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CORPORATE GOVERNANCE:

Planned Changes Should Improve Amtrak's Capital Planning Process, and Further Adoption of Sound Business Practices Will Help Optimize the Use of Limited Capital Funds

Report No. OIG-E-2013-020 | September 27, 2013





REPORT HIGHLIGHTS

Why We Did This Review

To fund its capital investments, Amtrak generally relies on its annual federal capital grant, which averaged about \$685 million per year from fiscal year (FY) 2011 through FY 2013. Given that Amtrak's capital funding varies from year to year, and its needs have exceeded the level of funding that it received each year, it is particularly important to optimize the value of capital expenditures.

This report discusses the extent to which the capital planning process reflects sound business practices in (1) developing project proposals, (2) selecting capital projects to fund, and (3) evaluating project outcomes. We identified these sound practices through our own research and by benchmarking the practices of other organizations.

During our evaluation, we briefed Amtrak executives on the results of our benchmarking efforts. Management initiated changes to improve the capital planning process in order to allocate capital more strategically in FY 2014. According to officials from the Finance department, the company plans to make additional changes to incorporate sound practices in the future.

For further information, contact Calvin Evans, Assistant Inspector General for Inspections & Evaluations (202) 906-4507.

The full report is at www.amtrakoig.gov/reading-room

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What We Found

Amtrak's initial changes to the capital planning process are generally consistent with sound business practices used by other organizations, and those changes should improve its process. Our analysis shows that the process could be further improved if management fully adopts sound business practices in the following areas.

Developing business cases. We observed a correlation between how well Amtrak followed sound practices for developing business cases (also referred to as project proposals) and the outcomes of five capital projects that we reviewed. When Amtrak followed these practices more closely, we observed that projects generally met their intended outcomes—for example, the successful implementation of Wi-Fi service on Amtrak's trains. When these practices were not followed, we observed schedule delays and other problems that potentially cost Amtrak up to \$155 million in lost revenues and unrealized cost reductions.

Selecting projects for funding. Amtrak has not consistently used sound business practices to objectively review and rank proposed capital projects. Until the company consistently does this, it will have difficulty ensuring that it is selecting the projects that best support its strategic objectives. For example, over 90 percent of funds are still allocated to Engineering and Mechanical projects, rather than a more balanced mix that includes more projects designed to improve the company's financial performance in support of Amtrak's strategic priorities.

Evaluating project outcomes. Amtrak officials told us they have not evaluated the status of ongoing projects or the outcome of completed projects because the company lacks the resources necessary to do so. In one case, this enabled an official to commit the company to about \$50 million more than was approved by the Board of Directors on a project for installing Positive Train Control on the Northeast Corridor. Finance officials plan to start monitoring the status of projects in early FY 2014 and conducting reviews of completed projects later, but even with dedicated resources and additional effort, the lack of performance measures typically included in sound business cases could limit the company's ability to effectively implement these practices.


Recommendations

To assist management's ongoing efforts to improve the company's capital planning process, we recommend that Amtrak take a number of actions to build the capability to fully implement the sound business practices described in this report. In these recommendations, we have included steps to develop sound business cases, review and rank proposals according to sound practices, tighten controls over the contract approval process, and implement current policy to evaluate the outcome of capital projects. Amtrak's President and Chief Executive Officer concurred with our recommendations.



Memorandum

To: Joseph H. Boardman, President and Chief Executive Officer

From: Ted Alves, Inspector General 

Date: September 27, 2013

Subject: *Corporate Governance: Planned Changes Should Improve Amtrak's Capital Planning Process, and Further Adoption of Sound Business Practices Will Help Optimize the Use of Limited Capital Funds (Report No. OIG-E-2013-020)*

Capital investment is vital to maintaining and improving Amtrak's operations and improving its financial performance. To fund its capital investments, Amtrak generally relies on its annual federal capital grant, which averaged about \$685 million per year from fiscal year (FY) 2011 through FY 2013.¹ Given that Amtrak's capital funding varies from year to year and its needs have exceeded the level of funding that it received each year, it is particularly important to optimize the value of capital expenditures.

Amtrak's annual capital budgeting process is governed by its *Capital Programming* policy, issued in December 2009. The Finance department manages the planning process, which can be viewed as having three major phases:

- development of project proposals by Amtrak's departments
- selection of projects for funding by Amtrak's Executive Committee and approval by the Board of Directors (the Board)
- evaluation of the status of ongoing projects and the outcome of completed projects by the Finance department.

¹ To finance capital projects, Amtrak has also used other grants from the federal government, loans from the federal government, and funding from its state partners, but these funds are usually earmarked for specific purposes. Amtrak also uses a small portion of its revenue to fund capital projects.

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This report discusses the extent to which the capital planning process reflects sound business practices in (1) developing project proposals, (2) selecting capital projects to fund, and (3) evaluating project outcomes. We identified these sound practices through our own research and by benchmarking the practices of other organizations. For a detailed discussion of our methodology, see Appendix I.

Given the Board's emphasis on ensuring that the company's capital planning process results in sound, cost-effective investments that support the company's strategic objectives,² this report should assist management in addressing the Board's concerns.

During the course of our evaluation, we briefed Amtrak executives on the results of our benchmarking efforts to identify sound capital planning practices and provided detailed information and contact points to Amtrak management. Management initiated changes to improve the capital planning process in order to allocate capital more strategically in FY 2014. According to officials from the Finance department, the company plans to make additional changes to incorporate sound practices in the future.

SOUND PROPOSALS ARE THE FOUNDATION OF AN EFFECTIVE CAPITAL PLANNING PROCESS

Amtrak has not consistently used sound business practices in developing proposals for capital projects. Recommended practices for developing sound proposals are publicly available. However, Amtrak has not issued corporate-wide policy providing guidance on how to develop sound project proposals. Consequently, for the five projects we reviewed, the extent to which the proposals addressed sound practices varied widely. Furthermore, we observed a correlation between how well these practices were addressed and the outcome of the corresponding capital projects.

² In testimony to Congress on November 28, 2012, the Amtrak Inspector General noted that the Board of Directors plays a key role in ensuring that Amtrak accomplishes its goals. *Amtrak Improvement Initiatives: Sustained Attention and Effective Implementation Keys to Success* (OIG-T-2013-001, 11/28/2012).

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Sound Project Proposals Share Several Common Elements

Our research of best practices published by public- and private-sector organizations shows that they use similar practices to develop sound project proposals across both sectors. We synthesized these common practices into four elements:

- Identification of the need and/or business opportunity in the context of the organization's financial and non-financial goals.
- Development of high-quality cost, benefit, and schedule estimates for each of the alternatives identified to meet the need. These estimates should include all costs and benefits associated with the project and clearly explain how the costs and benefits were quantified for each alternative.
- Analysis of alternatives to increase the likelihood that the best and most cost-effective option is selected to address the business need. This should include a comparison of financial performance measures (such as return on investment) and non-financial measures quantifying improvements in such areas as customer service or safety.
- Analysis and mitigation of the risks associated with a chosen option to increase the likelihood that the assumptions used in selecting an alternative are reasonable.

