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AMTRAK

Acela's Continued Problems Underscore the Importance of Meeting Broader Challenges in Managing Large-Scale Projects

Statement of JayEtta Hecker, Director
Physical Infrastructure Issues

May 11, 2005

AMTRAK

Acela's Continued Problems Underscore Importance of Meeting Broader Challenges in Managing Large-Scale Projects

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Highlights

Highlights of GAO-05-698T, a report to Subcommittee on Railroads, Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

In 1996, the National Railroad Passenger Corporation (Amtrak) executed contracts to build high-speed trainsets (a combination of locomotives and passenger cars) as part of the Northeast High Speed Rail Improvement Project. Since that time, Amtrak has experienced multiple challenges related to this program, including recently removing all trains from service due to brake problems. Amtrak has struggled since its inception to earn sufficient revenues and depends heavily on federal subsidies to remain solvent. The April 2005 action to remove the Acela trainsets—Amtrak's biggest revenue source—from service has only exacerbated problems by putting increased pressure on Amtrak's ridership and revenue levels.

This testimony is based on GAO's past work on Amtrak and focuses on (1) background on problems related to the development of the Acela program, (2) summary of issues related to lawsuits between Amtrak and the train manufacturers and the related settlement, (3) key challenges associated with the settlement, and (4) initial observations on possible challenges in Amtrak managing large-scale projects.

www.gao.gov/cgi-bin/getrpt?GAO-05-698T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact JayEtta Z. Hecker, (202) 512-2834, heckerj@gao.gov.

What GAO Found

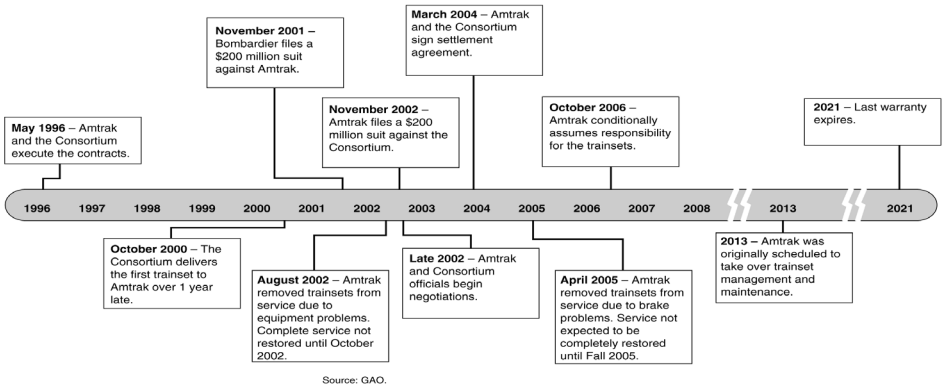
Significant issues and controversy have impacted the Acela program since its inception. According to Amtrak, what started out as a simple procurement of train equipment evolved into a complex high-speed rail program. Acela has encountered numerous difficulties due to such things as new technology and production delays. Even after Acela service began, unexpected problems were encountered, which required Amtrak to remove the trainsets from service, resulting in lost revenue.

Concerns about the quality of the Consortium of train manufacturers' (Bombardier and Alstom) work and Amtrak's withholding of payments for the Acela trainsets resulted in the parties suing each other, each seeking $200 million in damages. Amtrak and the Consortium reached a negotiated settlement in March 2004. Although the settlement agreement protects Amtrak through certain warranties, loss of revenue resulting from removal of trains from service is not directly recoverable. Under the settlement, Amtrak is conditionally scheduled to assume maintenance functions from the Consortium in October 2006.

Aside from the current problems, Amtrak faces other risks and challenges to the recent settlement, including obtaining technical expertise and providing sufficient funding for maintenance. Achieving a successful transition is critical to Amtrak given the importance of the Acela program. The recent brake problems may impact the transition through such things as delayed management training.

As GAO reported in February 2004, Amtrak had difficulties managing the Northeast High Speed Rail Improvement Project and many critical elements of the project were not completed and the project goal of a 3-hour trip time between Boston and New York City was not attained. GAO has ongoing work addressing Amtrak management and performance issues that GAO plans to report on later this year.

