AMTRAK OFFICE *of* INSPECTOR GENERAL
NATIONAL RAILROAD PASSENGER CORPORATION

GOVERNANCE:

Opportunities Exist to Better Use Data to Improve the Customer Experience

OIG-A-2024-006 | April 18, 2024

This page intentionally left blank.

Memorandum

To: Eliot Hamlisch
Executive Vice President, Marketing and Chief Commercial Officer

From: James Morrison
Assistant Inspector General

Date: April 18, 2024

Subject: *Governance: Opportunities Exist to Better Use Data to Improve the Customer Experience* (OIG-A-2024-006)

Providing consistent, high-quality customer service has been a longstanding strategic priority for Amtrak (the company).[1] To that end, the company uses customer satisfaction surveys and other tools to collect data to help identify issues, inform business decisions, and ultimately improve the customer experience.

Our objective was to assess how the company uses the data it collects to improve the customer experience. To address our objective and assess the company's use of these data, we collected and analyzed its outbound communications to customers;[2] late train reports; call center data,[3] including hold times; and reports documenting inbound communications from customers. We also interviewed company executives about customer service goals and initiatives, as well as key officials responsible for providing customer service, including those in charge of call centers and those responsible for analyzing customer feedback from surveys. We reviewed commonly accepted management standards for organizations, including standard practices in the call center

[1] For example, in its most recent five-year plan, the company stated that one of its three core values is to "put customers first," with a more specific goal of providing consistent and courteous customer service. See Amtrak's *Fiscal Year 2024-2029 Service and Asset Line Plans*.

[2] We conducted our analysis of outbound communications based on the company's three service lines: 1) long-distance train routes, 2) state-supported train routes, and 3) Northeast Corridor train routes. To conduct this analysis, we used data the company provided from six different communications sources and downloaded the company's daily late train reports to determine which trains across the company's network were delayed during our two-week analysis period. For additional details about our methodology, see Appendix A.

[3] The company operates its primary call center with internal employees in Philadelphia, Pennsylvania, and supplements it with contractor staff at a second call center in Port St. Lucie, Florida. The Philadelphia call center receives all types of customer service calls, and the Port St. Lucie location primarily receives calls for travel reservations.

industry. Additionally, we interviewed management officials who oversee employees providing front-facing customer service, such as onboard and station staff. For more details on our scope and methodology, see Appendix A.

SUMMARY OF RESULTS

The company is expanding its use of customer satisfaction data to identify and drive a wide variety of customer service improvements, such as allowing customers to modify reservations online and providing more innovative food and beverage offerings. As the company implements these initiatives, we identified three targeted opportunities—mostly related to communications—to use the customer feedback data it collects to bolster its overall service improvement efforts:

- **Outbound communications during en route train delays.** In March 2023, the company increased the number of methods it uses to communicate with passengers during en route delays. As of September 2023, however, about 25 percent of customers still reported not hearing information about their delays, and the company's data do not allow it to easily determine what electronic communications, if any, it sends about specific delays. We analyzed a two-week period and found that customers on delayed trains received communications about those delays at widely varying times or sometimes not at all. Establishing thresholds for when to initially communicate with customers about en route delays—and measuring and reporting on its performance—could help the company better assess the effectiveness of its customer communications and identify opportunities for improvement.[4]
- **Inbound communications.** The company's primary measure of call center performance—the average speed to answer calls—improved from 9.5 minutes in fiscal year (FY) 2022 to 5.5 minutes in FY 2023. A senior Marketing official attributes this improvement to more call center staff, and in April 2024, company officials told us they have seen further improvements in FY 2024. At the same time, however, more than 200,000 calls in FY 2023 (4 percent) remained on an initial hold for 30 minutes or more. Additionally, more than 900,000 calls (15 percent) were abandoned,[5] which Marketing department officials agreed is too high. This is occurring, in part, because the company does not report on its

[4] Committee of Sponsoring Organizations of the Treadway Commission (COSO), May 2013.
[5] Calls that are not answered are referred to as "abandoned calls." The proportion of calls not answered is referred to as the "abandonment rate."

performance for these two commonly used metrics or use this performance to establish relevant goals.[6]

- **Internal use of customer feedback.** In December 2022, the company expanded its call center case management system to request that field employees document the actions taken in response to customer feedback. Known as the "feedback loop," we found three challenges with the design of this feature that limits the company's ability to assess its effectiveness.

To help the company better provide consistent, high-quality customer service, we recommend a series of actions to improve its use of customer feedback data. These include establishing thresholds and goals to measure its performance in communicating with customers, assessing additional categories of call center data, and conducting a review of its recent changes to the call center case management system. In commenting on a draft of this report, the Executive Vice President, Marketing and Chief Commercial Officer, agreed with our recommendations and identified actions the company plans to take to address them. For management's complete response, see Appendix C.

BACKGROUND

The company's primary source of customer feedback is the Customer Satisfaction Index (CSI) survey, which it sends to passengers who meet certain eligibility requirements.[7] It uses the information it gathers in these surveys to drive improvement efforts. The company also uses the surveys to determine an overall score for customer satisfaction, which is one of three factors it considers in its financial incentive program for management employees.

Three departments have primary responsibilities for overseeing or providing customer service:

- **The Marketing and Commercial department** (Marketing department) manages the CSI survey, oversees the company's call centers, and staffs the Customer Communications Team, which is the group primarily responsible for sending communications to customers during en route delays.

---

[6] COSO, May 2013.

[7] To be eligible, customers cannot have received another survey invitation from the company within the past 30 days, must not be company employees or contractors, must have an email address on file with the company, must reside in the United States, must be over 18 years of age, and other considerations.

- **The Service Delivery and Operations department** (Operations department) includes the Transportation group and the Customer Service Stations and Onboard group. The Transportation group provides conductors, and the Customer Service Stations and Onboard group provides ticketing agents and onboard service staff. The department also includes the Mechanical group, which does not directly interface with customers but is responsible for the maintenance and cleanliness of the train. Finally, the department's Consolidated National Operations Center shares critical information regarding the causes of delays throughout the country with the Customer Communications Team.
- **The Digital Technology and Innovation department** (Digital Technology department) designs and maintains systems and applications to track customer feedback and other customer service data.