To evaluate whether these practices could be applied at Amtrak, we also reviewed the practices of two leading freight railroads, two transit railroads, and a federal government corporation that, like Amtrak, provides a market-oriented public service. This corporation standardized a process for managing investments in capital projects that was reviewed and endorsed by the U.S. Government Accountability Office (GAO) in 2002.³ We concluded that the project proposals of this organization and at least two of the other organizations exhibited the recommended elements.

Most of these organizations also take a risk-based approach to developing proposals, putting more effort and analysis into complex or costly projects. For

³ An official from this corporation stated that the process had been further improved since the GAO review.

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example, at the government corporation, projects that cost more than \$1 million require significantly more detail than projects under \$1 million, such as a detailed analysis and discussion of risk, and a mitigation plan for potential risks. Additionally, the government corporation uses a single comprehensive document to capture how the elements are addressed; this document is the primary record of the project throughout the capital planning process and the project lifecycle.

Amtrak's Proposals Do Not Consistently Address Sound Practices

Amtrak's *Capital Programming* policy does not provide guidance on developing proposals in accordance with sound business practices. The policy requires corporate departments to summarize their proposed projects for the project selection process. These summaries could include some of the information needed to develop sound proposals—such as identifying the need and expected benefits of each project, if they were consistently developed—but would not address all of the elements we identified.⁴ According to senior officials, guidance on preparing project proposals in accordance with sound business practices will be developed in the future, but building the capability needed to develop sound proposals for capital projects could require a significant amount of training.

The policy also does not require departments to develop and maintain documentation to support the assumptions made in the project summary. In reviewing five major, multiyear capital projects that were ongoing in FY 2012, we found that Amtrak developed proposals in an inconsistent manner,⁵ with no comprehensive document discussing the elements needed for a sound project proposal. For the most part, to attempt to ascertain whether each element of a sound proposal had been addressed, we had to examine multiple documents—

⁴ The Federal Railroad Administration does not require Amtrak to calculate return on investment for capital projects included in the company's State of Good Repair Plan for the NEC Infrastructure and for regular equipment overhauls included in an approved fleet plan.

⁵ The Engineering department has a formal process for managing construction projects that includes some guidance on developing proposals; however, this guidance is not required to be followed for internally managed projects and was not used for the projects we reviewed.

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such as briefings, loan packages, project summaries, and information gathered from other sources.

Our analysis of the five sampled Amtrak projects suggests an apparent correlation between the use of sound business practices in developing the project proposal and the outcome of the project. We noted that when the proposals adequately addressed the elements of sound proposals, they tended to stay on track and achieve their intended benefits. When projects experienced delays and cost overruns, we could identify elements that were not adequately addressed.

Table 1 shows the extent to which the five projects we reviewed addressed each element of a sound proposal. Only one project adequately addressed each of the elements, and one project did not adequately address any of the elements.

Table 1. Extent to Which Elements Were Adequately Addressed in Amtrak's Project Proposals

Project	Identified Need or Opportunity	Developed Cost & Schedule Estimates for Alternatives	Analysis of Alternatives	Analyzed & Mitigated Risk
Wi-Fi Nationwide Expansion	Yes	Yes	Yes	Yes
Traffic Control Center Consolidation	Yes	Yes	Yes	No
eTicketing Implementation	Yes	No	Yes	No
Acela Capacity Expansion	Yes	No*	No	No
Electric Locomotive Procurement	No	No	No	No

* A cost and schedule estimate was developed for one option, but not for any other alternative.

Source: OIG analysis of project documentation as of 3/31/2013

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Identify need or opportunity. Officials from the government corporation we visited told us that the project proposal was one of the most important aspects of the entire capital planning process because it establishes how a project relates to the financial and non-financial goals of the organization. For example, when the Marketing department developed its proposal to expand Wi-Fi service on Amtrak trains, it clearly demonstrated the need for this service by conducting market research that showed that the lack of Wi-Fi made Amtrak vulnerable to losing customers to other modes of transportation that already offered this service.

On the other hand, we recently reviewed Amtrak's fleet planning process⁶ and evaluated the impact of omitting or inadequately addressing the need for the project on Amtrak's ability to ensure that it is using its funds effectively. For example, while the Mechanical department originally proposed a procurement of 20 new electric locomotives with 2 option orders for 20 additional units each to replace some of its existing locomotives, the project was eventually approved in the 2009 capital budget for 70 locomotives without adequately assessing, at the time, whether this many locomotives were needed. Without an adequate needs assessment, Amtrak did not have assurance that purchasing the additional locomotives was a better alternative to achieving its goals than using the funds for other capital investments.

Develop cost, benefit, and schedule estimates for alternatives. A high-quality business case includes an analysis of cost, benefit, and schedule estimates for each potential alternative and provides the basis on which decisions are made and project outcome is judged. GAO established best practices in estimating costs by researching public- and private-sector organizations and developed criteria defining a high-quality cost estimate.⁷ According to GAO, a high-quality estimate is comprehensive, well documented, accurate, and credible.

In its National Wi-Fi project, Amtrak substantially met GAO's criteria for a high-quality cost estimate. Its estimate was comprehensive because it appeared to

⁶ See *Asset Management: Integrating Sound Business Practices into its Fleet Planning Process Could Save Hundreds of Millions of Dollars on Equipment Procurements* (OIG-E-2013-014, 5/28/2013).

⁷ *Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Cost* (GAO-09-3SP, 3/2/2009).

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have included all costs associated with the project based on the alternatives that had been analyzed when Wi-Fi was installed on the Acela Express service. It also met GAO's criteria for accuracy because it accounted for inflation and reflected the costs considered most likely to occur based on prior installation of Wi-Fi on Acela. Although we found no evidence that the cost and schedule was cross-checked with an independent group, as recommended by GAO, we believe that the estimate was credible because Marketing relied on and incorporated the costs from the previous installation of Wi-Fi on Acela to estimate the cost of rolling out this service to other trains.

Amtrak did not develop high-quality cost estimates for some of the other projects we reviewed. For example, when it was approved in 2006, Amtrak's eTicketing project to modernize its reservation and ticketing system was projected to cost \$14.5 million through its estimated completion in 2008. We used GAO's criteria to evaluate the original cost estimate for the eTicketing project and concluded that the estimate partially met GAO's criteria for accuracy by including the costs most likely to occur over the three-year period and was adjusted for inflation. However, the estimate did not meet GAO's other criteria:

- The estimate was not sufficiently documented until April 2008—about two years after the project was approved—when a contractor was brought in to help implement the project, according to Marketing officials. However, if the cost estimate had been adequately documented when the project was proposed, it could have potentially shown that the initial \$14.5 million estimate was not sufficient—especially with regard to the cost and time required for developing the technology necessary to implement the project.
- The estimate was not comprehensive or credible because it did not include all of the costs for planning and developing the project, and it was not cross-checked by an independent group. According to GAO, independent cost estimates tend to be higher, but more reasonable, because they are more objective than those developed by the group sponsoring the project. Therefore, if an independent group had checked the cost estimate, the potential limits of the projected cost savings resulting from eliminating the legacy ticket scanning process could have been identified earlier.