Timeline of key events



Source: GAO.

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to testify on the National Railroad Passenger Corporation's (Amtrak) Acela program and the overall management of the corporation. Intercity passenger rail is at a critical crossroads regarding its future in the United States. Amtrak has struggled since its inception to earn sufficient revenues and depends heavily on federal subsidies to remain solvent. The April 2005 action to remove the Acela trainsets—the combination of locomotives and passenger cars—from service has only exacerbated problems by putting increased stress on Amtrak's ability to maintain ridership and revenue levels and could make Amtrak's financial condition even more precarious. Amtrak's Acela program accounted for not quite one-fourth of the ridership and about 44 percent of revenue on the Northeast Corridor—Amtrak's busiest rail route—in fiscal year 2004.

My statement today addresses numerous issues of interest to the Congress as it delves into Amtrak's handling of this most recent incident involving Acela, and more generally, the future of intercity passenger rail in this country. I will cover four areas: (1) background on the problems Amtrak experienced during the development of the Acela program, (2) a summary of issues related to the lawsuits between Amtrak and the consortium of train manufacturers (the Consortium), Bombardier and Alstom, and the subsequent settlement, (3) key challenges associated with implementing the settlement, and (4) possible broader challenges at Amtrak in managing other large-scale projects. The information I will present is primarily based on reports that we have issued over the last several years.[1]

Significant issues and controversy have impacted the Acela program since its inception. Among the issues that have impacted the Acela program are the following: (1) potential difficulties due to new technology, (2) impacts from new safety standards to accommodate high-speed rail, (3) manufacturing and production delays, and (4) abbreviated testing of the trains prior to placement in revenue service. The Acela trainsets are not an "off-the-shelf" piece of equipment but rather a combination of both new and existing technology. According to the Federal Railroad Administration (FRA), this was the first time this particular combination of new and existing technology had been designed as one unit. As such, the equipment required considerable time to develop and test, and the probability of expected and unexpected problems was high. Furthermore, the trainset

[1]See the enclosure for a list of related GAO products.

grew in weight and cost due to new safety regulations. The Consortium also encountered production delays. With Amtrak under considerable financial and time pressures to place the trainsets into service; therefore, trainset testing was abbreviated. In addition to building the Acela trainsets, the Consortium entered into a contractual arrangement with Amtrak to manage the Acela facilities and maintain the trainsets, including training and supervising Amtrak employees. Since the trainsets were placed into revenue service in 2000, unexpected problems have been encountered that have resulted in lost revenue and damaged the image of the Acela program. For example, an equipment failure forced Amtrak to withdraw the Acela trainsets from service for 2 months in 2002. As problems and difficulties mounted, increased tension between Amtrak and the trainset manufacturer led to legal action against each other.

- Concerns about the quality of the Consortium's work and Amtrak's withholding of payments for the Acela trainsets resulted in the parties suing each other, each seeking $200 million in damages. Amtrak and the Consortium reached a negotiated settlement in March 2004. In general, under the settlement, the Consortium must complete modifications to the trainsets and locomotives, achieve established performance requirements, provide training to Amtrak staff, and provide and extend warranties. In addition, Amtrak agreed to release a portion of previously withheld funds and will conditionally assume facility management and trainset maintenance responsibilities as soon as 2006, rather than in 2013, as originally planned; if the Consortium satisfactorily completes its commitments under the settlement agreement.

- Our work evaluating the terms of the settlement led us to conclude that Amtrak faces other risks and challenges to sustain the trainsets and keep them operating.[2] Achieving a successful transition is critical to the financial well-being of Amtrak, given that the Acela program is such a significant source of its revenue. The challenges include (1) completing modifications and meeting performance requirements, (2) obtaining technical expertise for maintenance and completing training, (3) sufficiently funding maintenance and integrating responsibilities, and (4) preparing a comprehensive implementation plan. Addressing and resolving these challenges will not be easy. Although the settlement agreement

[2]GAO, *Intercity Passenger Rail: Issues Associated with the Recent Settlement between Amtrak and the Consortium of Bombardier and Alstom*, GAO-05-152 (Washington, D.C.: Dec. 1, 2004).

ensures that Amtrak will be protected by the extended trainset warranties and Amtrak has several methods of financial recourse if the Consortium does not honor warranties, loss of revenue resulting from removal of trainsets from service is not directly recoverable. However, the full extent of the legal liability has yet to be addressed by the parties. Amtrak officials told us that their first priority is getting the trainsets back in service. In addition, the recent brake problems may impact the transition of the maintenance function to Amtrak through such actions as delaying management training. Amtrak officials continue to believe the transition will occur in October 2006, however.

