

***2001 Assessment of Amtrak's Financial
Performance and Requirements***

National Railroad Passenger Corporation

***Report Number: CR-2002-075
Date Issued: January 24, 2002***



Memorandum

U.S. Department of
Transportation
Office of the Secretary
of Transportation
Office of Inspector General

Subject: INFORMATION: Report on the 2001 Assessment of
Amtrak's Financial Performance and Requirements

Date: January 24, 2002

From: Inspector General

Reply to

Attn of: J-1

To: The Secretary

Please find attached the "Report on the 2001 Assessment of Amtrak's Financial Performance and Requirements." It is the fourth report issued by the OIG in accordance with the requirements set forth in the Amtrak Reform and Accountability Act of 1997. The three prior assessments are referenced in the accompanying report.

Since Amtrak received its mandate in December 1997 to become operationally self-sufficient, it has significantly improved passenger revenues and ridership. However, Amtrak has not been successful in slowing its expense growth. The result is that Amtrak's cash losses have not decreased and Amtrak is no closer to operating self-sufficiency now than it was in 1997. With less than a year remaining in its mandate, there is not sufficient time for Amtrak to implement the kinds of sustainable improvements necessary to meet its deadline for self-sufficiency. At this point in time, Amtrak will face a formidable challenge in 2002 just managing its cash resources – be they from operating revenues or Federal subsidies – to make ends meet without further borrowing.

Last summer, Amtrak generated a significant amount of cash by mortgaging portions of one of its most valuable assets, Penn Station-New York. It is possible that Amtrak could perform similar transactions in 2002 to improve its cash position, potentially even enabling Amtrak to meet its self-sufficiency deadline. While Amtrak would technically meet the letter of the law, the victory would be hollow. Not only would Amtrak's financial position be unsustainable – Amtrak's assets are finite – but more importantly, the cannibalization of the railroad's assets would compromise the future of our intercity passenger rail network, regardless of who provides rail service. Actions such as the sale or mortgaging of assets, or widespread service or personnel cuts, would constrain the options available to the Congress and the Administration as they deliberate Amtrak's future and the future of intercity passenger rail.

The debate over Amtrak has primarily focused on its inability to eliminate the need for Federal operating subsidies. It is important to keep sight of the fact that even if Amtrak is successful in becoming operationally self-sufficient, it will still rely heavily on the Federal Government for funding of its capital needs. Amtrak's annual capital needs are currently estimated at between \$1 billion and \$1.5 billion. In large part, these needs are inherent to the underlying rail infrastructure – stations, yards, track, etc. If the nation is to have a networked system of intercity passenger rail in the future, these needs will still have to be addressed, regardless of whether it is Amtrak or some other entity or entities providing rail service.

Amtrak's authorization expires in 2002 and the debate is likely to begin soon concerning the future of intercity passenger rail in the United States and Amtrak's role within it. During the course of the debate, a number of issues will need to be addressed, including whether or not a linked national system of intercity passenger rail is desirable, the operating subsidies that would likely be needed to sustain such a system, the capital investment requirements associated with the resulting rail network, and the appropriate source or sources of any operating or capital subsidies. Factors other than Amtrak's financial performance should be considered during these discussions, including the role Amtrak has played since September 11 in providing an alternative to airline travel.

The OIG is required to perform an annual assessment of Amtrak's financial requirements in every year that Amtrak requests Federal funds. We expect to begin our 2002 assessment within the next few weeks. Since this is the last year of Amtrak's current authorization, our efforts in the 2002 assessment will focus on reauthorization issues, including potential route restructuring, future development of new high-speed corridors, and issues related to the security and safety of passenger train operations. We will issue our report this summer, although we will be prepared in the interim to provide information that might be useful to the Department and Congress as reauthorization proceedings begin.

We appreciate the cooperation received from Amtrak and the professionalism of Amtrak's senior staff during the assessment. If you have any questions concerning the attached report, please call me or my Deputy, Todd J. Zinser, at (202) 366-1959, or the Amtrak project leader, Mark R. Dayton on (202) 366-9970.

Attachment

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Executive Summary

2001 Assessment of Amtrak's Financial Performance and Requirements

In 1997, Congress established a deadline of December 2, 2002 in the Amtrak Reform and Accountability Act (ARAA) for Amtrak to eliminate its need for further Federal operating subsidies.¹ After that date, no funds authorized for Amtrak can be used for operating expenses,² 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").

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

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 assessments in 1999⁴ and 2000⁵ and, because Amtrak requested and received \$521 million in Federal funding in 2001, we initiated this assessment of Amtrak's financial status and plans. This report details the findings of our review and provides an update on Amtrak's progress in 2001 towards meeting its goal of operating self-sufficiency.

¹ Unless otherwise stated, all years are fiscal years based on Amtrak's fiscal year of October 1 to September 30, the same as the Federal fiscal year.

² Amtrak 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.

³ 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.

⁴ 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.

⁵ Report No. CR-2000-121, September 19, 2000. *2000 Assessment of Amtrak's Financial Performance and Requirements*, Office of Inspector General, U.S. Department of Transportation.

Results in Brief

Amtrak has not succeeded in implementing enduring financial improvements of the magnitude necessary to attain and sustain self-sufficiency in and beyond 2003. Since receiving its mandate in December 1997, Amtrak's passenger revenues and ridership have shown marked growth, rising 26.1 percent and 11.4 percent, respectively. However, expense growth has more than kept pace, so that for every \$1 Amtrak realized in additional revenue, cash expenses increased by \$1.05. Interest expenses related to borrowing will account for \$225 million of Amtrak's total expenses by 2005, a growth of over 400 percent since 1995 when interest expenses totaled \$43 million.

Amtrak's operating loss in 2001 of \$1.1 billion was \$129 million higher than the 2000 loss and the largest in Amtrak's history. Amtrak's cash losses, which are the basis for measuring Amtrak's progress towards self-sufficiency, were \$585 million in 2001. This was \$24 million worse than Amtrak's cash loss in 1998, the first year of Amtrak's self-sufficiency mandate. *By 2003, Amtrak must reduce its cash losses by more than \$300 million in order to meet its deadline for achieving self-sufficiency. There simply is not sufficient time left for Amtrak to develop, implement, and realize results from meaningful and sustainable improvement plans. At this point in time, Amtrak will face a formidable challenge in 2002 just managing its cash resources – be they from operating revenues or Federal subsidies – to make ends meet without further borrowing.*

The Northeast Corridor experienced the strongest growth in 2001 with passenger revenues and ridership increasing 13.5 percent and 4.6 percent, respectively. It was also the only business unit to post a cash profit in 2001, contributing \$89 million before depreciation expense. Amtrak West posted passenger revenue growth of 7.1 percent and ridership growth of 13.4 percent. While Intercity passenger revenues improved slightly over last year, its ridership actually declined by 2.9 percent. Both Amtrak West and Intercity posted cash losses in 2001 totaling \$52 million and \$188 million, respectively. Amtrak Corporate, which includes much of the railroad's overhead and management costs, accounted for the remaining cash loss.

Our assessment of Amtrak's 2001 Strategic Business Plan predicts that Amtrak's cash losses in 2003 will be \$511 million, which is \$263 million greater than it would need to be for Amtrak to meet its self-sufficiency mandate. In the past year, Amtrak sought to compensate for cash shortfalls through a variety of means, including mortgaging portions of one of its most valuable assets, Penn Station-New York. *It would be possible for Amtrak to pursue additional transactions of this nature in the coming year and meet the letter of the self-sufficiency law.*

Amtrak could also take other draconian measures, such as widespread employee or service cuts. Both strategies are questionable. While Amtrak would technically meet the letter of the law, the victory would be hollow. Not only would Amtrak's financial position be unsustainable – Amtrak's assets are finite – but more importantly, the cannibalization of the railroad's assets would compromise the future of our intercity passenger rail network, regardless of who provides rail service. Such actions would also constrain the options available to the Congress and the Administration as they deliberate Amtrak's future and the future of intercity passenger rail.

Since the September 2001 terrorist attacks, new airport security measures have made air travel less convenient for intercity travelers. Amtrak has benefited from these changes, although the duration and magnitude of the changes may not be clear for several months. While our preliminary analysis indicates that Amtrak could realize between \$72 million and \$150 million in additional passenger revenues in the Northeast Corridor in 2002, this would still not be sufficient to reduce cash losses to the extent necessary to meet the self-sufficiency mandate.

Amtrak's authorization expires in 2002 and during the next several months, debate will begin concerning the future of Amtrak, the future of intercity passenger rail, and the extent to which the two will be intertwined. In the near term, Amtrak has some very real security and safety needs that will need to be addressed and will likely need additional Federal assistance in order to meet its cash obligations in 2002. Amtrak's alternative would be to seek these funds through another external financing transaction of about the same magnitude as the Penn Station-New York mortgage.

Before the long-term capital investment needs for intercity passenger rail can be determined, decisions need to be made about the scope, size, and structure of our future passenger rail network. *It is not clear whether Amtrak or any other entity could ever operate a linked national system such as that in place today without operating subsidies. Congress will need to weigh the likely costs of subsidizing a linked national system against the merits of preserving such a system.* The alternatives to such subsidies would be restructuring of the national system into a smaller system or systems that would be self-sustaining and not require Federal operating assistance.

The decisions concerning continued *operating* assistance will establish the framework for determining future *capital* investment needs. *As currently structured, Amtrak will require significant capital investment on the order of \$1 billion or more each year for the foreseeable future.* These needs reflect deteriorated conditions in the railroad infrastructure that will need to be addressed if rail service is to continue, regardless of who operates that service. Restructuring

or abandoning the linked national network to reduce operating losses will likely reduce the capital investment needs.

Findings

Time Has Run Out for Amtrak to Achieve Self-Sufficiency Through Meaningful and Sustainable Improvements

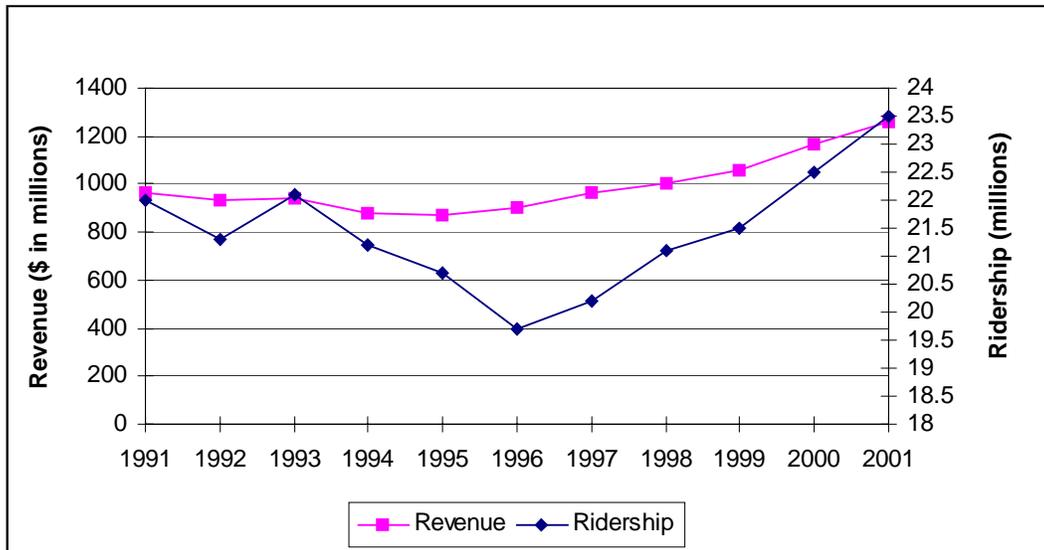
Amtrak has not made sufficient progress in instituting financial improvements of the magnitude necessary for it to achieve and sustain operating self-sufficiency. Amtrak's revenues and ridership have shown marked growth, increasing by 8.2 percent and 4.3 percent, respectively, between 2000 and 2001. *However, expense growth has more than kept pace.* Amtrak's cash losses, the basis for measuring Amtrak's progress towards self-sufficiency, were \$585 million in 2001, which represents a growth of about 4 percent since Amtrak received its self-sufficiency mandate. There is not sufficient time remaining in Amtrak's congressional mandate for Amtrak to develop, implement, and realize results from meaningful and sustainable improvement plans.

Revenues and Ridership Have Grown

In 2001, systemwide passenger revenue and ridership improved from 2000, continuing the upward swing of the past few years. Passenger revenues increased by 8.2 percent and ridership increased by 4.3 percent. The most significant increase was in the Northeast Corridor (NEC) where passenger revenues grew a strong 13.5 percent and ridership increased by 4.6 percent. Amtrak West passenger revenue increased 7.1 percent while ridership grew by 13.4 percent. Amtrak Intercity passenger revenues improved slightly over last year, but ridership declined by 2.9 percent. Amtrak has historically struggled with generating growth on Intercity trains which represent most of Amtrak's long-distance routes.

Longer-term trends also show significant growth. Systemwide ridership grew 19.3 percent between 1996 and 2001, rising from 19.7 million to 23.5 million. Systemwide passenger revenue grew 44 percent between 1995 and 2001. The revenue growth trend that began in 1995 has brought Amtrak to the highest passenger revenue levels in its history. Figure 1 illustrates growth in passenger revenue and ridership since 1991.

Figure 1. Passenger Revenue and Ridership Growth Since 1991



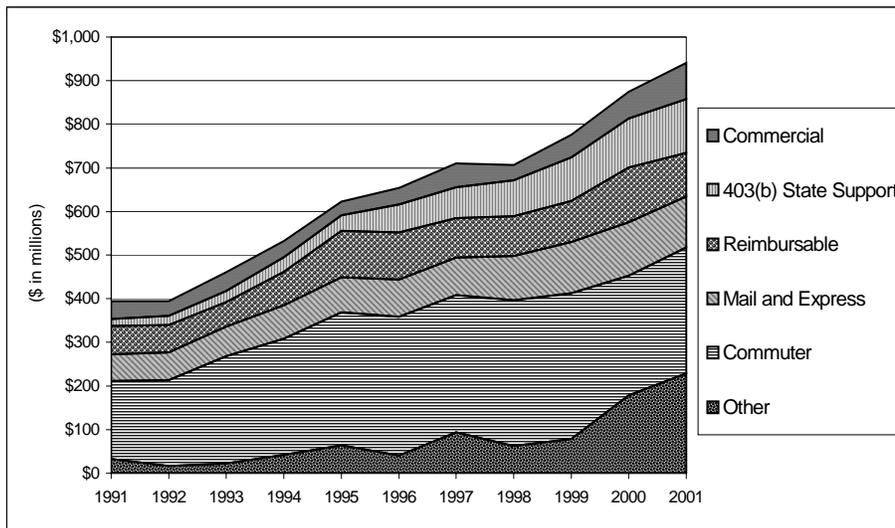
While growth has fallen short of Amtrak’s projections for both revenue and ridership, in the current economic climate and in the wake of the terrorist attacks, Amtrak’s relative performance has been more positive than its competitors. Domestic air passenger enplanements were down 22 percent in October and 20 percent in November compared to last year and air carrier revenues were down 38 percent in October. Amtrak’s ridership and revenue numbers, however, remained strong in both months. Compared to 2000, October and November ridership were only down about 1 percent and revenues were *up* by 13 percent and 14 percent, respectively.

Despite delays in implementing Acela Express service, Amtrak continues to see marked growth in revenues and ridership, especially on the Southend of the Northeast Corridor. In October and November of 2001, combined Acela Express/Metroliner ridership was 40 percent higher than in 2000, and associated ticket revenue increased by 66 percent. In the first 3 months of Fiscal Year 2002, Acela Express load factors have averaged 54 percent, which is consistent with performance over the same period in 2001, despite the downturn in the economy. The airlines, in contrast, have lowered average fares and reduced capacity in order to sustain load factors.

Non-Passenger Revenues are Also Increasing

Non-passenger revenue has accounted for an increasing share of Amtrak's total revenues between 1991 and 2001. In contrast to passenger revenues, which grew 31 percent, the overall increase in non-passenger revenue has been 139 percent, rising from \$394 million in 1991 to \$941 million in 2001. Non-passenger activities now account for 43 percent of Amtrak's total revenues. Figure 2 illustrates growth in non-passenger revenues between 1991 and 2001.

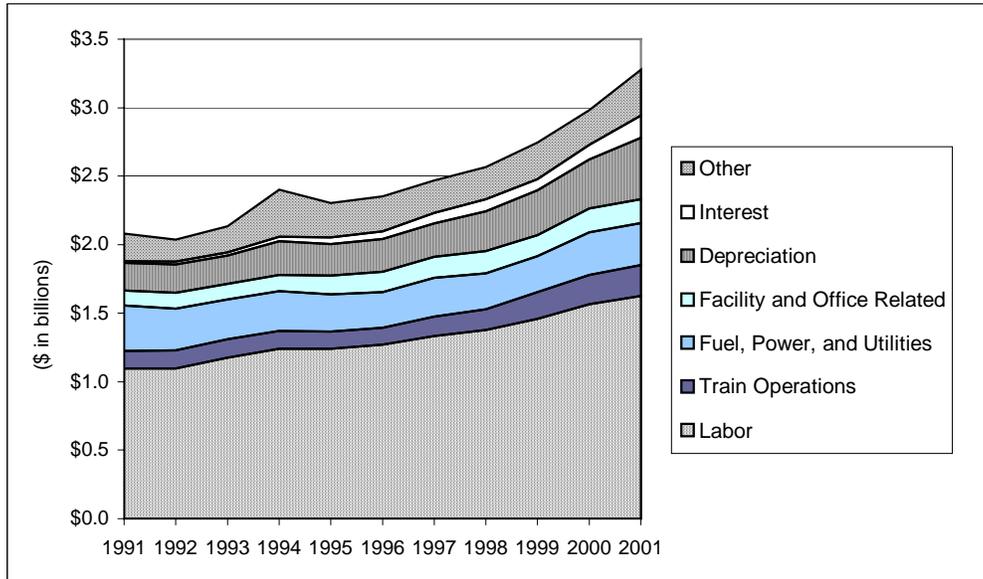
Figure 2. Growth in Non-Passenger Revenues, 1991 Through 2001



Expense Growth Outpaces Revenue Growth

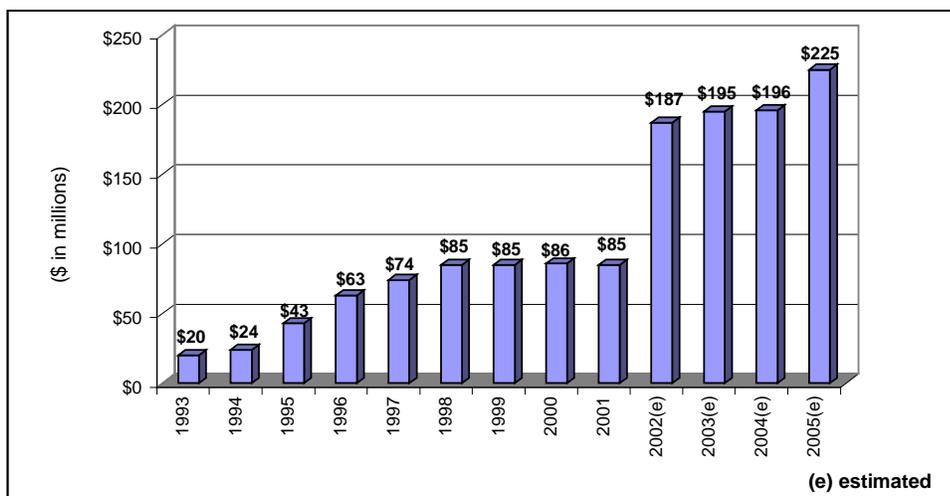
Between 2000 and 2001, Amtrak's expenses, including depreciation, grew 9.8 percent, or a total of \$294 million. Since 1991, total operating expenses have grown about \$1.2 billion, from \$2.1 billion to \$3.3 billion, representing an overall increase of 57 percent. In the same time period, total revenues grew by about \$850 million. Figure 3 on the following page illustrates growth in various categories of expenses between 1991 and 2001.

Figure 3. Growth in Amtrak's Expenses, 1991 Through 2001



While the single largest expense category is labor, which accounted for 50 percent of Amtrak's total 2001 expenses, and 58 percent of cash expenses, Amtrak has also experienced a significant increase in interest expenses related to borrowing.⁶ The interest expenses primarily relate to externally financed purchases of new equipment, including the Acela trainsets and high-horsepower locomotives in the Northeast Corridor. Figure 4 illustrates past growth in interest expense since 1993 and projected growth through 2005.

Figure 4. Growth in Interest Expense, 1993 Through 2005 (Estimated)

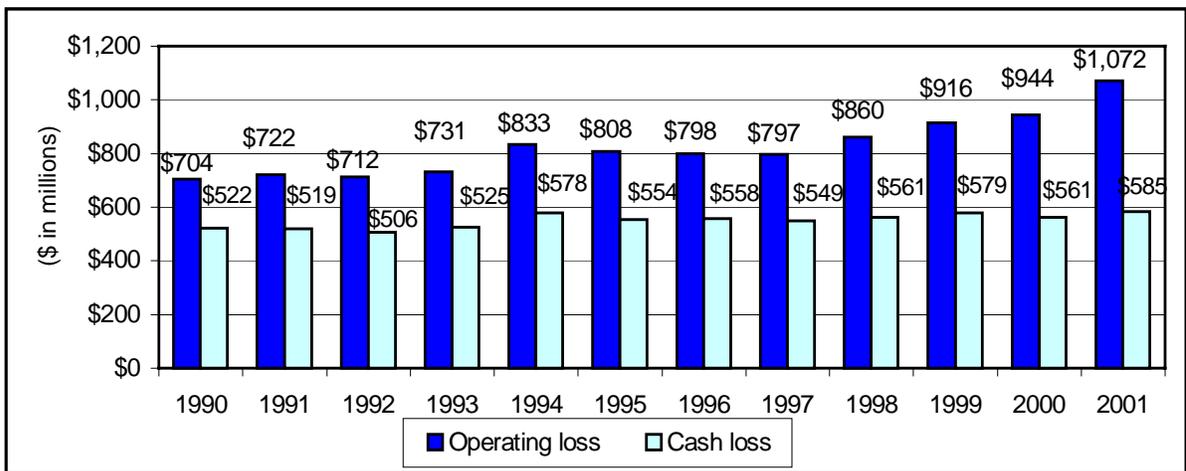


⁶ Discussion of interest is on a cash interest basis, rather than accrual.

Amtrak Has Made Little Progress to Date in Reducing Operating and Cash Losses

Continued expense growth coupled with lower-than-projected revenue growth has resulted in operating losses that have continued to increase since Amtrak's mandate was established in 1997. Amtrak's operating loss in 2001 of \$1.1 billion was \$129 million higher than the 2000 loss and the largest in Amtrak's history. Amtrak's 2001 cash loss, which is the basis for measuring operating self-sufficiency, was \$585 million, \$24 million higher than its cash loss in 2000. Figure 5 illustrates growth in Amtrak's operating and cash losses since 1990.

Figure 5. Growth in Operating and Cash Losses, 1990 Through 2001



All three business units contributed to Amtrak's 2001 operating loss. The Northeast Corridor accounted for \$203 million in losses, Intercity accounted for \$304 million, and Amtrak West accounted for \$81 million. On a cash basis, the Northeast Corridor was the only business unit to post a cash *profit* in 2001, with revenues exceeding cash expenses by \$89 million. Both Amtrak West and Intercity posted cash losses in 2001, totaling \$52 million and \$188 million, respectively. The remaining cash losses were incurred by the Corporate business unit, which absorbs many of the expenses related to management and corporate overhead.

Amtrak's 2001 Strategic Business Plan Will Not Achieve Operating Self-Sufficiency in 2003

Amtrak's 2001 Strategic Business Plan projected self-sufficiency by 2003 with cash losses equal to the sum of Amtrak's estimates of excess RRTA payments and capital overhauls of equipment (\$248 million), both of which can be funded with Federal appropriations. However, in order to achieve self-sufficiency, Amtrak's

Plan required revenue increases and cost reductions between 2001 and 2003 that, on a cash basis, amounted to a \$337 million improvement over its actual cash loss in 2001 of \$585 million.

Our assessment of the Plan determined that a number of its elements are unlikely to perform as Amtrak expects. Amtrak’s cash loss would be about \$1.3 billion more than it projects over the 5-year Plan period, and more importantly, \$263 million greater than it can fund with Federal funds in 2003, the deadline for Amtrak to reach self-sufficiency. If our restatements were to occur, Amtrak will not make self-sufficiency in 2003 nor would the Plan bring it any closer in the outyears. Table 1 presents the OIG restatement of Amtrak’s 2001 Plan forecast.