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On the other hand, the project is now complete and considered a success by Amtrak. Marketing officials provided information showing that the project generated about \$55 million in revenue and cost savings from FY 2009 through 2012,⁸ along with other benefits such as improved processing of tickets, increased customer satisfaction, and more accurate counts of total riders. In addition, according to Marketing officials, some of the largest technology companies in the world are showcasing the eTicketing project, and a market research firm is studying it as a model project. Nonetheless, the project cost about \$50 million—about \$35 million more than originally planned—and was completed 3.5 years late, in July 2012.

Analyze alternatives. Analyzing alternatives to meet a business need or opportunity increases the likelihood that the best and most cost-effective alternative is selected based on quantitative and qualitative performance measures. For example, one of the projects we reviewed was designed to upgrade and consolidate Amtrak's three traffic control centers on the Northeast Corridor. Engineering department officials analyzed several options, including consolidating its operations at one of its three existing locations and an option of building a new center and keeping the remaining centers open to build redundancy in the system. Although building the new center and keeping the existing centers open was one of the more expensive options, it provided the greatest security benefits and was selected as the preferred alternative because it best satisfied the most important performance measure for this project, according to Amtrak officials.

In contrast, when deciding whether to buy 40 additional passenger cars, Amtrak did not adequately analyze all of the alternatives to address growing demand for its Acela Express service. Although Amtrak listed several alternatives to address this need in its FY 2011 Fleet Strategy, the only alternative analyzed and presented to the Executive Committee was to forego purchasing the additional passenger cars and miss out on the opportunity to capture more revenue.

⁸ Marketing estimates that the project will generate approximately \$35 million in additional cost savings and revenue in 2013.

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As a result, Amtrak did not have a fully analyzed option to fall back on when negotiations with the potential vendor broke down over the unit price of each car, which was greater than estimated. Amtrak eventually decided to cancel the project in October 2012—after spending approximately \$5 million pursuing the procurement of the additional 40 cars—and had to restart the planning process to expand the capacity of its high-speed rail service. It ultimately chose an option that may better address its long-term needs, but expansion will be delayed at least three years. Amtrak estimates that this delay will cause the corporation to miss out on a return of about \$76 million in additional revenue from FY 2015 through FY 2017.

Analyze and mitigate risk. Once an alternative to meet a business need is selected, the potential risks of pursuing the option need to be analyzed, and plans for mitigating these risks need to be developed to help ensure that the goals of the organization are realized.⁹ Sound project proposals identify and discuss, as appropriate, techniques for mitigating risks caused by potential changes in the assumptions that could modify the potential benefits of the project.

Again, Amtrak adequately addressed risk in its proposal for the National Wi-Fi project. Capitalizing on lessons learned from the previous Acela Wi-Fi installation, Amtrak identified the potential risks of using cellular-based technology to bring Wi-Fi service to its other trains. Amtrak's proposal described the steps it would take to mitigate the risks presented by this technology, such as spending three months prototyping how the service could operate and then approximately four months of installation and testing before rolling out Wi-Fi across its system.

The other four proposals we reviewed either did not discuss or inadequately addressed risk. For example, when the eTicketing project was proposed, Amtrak did not address the risk associated with developing the technology needed to automate its onboard process used by conductors to collect tickets because it did not sufficiently understand the technology needed to automate this process

⁹ An analysis of risk could also be performed during the previous step, but must at least be accomplished after the alternative is selected so that mitigation strategies can be developed.

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when the project was initially proposed. These risks were not addressed until 2008, but the project had already suffered significant delays because the company moved ahead with the project without addressing all of the potential technological risks. These delays caused Amtrak to miss out on approximately \$44 million in additional revenues and cost savings, according to Amtrak estimates.

Similarly, Amtrak did not address how it would mitigate risks to its assumptions for estimating the costs of procuring 40 passenger cars for Acela. For example, although Amtrak had its estimate independently verified, it did not conduct a sensitivity analysis to identify and anticipate how its return on investment might change if the price of the cars, or any other component of the project, differed from its estimate. If Amtrak had conducted this analysis, it may have realized the need to develop other options to hedge against its assumptions about the cost of the cars. This could have prevented the need to start over when the price for the cars proved to be significantly higher than expected.

MORE OBJECTIVITY IS NEEDED IN THE SELECTION PROCESS TO ENSURE EFFECTIVE USE OF CAPITAL FUNDS

Amtrak has not consistently used sound business practices to objectively select projects for its capital budget. Most of the organizations we reviewed shared several common practices for reviewing, ranking, and approving projects for their capital budget. Amtrak's *Capital Programming* policy includes some of these practices, and it is revising its practices to select projects more objectively and reduce its overall number of capital projects. Nevertheless, more change is needed to fully adopt sound practices. Until the company consistently uses sound business practices to objectively select projects for capital funding, Amtrak will have difficulty ensuring that it is selecting the projects that best support its strategic objectives.

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Sound Selection Practices Include Several Common Elements

As with project proposals, most of the organizations we reviewed shared common steps in their selection processes:

- Conduct rigorous independent review and validation of proposals to verify the content of each proposal and ensure that the proposal supports the organization's business strategy.
- Use an objective ranking of all proposals based on strategic priorities and performance measures to make trade-offs among projects to best support the organization's strategic goals.
- Use a risk-based approach for approving the capital budget that enables project owners, reviewers, and senior leadership to focus on the projects that are most important to the organization.

More Rigorous Review Should Improve Amtrak's Ability to Select Projects that Best Support its Strategic Objectives

Officials from most of the organizations we reviewed stressed the need for a rigorous, independent review and validation of proposals to verify the accuracy and adequacy of the information in the proposals, and to ensure that the level of review is commensurate with the risk and importance of the project. For example, one of the leading freight railroads places so much value on project proposals that before important projects are submitted for ranking, it evaluates the degree to which the proposals address the elements we discussed in the previous section. Officials from this railroad said these reviews are critical to providing senior officials a reasonable assurance that the proposals provide a sound basis for investment decisions.

Similarly, officials from most of these organizations told us that this degree of scrutiny also enabled them to ensure that proposed projects supported the organization's strategic priorities in the most effective and efficient manner. For example, an independent group that reviews proposals at one of the freight railroads questioned whether a proposal by the railroad's engineering department for track repairs to a specific branch line was the most efficient use of

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available resources. Although the project would have brought the line to a state of good repair, officials from the independent group questioned whether the proposed reduction in the number of track defects per mile was necessary and whether a lower-cost option with a greater number of defects per mile was acceptable given the operating needs of the railroad. The engineering department agreed that the lower-cost option was acceptable, and choosing this option saved funds that could be used for other capital projects.

