HUMAN RESOURCES:
The Company is Addressing Engineering Management Workforce Challenges, but Additional Work Remains
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In November 2021, the Infrastructure Investment and Jobs Act (IIJA) provided Amtrak (the company) access to as much as $66 billion to build, repair, and restore infrastructure. The company’s Infrastructure Maintenance and Construction Services (IMCS) group will play a lead role in supporting these objectives, including executing the work needed to address a major backlog of infrastructure repairs. As of April 2022, the IMCS group had 192 engineering managers—many with unique skill sets, such as maintaining overhead catenary systems that supply electrical power to trains and building bridges and tunnels. As ridership resumes after historic declines during the pandemic, the company expects to hire an additional 63 engineering managers before the end of fiscal year (FY) 2022 to restore basic operations and carry out the company’s ambitious rehabilitation and revitalization plan. These managers will also provide oversight for the estimated 4,500 agreement workers who will execute the IIJA-funded projects. Filling these management positions will likely be challenging in a tight labor market in which multiple industries are vying for workers with the same skills and experience as the company—in many cases to support IIJA-funded projects in other transportation sectors. The IMCS group will rely on the Human Resources department to recruit, hire, and onboard these employees.

Our objective for this audit is to assess the company’s efforts to address challenges in recruiting and retaining skilled engineering managers as it recovers from the pandemic and builds for the future. To perform our work, we analyzed the Service Delivery and Operations department’s workforce data and interviewed officials in the IMCS group and Human Resources department to understand these challenges. We also reviewed

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1 Agreement employees are those covered by collective bargaining agreements.
documents outlining the department’s recruitment and retention strategies. For additional details on our scope and methodology, see Appendix A.

During our work, we identified challenges in the Human Resources department’s talent acquisition group that would have limited its ability to support increased hiring needs company-wide. We issued an interim report\(^2\) in December 2021 to bring these immediate issues to the company’s attention.

**SUMMARY OF RESULTS**

The company recognizes the challenges associated with recruiting and retaining a skilled engineering workforce to help accomplish its strategic goals now made more attainable by the IIJA. Accordingly, it has begun addressing these challenges through a series of initiatives both on a company-wide and department-specific basis. Nevertheless, it has additional opportunities to build on these initiatives and improve its ability to keep pace and compete with the external labor market.

**Company-wide efforts.** The Human Resources department is addressing compensation issues across the company, which will improve its ability to attract and retain talented engineering managers. First, the department adjusted salaries company-wide to establish more meaningful differences in pay between managers and the employees they supervise. Second, it commissioned a consultant to conduct a thorough compensation analysis—the first comprehensive salary review completed in eight years—to determine whether salaries for management employees are competitive with the market. The department fell behind on market reviews in the past because its compensation guidance is informal, and it did not communicate the guidance to newer managers.

**IMCS efforts.** The IMCS group is beginning to address two of its most pressing challenges—retaining engineers in demanding field-based roles that require around-the-clock availability and recruiting agreement supervisors with valuable skills and experience for management positions.\(^3\) To mitigate these challenges, the group recently increased salaries for field engineers, hired more field engineers to better distribute their responsibilities, and began offering one-time sign-on bonuses to

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\(^3\) Agreement workers who move into management positions are no longer covered by agreement rules, which include the right to earn overtime pay for hours worked outside a designated work schedule.
agreement employees who move into management. The group does not, however, regularly analyze workforce data that would help determine whether the actions effectively address recruiting and retention challenges.

To minimize further challenges in recruiting and retaining skilled engineering managers, we are recommending that the company formalize and communicate its compensation policies, routinely analyze common workforce metrics, and use these metrics to assess the success of workforce initiatives.

In commenting on a draft of this report, the Chief Human Resources Officer (CHRO) agreed with our recommendations and described specific actions the company plans to take by June 2023 to implement them. These include revising and communicating formal compensation policies, creating a dashboard to track employee turnover, and using workforce data to monitor the effectiveness of recent recruitment and retention efforts. For management’s complete response, see Appendix B.

BACKGROUND

The IMCS group in the Service Delivery and Operations department employs skilled workers to build and maintain railroad infrastructure, including tracks, structures, signals, equipment, and power. As the company breaks ground on IIJA-funded projects, the Capital Delivery department will lead design and planning for infrastructure improvements, and the IMCS group will be responsible for implementing them. Figure 1 shows the disciplines that the 255 engineering managers in the IMCS group’s FY 2022 hiring authority will cover.
The Human Resources department plays a key role in company-wide workforce efforts. Its Total Rewards group oversees company-wide policies and initiatives related to compensation and benefits. The group’s responsibilities include revising benefits and incentives and ranking other departments’ hiring needs to prioritize compensation changes. In addition, its Workforce Analytics group manages and analyzes company-wide workforce data, maintains a workforce analytics dashboard that provides high-level workforce metrics, and supplies information to other departments at their request. The department also employs Business Partners to act as liaisons between Human Resources and the other departments.

**FORMALIZING POLICIES COULD HELP HUMAN RESOURCES SUSTAIN PROGRESS ADDRESSING LONG-STANDING CHALLENGES**

The Human Resources department is addressing long-standing compensation challenges that have limited the IMCS group’s ability to retain or hire skilled management employees. The department could help prevent these challenges from recurring by formalizing its compensation policies.
Specifically, in 2021, the Human Resources department began correcting company-wide compensation issues by taking the following actions:

- **Establishing more meaningful pay differences between managers and subordinates.** In February 2021, the department started analyzing salaries company-wide and found that some pay differences between managers and the employees they supervise had narrowed over time, which is referred to as "pay compression." In response, the department identified instances of employees earning within 10 percent of their managers and increased salaries for 393 managers across the company, including 14 engineering managers.\(^4\) Figure 2 illustrates how pay compression can occur and the steps management can take to reinstate meaningful pay differences between managers and subordinates. These variances are necessary to retain and motivate experienced employees.

