



OFFICE of INSPECTOR GENERAL
NATIONAL RAILROAD PASSENGER CORPORATION

GOVERNANCE:

Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

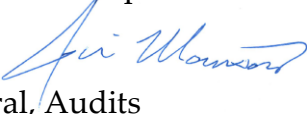
OIG-A-2020-002 | October 23, 2019

This page intentionally left blank.



Memorandum

To: Scot Naparstek
Executive Vice President / Chief Operations Officer

From: Jim Morrison 
Assistant Inspector General, Audits

Date: October 23, 2019

Subject: *Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs (OIG-A-2020-002)*

Amtrak (the company) is a for-profit corporation¹ that received about \$507 million in revenue in fiscal years (FY) 2016–2018 by undertaking projects for freight and commuter railroads and state departments of transportation on a cost-reimbursable basis. These reimbursable projects range from small equipment repairs to large infrastructure upgrades. The company may complete a reimbursable project in response to an external request for services based on its expertise, or it may have a contractual obligation to conduct work on its property or right-of-way for external partners. The company typically seeks full reimbursement of its costs for this work.

Our objective was to assess the extent to which the company effectively manages reimbursable projects, including its use of controls to help it recover its costs. We focused our review on projects the Engineering department managed, which accounted for 87 percent of total revenue for reimbursable projects. In addition, we selected three projects for more detailed reviews and site visits, including the installation of (1) an additional track near Albany for the state of New York (Albany double track); (2) positive train control near Detroit for the state of Michigan (Michigan PTC); and (3) a third rail and work supporting facilities maintenance at New York Penn Station for the Long Island Rail Road (LIRR Penn Station). We selected these projects using a risk-based methodology based on the project size, geographic location, and level of complexity. For more information on our scope and methodology, see Appendix A.

¹ The Rail Passenger Service Act of 1970 (Public Law 91-518; October 30, 1970) established the company as a for-profit corporation.

Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

SUMMARY OF RESULTS

The company did not effectively and consistently manage the reimbursable projects we reviewed due to weaknesses in assessing project costs and benefits, managing its business relationships with key project partners, and implementing controls for successful cost recovery, including the following:

- **Assessing costs and benefits of potential projects.** The company did not require “business cases” that define the potential costs and benefits of reimbursable projects for decision makers before undertaking such work. As a result, for two of the projects we reviewed, the company could not ensure that the benefits would offset the \$6.8 million in unrecovered costs it reported for FY 2016 through FY 2018.
- **Managing its business relationships.** The company did not consistently manage its business relationships on the reimbursable projects we reviewed. For example, managers on the first project used progress reports, regular communication, and other practices with their partner, but managers on the other two did not consistently do so. The Engineering department’s project management standards call for “effective relationships” but do not specify the types of practices project managers should follow to achieve this goal.
- **Implementing project management controls.** The company did not consistently implement project management controls for the reimbursable projects we reviewed. For example, managers on one of the projects effectively implemented several key controls to estimate, track, and bill for costs, but the Engineering department did not ensure that the managers on the other two projects implemented similar controls. We estimated that, as a result, the company spent an additional \$10.4 million that it will not recover on these other two projects.

To address these issues, we recommend that the company take the following actions:

- Require business cases to evaluate the costs and benefits before undertaking a reimbursable project.
- Update the Engineering project management standards to specify key business partnering practices and hold project managers accountable for implementing them.

Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

- Ensure that project managers implement key project management controls to recover costs.

In commenting on a draft of this report, the Executive Vice President / Chief Operations Officer agreed with our recommendations and described the company's actions and plans to address them. Company management also provided additional perspectives for some of the issues the OIG identified, including details regarding the complexities of the company's relationships with its partners, as well as improvements it has made to its project controls. For management's complete response, see Appendix B.

BACKGROUND

The Passenger Rail Investment and Improvement Act of 2008 encourages the company to undertake initiatives to maximize revenues and minimize federal operating subsidies.² The company classifies reimbursements from its partners as revenue although this revenue may not cover the company's costs of some projects. According to company executives, the company may accept a reimbursable project request for strategic reasons, such as maintaining a partner relationship, or it may have an obligation to perform reimbursable work, such as for a tenant with access rights.

The Engineering department manages most of the company's reimbursable projects³ with support from other departments.⁴ We assessed three complex, long-term Engineering infrastructure projects (see Figure 1) with total revenues of approximately \$120 million from FY 2016 through FY 2018:

- **Albany double track.** In 2011, at the request of the New York State Department of Transportation, the company took on a project to expand 17 miles of capacity by installing a second track between Albany and Schenectady, New York.

² Section 24101(d) of Title 49 of the U.S. Code states that "Amtrak is encouraged to...undertake initiatives that are...designed to maximize its revenues and minimize Government subsidies" in order to carry out its statutory goal in Section 24101(c)(12) to maximize its resources.