Amtrak's Finance department does not independently review and validate proposals in a similar manner although a detailed review is required by policy.¹⁰ Specifically, Finance is required to review the project summaries submitted by the operational departments to ensure that proposals:

- have an adequate and clear scope that addresses Amtrak's strategy
- are justified with appropriate performance measures and intended benefits
- include multiyear funding requirements if the proposal is for a multiyear project

Finance officials told us that these reviews were not being conducted because Finance did not have enough dedicated staff to conduct the reviews.

From FY 2011 through FY 2013, Amtrak's departments submitted, on average, about 700 capital project proposals to Finance each year, but according to Finance officials they have three people available to review them. Amtrak's ratio of more than 200 project proposals per reviewer is much greater than the ratio of the organizations we reviewed, which ranged from 2 to 50 proposals per reviewer. Nonetheless, even if Amtrak had enough staff to perform the reviews required by policy, the amount of detail included in the project summaries would not enable Finance to complete these reviews in a manner consistent with the organizations we benchmarked.

This lack of rigor in reviewing projects could limit Amtrak's ability to build an effective capital budget. Since FY 2012, Amtrak strategy has been to improve its

¹⁰ We discussed this specific issue with Amtrak executives during our evaluation.

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financial performance by increasing revenue and minimizing costs, but the capital projects submitted in FY 2012 and FY 2013 did not appear to clearly support this goal. To illustrate, we identified only five capital projects in FY 2012 (about 5 percent of total capital funding¹¹) and seven projects in FY 2013 (about 4.2 percent of total capital funding) that appeared to be designed to improve financial performance—as evidenced by the inclusion of quantitative performance measures in their project summaries, such as return on investment.

The limited amount of capital funds allocated to projects clearly designed to improve the company's financial performance seems inconsistent with its emphasis on improving the company's bottom line during these two fiscal years. A closer review of project proposals could have identified this inconsistency sooner and alerted senior management. This could have led to a call for more financial improvement projects or a more sophisticated analysis of the intended benefits of its proposed projects. For example, even though projects may be aimed at addressing mandatory regulatory and/or maintenance requirements, these projects may have benefits that could be expressed in financial terms or quantified in other ways. To illustrate, table 2 compares the justification for an Amtrak project to replace an air-conditioning system with a similar project by a freight railroad. The freight railroad quantified the cost savings that could be generated by more efficient air-conditioning units, illustrating that this analysis can be done.

¹¹ The Acela Expansion project is not included in the count because the project summary did not include any quantitative performance measures. Return on investment measures were later developed separately from the project summary.

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Table 2. Comparison of Justification for Air-Conditioning Replacement Projects

Organization	Amtrak	Freight Railroad
Description	Replace the system in the Contact Center, which has reached the end of its life.	Replace 40 units at various locations.
Estimated Cost	\$1.2 million	\$2.4 million
Justification	The system needs to be replaced because it is 13 years old and no longer can be kept in a state of good repair.	This project offers a return on investment with an internal rate of return of 49% and a net present value of \$1.3 million.*

* The *internal rate of return* is the amount of benefits that the project is expected to generate for every dollar spent; the *net present value* is the value of a dollar today to that same dollar in the future, discounted by the inflation rate.

Source: OIG analysis of project documentation as of 04/30/2013

For the FY 2014 budget, Finance worked with the departments to review some of their proposed projects and to revise and refine some quantitative and qualitative performance measures that they are now using to complete project summaries. This effort focused on projects designed to support new strategic initiatives or to increase performance (102 proposals projected to cost about \$690 million). This was a commendable effort and a good first step, but these summaries do not address all of the elements of sound business proposals we discussed above. In addition, performance measures were not developed for the rest of the proposed projects, which were projected to cost about \$1.2 billion.

A closer review of projects could also identify other inconsistencies before projects are selected by senior executives and approved by the Board of Directors. In an April 2013 request to the Board, Amtrak management proposed \$31 million for the advance purchases of parts for locomotive overhauls scheduled for 2014. Although most of the parts requested appear necessary—and need to be ordered in advance to avoid repair delays next year—about \$3.6 million was included in the proposal for parts to overhaul 11 electric locomotives. However, Amtrak is planning to retire these locomotives sometime between FY 2015 and FY 2016, potentially making the overhauls unnecessary. Mechanical officials said they did not have a schedule for which locomotives may be replaced first. Therefore, it is possible that some of the locomotives

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scheduled for overhaul could be replaced shortly after their overhauls are completed.

Strategically Focused Project Ranking Should Improve Amtrak's Ability to Select Projects More Objectively

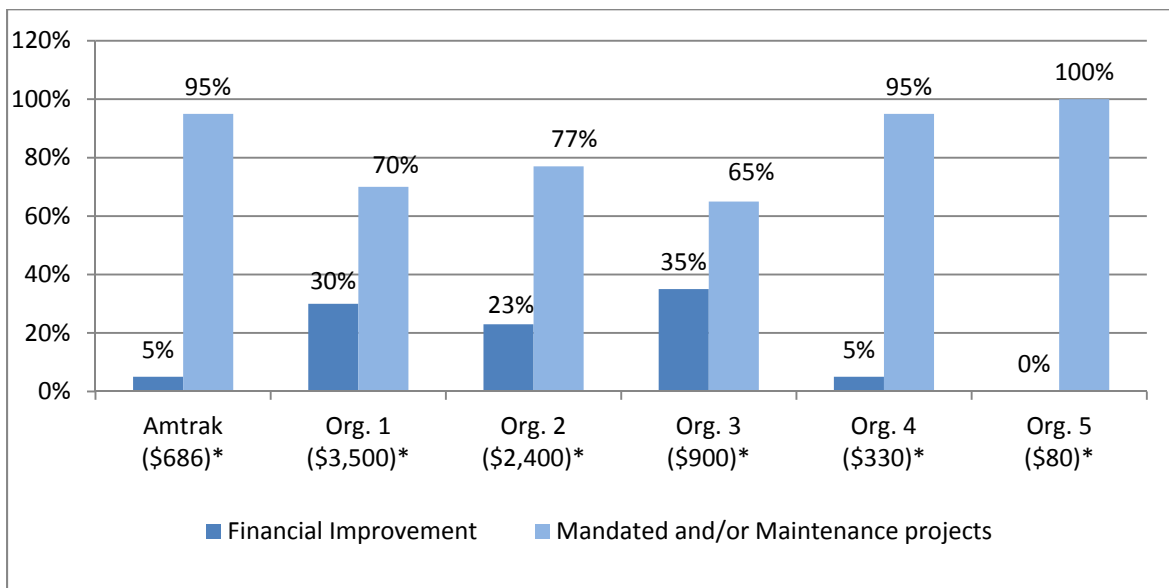
The majority of the organizations we reviewed consistently ranked proposals based on how well the project would support the organization's strategic priorities. The leadership of these organizations established strategic priorities and allocated the overall level of capital funding in any given year to address the priorities and build its capital budget. For example, in one year, one of the freight railroads significantly emphasized projects designed to increase its revenue over other projects. This resulted in it reducing its funding for typical maintenance projects to free up funds to execute projects designed to improve its financial position.

