

OFFICE of INSPECTOR GENERAL NATIONAL RAILROAD PASSENGER CORPORATION

SAFETY AND SECURITY:

Addressing Security Weaknesses and Operational Impacts of Amtrak Express is Critical to the Program's Future

Certain information in this report has been redacted or summarized due to its sensitive nature.

OIG-A-2020-005 | January 22, 2020

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Office of Inspector General National Railroad passenger corporation

Memorandum

То:	Scot Naparstek		
	Executive Vice President / Chief Operations Officer		
	Roger Harris Executive Vice President / Chief Marketing and Revenue Officer		
	DJ Stadtler Executive Vice President / Chief Administration Officer		
From:	Jim Morrison Assistant Inspector General, Audits		
Date:	January 22, 2020		
Subject:	Safety and Security: Addressing Security Weaknesses and Operational Impacts of Amtrak Express is Critical to the Program's Future (OIG-A-2020-005)		
Amtrak (the	company) operates a package shipping program Amtrak Express		

Amtrak (the company) operates a package shipping program, Amtrak Express (the program), as an initiative to generate additional revenue. Through this program, individuals pay to ship packages on the company's trains between more than 100 locations. Our prior work helped identify security vulnerabilities with the program,¹ including a drug-trafficking organization using it to ship hundreds of packages of illegal drugs on trains from 2010 to 2016.²

. We initiated this review as a follow-on to our series of audits assessing the company's security efforts.³

¹ Sentencing for Employee Convicted of Possession with Intent to Distribute Cocaine (OIG-WS-2018-304), September 28, 2017.

² U.S. Department of Justice, *California drug trafficker sentenced to 35 years in federal prison for transporting heroin and cocaine to Chicago aboard Amtrak trains* (press release), September 12, 2018.

³ Safety and Security: Physical Security Vulnerabilities at Washington Union Station and Ivy City Yard (OIG-A-2019-009), July 22, 2019; Safety and Security: Longstanding Physical Security Vulnerabilities in Philadelphia Pose Risks (OIG-A-2018-007), April 24, 2018.

Initially, we also began looking at the program's financial performance—revenues and costs—to assess its profitability.⁴ During our review, however, the company began to track the program's costs compared with the revenue it generated, so we decided not to audit that aspect of the program to avoid duplicating the company's efforts. The company estimated that, in fiscal year (FY) 2019, the program's costs exceeded its \$2.5 million in revenues by \$198,000. The company's analysis also showed that the program was causing train delays throughout its network. As a result, company leadership began discussions about the future direction of the program.

Given these developments, our objective was to evaluate the effectiveness of the program's security controls and operations. To do this, we visited Chicago Union Station, Los Angeles Union Station, New York Penn Station, and Washington Union Station in October 2019. We observed the security controls and operations in place and discussed their effectiveness with employees administering the program. We selected these stations based on the Amtrak Express revenue they generated, passenger volume, security concerns, and other factors. For more information, see Appendix A. Given the sensitive nature of this report's information, certain results have been redacted or summarized in this public version.

SUMMARY OF RESULTS

Security weaknesses in Amtrak Express continue to place employees, passengers, and the company's brand at risk, and operational inefficiencies continue to contribute to train delays and have other impacts. These include the inability to collect and track data necessary to administer the program effectively. Resolving the following weaknesses and inefficiencies to reduce the risks they pose is imperative to any future operational scenario for the program, and considering the costs of doing so is important to the company's ongoing deliberations:

• **Security weaknesses** pose risks. We identified areas where the company could strengthen the security controls of the Amtrak Express program.

⁴ In 2017 and 2018, our investigative work found control weaknesses affecting profitability, insomuch as company employees improperly used the company's internal shipping service for personal gain instead of using Amtrak Express. See *Employees Terminated, Suspended After Violating Company Policies* (OIG-WS-2018-316), March 21, 2018; *Employee Terminated for Violation of Policies* (OIG-WS-2018-311), October 10, 2017.

