SAFETY AND SECURITY:
The Company Has Made Significant Progress Implementing New Safety Program
Memorandum

To: Steven Predmore  
   Executive Vice President/Chief Safety Officer

From: Jim Morrison  
       Assistant Inspector General, Audits

Date: April 8, 2021


Amtrak’s (the company) stated top priority is to ensure the safety of its employees and passengers, and it has devoted significant resources to this effort with mixed success. For example, in 2015, we reported on the Safe-2-Safer program, which it abandoned in 2017 because of inconsistent outcomes and weak employee buy-in. In FY 2018, it began its most recent effort—developing and implementing its System Safety Program Plan, commonly known as a Safety Management System (SMS). Unlike previous efforts, the SMS is in response to a federal requirement.¹ The Federal Railroad Administration (FRA) required the company to submit its program plan for review by March 2021 and fully implement it by March 2024. While acknowledging that the company has had to devote attention and resources to responding to the coronavirus pandemic and its financial and operational impacts, company officials stated that they continue to be fully committed to implementing the SMS well ahead of the March 2024 federally mandated deadline.

Since April 2020, we have been assessing the company’s progress implementing the program, and we have issued two interim reports during our work. The first assessed company efforts to establish a baseline measurement of its safety culture to be able to track progress over time.² The second assessed the extent to which the company fully uses its injury claims data to help identify additional safety risks to address.³ We discuss the results of this work later in this report where it is most relevant.

¹ 49 C.F.R. Part 270.
This third and final report assesses the company’s overall progress implementing its SMS. We examined the structure and components of the company’s program plan to determine whether it aligns with federal requirements and industry standards for similar programs. We also interviewed officials from the Operations and Safety departments responsible for developing and implementing the program; reviewed key documents, including the plan the company submitted to FRA; and reviewed the databases used to track injuries and claims to assess the company’s progress. For additional details on our scope and methodology, see Appendix A.

SUMMARY OF RESULTS

The company has made significant progress implementing its SMS. Early, proactive collaboration with FRA helped the company to develop and submit its initial program plan 28 months before the March 2021 deadline and to begin executing key components of the plan well ahead of the March 2024 implementation deadline.\(^4\) As of December 2020, the company’s SMS aligns with federal requirements—such as developing a written safety plan that describes the company’s safety organization and goals—and with other passenger transportation industry safety programs. The company is still executing some key steps in establishing its program. For example, employees are completing training to expose them to the fundamental SMS concepts and begin to address the company’s historically weak safety culture.\(^5\) It is also implementing newly acquired software to centralize injury tracking and more easily report injury and accident data to FRA. Moreover, and crucially, SMS is designed as a continuous improvement program, so the company plans to reevaluate and adjust its efforts to improve safety outcomes as needed. As a result, we are concluding our audit work at this time—noting the company’s good progress to date. Because the company states that safety is its top priority and the program its main tool to ensure safe operations, we plan to continue monitoring the program.

During our work, we identified one potential issue that could impact the company’s efforts. Since August 2019, the company lost several key staff in the Safety department. Safety officials told us that these departures could create a gap in the skillsets needed to

\(^4\) 49 C.F.R. § 270.201(a)(1).

\(^5\) The National Transportation Safety Board (NTSB) found that the company’s weak safety culture was a contributing factor in at least three train accidents that occurred from 2016 through 2018. This includes the NTSB accident report on the Amtrak train 89 collision with maintenance-of-way equipment that killed two roadway workers near Chester, Pennsylvania, on April 3, 2016.
Amtrak Office of Inspector General
Safety and Security: The Company Has Made Significant Progress Implementing New Safety Program
OIG-A-2021-008, April 8, 2021

successfully implement the program, but they differ on the extent to which this is a challenge. Although the Chief Safety Officer has recently begun to assess and replace some of these positions, the company cannot be sure it will be able to implement the program to its desired outcomes until he fully assesses the skillsets needed for the program’s next phase and ensures that they are in place. Therefore, we recommend that the Chief Safety Officer continue to assess the current staffing needs of the Safety department and address any significant gaps in capacity and key skillsets that could impact the company’s ability to execute the SMS. In commenting on a draft of this report, the Executive Vice President/Chief Safety Officer agreed with our recommendation and identified specific actions the company plans to take by September 30, 2021 to implement it. For management’s complete response, see Appendix B.