Table 1. OIG Restatement of Amtrak’s 2001 Plan Forecast (\$ in millions)⁷

Component	2001	2002	2003	2004	2005	Total
Operating Revenues	\$2,203	\$2,432	\$2,515	\$2,597	\$2,679	\$12,426
Less Operating Expenses	3,276	3,500	3,594	\$3,733	3,859	17,962
Operating Profit (Operating Loss)	(1,072)	(1,068)	(1,079)	(1,136)	(1,180)	(5,535)
Plus Non-Cash Items	488	570	568	612	658	2,896
Cash Profit (Cash Loss)	(585)	(498)	(511)	(524)	(522)	(2,639)
Plus TRA Funds—Capital Overhauls	39	0	0	0	0	39
Plus Federal Funds—Capital Maintenance	242	230	196	202	208	1,078
Plus Federal Funds—Capital Overhauls	27	51	52	54	55	239
Budget Result (Unfunded Cash Loss)	(\$277)	(\$217)	(\$263)	(\$268)	(\$259)	(\$1,283)

Remaining Options for Achieving Self-Sufficiency by 2003 Are Not Advisable

In the past year, Amtrak sought to compensate for cash shortfalls through a variety of means, including mortgaging portions of one of its most valuable assets, Penn Station-New York for approximately \$300 million. It would be possible for Amtrak to pursue additional transactions of this nature in the coming year and meet the letter of the self-sufficiency law. *Amtrak could also take other draconian measures such as widespread employee or service cuts. Both strategies are questionable. Not only would Amtrak’s victory be hollow in the short-term, but the sacrifices made to achieve the immediate goal would compromise the physical and financial integrity of any future passenger rail company, be it Amtrak or another entity or entities.*

⁷ Numbers in the tables and figures throughout this report may not sum to totals due to rounding.

Amtrak's Popularity Has Risen Since September 11, But Not Sufficiently to Offset Other Losses

Since the September 11 terrorist attacks, the airline travel environment has changed significantly. In order to quantify the potential short-term implications of these changes for Amtrak's ridership and passenger revenues, we analyzed the potential impacts associated with fewer flight frequencies, longer airport access times, more restrictive security procedures, and less convenient parking. Compared to our original 2001 forecast for Northeast Corridor revenue and ridership, our revised projections predict an additional \$72 million in passenger revenues in Fiscal Year 2002. This represents a 9 percent increase over the \$869 million in Northeast Corridor passenger revenues forecast for 2002 in our original analysis.

This scenario assumed permanent, longer security-related airport processing times of between 15 and 30 minutes. Significantly longer processing times, as some airports are actually experiencing since the attacks, could raise this projection to as much as \$150 million in incremental revenue in 2002. If this occurs, the additional revenues would likely reduce Amtrak's cash losses so that the self-sufficiency gap in 2003 could be substantially less than our currently projected gap of \$263 million.

Our analysis indicates that the benefits of increased air travel times will likely be concentrated in the Northeast Corridor. While it appears that limited markets in Amtrak's Intercity and West business units will also benefit from a diversion of air travelers to rail, it is unlikely that the benefits will outweigh the expected negative impacts of the economic downturn.

Amtrak Will Likely Need Additional Funds in 2002 to Meet Cash Liabilities

Amtrak's authorization expires in 2002 and during the next several months, the debate will begin concerning the future of Amtrak, the future of intercity passenger rail, and the extent to which the two will be intertwined. In the very near term, however, Amtrak has general capital needs and operating costs as well as security and safety needs that will need to be addressed. Amtrak received \$521 million in the 2002 Department of Transportation Appropriations Act⁸. It also received \$105 million in the 2002 Department of Defense Appropriations Act to be used for life-safety work in the tunnels beneath Penn Station-New York and security-related operating expenses. *Even with these funds, Amtrak will likely*

⁸For Fiscal Year 2002, Amtrak also received \$313 million in funding remaining from its 2001 appropriation. The 2001 funds were scored to make 40 percent, or \$208 million available to Amtrak in 2001, with the remaining 60 percent (\$313 million) of the total appropriation available in 2002.

need additional Federal assistance in order to meet its cash obligations in 2002. Amtrak's alternative would be to seek these funds through another external financing transaction similar in magnitude to the Penn Station-New York mortgage.

Amtrak's Needs Exceed Available Capital Funding

Although Amtrak has received about \$4.1 billion in Federal capital funds since 1998, Amtrak's available capital funding has not proven sufficient to meet its capital needs during this period. In 2001, facing a severe funding shortfall, Amtrak was forced to reprogram \$92 million in funds committed to projects in earlier years in order to meet basic system needs. In addition, \$255 million in projects that were in progress prior to 2001 were postponed, including \$83 million in jointly funded State projects to which Amtrak had made funding commitments.

Focus on Self-Sufficiency Has Detracted From Basic System Reinvestment

- **Capital Strategy Focuses on High-Speed Rail and Other Development**

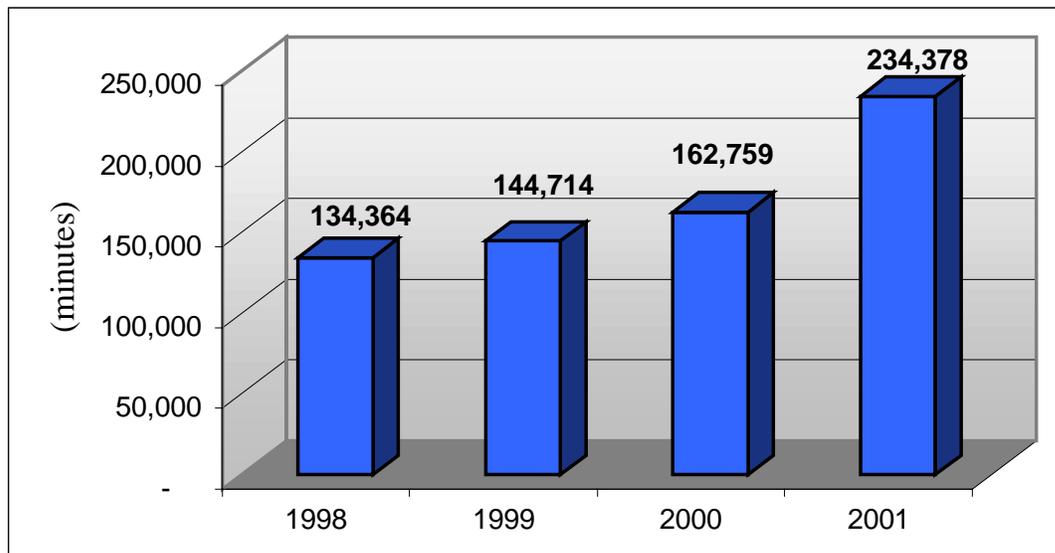
Amtrak's capital investment strategy since 1998 has focused on its self-sufficiency mandate. The most notable project is the Northeast Corridor high-speed rail project in which Amtrak invested nearly \$900 million between 1998 and 2001. When fully implemented, Amtrak anticipates net revenues from high-speed rail of between \$150 million and \$180 million each year. Since 1998, Amtrak has also invested in other projects to support its self-sufficiency goal, including refurbishing existing equipment and stations to promote Amtrak's new brand identity. Completion of some of these projects has been postponed because Amtrak's available funds in 2001 were not sufficient to continue the planned investments.

- **Infrastructure Deteriorates**

Amtrak's available funding since 1998 has not been sufficient to invest in both high rate-of-return projects *and* reinvest sufficiently in existing infrastructure. The projects that support self-sufficiency, while not frivolous, have come at the expense of other, less visible reinvestment and operational reliability projects. The most notable of these needs is an estimated \$3.0 billion backlog of "state of good repair" needs in the Northeast Corridor. Amtrak has not been able to invest sufficiently in operational reliability or other kinds of projects that would begin to address these needs. The results of this deferred spending are becoming apparent. Total minutes of delay for Amtrak trains in the Northeast

Corridor rose nearly 75 percent between 1998 and 2001⁹. Figure 6 compares minutes of delay in the NEC from 1998 to 2001.

Figure 6. Comparison of NEC Minutes of Delay, 1998 Through 2001



Facing constrained Federal capital funding, combined with continued large operating losses, Amtrak has turned to external financing as a means for funding procurement of new equipment. While this practice has freed up Federal funds for other uses, the debt associated with these purchases will become a significant burden to Amtrak in the next few years. Principal payments on the debt, which are capital costs, are anticipated to more than double in the next 4 years, growing from \$64 million in 2001 to \$136 million in 2005.

- **Prolonged Schedule For Addressing Critical Life-Safety Needs**

Numerous times in the past 2 years we have raised concerns about the long-standing fire and life-safety needs in the Penn Station New York river tunnels. Almost \$900 million is needed to fully address the range of needs, which include the replacement of narrow, winding, spiral staircases and crumbling benchwalls and ventilation systems that cannot remove sufficient amounts of smoke or heat. Amtrak and the other users of the tunnels have been investing in the life-safety program since 1976, but their efforts have focused on prevention, such as keeping track, signals, and equipment in a state of good repair rather than emergency

⁹ Total includes delays caused by equipment, infrastructure, train operations, and outside interference (weather, police, and trespassers). The total includes delays incurred by Amtrak operating along its own right-of-way as well as trains operating over territory in which Amtrak neither owns nor is responsible for maintaining the infrastructure.

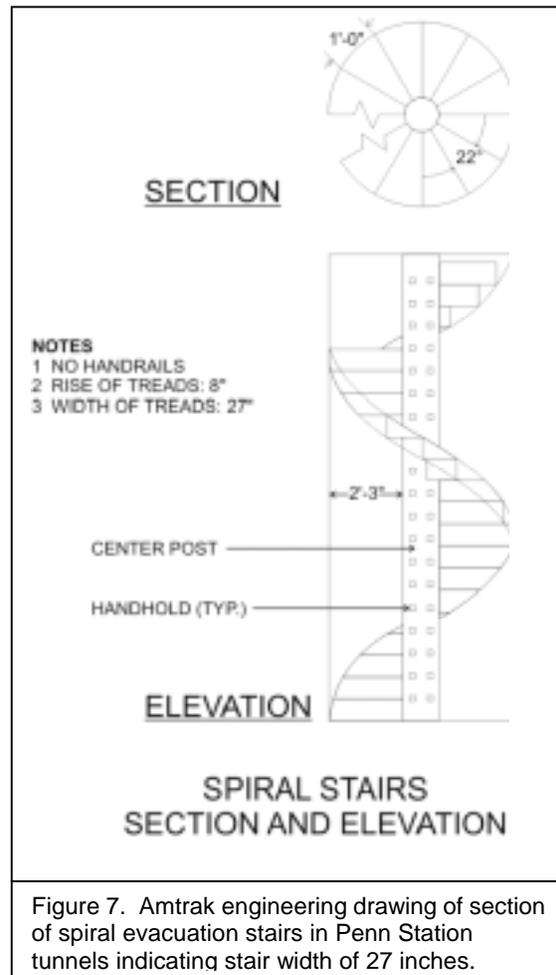
response. These investments may be effective in preparing for known risks, but it is unlikely that these efforts would have been satisfactory in responding to a terrorist attack.

On September 11, 2001, the terrorist attacks on the World Trade Center claimed thousands of lives both as a result of the initial airplane attacks and then the collapse of the towers as workers attempted to evacuate the building. While the number of casualties was devastating, it would have been far worse if the World Trade Center had not had adequate evacuation facilities.

Newspaper reports in recent months have suggested that the World Trade Center's stair system allowed thousands of people to safely evacuate despite panic and smoke. Despite being built 30 years ago, the World Trade Center's stair system exceeded current building codes, with two stairways 44 inches wide and a central stairway 56 inches wide. In a 44-inch stairway, a person must turn sideways to let others pass – for example, a fireman or paramedic. With the 56-inch stairway, two people can pass comfortably.

The existing staircases in the Penn Station tunnels are only 27 inches wide, extend 10 stories, and are winding spiral staircases. They do not allow two-way traffic – evacuation and emergency response cannot occur simultaneously. There are no landings to catch someone if they fall, or to allow individuals to rest.

These spiral staircases are not necessarily the only means out of the tunnels, and are certainly not the preferred evacuation route, but depending on the location and severity of the incident, they may prove to be the only feasible option. Each of the six tunnels is approximately 2.5 miles long, and the distance between portals and escape shafts is a minimum of three-quarters of a mile. Figure 7 illustrates the spiral evacuation stairs present in the Penn Station-New York tunnels.



Long-term Funding Requirements Will Need to Be Determined

Short-term Funding Required

Amtrak's reauthorization expires in 2002 and the appropriate level of funding for Amtrak's needs beyond 2002, including those for capital investment, will need to be decided in the near future. In the short term, however, Amtrak has immediate needs that include funding for 2002 as well as safety and security-related needs that were expanded in the wake of the September 11 terrorist attacks.

These needs include the funding of the life-safety work in the tunnels beneath Penn Station-New York. Although Amtrak owns Penn Station and the tunnels, New Jersey Transit and the Long Island Rail Road are also heavy users of the tunnels for their daily commuter operations. In the past, work in the tunnels and Penn Station has been jointly funded by all three entities. While joint funding may be the most equitable solution to addressing existing needs, it may not be the most efficient one. All three users have different funding cycles and mechanisms, and in the past, projects have been postponed when one or more entities have not been able to meet their share of responsibility.

Providing full funding, earmarked for these projects, is the best option for ensuring that these projects are expedited. Earmarking would ensure that the funds are not diverted for other needs, and that they would be available when needed.

Amtrak received \$105 million in the 2002 Department of Defense Appropriation, which was signed into law on January 10, 2002. Of these funds, Amtrak is directed to use \$100 million, "solely to enhance the safety and security of the aged Amtrak-owned rail tunnels under the East and Hudson Rivers." The remaining funds are to be used to offset costs associated with post-September 11 enhanced safety and security operations.

Reauthorization Will Set the Stage for Longer-Term Funding Solutions

Amtrak's long-term capital needs can only be reasonably determined after the reauthorization debate this year. During reauthorization, decisions will need to be made about how passenger rail service will be delivered in the United States, where it will exist, by whom will it be provided, and whether and what aspects of service should be subsidized and by whom. Amtrak has developed a 20-year plan that identifies funding needed for multiple scenarios: sustaining the existing system, or expanding it to develop new rail corridors. It is not certain, however, that either scenario will accurately reflect Amtrak's future operating profile.

Legislative proposals have been introduced that attempt to address a variety of Amtrak's longer-term needs, including a variety of initiatives to fund development of high-speed corridors around the country. Other proposals have been introduced as part of security or economic stimulus bills that followed the September 11 terrorist attacks that provide funds for increasing Amtrak's infrastructure and equipment capacity. With little exception, we believe that these proposals are premature in that they presuppose the scope and profile of a passenger rail system that has not yet been decided, and will not be until the reauthorization debate occurs. The results of the reauthorization debate will provide the framework for accurately identifying the long-term capital needs of our intercity passenger rail system, and the most appropriate mechanism for funding those needs.

Objectives and Scope

The assessment summarized in this report responds to our mandate as defined in Section 409 of ARAA. 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 2001 Strategic Business Plan, and an assessment of Amtrak's current capital investment plans and needs. The specific objectives for each component are described below. Our methodology for addressing each of these objectives is described in Exhibit A. Discussion of prior findings and recommendations is included in Exhibit B.

Amtrak's Current Financial Status. The objective of this task was to assess Amtrak's current financial condition, incorporating final 2001 operating and financial performance. We also compared 2001 operating results to operating trends for up to the last 11 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 2001 Strategic Business Plan. The 2001 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.

Amtrak's Capital Investment Plans and Needs. 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.

Findings: Current Financial Status

Amtrak Increased Revenue in 2001 But Cash Losses Remained High

Although Amtrak's operating results showed continued revenue improvements in 2001, increases in depreciation expense, labor costs, and interest expenses resulted in an operating loss of \$1.1 billion. This loss was \$129 million more than the 2000 loss and the largest in Amtrak's history. Amtrak's 2001 cash loss was \$585 million, \$24 million higher than its 2000 cash loss.

Systemwide ridership increased by 4.3 percent from 2000 levels, led by growth of better than 13 percent in Amtrak West and 4.6 percent in the Northeast Corridor business units. Intercity ridership decreased by 2.9 percent. Operating revenues increased in 2001 by 8.0 percent over 2000, from \$2,040 million to \$2,203 million. This growth stemmed from an 8.2 percent growth in passenger revenue, from \$1,166 million to \$1,262 million, and a 7.7 percent growth in non-passenger revenue, increasing from \$874 million in 2000 to \$941 million in 2001.

Operating expenses increased by nearly 10 percent, from \$2,983 million to \$3,276 million. The largest sources of growth in operating expenses in 2001 were depreciation, \$105 million (28.3 percent higher); labor, \$62 million (4.0 percent higher); and interest, \$55 million (50.8 percent higher). On a cash basis, 2001 operating expenses increased 7.3 percent over 2000. 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. The growth in labor costs is mainly attributable to wage increases resulting from new labor contracts and overtime payments. The majority of growth in Amtrak's accrued interest expense in 2001 is related to the financing on new equipment.

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 2001 was \$585 million. To reach operating self-sufficiency, Amtrak must reduce this cash loss to \$248 million in 2003, a required improvement of \$337 million.

Despite Revenue and Ridership Growth, Operating Results for 2001 Fell Far Short of Amtrak's Business Plan

For the 12 months ended September 2001, systemwide passenger revenue and ridership improved from last year, continuing the upward swing of the past few years. Passenger revenue was up by 8.2 percent and ridership was up by 4.3 percent. Northeast Corridor (NEC) passenger revenues grew a strong 13.5 percent from a 4.6 percent ridership increase, and Amtrak West passenger revenue increased 7.1 percent from a 13.4 percent ridership increase. Amtrak Intercity passenger revenues improved slightly over last year, but ridership declined by 2.9 percent.

Total operating revenues were up 8.0 percent, and operating expenses grew by 9.8 percent. While total operating expenses were close to Plan, revenues fell short by nearly \$200 million. As a result, Amtrak recorded an operating loss of \$1.1 billion; \$129 million greater than for the same period last year and \$179 million worse than its Plan goal of \$894 million. Amtrak's cash loss in 2001 was \$585 million, \$24 million worse than last year and \$179 million worse than planned.

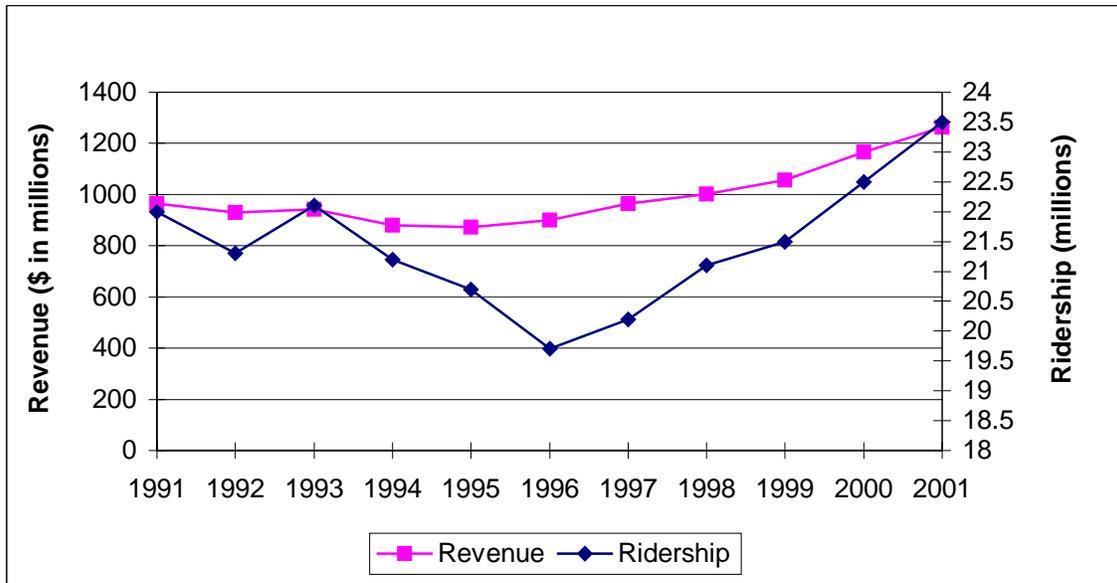
Amtrak's revenue results for 2001 are primarily attributable to the delayed introduction of Acela Express services and a slower ramp-up than planned for the Express shipping business. While Amtrak's 2001 Express business grew a modest \$5 million, or 22 percent, over 2000, it was about \$37 million short of Amtrak's projections.

Additionally, Mail revenues actually decreased by \$10 million from 2000 and were \$26 million behind Plan due to lost U.S. Postal Service contracts. Other factors affecting the revenue shortfall include fewer than planned reimbursable business opportunities and a softening economy in the second half of 2001, which dampened ridership growth.

Revenue and Ridership Trends for 1991 Through 2001

Amtrak's passenger revenue and ridership continued their upward swing in 2001 as seen in Figure 1, which shows systemwide passenger revenue and ridership numbers for 1991 through 2001.

Figure 1. Systemwide Passenger Revenue & Ridership Trends, 1991 Through 2001



After 3 years of significant systemwide ridership decline between 1993 and 1996, ridership has consistently increased between 1996 and 2001. Systemwide ridership has grown over this time from 19.7 million to 23.5 million, an increase of 19.3 percent. Systemwide passenger revenue declined between 1991 and 1995. This trend reversed itself after a series of fare increases in 1995 and later years and sustained ridership growth, resulting in a 44 percent growth in passenger revenue between 1995 and 2001. The revenue growth trend that began in 1995 has brought Amtrak to the highest passenger revenue levels in its history, and Amtrak fully expects that trend to continue.

Non-passenger revenue has become an increasing share of Amtrak’s total revenues between 1991 and 2001, as shown by Figure 2. The overall increase in non-passenger revenue for the last 11 years has been 139 percent, going from \$394 million in 1991 to \$941 million in 2001. Non-passenger activities now account for 43 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, Mail and Express, reimbursable work, state support for train services, commercial development, and other revenue.

Figure 2. Composition of Amtrak Revenues, 1991 Through 2001

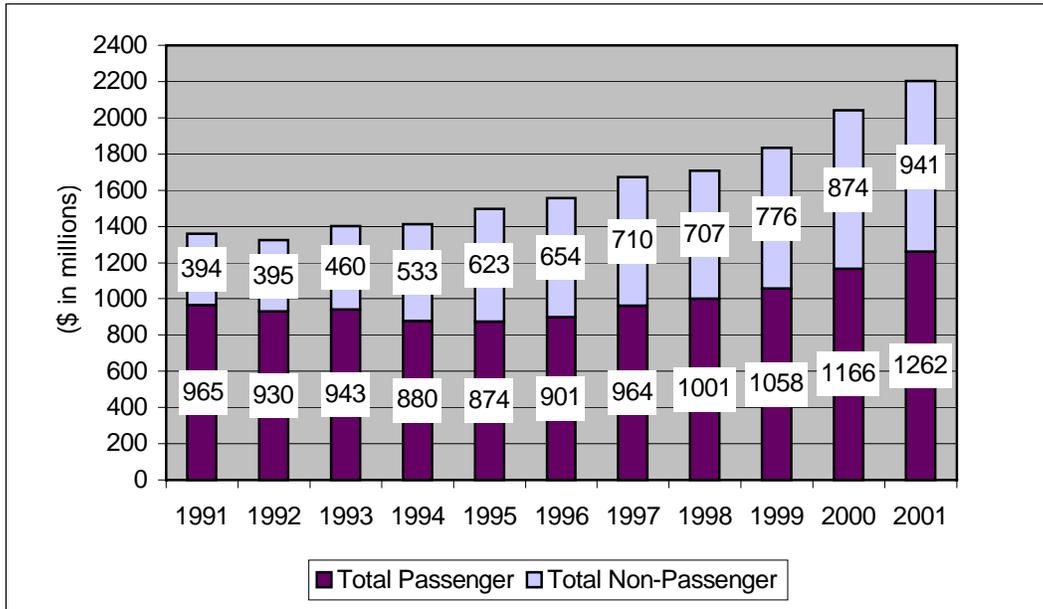
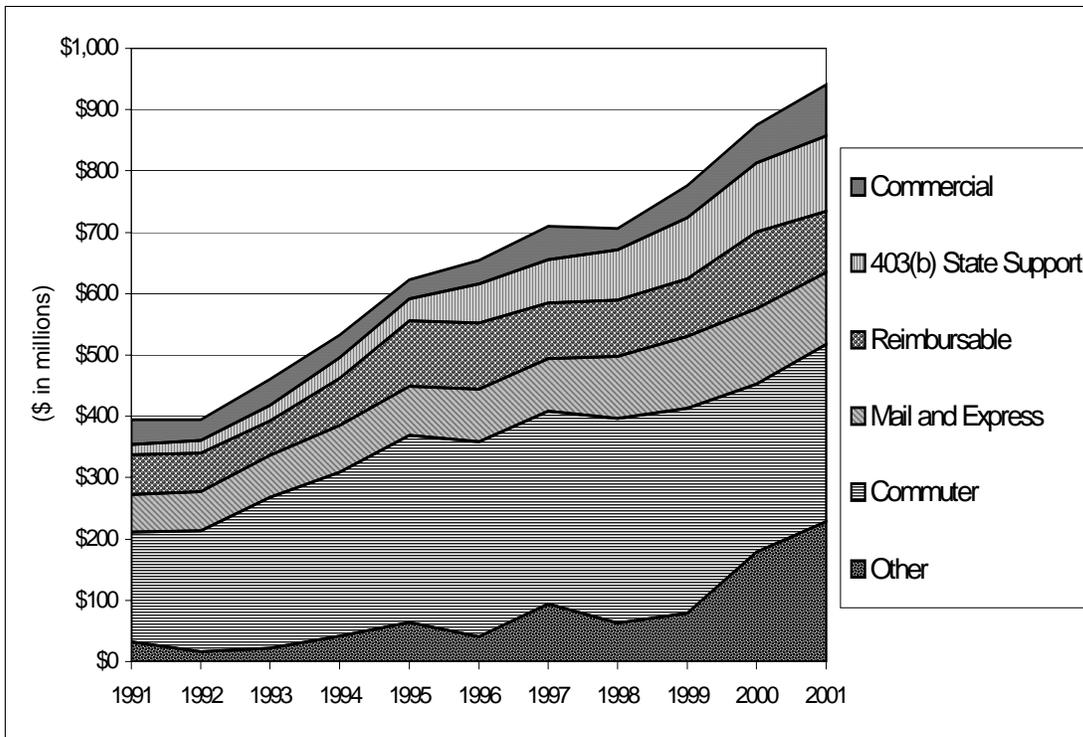


Figure 3. Amtrak's Non-Passenger Revenue Categories, 1991 Through 2001



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 and commercial development. Commuter operations alone have gone up 62 percent since 1991 and accounted for revenues of \$289 million in 2001. (Amtrak has management and operating contracts with seven State and local authorities and transported over 62 million commuter riders in 2000.)