• Operational inefficiencies resulting in part from the program's manual, paperbased process contributed to 109 delays of 5 minutes or longer from April through September 2019. Station employees do not have information readily available to effectively load and unload packages because the company does not have an electronic package management system—a tool common across the shipping industry. For example, station employees are unaware of the volumes and sizes of incoming packages; therefore, they cannot prepare to efficiently manage packages during train stops. In addition,

. The company estimated that such a system could cost about \$16 million for both passenger baggage and Amtrak Express packages and provided \$350,000 in funds to pilot a for passenger baggage services in 2020. The pilot, however, did not include Amtrak Express because the future of the program is unknown.

To address these security weaknesses and operational inefficiencies, we recommend that the company take the following actions that are critical to any future scenario of the program:

- Implement security controls to mitigate the risk of ________, including employee training and more robust _______ practices.
- Improve the program's paper-based, manual process, including investing in electronic tools to reduce operational inefficiencies that contribute to train delays and have other impacts.

In commenting on a draft of this report, the company's Executive Vice President and Chief Operations Officer agreed with our recommendations and described the company's actions and plans to address them. These actions include adding security controls and assessing the program to identify a technology solution to improve the paper-based, manual process. For management's complete response, see Appendix B.

BACKGROUND

The Passenger Rail Investment and Improvement Act of 2008 requires the company to use its best business judgment to minimize government subsidies by increasing

revenue, in part, from express shipping.⁵ Amtrak Express allows its customers to ship individual packages weighing up to 50 pounds or pallets of packages weighing up to one ton between more than 100 locations by using capacity in baggage cars on the company's trains. Figure 1 shows the revenue generated at participating stations in FY 2019.

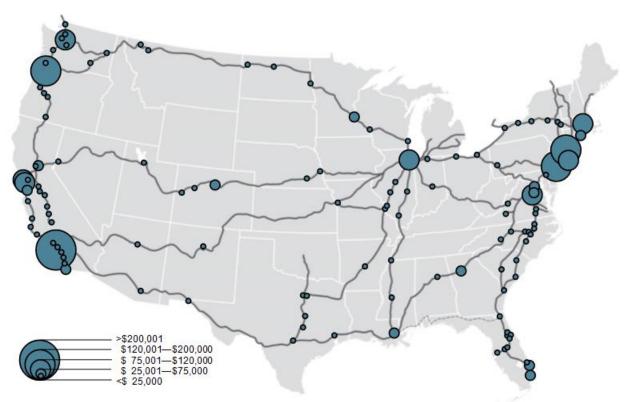


Figure 1. Amtrak Express Revenue by Origination Station, FY 2019

The company's Office of Customer Service and Stations (under the Chief Operations Officer) provides employees to operate the program at participating stations. These stations are divided into three types of services—light, regular, and heavy express—according to the capacity of each station's infrastructure and ability to handle specific sizes and weights of packages. Employees at these stations include ticketing and baggage staff who typically support the program's operations in addition to their

⁵ 49 U.S.C. § 24101(c).

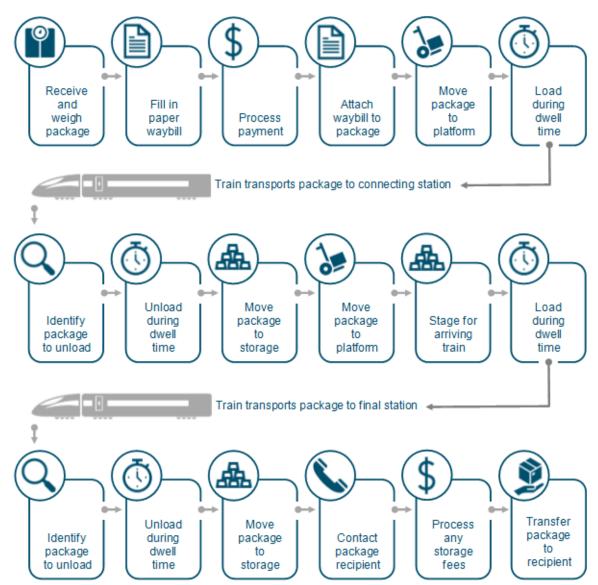
Source: OIG analysis of company data

passenger-related duties.⁶ These employees execute the program by collecting, processing, loading, and unloading packages on baggage cars.