BACKGROUND

The SMS is a formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of efforts to mitigate these risks. The company designed this multi-year initiative to redefine its approach to safety by transitioning from a system that reacts to safety incidents and results in punitive actions, to a system—as described in the federal requirement—that proactively identifies risks and mitigates them before incidents can occur. The company has had difficulty sustaining earlier safety programs, partly due to a shifting approach towards safety management under various leadership teams, a lack of robust data, the absence of employee buy-in, and limited employee trust that the company would deal fairly with safety violations.

In FY 2018, the company began drafting an SMS plan that outlines specific actions to begin implementing in FY 2019 and FY 2020 in anticipation of the new federal requirement. It also began working with FRA early in this process to ensure that its draft plan generally aligned with the intent of the federal requirement. The plan describes the roles and responsibilities of various executives and departments, sets out specific goals such as injury reduction targets, and includes milestones for key steps to implementation. The plan states that its success will depend on improving the safety culture, which will require a full organization-wide commitment to implementing the SMS, ranging from senior-most leadership to the newest frontline employees.

To develop and implement SMS, the Safety department is responsible for collaborating with the following four Operations departments:
The program consists of four interconnected lines of effort, as Figure 1 shows.

*Figure 1. SMS Four Lines of Effort*

- **Engineering.** This department is responsible for constructing and maintaining the infrastructure associated with the 1,400 route-miles that the company either owns or maintains through contracted services.

- **Mechanical.** This department is responsible for performing periodic maintenance, inspections, and minor repairs of rolling stock at terminals across the country, as well as conducting full repairs, modifications, and overhauls at heavy maintenance facilities.

- **Stations and Customer Service.** This department is responsible for all functions related to managing station operations, including ticketing, boarding, baggage handling, and other customer service functions.

- **Transportation.** This department is responsible for directing and controlling all train movement throughout the nationwide system.
THE COMPANY HAS MADE SIGNIFICANT PROGRESS WITH SMS BUT CAN BETTER EVALUATE FUTURE STAFFING NEEDS

The company leveraged its early collaboration with FRA to submit its written SMS plan well ahead of the March 2021 submission deadline. This allowed it to begin executing key components of this plan well ahead of the March 2024 implementation deadline with confidence that its plan meets the intent of the federal rule. For a timeline, see Figure 2.

**Figure 2. Company Actions Compared to FRA Deadlines**

![Figure 2. Company Actions Compared to FRA Deadlines](source: OIG analysis of SMS documentation)

Note:

*a* 49 C.F.R. § 270.201(a)(1) requires that each railroad submit a plan to FRA by March 4, 2021. Further, 49 C.F.R. § 270.103(f)(2) states that each railroad must implement their plan within 36 months of FRA approval.

Our review of the plan found that its components align with the structure of the federal requirement and with other passenger transportation industry standards for managing such programs. For example, the company’s SMS plan follows the same four lines of effort promulgated by the Federal Aviation Administration and used by passenger airlines today. Further, the company has taken a number of proactive steps in the planning and early execution stage to help ensure that it meets the regulatory deadlines for establishing and implementing its SMS program. These include developing new safety metrics, such as tracking the frequency of train separations, which helped

---

6 The company submitted its initial plan to FRA in November 2018—16 months before the rule became final in March 2020, and 28 months before the March 2021 submission deadline.
the company identify the scale of the issue and put mitigations in place. They also include increasing communications to employees about safety issues and establishing regular meetings in which each of the four Operations departments reevaluates identified risks and mitigation steps.