³ The company's reimbursable projects are part of a broader group of services the company provides for states, freight and commuter railroads, and other external partners. For example, the company provides services such as operations and maintenance under cost-sharing agreements with these partners. Services the company provides under those agreements were outside of our scope.

⁴ The Finance department; Law department; and Marketing, Planning, and Strategy department are involved in initiating, supporting, and billing for reimbursable projects.

Amtrak Office of Inspector General

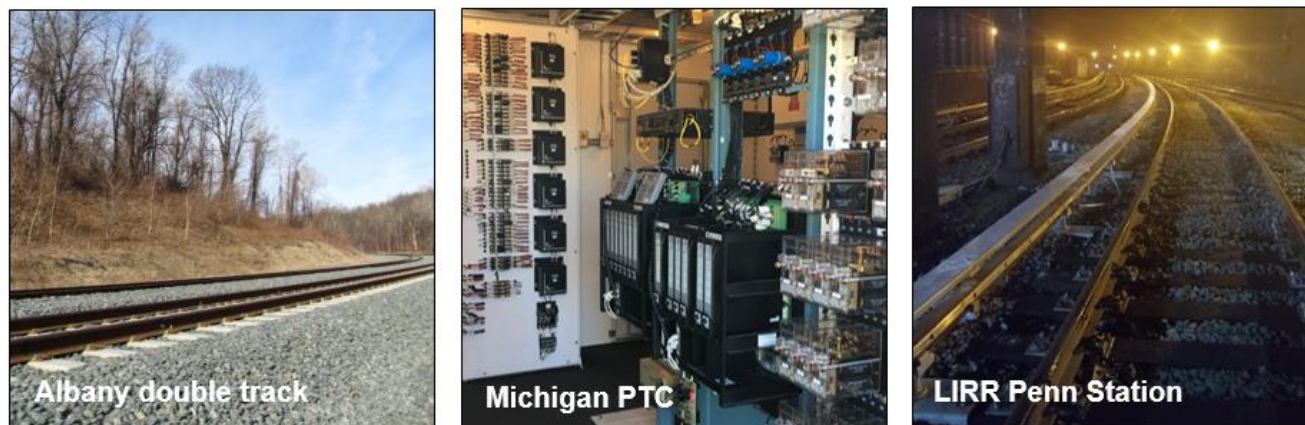
Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

The company completed this project in 2018 and took in about \$55 million in revenue from the state of New York during our review period.

- **Michigan PTC.** In 2012, at the request of the Michigan Department of Transportation, the company took on a project to manage contractor work to install PTC between Detroit and Kalamazoo, Michigan, and provide related roadway-worker protection services. The company took in about \$56 million in revenue from the state of Michigan during our review period. As of September 2019, this project was ongoing.
- **LIRR Penn Station.** In 1988, the company and LIRR signed an agreement for the company to perform preventative and emergency maintenance work at the station on behalf of LIRR. These projects include maintaining elevators, plumbing, and station air conditioning, as well as replacing tie switches and cables for LIRR's third rail. The company took in about \$9 million in revenue for these projects from LIRR during our review period. As of September 2019, this work was ongoing.

Figure 1. Three Reimbursable Projects



Source: Amtrak OIG, April 2019, and Amtrak, May 2019

Note: The Michigan PTC photograph shows PTC equipment inside a wayside electronics hut.

BETTER MANAGEMENT OF PROJECTS COULD HELP THE COMPANY CONSIDER RELATIVE BENEFITS AND RECOVER MORE COSTS

The company's management of reimbursable projects had weaknesses in three areas. First, it did not consistently assess project costs and benefits before undertaking a reimbursable project. In addition, the company struggled with effectively managing its business relationships with key project partners. Further, it did not consistently

Amtrak Office of Inspector General
Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs
 OIG-A-2020-002, October 23, 2019

implement the project management controls necessary to recover its costs for the projects we reviewed.

Assessing Costs and Benefits

Unlike the process it uses for capital projects, the company did not require business cases for its reimbursable projects.⁵ We previously reported that business cases help decision makers weigh and document the costs and benefits of potential investment decisions⁶ and establish how a project supports the company's financial and non-financial goals.⁷ This practice provides an objective analysis of a project's potential costs and benefits *before* undertaking the endeavor and committing resources. Not doing so, as with reimbursable projects, appears to be inconsistent with the company's mandate to operate as a for-profit corporation and maximize its resources.⁸

Nevertheless, the company reported that it may not seek full reimbursement if it anticipates that a project will benefit Amtrak services, such as by improving safety. Although the company is obligated to complete some reimbursable projects, company executives told us they accept other reimbursable projects to provide strategic benefits and generate goodwill with state partners, knowing that the company may not recover all of its costs. But without formally balancing pre-decisional tradeoffs between benefits and costs, the company cannot objectively demonstrate whether qualitative judgments such as goodwill outweigh the costs.