THE COMPANY IS UNDERTAKING EFFORTS TO USE DATA TO IMPROVE CUSTOMER SERVICE

The company is expanding its use of customer feedback data to identify and drive a variety of customer service improvements. In September 2022, the company launched a new version of its CSI survey[8] that includes detailed questions to follow up on customers' responses and additional open-ended questions to solicit comments. For example, the previous version included a broad question about customers' experiences with onboard staff, but the new version allows customers to indicate the specific position—the conductor, for example—that they are referring to in their feedback. The new version also includes questions tailored to the customer's trip. For example, if the customer experienced a delay—either in their departure time or while en route—the survey now includes questions asking how the customer heard about the delay.

The company is using the additional data it collects in its CSI survey to analyze the customer experience in a number of ways, including the following:

- **Identifying customers' priorities.** The company has begun using the expanded survey data to identify the aspects of the customer experience that most strongly influence overall CSI scores.[9] It also analyzes these data by train route and class

[8] The company refers to the new survey as CSI 3.0 and the previous version as CSI 2.0. The company ran both surveys in parallel for one year to ensure data integrity for calculating the CSI scores.
[9] For example, in the first quarter of FY 2024, the company identified that poor on-time performance negatively affected overall CSI scores, but these scores were partially offset by helpful service from company staff.

of travel to better understand, for example, the factors most likely to influence the CSI scores of a long-distance, coach-class passenger versus those of a first-class Acela passenger.

- **Predicting the impact of specific improvements.** The company has begun using the survey data to model potential impacts of specific improvements on overall CSI scores, such as communicating with customers regarding delays.
- **Understanding customer service scores for a specific train route.** The company has begun analyzing CSI scores by train route and number to determine how individual train crews contribute to or detract from overall CSI scores each month.

Some targeted, data-driven improvement efforts that have flowed from these analyses include allowing customers to modify their reservations online and providing more innovative food and beverage offerings.[10]

The company has also undertaken initiatives to make the CSI survey results more widely available across the company. For example, company personnel—including conductors and the onboard group—can now access the data in a suite of dashboards to gain insights on their areas of responsibility and identify opportunities for improvement. In addition, the Marketing department now sends summary information from the dashboards to executive leadership each month and discusses the results at weekly senior leadership meetings.

As we reviewed these initiatives and the company's use of data to improve the customer experience, we identified three targeted opportunities—mostly related to communications—to use the data it collects to bolster its overall service improvement efforts, as discussed below.

THE COMPANY HAS OPPORTUNITIES TO USE EXISTING DATA TO IMPROVE COMMUNICATIONS ABOUT EN ROUTE DELAYS

The company has increased the number of methods it uses to communicate with customers about en route delays, including adding email and text messaging. Our analysis found, however, that the timeliness of these communications varied widely

---

[10] The company is also undertaking several other broad customer service initiatives intended to improve the customer experience that are not data-driven. These include passenger car refurbishments and fleet replacements across the entire network.

and, in some cases, did not occur at all. Better measuring and reporting on its performance in providing timely communications to customers could help the company identify and implement further improvements.

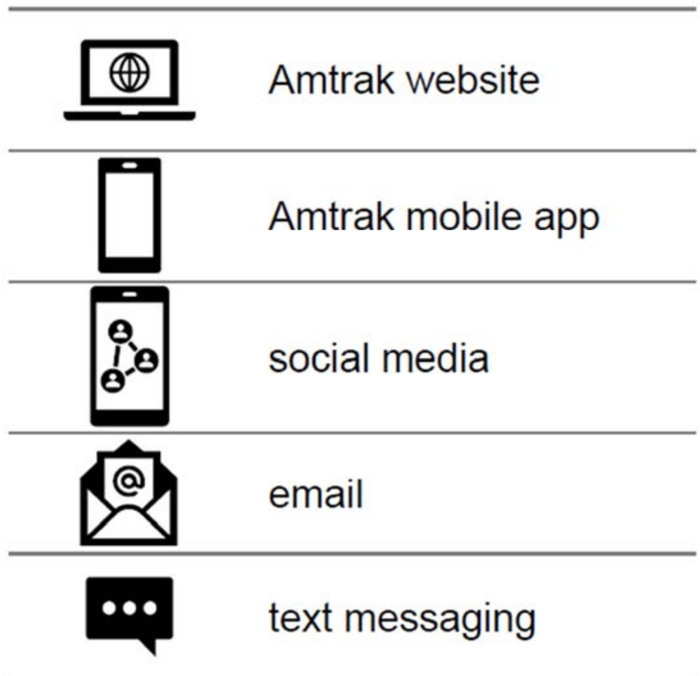
The Company Increased Communication Methods, but Timelines Varied Widely

The company's FY 2023 CSI survey results showed that customers heard about en route delays primarily through conductors' onboard announcements.[11] In addition to these announcements, the company uses five electronic methods to communicate with customers during an en route delay, including email and text messaging, which the Customer Communications Team introduced in March 2023.[12] Figure 1 shows these five methods.

[11] The company does not track conductors' onboard announcements about delays; therefore, we could not assess the timeliness or frequency of these announcements.

[12] Prior to March 2023, customers could receive automated emails or text messages from the company's scheduling and reservations system and its call centers, but not from the Customer Communications Team, which is primarily responsible for communicating to customers about en route delays.

Figure 1: Methods for Communicating about En Route Delays



Source: Office of Inspector General (OIG) analysis of interviews with company officials

The FY 2023 CSI survey results showed an increase in the number of customers who heard about their delays through text messaging. Nonetheless, 25 percent of respondents in September 2023 reported not hearing any information about their en route delays—a figure that remained relatively consistent even after the company expanded its communications methods. The company cannot easily determine, however, whether it sent communications about specific en route delays and, if so, when it sent them because the communications were not stored in a centralized repository and were not readily accessible.

We analyzed outbound communications for 88 trains over a two-week period in May 2023[13] and found that the company sent its initial electronic communications about en route delays to customers at widely varying times, with some occurring minutes after the delay began, some hours later, or some not occurring at all. For example, we

---

[13] For this analysis, we selected trains delayed beyond certain timeliness thresholds. We selected the thresholds based on parameters the company uses for its long-distance (120 minutes) and state-supported routes (30 minutes) when it computes its CSI score. For the Northeast Corridor routes, the company does not have a threshold so we selected 30 minutes. For more details, see Appendix A.

found instances when the company sent initial communications about en route delays for long-distance trains—typically overnight trips—up to 12, 16, or 24 hours after the delays began. For one *Northeast Regional* train—for which trips typically are eight hours or less—the only communications about its en route delay were sent to customers more than four hours after the delay began.