The company still has some key steps to complete before the 2024 implementation deadline, which will ultimately determine the program’s success in reducing risks and incidents that affect both employees and customers and in improving its safety culture, as the following examples show:

**Safety policy.** From FY 2018 through FY 2020, the company defined and developed the overall governance structure of the SMS, which includes an Executive Safety and Security Council and department-level working groups. These groups track and monitor safety performance against established company metrics, identify and determine mitigations for safety risks, and take other actions. The company also has existing frontline employee safety committees among the Operations departments. All three groups write policies at the company-wide, department, and frontline levels, and address safety issues as they arise. For example, frontline employee safety committees tackle day-to-day safety issues by identifying local risks such as insufficient lighting on a platform or inoperative security cameras, while the Council addresses more systematic safety trends, such as reducing company-wide sprains and strains.7

In addition, the company procured new comprehensive safety management software to centralize its tracking of injury and accident data and make it easier to report information about these incidents to FRA, as mandated. The company plans to roll out this software in phases and replace the existing legacy software it has been using since the late 1990s. In response to the financial impacts of the pandemic, the Safety department paused this procurement as a cost-saving measure but expects to complete integrating the software by mid-2021. In the meantime, the department is further refining the specific functions it wants the software to execute. For example, the company wants to establish a central repository for documentation of internal investigations of safety incidents. This information is currently saved on the computers of individual Lead System Safety Specialists across the country. Storing them centrally should enable the company to more easily compare investigations to ensure that they are being

---

7 Sprains and strains are the most frequent employee injury type.
conducted consistently. It should also allow the company to better analyze these investigations to identify common root causes and other contributing factors of safety incidents to inform its risk mitigation efforts.

**Risk management.** Beginning in FY 2018, each of the four Operations departments\(^8\) collaborated with the Safety department to conduct an initial assessment of their top safety risks. These included items such as the risk of ballast cars derailing, the risk of Engineering workers experiencing electric shocks while working in the field, and the risk of employees committing major violations of operating rules. In the process, they ranked these risks and subsequently developed, documented, and began implementing actions to mitigate the most significant ones. For example, as part of this initial assessment, the Mechanical department identified the risk of train cars decoupling en route, diagnosed the root cause of this failure, and developed a new procedure to prevent this from occurring. As another example, the Transportation department identified that the leading causes of injuries on moving trains were slips, trips, and falls. In response, the department and the Safety department developed the “Get-A-Grip” Safety campaign to raise employee and customer awareness of this risk and provide tips for how to avoid injury. Operations and Safety department officials told us that because the SMS is a continuous improvement process, they plan to regularly review their risk management efforts, including reevaluating identified risks, looking for new risks, and reassessing the mitigations currently in place.

Separately, the Safety department assessed other risks and mitigations that would cut across multiple departments—for example, collisions at rail-highway grade crossings. The company is developing mitigating strategies to address this risk and is coordinating these efforts with various stakeholders such as freight railroads and state partners. According to a senior official in the Safety department, this effort will take years to complete due to the number of rail-highway crossings and the overall complexity of the problem. We also identified an opportunity for the company to better assess and mitigate safety risks. In our February 2021 interim report, we noted that the company did not fully use its injury claims data as an input to help manage safety risks. We made two recommendations, including that the Law department develop and

---

\(^8\) The four departments are Engineering, Mechanical, Stations and Customer Service, and Transportation.
implement a policy to share these data with the Safety and Operations departments to help identify and mitigate safety risks. The company agreed with our recommendations and has begun to develop this data-sharing agreement.

**Safety assurance.** In FY 2020, the Safety department established and staffed an Internal Evaluation Program⁹ (IEP) to provide oversight of the day-to-day steps that Operations personnel take to mitigate known safety risks. This oversight includes conducting: (1) spot inspections of employees’ use of personal protective equipment, (2) job safety briefings prior to starting work, and (3) more comprehensive audits of other critical safety processes. For example, evaluation personnel conduct field inspections of the “Lockout/Tagout” program, which is designed to prevent serious electrical injuries while workers maintain or repair equipment. IEP personnel use the results of these inspections to evaluate the effectiveness of existing processes and to identify new hazards they can mitigate.