As a result, the company did not develop or use business cases for the reimbursable projects we reviewed. Consequently, the company could not ensure that the projects'



Business cases help weigh the costs and benefits of potential investment decisions.

benefits would offset the unrecovered costs of \$6.8 million it reported from FY 2016 through FY 2018 for Michigan PTC and LIRR Penn Station. The Executive Vice President / Chief Operations Officer told us the company could

⁵ Amtrak, *Engineering Project Management Manual*, 2016, and Amtrak, *Enterprise Program Management Office Project Management Standards*, 2017.

⁶ *Real Property: Improving Management Processes Could Reduce Costs and Generate Additional Revenues* (OIG-A-2019-006), March 29, 2019.

⁷ *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* (OIG-E-2013-020), September 27, 2013.

⁸ Passenger Rail Investment and Improvement Act of 2008, Section 24101(d) of Title 49 of the U.S. Code.

Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

improve its analysis of projects at the outset to ensure that it identifies the potential benefits compared to the likely costs. In addition, the company could note any strategic benefits before accepting reimbursable projects. Further, the Engineering department has more projects than its personnel can effectively support; therefore, the use of business cases could also help the company determine the priority of reimbursable projects and whether it can justify spending its limited resources on them.

Managing Business Relationships

On one of the projects we reviewed, the Engineering department effectively managed its business relationships with its partner. On the other two, however, it did not consistently do so, which contributed to disputes that led to cost overruns and schedule delays. The department's project management standards state that project managers should implement practices similar to those used in the private sector to build strong relationships and manage risks with its business partners to achieve commitment and trust among all parties.⁹ The standards, however, do not specify the practices that project managers should use to implement successful business partnering, such as providing progress reports or ensuring regular communication consistent with private-sector standards. As a result, the project managers handle the relationships as they consider appropriate without guidance and oversight from the department that would help ensure that managers are held accountable for effective relationships.

During the initial phases of Albany double track and Michigan PTC, the Engineering department and its state partners disagreed on billed costs, which strained the business



Effective business relationships contribute to delivering projects on time and within budget.

relationships and diminished trust. To strengthen the relationship, the Albany double track management team, with support from a construction management firm, instituted practices such as weekly meetings and progress reports, which included a

summary of ongoing and scheduled work, likely costs, and any problems or delays. These changes strengthened the commitment of both parties and contributed to reduced invoice disputes.¹⁰ In addition, the Engineering department completed this project on

⁹ The Government Accountability Office (GAO) also identified partnering as a key practice to manage risks between state partners and their contractors for transit projects. See GAO, *Rail Transit: Federal Transit Administration Could Improve Information on Estimating Project Costs* (GAO-19-562), July 2019.

¹⁰ This is in line with private-sector research stating that strong business relationships help reduce project costs, tighten schedules, improve quality, and reduce disputes.

Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

schedule and within budget, in part because of its effective business relationship with the state, according to department and state officials.

In contrast, the initial Michigan PTC management team was not accountable for sustaining such successful practices. When the project team could not show supporting documentation for the project's increasing costs, the relationship deteriorated. Instead of using its weekly meetings and progress reports to help address this problem, however, the prior project manager suspended the meetings with the state for about a year and did not provide progress reports on the project's status or anticipated costs, according to Engineering department and state officials. The state ultimately stopped reimbursing the company for its work.

Tensions escalated beyond a level that the project management team could resolve, and the Corporate Planning group—which maintains business partnerships at a corporate level—and the Government Affairs office interceded. These groups re-established communication channels with the partner to settle on disputed costs through December 2018, and the company assigned an official responsible for managing the relationship. In addition, the current project management team has improved communications with this partner, including providing weekly updates. According to company officials, notwithstanding these improvements, cost overruns and schedule delays continued through FY 2019, in part, because of the complexities of implementing positive train control in Michigan.

For LIRR Penn Station, project teams also did not consistently communicate with their partner on the status of projects and their likely costs once the projects were underway. An LIRR official told us that the company focuses on completing the work but does not provide progress reports, and when it does, the reports are ad hoc, incomplete, and show overruns. This has contributed to scheduling conflicts and invoicing disputes that have persisted for years.
















Implementing Project Management Controls

The Engineering department's project management standards identify controls to facilitate cost recovery, such as accurately estimating, identifying, recording, tracking, and billing for costs. The department, however, did not ensure that project managers consistently implemented these controls for the projects we reviewed, as shown

Amtrak Office of Inspector General
Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs
 OIG-A-2020-002, October 23, 2019

in Figure 2. As a result, the company is not recovering the costs it should, such as an additional \$10.4 million we identified for the projects we reviewed.¹¹

Figure 2. Project Management Controls for Three Projects, FY 2016 – FY 2018

	Effective 	Partially Effective 	Not Effective 
Cost Control Activities	Albany Double Track	Michigan PTC	LIRR Penn Station
Estimating costs			
Identifying and recording costs			
Tracking costs			
Billing for costs			
Completed on time and within budget	Yes	No	Ongoing

Source: OIG analysis and observations of company controls

Estimating costs. The Engineering department did not ensure that two of the three projects we reviewed had comprehensive cost estimates. As a result, project costs exceeded the initial estimates and the amount the partner agreed to reimburse. The department’s project management standards require detailed estimates of all the planned work on a project,¹² and cost estimates are particularly important for reimbursable projects because they establish the costs that the company’s partners will cover.