An increasingly important source of non-passenger revenue is projected to come from the growth of Mail and Express shipments. Amtrak’s 2001 Mail and Express revenues increased 19 percent over 1999 levels, but fell \$5 million from 2000. Amtrak currently projects that the Mail and Express business will grow more than 75 percent between 2001 and 2005. 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 2002. Primary factors are growth in depreciation and 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.

Depreciation Expenses

Depreciation expenses will continue to grow over the next 4 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 2001 and projected levels for 2002 through 2005. As shown, Amtrak projects depreciation expenses to increase to \$561 million in 2002 and reach as high as \$649 million in 2005, almost triple 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	2005
\$206	\$245	\$230	\$238	\$242	\$294	\$329	\$371	\$476	\$561	\$559	\$604	\$649

Amtrak began a program of refueling 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 2005 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.¹ Depreciation expenses are projected to constitute an increasing proportion of the overall operating loss over the next 4 years because of the large number of capital purchases that Amtrak has made or plans to make in this period.

Labor Costs

Labor costs are Amtrak's largest operating cost. In 2001, labor costs, which include salaries, wages, overtime, and benefits, accounted for 50 percent of Amtrak's total operating costs, down from 52 percent of costs in 2000. 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 of the incremental costs of the contracts. For the 3 years 1998 through 2000, Amtrak estimated it achieved savings of about \$53 million. Amtrak has 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.

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 expenses from 1993 through 2001 and projections through 2005.² The jump in interest costs in 1995 reflects the equipment financing for the Intercity and Amtrak West fleetings programs. The equipment financed included locomotives in all three Strategic Business Units, passenger cars for Intercity and Amtrak West for

¹ 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.

² The interest expenses shown in Table 2 are on a cash interest basis, not on an accrual basis.

the refueling 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	2005
\$20	\$24	\$43	\$63	\$74	\$85	\$85	\$86	\$85	\$187	\$195	\$196	\$225

Because of the low levels of Federal capital support throughout the 1980s and early 1990s, Amtrak needed to secure outside financing for its refueling 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. The large increase in 2002 is attributable to the interest expense associated with the external financing of the new Acela Express trainsets and Acela high-horsepower locomotives.

Amtrak must take more aggressive action to control expense growth or it will not achieve self-sufficiency. We will closely scrutinize Amtrak's cost cutting initiatives in its 2002 Business Plan.

Findings: 2001 Strategic Business Plan

Amtrak's 2001 Strategic Business Plan Projects Operating Self-Sufficiency in 2003

Amtrak's 2001 Strategic Business Plan anticipated reducing its cash loss to \$248 million in 2003. Of this amount, \$52 million is for equipment overhauls that Amtrak intends to fund with its capital subsidy, and the remaining \$196 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.

The Plan assumed that annual Federal appropriations would be \$521 million in 2001 and at least the authorized level of funding of \$955 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, \$248 million and \$256 million, respectively.³ These assumptions, along with a continued strong economy, underpin Amtrak's forecasts of revenue and financial results.

Table 3 presents Amtrak's projections for 2001 through 2005. Amtrak projects an operating loss that decreases from \$891 million in 2001 to \$816 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 forecasted operating loss. After subtracting non-cash operating charges, the cash loss is projected to decrease from \$406 million in 2001 to \$248 million in 2003, a \$158 million improvement, and a \$313 million improvement over Amtrak's actual cash loss in 2000 of \$561 million.

³ We have assumed that the 2002 appropriation of \$521 million will continue in 2003 through 2005.

Table 3. Amtrak's 2001 Plan Forecast (\$ in millions)

Component	2001	2002	2003	2004	2005	Total
Operating Revenues	\$2,414	\$2,615	\$2,849	\$2,930	\$3,008	\$13,816
Less Operating Expenses	3,305	3,466	3,665	3,798	3,929	18,163
Operating Profit (Operating Loss)	(891)	(851)	(816)	(868)	(921)	(4,347)
Plus Non-Cash Items	485	570	568	612	658	2,893
Cash Profit (Cash Loss)	(406)	(281)	(248)	(256)	(263)	(1,454)
Plus TRA Funds—Capital Overhauls	28	0	0	0	0	28
Plus Federal Funds—Capital Maintenance	242	230	196	202	208	1,078
Plus Federal Funds—Capital Overhauls	17	51	52	54	55	229
Budget Result (Unfunded Cash Loss)	(\$119)	\$0	\$0	\$0	\$0	(\$119)

Amtrak intends to finance its cash losses by using its annual Federal appropriation for capital maintenance equal to excess RRTA and for its equipment overhaul expenses. Table 4 shows how Amtrak's annual capital appropriations will be used.

A portion of the appropriation in 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 appropriations in 1999, 2000, and 2001 to only 40 percent of those appropriations. 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 2001 and 2002 (funds available for capital investment in 2002 will thus be reduced by the excess operating losses), to cover excess RRTA in 2002 through 2005, and to fund capital overhauls of equipment in 2001 through 2005.

Table 4. Amtrak's Uses of Federal Appropriated Funds in the 2001 Plan Forecast, 2001 Through 2005 (\$ in millions)

Use of Federal Appropriated Funds	2001	2002	2003	2004	2005	Total
Capital Maintenance	\$242	\$230	\$196	\$202	\$208	\$1,078
Repayment of TRA Borrowing	222	0	0	0	0	222
Subtotal—Operating and Repayments	464	230	196	202	208	1,300
Capital Overhauls	50	51	52	54	55	262
Capital Investment	68	553	273	265	258	1,417
Subtotal—Capital	118	604	325	319	313	1,679
Total	\$582	\$834	\$521	\$521	\$521	\$2,979

Amtrak's 2001 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 2001 to 2005 if the more 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.

Delays in Acela Express and Acela Regional services, a slower ramp-up than projected for the Mail and Express business, and a softening economy in the second half of 2001 have affected Amtrak's operating results in 2001 and 2002. As Table 5 indicates, our total restatement is \$1.2 billion over the 5-year Plan period.

Table 5. OIG 2001 Net Restatements of Amtrak's Revenue and Expense Forecasts (\$ in millions)

	2001	2002	2003	2004	2005	Total
Passenger Revenue						
Northeast Corridor	\$50	\$5	\$(19)	\$(16)	\$(13)	\$6
Intercity	5	(8)	(7)	0	6	(5)
Amtrak West	5	7	7	8	9	36
Mail and Express	49	52	86	81	74	342
Other Business Plan Actions						
Northeast Corridor	21	35	24	17	14	111
Intercity	33	64	43	35	25	200
Amtrak West	13	15	14	13	13	68
Corporate	50	46	114	130	131	471
Increase (Decrease) in Cash Loss	\$226	\$217	\$263	\$268	\$259	\$1,233

Five restatements account for 65 percent, or \$807 million, of our total restatement. The key restatements are:

- \$342 million in Mail and Express net improvement that is at risk due to slower than anticipated growth in the Express business;

- \$134 million in Corporate Productivity Enhancements reflecting cost reduction targets that were overly optimistic or not clearly defined;
- \$129 million in Corporate expense reductions, which were double counted on two separate plan actions;
- \$117 million in Corporate projected bottom-line improvements associated with the introduction of new services not approved or implemented;
- \$85 million in Corporate Service Standards net revenue beyond those already credited to the individual Strategic Business Units (SBU). This action is essentially a placeholder whose value will have to be allocated to the other SBUs.

Table 6 shows Amtrak’s financial projections from Table 3 that have been adjusted for our restatements of Amtrak revenues and expenses. The data for 2001 are actual results. Our restatements result in increases in the operating, cash, and unfunded cash losses by \$1.2 billion.

**Table 6. OIG Restatement of Amtrak’s 2001 Plan Forecast
(\$ in millions)**

Component	2001	2002	2003	2004	2005	Total
Operating Revenues	\$2,203	\$2,432	\$2,515	\$2,597	\$2,679	\$12,426
Less Operating Expenses	3,276	3,500	3,594	\$3,733	3,859	17,962
Operating Profit (Operating Loss)	(1,072)	(1,068)	(1,079)	(1,136)	(1,180)	(5,535)
Plus Non-Cash Items	488	570	568	612	658	2,896
Cash Profit (Cash Loss)	(585)	(498)	(511)	(524)	(522)	(2,639)
Plus TRA Funds—Capital Overhauls	39	0	0	0	0	39
Plus Federal Funds—Capital Maintenance	242	230	196	202	208	1,078
Plus Federal Funds—Capital Overhauls	27	51	52	54	55	239
Budget Result (Unfunded Cash Loss)	(\$277)	(\$217)	(\$263)	(\$268)	(\$259)	(\$1,283)

If our restatements provide more accurate projections than those reported in the Strategic Plan, Amtrak would not only fail to achieve self-sufficiency in 2003, but would not come closer to achieving that goal during the subsequent years of the Plan. Also, the revenue forecasts depend on maintaining service quality and reliability, both of which would suffer without adequate capital spending on overhauls, fleet renewal, and operational reliability projects.

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

Absent draconian cuts in service and personnel, it is unlikely that Amtrak will be able to develop and put into place actions needed to close the gaps we have identified. The revenue problems facing Amtrak are less troublesome than the challenges it faces in controlling expenses. The Northeast Corridor and Amtrak West SBUs are projected to show steady passenger revenue growth and systemwide non-passenger revenue is expected to continue solid growth as well. However, in the last 4 years, expense growth has more than kept pace with the rapid growth in revenues Amtrak has experienced. Thus, Amtrak must find ways to curtail expense growth if it is to close the gap between revenues and expenses.

To address this problem, Amtrak began a program in 2001 designed to promote a renewed and intensified focus on cost management, cost reduction, and cash generation across the company. This program was adopted to create an environment of intense awareness for cost management, to stem escalating costs, and to assist in achieving operational self-sufficiency. Part of Amtrak's new cost management and cash generation program is the adoption of Cost Management Initiatives, which are designed to improve and streamline internal processes, policies, and procedures to either reduce costs or generate revenues. Amtrak has also contracted an outside consultant to conduct a cost management study of Amtrak designed to identify areas where costs can be substantially reduced or eliminated.

Post-September 11 Revised Forecast is Favorable to Northeast Corridor Ridership and Revenue

While curtailing cost growth is critical to achieving self-sufficiency, the potential positive effects on Amtrak's ridership as a result of the terrorist attacks on September 11, 2001 may help close some of the gap. In our original forecast, we found that relative to past years, the travel environment in the Northeast Corridor had changed favorably for Amtrak in 2001. A strongly growing economy resulted in increased travel volumes on all modes of travel, and this demand, in part, taxed the airlines' ability to maintain reliable service. The resulting aviation delays and higher business fares made air travel a less attractive option.

At the same time, rail travel improved significantly as Amtrak introduced Acela Express between New York and Boston and set fares lower than originally projected. As a result, our original restated forecasts were similar to Amtrak's own projections over the Plan period.

However, since last Spring, a slowing economy has suppressed travel on all transportation modes, most notably that of business travelers. Airline volumes and yields were down, and Amtrak announced that Acela ridership was below expectations. On September 11, the terrorist attacks and their aftermath resulted in further changes to the travel environment, particularly in the Northeast Corridor. Many factors, including increased security at airports, less convenient parking, reduced flight frequencies, and stringent carry-on restrictions, have made airline travel a less attractive option. For the foreseeable future, these factors are likely to be in Amtrak's favor.

Compared to our original 2001 forecast for Northeast Corridor revenue and ridership, our revised projection predicts an additional \$72 million in passenger revenues in Fiscal Year 2002 beyond that reflected in Table 5. This represents a 9 percent increase over the revenues forecast in our original analysis. Significantly longer airport access times could raise this projection to as much as \$150 million in incremental revenue (18 percent above our original forecast) in 2002 beyond that reflected in Table 5. If this occurs, the additional revenues would likely reduce Amtrak's cash losses so that the self-sufficiency gap in 2003 could be substantially less than our currently projected gap of \$263 million.

Most of the projected additional revenues are likely to come from the Acela Express service, where we project an additional 610,000 riders in 2002. This represents a 16.5 percent increase over our original projections. At the same time, however, we estimate that Acela Regional ridership will decrease slightly from our original projections, declining by a total of 248,000 riders or 3.9 percent.

The greatest impacts will be on Acela Express on end-to-end markets in the Northend (Boston –New York) and Southend (New York – Washington), where air volumes are much larger than between intermediate markets, and where the relative competitiveness of air travel has been most severely impacted by the September 11 events. In the intermediate markets (i.e., Philadelphia –New York), Acela was already the superior common carrier mode prior to the attacks, while in the longer through markets, (i.e., Washington –Boston), the degradation in air service is still not sufficient to fundamentally affect the superiority of air over rail.

Effects of September 11 on Intercity and West Revenue and Ridership

Since the terrorist attacks on September 11, 2001, enhanced security procedures, new check-in requirements, less convenient parking, and more restrictive carry-on policies have also made airline travel a more time-consuming activity. In most long-distance markets, there are few alternatives, as the driving or rail travel times are simply too long to compete with air travel, despite degradations in air service.

However, in shorter markets, some travelers who previously used air service may choose to travel on Amtrak.

We selected a limited number of markets in Amtrak’s Intercity and West business units to gauge the potential for increased revenue and ridership beyond our original projection that could occur in response to longer air travel times. We identified major city-pairs between 100 and 500 miles that are served by Amtrak and also receive scheduled air service. Table 7 identifies the number of routes, city-pairs, and Amtrak station-pairs included in our analysis.

Table 7. Number of Routes, City-Pairs, and Amtrak Station-Pairs Included in Analysis

Variable	Strategic Business Unit	
	Intercity	West
Routes	24	4
City-Pairs	100	14
Station-Pairs	639	89
FY01 Passengers (000)	677	582
Percent of SBU Total	12	14
FY01 Revenue (\$ in millions)	37.5	17.8
Percent of SBU Total	9	18

Overall Results

We found the potential increases in net revenue appear to be very modest, with a maximum net revenue impact on Intercity trains of approximately \$8.7 million and a maximum net revenue impact in the West business unit of about \$3.3 million. The greatest impacts are likely to be for trips between city-pairs within the 200 to 400 mile range, since it is between these markets that air and rail service are most competitive. In the longer distance markets (greater than 400 miles), the rail travel times are simply too long to be competitive with air service, even with longer air travel times. In the shorter markets (less than 200 miles), rail is likely to already be the superior common carrier and is not likely to benefit from additional riders as a result of the September 11 attacks.

Within the 200 to 400 mile city-pair range, the potential shift of travelers from air to rail is also likely to be larger between cities served by Amtrak routes that provide frequent service. Shifts of air passengers to rail travel should increase ridership and passenger revenues on Amtrak routes without a commensurate increase in expenses, since these additional passengers can be accommodated on existing trains.

We note that these modest increases, however, were calculated as incremental growth over the 2002 net passenger revenues we had projected earlier in 2001 when we conducted our original analysis of Amtrak's Business Plan forecast for Intercity and West passenger revenues. At that time, we did not incorporate the effects of the softening economy in our analysis.

While it appears that Amtrak's services in Intercity and West stand to benefit somewhat from the degradations in airline service in a limited number of markets, it is unlikely that the benefits will outweigh the expected impacts of the economic downturn. For example, in our original forecast, we credited Amtrak's Intercity business unit with an expected economic growth of \$6 million in 2002. Eliminating that growth would nearly offset our estimate of the maximum potential revenue increases resulting from the air service changes following September 11.

Intercity Results

Our analysis of the potential diversion from air to rail of passengers in Intercity markets as a result of the September 11 terrorist attacks found that there were a total of 100 city-pairs along 24 of Amtrak's routes that could experience increased ridership and revenues.

Table 8. Intercity Potential Revenue Growth in Selected Markets, 2002

City-Pair		Percent of Total Potential Growth	Potential Additional Revenue in 2002 (\$ in millions)
Chicago	Detroit	10.5%	\$0.91
Chicago	Minneapolis	6.6%	0.57
Washington	Atlanta	4.1%	0.35
New York	Charlotte	3.9%	0.34
St. Louis	Kansas City	3.9%	0.34
Chicago	Memphis	3.4%	0.30
New York	Raleigh	3.3%	0.29
Reno	San Francisco	3.3%	0.28
New York	Charleston	3.1%	0.27
Raleigh	Charlotte	3.1%	0.27
Philadelphia	Pittsburgh	2.9%	0.25
Washington	Charlotte	2.8%	0.24
Chicago	Grand Rapids	2.7%	0.24
Washington	Raleigh	2.6%	0.23
Okla. City	Ft. Worth	2.5%	0.21
Memphis	New Orleans	2.4%	0.21
Omaha	Denver	2.1%	0.19
Total 17 City-Pairs		63.1%	5.49
Total 60 Other City-Pairs		36.4%	3.17
Total 77 City-Pairs		99.5%	\$8.66

As Table 8 illustrates, 17 city-pairs accounted for nearly two-thirds of the estimated revenue and ridership growth, while an additional 60 city-pairs constituted the remaining one-third. The largest city-pair, Chicago-Detroit represented over 10 percent of the potential FY 2002 revenue growth of nearly \$8.7 million.

Amtrak West Results

In the West business unit, the Seattle–Portland city-pair accounts for over 43 percent of the total potential growth, accounting for \$1.42 million of the maximum projected incremental increase in 2002 net passenger revenues. The combined top four markets account for more than three-quarters of all projected growth. Table 9 illustrates Amtrak West’s potential revenue growth in selected markets.

Table 9. Amtrak West Potential Revenue Growth in Selected Markets, 2002

City-Pair		Percent of Total Potential Growth	Potential Additional Revenue in 2002 (\$ in millions)
Seattle	Portland	43.1%	\$1.42
San Francisco	Los Angeles	18.3	0.61
San Francisco	Bakersfield	10.9	0.36
Vancouver, BC	Seattle	10.5	0.35
San Jose	Los Angeles	7.6	0.25
San Francisco	Fresno	4.7	0.15
Seattle	Salem	2.4	0.08
Seattle	Eugene	2.3	0.08
Total Net Passenger Revenue Growth		99.8%	\$3.30

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

Northeast Corridor Strategic Business Unit

Passenger Revenues

The nation has experienced significant changes since Spring 2001 when we prepared our original forecast for Northeast Corridor passenger revenue and ridership. The economy has slipped into a recession and the terrorist attacks on September 11, 2001 have substantially impacted how, where, and even whether, people choose to travel. It is likely that these changes will have long-term implications for Amtrak's ridership and revenues in the Northeast Corridor, although it is too early to predict with certainty the magnitude and duration of the effects.

The following section reports the findings of our original analysis. The results are what we believed would be likely to occur during the Plan period if the economy remained robust and the attacks had not occurred. The analysis incorporated longer air trip-times resulting from continued flight delays. It also assumed an equipment delivery schedule that would allow Amtrak to realize 8 months of full incremental revenue, and 2 months of nearly full revenues, from the high-speed rail program in 2002.

We follow this discussion with a section on the potential impacts of the terrorist attacks on Amtrak's revenue and ridership in the Northeast Corridor, and to some extent, the impacts of the weakening economy. Our next assessment will focus in more detail on the likely impacts of the weakening economy on total travel demand in the Northeast Corridor, and the projected impacts this will have on Amtrak's Northeast Corridor ridership and revenues. We will also incorporate the revenue impacts of new delays in Acela equipment delivery.

Original Forecast for NEC Passenger Revenues Is Consistent With Amtrak's Forecast

In the 2001 Strategic Business Plan, the Northeast Corridor projected passenger-related revenues of about \$4.5 billion over the Plan period, 2001 through 2005. These revenues reflect Amtrak's baseline projections for the Acela program (Metroliner/Acela Express and Northeast Direct/Acela Regional) and four related

BPA's including Airline Agreement, Service/Promotional Changes, Ticket Revenue-Economic Growth, and Transit Authority Agreement⁴.

Based on our assessment of the reasonableness and consistency of Amtrak's projections of NEC passenger revenues, we project that Amtrak's revenues over the Plan period will be essentially the same as it forecasts. This is a significant improvement over our 2000 assessment where we projected that revenues would fall short of projections during the 2000-2004 plan period by \$304 million, or 7.4 percent.

All of our downward restatements of Amtrak's forecast of NEC passenger revenue occurs in 2001 (\$49.5 million) and 2002 (\$5.1 million) and is a result of an updated (delayed) implementation schedule for high-speed service. However, in 2003, the first full year of operation of the entire high-speed rail program, our forecast of total passenger revenue is \$18.8 million, or 2.1 percent, higher than Amtrak projects in its 2001 business plan. Table 10 compares our restatement of NEC passenger revenues to Amtrak's 2001 Business Plan projections for the years 2001 through 2005.

Table 10. Amtrak's NEC Passenger Revenue Forecasts and OIG Restatements (\$ in millions)

	2001	2002	2003	2004	2005	Total
Amtrak's Forecast	\$758	\$874	\$910	\$947	\$986	\$ 4,474
OIG Restated Forecast	708	869	929	964	999	4,468
Increase (Decrease) in Cash Loss	\$50	\$5	(\$19)	(\$16)	(\$13)	\$6
Percent Difference	(6.5)	(0.6)	2.1	1.7	1.4	(0.1)

Although our 5-year total passenger revenue forecasts are close to those in the 2001 Business Plan, our forecast of the relative revenue contributions of the Acela Express and Acela Regional services differ substantially from Amtrak's forecasts. Similar to our restatements in past years, we forecast less revenue from Acela Express and more revenue from Acela Regional than does Amtrak. Our forecast estimates that some passengers will prefer to take the improved conventional service (Acela Regional) on the Northend from New York to Boston rather than the faster Acela Express service because the time savings offered by the express service will not compensate for the fare differential.

⁴ 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.

Included in Amtrak’s NEC passenger revenue forecast are four Business Plan Actions (BPAs), which cumulatively total \$164 million over the Plan period, 2001 through 2005 when inflated to current year dollars. Our analysis indicates that in nearly all cases, the effects of the actions have already been subsumed in our restated revenue forecasts. In the other few instances, delays in service or agreements necessitated downward restatements of projected revenues. Table 11 indicates our restated revenue forecasts for the four BPAs included in the NEC passenger revenue forecast.

Table 11. Amtrak Revenue Forecasts for NEC Passenger BPAs and OIG Restatement, 2001-2005

SBP Projections	2001	2002	2003	2004	2005	2001-05
Airline Agreement	0.5	0.5	0.5	0.6	0.6	2.7
Service/Promotional Changes	18.2	16.6	17.0	17.4	17.9	87.1
Economic Growth	11.6	11.6	11.6	11.6	11.6	58.0
Transit Authority Agreement	3.1	3.2	3.2	3.3	3.4	16.2
Total SBP Projections	33.4	31.9	32.4	32.9	33.5	164.0
OIG Restatement	0.3	3.1	4.8	4.9	5.0	18.0
Difference	33.2	28.7	27.6	28.0	28.5	146.1

Ridership Projections Vary By Service

Both Amtrak’s and our projections for 2001 ridership in the Northeast Corridor were overly optimistic. Amtrak’s projected ridership for 2001 was 14.032 million, we projected 13.906 million, and Amtrak’s actual ridership was 13.492 million. This lower-than-projected actual result was most likely caused by a combination of factors, including delays in trainset delivery, the slowing economy, and the September terrorist attacks, which neither forecast could have anticipated.

The difference in the ridership forecasts primarily reflects our projections of the competitiveness of the slightly slower, but significantly lower-priced Acela Regional service. Our total downward ridership restatement is entirely on Metroliner/Acela Express services, while we restated Other Rail, which includes Acela Regional, upward by 31,000 riders. Table 12 illustrates the difference in 2001 ridership forecasts.

Table 12. Amtrak’s NEC Ridership Forecasts and OIG Restatement (Passengers in thousands)

	Metroliner/Acela Express	Other Rail	Total
Amtrak's Forecast	3,071	10,961	14,032
OIG Restated Forecast	2,915	10,991	13,906
Difference	(156)	31	(125)
Percent Difference	(5.1)	0.3	(0.9)

Fare Adjustments Could Result in Greater Revenues

One of the long-standing concerns we have had about Amtrak’s passenger revenue forecast is the structure of the mathematical model used to derive its projections. The models understate the potential for substitution of ridership between the slightly slower, but significantly lower-cost Acela Regional service and the higher-fare Acela Express. Even the increased comfort, marketing, and amenities of the Express service are not likely to merit the premium Express fare when the alternative is a significantly less expensive, but only marginally slower service.