- Amtrak also faces challenges in managing other large-scale projects. As we reported in February 2004, Amtrak had difficulties managing the Northeast High Speed Rail Improvement Project (NHRIP), a multi-year, multi-billion dollar project to electrify the tracks between Boston, Massachusetts, and New Haven, Connecticut, acquire high-speed trains, and make capital improvements. Among the problems we found were that (1) Amtrak's management of this project was not comprehensive but was focused on the short term; (2) project management focused on separate components of the project, such as electrification and acquisition of the high-speed trains, and not on the project as a whole; and (3) Amtrak did not sufficiently address major infrastructure improvements needed to attain project goals. The overall results were that many critical elements of the project were not completed, project costs and schedules increased considerably, and the project goal of a 3-hour trip time between Boston and New York City was not attained.

Background

The Rail Passenger Service Act of 1970 created Amtrak to provide intercity passenger rail service because existing railroads found such service to be unprofitable. Amtrak operates a 22,000-mile network, primarily over freight railroad tracks, providing service to 46 states and the District of Columbia. Amtrak owns about 650 miles of track, primarily on the Northeast Corridor between Boston, Massachusetts, and Washington, D.C. In fiscal year 2004, Amtrak served about 25 million passengers, or about 68,640 passengers per day. According to Amtrak, about two-thirds of its ridership is wholly or partially on the Northeast Corridor. The Northeast Corridor is the busiest passenger rail line in the country, and some 200 million Amtrak and commuter rail travelers use the Corridor, or some part of it, each year. On some portions of the Northeast Corridor, Amtrak provides high-speed rail service (up to 150 miles per hour). The high-speed Acela program is the centerpiece of Amtrak's intercity passenger rail system, with its financial contributions to the company exceeding that of all other routes combined.

Acquisition of the Acela trainsets occurred as part of NHRIP. NHRIP, and its predecessor the Northeast Corridor Improvement Project, date back to the late 1970's and represented a multiyear, multibillion collection of capital improvements to the Northeast Corridor that included electrifying the line between New Haven, Connecticut, and Boston, Massachusetts, improving tracks, signals, and other infrastructure, and acquiring high-speed trains.[3] These efforts were designed to achieve a 3-hour trip time between New York City and Boston. As of March 2003, Amtrak, commuter railroads, and others had spent about $3.2 billion on the project.

In 1996, Amtrak executed contracts with train manufacturers Bombardier and Alstom to build 20 high-speed trainsets and 15 electric high-horsepower locomotives; construct three maintenance facilities; and provide maintenance services for the Acela trainsets. The trainsets, locomotives, and facilities contracts totaled $730 million.[4] Bombardier and Alstom, referred to as the Consortium, created the Northeast Corridor Management Service Corporation (NecMSC) to manage the facilities and maintain the trainsets, including supervising Amtrak maintenance employees. Amtrak pays NecMSC a per-mile rate—that is, a fixed rate for each mile the Acela trains travel—on a monthly basis to provide management and maintenance services at three maintenance facilities.[5]