¹¹ This amount is in addition to the reported unrecovered costs from FY 2016 through FY 2018 noted above.

¹² We previously reported that the company faces challenges in developing high-quality cost estimates that are detailed and complete, which can result in delays and cost overruns. See *Amtrak: Top Management and Performance Challenges – Fiscal Years 2017 and 2018* (OIG-SP-2017-009), March 29, 2017.

Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

The cost estimate for Albany double track was effective because the project manager ensured that it included all activities for the project and substantially followed it



High-quality cost estimates facilitate project delivery and cost recovery.

throughout the project. This helped the department complete the project on time and within budget. In addition, this project was the only one of the three projects we reviewed that achieved full cost recovery.

In contrast, the Engineering department did not ensure that project managers had detailed and complete cost estimates on Michigan PTC and LIRR Penn Station. For Michigan PTC, our analysis found—and department and state officials confirmed—that the company’s cost estimate was incomplete. For example, it did not include certain railroad crossings, software upgrades, and general and administrative expenses that the company needed to effectively implement positive train control in Michigan. As a result, the company will not be able to fully recover costs it did not include in the initial cost estimate, including at least \$9.6 million.¹³ Similarly, for LIRR Penn Station, the department needed subsequent agreements with LIRR authorizing it to recover an additional \$769,000 in costs because the initial cost estimate for a project to upgrade the station’s air conditioning omitted some requirements, which resulted in delays occupying its resources past the original schedule.

Identifying and recording costs. The Engineering department did not consistently ensure that project managers identified and recorded costs on the three projects we reviewed, as the department’s project management standards require. For these projects, project managers were inconsistent in identifying and recording costs for materials and equipment for one project, and all three projects had errors in their recorded labor hours. As a result, the department did not fully recover its costs for the activities it did not record. Accurately identifying and recording costs is critical for

¹³ This includes \$4.7 million in general and administrative costs and \$4.9 million in project-related costs, in addition to the reported unrecovered costs that we noted above. The company incurred some project-related costs that it may not have been able to anticipate at the time of the initial estimate given the unknown factors of implementing a new technology like positive train control, according to company officials.

Amtrak Office of Inspector General
**Governance: Better Management of Reimbursable Projects Could Help the Company
Consider Benefits and Recover its Costs**
OIG-A-2020-002, October 23, 2019

reimbursable projects because the company's invoices and cost recovery are directly linked to this information.¹⁴

For Albany double track and Michigan PTC,¹⁵ project managers identified and recorded the costs for materials and equipment, such as for the equipment Figure 3 shows. They did not consistently do so, however, for LIRR Penn Station.

Figure 3. Ballast Regulator Used to Secure Rail for Albany Double Track



Source: OIG photograph, April 2, 2019

For LIRR Penn Station, the Engineering department did not ensure that field personnel accurately identified and recorded the costs of materials and equipment, which is inconsistent with company project management standards. Given the volume of capital and reimbursable projects at this location, project teams often work on more than one project code, increasing the likelihood that they will incorrectly charge or omit costs for materials and equipment. For example, the department did not realize that employees were not charging for a leased welding truck they used on LIRR Penn Station and other

¹⁴ For each project, the Finance department relies on the project management teams to accurately capture their costs in the company's information technology systems, which automatically flow into SAP, the company's financial system of record. The Finance department uses that information to invoice the company's partners.

¹⁵ Each project team completed daily logs that tracked the equipment used, and the company had a dedicated materials inventory that facilitated the tracking of materials for the projects.

Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

projects until the leasing company notified the Finance department of 29 months of missed payments, totaling at least \$104,000 in costs. The company has not assigned any of these costs to an LIRR reimbursable project so that it can recover them, as of September 2019.

We also found weaknesses in identifying and recording the labor hours of agreement and management employees. For example, agreement employees did not always



Accurately identifying and recording costs helps ensure the company can recover them.

correctly record their hours in Maximo—the Engineering department’s asset management system that includes employees’ time charges. Field supervisors told us that employees work on multiple activities that use different codes for reimbursable projects

and the department’s capital projects, which makes tracking the accuracy of the codes charged difficult.¹⁶ As a result, the Engineering department cannot immediately identify incorrectly coded labor hours, which can lead to billing disputes when the company invoices partners for these costs without appropriate support for the miscoded charges. For example, from 2017 to 2019, field personnel on LIRR reimbursable projects incorrectly coded at least \$646,000 in labor hours that LIRR disputed. As of September 2019, the company was in the process of resolving this dispute, according to an Engineering department manager.