In our 2000 assessment, we found that Amtrak could significantly increase revenues by lowering Express fares, especially in the Boston-New York end-to-end markets, with smaller increases in the shorter intermediate markets. Between 2000 and 2001, Amtrak reduced its Northend Acela Express fares, at least in part, because of the results of our analysis. However, Amtrak was concerned that its operating plan would not be able to accommodate the expanded volume of Acela Express riders at the revenue-maximizing fares. This year, as part of our review of the 2001 business plan projections, we undertook a fare maximization review that accommodated the capacity constraints posed by Amtrak’s current operating plan.

Similar to 2000, we found that by lowering Express fares in most of the Northend markets, Amtrak could realize over \$50 million in additional revenue, relative to our restated 2001 projected revenues. The revenue maximizing fares were very similar to those recommended in our analysis performed in 2000. However, as we found with our earlier analysis, the ridership growth that would accompany the fare changes would greatly exceed seating capacity on all route segments in the Northend. 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 to assist them in formulating their Acela operating and fare strategies.

By revising our analysis to incorporate existing capacity constraints, we still concluded that Amtrak could capture an additional \$10 million in revenue with some fare adjustments. Lowering fares in the long distance, air competitive markets makes economic sense. And since Acela tickets are sold on a reservations-only basis, restricting low yield, short distance trips on the Express service and moving them to the Regional service would be both feasible and economically prudent.

Post-September 11 Revised Forecast is Favorable to Northeast Corridor Ridership and Revenue

In our original forecast, we found that relative to past years, the travel environment in the Northeast Corridor changed favorably for Amtrak in 2001. A strongly growing economy resulted in increased travel volumes on all modes of travel, and this demand, in part, taxed the airlines' ability to maintain reliable service. Aviation delays and higher business fares made air travel a less attractive option. At the same time, rail travel improved significantly as Amtrak introduced Acela Express between New York and Boston and set fares lower than originally projected. As a result, our original restated forecasts were similar to Amtrak's own projections over the Plan period.

However, since last Spring, a slowing economy has suppressed travel on all transportation modes, most notably that of business travelers. Airline volumes and yields were down, and Amtrak announced that Acela ridership was below expectations. On September 11, the terrorist attacks and their aftermath resulted in further changes to the travel environment, particularly in the Northeast Corridor. Many factors, including increased security at airports, less convenient parking, reduced flight frequencies, and stringent carry-on restrictions, have made airline travel a less attractive option. For the foreseeable future, these factors are likely to be in Amtrak's favor.

We have attempted to gauge the potential near-term impacts of the September 11 attacks on Amtrak's revenue and ridership in the Northeast Corridor. To conduct our analysis, we attempted to quantify a range of values associated with a variety of elements that have changed since our initial forecast. Table 13 identifies the variables we used to quantify changes in service since last Spring and the associated impacts on our original forecast. We refer to this as our "base case" scenario.

Table 13. Base Case Scenario For Revised Northeast Corridor Revenue Forecast

Variable	Description	Impact
Economic Slowdown	Reduced traffic volumes in all modes due to pre-September 11 economic slowdown.	-10 percent (all modes)
Increased Airport Security	Estimated increases in airport processing times related to new security procedures. Likely to lessen over time and vary by type of passenger, business or non-business.	+15 minutes business (air travel time) +30 minutes non-business (air travel time)
Airport Specific Security Measures	Passengers flying in/out of Reagan National Airport (DCA) assumed to require additional processing time related to enhanced security.	+10 minutes (air travel time)
Airport Specific Parking Restrictions	Passengers flying in/out of Boston Logan airport assumed to require additional access time because parking at Shuttle terminals banned.	+5 minutes (air travel time)
Revised Airline Schedules	Reduced frequencies on markets other than end-to-end Shuttle markets (DCA-BOS, DCA-LGA, LGA-BOS).	-18 percent (air frequency)
Airline Congestion Related Delays	Reduced air volumes eliminates congestion-related delays at Northeast Corridor airports.	-10 to 15 minutes air travel times between major Northeast Corridor city-pairs
Flying "Inconvenience"	Increased inconvenience of flying – new security-related baggage and carry-on restrictions, check-in requirements, gate access restrictions, etc. will cause some passengers not to travel at all.	-11 percent in air travel volumes

The base case represents what we believe to be the most likely scenario. We also performed a series of sensitivity analyses that estimated the impacts of other possible changes to the base case results. These are identified in Table 14.

Table 14. Additional Changes Tested

Changes	Description	Impact
Increased Airport Security	Estimated increases in airport processing times related to new security procedures. Likely to lessen over time and vary by type of passenger, business or non-business.	+ 30 minutes business (air travel time) + 45 minutes non-business (air travel time)
"Attractiveness" of Air Travel	Temporary further suppression of air volumes since Terrorist attacks on September 11 due to factors other than those identified above. Potential for an additional 4 percent reduction in air volumes, translated into "penalty" minutes.	+ 6 minutes business (air travel time) +11 minutes non-business (air travel time)

Results: Combined Factors Could Substantially Increase Ridership and Revenue

Compared to our original 2001 forecast for Northeast Corridor revenue and ridership, our revised (base case) projection predicts an additional \$72 million in passenger revenues in Fiscal Year 2002. This represents a 9 percent increase over the revenues forecast in our original analysis. Significantly longer airport access times, ie., 30 minutes business/45 minutes non-business, would raise this projection to as much as \$150 million in 2002 incremental revenue. Table 15 identifies our revised projections and the likely contributions by market and service level.

Table 15. Revenue and Ridership Forecast Changes Following September 11 (base case scenario)

	Ridership (thousands)	
	High-Speed Rail	Conventional
Northend		
Boston-New York	136	(56)
Other Northend	(17)	(66)
Total Northend	119	(122)
Southend		
New York-Washington	371	84
Other Southend	(15)	(225)
Total Southend	356	(141)
Through Travel		
Total Through Travel	135	15
Total Northeast Corridor Spine	610	(248)
Revenues		
	High-Speed Rail	Conventional
Incremental Total Passenger Revenues (\$ in millions)	\$78.2	(\$6.0)

Most of the revenues will come from the Acela Express service, where we project an additional 610,000 riders in 2002. This represents a 16.5 percent increase over our original projections. We estimate that Acela Regional ridership will decrease slightly from our original projections, declining by a total of 248,000 riders or 3.9 percent.

The greatest impacts will be on Acela Express on end-to-end markets in the Northend (Boston – New York) and Southend (New York – Washington), where air volumes are much larger than between intermediate markets, and where the relative competitiveness of air travel has been most severely impacted by the September 11 events. In the intermediate markets (i.e., Philadelphia –New York), Acela was already the superior common carrier mode prior to the attacks. In the longer through markets, (i.e., Washington –Boston), the degradation in air service is still not sufficient to fundamentally affect the superiority of air over rail.

The greatest potential for improvement is on the Southend, where rail is relatively more competitive with air than in the Northend. Between Washington and New York, with the degradation in air service, Acela Express becomes the superior mode of travel with its trip-times close to 2.5 hours. In 2002, we expect to see a 70 percent increase in Acela Express ridership in the New York – Washington market, for a total of 370,000 additional riders. On the Northend, however, Acela Express trip-times from New York to Boston of 3.4 hours are still not competitive with air travel, even with the degradation in airline service. While we anticipate growth, it is not as pronounced as on the Southend. In the Boston-New York market, we project ridership to increase by a total of 136,000 additional passengers, which represents a 24 percent increase from our original projections.

Actual Experience In October Matches OIG Projections

Amtrak's experience in September and October is unlikely to be indicative of what we project to occur in the remaining months of Fiscal Year 2002. Airport access and terminal processing times were, in some cases, 1 to 2 hours longer than we anticipate will be the case in a steady state higher security environment. This would favor passenger choice to rail rather than air. In addition, for purposes of performing an expeditious analysis, our projections assumed a full complement of Acela Express trains in service during the entire year. Since this has not occurred, our projections would tend to be overstated. However, despite these differences, Amtrak's actual experience through October closely matched our forecast.

On Acela Express, monthly ridership in October between New York and Washington nearly doubled the monthly ridership in the June-August period. Significant growth occurred in the end-to-end markets on both the Northend and Southend, where we projected the competitiveness of air service would be most

severely affected. In fact, in Southend markets other than end-to-end, October ridership (seasonally adjusted) declined compared to earlier months. Total October ridership on Acela Regional decreased overall by about 20,000 riders relative to the months June through August (seasonally adjusted).

Risks Exist to Realization of Potential Gains

Although our analysis predicts potential passenger revenue increases that could range from \$72 million to \$150 million, there are a few caveats that could materially affect the projection. First, our forecasts of incremental revenue are very sensitive to the degradation of air service in the Southend New York to Washington market. If the degradation is less than we project, the potential favorable impact on Amtrak will be suppressed. Second, our forecast assumed a full complement of Acela Express trains in operation for the entire 2002 fiscal year. Recent additional delays in equipment delivery mean that this is not likely to be the case until at least May 2002.

Third, even prior to September 11, we projected that Amtrak could experience capacity constraints on the Northend as early as 2002. While we did not perform a detailed train-by-train analysis on the Southend, clearly additional capacity would have to be added to accommodate the projected ridership growth. However, we note that Amtrak could preserve potential revenue increases through fare adjustments. Fourth, our projections assume no competitive pricing actions by the airlines. If the airlines lower their fares, Amtrak's ridership and revenue increases would be less robust. Lastly, our forecast of revenue and ridership increases could be significantly reduced if there are terrorist attacks on Amtrak. Additional attacks related to air travel, while appearing to support rail service, are likely to suppress travel further on all modes.

Non-Passenger Business Plan Actions

In addition to passenger revenue initiatives, the NEC developed 22 plan actions that are projected to improve bottom-line results by \$219 million over the 5-year Plan period. Amtrak estimated these actions would increase revenues by \$37 million and produce expense savings of \$182 million. We decreased the NEC's revenue projections to \$20 million, a decrease of about \$17 million, and reduced expense savings to \$88 million, a reduction of \$94 million. Overall, we projected the NEC BPAs will result in \$108 million in improvements to Amtrak's bottom-line for the 5-year Plan period, \$111 million less than Amtrak's projection. Table 16 summarizes our restatements.

Table 16. OIG Restatements of NEC’s Non-Passenger Business Plan Actions (\$ in millions)

	2001	2002	2003	2004	2005	Total
Amtrak Revenue Increases	\$22	\$4	\$4	\$4	\$4	\$37
OIG Revenue Increases	11	6	1	1	1	20
Difference	12	(2)	2	2	2	17
Amtrak Expense Savings	6	56	46	39	35	182
OIG Expense Savings	(4)	19	24	25	24	88
Difference	10	37	22	15	11	94
Increase (Decrease) in Cash Loss	\$21	\$35	\$24	\$17	\$14	\$111

We concluded that the revenue estimates in two Plan actions were overstated. Amtrak projected it would generate over \$12 million in incremental revenues related to increased access fees from freight railroads. However, at the time of our review, Amtrak could not provide any support for its projections. In another plan action, Amtrak projected nearly \$16 million in additional revenues due to the increase in billing rates for use of Amtrak-owned equipment on reimbursable projects. We accepted \$11 million as reasonable but questioned Amtrak’s ability to fully recover recently constructed billings for equipment use for periods of up to 5 years ago.

Based on our discussions with NEC officials and analysis of supporting documentation, we concluded 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. A summary of our three largest expense restatements follows.

First, NEC’s largest Plan action to reduce expenses is valued at \$68 million. This action represents projected savings from closely managing the use of overtime and a goal of reducing the ratio of overtime wages to straight-time wages. At the time of our review, NEC had been successful at reducing the ratio by over 1.5 percent, but the savings were short of Amtrak’s Plan. We credited Amtrak with about \$17.5 million in savings for the 5-year period, a reduction of \$50 million.

Second, Amtrak projected over \$12 million in savings from deploying additional track maintenance vehicles in 2002. Because capital funding was not made available and the associated labor savings attributable to the vehicles were overly optimistic, we reduced the value of this action by \$11 million.

Third, NEC had two Plan actions called Productivity Enhancements and Management Actions, valued at \$60 million, that at the time the Plan was submitted were essentially placeholders that Amtrak planned to address with future initiatives. During our review, Amtrak was able to identify three areas to help close the gap. It eliminated the double counting of commuter contract-related expenses, reduced future interest expenses associated with financing the frequency converter in Pennsylvania, and eliminated planned labor expenses for station personnel providing customer service for Acela Express passengers. These actions resulted in about \$50 million in expected savings, leaving a gap of about \$10 million.

Intercity Strategic Business Unit

Passenger Revenues

Amtrak projects a net improvement of \$68 million from the baseline performance anticipated for Intercity over the 2001 through 2005 period (\$453 million in increased revenues offset by \$385 million in increased expenses). Our revised forecasts for these BPAs project a net contribution to improved bottom-line financial performance for Intercity of \$73 million over the same period, a difference of \$5 million (7 percent). Table 17 compares our passenger revenue and expense projections to Amtrak's projections over the Plan period.

Table 17. Amtrak's Intercity Passenger Revenue and Expense Projections and OIG Restatements (\$ in millions)

	2001	2002	2003	2004	2005	Total
Amtrak Revenue Increases	\$38	\$76	\$97	\$113	\$128	\$453
OIG Revenue Increases	27	37	58	66	75	262
Difference	12	38	40	47	53	190
Amtrak Expense Increases	19	61	100	102	103	385
OIG Expense Increases	12	14	53	54	55	189
Difference	(7)	(47)	(47)	(48)	(47)	(195)
Increase (Decrease) in Cash Loss	\$5	(\$8)	(\$7)	(\$0)	\$6	(\$5)

It is important to note that Intercity's Network Growth Strategy (NGS) at the time the 2001 Strategic Business Plan was developed assumed an expansion of passenger routes and services, as well as rapid growth in its Mail and Express business line. Since publishing its Plan, however, Amtrak has drastically scaled back its planned network growth, as constraints on capital investment and other factors have required it to postpone or cancel most of the route restructuring and

new service initiatives comprising the NGS. At the same time, expanding Mail and Express capacity and service at the cost of significantly increased losses on passenger service has ceased to be the focus of Amtrak's strategy for network growth.

As a consequence of this scaling back of the NGS, we have revised Amtrak's passenger-related revenue and expense forecasts for this BPA to include only those specific service initiatives that have already been inaugurated or have been approved by Amtrak management and are scheduled for implementation during the Strategic Plan period. We also separated out Amtrak's Mail and Express related revenues and expenses and report on those in a section that follows the Intercity non-passenger business plan actions. The following is a summary of our largest restatements.

Mail, Express and Network Growth. Amtrak's passenger-related revenues and expenses from the "Mail, Express and Network Growth" business plan action were projected to result in a net loss of \$219 million, \$141 million in increased revenues offset by \$360 million in increased expenses. At the time of our review, it was not clear which of the new service initiatives comprising Amtrak's overall Network Growth Strategy were reflected in Amtrak's forecasts of increased passenger revenues for this action. In addition, no information was provided detailing expenses related to these new initiatives, which made it difficult to distinguish between passenger service and mail and express activities. Based on discussions with Amtrak officials and analysis of available documentation, we restated Amtrak's projection to a net loss of \$92 million (\$54 million in increased revenues, \$146 million in increased expenses), which reflects a bottom-line improvement of \$127 million compared to Amtrak's projected net loss of \$219 million.

Economic Growth. Amtrak's "Economic Growth" action forecasted \$199 million in incremental revenues over the Plan period, while incurring only \$1.7 million in additional expenses, for a net contribution of \$197 million. This action is Amtrak's forecast of increased passenger revenue stemming from projected ridership and revenue growth on Intercity routes as a result of population and income growth as well as fare increases. Using a statistical model of ridership in Amtrak's Intercity routes, economic forecasts from a variety of Federal agencies, and analysis of other revenue management initiatives Amtrak included in this action, we forecast slower growth in passenger revenue and an increase in projected expenses related to ticket sales and distribution. As a result, we restated this action downward by \$90 million, resulting in a net contribution of \$107 million over the Plan period.

Marketing Programs. Amtrak projects that its joint-fare agreements with airlines, Internet ticket sale promotions, and other marketing programs will generate about \$43 million in net improvements to its bottom-line over the 5-year Plan period. While Amtrak could not provide detailed revenue and expense data for the individual programs comprising this BPA, we agree that focused marketing activities can generate significant increases in passenger revenue and Amtrak has been successful at selected promotions in the past. However, we found Amtrak's projection of associated expenses to be unrealistically low, and therefore increased expenses by \$14 million. As a result, we project this action to contribute about \$29 million to Amtrak's bottom-line, instead of the \$43 million Amtrak projected.

Service Standards. Amtrak's service standards action is an initiative to improve the quality of all Amtrak passenger services through higher staffing levels, improving passenger amenities, conducting thorough pre-departure train inspections, and providing customer service guarantees and incentives for on-board personnel to take actions to improve customer service. Amtrak projected this action to improve net revenues by \$30.5 million. Based on our analysis, Amtrak's forecasts of ridership and fare increases appear to be extremely optimistic and we have revised this action's forecast of revenues downward by approximately half. Thus, we restated the Plan forecast of net revenues from this source downward to about \$15 million.

Non-Passenger Business Plan Actions

Amtrak Intercity developed 23 Business Plan Actions that do not relate to passenger revenue or to Mail and Express activity. Amtrak projected that these actions would increase revenues by \$40 million and produce expense savings of \$98 million for a net improvement of \$138 million over the 5-year Plan period. Overall, we raised Intercity's projections of revenue increases by \$18 million and, instead of Amtrak's projected expense savings of \$98 million, we estimated expense increases of \$120 million. Our total restatement is a \$200 million reduction of Amtrak's total projected impact from these BPAs. Rather than the \$138 million Amtrak projected in improvements over the 5-year Plan period, we projected a bottom-line deterioration of about \$62 million. Table 18 summarizes the effect of the restatements on Amtrak's projections of revenue increases or expense savings.

**Table 18. OIG Restatements of Intercity’s Business Plan Actions
(\$ in millions)**

	2001	2002	2003	2004	2005	Total
Amtrak Revenue Increases	\$20	\$5	\$5	\$5	\$5	\$40
OIG Revenue Increases	13	14	11	11	11	59
Difference	7	(8)	(5)	(5)	(5)	(18)
Amtrak Expense Savings	11	47	23	13	3	98
OIG Expense Savings	(15)	(26)	(26)	(26)	(27)	(120)
Difference	26	72	49	40	30	218
Increase (Decrease) in Cash Loss	\$33	\$64	\$43	\$35	\$25	\$200

Our increase of \$18 million to Amtrak’s revenue projection reflects \$27 million more in management actions associated with fare increases in most major Intercity markets, additional revenues from sleeper services, and other revenue actions. These increases were offset somewhat by reductions in anticipated commercial revenue initiatives and expected revenues from wreck repairs.

Intercity included three particularly large expense saving initiatives in its Plan with a combined value of over \$187 million. These initiatives included \$90 million for Management Actions to Be Determined, \$50 million for Intercity Restructuring and Improvements, and about \$48 million for Productivity Enhancements.

Generally, these BPAs reflected anticipated expense savings from management efforts to reduce labor costs, improve crew utilization, strengthen train performance, and achieve other efficiencies. The management actions to be determined BPA was essentially a placeholder representing the gap Intercity had to close to meet its self-sufficiency target assuming all other actions were fully achieved. Other than about \$3.5 million in savings from vacant positions that were included in Intercity’s 2001 budget, at the time of our assessment, Amtrak had not yet developed concrete efforts that could reasonably result in the projected expense savings.

Another large expense savings BPA reflected Amtrak’s anticipated savings from employing a Six Sigma program. This program, developed by General Electric, provides tools for analyzing processes with a goal of improved efficiencies and higher quality performance. Although Amtrak discussed several potentially promising projects underway such as eliminating operating problems on its Amfleet II passenger cars due to cold weather, inventory management, and wheel wear studies, Amtrak could not provide us with any support to show how these

actual savings would be realized. Thus, we restated cost savings associated with this BPA to \$4 million, a difference of about \$39 million.

The Intercity SBU also developed three BPAs to account for changes in fleet maintenance practices that were projected to result in \$217 million of additional expenses over the Plan period. These BPAs, CFR 238 PM - Overhaul, CFR 238 PM - Inspections, and Mechanical Improvements, were predicated on meeting or exceeding two separate standards, one regulated by the FRA under 49 CFR 238, and another developed by Amtrak internally, "Right and Ready." The new program that was planned to incorporate both these standards included preventive maintenance and inspection of most passenger equipment on a 120-day cycle. In addition, these functions were to be performed at SBU facilities rather than at the major mechanical backshops.

Amtrak recognized during 2001 that capital funding reductions and the need to cut expenses further would require this program to be scaled back. By limiting the scope of work, extending the 120-day cycle to a 180-day cycle, and keeping the work at the backshops, Intercity now estimates it will reduce the expense growth by \$40 million over the Plan period.

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, carries express shipments, and offers limited package express service on some passenger routes. While incremental revenues and expenses associated with these services were included as part of our restatement of Amtrak's Intercity SBU forecasts in previous assessments, this analysis treats Amtrak's Mail and Express services on a stand-alone basis as if they comprised a separate Strategic Business Unit.

Prior OIG Assessments of Amtrak's Mail and Express

Our three previous reviews found Amtrak's combined forecasts for revenues and expenses from its Mail and Express activities to be overstated. While the projections for its Mail activities were reasonable, the forecasts for Express were determined to be overly ambitious.

In last year's Plan, it was not possible to separate Amtrak's projections for Mail and Express revenue growth from its projections for passenger revenue growth in the Market-Based Network Analysis (MBNA), now called the Network Growth Strategy (NGS). This was because many of the projected new routes or route extensions were profitable only when additional Mail and Express business was considered. For that reason, we analyzed the projections for MBNA and Mail and

Express together. While we accepted the passenger revenue growth that was anticipated from the MBNA, we concluded that the Mail and Express projections were predicated on a too ambitious ramp-up of the business and restated the bottom-line contribution downward by \$179 million.

Amtrak's 2001 Strategic Business Plan Projections for Mail and Express

Amtrak's 2001 Strategic Business Plan for Mail and Express contains projections derived from 2000 results, referred to as the Baseline, and two Business Plan Actions that are expected to substantially increase the net contribution from these services throughout the Plan period.

The BPA titled Mail, Express, and Network Growth, is projected to have the largest impact. It assumes considerable expansion of new NGS routes, with a substantial increase in Mail & Express business on these routes. Expense savings of over \$15 million from the Mail and Express Efficiencies BPA are projected to result from better management of the mail and express assets and operations. Amtrak's Plan projects a "bottom-line" contribution of about \$551 million from the combined Mail and Express business lines over the 5-year Plan horizon. This contribution, which reflects both the Baseline level of Mail and Express business and the contributions of the two Business Plan Actions, is the net result of revenue growth totaling \$1,779 million and increased expenses of \$1,228 million over the 2001-2005 period. Table 19 summarizes Amtrak's Business Plan forecasts that are related solely to Mail and Express, along with our restatements.

Table 19. Mail and Express Revenue and Expense Forecasts and OIG Restatements (\$ in millions)

	2001	2002	2003	2004	2005	Total
Amtrak Revenue	\$176	\$287	\$425	\$439	\$451	\$1,779
OIG Revenue	118	139	156	180	206	799
Difference	58	148	269	259	245	980
Amtrak Expense	114	201	294	304	314	1,228
OIG Expense	105	105	111	126	143	590
Difference	(9)	(96)	(183)	(178)	(171)	(638)
Increase (Decrease) in Cash Loss	\$49	\$52	\$86	\$81	\$74	\$342

Revised Mail and Express Forecasts

In contrast to Amtrak's projections of net bottom-line improvements of \$551 million over the Plan period, our restated forecast projects net bottom-line improvements of \$209 million, reflecting anticipated revenue increases of \$799 million and expense increases of \$590 million. This results in a net restatement of \$342 million.

Basis for Restatements

In FY 2001, Amtrak was unable to meet the combined baseline and BPA revenue projections for Mail and Express that were contained in the Plan. In fact, Amtrak did not even meet its baseline revenue targets for these services.

Recognizing that its forecasts were not realistic, Amtrak has engaged in considerable internal restructuring and extensive strategic analysis of its Mail and Express business activities since the issuance of its 2001 Strategic Business Plan. This restructuring and analysis has resulted in a new philosophy and approach to the Mail and Express Business. We have discussed the new approach with Amtrak and examined the new assumptions on which it is based, and find them to be much more reasonable in light of historical performance and current market conditions.

As part of these efforts, Amtrak has attempted to assess the probabilities of attracting specific cargo movements to Amtrak services by comparing the rates and delivery times it is able to offer on those movements to those currently experienced by shippers. The process has also incorporated potential constraints on Amtrak's capacity to accommodate increased Mail and Express cargo volumes by assigning movements identified for potential diversion to specific equipment included in current or potentially operable train consists.

The train consist and equipment availability assumptions used in this analysis are claimed by Amtrak to not depend on obtaining agreement from freight railroads to operate train lengths of greater than 30 cars, or on inauguration of new services as part of Amtrak's Network Growth Strategy. These assumptions also do not rely on acquisition of any new equipment beyond the 100 boxcars and 110 refrigerated boxcars that are expected by the second quarter of 2002.