To rank the projects within the parameters of the organization's priorities, most of these organizations rely on the quantitative and qualitative performance measures identified in the project proposals and apply criteria for scoring projects based on strategic priorities. In addition, because they could assess the performance measures for almost all proposed projects, the ranking procedure enabled these organizations to make trade-offs among the different types of projects and expected financial gains generated by them in order to implement their business strategy.

As shown in Figure 1, these organizations selected projects designed to support their business strategies. Financial performance was one of the major focus areas for three of the organizations; and as such, they allocated a significant amount of funds in their capital budgets to projects designed to improve their financial position. On the other hand, the strategic objectives of the other two organizations focused more on meeting regulatory requirements and providing a reliable service, not specifically to improve their financial performance. Although Amtrak's goal was to focus on improving its financial performance, the funding allocations in its FY 2012 capital budget did not clearly reflect this focus.

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Figure 1. Types of Capital Projects Selected for Funding by Organization for FY 2012



* Dollar figure represents the approximate size of the organization's FY 2012 capital budget in millions. Amtrak's figure represents only its general capital grant for FY 2012.

Source: OIG analysis of FY 2012 capital budgets

Amtrak policy requires Finance to create a scoring methodology intended to support Amtrak's strategic goals so executives can rank proposed projects accordingly. To rank projects, Amtrak uses a commercially available tool, Decision Lens, which was cited by the Office of Inspector General (OIG) of the U.S. Department of Transportation as bringing transparency to Amtrak's ranking process and facilitating collaboration between executives and subject matter experts with different prioritization needs.¹² However, Amtrak has not fully used the capability of the software to-date and faced challenges in the past uploading its numerous capital projects without crashing the system.

The tool also could not overcome the manner in which Amtrak has structured its ranking process over the last three years where the Engineering and Mechanical

¹² Department Of Transportation Office of Inspector General Report: Amtrak Made Significant Improvements in its Long-Term Capital Planning Process (CR-2011-036, 1/27/2011).

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departments received about 90 percent of the total general capital budget in each year. For example:

- In FY 2011, projects proposed by the Engineering and Mechanical departments were not included in the ranking process and were funded separately.
- In FY 2012, Engineering and Mechanical projects were included in the ranking process, and many of these projects ended up with the highest scores because of the safety and maintenance focus of the ranking criteria.
- In FY 2013, Engineering and Mechanical projects were again included in the ranking process. Because the scoring criteria again focused primarily on safety and maintenance, many of these projects again ended up with the highest scores.

Amtrak officials said they are moving in a new direction for FY 2014, making two major changes in the ranking process. First, the company decided to group potential capital projects into four categories: (1) projects that are deemed mandatory either by law, regulation, or direction from Amtrak's leadership; (2) projects intended to maintain Amtrak's current level of service; (3) projects intended to increase Amtrak's level of service while maximizing revenue and minimizing cost; and (4) projects that support new strategic initiatives that add "internal or external value" to the company.

The order of prioritization for funding these projects is category 1, then categories 3 and 4 together, and then category 2, based on Amtrak's strategic objectives. Prior to senior executives ranking these projects for the FY 2014 capital budget, Amtrak officials told us that this prioritization should place less emphasis on projects designed to address maintenance issues and increase emphasis on projects designed to improve its financial performance in support of its current strategic priorities.

Basing a ranking system on strategic priorities is consistent with the practices of the other organizations we reviewed. However, the majority of these organizations rank projects against each other, rather than ranking them within categories, which officials said improves their ability to make strategic trade-offs

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between different types of projects based on their priorities. Therefore, Amtrak's decision to group projects into specific categories and then prioritize funding by category was inconsistent with the sound practices we observed at other organizations.

The other major change to the process was Amtrak's new method of scoring projects, which attempts to minimize the subjectivity of the rankings. The scoring methodology uses four factors:

- the extent to which each project supports Amtrak's strategic objectives
- the project's potential impact on the company's operational performance
- the project's financial benefits
- the risk inherent in the project in terms of its probability of success

Each factor is weighted based on input from Amtrak's senior executives. Amtrak used Decision Lens to compile the rankings from different executives and provide an overall score for each ranked project.

This change is a step in the right direction for analyzing projects in categories 3 and 4, but Amtrak does not yet have the data to make objective decisions because the performance measures that are typically developed in sound project proposals are not available for most projects. For example, two key components of the proposed scoring methodology—financial benefit and program risk—cannot be scored in a manner similar to the organizations we reviewed because these elements were either not present or were not consistently included in the project proposals. Officials from the Finance department told us that they intend to eventually develop proposals that will include performance measures for all projects, and they agree that developing the capability to do this may require a significant investment in time and effort.

However, the ranking process for FY 2014 resulted in roughly the same types of projects being selected as in prior years. Across all four categories, Engineering and Mechanical once again received most of the funding with \$700 million being allocated to their projects—about 95 percent of the total general capital funds for the proposed budget. Only 3 of the 102 projects submitted to improve Amtrak's service or support new strategic initiatives were selected, estimated to cost about

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\$9 million (1.2 percent of the proposed capital budget). Amtrak has spent or plans to spend a total of about \$55 million on these three projects, which are expected to generate \$157 million in financial benefits over the next six fiscal years.

We were informed that the executives selected only three of these types of projects because Amtrak expects that its capital funding grant for FY 2014 will be lower than in recent years. Therefore they decided to allocate almost all of the funds for mandatory and other projects designed to maintain current levels of service rather than ranking all projects against each other and potentially selecting more projects to improve performance.

According to a senior official, designating a greater portion of overall capital funds towards improving service or supporting new strategic initiatives is where the company should be, which would provide a more balanced approach to capital investments. When the company accomplishes this, Amtrak will be more clearly in line with efforts to advance its strategic objectives, but further changes will be needed to do so.

Planned Changes to the Budget Approval Process Are Consistent with Sound Practices

Using a risk-based approach to approving a capital budget enabled the benchmarked organizations to focus their oversight of the selection process on projects with the highest-dollar value and other key projects that are most important to the success of the organization. These organizations principally used two methods for doing this:

- They set a minimum threshold for projects or programs included in these organization's capital budgets, ranging from \$200,000 to \$25,000,000, relative to the size of the organization's capital budget as established by the organization's leadership. For example, one of the freight railroads had about a \$2 billion capital budget in FY 2012 and a \$10 million project threshold, which resulted in about 200 line items in its capital budget.