In addition, the Engineering department does not identify and record the full number of management employee hours worked on reimbursable projects. The Time Distribution Report system captures management employee hours but does not allow these employees to charge more than 40 hours a week. At times, these employees may work more hours than this. Company officials told us that recording the extra hours is not necessary because management employees are salaried; therefore, the company does not incur costs for their additional hours. Other company officials told us, however, that identifying and recording these hours could help the Engineering department obtain a more complete picture of how it is using and charging for its resources. For example, the Chief Engineer told us the company is assessing whether it should increase its rates for management employees. We agree that having data on the full number of hours that these employees work could inform these decisions and potentially help the company increase its revenues to offset other costs. On the projects we reviewed, we estimated

¹⁶ Maximo also does not have a control to limit the codes that employees can charge; as a result, they can charge hours to any project code. This increases the risk that employees charge their hours incorrectly.

Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

that the project management teams provided an additional \$236,000 in labor to its partners for hours above 40 a week.

Tracking costs. The Engineering department did not ensure that all project managers consistently tracked costs. As a result, project costs exceeded spending limits for two projects we reviewed. The department's project management standards require project managers to track costs against a project's budget. This is particularly important for reimbursable projects because partners may not reimburse the company for any costs above an agreed-on spending limit.

On Albany double track, project managers reviewed costs and tracked budgets timely. The managers did so by assigning this responsibility to an individual on the project.



Tracking costs helps ensure they do not exceed established spending limits.

As a result, the project did not exceed its spending limit. In contrast, the initial project management team for Michigan PTC did not effectively track costs, and spending exceeded the established limit. LIRR Penn Station

project teams also did not designate an employee to track all project costs for this location; therefore, the teams faced similar challenges ensuring that actual spending did not exceed established limits. LIRR Penn Station project teams told us that because they are not tracking these costs, they are not aware of how close their projects are to the established spending limits and may not know until after they exceed the limits.

Billing for costs. The Engineering department did not ensure that project managers for two of the projects consistently reviewed costs for accuracy prior to billing and had supporting documentation for them, as the department's project management standards require. As a result, the company incorrectly charged its partners. For reimbursable projects, partners will reimburse the company only for supported invoices.

For Albany double track, the project team and the Finance department used a pre-billing process to review costs with its state partner before sending invoices requesting



Reviewing support for costs helps reduce billing errors and disputes with partners.

reimbursement. The team also established controls, such as designating a specific employee to collect project documentation to ensure that it supported costs. This minimized the number of billing disputes.

Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

In contrast, the department's controls to accurately bill for costs were not as effective for Michigan PTC and LIRR Penn Station, and the department did not become aware of billing inaccuracies until state partners disputed costs and requested additional documentation to support them. The project team and Finance department used a pre-billing process to review costs for both projects, but state partners told us the billing errors persisted because the project management teams did not consistently provide documentation to support invoice charges.

CONCLUSIONS

Addressing the management weaknesses we identified could help the company more effectively and consistently manage its reimbursable projects, including recovering its costs. Requiring business cases will help ensure that decision makers weigh the costs and benefits of potential reimbursable projects and justify using resources for them. In addition, specifying key business partnering practices will help minimize disputes and ensure that projects are on time and within budget—such as holding regular meetings with partners, providing them with progress reports, and holding managers accountable for implementing them. Further, requiring the Engineering department to ensure that project managers implement its management controls will help the company recover its costs, similar to the \$10.4 million we identified in this report.

RECOMMENDATIONS

To provide for more effective and consistent management of the company's reimbursable projects and to help ensure that it recovers its costs, we recommend that the Executive Vice President / Chief Operations Officer take the following actions:

1. To support executive-level decisions, require business cases to evaluate the costs and benefits before accepting reimbursable project requests.
2. Ensure that the Engineering department updates its project management standards to specify key business partnering practices and hold project managers accountable for implementing them.
3. Require the Engineering department to ensure that project managers implement the department's project management controls to effectively recover costs.

Amtrak Office of Inspector General
**Governance: Better Management of Reimbursable Projects Could Help the Company
Consider Benefits and Recover its Costs**
OIG-A-2020-002, October 23, 2019

MANAGEMENT COMMENTS AND OIG ANALYSIS

In commenting on a draft of this report, the company's Executive Vice President / Chief Operations Officer agreed with our recommendations and described the company's actions and plans to address them, which we summarize below.