More specifically, for en route delays on long-distance trains, we found that the Customer Communications Team sent initial communications 2 hours or more after the delay began for 14 of 27 trains (52 percent), as Figure 2 shows.

Figure 2: Timing of Initial Customer Communications for En Route Delays, Long-Distance Routes, May 4–17, 2023

Source: OIG analysis of company documents

On Northeast Corridor routes, which include the *Acela* and *Northeast Regional* trains, we found that the Customer Communications Team sent initial communications more than 30 minutes after the delay began on 19 of 30 trains (63 percent), and did not send any electronic communications on 2 trains (7 percent), as Figure 3 shows.

Figure 3: Timing of Initial Customer Communications for En Route Delays, Northeast Corridor, May 4–17, 2023

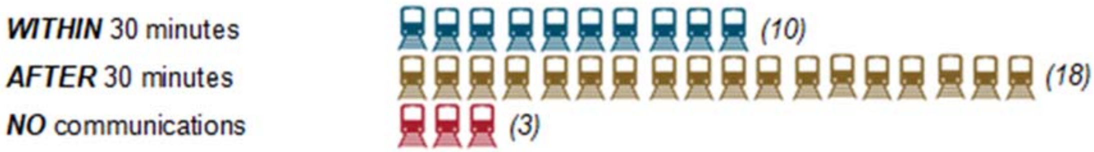
Source: OIG analysis of company documents

Similarly, for delays on state-supported routes,[14] the Customer Communications Team sent initial communications more than 30 minutes after the delay began for 18 of 31 trains (58 percent), and it did not send any communications for 3 trains (10 percent), as Figure 4 shows.

---

[14] The company operates 28 routes under a joint mission with 20 transit organizations across 17 states to deliver and grow the country's rail transportation network. Throughout this report, we refer to these routes as "state-supported."

Figure 4: Timing of Initial Customer Communications for En Route Delays, State-supported Routes, May 4–17, 2023



Source: OIG analysis of company documents

Challenges Hinder the Company's Ability to Measure and Report on How Well it is Communicating with Customers

When we conducted our analysis, the company could not readily assess the timeliness of its communications with customers because it had not organized the communications data in ways that made it easy to access, analyze, and report on. Instead, it stored the data in multiple, disconnected locations. We raised these issues with company officials, and, during our audit, the Digital Technology department consolidated all of the communications the company sends to customers into one repository, including those addressing en route delays, its guest rewards program, and ticket sales promotions. Digital Technology officials noted, however, that the data are still not easy to access or filter so they are working to create dashboards to provide easier access to this information. They expect to complete the dashboards in the near future. Marketing department officials said that when they are complete, these dashboards would be useful for identifying communications sent during a specific en route delay.

Better access to these communications records would allow the company to determine if and when it provided information to customers on delayed trains. The company has not, however, established thresholds for when to initially communicate with customers after a delay (for example, no later than 30 minutes after a delay begins), the frequency with which it will update customers after these initial communications, or goals for how well it communicates within those thresholds to track performance, as management standards suggest.[15] The senior official in charge of the Customer Communications Team told us he developed informal timeliness goals for various routes and agreed that it would be helpful to start measuring his team's performance against these goals. He also noted that since his team's customer communications rely on receiving prompt notice about delays from the company's Consolidated National Operations Center, he is

---

[15] COSO, May 2013.

working with the Operations department to establish timeliness goals for sharing this information. Digital Technology department officials also told us their staff could create a report that compares the timeliness of company communications to the established goals if the Marketing department prioritized this request for information.

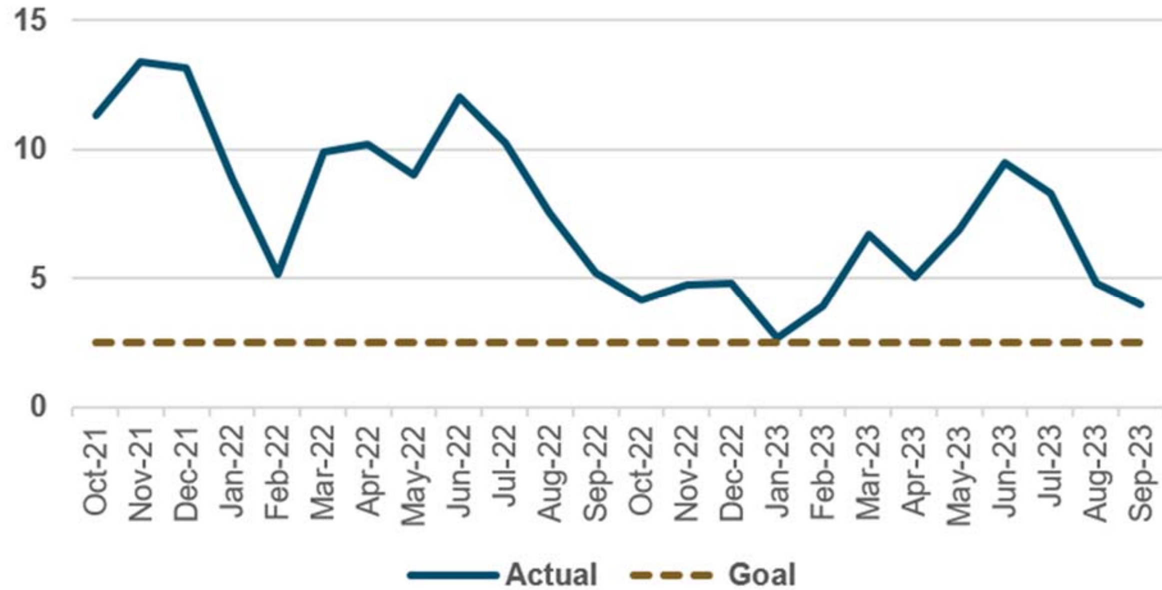
Establishing measurable goals and reporting on them would allow the company to determine how well it is communicating with customers and to better understand the feedback it receives from customers about communication issues. For example, the company would be able to more easily determine whether customers who report not hearing about a delay missed the company's communications or if the company did not provide any in the first place.

THE COMPANY HAS OPPORTUNITIES TO FURTHER IMPROVE CUSTOMER EXPERIENCE WITH CALL CENTERS

In FY 2023, the company improved the performance of its call centers but could better use its existing data to measure call center performance, identify challenges, and continue improving the customer experience.