The new plan anticipates a business that is comprised largely of long-haul, East-West trains. It also anticipates a reduction of expenses resulting from a considerable paring down of its previously planned system of RoadRailers through reduction in the number of loading terminals it maintains, more accurate tracking

of equipment usage patterns, and managing labor costs through time and motion studies.

As a result of this new business model, Amtrak has substantially reduced its forecasts of increased revenues from Mail and Express activities from those previously published in its 2001 Business Plan. We agree with Amtrak that these revised revenue projections represent a considerably more realistic forecast of both the market potential for Amtrak's Mail and Express business activities and the regulatory and contractual constraints on Amtrak's opportunities to deploy expanded mail and express cargo services on its current passenger service network. It is certainly possible that Amtrak will reach agreements with freight railroads to relax these constraints, or that certain route realignments or extensions adopted as part of the Network Growth Strategy could allow Amtrak to offer expanded Mail and Express cargo services.

However, the necessary revisions to Amtrak's agreements with freight railroads have been under discussion for some time without resolution, which suggests that the revised Mail and Express plan's assumption regarding continuation of existing train capacity constraints and their effects on potential revenues from expanded Mail and Express cargo is realistic for the foreseeable future. At the same time, the Network Growth Strategy is undergoing continuous re-evaluation and as a result, is apparently being implemented much more slowly than originally planned. Thus, we believe it is prudent of Amtrak not to include any revenue anticipated from NGS actions.

While we believe that Amtrak's latest projections appear more reasonable and achievable than prior forecasts, we still have reservations about their likelihood. The following discussion outlines five specific areas of concern.

Risks to Realization of These Projections

First, one of the largest risks to the realization of the revenues projected in the revised forecast lies with delays in the delivery of equipment. The forecasts anticipate revenues from 110 refrigerated boxcars, along with an additional 100 regular boxcars. However, Amtrak has experienced recurring delays in receipt of this equipment. The revised forecasts anticipate delivery of the new equipment by the second quarter of 2002. Any further delays will negatively impact the revenue projected for the Mail and Express business.

A second potential risk is the fact that freight railroads are beginning to exhibit greater interest in trailer intermodal service for time-sensitive premium freight. This will provide direct competition with Amtrak's Express service. Nonetheless, Amtrak officials believe that the portion of the market that it is trying to attract is a

fractional portion of the overall market, and thus will not be affected by this trend. In fact, these officials feel that there is an opportunity in this trend, in that the freights may draw more attention to the service in general, which could serve to generate additional business for Amtrak.

Third, Amtrak's projections assume that all of its Mail and Express equipment will be filled as it becomes available. The projected business is, according to Amtrak, a very small proportion of the total market for premium freight. The new plan does not incorporate projected backhaul movements, but does anticipate front-hauls that are filled to capacity very quickly after the equipment has been acquired. At the time of our review, however, Amtrak did not have contracts in place to fill the equipment.

Fourth, in 2001 Amtrak did not have a separate set of financial statements which accurately accounted for its Mail and Express business activity. Amtrak has spent considerable effort in the latter part of 2001 isolating the actual costs that are attributable to the Mail and Express business and the results from this exercise will allow Amtrak to more accurately track, manage, and report expenses incurred by Mail and Express. Amtrak is expected shortly to begin reporting the financial results of the Mail and Express business separate from that of the rest of Amtrak, and this should help considerably in analyzing future forecasts of the financial contribution from the Mail and Express business.

The fifth risk is that, according to discussions with Mail and Express representatives, Amtrak will not provide capital for its Mail and Express unit, so that any capital needed to finance Mail and Express operations will have to be externally financed. Thus, to the extent that available outside financing is not adequate, future business may be negatively affected.

Amtrak West Strategic Business Unit

Passenger Revenues

Amtrak projects a net improvement of \$160 million from the baseline performance anticipated for West between 2001 and 2005 (\$186 million in increased revenues minus \$26 million in increased expenses). In contrast, our revised forecasts for these BPAs project a net contribution to improved bottom-line financial performance for West of \$124 million over the same period, a difference of \$36 million. Table 20 compares our passenger revenue and expense projection to Amtrak's projections between 2001 and 2005.

Table 20. Amtrak West Passenger Revenue and Expense Forecasts and OIG Restatements (\$ in millions)

	2001	2002	2003	2004	2005	Total
Amtrak Revenue Increases	\$11	\$30	\$41	\$49	\$56	\$186
OIG Revenue Increases	9	18	35	43	50	155
Difference	3	12	5	5	6	31
Amtrak Expense Increases	(2)	5	8	8	8	26
OIG Expense Increases	0	0	10	10	11	31
Difference	2	(5)	2	3	3	4
Increase (Decrease) in Cash Loss	\$5	\$7	\$7	\$8	\$9	\$36

We accepted Amtrak’s revenue and expense projections for 3 Plan actions, but revised those for 19 others. We concluded that some of Amtrak’s revenue projections were overstated because delays were likely in implementing some new services, while others reflected overly optimistic estimates of likely revenue impacts. Our largest restatements are summarized below.

The largest restatement was associated with the “Surfliner Equipment” BPA, which reflects the replacement of the entire San Diegan fleet with 40 new cars designed for the types of services provided in the corridor. Amtrak projected this action to generate a net contribution of \$32 million between 2001 and 2005. The fleet replacement program will reduce the number of different types of equipment used to operate this service, which is expected to lead to a significant reduction in maintenance expenses as well as to reduce scheduled travel time on the route (5 to 10 minutes) and improve overall reliability of the service.

Based on our analysis, Amtrak’s projected increase in passenger revenue, which amounts each year to approximately 20 percent of current passenger revenues, is considerably larger than can realistically be expected to result from the likely service quality and travel time changes made possible by the new equipment. As a result, we adjusted expected revenues downward from this action by \$8 million.

Expense savings associated with this Plan action include a reduction of wages, overtime, and maintenance costs. We were not provided information on how savings were calculated for the Plan period, so we reduced Amtrak’s projected expense savings by 50 percent to be conservative. Therefore, we adjusted expected expense savings downward by about \$9 million, resulting in a total restatement of \$17 million for the Plan period.

In addition, we restated the Las Vegas Service and Coast Starlight Auto Carrier Plan actions. The Las Vegas Service initiative is expected to generate over \$33 million in revenues for the Plan period. This service would provide one daily departure in each direction between Las Vegas and the southern California area. Because the start date of this service has been postponed to the summer of 2002 or later, we revised Amtrak's FY2002 revenue projections for this action to \$28 million, a decrease of approximately \$5 million.

The Coast Starlight auto carrier action is expected to generate \$19 million in revenues for the Plan period. This initiative was designed to load cars at Seattle and Los Angeles, carrying them a distance of 1,389 miles. The contract for the auto carrier cars has been initiated, but there is a minimum 18-month lead-time for the equipment to arrive. As a result of the delays associated with this initiative, we decreased the expected revenues to \$13.5 million during 2002, a reduction of \$5 million.

We also restated the "Marketing – Other" business plan action, projected to generate a bottom-line contribution of \$12 million. This action incorporates advertising and promotional actions carried on by Amtrak West and the impacts of corporate-wide marketing activities. In 2001, Amtrak planned to increase off-peak season promotions in the Northwest and advertising in Los Angeles to promote the new Pacific Surfliner service. Based on our communications with Amtrak West, we restated the marketing BPA revenues for the Cascades and Surfliner in line with Amtrak's revised plans. In addition, Amtrak's projected expenses associated with marketing activities were unrealistically low. To more reasonably reflect likely expenses of these promotional programs, we employed results from an Amtrak analysis of the effectiveness of advertising and promotion expenditures to estimate that each \$1.00 of marketing expense will result in, at most, \$3.00 of revenue gains. We used this relationship to revise the expense projection to be consistent with our restated estimate of marketing revenues, which resulted in an upward expense adjustment of over \$3 million and a total restatement for this action of \$5.2 million.

Non-Passenger Business Plan Actions

Amtrak West developed 52 Business Plan Actions which do not relate to passenger revenue and which Amtrak expects will improve bottom-line results by \$91 million over the 5-year Plan period. Amtrak estimated these actions would increase revenues by \$10 million and produce expense savings of \$81 million. Overall, we reduced Amtrak West's projections of revenue increases to about \$3 million, a reduction of \$7 million, and expense savings to \$20 million, a reduction of about \$61 million. The result is a bottom-line benefit from business plan actions of \$23 million for the 5-year Plan period. Table 21 summarizes the

effect of the restatements to reduce projected revenue increases or expense savings.

Table 21. OIG Restatements of Amtrak West’s Business Plan Actions (\$ in millions)

	2001	2002	2003	2004	2005	Total
Amtrak Revenue Increases	\$1	\$3	\$2	\$2	\$2	\$10
OIG Revenue Increases	1	1	1	1	1	3
Difference	1	3	2	1	1	7
Amtrak Expense Savings	14	17	17	17	17	81
OIG Expense Savings	1	4	5	5	5	20
Difference	12	13	12	12	12	61
Increase (Decrease) in Cash Loss	\$13	\$15	\$14	\$13	\$13	\$68

We reduced Amtrak West’s projection of revenue increases from these actions by \$7 million. Our two largest revenue restatements included about \$2.1 million for productivity and other initiatives for which West had no defined actions and \$1.9 million for video monitors planned to be installed in Coast Starlight coach cars. Based on discussions with West officials, the necessary outside financing to acquire the monitors had not been secured and future plans were uncertain. Many of our other revenue restatements reflect the lack of required funding, state agreements, or delayed construction completion dates for Amtrak West’s planned station improvements.

Our three largest expense restatements were associated with Amtrak West business plan actions for capitalizable maintenance, commissary, and presenteeism. We restated Amtrak West’s action on capitalizable maintenance from \$23.7 million to zero. In substance, this action does not project any cost savings or expense reductions but merely transfers these costs from West’s core line of business to its overhaul line of business.

Amtrak projected that its efforts to reduce commissary expenses would improve their bottom-line by \$10 million between 2001 and 2005. The main focus of this initiative is to reduce condemned costs and streamline food costs on all Amtrak West trains to bring margins closer to industry standard. At the time of our assessment, cost margins improved on some trains and worsened on others. Overall, food and beverage costs were over budget by \$400,000 - \$500,000. As a result, we restated this action to zero.

Amtrak’s business initiative on presenteeism projected a bottom-line net improvement of almost \$9 million for the Plan period. This action represents the reduction in employee overtime due to reduced absenteeism rates and other

overtime reduction strategies. At the time of our assessment, overtime wages were significantly higher than the prior year and more than \$2 million higher than planned. In addition, 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. Thus, we restated this action to zero.

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 Officer, Labor Relations, Government Affairs, and Procurement and Administration.

The Corporate Service Centers projected a net bottom-line improvement of \$752 million between 2001 and 2005. The improvements were projected in both passenger and non-passenger revenues and expenses. Of the 64 BPAs that were included in the Corporate Service Centers, we accepted Amtrak's revenue and expense forecasts for 46 and restated 18 others. We reduced Amtrak's projected revenue increases to a loss of \$7 million, a reduction of \$161 million, and reduced Amtrak's projections of expense savings to \$287 million, a decrease of \$310 million. The result is an increase in cash loss of \$471 million over the 5-year Plan period. Table 22 shows our restatements of Amtrak's Corporate BPAs categorized by revenue increases and expense savings.

Table 22. OIG Restatements of Corporate Business Plan Actions (\$ in millions)

	2001	2002	2003	2004	2005	Total
Amtrak Revenue Increases	\$64	\$8	\$28	\$28	\$28	\$154
OIG Revenue Increases	9	21	(12)	(12)	(12)	(7)
Difference	55	(13)	40	40	40	161
Amtrak Expense Savings	26	116	140	157	158	597
OIG Expense Savings	30	57	66	67	68	287
Difference	(4)	60	74	90	91	310
Increase (Decrease) in Cash Loss	\$50	\$46	\$114	\$130	\$131	\$471

Four restatements account for \$464 million of our total restatement for Corporate Service Centers. They are Productivity Enhancements, valued at an improvement

of \$255 million, but restated to \$122 million; Reduction in Capital Plan-COR valued at an expense increase of \$2 million, but restated to an expense increase of \$131 million; Market Based Network, valued at an improvement of \$145 million, but restated to \$28 million; and Service Standards, valued at an improvement of \$85 million, but restated to zero over the Plan period.

Productivity Enhancements. Corporate's Plan included 6 actions under Productivity Enhancements targeted to save Amtrak approximately \$255 million for the Plan period. The actions reflect benefits from expanding and developing opportunities to "insource" maintenance; an evaluation of major processes through the company to reduce costs; more efficient procurement and requisition initiatives; and development of standard budget guidelines for company-issued hand-held electronic devices and vehicles. While Amtrak is making progress in these areas, we restated these 6 actions from a planned benefit of \$255 million over the Plan period to \$122 million, a reduction of \$133 million.

The most significant restatement was for the Terminal Operations Savings and Business Processes, Systems, and Organizational Savings actions. The Terminal Operations initiative was to develop standard budget guidelines and re-justification of all needs for company-issued hand-held electronic devices and vehicles. We restated this action by \$65 million because Amtrak did not provide adequate support for achieving these savings.

The Business Processes, Systems, and Organizational Savings action was a comprehensive evaluation of major processes that focuses on standardization to reduce costs. This action included Amtrak's Cost Management Initiatives (CMI), as discussed in the next section. We restated this action downward by \$41 million because Amtrak had not provided support for much of the projected savings or, in some cases, specific initiatives were not clearly defined.

Cost Management Initiatives. Amtrak began a program in 2001 designed to promote a renewed and intensified focus on cost management, cost reduction, and cash generation across the company. It was adopted to create an environment of intense awareness for cost management, stem escalating costs, achieve operational self-sufficiency, and because it makes good financial sense.

Part of Amtrak's new cost management and cash generation program was the adoption of Cost Management Initiatives, designed to improve and streamline internal processes, policies, and procedures to either reduce costs or generate revenues. Additionally, Amtrak has contracted an outside consultant to conduct a cost management study of Amtrak designed to identify areas where costs can be substantially reduced or eliminated.

Amtrak is seeing cost savings/additional revenues from the cost management and cost reduction program. The majority of these savings have been incorporated into our BPA analysis. For those CMIs not related to any 2001 BPAs, Amtrak generated approximately \$6 million in additional savings for 2001. It intends to continue this program and is confident that these initiatives will continue to generate significant net savings in 2002 and beyond.

In addition, Amtrak initiated a restructuring of staff, backshops, and food service to generate additional savings. These initiatives include, but are not limited to, reducing support staff across the company, consolidation of functions, automating processes, and changing the way food is delivered on trains. Amtrak expects to generate over \$100 million in annual cost reductions from these initiatives, beginning in 2002.

The plans, although generally indicative of potential savings, must be clearly defined. Amtrak has had difficulty in the past translating vague goals into actual savings. The CMI program Amtrak has instituted appears to be a good exercise in defining goals, steps to achieve them, and appropriate metrics for monitoring results. Amtrak will need to be diligent in monitoring results and taking swift action to compensate for any deviation from goals.

Reduction in Capital Plan – COR. The Corporate SBU included two BPAs that seek to account for changes in the level of capital-funded activity. Beginning in 2001, the action “Reduction in Capital Plan Core” reduces the underlying expenses associated with work performed by the Corporate equipment overhaul shops that is financed by capital funds. This action assumed the decline in capital program to be permanent. Amtrak projected this action would result in a bottom-line increase in expenses of over \$2 million during the Plan period.

A second BPA, Transfer Credits, assumed capital funding for the overhaul shops would be reinstated beginning in 2002. As a result, operating expenses would be reduced by an amount equal to the projected overhead applied to the capital program, approximately \$30 million annually. Amtrak projected this action would result in a net improvement of almost \$130 million.

In our analysis, we found that the projected expense reduction represented by the BPA-Transfer Credit had already been accounted for by the BPA - Reduction in Capital. To correct for the resulting double counting, we have eliminated the reduction in expense associated with the Reduction in Capital action and accepted the Transfer Credit BPA. Our restatement results in a projected expense increase of \$131 million rather than the \$2 million expense increase in the Plan.

Market Based Network-NGS. The Market Based Network-NGS action was projected to generate a net bottom-line improvement of \$145 million during the Plan period. This Corporate Plan action includes additional initiatives planned as part of Amtrak's Network Growth Strategy beyond those NGS initiatives included in the Intercity action entitled "Mail, Express, and Network Growth."

However, at the time Amtrak's 2001 Strategic Business Plan was published, no specific service initiatives for a second phase of NGS restructuring had been analyzed in detail and approved for implementation. Thus, the revenue and expense impact estimates for this action represented "placeholder" or target values that were to be refined for inclusion in subsequent business plans.

To date, Amtrak has identified three specific NGS initiatives that were not included among those making up the Mail, Express & Network Growth BPA: Empire Corridor Restructuring (sometimes referred to as the Adirondack/Maple Leaf service), Coast Starlight Restructuring, and Silver Service Restructuring (often referred to as the Palmetto service). As a result of Amtrak's analysis of the projected revenue and expense impacts, these three initiatives have been tentatively scheduled for implementation during the 2002-2003 time frame.

Based on discussions with Amtrak and a review of the methods used to develop the revenue and expense forecasts for these initiatives, we believe Amtrak's expectations for the financial contributions from these measures are reasonable. These three measures are together expected to reduce passenger revenues by more than \$20 million over the 5-year Plan horizon, as the expected reduction in passenger revenues on the New York-Florida Silver Services offsets modest revenue increases on the Empire Corridor services and the Coast Starlight.

In addition, each of the three restructuring initiatives is expected to reduce train operating expenses -- significantly in the case of the Silver Service Restructuring -- with the total expense savings amounting to more than \$48 million. On balance, these three measures are expected to reduce Amtrak's cash loss by \$28 million, beginning with a \$5.5 million improvement during 2002, and increasing to \$7.5 million annually for the remainder of the Plan period. Thus, we restated this Plan action to a net improvement of \$28 million, down from the \$145 million Amtrak projected.

Service Standards. Amtrak has developed 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.

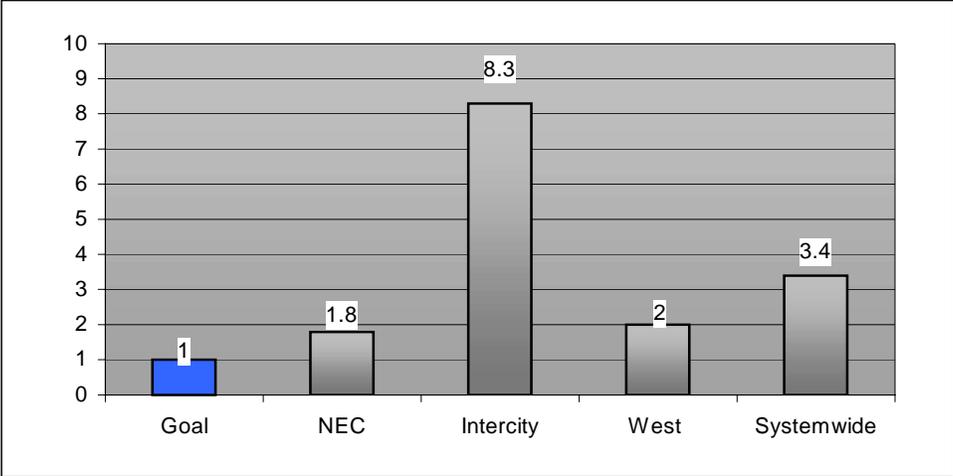
The Corporate Service Centers projected net revenue growth of \$85 million associated with this initiative. This Corporate Plan action is essentially a placeholder whose value will have to be allocated to the Strategic Business Units that operate passenger service. As discussed previously, however, we have already credited Amtrak West and Intercity with about \$17 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 required staffing. In addition, Amtrak's promise to provide bonuses to its employees for meeting Service Standards goals will fully offset the assumed ridership retention benefits. Consequently, we have restated the value of this Corporate Plan action to zero.

We also note that 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. In July 2000, Amtrak instituted a Customer Service Guarantee to bolster ridership, passenger retention, and revenue. This guarantee is a service standard initiative that 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.

Between July 4, 2000 and September 30, 2001, Amtrak issued about 100,000 service guarantee vouchers with a total value of \$8.2 million. Vouchers issued per 1,000 passengers were 3.4 systemwide (a 99.6 percent satisfaction rate), 8.3 in Intercity, 2.0 in West, and 1.8 in the Northeast Corridor. As Figure 4 illustrates, none of the Strategic Business Units have reached Amtrak's customer service guarantee goals.

**Figure 4. Amtrak Service Guarantees
July 4, 2000 To September 30, 2001 (Per 1,000 Customers)**



Finding: Capital Funding Needs

The Amtrak Reform and Accountability Act of 1997 authorized funding for Amtrak through 2002 and established the mandate for Amtrak to reach operating self-sufficiency. It is clear that even if Amtrak is somehow able to achieve operating self-sufficiency in accordance with its mandate, Amtrak will still require about \$1.2 billion each year for basic capital needs (\$1 billion) and excess RRTA payments (\$200 million).

Summary

Amtrak's Needs Exceed Available Capital Funding

2001 Capital Shortfall Results in Reprogramming and Project Delays

Although Amtrak has received about \$4.1 billion in Federal capital funds since 1998, Amtrak's available capital funding has not proven sufficient to meet its capital needs during this period. In 2001, facing a severe funding shortfall, Amtrak was forced to reprogram \$92 million in funds committed to projects in earlier years in order to meet basic system needs. In addition, \$255 million in projects that were in progress prior to 2001 were postponed, including \$83 million in jointly-funded State projects to which Amtrak had made funding commitments.

Shortfall Impedes Efforts To Achieve Financial Goals

The constrained capital budget in 2001 also had a negative impact on Amtrak's ability to achieve financial goals. Amtrak was not able to capitalize an estimated \$30 million in capital program-related overhead costs because the base of projects to which the overhead rate was applied was insufficient to fully recover all overhead costs. Constrained funds have also meant that Amtrak has not been able to fund a variety of projects, including automation of several labor-intensive procedures, which Amtrak believes could help it reach the self-sufficiency goal.

Focus on Self-Sufficiency Has Detracted From Basic System Reinvestment

Capital Strategy Focuses on High-Speed Rail and Other Development

Amtrak's capital investment strategy since 1998 has focused on its self-sufficiency mandate. The most notable project is the Northeast Corridor high-speed rail project, in which Amtrak invested nearly \$900 million between 1998 and 2001. When fully implemented, Amtrak anticipates net revenues from high-speed rail of \$150 million to \$180 million each year. Since 1998, Amtrak has also invested in

other projects to support its self-sufficiency goal, including refurbishing existing equipment and stations to promote Amtrak's new brand identity. Completion of some of these projects has been postponed because Amtrak's available funds in 2001 were not sufficient to continue the planned investments.

Infrastructure Deteriorates

Amtrak's available funding since 1998 has not been sufficient to invest in both high rate-of-return projects *and* reinvest sufficiently in existing infrastructure. The projects that support self-sufficiency, while not frivolous, have come at the expense of other, less visible reinvestment and operational reliability projects. The most notable of these needs is an estimated \$3.0 billion backlog of "state of good repair"⁵ needs in the Northeast Corridor. Amtrak has not invested sufficiently in operational reliability or other projects, which would begin to address these needs. The results of this deferred spending are becoming apparent. Total minutes of delay for Amtrak trains in the Northeast Corridor rose nearly 75 percent between 1998 and 2001⁶.

Federal Investment in Fleet Declines

Investment in maintaining Amtrak's fleet is declining. Although TRA allowed Amtrak to invest significantly in progressive and heavy overhauls between 1998 and 2000, constrained budgets in 2001 reduced this investment considerably. In an effort to reduce costs in 2001, Amtrak adjusted its preventive maintenance program from a 120-day cycle to a 180-day cycle. Congress has allowed Amtrak to use Federally appropriated capital funds to pay for progressive overhauls, although they are considered operating expenses under Generally Accepted Accounting Principles (GAAP). Amtrak anticipates using Federal funds to pay for the components of the preventive maintenance program that would be included in a progressive overhaul beyond 2002 when it is prohibited from using Federal funds for operating expenses.

Facing constrained Federal capital funding, combined with continued large operating losses, Amtrak has turned to external financing as a means for funding procurement of new equipment. While this practice has freed up Federal funds for other uses, the debt associated with these purchases will become a significant burden to Amtrak in the next few years. Principal payments on the debt, which

⁵ The condition in which annual investments are sufficient to support annual replacement needs and sustain a high level of on-time performance.

⁶ Total includes delays caused by equipment, infrastructure, train operations, and outside interference (weather, police, and trespassers). The total includes delays incurred by Amtrak operating along its own right-of-way as well as trains operating over territory in which Amtrak neither owns nor is responsible for maintaining the infrastructure.

are capital costs, are anticipated to more than double in the next 4 years, growing from \$64 million in 2001 to \$136 million in 2005.

Long-Term Funding Requirements Will Need to Be Determined

Short Term Funding Required

Amtrak's authorization expires in 2002 and the appropriate level of funding for Amtrak's needs beyond 2002, including those for capital investment, will need to be decided in the near future. In the short term, however, Amtrak has immediate needs that include funding for safety and security-related needs that were expanded in the wake of the September 11 terrorist attacks.