When Amtrak Express customers arrive at a station to ship packages, employees obtain shipping information using paper waybills to route the packages. Employees typically load and unload these packages when passengers are boarding and disembarking from the trains. Stations at the ends of the line generally have more time for employees to load and unload packages, whereas each stop along the route is scheduled for a specific amount of time, which is referred to as "dwell time." Many packages travel on multiple trains before reaching their destinations. After packages arrive at destination stations, employees unload them and notify recipients to pick up their packages using information written on the paper waybill. Figure 2 shows the process that company employees generally use to ship Amtrak Express packages.

⁶ The company estimated that the combined time these employees spent supporting the program equated to about 25 full-time employees in FY 2019.



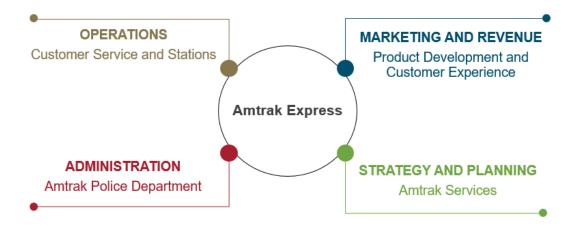


Source: OIG analysis of company processes

Other company departments have roles and responsibilities related to the security and operations of Amtrak Express. The Amtrak Police Department (APD) (under the Chief Administration Officer) is responsible for the company's security practices, including those for Amtrak Express, and the Office of Product Development and Customer Experience (under the Chief Marketing and Revenue Officer) is responsible for developing and issuing the policies and operating procedures for the program. The Amtrak Services group (under the Chief Strategy and Planning Officer) has also

been tasked with evaluating the program to determine its business potential going forward. Figure 3 shows the company departments with a role in the program.





Source: OIG analysis of company information

AMTRAK EXPRESS SECURITY WEAKNESSES POSE RISKS, AND OPERATIONAL INEFFICIENCIES CONTRIBUTE TO TRAIN DELAYS

Security weaknesses in Amtrak Express continue to place employees, passengers, and the company's brand at risk, and operational inefficiencies continue to contribute to train delays and have other impacts. These include the inability to collect and track data necessary to administer the program effectively. Addressing these weaknesses and inefficiencies is critical to the program's future and factoring in the costs of resolving them is important to the company's deliberations about the program.

Amtrak Express Has Security Weaknesses That Pose Risks

We identified areas where the company could strengthen the security controls of the Amtrak Express program.

Operational Inefficiencies Cause Train Delays and Have Other Impacts

Amtrak Express relies on a decentralized, paper-based, manual process to ship packages nationwide, which contributes to operational inefficiencies that continue to

cause train delays. From April through September 2019, the company attributed 109 delays of 5 minutes or longer to the program,⁷ as Figure 4 shows.

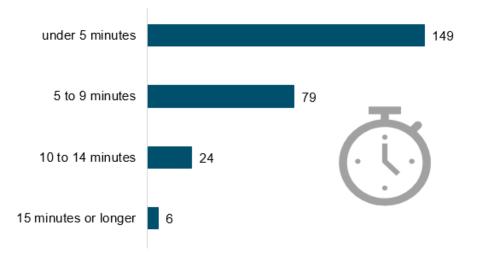


Figure 4. Delays Attributed to Amtrak Express, April–September 2019

Our prior work noted that train delays negatively affect passengers and future ticket sales. For example, we recently reported on the importance of on-time performance, concluding that more reliable performance helps retain existing customers and attract new riders while reducing labor, fuel, and other operating costs.⁸

Amtrak Express contributes to delays because company employees do not have information readily available to effectively plan and coordinate shipments, which is inconsistent with management control standards. This information is not available because the company does not have an electronic package management system, which is commonly used across the shipping industry. In 2014, the company researched the benefits of such a system to **mathematical and provide information on passenger baggage and** Amtrak Express shipments. At that time, the company estimated that the system could cost \$16 million, about \$3 million of which would cover Amtrak Express. Company leadership approved \$350,000 in FY 2020 capital funds to pilot the use of

Source: OIG analysis of company data

⁷ Delay minutes the company attributed to Amtrak Express accounted for a relatively small portion of overall train delays. For example, these delays accounted for less than one percent of the total minutes of delays that Amtrak could control from April 2019 through September 2019.