The company received more than 5.4 million calls in FY 2022 and more than 5.9 million calls in FY 2023. During this time, it improved its average speed to answer—its primary measure of call center performance—from 9.5 minutes in FY 2022 to 5.5 minutes in FY 2023. A senior Marketing department official told us this improvement was the result of a 29 percent increase in call center staffing in FY 2023, and this official expects continued improvement. In April 2024, company officials told us that the improvements have begun, and the company's average speed to answer is under three minutes thus far in FY 2024. Nonetheless, over the last two fiscal years, the company did not achieve its goal of 2.5-minutes in any month, as Figure 5 shows.

Figure 5: Average Minutes on Hold before an Agent Answered a Call, FYs 2022 and 2023[a]



Source: OIG analysis of company documents

Note: [a] In January 2023, the company's average speed to answer was 2.7 minutes, just short of its goal of 2.5 minutes.

Marketing department officials told us they also use secondary call center metrics, including the total length of individual calls, the length of time customers are placed on hold after an agent answers, and the proportion of times an agent satisfies a customer's issue without having to escalate the matter to a supervisor. The company does not, however, have goals related to other important data it collects that are commonly used in the call center industry, including the following:

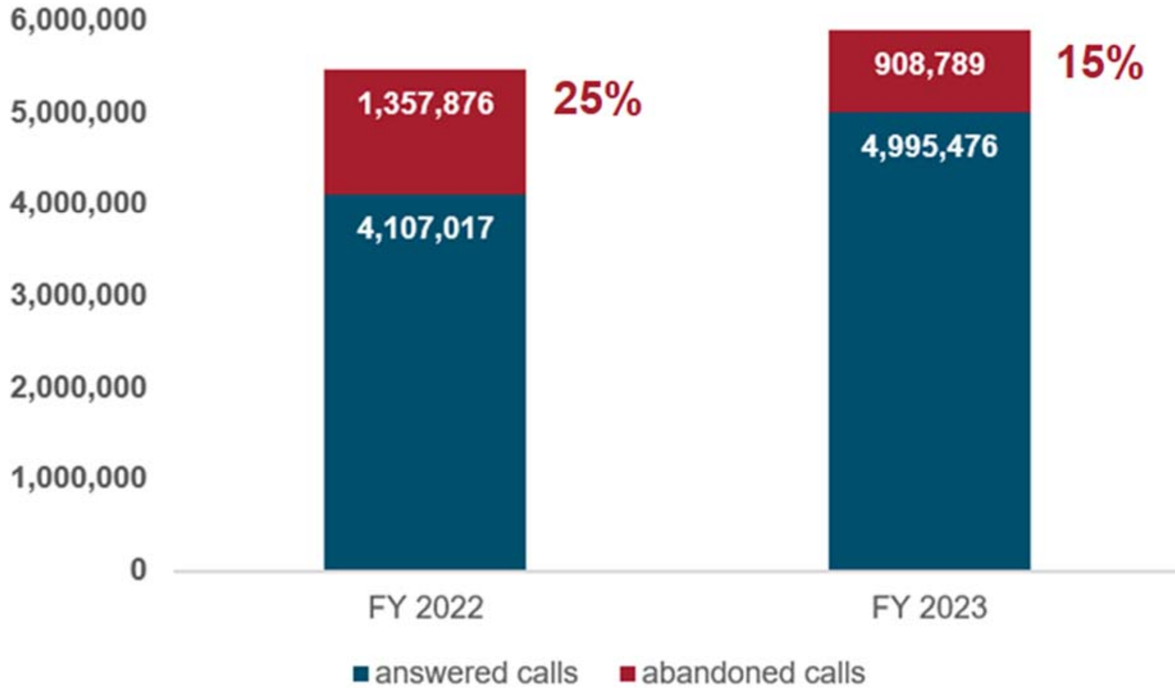
- the number of calls on hold for extended periods before they are answered or abandoned
- the overall call abandonment rate

We analyzed the company's data and determined that although these other two aspects of the customer experience show progress, they could further improve. For example, in FY 2022, about 500,000 calls (9 percent of total calls) were on hold for 30 minutes or longer before they were answered or abandoned. In FY 2023, this number improved, but it remained at approximately 200,000 calls (4 percent).[16]

In addition, the company reduced its number of abandoned calls from approximately 1.4 million in FY 2022 (25 percent of total calls) to about 900,000 in FY 2023 (15 percent of total calls),[17] as Figure 6 shows. Marketing department officials agreed that the company's current rate is too high, our research suggests that call center industry averages are approximately 5 percent, and acceptable upper limits are from 9 to 10 percent.[18]

[16] For more detail, see Appendix B.
[17] The company tracks the number of abandoned calls and the number of times that customers receive busy signals.
[18] Call center industry sources include the International Customer Management Institute, a professional association; SQM Group, a software and research firm; and MetricNet, a consulting firm. A variety of factors can affect the abandonment rate, such as the reason for the call, the organization's industry, the day of the week, and the time of day. An organization may choose an abandonment rate goal based on these factors and other business decisions.

Figure 6: Number and Proportion of Abandoned Calls, FYs 2022 and 2023



Source: OIG analysis of company documents

The Marketing department, however, does not measure and report its performance to senior leadership regarding long hold times or abandonment rates, leaving executives largely unaware of the company's performance for these two commonly used metrics. Moreover, the Marketing department has not assessed the costs and benefits of attempting to improve the company's performance further or used that assessment to establish appropriate goals, as management standards suggest.[19] As a result, the company is missing an opportunity to fully evaluate its call center performance and determine how much to invest to improve these aspects of the customer experience.

THE COMPANY HAS OPPORTUNITIES TO IMPROVE ITS INTERNAL USE OF CUSTOMER FEEDBACK

The company recently developed a feature to better use customer feedback to call center agents by tracking what field employees did in response to that feedback. We identified

[19] COSO, May 2013.