Reauthorization Will Set the Stage for Longer-Term Funding Solutions

Longer-term needs will depend on the outcome of the reauthorization debate. Amtrak has developed a 20-year plan that identifies funding needed for multiple scenarios: sustaining the existing system, or expanding it to develop new rail corridors. It is not certain, however, that either scenario will accurately reflect Amtrak's future operating profile.

Legislative proposals have been introduced that attempt to address a variety of Amtrak's longer-term needs, including a variety of initiatives to fund development of high-speed corridors around the country. Other proposals have been introduced as part of security or economic stimulus bills that followed the September 11 terrorist attacks that provide funds for increasing Amtrak's infrastructure and equipment capacity. With the exception of the \$101 million Penn Station Access Project, we believe that these proposals are premature in that they presuppose the scope and profile of a passenger rail system that has not yet been decided, and will not be until the reauthorization debate occurs.

Amtrak's Funding Since 1998, Although Substantial, Has Not Been Sufficient To Address Capital Needs

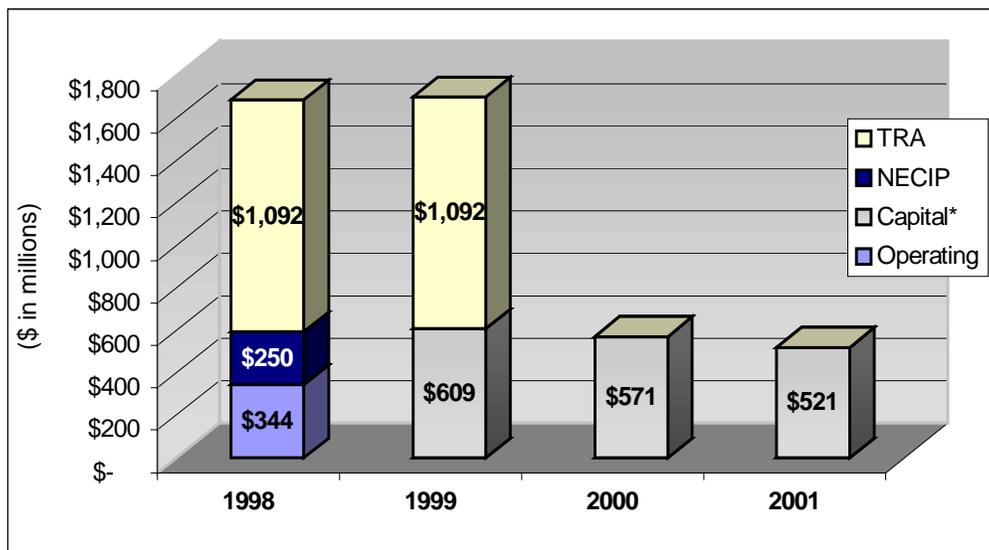
Although Congress has made available \$6.6 billion in the past decade to Amtrak for capital investment, Amtrak has not had sufficient capital to address a backlog of deferred needs, sustain existing services in a steady state, and invest in projects to support its quest for operating self-sufficiency. In 2001, Amtrak faced a severe capital funding shortfall and was forced to reprogram \$92 million in funds committed to projects in earlier years. Amtrak also postponed funding for projects already in progress prior to 2001, which require additional funding to complete.

Some of these projects included projects undertaken jointly with States, to which Amtrak had made funding commitments.

Funding Since 1998 Has Been Substantial

Since Amtrak was authorized in FY 1998, Amtrak has received nearly \$4.5 billion in Federal funds - \$2.2 billion in funds were provided under the Taxpayer Relief Act and the remainder through annual appropriations. Figure 5 summarizes Federal funding for Amtrak from 1998 through 2001.

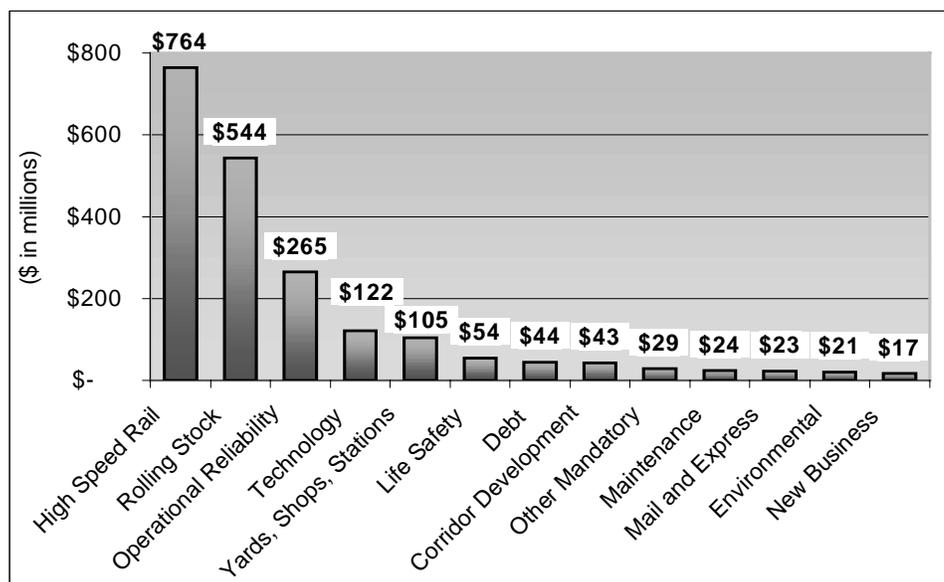
Figure 5. Federal Funding, 1998 Through 2001



*The Amtrak Reform and Accountability Act permitted funding of operating expenses related to excess RRTA, and appropriations in 2000 and 2001 expanded use for maintenance of way and equipment.

The Taxpayer Relief Act (TRA) of 1997 made \$2.2 billion available to Amtrak in 1998 and 1999. As of the end of 2001, nearly all of these funds and \$73 million in interest earned on these funds had been spent. The TRA funds were intended to enable capital investments that would help Amtrak achieve its self-sufficiency mandate in 2003. TRA funding allowed Amtrak to meet its current mandatory capital needs, complete projects that supported the introduction of high-speed rail service between Boston and Washington, and overhaul its fleet. Figure 6 illustrates the categories of investment and the amounts of TRA funding used for each.

Figure 6. Investment of TRA Funds, 1998 Through 2001



Amtrak also received \$2.3 billion in annual appropriations between 1998 and 2001. Since 1999, the funds have been provided as a single capital grant, with the provision that Amtrak could use the funds for preventive maintenance expenses. Amtrak has used, on average, \$505 million in each year for qualified operating expenses, including excess RRTA.

Capital Shortfalls in 2001 Resulted in Reprogramming and Project Delays

In our 2000 assessment, we projected that Amtrak would not have sufficient capital in 2001 to fund its most basic system needs, continue projects-in-progress, and fulfill obligations to State partners for jointly funded projects. Our analysis showed that funds available from the 2001 appropriation combined with remaining TRA funds would fall \$91 million short of meeting Amtrak’s mandatory and other basic system needs. Furthermore, in order to meet basic needs, continue projects-in-progress, and meet State commitments, we said that Amtrak would need an additional \$385 million.

This funding did not materialize and Amtrak subsequently de-obligated projects from prior years and reprogrammed those funds to provide an additional \$92 million in available funds in 2001. The projects from which these funds were de-obligated have been rescheduled rather than cancelled, but the reprogrammed amounts will need to be reinstated in the coming years before the projects can be completed. The following table identifies the projects from which funds were reprogrammed.

Table 23. Reprogramming of FY 2000 Funds to Fund Amtrak's 2001 Capital Plan (\$ in millions)

Chicago Hub	\$18.4
Automated Fare Collection	11.2
Pacific Northwest Infrastructure	10.1
King Street Coach Yard	6.2
Bay Area Maintenance Facility	3.8
Chicago Union Station Redevelopment	2.8
Mail Tracking System	2.3
Commissary Upgrades	1.7
Chicago Union Station Emergency Generator	1.6
Superliner Video Monitors	1.1
20 Other projects	33.3
Total 30 projects	\$92.5

Amtrak's Commitments to Jointly-Funded State Projects Are Among Reprogrammed Funds

Amtrak has attempted to invest in future business growth opportunities by partnering with States and other entities to develop new rail corridors and expand service. Amtrak has successfully negotiated joint-benefit agreements with East Coast States, particularly those where commuter services are heavy users of the stations, tracks, and other facilities owned by Amtrak. Amtrak also has strong partnering agreements with the West Coast States, where it not only receives reimbursements for operating costs, but also State investment in equipment and infrastructure improvement. Amtrak views these partnering agreements as essential to Amtrak's ability to achieve its business plan goals.

Amtrak has known for several years that it likely would face a severe capital funding shortfall in 2001, and that without additional funds, it would barely be able to cover its most basic needs in that year, including debt and other mandatory investment. Still, in 1999 and 2000, Amtrak continued to invest in projects that went well beyond these needs, including entering into agreements with States for joint capital projects.

In 2001, Amtrak was forced to reprogram funds from these projects to help cover shortfalls in other areas. While Amtrak was able to change spending plans for a number of joint capital projects by delaying its promised contribution of funds, Amtrak assured its State partners that these funds would be available in later years. The following table identifies Amtrak West projects that had funds reprogrammed from 2000 to fund the 2001 capital plan.

Table 24. Reprogramming of Amtrak West Projects from 2000 Capital Plan (\$ in millions)

	Total Project Cost	Amtrak Share	Reprogrammed from 2000 Capital Plan
Bay Area Maintenance Facility	\$55.2	\$23.1	\$3.8
King Street Coach Yard	\$49.4	\$30.4	\$6.2
Pacific Northwest Infrastructure	\$26.0	\$22.0	\$10.1

If sufficient capital funding is not provided, Amtrak believes the effect will be to “seriously jeopardize [Amtrak’s] relationships with State partners, commuter customers and freight railroad partners.” Amtrak fears that not only will this make States reluctant to enter into future agreements, including corridor development projects from which Amtrak could potentially derive substantial benefits, but could lead to State or commuter partners opting to outsource either operations or maintenance activities which Amtrak currently provides.

Key Projects Are Delayed

In our 2000 assessment, we identified a number of key projects-in-progress and new corridor development projects that would require \$294 million to continue in 2001. Amtrak was only able to provide \$39 million of these funds in 2001, and for the projects that Amtrak funded, the amounts provided were in all cases far below Amtrak’s estimated need in that year. The following table indicates the projected needs related to key projects-in-progress in 2001 and the amounts Amtrak actually authorized for spending. Of the total of estimated needs, \$84.6 million represented Amtrak’s share in 2001 on projects jointly funded with States, of which only \$1.7 million was funded.

**Table 25. Key Projects-in-Progress and New Corridor Projects –
Funds Needed in 2001 vs. Funds Authorized (\$ in millions)**

Key Projects in Progress	Estimated Need in 2001	Funds Provided in 2001 Capital Plan
High-Speed Rail Infrastructure	\$100.0	\$30.3
Automated Fare Collection	11.8	0.0
Las Vegas Service	12.8	7.0
Heritage Diner Refurbishment	12.0	0.0
Mail and Express Information Technology	5.0	0.0
Capstone Interiors	42.0	0.0
Other Transformation (Branding)	26.0	0.0
Metro North Infrastructure Improvements*	25.0	0.0
MBNA – Florida East Coast Reroute*	4.0	0.0
New York State Agreement*	23.3	0.3
Keystone Corridor – Pennsylvania*	13.2	1.0
California High-Speed Rail*	19.0	0.4
Total Projects In Progress	\$294.1	\$39.0

*Projects with State Partners

Capital Shortfall Impedes Efforts To Achieve Financial Goals

The relationship between Amtrak’s capital investment strategy and its financial performance manifests itself in several ways. First, investments in capital projects that can automate labor intensive processes can result in very near term expense savings. Second, a robust capital program allows management and other overhead costs to be allocated to capital projects. This allocation moves the expenses from Amtrak’s income statement, upon which Amtrak’s cash losses are calculated, to the capital program where they can be covered with Federal capital funds. Finally, the long-term effects of *not* investing in capital needs translate into increased maintenance expenses and reduced on-time performance and service reliability. Declining system performance will eventually result in lost ridership and revenues.

Capital Investments Can Reduce Operating Costs

Amtrak’s constrained capital budget in recent years has affected its ability to invest in capital projects that could result in a direct positive effect on its revenues or expense savings. For example, in each of the past 3 years, the Northeast Corridor business unit has requested capital funding for engineering projects that

could potentially reduce operating costs by automating labor-intensive activities. In all 3 years, funding for the projects lost out to higher priority projects, even though each were projected to result in very near-term savings. Table 26 identifies four of these projects, their capital costs, and projected financial contribution.

Table 26. Unfunded Engineering Projects in the Northeast Corridor and Projected Annual Financial Contribution

Project	Capital Investment Needed	Projected Annual Financial Contribution
Remote Control of Moveable Bridges. Fully automate switches at 12 bridges by providing technology needed to open and close bridges from dispatching centers.	\$6.0 million	\$1.2 million
In Track Welding. Acquire new welding units with improved technology to reduce the amount of labor required to perform welding functions and virtually eliminate operator caused defective welds.	\$8.0 million	\$0.7 million
Automated Track Inspection Vehicles. New inspection vehicles to electronically monitor track and switch geometry faster thereby covering a wider territory. Reduces labor needed currently to perform same function on foot.	\$1.3 million	\$1.4 million
Automated Greasing of Moveable Bridges. New hydraulic technology to automate greasing at 14 bridges. Reduces the amount of labor currently needed to keep these bridges operating properly.	\$2.1 million	\$0.5 million

Overhead Expenses Not Quickly Adjustable To Size of Capital Program

Amtrak allocates a percentage of system overhead costs, such as management salaries and other corporate functions, to projects underway in its capital program. The overhead rates, which represent the ratio of indirect support expenses to direct project labor and material expenses, are calculated as a percentage that is applied to each dollar spent on capital projects. These indirect or overhead expenses are initially recorded to the company’s operating expenses and “transferred” to capital projects through the application of an overhead rate to capital project-related labor and material expenses.

In 2000, TRA funds and Amtrak’s annual appropriation provided Amtrak with a large base of projects over which to allocate overhead costs. In 2001, the program was severely constrained and the overhead rates developed in 2000 were insufficient to recover all overhead costs associated with the 2001 capital program. As a result, these unrecovered costs, which Amtrak estimates at approximately \$30 million, were included as operating expenses in Amtrak’s income statement, and contributed to Amtrak’s cash loss.

For example, in 2000, an overhead rate of 84.29 percent was applied to \$76 million in labor expenses related to Northeast Corridor maintenance-of-way (MOW) capital projects. The application of this rate allowed \$64 million in operating expenses to be transferred to the capital program. In 2001, under a constrained capital program, the overhead costs remained constant but labor costs on maintenance-of-way capital projects totaled only \$42 million. An overhead rate of 86.89 percent applied to this program recovered only \$36 million in overhead expenses related to the capital program, resulting in an under-recovery of almost \$30 million. Table 27 illustrates this example.

Table 27. Under-recovery of Overhead Expenses on Northeast Corridor 2001 Maintenance-of-Way Projects

Fiscal Year	MOW Labor Expenses	Overhead Rate	Actual Overhead Costs	Recovery	Over/(Under)
2000	\$76 million	84.29%	\$64 million	\$64 million	\$0
2001	\$42 million	86.89%	\$64 million	\$36 million	(\$28) million

Amtrak’s practice of annually updating the overhead allocation rates will need to be reevaluated in 2002. Because of the decreased levels of capital funding available in 2001, the overhead rates calculated for 2002, which are based on actual 2001 expenses, would result in the application of a much higher overhead rate than had been in effect in recent years. This may be appropriate if Amtrak’s capital program is as constrained in 2002 as it was in 2001, but if the program is larger, it is likely that the rates will be too high and a disproportionate amount of system overhead will be capitalized. This problem could be further exacerbated as Amtrak pursues a restructuring plan, which could result in the elimination of management positions as well as other overhead expenses.

Amtrak’s Capital Investment Strategy Has Focused on Self-Sufficiency Mandate

Amtrak owns substantial infrastructure and equipment requiring hundreds of millions of dollars in annual reinvestment. With a limited capital budget in recent years, Amtrak has had to prioritize investments, balancing the goals of achieving operating self-sufficiency against the need to preserve the integrity of its physical assets. While these goals are related, the investment strategies associated with each are somewhat different.

In recent years, Amtrak’s investment strategy has been driven substantially by its need to improve its financial condition. Significant investment has been made in

projects, such as high-speed rail and other visible service improvements, that were expected to result in a positive growth in customer attraction, retention, and revenue. Amtrak has also attempted to invest its capital funds in projects that will result in cost savings. While some of these investments have fulfilled their intent, others have fallen victim to Amtrak's funding shortfall in 2001 and have been delayed or postponed.

Amtrak Pursues Increased Revenues Through High-Speed Rail

The majority of Amtrak's recent spending on the Northeast Corridor has occurred between New Haven, Connecticut and Boston, Massachusetts. Between 1998 and 2001, Amtrak invested nearly \$900 million in the high-speed rail project, which except for approximately \$50 million for Southend improvements, was directed toward improvements on the Northend between New York and Boston. The program began in 1991, with ground-breaking in 1996, and provided for construction of electrical substations and installation of overhead catenary that would allow Amtrak to run continuous electrified service between Washington, D.C. and Boston. Previously, electrified service extended only to New Haven, Connecticut, where the electric locomotives were switched for diesel-powered locomotives.

To maximize the benefits from use of electrically powered trains, Amtrak also substantially rebuilt the railroad infrastructure north of New Haven, including replacing rail and ties, re-aligning curves, replacing bridges, and modernizing the signal system. The infrastructure was also redesigned to eliminate major bottlenecks at Old Saybrook, New Haven, Stamford, and the Boston area.

The electrification project was necessary to accommodate the Acela high-speed trainsets and high-horsepower locomotives. Although Amtrak has been operating Acela Regional service since January 2000 and Acela Express since December 2000, further investments by Amtrak are needed on the Northend to improve operations and to complete environmental and noise mitigation projects required under legally binding agreements. These projects are estimated to cost an additional \$28 million in 2002.

Improvements that benefited high-speed rail were also made on the Southend between New York City and Washington. These improvements increased speed and reduced transit times by enhancing operational reliability and capacity. For example, Amtrak made modifications to track infrastructure, including interlockings,⁷ which reduced schedule times by enabling trains to move more quickly between tracks. These types of projects may have only resulted in slight

⁷ Interlockings are collections of switches and signals where train movements between tracks are possible.

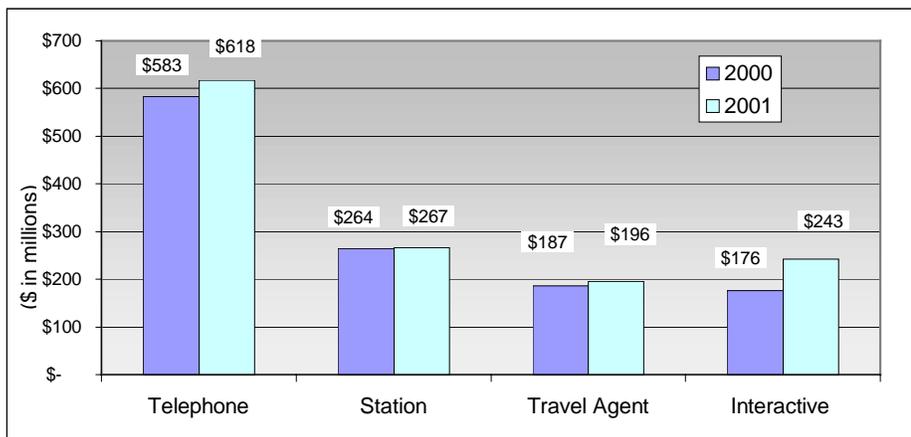
increases in potential speed, but by reducing failure rates or increasing operational flexibility, they have actually resulted in greater trip time reductions than more expensive projects that would have allowed Amtrak to increase Southend operating speeds beyond 125 mph.

Amtrak Seeks Operating Cost Savings Through Technological Improvements

Over the past 3 years, Amtrak has made significant investments in upgrading its information technology systems to become current with industry advances. The capital investments, which are administered by Amtrak Technologies, Amtrak’s information technology group, seek to improve operating efficiencies throughout the company and support business growth. Technological improvements have enabled Amtrak to replace manual procedures with automated ones, including many functions historically performed by reservation and ticket agents. Three of the most significant improvements in recent years include upgrades to Amtrak’s Internet website, introduction of voice recognition technology at the reservation call centers, and introduction and expansion of self-serve ticketing kiosks in stations.

As Figure 7 shows, interactive ticket sales, which includes the Amtrak website, voice-recognition technology, and ticket kiosks, increased by almost 40 percent in the past year. Sales through other, more expensive distribution channels increased also, but at a slower rate. A discussion of each of the information technology projects is included in the Appendix to this chapter.

Figure 7. Growth in Ticket Sales by Channel from 2000 to 2001



Funding Shortfalls Place Financial Improvement Projects At Risk

Amtrak has made significant investments in projects it believes support its efforts to improve its financial condition. Many of these projects began in 1998 and 1999, but anticipated significant funding in the following years to complete. For example, in 1999, Amtrak began the Capstone program in the Northeast Corridor with the goal of retrofitting 427 Amfleet I passenger cars to conform to the new interiors of the Acela Express trains. In 1999, \$30 million was approved to complete 56 cars, and Amtrak projected that it would need an additional \$300 million between 2000 and 2003 to fully fund the Capstone program. In 2000, Amtrak provided \$43 million to complete an additional 77 cars, but in 2001 Amtrak production dropped to only 9 cars at a cost of \$6 million. Amtrak's business plan projections for Northeast Corridor passenger revenues include the expected revenue impacts of the interior retrofits.

Self-Sufficiency Goal Draws Investment From Other Needs

Amtrak's available capital funding in recent years has not been sufficient to invest in both high rate-of-return capital projects *and* reinvest sufficiently in existing infrastructure. With the self-sufficiency mandate drawing closer in 2003, Amtrak has invested its limited funds in projects that will help it meet this goal, at the expense of other, less visible reinvestment and operational reliability projects. While Amtrak has not neglected the system to the point where safety has been compromised, it has not been able to invest at a level that would be necessary to maintain the system in a steady state beyond 2003. The area that has suffered the most from this strategy is the infrastructure in the Northeast Corridor.

Northeast Corridor Infrastructure In Need Of Extensive Reinvestment

The Northeast Corridor consists of 630 miles of track,⁸ 457 miles of which constitute the spine extending from Washington, D.C. on the "Southend" to Boston, MA, on the "Northend." Amtrak owns all but 94 miles of this track. Despite Amtrak's investment of more than \$2.7 billion in Federal funds over the last decade, the investments have not been adequate to address the backlog of needs in the Corridor. While the deferred investments have not compromised the safety of Amtrak's operations, the speed and reliability of Amtrak's services, as

⁸ "miles of track" reflect the length of the rail corridors, not the actual combined length of all track.

well as those of other corridor users, have suffered. Table 28 summarizes Federal investments made in the Northeast Corridor from 1992 through 2001.

**Table 28. Federal Investment in the Northeast Corridor
1992 Through 2001 (\$ in millions)**

High Speed Rail	\$1,618
Operational Reliability And Other Investments	1,094
Total Federal Investment	\$2,712

Billions Needed To Address Deferred Investment

Due to Amtrak’s constrained capital funding and the railroad’s decision to place a higher priority on investments intended to result in financial returns, a significant backlog of deferred reinvestment needs has accumulated on the Southend of the Corridor. In 1996, Amtrak estimated that the cost of returning the Southend to a “state of good repair,” would total \$2.5 billion. Since then, Amtrak has continued to defer operational reliability projects and the costs of addressing the backlog of needs have increased.

For example, in 1996, Amtrak estimated that the cost of addressing life-safety needs in the Penn Station-New York tunnels would total \$600 million. In 2000, Amtrak revised its estimate, primarily for inflation purposes, to nearly \$900 million. Although Amtrak has not revised its estimates for the remainder of the components in the 1996 estimate of \$2.5 billion, it is likely that the total estimate today exceeds \$3 billion. This cost would be shared to some degree, on a project-by-project basis, with other users of the Northeast Corridor, including freight and commuter rail operators.

Amtrak’s Southend Transportation Plan unveiled in January 2000 identified needs totaling \$12 billion over 25 years. Amtrak, as the owner of the track and facilities on the Southend, will likely be responsible for at least one-half of this estimate, but it will need to negotiate cost-sharing with commuter and freight railroads on a project-by-project basis to determine actual contributions. The \$12 billion addresses the backlog of deferred needs, but also includes estimates for projects designed to add system capacity in response to expected demand growth.

The Southend Transportation Plan 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 has attempted to mitigate the impacts of deferred investment on service through a “bare-bones” level of operational reliability investment. These projects attempt to sustain on-time performance and reduce slow orders by performing the minimum amount of spot, in-kind replacements of infrastructure elements necessary to maintain service. The schedule for these projects is often dictated by the immediate needs that arise as a result of undercapitalized infrastructure.