The company continues developing and working to improve its IEP. For example, evaluation personnel recently began using inspection results to inform the processes used by the four Operations departments to reevaluate risks and identify mitigations. During the next stage of implementation, the Safety and Operations departments plan to standardize their inspection findings, according to the program director. This should allow the IEP personnel to better track inspection results, identify common themes, and assess safety risks more accurately throughout the company. According to the SMS policy, the Safety department expects this feedback loop to drive continuous improvement to better manage risks and help protect customers and employees.

**Safety promotion.** In March 2020, the Safety department presented an initial SMS communication strategy to the Board of Directors. As part of this strategy, the company is in the process of rolling out its “Safety Starts with Me” training. The Safety, Operations, and Human Resources departments designed this one-to-two-day course to expose frontline employees to the fundamental SMS

---

⁹ The purpose of this program is to conduct operational audits to ensure that safety programs and processes have the appropriate documentation, training, and field implementation. The program will then assess the effectiveness of the programs and processes.
Amtrak Office of Inspector General
Safety and Security: The Company Has Made Significant Progress Implementing New
Safety Program
OIG-A-2021-008, April 8, 2021

costs and begin to address weaknesses in its safety culture. The weaknesses include longstanding employee perceptions that management prioritizes keeping trains running on time over safety. Executives told us that changing this culture will ultimately determine the success of the program. Many executives and safety officials from other companies stated that changing organizational culture—and thus fully implementing the program—is a long-term, multi-year effort.

In our October 2020 interim report, we found that the company did not have a baseline of its current safety culture against which it could measure the results of its efforts to improve it, such as the training program. We recommended that it develop and deploy an employee survey as soon as practical, use the results to establish a measurable baseline, assess progress in improving the safety culture over time, and take action to address issues the survey identifies. The company agreed with our recommendations and is in the process of conducting an employee survey to measure its safety culture baseline as part of the “Safety Starts with Me” training. As of December 2020, the company has trained and surveyed more than 450 management personnel. Additionally, the Safety department is working with their third-party vendor that conducts the annual company-wide employee survey to add specific questions on safety culture to inform this baseline.

The company has taken other noteworthy steps to demonstrate its commitment to safety. For example, it has reiterated to the public and its employees that safety is its number one priority, and despite continuing challenges from the coronavirus pandemic, executives told us they are on track to implement the SMS on schedule. Additionally, in May 2020, to highlight the importance of safety, the Chief Executive Officer implemented an organizational change so the Chief Safety Officer is now a direct report to the Chief Executive Officer.

We found one issue related to staffing that could affect the company’s ability to successfully execute its SMS program. From August 2019 through November 2020, many key personnel in the Safety department left the company. Notable departures

---

10 The company made some adjustments to its initial training timeline based on impacts from the coronavirus pandemic, but the Safety and Human Resources departments began delivering training to Operations department frontline employees in October 2020, and the company plans to completely train all frontline employees by October 2021.
include two senior officials who oversaw the groups responsible for the design and execution of the four program components. They also include key Safety department staff devoted to data analytics—a critical component of program implementation. We previously reported on the company’s management capacity as an ongoing challenge that can make it difficult for it to deliver major initiatives as planned.11

The Chief Safety Officer told us that he may not backfill some vacant positions because the company is moving into the execution phase of the SMS, and the Safety department’s needs and staffing requirements are evolving. He also told us that he has begun reviewing and filling some key positions such as the Director of System Safety. He has not, however, fully assessed the key skillsets the department needs for the execution phase of the program. Some senior officials in the Safety department told us they believe that the recent personnel departures created a capacity gap that could affect the company’s ability to continue its progress in proactively mitigating risk. Until the Safety department fully assesses key staffing needs to ensure that it does not face gaps in critical functions, the company risks not being able to execute its SMS to its desired outcomes.