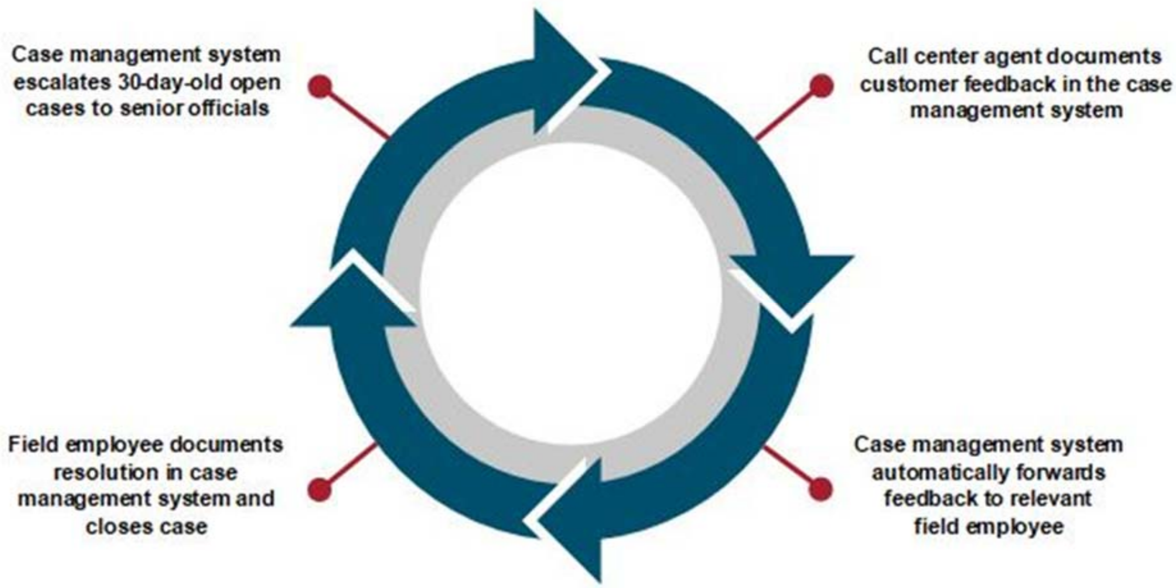
three challenges, however, with this new feature. These challenges occurred, in part, because Marketing department officials did not include Operations personnel when developing this feature, which ultimately limited its effectiveness in responding to and leveraging customer input.

The Company Recently Implemented a Feature to Document Responses to Customer Feedback

The company uses a case management system to document the interactions of call center agents with each customer and the actions they take in response. Typical call center cases include customers who need to re-book a trip, request a refund, register a praise or complaint, or request information. The company initially used the system to automatically email the case feedback details to a distribution list of field employees in various departments, including the Transportation group and the Customer Service Stations and Onboard group. For example, the system would email a customer complaint case about an employee on a *Northeast Regional* train to the *Northeast Regional* distribution list. This system did not, however, require the employees who received the complaint to document any actions taken in response.

In December 2022, the Marketing department augmented the case management system to hold employees more accountable for addressing the customer feedback recorded in it. Although the system continued to route cases to similar company distribution lists, the Marketing department added a feature requesting that field employees responsible for addressing the case document actions taken in response. This new feature is known as the “feedback loop.” Cases in the feedback loop are closed if the field employee marks it as resolved or are automatically escalated to senior company officials if they have been unresolved for more than 30 days. Figure 7 outlines the new feedback loop feature.

Figure 7: Feedback Loop Feature to Document Response to Customer Feedback



Source: OIG analysis of company documents and interviews

Feedback Loop Feature Has Three Key Challenges

When we analyzed data from the company's feedback loop,[20] we identified the following three challenges:

- **Some cases are sent to the wrong field employees.** The feedback loop feature sometimes routes cases to the wrong field employees for follow-up. For example, we found 3,426 cases (24 percent) that should have been routed to Mechanical department staff but were incorrectly routed to Transportation department staff. When they received cases outside their purview, company officials described ignoring them, closing them as not actionable, forwarding them to others via email, or reassigning them to a different distribution list within the feedback loop.

- **Some cases are non-actionable.** The feedback loop feature forwards cases to field employees that those employees cannot take action on—for example, passenger complaints about train car cleanliness that do not include the car

[20] We analyzed feedback loop data from December 28, 2022, to July 12, 2023, which included 14,014 cases.

identification number. Although field employees would have had the same issue previously, the new feature requires them to add comments and mark these non-actionable cases as closed or leave them open and escalate them to senior company officials. We found that 668 of 4,185 (16 percent) of cases marked as closed included terms such as "no action required/no action taken" in the resolution comments, which aligns with what Operations department officials told us—that many cases are not actionable.[21] In addition, a single customer complaint sometimes generates multiple cases,[22] adding to the volume of non-actionable information that field employees must sift through. Regardless of whether the feedback loop forwards non-actionable cases to field employees, all customer interaction data are documented and stored in the case management system as described above.

- **Some cases are redundant with data from other sources.** Senior officials noted that data in the feedback loop are often redundant with—and less complete than—the feedback they receive from other sources, such as the CSI survey results and the Mechanical department's system that conductors use to report problems they identify on the train while en route.

These weaknesses occurred, in part, because when the Marketing department designed the feedback loop feature and identified its business requirements, it did not coordinate with those stakeholders who would be responsible for addressing customer feedback to get their input on where to route cases, what kinds of cases are actionable, or what kinds of issues are redundant with other systems.[23] This is inconsistent with project management standards for gathering requirements and engaging stakeholders.[24]

During our audit, the Marketing department began making changes to the feedback loop feature based on input from other company officials. For example, Marketing

---

[21] Although we were able to determine the number of closed cases marked "no action taken," the number of cases that are not actionable may be higher or lower because of the limitations outlined in this section.
[22] A single customer communication can have multiple components, each of which creates a separate case in the feedback loop. For example, if a customer complains about rude employees, unsatisfactory food choices, and cleanliness in a single telephone call, the feedback loop will create three separate cases, all of which a field employee must individually review and close.
[23] Officials from the Marketing department sponsored the feedback loop project, including providing input on requirements. Officials from the Digital Technology department worked with the Marketing department to implement the feedback loop.
[24] Project Management Institute, *A Guide to Project Management Body of Knowledge*, Sixth Edition, 2017.

officials removed some categories of cases when field employees could not take action, such as finding the accommodation size of roomette unsatisfactory, and added a "No Action Needed" checkbox to the feedback loop feature to make it easier for field employees to manually close non-actionable cases. Despite these improvements, the three challenges we identified remain.

Senior Operations department leaders told us that the intent of the system was worthwhile, but the volume of cases they still receive—especially given that many are not actionable or misdirected—makes it challenging to sift through them and identify those that present meaningful opportunities to improve the customer experience. As a result, the current feedback loop has limited effectiveness for leveraging customer input and holding employees accountable for responding.