Deferred Spending Is Beginning to Take its Toll

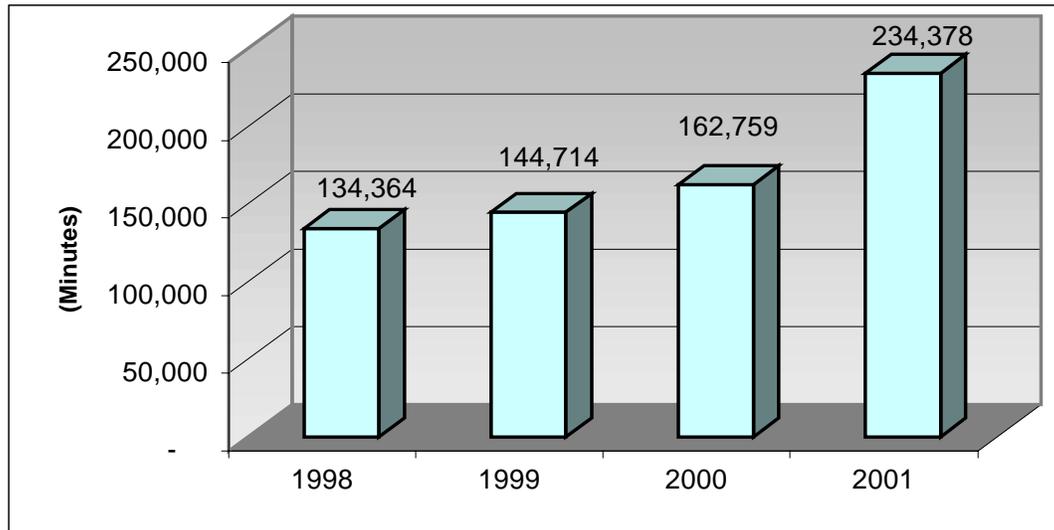
The effects of underspending on operational reliability needs are already beginning to surface. Some sections of the Southend electric traction system are over 60 years old, and despite nearly \$1.6 billion in spending for in-kind replacement and maintenance under the Northeast Corridor Improvement Project (NECIP),⁹ the system is comprised of many components that are prone to failure. An example 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 that can cause it to break upon contact with a train’s pantograph.

Communications and signaling poses another challenge to reliability in the Northeast Corridor. The Southend contains 8 million feet of cable used for communication and control of trackside equipment. Age, electrical faults, and weather affect the ability of this cable to perform adequately. Deteriorated wiring insulation and corroded connections can result in signal leakage until, eventually, the wire is no longer able to perform.

Overall, delays in the Northeast Corridor have increased significantly and steadily since 1998. As Figure 8 shows, the total minutes of delay for Amtrak trains in the Northeast Corridor rose nearly 75 percent between 1998 and 2001.

⁹ NECIP investments since 1992.

Figure 8. Growth in Total Northeast Corridor Delays, 1998-2001



Life Safety Needs Not Met In Timely Manner

Numerous times in the past 2 years, we have raised our concerns with the longstanding fire and life safety needs in the tunnels approaching Penn Station in New York City. Nearly \$900 million is needed to bring existing systems up to par with modern safety standards, including the replacement of narrow, winding, spiral staircases, installation of modern ventilation fans and the rehabilitation of benchwalls. In 1998, Amtrak warned that unless improvements were made rapidly, the age and condition of the tunnels, coupled with the projected growth in traffic, would raise the potential for a serious and consequential accident.

Federal Investment in Amtrak Fleet is Declining

Until 3 years ago, each Strategic Business Unit made its own decisions on how to best keep its equipment running and in good repair. Intercity and West adopted a progressive overhaul program, in which equipment was serviced on an annual basis for maintenance and major component replacements.¹⁰ Between the annual progressive overhauls, the Intercity and West fleets were serviced on a “defect maintenance” schedule. This meant that equipment was serviced when it failed, rather than following a scheduled preventive maintenance program.

¹⁰“Major component replacement” costs are what Amtrak considers the “progressive overhaul” program. Although these costs are an operating expense, Congress has allowed Amtrak to use capital funding to pay for them.

In lieu of progressive overhauls, the Northeast Corridor established a preventive maintenance program on a 120-day cycle. The program was comprised of scheduled tasks designed to address individual equipment components and systems to ensure that the equipment did not fail while being operated. The program was supplemented with traditional heavy overhauls performed approximately every 4 years in order to return the equipment to a “nearly-new” condition.

Since the creation of the office of Corporate Chief Mechanical Officer 3 years ago, Amtrak has attempted to create and implement a single comprehensive maintenance and overhaul policy for its entire fleet. The decision was made to transition to a systemwide maintenance program based on the Northeast Corridor program of 120-day maintenance/4-year heavy overhauls. Amtrak’s decision was based on findings that the effectiveness of the progressive overhaul program was limited due to reductions in Federal funds and the need to keep the equipment out of revenue service for as brief a time as possible. In addition, new Federal Railroad Administration regulations, effective January 1, 2002, require a preventive maintenance program on a cycle no less frequent than every 184 days.

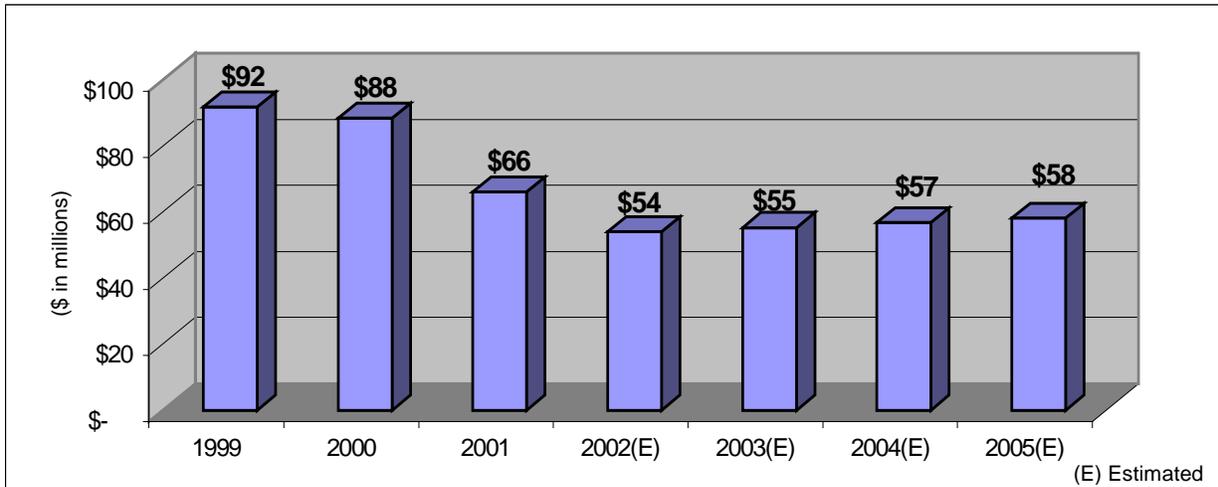
In 2001, capital funding constraints and higher-than-projected cash losses resulted in a further change to the fleet program that extended the 120-day maintenance cycle to 180 days. While this schedule complies with the FRA regulations, the reduced preventive maintenance cycle will likely result in less reliable operations. In addition, Amtrak has limited the number and scope of heavy overhauls it is completing. In 1999 and 2000, Amtrak invested \$136 million and \$166 million, respectively, in heavy overhauls. In 2001, its total heavy overhaul program totaled \$134 million.

It is important to note that although progressive overhauls are considered operating expenses under GAAP, Congress has allowed Amtrak to use Federally appropriated capital funds to pay for them. While Amtrak no longer employs a formal progressive overhaul program, its preventive maintenance program incorporates many elements, such as major component replacements, that were included in progressive overhauls. Amtrak anticipates using Federal funds to cover those elements after 2002 when Amtrak is prohibited from using Federal funds for operating expenses.

The expenses will flow through Amtrak’s income statement and will be used to calculate its annual cash loss, but will be subtracted as part of the test to determine whether Amtrak is operationally self-sufficient. In other words, Amtrak may have cash losses equal to the amount required for progressive overhauls (and excess RRTA payments), and still pass the test for operational self-sufficiency. Figure 9 shows the amounts of the progressive overhaul program (or more recent estimates

of the components of progressive overhauls contained in the current preventive maintenance program) Amtrak has funded in the past and expects to fund from Federal sources through 2005.

Figure 9. Federal Funds Used for Progressive Overhauls and Related Expenses, 1999 Through 2005



Amtrak has turned to external financing as a means for funding procurement of new equipment. While this practice has allowed Amtrak to use its scarce capital dollars for other kinds of investments, the practice comes at a significant price to Amtrak, from both an operating and capital funding standpoint. As explained earlier, Amtrak's interest on all borrowing, including procurement of new equipment, is anticipated to reach \$225 million in 2005. Principal payments on debt, which are capital expenses, are projected to account for \$136 million of Amtrak's capital budget by 2005. Significant equipment purchases financed in recent years include \$870 million for the new Acela trainsets and high-horsepower locomotives, \$200 million for 85 new locomotives, and \$105 million for new Surfliner equipment.

Long-Term Funding Requirements Will Need To Be Determined

Amtrak's authorization expires in 2002 and decisions will need to be made soon about funding beyond that date. In the short term, however, Amtrak will need funds in 2002 to address basic system needs as well as to address safety and security needs identified following the terrorist attacks of September 11, 2001. A variety of proposals have been introduced that would provide funds for

investments needed to ensure the safety of the traveling public. These projects are necessary regardless of any decisions made about Amtrak’s future.

Additional legislative proposals were also introduced during the 107th Congress that would provide long-term funding for rail infrastructure needs. These include adding capacity to existing corridors or investing in the development of new rail corridors. The debate that is likely to occur during the reauthorization process in the coming year will determine the magnitude and timing of Amtrak’s long-term needs. Decisions can then be made about how and by whom these needs can best be met. Until decisions are made about the future of Amtrak and intercity passenger rail, funding for long-term growth is premature. Table 29 identifies the rail-related legislation that has been introduced during the 107th Congress.

Table 29. Rail-related Legislation Introduced During the 107th Congress

	<i>Bill Number</i>	<i>Bill Title</i>	<i>Sponsor</i>	<i>Issues</i>	<i>Amount</i>	<i>Note</i>
1	H.R. 2329	High-Speed Rail Investment Act of 2001	Houghton	High Speed Rail (HSR)	\$12 B	HSR Bonds
2	H.R. 2950	Rail Infrastructure Development and Expansion Act for the 21 st Century	Young	Rail Development	\$71 B	Loans, Loan Guarantees, Bonds
3	S. 1528	Rail Transportation Safety and Security Act	McCain	Security	\$1.5 B	Security and Safety
4	S. 1530	Rail Advancement and Infrastructure Law for the 21 st Century	Hollings	Security	\$3.2 B	Security, Safety and Capacity
5	S. 1550	Rail Security Act of 2001	Hollings	Security	\$1.8 B	Security and Safety + PSNY, ACSES ¹¹
6	S. 250	High-Speed Rail Investment Act of 2001	Biden	HSR	\$12 B	HSR Bonds
7	H.R. 3166	Rebuild America: Financing Infrastructure Renewal and Security for Transportation Act of 2001	Borski	Transportation Infrastructure Renewal and Security	\$15 B	HSR Bonds
8	H.R. 3090	Economic Security and Recovery Act of 2001	Thomas	Economic Stimulus	\$9 B	HSR Bonds

Amtrak has developed a long-term capital plan identifying its funding needs over the next 20 years. The plan presumes that Amtrak’s scope of operations will be similar to what exists currently, or that it will be expanded to develop new rail corridors. This plan will need to be revised to address any changes to Amtrak’s route or operating structure that could occur during reauthorization proceedings.

¹¹ Advanced Civil Speed Enforcement System

Following is a more detailed discussion of Amtrak’s short-term and long-term capital needs and observations on various legislative proposals to fund passenger rail safety, security, and infrastructure needs.

Short-term Funding Needs Are Substantial

Funding for 2002

Amtrak’s annual funding is provided through the Department of Transportation Appropriation bill that is passed annually by Congress. The FY 2002 bill provides \$521 million in funding for Amtrak. Unlike prior years, the bill permits the full amount to be available to Amtrak in 2002. In past years, 40 percent of the appropriated funds have been available in the appropriation year and 60 percent in the following year.

As summarized in Table 30, the FY 2002 appropriation combined with the 60 percent of the 2001 appropriation carried over to 2002, would make a total of \$834 million available for Amtrak’s use in 2002. This amount could be used for capital investment and eligible operating expenses, including costs associated with preventive maintenance and funds for excess RRTA.

Table 30. FY 2002 Federal Grants (\$ in millions)

FY 2001 (60% available in FY 2002)	\$313
FY 2002 Appropriation	521
Total	\$834

Safety and Security Related Funding Is Merited

On September 11, the safety, security and reliability of our nation’s transportation network was called into question. As airline service ground to a halt following the terrorist attacks on the Pentagon and World Trade Center, the need for reliable and safe transportation alternatives became apparent. In the intervening months, various bills have been introduced that propose ways to improve security and otherwise strengthen rail service. These proposals include provisions for both short- and long-term security and safety needs as well as a variety of options for facilitating modal growth.

On October 17th, 2001, the Senate Committee on Commerce, Science, and Transportation unanimously reported out S. 1550, which contained nearly

\$1.8 billion in funding for Amtrak’s security and safety-related needs. While no action has been taken as of January 23, 2002, it is currently on the Senate Calendar. Table 31 identifies the major provisions of S. 1550.

Table 31. S. 1550 Provisions (\$ in millions)

System Security Upgrade	\$515
NEC Tunnel Life Safety and Security	998
Penn Station NY Accessibility Improvements, Bridge Renovation, and ACSES	254
Total	\$1,767

The security component of this proposal is comprised of capital and operating initiatives formulated in the time since September 11, 2001. At least \$61 million represents operating expenses associated with costs of additional police, security officers, and track inspection personnel.

One of the key elements in S. 1550 is full funding for the nearly \$900 million investment needed to complete the New York Pennsylvania Station and Tunnel Complex life-safety projects over the next 9 years. Most critical among the needs is the lack of adequate evacuation and ventilation facilities. Amtrak and the other users of the tunnels – Long Island Rail Road and New Jersey Transit, have been investing in the life-safety program since 1976, but their efforts have focused on prevention, such as keeping track, signals, and equipment in a state of good repair. These investments may be effective in preparing for *known* risks, but it is unlikely that these efforts would have been satisfactory in preventing or responding to a terrorist attack. The Fire Commissioner of the City of New York concurs that the rescue and fire-fighting facilities in the tunnels are not sufficient to ensure a successful outcome in the event of a serious tunnel fire or other emergency.

In the past, Amtrak, Long Island Rail Road and New Jersey Transit have jointly funded work in the tunnels and in Penn Station. While joint funding may be the most equitable solution to addressing existing needs, it may not be the most efficient one. All three users have different funding cycles and mechanisms, and in the past, projects have been postponed when one or more entities have not been able to meet their share of responsibility.

Earmarking and Oversight of Security-Related Funding is Essential

In recent years, Amtrak’s investment strategy has been driven substantially by its need to improve its financial condition. As a result, important projects, including ones that improve operational reliability or enhance security or safety of

equipment or infrastructure have been deferred in favor of investments that can provide a quick and significant return on investment.

This is a strong argument for earmarking any funds provided through legislation designed to fund Amtrak's safety and security-related needs. The events of the past few months have underscored how important these projects are, despite the fact that their results may not be immediately visible. Earmarking these funds serves two important purposes: one, it would ensure that the funds are not diverted to other spending needs, and two, it would provide the Department with necessary oversight responsibilities.

It is important to note that Amtrak's estimate of annual capital needs beyond 2002, namely the \$973 million it believes is necessary to support its current services, would not be appreciably reduced if the funds proposed under S. 1550 were provided as a lump sum appropriation. S. 1550 requires the Office of Inspector General to identify any overlap between projects funded through proposed legislation and those in its 20-year capital plan, which is the basis of Amtrak's estimated annual needs.

Funding Long Term Proposals Is Premature

The appropriate level of funding for Amtrak's needs, including those for capital investment, beyond 2002 will need to be decided in the near future. Significant decisions will need to be made about the future of passenger rail. These include where passenger service should exist, who should provide it, and whether and how it should be subsidized.

Various proposals were introduced during the 107th Congress to address Amtrak's long-term needs. Some of these related to adding equipment and expanding capacity to accommodate new demand that was expected to occur following the September terrorist attacks. Others were introduced before the attacks and provided funds for expanding existing service and developing new high-speed corridors throughout the country. These proposals address a variety of needs that could change depending on the outcome of the reauthorization debate. Funding these proposals should be withheld until this debate occurs and it is known with greater certainty what the needs are related to intercity passenger rail, and how, by whom, and when they should be funded.

Capacity Enhancements Related to Terrorist Attacks

S. 1530, the Railroad Advancement and Infrastructure Law for the 21st Century (Act), was introduced by Senator Hollings on October 11, 2001 and was the subject of a Senate hearing on November 1, 2001. The Act, in part, contained

provisions for funding \$1.7 billion in capacity-related improvements that Amtrak projected would be necessary to accommodate increased demand spurred by the terrorist attacks in September. The projects and related funding needs are represented in the following table.

Table 32. Proposed Capacity Projects (\$ in millions)

Northeast Corridor-Southend – infrastructure capacity	\$485
Northeast Corridor – Northend – infrastructure capacity	243
Penn Station-New York access and egress	101
Chicago infrastructure – capacity	100
Procurement of new equipment	540
Upgrade 11 locomotives and 18 coaches scheduled for retirement and overhaul 213 coaches	224
Repair 7 locomotives and 32 coaches in wreck status	17
Total	\$1,710

All of the equipment and infrastructure projects represented in this estimate are included in Amtrak’s 20-year capital plan and are based on growth that Amtrak anticipated would occur during that period. The planning was completed prior to September 11 and the projected growth and planned capacity improvements to accommodate this growth are exclusive of any additional demand anticipated to occur as a result. As our revised analysis of Amtrak’s revenue and ridership forecasts indicates, Amtrak’s forecast for substantial and sustained demand increases appears to be overly optimistic. Some demand growth is likely to occur, but we expect that it will be isolated to certain markets and not to the degree that would justify the extent of capacity investments proposed by Amtrak.

During the reauthorization process that is likely to begin within the next few months, decisions will need to be made about Amtrak’s future and the future of intercity passenger rail. Amtrak’s projected growth beyond 2002 could be affected by the outcome of this process and it is premature to fund these capacity-enhancing projects before these decisions are made.

Penn Station Platform Access Project is Justified

The one project that *is* justified by new demand resulting from the September 11 attacks is the \$101 million requested for the New York-Penn Station access project. This funding would provide for the extension of the station’s West End Concourse, which would include building new stairs from this concourse to four of the station’s eleven train platforms as well as providing an additional exit to the street. The project is included in Amtrak’s “growth” capital strategy and is

included to meet demand associated with future expected ridership growth on an annual incremental basis.

After September 11, daily commuters who normally accessed lower Manhattan via PATH train service to the World Trade Center station were forced to alter their commutes. Many switched to New Jersey Transit trains operating into Penn Station, some of which are now operating at 40 percent over capacity. The increased demand that Amtrak projected to occur in later years as a result of general economic growth has appeared overnight, and the demand is likely to be sustained for the foreseeable future. The station access project is necessary to assure adequate access and egress from the platforms to the station, and is not only for the passengers' convenience, but also for their safety.

High-Speed Corridor Legislation

Several proposals have been made in Congress to fund the development of high-speed rail corridors around the nation. S. 250 and H.R. 2329 authorize \$12 billion in bond-issuing authority by Amtrak for the purpose of supporting high-speed rail projects between Fiscal Year 2002 and Fiscal Year 2011. To qualify for funding, projects must demonstrate a positive financial contribution to Amtrak.

Both bills provide bondholders with Federal tax credits in lieu of interest payments and principal amounts are repaid from State and local matching funds deposited in a sinking fund at the time the bonds are issued. In both bills, the Northeast Corridor, principally owned by Amtrak, is limited to \$3 billion of the \$12 billion in funding. It is anticipated that the \$3 billion could be used to address some of the backlog of state-of-good-repair needs, although the funds could only be used on projects of joint benefit to States, which would need to post the required funding match. It is unlikely that Amtrak could entice States to post matching funds on projects for which Amtrak was the only beneficiary.

It is important to note that these high-speed rail bills, if passed, would not satisfy Amtrak's capital requirements. Amtrak has significant mandatory needs, including an estimated \$100 million to \$150 million in annual principal payments on its debt as well as other needs that are neither related to developing corridors nor likely to draw matching State funds. Amtrak will still need considerable Federal capital assistance for the foreseeable future, an amount Amtrak estimates to total \$973 million annually. The amount, however, could change if decisions about Amtrak's future made during the reauthorization proceedings materially affect the size and scope of Amtrak's operations and network.

H.R. 2950, The Rail Infrastructure Development and Expansion Act for the 21st Century, would make \$71 billion available for high-speed rail and other rail

projects. This funding would be provided through Federal tax-exempt bonds issued by States, expansion of the Railroad Rehabilitation and Infrastructure Financing (RRIF) program from \$3.5 billion to \$35 billion, and reauthorization of the Swift Rail Development Act. Table 33 summarizes the key provisions of H.R. 2950.

**Table 33. Provisions H.R. 2950 – over 10 Years
(\$ in millions)**

High Speed Rail Infrastructure Bonds	\$36,000
Railroad Rehabilitation Infrastructure Financing	35,000
Swift Rail Development	280
Total	\$71,280

The tax-exempt bonds would be issued by States for infrastructure improvements needed to support high-speed rail projects. In total, \$36 billion in bonds could be issued over 10 years.

While the funds provided through these bonds could substantially fund the costs associated with developing several new corridors, the criteria that the projects must meet in order to qualify for funding are rigorous. First, eligible projects must be designed for sustained cruising speeds of 125 mph or more. Second, projects must eliminate all existing grade crossings and create no additional grade crossings. Many in the railroad industry believe that these requirements are unrealistically high and recommend that Congress consider establishing lower initial standards at the start of these projects, followed by incremental increases.

The second funding mechanism contained in this legislation expands the existing RRIF loan and loan guarantee program by increasing funding authority from \$3.5 billion to \$35 billion. Critics of this program have complained that the criteria required to obtain the financing have made it impossible to access funds. In fact, since new guidelines were issued in July 2000, *no* projects had received funding through FY 2001. One of the primary concerns with the program is the requirement that applicants must first have been refused credit by at least one commercial lender before applying for credit in this program. Another involves the requirement for collateral on the loans. S. 1530 and H.R. 2950 eliminate these requirements, which could make the program more viable as a funding mechanism.

The last funding source specified in this legislation is the extension of the Swift Rail Development Act to Fiscal Year 2009. Established in 1994, the goal of this program is to develop high-speed rail corridors. The Swift Act, which was authorized at \$35 million, annually, expired in 2001. The proposed legislation would reauthorize the Act at \$35 million annually for an additional 8 years.

In addition to the legislation and proposals already mentioned there are economic stimulus and transportation infrastructure bills that seek to advance high-speed rail. H.R. 3166, introduced by Representative Borski, provides \$15 billion in bonding authority to Amtrak for high-speed rail development. The bill limits use of the funds to \$3 billion in the Northeast Corridor and \$3 billion in any one State. H.R. 3090, introduced by Representative Thomas, provides \$9 billion in bonding authority to Amtrak as part of an economic stimulus package. The bill restricts use of these funds to \$2 billion in the Northeast Corridor, \$2 billion in any one State, and requires \$2 billion to be used for the construction of a new river tunnel from New Jersey to Manhattan.

Amtrak’s 20-Year Capital Plan Identifies Funding Needed to Support Future Operating Scenarios

In 2001, Amtrak prepared a 20-year capital plan that identified the estimated timing and amount of capital funding it would need to pursue a variety of different operating strategies. The “Current Service” plan identified projects and needs intended to sustain current service levels across a national network. The “Growth” plan identified needs associated with sustaining the current network with additional investment for developing new rail corridors. The following chart identifies projected Federal funding needs associated with each plan. These projections do not include funds needed to fulfill Amtrak’s excess RRTA requirements of approximately \$200 million each year, nor do they include any funds for new fleet acquisitions, which Amtrak expects to externally finance.

Our discussion of Amtrak’s 20-year capital plan focuses on the first 5 years under the current service scenario. Due to the uncertainty surrounding Amtrak’s future and the future of intercity passenger rail, in general, we did not closely examine the estimates or assumptions contained in the growth scenario of the plan. Table 34 summarizes the major Federal components of the first 5 years of Amtrak’s 20-year capital plan.

Table 34. Amtrak 20-year Capital Plan - Average Annual Federal Need (First 5 Years) (\$ in millions)

Capital Need	Current	Growth	Current plus Growth
Infrastructure	\$380	\$375	\$755
Fleet (overhauls/maintenance)	374	143	517
Stations/Facilities	60	42	102
Debt	99	4	103
Technology/program management	60	20	80
Total	\$973	\$584	\$1,557

In the last 15 years of the 20-year plan, the average Federal capital required to fund the current service scenario drops to \$750 million annually from the original funding level of \$973 million. It is anticipated that the backlog of deferred Northeast Corridor needs as well as reinvestment in existing fleet will be substantially addressed in the first 5 years of the plan.

Amtrak's 20-year capital plan and the Southend Plan developed with FRA in 2000 to address needs along the Southend of the Northeast Corridor are consistent in most aspects, with some minor differences. In the Southend Plan, projects to improve capacity and reduce trip-times were identified as essential projects necessary to keep pace with projected traffic growth by all Southend Corridor users, whereas Amtrak's 20-year capital plan includes these projects in its growth scenario. Also, Amtrak's 20-year capital plan contemplates using the revenue streams associated with the incremental reduction in trip times to finance further capital improvements.