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- They grouped similar projects together as one line item in the budget (such as track maintenance) and allowed individual departments to manage these groups of projects as a program.¹³ Officials from one of these organizations stressed that the capability to develop good cost and schedule estimates, as well as good programmatic and project management skills, were prerequisites to managing the capital budget in this way and having confidence that projects and programs would stay on track.

Officials at three of these organizations said that employing these practices also helped to limit the amount of annual capital budget reprogramming actions. On average, these organizations reprogrammed about 3 percent of their capital funds. Officials at the majority of the benchmark organizations also said that they fully fund most projects in the year they are approved. Therefore, this would reduce the need to reprogram funds except in special circumstances, and reduce the amount of time spent by staff and senior leadership on preparing and reviewing reprogramming actions.

In accordance with Amtrak's *Capital Programming* policy, after the proposed capital projects are ranked and Amtrak's executives agree on the list of projects to fund, Finance prepares the list of selected projects as the proposed capital budget for the upcoming fiscal year. In FY 2012 and FY 2013, Amtrak's capital budget included about 600 projects, ranging in value from about \$17,000 to about \$160 million. Finance then presents the proposed list of capital projects selected by the company's executives to Amtrak's Board of Directors for review and approval. In the past, the Board typically had only a few days to review the budget; however, it plans to take significantly more time to review the FY 2014 budget.

Beginning in FY 2014, Amtrak is proposing to manage much of its maintenance efforts as collective programs rather than individual projects, such as track maintenance or locomotive overhauls. These programs would be included as line items in the capital budget instead of the many individual projects they

¹³ One of the organizations also set aside a small amount of its capital budget for smaller projects (about 1-3 percent) and delegated authority to its operational departments to approve and manage these smaller projects.

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represent, which should reduce the number of overall line items in Amtrak's capital budget from about 600 to 100. This practice would be consistent with the other organizations we reviewed. Accordingly, this should offer two potential benefits:

- improving Amtrak's ability to review and assess proposed projects and programs
- reducing the amount of funds that Amtrak reprograms every year—about 15 percent of its capital budget in FY 2012—because managers will have the flexibility to redistribute funds between projects in their programs¹⁴

EVALUATING PROJECT OUTCOMES IS AN IMPORTANT TOOL IN IMPROVING CAPITAL PLANNING

Amtrak is not exercising sound business practices for evaluating project outcomes. Sound practices call for independently monitoring the status of ongoing projects and reviewing the outcome of completed projects. Although Amtrak's *Capital Programming* policy requires Finance to follow these practices, the department has not conducted this oversight yet because of a lack of resources, according to senior officials. Without implementing these practices, it will be difficult for Amtrak to verify that it is using its capital funds effectively.

Sound Practices Include Monitoring the Progress of Projects

Independent monitoring of the status of multiyear projects is a practice employed by most of the organizations we reviewed as a way of ensuring that projects stay on track and that capital funds are not wasted. These organizations monitor the progress of these projects on a periodic basis. In one organization, individual projects with cost overruns greater than 10 percent must be documented and explained to senior management. In this way, project managers are held accountable for adhering to their estimates.

¹⁴ This shifts the risk of managing these programs to the departments, which will require a disciplined process and set of management skills at the department level and below that the company has not yet consistently demonstrated. Later this year, we will report on Amtrak's capabilities to manage projects and programs.

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Amtrak policy requires Finance to monitor the progress of ongoing projects, but does not prescribe the actions Finance can or should take when a project experiences delays and cost overruns. Operational departments are required to submit monthly Project Status Reports to Finance discussing the status of their projects, whether they are on budget, and other issues. Finance uses these reports to project cash flow and provide project status updates to the Federal Railroad Administration, but it is not reviewing these reports to evaluate progress and hold project managers accountable for the outcome of their projects. Finance officials said that they do not exercise oversight because they have not had the staff needed to oversee the number of projects that Amtrak has ongoing at any time.¹⁵

Finance officials stated that in early 2014 they will start increasing the department's oversight of ongoing projects in a manner similar to the other organizations despite not having additional resources. This is encouraging, but monitoring ongoing project status could remain difficult because the project proposals lack the performance measures needed to evaluate progress.

Increasing the oversight of ongoing projects could also help prevent project managers from incurring expenses for projects beyond the amounts approved by Amtrak's Board of Directors. The majority of the organizations we benchmarked prohibit or restrict departments and project managers from committing their organizations to contracts that exceed approved amounts. At Amtrak, we recently observed an instance where a contract for Positive Train Control was signed committing the company to spend more money than was approved in the FY 2013 capital budget or in the company's five-year financial plan.

Specifically, during our recent review of the company's implementation of Positive Train Control,¹⁶ company officials told us of Amtrak's plans to award a contract for the installation of a positive train control system called the Interoperable-Electronic Train Management System (I-ETMS) on the Northeast

¹⁵ An official from the Finance department stated that project managers are available to Finance and the Federal Railroad Administration to answer any questions and elaborate on information provided in their monthly reports.

¹⁶ *Railroad Safety: Amtrak Has Made Progress in Implementing Positive Train Control, but Significant Challenges Remain* (OIG-E-2013-003, 12/20/2012).

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Corridor. Amtrak's Engineering department had planned to spend \$15 million from FY 2013 through FY 2015 to develop and install I-ETMS. Amtrak's Board approved spending about \$9.6 million for this project in FY 2013.¹⁷

On December 20, 2012, Amtrak awarded the I-ETMS contract for about \$59 million. This action highlights a weakness in Amtrak's controls over ongoing projects. Specifically, the documents submitted to senior leadership for review and approval do not include the amount originally approved for funding, which makes it difficult for senior officials to ensure that funding has been properly budgeted before approving the contract. In this case the contract was awarded for about \$50 million more than the amount approved by the Board for the project.

Sound Practices Include Conducting Post-Completion Reviews

Conducting reviews of completed projects is a sound practice for determining whether projects achieved their intended outcomes. Three of the organizations we reviewed have groups that are independent of the project office that conduct reviews of completed capital projects, rather than project managers. One organization, which conducts approximately 500 capital projects a year, reviews all projects when completed or terminated. The other two organizations annually review about 10 percent of their completed projects, including a cross-section of all types of projects—not just those intended to improve financial performance. These independent groups use the results of these reviews to ensure that the projected benefits were realized and to capture lessons learned to improve the planning and selection of future projects.

¹⁷ We had recommended in our report that the program manager ensure that Amtrak reconsiders the risks associated with the plan to award a fixed-price contract to install I-ETMS because the potential contractor has no basis on which to develop a fair and reasonable fixed-price proposal due to the lack of information about the system. In its response to the report (12/12/2012), Amtrak stated that "the I-ETMS contract will be scaled back to an I-ETMS test bed to be installed in Maryland on the NEC. Amtrak will not proceed with a contract to install I-ETMS on the remaining portions of the NEC until the system has been more fully developed." However, the contract was not scaled back in accordance with the response to our report and was awarded a week later.