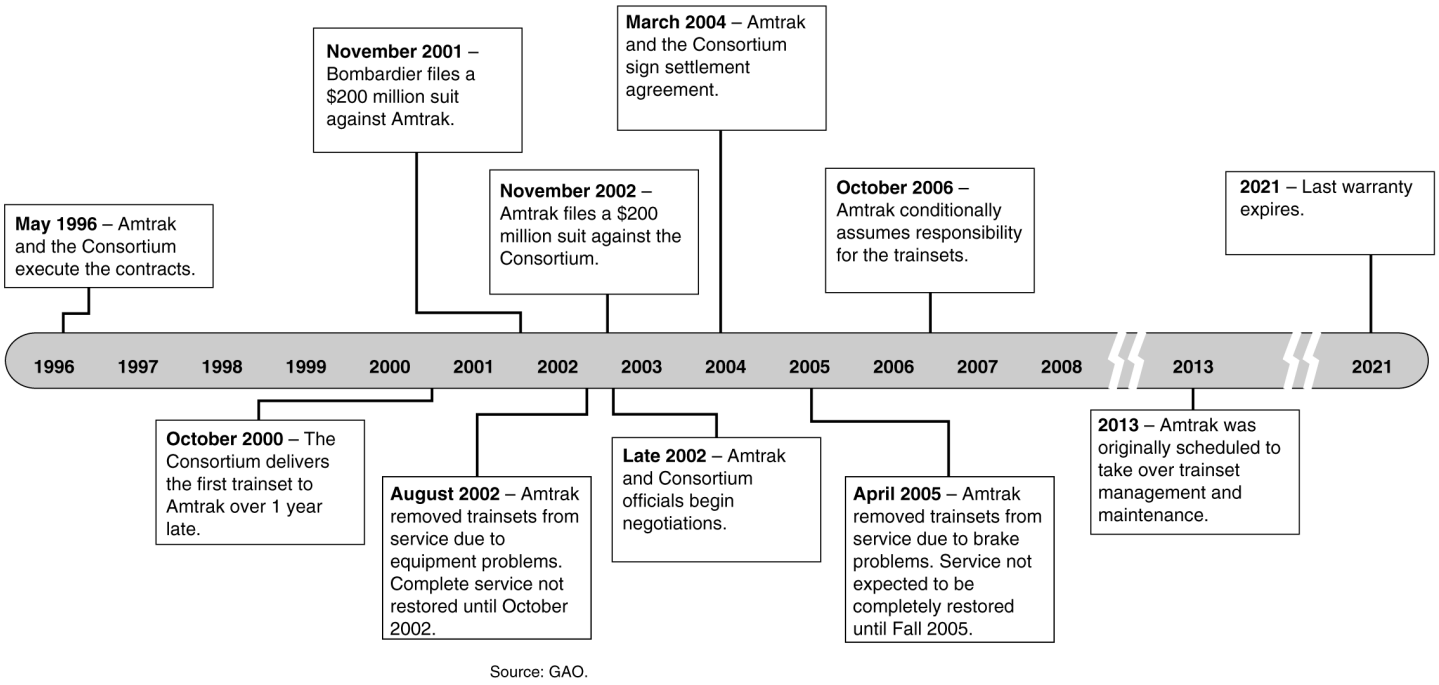
Amtrak's Acela program has undergone a number of events since its inception, which has included the execution of the original contracts in 1996, delivery of the first trainset in October 2000, and the filing of lawsuits by both Bombardier and Amtrak in November 2001 and 2002, respectively(see fig. 1). The trainsets were also withdrawn from service for several weeks in August 2002. In March 2004, Amtrak and Bombardier signed an agreement to settle the lawsuits, which calls for Amtrak to conditionally assume trainset maintenance in October 2006, assuming conditions of the settlement have been met. The last warranties for the trainsets expire in 2021.

[3]For a more detailed description and discussion of NHRIP and the Northeast Corridor Improvement Project, see GAO, *Intercity Passenger Rail: Amtrak's Management of Northeast Corridor Improvements Demonstrates Need for Applying Best Practices*, GAO-04-94 (Washington, D.C.: Feb. 27, 2004).

[4]The cost of the Management Service Contract is not included in the total contract cost.

[5]As of April 2004, Amtrak had paid NecMSC a total of $31 million for its maintenance and management services. This amount is adjusted for liquidated damages Amtrak has assessed to NecMSC.

Figure 1: Timeline of key events



Source: GAO.

Significant Issues Have Impacted Acela Program Since Its Inception

Significant issues and controversy have impacted the Acela program since its inception. What started out as a relatively simple procurement of train equipment evolved into a complex high-speed rail program, according to an Amtrak official. The Acela trainset is a complex piece of equipment with state-of-the-art electronics and was considered new technology for the United States. As such, it required additional time to develop and test, and the probability of expected and unexpected problems was high.