Operations officials told us that if the company continues to use the feedback loop, it would be more effective if it is modified to prioritize the actionable cases, exclude non-actionable or redundant cases to the extent practical, and ensure that the correct field employees receive actionable cases for follow up. Additionally, although the Marketing department uses the total number of cases closed as its primary metric of the feedback loop's effectiveness, the challenges we identified indicate that this may not be a meaningful way to evaluate the feature's effectiveness. Without incorporating this and other input from relevant Operations stakeholders, the company may not be able to effectively determine whether to continue using the feedback loop and, if so, how to increase its effectiveness.

CONCLUSIONS

A key strategic objective for the company is to provide consistent, high-quality customer service. Establishing goals and reporting to Marketing department and senior leadership officials on key customer service issues—such as timely communications about en route delays, hold times for customer calls, and the proportion of abandoned calls—could further improve the customer experience. In addition, determining whether to continue using the feedback loop and, if so, identifying and implementing ways to increase its effectiveness could further enhance the customer experience.

RECOMMENDATIONS

To help the company better meet its strategic objective of providing consistent, high-quality customer service, we recommend that the Executive Vice President, Marketing and Chief Commercial Officer take the following five actions:

1. Work with the Digital Technology department to complete the customer communications dashboard to ensure that stakeholders can more easily access and filter data about communications sent to customers during en route delays.

2. Establish thresholds for when to communicate electronically with passengers during en route delays and the frequency of updates about those delays. To track and assess performance, establish goals for how well the Customer Communications Team meets those thresholds.

3. Work with the Digital Technology department to establish a process to regularly report to Marketing and Operations department officials and senior leadership on the Customer Communications Team's performance meeting the new goals for sending communications to customers about en route delays.

4. Measure and report performance to senior leadership on the call abandonment rate and the number of calls on hold for long periods. Assess the costs and benefits of improving in these two areas and use that assessment to establish goals to assess performance over time.

5. Work with relevant stakeholders to determine whether to continue using the feedback loop and, if so, how to increase its effectiveness, including a) determining which categories of cases to prioritize or remove, b) better ensuring cases are sent to the correct staff, and c) minimizing redundancy with other sources to the extent practical.

MANAGEMENT COMMENTS AND OIG RESPONSE

In commenting on a draft of this report, the Executive Vice President, Marketing and Chief Commercial Officer, agreed with our recommendations and detailed actions the company plans to take to address them, which we summarize below.

- **Recommendation 1:** Management agreed with our recommendation to work with the Digital Technology department to complete the customer communications dashboard so stakeholders can more easily access and filter data about communications sent during en route delays. Management stated that the Digital Technology department is working to collect the data elements required for reporting on customer communications during delays. The target completion date is December 31, 2024.

- **Recommendation 2:** Management agreed with our recommendation to establish thresholds for when to communicate electronically with passengers during en route delays and the frequency of updates about those delays, as well as set goals to track its performance. Management stated that its eCommerce group will (1) meet with business line stakeholders to determine the extent to which existing automated message delay thresholds need to be adjusted, (2) drive implementation of a reoccurring delay message to ensure that delay messaging goes out via a pre-determined cadence (for example,, every 30 minutes), and (3) implement an alert to the Customer Communications Team so it knows to send a customer communication. The target completion date is December 31, 2024.

- **Recommendation 3:** Management agreed with our recommendation to work with the Digital Technology department to establish a regular reporting process on the Customer Communications Team's performance meeting the new goals for sending communications to customers about en route delays. Management stated that once the customer communications dashboard is in place, they will be able to capture the messages sent to a particular train and assess when those messages were sent relative to the cadence determined as a part of Recommendation 2, yielding a report that demonstrates how well they are meeting goals associated with en route delay messages. The target completion date is December 31, 2024.

- **Recommendation 4:** Management agreed with our recommendation to measure and report performance to senior leadership on the call abandonment rate and the number of calls on hold for long periods. Management stated that the abandoned call percentage and on hold metrics will be added to the monthly dashboard that is reviewed by the Executive Leadership Team. The target completion date is December 31, 2024.

- **Recommendation 5:** Management agreed with our recommendation to work with relevant stakeholders to determine whether to continue using the feedback loop, and if so, how to increase its effectiveness. Management stated that it plans to continue using this process while in parallel making select improvements, including: (1) enhancing training for Customer Relations agents, (2) collaborating with the Digital Technology department to evaluate the extent to which they can provide integrated features with other systems, (3) conducting a review of the categories, groups, and reasons associated with each case and (4) continuing to work with field personnel to ensure that cases sent to them are reviewed regularly and associated actions are taken. The target completion date is March 31, 2025.

For management's complete response, see Appendix C. 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 company's use of the data it collects about its customer service efforts. Our objective and scope were to assess how the company uses the data it collects to improve the customer experience.[25] We conducted our work from October 2022 through April 2024 in Philadelphia, Pennsylvania; Chicago, Illinois; and Washington, D.C.

To understand the company's overall customer service strategy and goals, we reviewed company documents such as its five-year plan and 2024 legislative grant request, as well as the company's service standards and protocols. We also interviewed company executives and other senior officials to gain insight into the company's new and planned initiatives to improve customer service and to understand how the company uses data to set goals and assess performance.

To analyze outbound communications to customers during en route delays, we obtained six data files from the company containing records of the communications the Customer Communications Team sent. We then obtained the company's daily late train reports to determine which trains across its network were delayed beyond certain timeliness thresholds from May 4, 2023, through May 17, 2023, as we describe below in more detail.

To establish timeliness thresholds for use in our analyses of en route delays, we used the parameters the company uses for its state-supported and long-distance routes when it computes its CSI scores. The company excludes from its CSI calculations the survey results for state-supported trips delayed more than 30 minutes and long-distance trips delayed more than 120 minutes. A senior Marketing official told us the company does this because outside the Northeast Corridor, it is typically operating as a tenant on other railroads' tracks; therefore, the delays are often not in the company's control. Thus, we used a threshold of 30 minutes for communications on state-supported trips, and 120 minutes as a threshold for communications on long-distance routes. Because the company owns and controls most of the tracks along the Northeast Corridor, it includes the surveys for all Northeast Corridor trips in its CSI calculations; therefore, we could

[25] We excluded customer service data related to the Americans with Disabilities Act (ADA) of 1990 from this review because we have a separate body of audit work on ADA-related issues.

not apply a similar company-provided timeliness threshold. Instead, we selected 30 minutes as the threshold for our analysis of the communications the company sent to Northeast Corridor customers to align with the state-supported threshold. We then used the six data files the company provided to filter and sort the data by date and train and determine what communications, if any, the company sent to customers regarding these late trains and compare them to the timeliness thresholds.