- **Recommendation 1:** Management agreed with our recommendation to require business cases to evaluate the costs and benefits of reimbursable projects and plans to develop a process to implement it. The target completion date is November 15, 2019.
- **Recommendation 2:** Management agreed with the intent of our recommendation to improve project managers' use of partnering practices and plans to implement actions to address it. The company maintains that existing policy already requires relationship management and does not need an update. The company did commit to review project managers' training on partnering and incorporate a review of partner relationships as part of the Engineering department's internal project reviews. The target completion date is March 31, 2020.
- **Recommendation 3:** Management agreed with our recommendation to ensure project managers implement controls to effectively recover costs and plans to implement actions to address it. These include assigning personnel as necessary to support the tracking and invoicing of work. The target completion date is March 31, 2020.

In the response, management also provided additional company perspectives for some of the issues the OIG identified that the Executive Vice President / Chief Operations Officer maintains the OIG should consider to provide a fairer assessment of the current situation, including the following:

- Management commented that the issues with Michigan on the PTC project are complex and noted that the company has improved its relationship with the state since 2017. We did acknowledge in the report that the current project management team has improved communications with this partner, including providing weekly updates. During the course of our audit, however, key players involved in the project reported continuing challenges with this partner. The actions that the company plans to implement in response to our recommendation

Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs

OIG-A-2020-002, October 23, 2019

on business partnering will help ensure continued improvements with Michigan as well as with other company partners.

- Management commented that the Engineering department has improved project controls, including those for project estimating, that would not be reflected in our review of older projects. The older projects we assessed were ongoing during our review period and, we believe, demonstrate the long-term impact poor estimates could have. For example, our work showed that because of poor initial estimates, the company experienced issues over the life of the projects, such as an inability to recover costs not included in initial estimates. The company's commitment to develop business cases for reimbursable projects should further enhance its efforts to develop more effective cost estimates. With regard to controls for identifying, recording, and billing for costs, our review did take into account current controls in the Engineering project management standards, which the department established in 2017.
- Management commented on the unique complexities regarding its agreement with LIRR and the nature of reimbursable work at Penn Station. Further, management noted it has been able to reduce disputed labor costs associated with LIRR work. We appreciate the complexities of the company's longstanding agreement with LIRR and are encouraged that the company has been able to recover a portion of the costs we identified in our report. The company's plan to improve the implementation of controls—such as assigning project administration staff to LIRR—will further support its efforts to recover costs by identifying them at the outset so as to minimize disputes.

For management's complete response, see Appendix B. Management also provided technical comments that we have incorporated in this report as appropriate.

Amtrak Office of Inspector General
**Governance: Better Management of Reimbursable Projects Could Help the Company
Consider Benefits and Recover its Costs**
OIG-A-2020-002, October 23, 2019

APPENDIX A

Objective, Scope, and Methodology

This report provides the results of our audit of the company's reimbursable projects. Our objective was to assess the extent to which the company effectively manages reimbursable projects, including its use of controls to help it recover its costs. Our scope focused on the Engineering department's reimbursable projects from FY 2016 through FY 2018, as well as the processes and controls related to managing business relationships and recovering costs. We performed our audit work from November 2018 to October 2019 in Jackson, Michigan; Albany, New York; New York City; Philadelphia, Pennsylvania; and Washington, D.C.

To select the three projects to review in detail, we used a risk-based methodology based on the project size, geographic location, and level of complexity and chose the following:

- Albany double track project
- Michigan PTC
- LIRR Penn Station

These three projects generated \$120 million in revenue—24 percent of the total revenues for all reimbursable projects for our review period. The results of our review cannot be projected to the remaining Engineering reimbursable projects.

To assess the extent to which the company was effectively managing reimbursable projects, we reviewed company documents related to its management of reimbursable projects. We compared them to public- and private-sector management control standards for achieving organizational objectives, and we prepared a profit-and-loss analysis for the three projects we reviewed. We also interviewed company executives regarding their insights on the company's management of reimbursable projects.

To assess the extent to which the company was effectively managing business relationships with its partners, we reviewed company and private-sector standards for business relationships. We then compared these standards to company management practices to determine their effectiveness for the three projects we reviewed. We assessed documents such as status reports and communication to assess the extent to

*Amtrak Office of Inspector General***Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs**

OIG-A-2020-002, October 23, 2019

which communication occurred. We also interviewed company executives on the importance of developing effective business relationships.

To assess the company's controls for recovering costs, we visited the three projects and conducted interviews with Engineering department officials in the field. We also developed a structured approach to identifying controls in the field and determining if they were effective. We then compared the controls we observed and documents we reviewed to the company policies and procedures.

We interviewed senior officials from the following departments: Engineering; Finance; Law; Government Affairs and Corporate Communications; and Marketing, Planning, and Strategy. We also spoke to officials from LIRR and the state departments of transportation of New York and Michigan.