Each of the four Operations departments has contributed to implementing the initial stages of the program, but this work will be ongoing since the program is designed to continually develop and evolve. The ultimate success of the SMS will depend on the continued and consistent support of departmental and executive leadership. As the company continues to execute additional components of its plan, such as completing “Safety Starts with Me” training for frontline employees and fully operationalizing its new SMS software, we will continue to monitor program progress.

CONCLUSION

Since January 2018, the company has taken significant actions to demonstrate that it is making safety a priority, even as it continues to address a broad spectrum of challenges associated with the global coronavirus pandemic. The company has made progress developing its SMS—a federal requirement and the cornerstone of its safety improvement efforts—and is beginning to implement key steps well ahead of the deadline. Ultimately, achieving the company’s long-term goals to improve its safety outcomes will depend on dedicated, sustained, and coordinated executive support

and frontline employee buy-in. In the near term, the company has not determined if its current staffing vacancies in the Safety department could present a vulnerability to executing its SMS to its desired outcomes.

RECOMMENDATION

To help ensure that the company remains on track to fully implement the SMS on time, we recommend the following action:

1. The Chief Safety Officer should assess the current staffing needs of the Safety department at this stage and address any significant gaps in capacity and key skillsets that could impact the company’s ability to execute the SMS.

MANAGEMENT COMMENTS AND OIG ANALYSIS

In commenting on a draft of this report, the company’s Executive Vice President/Chief Safety Officer agreed with our recommendation and described the company’s actions and plans to address it, which we summarize here.

Recommendation 1: Management agreed with our recommendation to assess its current staffing needs and noted ongoing recruiting efforts to fill two positions. The company also plans to review critical roles and skillsets it needs, and personnel it has on board in the Safety department, as part of the annual budgeting cycle. The target completion date is September 30, 2021.

Management provided additional technical comments, which we incorporated, as appropriate. Management also said that our reference to the company’s historically weak safety culture, and the NTSB’s same conclusion following a major train accident in 2016, is too retrospective. As we previously reported, however, the company has had difficulty sustaining prior safety programs due in part to its weak safety culture. Therefore, we continue to believe it is important that the company consider this history as part of its current and future safety improvement efforts.
APPENDIX A

Objective, Scope, and Methodology

This report provides the results of our audit of the company’s implementation of its Safety Management System (SMS). Our objective was to assess the company’s progress implementing the SMS. Our scope focused on the company’s planning and implementation of its SMS since FY 2018. We performed our audit work from April 2020 through March 2021 in Washington, D.C.

To assess the company’s progress, we examined the structure and components of its SMS planning documents to determine whether they align with the federal rule and industry standards for similar programs. We also spoke with FRA officials who helped draft the federal rule and help oversee the company’s implementation of SMS to understand the intent of the federal rule and the company’s progress and coordination implementing it. To understand the scope of efforts related to developing and implementing the SMS, we interviewed officials from the Safety, Operations, Human Resources, and Information Technology departments. In addition, we reviewed key documents, training material, and databases used to track injuries and claims.

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 the management controls for overseeing the program and mitigating associated risks. We assessed the internal control components and underlying principles, and we determined that the following component was significant to our audit objective:

Control Environment. The organization demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives.

Attracts, Develops, and Retains Individuals. The organization provides the mentoring and training needed to attract, develop, and retain sufficient
and competent personnel and outsourced service providers to support the achievement of objectives.

We developed audit work to ensure that we assessed this control. Because our review was limited to this internal control and the one underlying principle, it may not have disclosed all of the internal control deficiencies that may have existed at the time of this audit.

**Computer-processed Data**

Our analyses and findings did not rely on computer-generated data from any company information systems.