Among the issues that the Acela program has encountered since its creation are the following:

- Potential difficulties due to new technology. Instead of purchasing "off-the-shelf" technology—that is, train equipment that was already designed, engineered, and in use—Amtrak decided to acquire "new" technology. An FRA official told us some components on the Acela trainset (such as

power components and the tilt mechanism[6]) were similar to that used on train equipment in other parts of the world but much of the technology on Acela trainsets was new. In addition, many of the components, whether new or existing technology, had never been used together. Further, this official said that because the components in the Acela trainsets had never before been designed as one unit, Acela was not an off-the-shelf technology train.[7] Although Acela trainsets were essentially new technology and could be expected to require additional time to develop and test, Amtrak developed an ambitious schedule that called for shipment of the first trainset 32 months—just over 2½ years—after the notice to proceed was issued. According to an Amtrak official, the calendar and electrification delivery date drove the planning for the trainsets. Amtrak worked backwards from these due dates to try and fit project work into the timeline.

- Impacts from new safety standards to accommodate high-speed rail. During the 1996 to 2000 time frame, the same time period when the Acela trainsets were being acquired and manufactured, FRA, in consultation with Amtrak, was developing safety regulations related to high-speed rail operations. These included new rules covering track safety (to accommodate speeds of up to 200 miles per hour), passenger car safety, and train control. According to FRA officials, Amtrak was intimately involved in developing these standards to accomplish its vision of high-speed rail operations on the Northeast Corridor. FRA officials also noted that passenger car safety regulations did not exist prior to the mid-1990's. Developed for safety purposes, these standards had a significant impact on the Acela trainsets. For example, the passenger car safety regulations required a crash energy management system in passenger cars that was designed to increase the strength of both car ends and side posts. FRA also prohibited the operation of high-speed trains (up to 150 miles per hour) in a push-pull manner.[8] FRA officials acknowledged that the crash energy system increased the weight of the Acela trainsets but said such a system resulted in safer trains. Amtrak told us that prohibiting push-pull operation

[6]This is a mechanism that allows trains to take curves at a higher speed.

[7]It should be noted that during 1993, existing high-speed trains such as the X-2000 and InterCity Express were tested on the Northeast Corridor. One of the bidders for the high-speed train contract proposed a slightly modified version of the X-2000 train but was not selected.

[8]Push-pull operation is when a locomotive "pulls" the train in one direction and then the locomotive "pushes" the train in the opposite direction. According to FRA, this is common in commuter rail operations.

caused them to obtain 20 additional power cars for Acela at a cost of about $100 million.

- Manufacturing and production delays. The Acela program experienced a significant share of manufacturing and production delays. Under FRA's 1994 master plan for NHRIP, developed in response to the Amtrak Authorization and Development Act, delivery of enough high-speed trains to initiate limited 3-hour service between Boston and New York City was expected by 1999.[9] However, due to design and manufacturing delays, the first Acela trainsets were delivered about a year late, and revenue service using the trainsets did not begin until December 2000. Manufacturing and production delays began early in the procurement process. For example, our review of Consortium progress reports indicated that as early as October 1996, only months after the original contract was signed, change orders and design changes (mainly related to car interiors) were being made that were causing delays in production. In addition, train weight was increasing, a condition that continued to plague the trainsets throughout production. Amtrak attempted to require the Consortium to prepare recovery plans to keep the program on schedule, but we found little evidence of such plans in documents we reviewed. Regardless, these plans did not prevent the trainsets from being delivered about a year late.

- Abbreviated testing prior to placement in revenue service. Amtrak's Acela trainsets also appeared to have had abbreviated testing prior to being deployed into revenue service.[10] A fuller testing of the trainsets may have better identified the range of potential problems and defects that could be experienced prior to placing the trainsets in service. The maximum testing any one Acela trainset received was about 35,000 miles of testing —20,000 miles at the Transportation Test Center (Center) in Pueblo, Colorado, and 15,000 miles on the Northeast Corridor between 1999 and 2000. However, an FRA official believed testing of the trainsets was rushed and that

[9]As we reported in February 2004, Amtrak had not yet met the requirement for achieving the 3-hour trip time contained in the Amtrak Authorization and Development Act. See GAO-04-94. It should be noted that Amtrak did not agree with our use of FRA's 1994 master plan to measure the effectiveness of its management of NHRIP, even though Amtrak officials had agreed that this plan was a "blueprint" for the project.