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

Internal Controls

We reviewed company policies and procedures, and we identified several controls related to managing reimbursable projects for the Engineering department that were significant in the context of our audit objective. We also assessed project management controls, including those related to estimating, identifying, recording, tracking, and billing for costs. Because our objective did not include a review of all related internal controls for reimbursable projects, we limited our conclusions and recommendations to controls in those areas. We did not review the Engineering department's overall system of controls.

Computer-Processed Data

The Finance department provided us with computer-processed data for reimbursable project revenues and expenses from FY 2016 through FY 2018 based on SAP, the company's financial system of record. The Finance department also provided SAP detail for reimbursable project revenues and expenses from FY 2016 through FY 2018 for the projects we selected for analysis. We verified the accuracy of the data by

Amtrak Office of Inspector General
Governance: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs
OIG-A-2020-002, October 23, 2019

comparing data from both sources. We concluded that the data were sufficiently reliable for how we used them for the purposes of our audit objective.

Prior Reports

In conducting our analysis, we reviewed and used information from the following reports:

Amtrak OIG

- *Asset Management: Improved Inventory Practices Could Help the Company Better Manage its Maintenance-of-Way and Rolling Stock Equipment (OIG-A-2019-010), July 25, 2019*
- *Real Property: Improving Management Processes Could Reduce Costs and Generate Additional Revenues (OIG-A-2019-006), March 29, 2019*
- *Amtrak: Top Management and Performance Challenges—Fiscal Years 2019 and 2020 (OIG-SP-2018-011), September 28, 2018*
- *Amtrak: Top Management and Performance Challenges—Fiscal Years 2017 and 2018 (OIG-SP-2017-009), March 29, 2017*
- *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 (OIG-E-2013-020), September 27, 2013*

GAO

- *GAO, Rail Transit: Federal Transit Administration Could Improve Information on Estimating Project Costs (GAO-19-562), July 2019*

Amtrak Office of Inspector General
**Governance: Better Management of Reimbursable Projects Could Help the Company
 Consider Benefits and Recover its Costs**
 OIG-A-2020-002, October 23, 2019

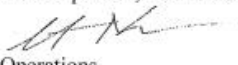
APPENDIX B

Management Comments

NATIONAL RAILROAD PASSENGER CORPORATION

Memo



Date	October 15, 2019	From	Scot Naparstek, EVP COO 
To	Jim Morrison, Assistant Inspector General, Audits	Departments	Operations
		cc	Eleanor Acheson, EVP General Counsel Ildefonso Burgos, AVP Engineering Stephen Gardner, Sr. EVP Carol Hanna, VP Controller Roger Harris, EVP Kenneth Hylander, EVP Andy Keefe, AVP Engineering Dennis Newman, EVP Mark Richards, Sr Director Amtrak Risk & Controls DJ Stadtler, EVP Ray Verrelle, AVP Engineering Gery Williams, VP Chief Engineer Tracie Winbigler, EVP CFO Christian Zacariassen, EVP

Subject Management Response to *GOVERNANCE: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs* (Draft Audit Report for Project No. 003-2019)

This memorandum provides Amtrak's response to the draft audit report entitled, "*GOVERNANCE: Better Management of Reimbursable Projects Could Help the Company Consider Benefits and Recover its Costs*".

Amtrak appreciates the opportunity to respond to the OIG's report and recommendations. Management continues to take actions to enhance all aspects of its business and build upon the successes of recent years. The Engineering Department is undertaking substantial operational changes to improve performance across its portfolio, and this is an ongoing process with results that are not always immediate. However, regarding some of the issues raised in the report, progress has either already been made or additional information needs to be considered in order to fairly assess the current situation.

Specifically, Amtrak notes the following:

- The issues with MDOT are more complex than what are described in the report, and we believe there are lessons to be learned by both parties. More importantly however, it needs to be noted that Amtrak's relationship with MDOT is improving. In fact, for the past two years (since 2017), Amtrak and MDOT have been conducting regular meetings to discuss project invoices in advance. MDOT has expressed increased satisfaction with Amtrak's management of the work as evidenced

Amtrak Office of Inspector General
**Governance: Better Management of Reimbursable Projects Could Help the Company
 Consider Benefits and Recover its Costs**
 OIG-A-2020-002, October 23, 2019

NATIONAL RAILROAD PASSENGER CORPORATION

by the minimal number of invoicing disputes in recent years. The latest invoice, from July 2019, has been approved by MDOT for 100% reimbursement.