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Amtrak policy requires post-completion reviews of completed projects, but it does so in a manner inconsistent with the practices of most of the organizations we benchmarked. Instead of Finance conducting the review, the policy states that operational departments should conduct the reviews and that Finance should audit only a sample of these reviews to verify that they were completed.

Since at least 2001, Amtrak has not completed any of these reviews, even though Amtrak OIG and another oversight organization have identified the requirement several times. According to Amtrak officials, part of the reason for this is that most project proposals do not include enough information on expected benefits and performance measures for an independent review group to perform a thorough evaluation. Also, officials told us that the Finance department does not yet have the resources or expertise to conduct these reviews.¹⁸

Nonetheless, Finance officials plan to conduct these reviews in the future. As with monitoring the status of ongoing projects, Finance could find it challenging to fully assess the effectiveness of its capital projects without sound proposals for all projects that include performance measures, not just those projects intended to improve performance and address new initiatives.

CONCLUSION

Amtrak is making changes to its capital planning process that are consistent with sound business practices used by other organizations and should generally improve its practices for selecting projects for funding. Our analysis shows that the process could be further improved if management fully adopts sound business practices across each phase of its capital planning process. This includes developing sound project proposals with performance measures for all projects that are independently reviewed, and improving its ability to learn from the execution and outcome of all of its capital projects while controlling unauthorized project expenditures. Implementing these improvements will help

¹⁸ Finance officials also told us that Amtrak's new enterprise resource management system, implemented in FY 2011, prevented any projects from being closed and available for review.

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ensure that Amtrak is using its limited capital funds to best support its strategic objectives.

RECOMMENDATIONS

To assist management's ongoing efforts to improve the company's capital planning process, we recommend that Amtrak take the following actions:

1. Establish corporate-wide guidance for developing project proposals based on sound business practices discussed in this report, and develop and implement a plan to train staff to develop these proposals.
2. Develop and implement a plan to fully adopt sound business practices to review and rank projects, including establishing the capability to independently review and validate proposals.
3. Tighten controls over the contract approval process to eliminate unauthorized expenditures of funds.
4. Develop and implement a plan to build the capability of the Finance department to monitor ongoing projects in accordance with sound practices and conduct post-completion reviews of projects as required by current Amtrak policy.

MANAGEMENT COMMENTS AND OIG ANALYSIS

Amtrak's President and Chief Executive Officer provided us with comments on a draft of this report on September 13, 2012, in which he concurred with our recommendations and established a time frame in which Amtrak will implement them (see Appendix II). We consider his comments responsive to our recommendation.

We appreciate the courtesies and cooperation that Amtrak representatives extended to us during this review. If you have any questions, please contact me (Ted.Alves@amtrakoig.com, 202-906-4600) or Cal Evans, Assistant Inspector

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General for Inspections and Evaluations (Calvin.Evans@amtrakoig.gov, 202-906-4507).

cc: Eleanor D. Acheson, Vice President, General Counsel & Corporate Secretary
Dan M. Black, Acting Chief Financial Officer
Stephen J. Gardner, Vice President, NEC Infrastructure and Investment Development
Polly Hanson, Chief of Police
Matthew F. Hardison, Chief Marketing and Sales
Joseph H. McHugh, Vice President, Government Affairs and Corporate Communications
Barry Melnkovic, Chief Human Capital Officer
Jason Molfetas, Chief Information Officer
Donald J. Stadler, Jr., Vice President, Operations
Susan Reinertson, Chief, Emergency Management and Corporate Security
Mark Yachmetz, Chief, Corporate Research & Strategy
Charles S. Farmer III, Assistant Vice President, Financial Planning
Matthew Gagnon, Senior Director, Business Processes and Management Controls
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Appendix I

SCOPE AND METHODOLOGY

This report provides the results of our evaluation of Amtrak's capital planning process. We originally initiated this evaluation to determine whether Amtrak used best practices in developing proposals for capital projects. Later, we expanded the scope to include an evaluation of Amtrak's process for selecting, ranking, approving, and funding capital projects and key investments, and we notified Amtrak of this on November 2, 2012. After this, Amtrak made changes to its capital planning process, and we took these into account in our evaluation. Therefore, the objectives of this report are to discuss the extent to which Amtrak's capital planning process reflects sound business practices in (1) developing project proposals, (2) selecting which capital projects to fund, and (3) evaluating project outcomes. We performed our work from May 2012 to July 2013 in Washington D.C. and at the headquarters of the organizations we benchmarked.

To identify sound business practices for developing project proposals, we reviewed publicly available documents and reference guides, including documents published by the Harvard Business School Press, American Productivity and Quality Control Center, U.S. Office of Management and Budget, GAO, and others. We also benchmarked the practices of two leading freight railroads, two transit railroads, and a government corporation similar to Amtrak. We selected these organizations based on their relative similarity in operations to Amtrak, the method by which they received funding, and the size of their capital budgets.

We then synthesized the practices into four elements and compared them to Amtrak's *Capital Programming* policy¹⁹ and practices for developing proposals for capital projects. To illustrate this comparison, we selected the five capital projects discussed in the first section of the report and discussed these projects with Amtrak officials from the departments that developed these projects. We chose five projects from the FY 2012 capital budget based on the purpose, cost, and type of project; projected revenue; status; and perceived importance of the

¹⁹ Capital Programming, P/I 8.37.0, 12/4/2009

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project to Amtrak operations. We used the term “adequate” or “adequately” to describe the extent to which Amtrak satisfactorily or sufficiently addressed each element of a sound project proposal.

To identify sound business practices for selecting projects for funding, we benchmarked the practices of the organizations we reviewed by discussing the organization's policies and selection process procedures with officials from these organizations. We then synthesized these practices into three major areas (as described in the section of the report discussing Amtrak's project selection process). To better understand Amtrak's practices, we discussed current practices and proposed changes to its capital planning process with senior officials and those charged with implementing the selection process. We then compared Amtrak's policies and procedures with those of the organizations we reviewed.

To identify sound practices for evaluating capital projects, we continued this approach. We recognized that Amtrak policy included the same practices used by the organizations we reviewed, but Amtrak was not exercising these practices. We focused on the effect of not following these practices. In particular, we reviewed the Finance department's use of project status reports and efforts to conduct post-completion reviews, and we interviewed Amtrak officials who have been responsible for these activities over the last three years. We also reviewed OIG reports from Amtrak and the Department of Transportation over the last 10 years to identify whether Amtrak has conducted post-completion reviews to measure the success of capital projects.

We performed this evaluation in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the evaluation to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our objectives.