[10]This discussion of Acela testing is not meant to imply that the trainsets are unsafe or do not meet federal safety standards. Rather, it focuses on the degree of testing to discover problems and defects that could potentially be fixed prior to deployment into revenue service.

additional testing at the Center should have been conducted.[11] This official cited testing of Amtrak's AEM-7 electric locomotive as an example of the testing that is normally done on new equipment. This locomotive, which was a new locomotive that entered service in the early 1980's, was tested for 165,000 miles at the Center prior to placement in service. An FRA official also acknowledged that there were no minimum federal testing requirements for new high-speed trainsets, like Acela, only that such equipment comply with existing safety regulations.[12] However, this official believed Amtrak was under both financial and time pressures to place the trainsets in service, in part because of delays in trainset production.

Since placement into revenue service in 2000, the Acela has experienced a number of unexpected problems. One occurrence was in August 2002 when Amtrak was forced to withdraw the trains from service to address unexpected equipment problems (yaw damper brackets). The trainsets were not returned to complete service until October 2002. According to Amtrak, this withdrawal cost the corporation a net $17 million in lost revenue. In April 2005, Amtrak once again experienced unexpected problems with the trainsets due to equipment problems (cracks in brake assemblies). Again, the trainsets have been withdrawn from service and Amtrak has stated that it may be months before the trains are returned to service. Although Amtrak is placing substitute equipment into service, it can be expected that there will be revenue loss as well as damage to Amtrak's image.

Legal Suits between Amtrak and the Acela Manufacturer Led to Settlement Agreement in March 2004

As the procurement proceeded, tensions grew between Amtrak and the Consortium. Concerns about the quality of the Consortium's work and Amtrak's withholding of payments for the Acela trainsets resulted in the parties suing each other, each seeking $200 million in damages. In November 2001, Bombardier filed a suit alleging that Amtrak improperly withheld payments, failed to provide accurate information on infrastructure conditions, and changed design specifications during contract performance. In November 2002, Amtrak filed a suit alleging that the Consortium failed to meet trainset performance requirements. In

[11]An FRA official acknowledged that the Center was not conducive to testing Acela's tilt mechanism. However, he said that other problems that developed during testing at the Center should have been a clear signal that additional testing was warranted.

[12]According to FRA, in lieu of high-speed testing standards, Amtrak developed its own minimum testing requirements.

addition, Amtrak alleged that the engineering was deficient, workmanship was poor, program management and quality control were inadequate, and the Consortium did not meet contract delivery schedules.

Amtrak and the Consortium reached a negotiated settlement in March 2004, ending their legal dispute surrounding the Acela trainsets.[13] As part of the settlement, Amtrak agreed to release a portion of the previously withheld funds to the Consortium and conditionally assume facility management and trainset maintenance responsibilities as soon as October 1, 2006, rather than in 2013, as originally planned. In general, under the settlement, the Consortium must complete modifications to the trainsets and locomotives; achieve established performance requirements for reliability, speed, and comfort; provide training to Amtrak staff; and provide and extend warranties (see fig. 2). The Consortium is also responsible for the transfer of technical information, rights to third-party contracts, parts information, permits, and licenses to Amtrak. In addition, the settlement requires that the Consortium provide technical services and information technology updates even after the transition date. Amtrak is required to create a transition plan, hire staff to manage the facilities and maintain the trainsets, and determine a parts procurement plan for the trainsets.

[13]For a more detailed information on the lawsuits and settlement, see GAO-05-152.

Figure 2: Settlement responsibilities

	Before October 1, 2006	After October 1, 2006
Amtrak		
	• Create transition plan • Hire staff to manage facilities and maintain trainsets • Decide how to procure trainset parts	• Manage maintenance facilities • Maintain trainsets
Consortium		
	• Complete trainset and locomotive modifications • Meet performance requirements for speed, reliability, and comfort • Train Amtrak staff • Transfer technical information • Renegotiate rights to third-party contracts • Provide parts information, permits, and licenses	• Provide technical services and information technology updates • Honor trainset warranties

Source: GAO analysis of Amtrak data.