We also interviewed a senior official from the Marketing department's Customer Communications Team, which is primarily responsible for sending communications about en route delays, as well as other groups that may send messages about services to assist with delays, including call center staff. We interviewed officials from the company's Consolidated National Operations Center about how they identify and report delays and with Digital Technology officials who provided data on the communications the company sent about the en route delays in our sample.

To conduct our analysis of inbound communications, we gathered company data on call center performance for FY 2022 and FY 2023, including the number of calls, hold times, and the number of abandoned calls. We performed a trend analysis on these data to determine how the company's average speed to answer had changed over time, identified the hold times for both answered and abandoned calls, and calculated the call abandonment rates. We spoke with managers in charge of day-to-day operations at the company's call center, as well as executives in the Marketing department who oversee the call centers, to understand the goals and metrics the company uses to assess performance and any challenges the department has identified. We also conducted research on call center metrics through a variety of resources, including International Customer Management Institute, a professional association; SQM Group, a software and research firm; and MetricNet, a consulting firm; we also spoke with a subject matter expert from MetricNet.

To assess the company's feedback loop feature, we spoke with the Marketing department personnel who requested it and the Digital Technology staff who assisted this effort to understand the initial intent of this feature and how the company was measuring its performance. We received data from the company that detailed the cases that its case management system sent to field employees for follow-up, and we assessed this information to determine how many were non-actionable or sent to the wrong employees. We also interviewed end users in the company's Operations department to identify examples of cases that had been misdirected, understand the impact of the feedback loop feature, and understand its relative benefits or challenges.

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 provides a reasonable basis for our findings and conclusions based on our audit objective.

Internal Controls

Our review considered the extent to which the company used its internal control network to assess whether departments implemented controls designed to specifically mitigate risks associated with managing a key strategic priority. In particular, we determined that the following two of the five internal controls areas were significant to our audit objective:

- **Control activities.** Management should design the entity's information system and related control activities to achieve the entity's objectives and implement control activities through policies.
- **Information and communications.** Management should use quality information and communicate this information internally to achieve the entity's objectives.

We developed audit work to ensure that we assessed each of these control areas by reviewing company policies, interviewing knowledgeable officials, and analyzing company customer service data. Because our review was limited to these internal controls and underlying principles, it may not have disclosed all of the internal control deficiencies that may have existed at the time of this audit.

Computer-processed Data

We obtained computer-processed data from the company's Marketing and Digital Technology departments. We interviewed company officials who oversee the data to understand how they collect, process, and manage the data to determine their reliability. We also reviewed the underlying data for reasonableness and completeness, and we shared our findings with relevant company officials. We determined that the data were sufficient and reliable for purposes of our review to identify opportunities to improve customer service.

Prior Reports

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

- *Human Resources: Additional Actions Needed to Improve Controls on Incentive Awards* (OIG-A-2017-014), August 15, 2017
- *Train Operations: Adopting Leading Practices Could Improve Passenger Boarding Experience* (OIG-A-2016-011), September 7, 2016
- *Human Capital: Incentive Awards Were Appropriate, But Payment Controls Can Be Improved* (OIG-A-2015-009), March 13, 2015

APPENDIX B

Table 1: Call Hold Times, FYs 2022 and 2023

	FY 2022		FY 2023	
Actual Length of Time on Hold	**Answered**	**Abandoned**	**Answered**	**Abandoned**
answered immediately, without hold time	640,043		1,228,660	
up to 2.5 minutes	1,378,921	373,324	1,736,361	315,444
2.5 minutes up to 15 minutes	1,153,168	601,151	1,447,860	430,370
15 minutes up to 30 minutes	590,206	222,165	420,520	115,483
30 minutes up to 45 minutes	211,076	78,875	107,423	31,729
45 minutes up to 1 hour	73,928	34,844	37,034	10,785
1 hour up to 2 hours	53,237	38,253	17,486	4,887
2 hours up to 3 hours	4,751	6,796	125	74
3 hours up to 4 hours	1,076	1,782	6	14
4 hours up to 5 hours	373	520	1	1
5 hours up to 6 hours	162	113	0	0
6 hours up to 7 hours	54	30	0	0
7 hours through 8 hours	22	23	0	2
Totals	**4,107,017**	**1,357,876**	**4,995,476**	**908,789**
Calls on hold 30 minutes or longer	344,679	161,236	162,075	47,492
Total calls on hold 30 minutes or longer		**505, 915**		**209,567**
Proportion of calls on hold 30 minutes or longer		***9%***		***4%***

Source: OIG analysis of company documents

APPENDIX C

Management Comments

NATIONAL RAILROAD PASSENGER CORPORATION

Memo

AMTRAK

Date:	April 8, 2024	From:	Eliot Hamlisch, EVP Marketing & CCO
To:	Jim Morrison, Assistant Inspector General, Audits	Department	Marketing & Commercial
		cc	Stephen Gardner, CEO Roger Harris, President Eleanor Acheson, EVP General Counsel Robert Grasty, EVP CHRO Laura Mason, EVP Capital Delivery Kevin McClafferty, Sr. Dir Sales & Customer Service Dennis Newman, EVP Strategy & Planning Steven Predmore, EVP CSO Roger Seitzinger, AVP e-Commerce Gerhard Williams, EVP Service & Delivery Ops Tracie Winbigler, EVP CFO Christian Zacariassen, EVP CIO

Subject: Management Response to **GOVERNANCE:** *Opportunities Exist to Better Use Data to Improve the Customer Experience* (Draft Audit Report for Project No. 001-2023).

This memorandum provides Amtrak's response to the draft interim audit report titled, "*Opportunities Exist to Better Use Data to Improve the Customer Experience*". Management agrees with all the noted OIG recommendations below and appreciates the opportunity to provide a response.

To help the company better meet its strategic objective of providing consistent, high-quality customer service, we recommend that the Executive Vice President and Chief Commercial Officer take the following five actions:

Recommendation #1:

Work with the Digital Technology department to complete the customer communications dashboard to ensure that stakeholders can more easily access and filter data about communications sent to customers during en route delays.

NATIONAL RAILROAD PASSENGER CORPORATION

Management Response/*Action Plan*:
Digital Technology is working to programmatically collect the two below data elements required for robust, actionable reporting on customer communications during delays. Once collected, reporting will be developed and distributed by Commercial.