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Internal Controls

In conducting the evaluation, we reviewed Amtrak's controls for capital planning in the context of our objectives, including a review of controls associated with preparing project proposals for the capital budget, controls associated with selecting projects, and controls associated with oversight of ongoing and completed projects. We presented the results of our review in the body of this report.

Use of Computer-Processed Data

To support our findings and conclusions, we used computer-processed data from Amtrak's Enterprise Resource Management System and the Project Budget Formulation System. We specifically examined the list of projects approved for the FY 2012 and FY 2013 capital budget and Amtrak's cost estimates for projects included in our evaluation. We did not review the overall reliability of these systems, but we did interview Amtrak officials to obtain a general understanding on how the data were collected and the extent to which Amtrak incorporated the data into its capital planning process. We determined that the data were sufficiently reliable for the purposes of our objectives.

Prior Reports

In conducting our evaluation, we reviewed the following reports from Amtrak OIG:

- *Asset Management: Integrating Sound Business Practices into its Fleet Planning Process Could Save Amtrak Hundreds of Millions on Equipment Procurements* (OIG-E-2013-014, 5/28/2013)
- *Railroad Safety: Amtrak Has Made Progress in Implementing Positive Train Control, but Significant Challenges Remain* (OIG-2013-003, 12/20/2012)
- *Amtrak Improvement Initiatives: Sustained Attention and Effective Implementation Keys to Success* (OIG-T-2013-001, 11/28/2012).

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- *Corporate Governance: Implementing a Risk Management Framework is Essential to Achieving Amtrak's Strategic Goals* (OIG-A-2012-007, 3/30/2012)
- *Acela Car Purchase: Future Revenue Estimates Were Initially Overstated* (OIG-E-2012-010, 3/28/2012)
- *Capital Budgeting, Submissions, and Approvals* (OIG, 106-205, 6/22/2007)
- *KPMG Management Letter Compliance Capital Expenditure Process* (OIG, 104-2003, 12/12/2003)

We reviewed these reports from the Department of Transportation OIG and GAO:

- *Amtrak Made Significant Improvements in its Long-Term Capital Planning Process* (Department of Transportation Office of Inspector General, Federal Railroad Administration Report Number CR-2011-036, 1/27/2011)
- *GAO Cost Estimating and Assessment Guide, Best Practices for Developing and Managing Capital Program Costs* (GAO-09-3SP, 3/2/2009)
- *Amtrak Management: Systemic Problems Require Actions to Improve Efficiency, Effectiveness, and Accountability* (GAO-06-145, 10/4/2005)

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Appendix II


**COMMENTS FROM AMTRAK'S PRESIDENT AND CHIEF
 EXECUTIVE OFFICER**

NATIONAL RAILROAD PASSENGER CORPORATION
 60 Massachusetts Avenue, NE, Washington, DC 20002
 tel (202) 906-3960, fax (202) 906-2850

Memo



Date September 13, 2013
 To Ted Alves, Inspector General

From  Joseph Boardman
 Department President and CEO
 Subject Corporate Governance: Planned
 Changes Should Improve Amtrak's
 Capital Planning Process, and
 Further Adoption of Sound
 Business Practices Will Help
 Optimize the Use of Limited
 Capital Funds (Draft Evaluation
 Report 008-2012)
 cc Dan Black
 DJ Stadtler
 Peggy Reid
 Mark Yachmetz
 Matt Hardison
 Jason Molfetas
 Charles Farmer
 Matt Gagnon
 Melantha Page

Message This letter is in response to the Office of Inspector General's ("OIG") discussion draft report entitled "*Corporate Governance: Planned Changes Should Improve Amtrak's Capital Planning Process, and Further Adoption of Sound Business Practices Will Help Optimize the Use of Limited Capital Funds*" dated August 16, 2013.

The OIG's draft report proposes implementation of several sound business practices as part of the Capital budget formulation, ranking and review process, as well as a recommendation to tighten controls concerning contract approvals as they relate to Board approved Capital budgets. Management agrees with the recommendations contained in the draft report and the AVP of Financial Planning will have the requested plans in place by the next budget cycle, beginning in the 2nd quarter of FY14. Specifically, management's responses to the OIG's recommendations are:

1. Establish corporate-wide guidance for developing project proposals based on sound business practices discussed in this report, and develop and implement a plan to train staff to develop these proposals.

Management concurs; the AVP of Financial Planning will develop a plan to both establish guidance on developing project proposals and train staff on sound business practices and implement it by the next budget cycle.

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2. Develop and implement a plan to fully adopt sound business practices to review and rank projects, including establishing the capability to independently review and validate proposals.

Management concurs; the AVP of Financial Planning will develop a plan to adopt sound business practices in reviewing and ranking projects, as well as independently review and validate proposals and implement the plan and review process by the next budget cycle.

3. Tighten controls over the contract approval process to eliminate unauthorized expenditures of funds.

Management concurs; the AVP of Financial Planning will work with the Chief Logistics Officer to develop enhanced controls linking Board approval to contract authorization and implement them by the next budget cycle.

4. Develop and implement a plan to build the capability of the Finance Department to monitor ongoing projects in accordance with sound practices and conduct post-completion reviews of projects as required by current Amtrak policy.

Management concurs; the AVP of Financial Planning will develop a plan to build the capability of the Finance department to monitor ongoing projects in accordance with sound practices and conduct post-completion reviews of projects and implement the plan and review process by the next budget cycle.

Implementation of these recommendations should significantly improve our capital allocation process, and I am grateful to the OIG for their hard work and thoughtful analysis. I am confident that the work they have done will allow us to ensure that we make the best possible use of constrained capital investment dollars in the years to come.

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Appendix III

ABBREVIATIONS

FY	Fiscal Year
GAO	U.S. Government Accountability Office
I-ETMS	Interoperable-Electronic Train Management System
OIG	Office of Inspector General
The Board	Amtrak Board of Directors

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Appendix IV

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Team members:

Calvin Evans, Assistant Inspector General, Inspections and Evaluations

Jason Venner, Senior Director, Inspections and Evaluations

Carl Manora, Lead Evaluator

John L. (Skip) MacMichael, Senior Principal Operations Officer

Other staff who contributed to this report:

Larry Chisley, Lead Evaluator

Renee Strolis, Principal Operations Officer

Kimberly Perteet, Evaluator

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OIG MISSION AND CONTACT INFORMATION

Amtrak OIG's Mission The mission of Amtrak OIG is to provide independent, objective oversight of Amtrak's programs and operations through audits, inspections, evaluations, and investigations focused on recommending improvements to Amtrak's economy, efficiency, and effectiveness; preventing and detecting fraud, waste, and abuse; and providing Congress, Amtrak management, and Amtrak's Board of Directors with timely information about problems and deficiencies relating to Amtrak's programs and operations.

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Web: www.amtrakoig.gov/hotline
 Phone: 800-468-5469

Congressional and Public Affairs Calvin E. Evans
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