⁸ *Train Operations: Better Estimates Needed of the Financial Impacts of Poor On-Time Performance* (OIG-A-2020-001), October 14, 2019.

for its passenger baggage services; however, company officials said the pilot will not include Amtrak Express packages because the future of the program is unknown.

As a result, the manual, paper-based process continues to cause the following problems that contribute to train delays:

- Acceptance of packages that a destination station cannot accommodate. Some stations cannot logistically handle pallets or large volumes of packages, and the company relies on ticket agents and baggage employees at originating stations to correctly identify which types of packages the destination stations can accept. Employees, however, do not consistently identify the limitations of a station and sometimes route packages incorrectly. An electronic package management system could be configured so it does not permit employees to accept certain packages for shipment to stations that cannot handle them. Company employees cited examples of delays caused by pallets or large volumes of packages arriving at stations that do not have the necessary equipment to unload them efficiently. The company's internal reports on the causes of train delays confirmed this problem.
- Inability to ensure sufficient staff to unload packages. Station employees are unaware of incoming package volumes and sizes because the company relies on staff at originating stations to manually collect information about large or otherwise unusual shipments on paper forms and relay it to staff at the destination stations. Employees at the four stations we visited told us—and a company report confirmed—that this relay of information is inconsistent. Without such advance notice, we identified examples of receiving stations that did not have sufficient staff available to unload packages during the scheduled station dwell times. For example, unloading a shipment of 77 boxes of flowers caused a 20-minute delay at one station because the receiving station's employees were not prepared for the shipment.
- Limited ability to determine baggage car capacity for packages. Station employees accept Amtrak Express packages without information about how much baggage car capacity is available and how much is needed for passenger baggage once the train is in route. In one instance, the company suspended Amtrak Express service along a route because packages had consumed the capacity needed for passenger baggage during peak months. Adding to this

problem, employees commingle passenger baggage and Amtrak Express packages, which is inconsistent with company policy and makes it difficult for baggage staff to locate and unload items within short dwell times. Company reports attributed some delays to the organization of items in the cars.

An

ensure that employees do not load packages on baggage cars that are full or nearly full. Figure 5 shows passenger baggage and Amtrak Express packages commingled and stacked on top of each other.



Figure 5. Amtrak Express Packages Commingled with Passenger Baggage

Source: Amtrak, July 2019

In addition to contributing to train delays, we identified other impacts of the company's reliance on a decentralized, manual process and paper documentation, including the following:

. This is particularly problematic because company employees often transfer shipments on multiple trains before packages reach their final destinations. is consistent with industry shipping practices and would be critical to intercepting

packages if the company became aware of suspicious packages already in transit. Further, would also help company employees administer the program more effectively, including locating misrouted packages and improving service for Amtrak Express customers.

- Inability to confirm the accuracy and completeness of cash transactions. Baggage employees can currently record cash transactions on paper documents at certain locations, which limits the company's ability to validate the accuracy or completeness of what employees record. An electronic package management system would create and save revenue documents so the company can reconcile the recorded transaction to the cash received. Without such a system, the company will continue to be at risk for fraud, abuse, and missed revenue.
- **Inability to collect and analyze program data.** The company does not have data on who its Amtrak Express customers are and how they are using the program to inform its business decisions. Further, the company does not have data to identify the volume of packages shipped or the most popular destinations, which could help managers identify trends and marketing opportunities and plan for seasonal increases.

An electronic package management system could also provide data to inform other business decisions regarding the program. Such decisions include determining whether the company has the capacity to increase the volume of Amtrak Express, the optimum staffing levels to handle an increase, the quantity of baggage cars needed, and the amount of station storage capacity available and needed. These factors are important components to company deliberations about the future direction of the program.

CONCLUSIONS

The company has not taken effective steps to improve the security and operations of Amtrak Express. In the absence of stronger security controls built into the shipping process, the program continues to be susceptible to **security**. In addition, reliance on a paper-based process continues to hinder the company's ability to effectively operate the program, including planning and coordinating shipments between stations and **security**. These operational inefficiencies contribute to train delays, weakening the company's ability to deliver on-time performance to its core customers. If the company continues to operate the program, addressing these weaknesses and inefficiencies is imperative. Moreover, the cost of

these changes is a critical component of the company's ongoing deliberations about the program's future.