It should be noted that both these plans require significant cooperation and funding among all users of the NEC. Since the plans provide only a framework for most of the work represented, more precise estimates of cost and relative funding shares are expected as the parties negotiate at the individual project level. Consequently, the Federal share estimates will need to be revised as Federal-State cost sharing provisions are reached.

In general, we have found Amtrak's current service capital plan to be comprehensive and reasonable, assuming the current system remains intact and does not substantially change as a result of the reauthorization process. Since the capital plan was developed, Amtrak has revised some of its plans concerning future operations and the capital plan will need to be revised to reflect these changes. Several of these areas are discussed below.

- **Mail and Express**

Amtrak's 20-year capital plan projects annual needs of \$30 million for fleet related to growth in the Mail and Express business. In 2001, Amtrak substantially revised downwards its estimates for growth in this business. Amtrak also adopted the policy that Mail and Express will be self-sufficient – covering the cost of both operations *and* capital. This policy extends to the principal payments on financing used to purchase Mail and Express equipment. As such, all capital needs estimates related to the Mail and Express business should be removed from the 20-year plan funding estimates.

- **Network Growth Strategy – Fleet**

Despite being described as "current service," the fleet portion of the plan assumes mass retirements and replacements of equipment in addition to procurement of new equipment. For example, in addition to retiring and in-kind replacement of existing equipment, Amtrak plans to add additional baggage and food service cars. Amtrak has scaled back the Network Growth Strategy and plans for fleet expansion may need to be revised downward. These changes would have little impact on federal capital required in the next 5 years since nearly all of Amtrak's equipment procurements are expected to be financed.

- **Station Costs – Americans with Disabilities Act**

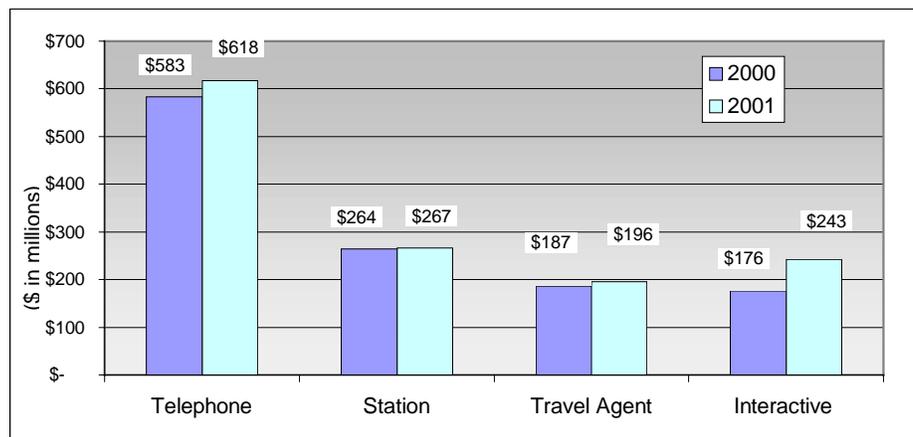
Amtrak's estimated investment needs for station projects are currently only a rough approximation. Amtrak needs to more accurately determine its responsibilities related to the Americans with Disabilities Act (ADA) in the stations it serves, regardless of whether it is the actual owner of those stations. Amtrak currently projects annual needs of \$50 million for station projects, although this estimate does not break out the costs specifically related to the ADA components. Amtrak has recently assembled a team to try to identify its potential needs and its responsibilities and this team is likely to provide a more accurate picture of capital funding needs for these projects.

Information Technology Capital Improvements

Over the past 4 years, Amtrak has made significant investments in upgrading its information technology systems to become current with industry advances. The capital investments, which are administered by Amtrak Technologies, Amtrak's information technology group, seek to improve operating efficiencies throughout the company and support business growth. A primary goal for Amtrak Technologies has been to replace manual procedures with automated ones, including many functions historically performed by reservation and ticket agents.

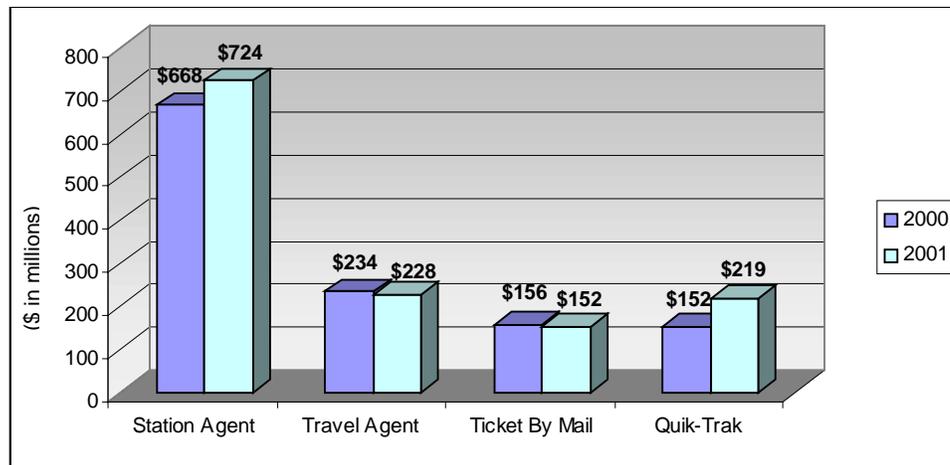
Three of the most significant improvements in recent years include upgrades to Amtrak's Internet website, introduction of voice recognition technology at the reservation call centers, and introduction and expansion of self-serve ticketing kiosks in stations. These improvements have impacted the relative popularity of Amtrak's sales and ticketing channels. As Figure 10 shows, interactive ticket sales, which includes the Amtrak website, voice recognition technology, and ticket kiosks, increased substantially (almost 40 percent) in the past year. Sales through other, more expensive, distribution channels, increased also, but at a slower rate.

Figure 10. Growth in Ticket Sales by Channel from 2000 to 2001



As Figure 11 shows, trends in ticketing (physical delivery of the ticket) have also changed. Ticketing through station agents and ticket kiosks (Quik-Trak) have increased in the past year, while ticketing through more expensive channels -- travel agents and tickets-by-mail decreased.

Figure 11. Changes in Ticket Distribution Outlets, 2000 vs. 2001



▪ **Website Improvements**

On July 29, 2001, Amtrak introduced its upgraded website. Among other improvements, the new booking system increased the speed and ease with which travelers are able to make reservations and to check fares, schedules, and train arrival or departure status. The improved website also features new graphics with a strong emphasis on brand identity and a more intuitive navigation scheme.

The improved website has prompted an increasing share of customers to purchase their tickets on-line. Since Amtrak first provided a website where consumers could research, reserve, and purchase tickets, the use of this channel has grown. In 2000, \$61.5 million in tickets were booked on www.Amtrak.com, which represented 5.1 percent of total bookings. For 2001, that share has grown to \$110 million or 8.4 percent. Online sales and reservations benefits consumers who are able to access a wide variety of information 24 hours a day, 7 days a week from their own computers, and Amtrak benefits through reduced distribution costs.

In the past 4 years, Amtrak has invested \$3.6 million in capital improvements to its website. The work was done primarily by Amtrak employees in the Amtrak Technologies and Marketing divisions. As summarized in Table 35, the costs reflect \$1.7 million in hardware, \$1.6 million in labor, and \$.3 million in software.

Table 35. Website Investment, 1998-2001 (\$ in millions)

Hardware	Labor	Software	Total
\$1.7	\$1.6	\$0.3	\$3.6

▪ **Voice Recognition Technology**

On October 15, 2001, Amtrak announced the introduction of a new voice recognition system to allow customers to check on the status of any of Amtrak's trains. The system is based on voice recognition software which uses natural language speech recognition and provides responses that sound like a human agent. Amtrak's toll free reservations and information number, 1-800-USA-RAIL, receives over 4.1 million calls each year requesting train status information. Amtrak estimates that shifting these calls to the automated system can significantly reduce expenses.

During the 5-month test of the new system in key geographic areas, Amtrak found that more than 70 percent of callers are using the voice recognition system to complete their calls, compared to just 42 percent who used the prior system which relied on touch tone responses. Amtrak has invested \$2.1 million in this project over the past 2 years. Amtrak anticipates expanding the capability of the voice recognition system to include fare information and reservations capabilities in early 2002. This will require an additional \$2.4 million in funding.

▪ **Self-Serve Ticketing Kiosks – Amtrak Quik-Trak**

Amtrak currently has 164 self-serve ticketing kiosks in its system located in 71 stations. In the future, Amtrak plans to acquire 100 additional kiosks, averaging about \$18,000 per kiosk, to be installed in its busiest stations. Amtrak plans to spend about \$2.2 million on this project. The additional kiosks are part of an Amtrak initiative to introduce electronic ticketing and boarding passes in the operational environment. Electronic ticketing is expected to divert passenger volumes to automated distribution channels, minimize manual processing of refunds and exchanges, and reduce call center and mailing costs. The use of kiosk-generated boarding passes is expected to provide more accurate on board passenger counts, recognize “no shows” so that tickets can be sold to standby passengers, and reduce revenue accounting costs by automatically generating a ticket lift as the boarding pass is issued.

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 2001.¹²

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,¹³ 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 Amtrak will need to continue operations and must be covered in some manner each year for Amtrak to continue as an ongoing concern.

¹² 2001 data have not been audited.

¹³ 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.

- 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 2001 Strategic Business Plan

In assessing Amtrak's 2001 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. We also conducted a follow-up capacity-constrained revenue 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 2000. 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 2001, (2) the actual rates of growth in 1999, 2000 and 2001, and (3) the revised business strategies and forecasts for the Mail and Express Strategic Business Unit developed since the issuance of the 2001 Strategic Business Plan.

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 annual capital programs between 1998 and 2001 and its 20-year capital plan, published in 2001.

To assess Amtrak's 20-year capital plan, we interviewed Amtrak's senior capital planners responsible for assembling the plan and reviewed the estimates and assumptions that the plan is based on. 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 Sunnyside maintenance facility in New York City.

We also held several meetings with senior officials at Amtrak's Engineering Department to understand the needs of the Northeast Corridor, including the New York Pennsylvania Station and tunnel complex. The Northeast Corridor represents the largest component of Amtrak's capital investment program. In addition, we 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.

Prior Assessment Findings and Recommendations

Based on our 2000 assessment, we concluded that 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 would depend heavily on limiting the growth in Amtrak's expenses over the next 3 years. We estimated that Amtrak's cash loss must drop by an average of \$85 million per year to reach operating self-sufficiency in 2003.

In our 1998, 1999 and 2000 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. The first was for Amtrak to develop a detailed long-range projection for mandatory spending needs and annual funding levels. In early 2001, Amtrak issued its first 20-year capital plan. 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. At this time, we consider both recommendations closed.

We made four recommendations in our 2000 assessment. First, we recommended that Amtrak identify actions in its 2001 Strategic Business Plan that would close the \$737 million gap represented by Undefined Management Actions in the 2000 Plan. In response to this recommendation, Amtrak submitted a series of new business plan actions that were intended to reduce the undefined actions to approximately \$125 million for the 5-year plan period 2001 to 2005. Although Amtrak identified some actions that will help to narrow the gap, the planned initiatives fall short of the objective. Because Amtrak appears to be committed to cutting costs and becoming more efficient, we consider this recommendation to be

resolved, but will not close it until we can evaluate Amtrak's 2002 business plan actions.

Our second and third recommendations addressed Amtrak's spending of capital funds on projects other than minimum needs. Specifically, we recommended that Amtrak reprogram any authorized, but unobligated, TRA funds that were approved for projects outside minimum needs and that Amtrak and its Board of Directors withhold approval on projects that fall outside Amtrak's minimum capital needs until Amtrak can demonstrate that it has provided for all minimum needs. Nonetheless, Amtrak has continued its practice of funding capital projects using TRA and other capital grant funds that, although beneficial to the company, does not address all of the minimum capital needs.

Amtrak has essentially maintained that it has conflicting mandates, that is, to maintain a national passenger rail network which requires covering minimum capital needs and to become operationally self-sufficient, which requires capital investments that divert resources away from the basic capital needs of the company. Because the TRA funds are nearly all spent and the Administration and Congress have both expressed the desire to begin the debate on the future of intercity passenger rail early in 2002, we are closing these two recommendations.

Finally, we recommended that Amtrak identify in a comprehensive manner all capital needs, including their costs, timing, and priority. Amtrak has developed a comprehensive 20-year capital plan that adequately addressed these issues. Therefore, we are closing this recommendation as well.

Contributors to This Report

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Attachment

The following pages contain versions of charts and tables contained in the preceding audit that are more easily read by screen readers. These pages were not part of the original audit report.

Executive Summary Charts and Tables

Figure 1. Passenger Revenue and Ridership Growth Since 1991

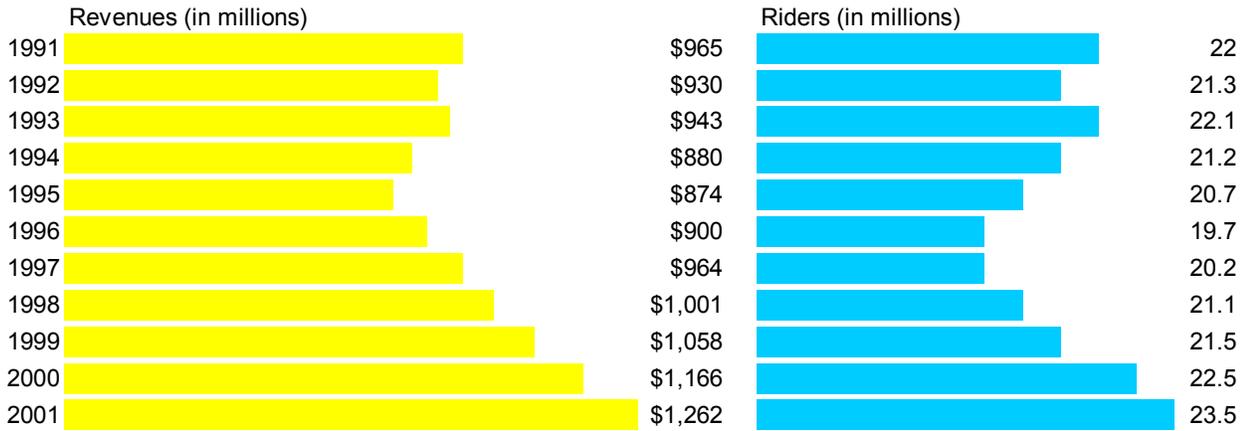


Figure 2. Non-Passenger Revenue Categories, 1991 Through 2001 (\$ in millions)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Other	\$32	\$16	\$22	\$42	\$64	\$41	\$94	\$63	\$79	\$179	\$152
Commercial	\$40	\$34	\$42	\$38	\$31	\$38	\$55	\$35	\$52	\$62	\$84
Reimbursable	\$65	\$63	\$55	\$77	\$107	\$108	\$91	\$91	\$94	\$126	\$100
Commuter	\$179	\$197	\$246	\$267	\$305	\$318	\$314	\$334	\$334	\$274	\$289
403(b) State Support	\$16	\$21	\$26	\$33	\$36	\$64	\$70	\$83	\$100	\$112	\$123
Mail and Express	\$62	\$64	\$69	\$76	\$80	\$85	\$86	\$101	\$117	\$122	\$117

Figure 3. Growth in Amtrak Expenses, 1991 Through 2001 (\$ in millions)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Labor	\$1,094	\$1,096	\$1,177	\$1,239	\$1,241	\$1,271	\$1,334	\$1,378	\$1,457	\$1,563	\$1,625
Train Operations	\$130	\$134	\$132	\$133	\$127	\$125	\$142	\$150	\$194	\$216	\$228
Fuel, Power, and Utilities	\$330	\$303	\$290	\$288	\$269	\$258	\$284	\$264	\$263	\$312	\$306
Facility and Office Related	\$110	\$117	\$116	\$120	\$139	\$147	\$152	\$159	\$155	\$173	\$171
Depreciation	\$203	\$206	\$206	\$245	\$230	\$238	\$241	\$292	\$327	\$359	\$452
Interest	\$14	\$18	\$21	\$32	\$48	\$60	\$76	\$88	\$83	\$107	\$162
Other	\$200	\$163	\$192	\$342	\$251	\$254	\$241	\$235	\$264	\$253	\$333
Total	\$2,081	\$2,037	\$2,134	\$2,399	\$2,305	\$2,353	\$2,470	\$2,566	\$2,743	\$2,983	\$3,277

Executive Summary Charts and Tables

Figure 4. Growth in Interest Expense, 1993 to 2005 (Estimated)

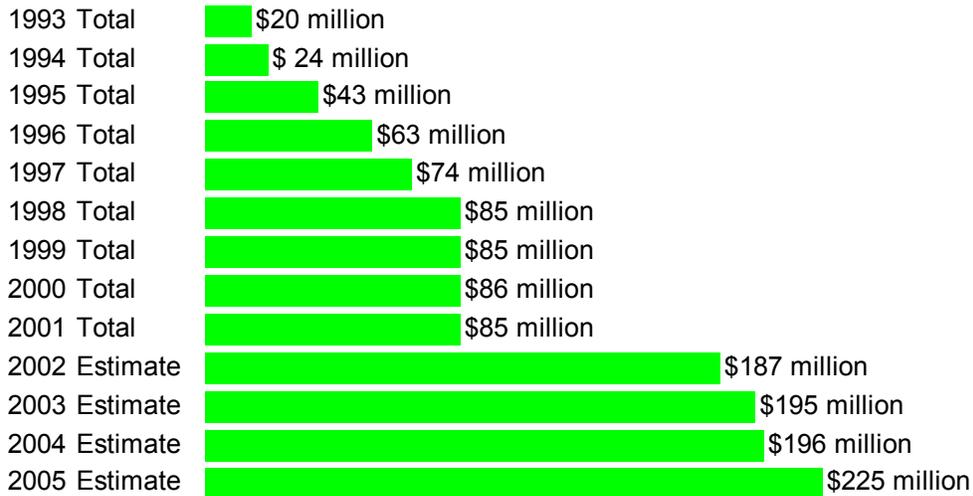


Figure 5. Amtrak’s Operating and Cash Losses, FY 1999 to FY 2001 (\$ in millions)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Operating Loss	\$704	\$722	\$712	\$731	\$833	\$808	\$798	\$797	\$860	\$916	\$944	\$1,072
Cash Loss	\$522	\$519	\$506	\$525	\$578	\$554	\$558	\$549	\$561	\$579	\$561	\$585

Figure 6. Comparison of Infrastructure Caused Delays, 1998 to 2001 (in minutes)

Infrastructure Delays	1998	2001
Maintenance of Way	9,698	7,371
Speed restrictions	7,672	10,843
Communication and signals	11,811	15,703
Bridges and buildings	3,074	4,075
Electric traction	6,377	10,295
Total infrastructure	38,632	48,287

Figure 1. Systemwide Passenger Revenue and Ridership Trends, 1991 Through 2001

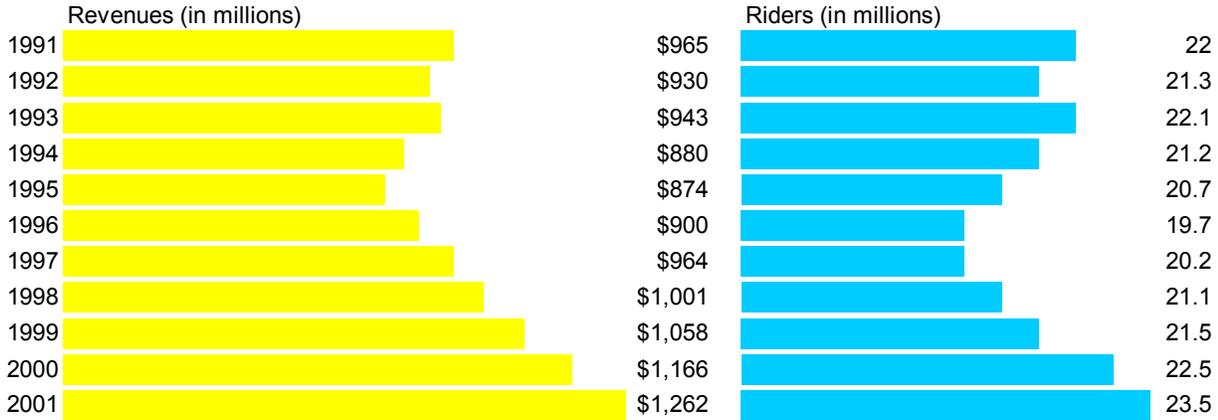


Figure 2. Composition of Amtrak Revenues, 1991 Through 2001 (\$ in millions)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total Passenger	\$965	\$930	\$943	\$880	\$874	\$901	\$964	\$1,001	\$1,058	\$1,166	\$1,262
Total Non-Passenger	\$394	\$395	\$460	\$533	\$623	\$654	\$710	\$707	\$776	\$874	\$941

Figure 3. Amtrak's Non-Passenger Revenue Categories, 1991 Through 2001 (\$ in millions)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Other	\$32	\$16	\$22	\$42	\$64	\$41	\$94	\$63	\$79	\$179	\$152
Commercial	\$40	\$34	\$42	\$38	\$31	\$38	\$55	\$35	\$52	\$62	\$84
Reimbursable	\$65	\$63	\$55	\$77	\$107	\$108	\$91	\$91	\$94	\$126	\$100
Commuter	\$179	\$197	\$246	\$267	\$305	\$318	\$314	\$334	\$334	\$274	\$289
403(b) State Support	\$16	\$21	\$26	\$33	\$36	\$64	\$70	\$83	\$100	\$112	\$123
Mail and Express	\$62	\$64	\$69	\$76	\$80	\$85	\$86	\$101	\$117	\$122	\$117

Figure 4. Amtrak Service Guarantees from July 4, 2000 Through September 30, 2001 (Per 1,000 Customers)

	Number of Guarantees
Goal	1.0
NEC	1.8
Intercity	8.3
West	2.0
Systemwide	3.4

Main Document Charts and Tables

Figure 5. Federal Funding, 1998 Through 2001 (\$ in millions)

Source	1998	1999	2000	2001
TRA	\$1,092	\$1,092	\$0	\$0
NECIP	\$250	\$0	\$0	\$0
Capital	\$0	\$609	\$571	\$521
Operating	\$344	\$0	\$0	\$0

Figure 6. Investment of TRA Funds, 1998 Through 2001 (\$ in millions)

Source	Total
High Speed Rail	\$764
Rolling Stock	\$544
Operational Reliability	\$265
Technology	\$122
Yards, Shops, Stations	\$105
Life Safety	\$54
Debt	\$44
Corridor Development	\$43
Other Mandatory	\$29
Maintenance	\$24
Mail and Express	\$23
Environmental	\$21
New Business	\$17

Figure 7. Growth in Ticket Sales by Channel from 2000 to 2001 \ (\$ in millions)

Channel	2000	2001
Telephone	\$583	\$618
Station	\$264	\$267
Travel Agent	\$187	\$196
Interactive	\$176	\$243

Figure 8. Comparison of Infrastructure Delays, 1998 to 2001 (in minutes)

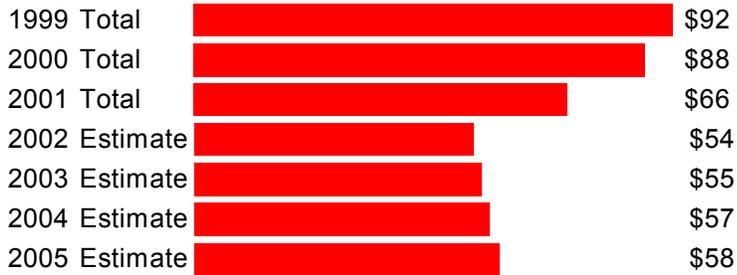
Cause	1998	2001
Bridges and buildings	3,074	4,075
Communication and signals	11,811	15,703
Electric Traction	6,377	10,295
Speed Restrictions	7,672	10,843
Maintenance of Way	9,698	7,371
Total	38,632	48,287

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Figure 9. Growth in Total Northeast Corridor Delays, 1998 to 2001 (in minutes)



Figure 10. Federal Funds Used for Progressive Overhauls and Related Expenses, 1991 Through 2005 (\$ in millions)



Charts for Capital Appendix

Figure 11. Growth in Ticket Sales by Channel from 2000 to 2001 (\$ in millions)

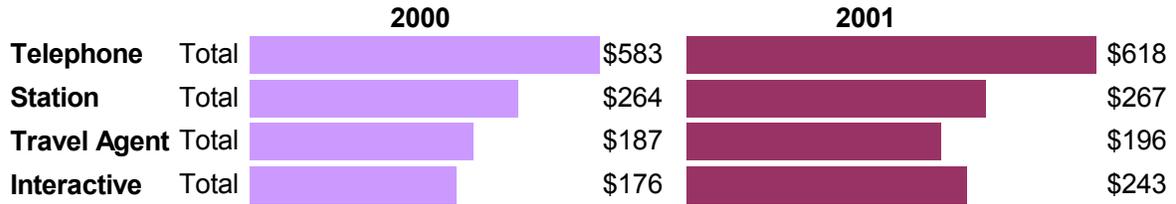


Figure 12. Changes in Ticket Distribution Outlets, 2000 vs. 2001 (\$ in millions)