1. Delay event start date/time (including train and category of delay)
2. Delay notifications sent to customers (including customer identifier, timestamp, contents of message)

Leveraging this data will enable reporting on key metrics including:

- Time elapsed between event start and first delay notification sent
- Coverage (% of delayed customers receiving notifications)
- Notification frequency
- Customer feedback on notification accuracy, timeliness, and frequency (from Amtrak's customer satisfaction survey data)

Timeframe:

- Longer-term automated reporting, including integration with vendor APIs required to collect the above data elements, is targeted for November 2024.

Responsible Amtrak Official(s): Roger Seitzinger, AVP e-Commerce

Target Completion Date: December 31, 2024

Recommendation #2:

Establish thresholds for (1) when to communicate electronically with passengers during en route delays and (2) the frequency of updates about those delays. To track and assess performance, establish goals for how well the Customer Communications Team meets those thresholds.

Management Response/*Action Plan*:
Addressing thresholds for electronic communications with the following actions:

- Automated systems have business rules already in place regarding the frequency with which ETAs/ETDs are checked, as well as delay thresholds in place that determine when a message is triggered. eCommerce will be meeting with business line stakeholders associated with both long-distance and corridor services to review the current business rules and to determine the extent to which adjustments are needed. (1-2 months)
- eCommerce will be driving the implementation of a reoccurring delay message. This will ensure delay messaging goes out via a pre-determined cadence (e.g., every 30 minutes) regardless of whether the delay threshold has increased or decreased, the objective being to continuously communicate delay status even when the delay status has not changed. Business stakeholders will collaborate to determine the cadence threshold. (Q1 FY25)

NATIONAL RAILROAD PASSENGER CORPORATION

- eCommerce will implement an alert sent to the Customer Communications Team (CCT) in circumstances where the system recognizes that a train has reached a pre-determined delay and no communication has been sent. This alert will ensure the CCT knows to send a communication, reducing communication gaps that may have been experienced historically. (Timeframe: Q1 FY25)

Responsible Amtrak Official(s): Roger Seitzinger, AVP e-Commerce

Target Completion Date: December 31, 2024

Recommendation #3:

Work with the Digital Technology department to establish a process to regularly report to Commercial and Operations department officials and senior leadership on the Customer Communications Team's performance meeting the new goals for sending communications to customers about en route delays.

Management Response/*Action Plan:*
Once the customer communications dashboard is in place, we will be able to more effectively measure the time between (1) CNOC event timestamp and (2) the timestamp associated with the first communication, as well as the cadence between each subsequent communication that follows thereafter. This report will capture the messages sent to a particular train, along with the timestamp of each message, measured relative to the cadence goals determined as part of Action Item #2. The overlay of these two items will yield a report that demonstrates how well we are meeting goals associated with enroute delay messages. (Timeframe: Q1 FY25)

Responsible Amtrak Official(s): Roger Seitzinger, AVP e-Commerce

Target Completion Date: December 31, 2024

Recommendation #4:

Measure and report performance to senior leadership on the call abandonment rate and the number of calls on hold for long periods. Assess the costs and benefits of improving in these two areas and use that assessment to establish goals to assess performance over time.

Management Response/*Action Plan:*
Abandoned call percentage and on hold metrics will be added to the monthly Dashboard that is reviewed with the ELT. Cost is quantified by required staffing levels to obtain ASA objectives and these vary depending on call volume and call type. As far as the benefits, any improvement in service level to the customer is beneficial. (Timeframe: Q1 FY25)

Responsible Amtrak Official(s): Kevin McClafferty, Sr. Dir Sales & Customer Service
Roger Seitzinger, AVP e-Commerce

Target Completion Date: December 31, 2024

Recommendation #5:

Work with relevant stakeholders to determine whether to continue using the feedback loop, and if so, how to increase its effectiveness, including a) determining which categories of cases to prioritize or remove, b) better ensuring cases are sent to the correct staff, and c) minimizing redundancy with other sources, to the extent practical.

Management Response/*Action Plan*:
Customer Service believes the feedback loop process using the Customer Relations Reporting application is effective and beneficial. It allows us to both share customer feedback with the field and track what was done to address any given complaint within the master case record. The feedback loop is also an effective way for us to share customer praise and suggestions with relevant employees and departments.

Customer Service plans on continuing to use this process, while in parallel planning to make select improvements, including:

- Enhance training for Customer Relations agents to ensure all sufficient information needed is collected in case details so that case recipients understand each complaint and can clearly identify subject of the complaint (staff name and work location, station name, train number, car number, etc.). (Timeline: Q1 FY25)
- Collaborate with Digital Technology to evaluate the extent to which we can provide increasingly integrated features with other systems for both internal and external resolutions to streamline reporting and to capture older case additions and updates. (Timeline: Assessment for level of effort to be completed by Q2 FY25)
- Conduct a review of the categories, groups and reasons associated with each case to ensure effective organization and to support the identification of cases to be sent to the field for follow up. Associated business rules will be adjusted as needed. (Timeline: Q4 FY24)
- Continue to work with field personnel to ensure cases sent to them are reviewed regularly and that associated actions are taken. (Ongoing)

Responsible Amtrak Official(s): Roger Seitzinger, AVP e-Commerce

Target Completion Date: March 31, 2025

APPENDIX D

Abbreviations

ADA	Americans with Disabilities Act
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CSI	Customer Satisfaction Index
Digital Technology department	Digital Technology and Innovation department
FY	fiscal year
Marketing department	Marketing and Commercial department
OIG	Amtrak Office of Inspector General
Operations department	Service Delivery and Operations department
the company	Amtrak

APPENDIX E

OIG Team Members

J.J. Marzullo, Deputy Assistant Inspector General, Audits

Melissa Hermes, Director

Jodi Prosser, Senior Audit Manager

Alejandra Rodriguez, Senior Manager, Data Analytics

Cindi Anderson, Senior Auditor, Lead

Samantha Apgar, Senior Auditor

Alison O’Neill, Communications Analyst

Nadine Bennett, Assistant General Counsel

Sid Schwartz, Contractor

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 www.amtrakoig.gov

Reporting Fraud, Waste, and Abuse

Report suspicious or illegal activities to the OIG Hotline

www.amtrakoig.gov/hotline

or

800-468-5469

Contact Information

Jim Morrison

Assistant Inspector General, Audits

Mail: Amtrak OIG

10 G Street NE, 3W-300

Washington, D.C. 20002

Phone: 202-906-4600