RECOMMENDATIONS

To improve the security and efficiency of program operations, we recommend that the Chief Operations Officer coordinate with the Chief Administration Officer and the Chief Marketing and Revenue Officer to take the following actions that are critical to any future scenario of Amtrak Express:

- Implement security controls to mitigate the risk of the security controls for employee training and more robust the security practices.
- 2. Improve the program's paper-based, manual process, including investing in electronic tools to reduce operational inefficiencies that contribute to train delays and have other impacts.

MANAGEMENT COMMENTS AND OIG ANALYSIS

In commenting on a draft of this report, the company's Executive Vice President and 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 implement security controls and plans to add additional security controls to address the recommendation. The target completion date is July 31, 2020.
- **Recommendation 2**: Management agreed with our recommendation to improve the program's paper-based, manual process and plans to implement actions to address the recommendation. The target completion date is December 31, 2020.

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

APPENDIX A

Objective, Scope, and Methodology

This report provides the results of our audit of the Amtrak Express program. Our objective was to assess the effectiveness of the program's security controls and operations. Our scope included the security controls and operational processes in place in 2019. We performed our audit work from June 2019 through December 2019 in Chicago, Illinois; Los Angeles, California; New York City; Philadelphia, Pennsylvania; and Washington, D.C. Certain information in this report has been redacted or summarized due to its sensitive nature.

To review the company's implementation of controls and processes, we applied a risk-based approach that considered revenue, regional representation, our prior investigations of misuse of the program, and insights from company officials to select four stations out of about 100 stations that participate in the Amtrak Express program. Based on the results of this approach, we visited Chicago Union Station, Los Angeles Union Station, New York Penn Station, and Washington Union Station in October 2019. Our work focused on the effectiveness of security controls and operations at these four stations. We limited certain results of our review to those four stations as noted throughout the report.

To assess the effectiveness of the company's security controls over Amtrak Express shipments, we reviewed the company's policies and procedures to identify security controls and standards. We visited the four stations to observe physical security controls and frontline employees implementing these controls and steps taken to process packages. At each station, we also reviewed all September 2019 waybills to determine the extent to which employees enforced

. We also interviewed company and privatesector shipping officials to understand current practices. To identify basic security measures to secure shipments, we conducted research of private-sector shipping companies. In addition, we interviewed company officials and agents from our Office of Investigations to identify security gaps, including discussing the cases of shipping illegal drugs and the subsequent impact on the company.

To assess the effectiveness of the operations of the Amtrak Express program, we interviewed company officials and reviewed company reports to understand the program's operations and identify the impact of any operational inefficiencies. We also

interviewed frontline employees administering the program at the four stations we visited. To identify gaps, we reviewed Amtrak Express policies and procedures and compared them to the actual practices we observed. In addition, we compared the practices to management control standards and shipping industry practices.

We conducted this performance audit in accordance with generally accepted government 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 provided a reasonable basis for our findings and conclusions based on our audit objective.

Internal Controls

We reviewed internal controls the company had in place to mitigate security risks related to Amtrak Express, such as **security**. We also reviewed controls within the program's operations, such as **security** and loading practices. To identify any breakdowns in those controls, we conducted physical observations of security practices and operational controls at the four stations we visited to determine whether they were operating effectively. To identify whether the paper-based system presented any risk of fraud and abuse, we also reviewed internal controls regarding Amtrak Express financial transactions. We reported on the limitations we identified.

Because our objective did not include a review of all related internal controls for Amtrak Express, we limited our conclusions and recommendations to controls in the areas noted above. We did not review the program's overall system of controls.

Computer-Processed Data

We obtained computer-processed data from company personnel regarding FY 2019 Amtrak Express revenue by station. We compared these to total revenue data we accessed in SAP, the company's financial system of record, and did not identify any material differences. We also obtained data on train delays from the company's online reporting system. We compared data we retrieved to reports the company provided and did not identify any material differences. We concluded that the data provided were sufficiently reliable for the purposes of our audit.