- In late 2015, Engineering established a PMO to initiate project management implementation. Furthermore, in 2017, Engineering created a Project Delivery organization to expedite completion of the implementation. Since the office was established there has been continued improvement in project controls across the Amtrak portfolio, including project estimating. The effects of these actions would not be observable through a review of older projects.
- Amtrak performs maintenance work on behalf of LIRR under a complex legal arrangement. The Joint Facilities Agreement with LIRR defines cost sharing criteria based upon the zone or tunnel where the work is performed. The Level A Agreement, which covers the work under the audit, is for LIRR's lease of a portion of Penn Station from Amtrak. Over the years, the parties agreed to have Amtrak perform the maintenance on the station facilities that LIRR leased. The costs of these maintenance activities are fully reimbursable by LIRR. However, because the work is considered ongoing maintenance, Amtrak did not assign a project manager and accordingly LIRR did not have to bear that cost. However, this situation is unique to LIRR work and not the rule for Amtrak reimbursable work. Amtrak further notes that after several recent meetings and in-depth review of disputed charges with LIRR, the \$695,000 of outstanding payments has been significantly reduced. LIRR has also been put on notice that Amtrak will no longer perform facility maintenance work at Penn Station on behalf of LIRR.

Notwithstanding the foregoing, Amtrak welcomes the OIG's feedback, as there is always opportunity for further improvement. As indicated in our responses below, we agree with the OIG recommendations and will initiate actions to address each in a timely manner.

Recommendations:

To provide for more effective and consistent management of the company's reimbursable projects and to help ensure that it recovers its costs, we recommend that the Chief Operations Officer take the following actions:

1. To support executive-level decisions, require business cases to evaluate the costs and benefits before accepting reimbursable project requests.

Management Response/Action Plan:

We agree with this recommendation. While a comprehensive review process is already in place for evaluating all projects/programs originating within Engineering, requiring written business cases for reimbursable projects will support the process and provide consistency in the development of the capital budget. Amtrak Planning, Engineering and Finance will develop an appropriate process to develop and review these business cases/

Responsible Amtrak Official(s): Byron Comati, Ildefonso Burgos and John Page

Target Completion Date: November 15, 2019

Amtrak Office of Inspector General
**Governance: Better Management of Reimbursable Projects Could Help the Company
Consider Benefits and Recover its Costs**
OIG-A-2020-002, October 23, 2019

NATIONAL RAILROAD PASSENGER CORPORATION

2. Ensure that the Engineering department updates its project management standards to specify key business partnering practices and hold project managers accountable for implementing them.

Management Response/Action Plan:

We partially agree with this recommendation. We acknowledge there is room for improvement in managing relationship with funding partners but disagree that updating the project management policy will have the desired effect since it already requires relationship management. Engineering will continue with its current practice of pre-review of invoices with the reimbursement entity on all projects, to ensure early identification of billing issues or concerns. Engineering will also review project managers' training on customer-centric behaviors with focus on recent hires. Finally, project managers will ultimately be held accountable for their relationship with their customers and engineering will include in their internal project reviews a review on key stakeholder relationship status.

Responsible Amtrak Official(s): Ildefonso Burgos

Target Completion Date: End of Q2 FY2020

3. Require the Engineering department to ensure that project managers implement the department's project management controls to effectively recover costs.

Management Response/Action Plan:

We agree with this recommendation. To implement this, Engineering will review project management processes and staffing levels in reimbursable projects and increase personnel as necessary to support administrative functions related to tracking and invoicing of work. Additionally, Amtrak will assign project administration staff to the LIRR division team that was the subject of this audit to ensure that costs are consistently captured, and that the best practices followed on other Amtrak reimbursable projects are applied.

Responsible Amtrak Official(s): Ildefonso Burgos, Andy Keefe, John Page

Target Completion Date: End of Q2 FY2020

Amtrak Office of Inspector General
**Governance: Better Management of Reimbursable Projects Could Help the Company
Consider Benefits and Recover its Costs**
OIG-A-2020-002, October 23, 2019

Appendix C

Abbreviations

FY	fiscal year
GAO	Government Accountability Office
LIRR	Long Island Rail Road
OIG	Amtrak Office of Inspector General
PTC	positive train control
the company	Amtrak

Amtrak Office of Inspector General
**Governance: Better Management of Reimbursable Projects Could Help the Company
Consider Benefits and Recover its Costs**
OIG-A-2020-002, October 23, 2019

APPENDIX D

OIG Team Members

Eileen Larence, Deputy Assistant Inspector General, Audits

Jason Venner, Deputy Assistant Inspector General, Audits

Anne Keenaghan, Senior Director, Lead

Dorian Herring, Senior Audit Manager

Joseph Zammarella, Senior Auditor, Lead

Andrew Mollohan, Senior Auditor

Alison O'Neill, Communications Analyst

OIG MISSION AND CONTACT INFORMATION

Mission

The Amtrak OIG's mission is to provide independent, objective oversight of Amtrak's programs and operations through audits 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.

Obtaining Copies of Reports and Testimony

Available at our website

Reporting Fraud, Waste, and Abuse

Report suspicious or illegal activities to the OIG Hotline

or

800-468-5469

Contact Information

Jim Morrison

Assistant Inspector General

Mail: Amtrak OIG

10 G Street NE, 3W-300

Washington D.C. 20002

Phone: 202-906-4600

Email: James.Morrison@amtrakoig.gov