Acela Program Still Faces Considerable Challenges

Independent of the Acela brake problem being discussed today, Amtrak faces other risks and challenges to sustain the trainset and keep it operating efficiently. Achieving a successful transition is critical to the financial well-being of Amtrak given that the Acela program is such a significant source of its revenue. A successful transition of maintenance and management responsibilities for the Acela trainsets depends on whether Amtrak and the Consortium can address the numerous challenges. Key challenges include:

- Achieving trainset modifications and performance requirements. The Consortium must complete an extensive list of modifications to the trainsets, some of which are complex, before Amtrak will assume

maintenance responsibilities. Although the Consortium has closed three-fourths of the items, they are behind schedule on completing the work on some remaining items. Amtrak has identified certain modifications that potentially may not be completed by October 1, 2006, and has concerns that other modifications may affect service reliability. The Consortium is also responsible for ensuring that the trainsets continue to meet reliability, speed, and comfort performance requirements. The trainsets have not yet met the minimum reliability performance requirement of traveling an average 17,500 miles between service failures.[14] According to Amtrak, the period of time when the trainsets are out of service to resolve the brake problems will not likely be included in the measurement of this standard.

- Obtaining technical expertise for maintenance and completing training. Amtrak must secure a workforce with the technical expertise needed to maintain the trainsets. To achieve this, Amtrak is developing a new High Speed Rail Division to assume management and maintenance responsibilities, and it plans to hire at least 50 percent of NecMSC's current staff to benefit from their knowledge and expertise. The Consortium and Amtrak must also develop and implement training programs needed to maintain the complex trainsets after the transition. The trainsets are technically complex and require considerable expertise to identify and make needed repairs and to troubleshoot difficult maintenance problems. According to Amtrak officials, ensuring that technicians are properly trained is one of the most critical points of the transition. As a result of the current brake problem, Amtrak is reevaluating its training materials. Based on the latest progress report (March 2005), troubleshooting training is slightly behind schedule, and Amtrak officials told us that management training has been temporarily delayed due to the brake problem. Under the transition plan, training is scheduled to be completed by October 1, 2005.

- Sufficiently funding maintenance and integrating responsibilities. Once the transition occurs, Amtrak will be responsible for maintenance costs to ensure continued trainset performance, including procuring parts and performing overhaul maintenance. Amtrak has experienced problems in the past with delays in completing the maintenance necessary to provide its conventional service; and if these problems continue, they could affect trainset performance and availability for revenue service. At the time of

[14]According to Amtrak, this measure is calculated as a 6-month rolling average. The settlement agreement requires the Consortium to meet this reliability standard before the transition will occur and Amtrak may draw down on letters of credit issued by the Consortium should it default and not meet the requirement.

our review, Amtrak had not determined the level of funding necessary to provide regular maintenance and overhauls to the trainsets. Amtrak officials stated that despite the uncertainty of maintenance costs once the transition occurs, they estimate that the costs of managing the maintenance in-house will be no greater than the costs of paying NecMSC to perform the work. We believe the uncertain amount of future maintenance costs and possible lack of adequate funds may have a greater impact than anticipated. Amtrak must also successfully integrate the new maintenance responsibilities into its current organization. Development of a new division requires strategic planning, communication, and performance management. This may prove difficult for Amtrak as our past and ongoing work has shown its shortcomings in managing large-scale projects.

- Preparing a comprehensive implementation plan. Creating a comprehensive implementation plan that provides a blueprint of important steps; milestones; contingency plans if milestones are not met; measures for achieving results; and funding strategies will be important for a successful transition. Amtrak has created a critical path schedule for monitoring the status and completion of open items related to the settlement and holds regular meetings, both internally and with the Consortium, to discuss progress and issues that arise. Although Amtrak has taken actions to address the key challenges related to the settlement, these actions did not represent a comprehensive implementation plan, and we recommended in our December 2004 report that Amtrak develop such a plan that encompasses all aspects of the transition in order to ensure a successful transition. We also said that such a plan should include contingency plans, if milestones are not met. In light of recent events, we believe a comprehensive plan that identifies contingency actions could provide the steps necessary to help prevent postponement of the transition. Amtrak officials do not believe the current brake problems will impact the October 2006 transition date, however.