Prior Reports

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

- Train Operations: Better Estimates Needed of the Financial Impacts of Poor On-Time *Performance* (OIG-A-2020-001), October 14, 2019
- Safety and Security: Physical Security Vulnerabilities at Washington Union Station and Ivy City Yard (OIG-A-2019-009), July 22, 2019
- Safety and Security: Longstanding Physical Security Vulnerabilities in Philadelphia Pose Risks (OIG-A-2018-007), April 24, 2018
- Employees Terminated, Suspended After Violating Company Policies (OIG-WS-2018-316), March 21, 2018
- Employee Terminated for Violation of Policies (OIG-WS-2018-311), October 10, 2017
- Sentencing for Employee Convicted of Possession with Intent to Distribute Cocaine (OIG-WS-2018-304), September 28, 2017
- Violation of Amtrak Standards of Excellence (OIG-I-2017-504), January 9, 2017

APPENDIX B

Management Comments

NATIONAL RAILROAD PASSENGER CORPORATION

Memo

MTRAK

Date	January 17, 2020	From	Scot Naparstek, EVP COO
То	Jim Morrison, Assistant Inspector General, Audits	Departments	Operations
		cc	Eleanor Acheson, EVP General Counsel Caroline Decker, VP Stephen Gardner, Sr. EVP Carol Hanna, VP Controller Roger Harris, EVP Robert Jordan, VP
			Dennis Newman, EVP Steven Predmore, EVP Mark Richards, Sr Director Amtrak Risk & Controls DJ Stadtler, EVP Chief Trugman, APD Tracie Winbigler, EVP CFO Christian Zacariassen, EVP

Subject Management Response to SAFETY AND SECURITY: Addressing Security Weaknesses and Operational Impacts of Amtrak Express is Critical to the Program's Future (Draft Audit Report for Project No. 011-2019)

This memorandum provides Amtrak's response to the draft audit report entitled, "SAFETY AND SECURITY: Addressing Security Weaknesses and Operational Impacts of Amtrak Express is Critical to the Program's Future". Amtrak appreciates the opportunity to respond to the OIG's report and recommendations. 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 improve the security and efficiency of program operations, we recommend that the Chief Operations Officer coordinate with the Chief Administration Officer and the Chief Marketing and Revenue Officer to take the following actions that are critical to any future scenario of Amtrak Express:

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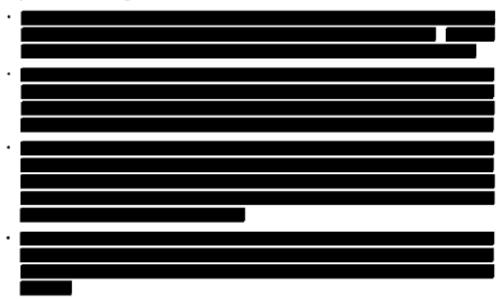
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NATIONAL RAILROAD PASSENGER CORPORATION

1. Implement security controls to mitigate the risk of

, including controls for employee training and more robust practices.

<u>Management Response/Action Plan</u>: We agree with adding additional security controls and will implement the following:



<u>Responsible Amtrak Official (s)</u>:, AVP of Customer Service and Stations, Chief of APD Police, AVP Training and Development, VP & Chief Technology Officer, Senior Director of Services and Standards

Target Completion Date: July 31, 2020

Improve the program's paper-based, manual process, including investing in electronic tools to reduce operational inefficiencies that contribute to train delays and have other impacts.

<u>Management Response/Action Plan</u>: We will be conducting an assessment of the Amtrak Express business. As a part of the assessment we will do a business process discovery exercise which will incorporate the investment required to implement a

<u>Responsible Amtrak Official(s)</u>: AVP of Customer Service and Stations, AVP Training and Development, AVP IT – Corporate and Operations Technologies, Senior Director of Services and Standards

Target Completion Date: December 31, 2020

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APPENDIX C

Abbreviations

APD Amtrak Police Department

FY fiscal year

OIG Amtrak Office of Inspector General

the company Amtrak

the program Amtrak Express

APPENDIX D

OIG Team Members

Eileen Larence, Deputy Assistant Inspector General, Audits

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Jodi Prosser, Senior Audit Manager

Cindi Anderson, Senior Auditor, Lead

Thelca Constantin, Senior Auditor

Mark Scheffler, Senior Auditor

Rachel Powell, 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.

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