**Prior Reports**

- *Amtrak: Top Management and Performance Challenges for Fiscal Year 2021* (OIG-SP-2021-002); October 23, 2020
**Memo**

**Date:** March 31, 2021  
**From:** Steven C. Pedmore, EVP/Chief Safety Officer  
**To:** Jim Morrison, Assistant Inspector General, Audits  
**Department:** Safety  
**Co:**  
- William J. Flynn, CEO  
- Eleanor Ackison, EVP General Counsel  
- Stephen Gardner, President  
- Carol Hanna, VP Controller  
- Roger Harris, EVP Marketing & Revenue  
- Justin Meko, VP Safety, Compliance and Training  
- Scott Napierstek, EVP COO  
- Dennis Newman, EVP Strategy & Planning  
- Mark Richards, Sr. Director Amtrak Risk & Controls  
- Qiana Spain, EVP CHRO  
- Tracey Wroblewski, EVP CFO  
- Christian Zichinowski, EVP CIO

**Subject:** Management Response to SAFETY AND SECURITY: The Company Has Made Significant Progress Implementing New Safety Program (Draft Audit Report for Project No. OIG-2016-2020)

This memorandum provides Amtrak’s response to the draft audit report titled, “SAFETY AND SECURITY: The Company Has Made Significant Progress Implementing New Safety Program”. The Safety department appreciates the OIG’s review of the progress we have made thus far in the implementation of our Safety Management System (SMS). We agree in general with the OIG’s view that we have made good progress in implementing an SMS that delivers desired outcomes and that future success depends on continued executive support and adequate resourcing to meet the challenges of a dynamic operational environment. We agree with the OIG’s recommendation and believe that our established annual processes for strategic planning and budgeting will allow us to meet the intent of the recommendation.

We also noted that the report makes reference to the company’s efforts through SMS training to address its “historically weak safety culture”, as cited in the NTSB report on Amtrak’s 2016 fatal accident in Chester, Pa. This statement suggests a retrospective focus, however, that is not the intent of our SMS. Rather, the SMS is forward looking and focused on improving Amtrak’s safety culture and performance.

**Company Response to the OIG Recommendation**

To help ensure the company remains on track to fully implement the SMS on time, the OIG recommends the following action:

**Recommendation 1:**
The Chief Safety Officer should assess the current staffing needs of the Safety department and address any significant gaps in capacity and key skillsets that could impact the company’s ability to execute the SMS as intended.

Management Response/Action Plan: Amtrak agrees that the ongoing assessment of resource needs, including staffing levels and necessary skillsets, is a primary responsibility of any executive officer, and is committed to ensuring that the safety department is adequately resourced to deliver continuous improvement in its safety culture and performance in accordance with its SMS. Indeed, to address the recent loss of key positions, we recently hired a Director System Safety Programs and are in the process of recruiting candidates for a Manager Safety Data & Analysis.

As part of the annual budgeting and planning cycle, during which we assess current year performance and identify strategic initiatives and resource needs for the upcoming fiscal year, we will undertake and complete a review of critical roles and talent in the safety department needed to support successful achievement of our safety performance goals and initiatives. The results of this assessment and actions we plan to take will be available no later than September 30, 2021.

Responsible Amtrak Officials: Steven C. Fredmore, Executive Vice President & Chief Safety Officer
Target Completion Date: September 30, 2021

As personnel changes occur, we will continuously evaluate whether those changes create opportunities to recruit new skillsets or realign roles and responsibilities to better meet dynamic operational and workplace safety roles, exploit new tools and technologies to more effectively manage risk, or achieve synergies and greater effectiveness through organizational realignment. Thank you for bringing this finding to our attention and we look forward to reviewing the final report.
APPENDIX C

Abbreviations

FRA  Federal Railroad Administration
FY   fiscal year
IEP  Internal Evaluation Program
NTSB National Transportation Safety Board
OIG  Amtrak Office of Inspector General
SMS  Safety Management System
the company  Amtrak
APPENDIX D

OIG Team Members

Eileen Larence, Deputy Assistant Inspector General

J.J. Marzullo, Senior Director, Lead

Melissa Hermes, Senior Audit Manager

Andrew W. Mollohan, Senior Auditor, Lead

Gabriel Picinini, Auditor

Richard Weiland, 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 www.amtrakojig.gov

Reporting Fraud, Waste, and Abuse
Report suspicious or illegal activities to the OIG Hotline
www.amtrakojig.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
Email: James.Morrison@amtrakojig.gov