  Although the settlement agreement ensures that Amtrak will be protected by the extended trainset warranties and Amtrak has several methods of financial recourse, if the Consortium does not honor warranties, loss of revenue resulting from removal of trainsets from revenue service is not directly recoverable. For example, the settlement agreement included the extension of "bumper to bumper" trainset warranties on all trainsets for the next 5 months, until October 1, 2005. In addition, modifications to the trainsets that are currently under way or planned will be under warranty for 2 years after they are completed to Amtrak's satisfaction. Amtrak also has several methods of financial recourse, if the Consortium does not honor warranties, including letters of credit that Amtrak may draw down.

However, the full extent of the legal liability associated with the April 2005 brake problem has yet to be addressed by the parties. Amtrak officials told us that their first priority is getting the trainsets back in service. Amtrak is considering a number of possible actions regarding the brake problem, including assessing liquidated damages.[15]

Challenges In Managing Other Large-Scale Projects

As we reported in February 2004, Amtrak did not effectively manage the entire NHRIP project, of which Acela was a part.[16] Among the problems we found were that (1) Amtrak's management of this project was not comprehensive but was focused on the short term; (2) project management focused on separate components of the project, such as electrification and acquisition of the high-speed trains, and not the project as a whole; and (3) did not sufficiently address major infrastructure improvements needed to attain project trip-time goals. We also found that Amtrak lacked a comprehensive financial plan for the project and that Amtrak did not fully integrate stakeholder interests (commuter rail authorities and state governments), even though work that involved stakeholders was critical to achieving project goals. The overall results of this poor management was that many critical elements of the project were not completed, project costs and schedules increased considerably, and the project goal (3-hour trip time from Boston to New York City) was not attained. While there have been many benefits from the NHRIP, including faster trip times between Boston and New York City, Amtrak's management of this project clearly demonstrates that Amtrak had difficulty keeping such a large-scale project focused, on-time, and on-budget.

We also have ongoing work for this committee on Amtrak'management and performance issues that we plan to report on later this year.

Mr. Chairman, that concludes my statement. I would be happy to answer any questions you or the Members of the Subcommittee might have.

[15]Amtrak officials said that, because the Acela trains have been removed from service, they are not currently paying NecMSC the fixed mileage rate for its services.

[16]See GAO-04-94.

Contacts and Acknowledgements

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Related GAO Products

Intercity Passenger Rail: Issues Associated with the Recent Settlement between Amtrak and the Consortium of Bombardier and Alstom, GAO-05-152 (Washington, D.C.: Dec. 1, 2004).

Intercity Passenger Rail: Amtrak's Management of Northeast Corridor Improvements Demonstrates Need for Applying Best Practices, GAO-04-94 (Washington, D.C.: Feb. 27, 2004).

Intercity Passenger Rail: Amtrak Needs to Improve Its Decisionmaking Process for Its Route and Service Proposals, GAO-02-398 (Washington, D.C.: Apr. 12, 2002)

Intercity Passenger Rail: Potential Financial Issues in the Event That Amtrak Undergoes Liquidation. GAO-02-871 (Washington, D.C.: Sept. 20, 2002).

Financial Management: Amtrak's Route Profitability Schedules Need Improvement, GAO-02-912R (Washington, D.C.: July 15, 2002).

Intercity Passenger Rail: Congress Faces Critical Decisions in Developing a National Policy, GAO-02-522T (Washington, D.C.: Apr. 11, 2002).

Intercity Passenger Rail: The Congress Faces Critical Decisions About the Role of and Funding for Intercity Passenger Rail Systems, GAO-01-820T (Washington, D.C.: July 25, 2001).

Intercity Passenger Rail: Amtrak Will Continue to Have Difficulty Controlling Its Costs and Meeting Capital Needs, GAO/RCED-00-138 (Washington, D.C.: May 31, 2000).

Intercity Passenger Rail: Issues Associated With a Possible Amtrak Liquidation, GAO/RCED-98-60 (Washington, D.C.: Mar. 2, 1998).

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