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\(^4\) The company did not adjust managers’ salaries when it identified a legitimate reason for an employee to earn within 10 percent of their manager’s pay, such as if the employee was a subject matter expert or if the manager had performance issues.
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**Figure 2. Example of Pay Compression Between Managers and Subordinates**

- **Benchmarking management positions to market rates.** In June 2021, the department commissioned a compensation analysis after several managers who left the company cited higher pay as a primary reason. Publicly available compensation information is limited; therefore, the department hired a consultant to benchmark salaries and determine appropriate rates for management positions company-wide. This analysis is still underway, and Human Resources officials expect it to be complete this summer. Once it is complete, the company plans to initiate an additional review of the salary adjustments it provides in areas with high costs of living, such as Los Angeles and Oakland, California, where managers told us the current adjustments are not sufficient to attract and retain talent.

Company leaders told us they believe that these actions will improve job satisfaction and reduce attrition. The department could do more, however, to prevent these
challenges from recurring. In particular, although the Human Resources department has guidance for monitoring pay gaps between managers and subordinates and regularly reviewing market compensation, it has fallen behind on these reviews. For example, its internal guidance recommends annual market comparisons, but it has not conducted such an analysis since 2014. A manager who worked in Human Resources at that time said the department had initially planned to use the 2014 study as a baseline for annual benchmarking, but the department experienced subsequent turnover, and new managers likely were not aware of the guidance. In addition, the guidance is not binding: it recommends that the department undertake these reviews but does not actually require them.

Human Resources managers told us that establishing and communicating formal compensation policies—including requiring regular salary reviews—would help the department keep up with these reviews even if the personnel responsible for conducting them change. Formalizing compensation policies would also align the company with management control standards for implementing control activities. Further, industry practices suggest that companies should regularly examine and adjust their overall salary structure to remain competitive. These regular reviews would help the company avoid falling behind the market again and reduce the challenges in recruiting and retaining the top talent needed to build an engineering workforce for the future.

**ANALYZING WORKFORCE DATA COULD HELP IMCS ASSESS EFFECTIVENESS OF RECRUITMENT AND RETENTION EFFORTS**

The IMCS group is also addressing some of the challenges that have limited its ability to hire and retain skilled management employees but could use workforce data to better monitor the effectiveness of these efforts.

In 2021, executive leadership authorized the then-Engineering department to implement specific actions to help recruit and retain managers in positions that require specialized skills, such as catenary engineers and track supervisors, including the following:

- **Providing sign-on bonuses to help recruit agreement supervisors for management positions.** Company officials describe the progression from

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5 Control standards call for management to document responsibility for operational processes through policies.
agreement supervisor to engineering management positions as a valuable pipeline, but one that is underutilized. Officials attributed this to the reluctance of agreement employees to give up the opportunity to earn overtime, which averages about $49,000 per year, and added more than $100,000 to the base salaries of 17 agreement supervisors in calendar year (CY) 2019. To help address this financial challenge, the Engineering department started offering one-time sign-on bonuses averaging about $8,000. Although the bonuses offset only a small portion of the overtime pay that agreement employees can receive, company officials told us they expect the agreement employees who do not routinely accept overtime assignments to view the bonus as a strong incentive to move into management. Figure 3 shows the range of overtime that agreement supervisors typically earn.

**Figure 3. Distribution of Overtime Earnings for Agreement Supervisors in CY 2019**

<table>
<thead>
<tr>
<th>Overtime Earnings</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 to $20,000</td>
<td>42</td>
</tr>
<tr>
<td>$20,001 to $40,000</td>
<td>55</td>
</tr>
<tr>
<td>$40,001 to $60,000</td>
<td>46</td>
</tr>
<tr>
<td>$60,001 to $80,000</td>
<td>29</td>
</tr>
<tr>
<td>$80,001 to $100,000</td>
<td>18</td>
</tr>
<tr>
<td>$100,001 to $120,000</td>
<td>9</td>
</tr>
<tr>
<td>$120,001 to $140,000</td>
<td>5</td>
</tr>
<tr>
<td>More than $140,000</td>
<td>3</td>
</tr>
</tbody>
</table>

*Source: OIG analysis of Amtrak salary data for engineering agreement supervisors*

- **Increasing salaries and improving work-life balance to help retain field engineers.** The company has had difficulty retaining engineering managers in field positions who are responsible for all aspects of track infrastructure and other essential functions such as maintaining the overhead catenary—primarily because the company requires them to be available at all times to restore service after emergencies and weather-related disruptions. To address this challenge, the department is creating 23 new positions that will share responsibilities for continuous coverage with field engineers. It also increased the base pay of field
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engineers by 10 percent. Engineering department officials told us they expect these actions to improve morale, reduce burnout among field engineers, and further encourage agreement employees to move into management roles. Figure 4 details the differences between the average earnings for agreement supervisors and engineering managers after implementing these incentives.

**Figure 4. Comparison of Average Earnings Between Agreement Supervisors and Engineering Field Managers Before and After Incentives**

Source: OIG analysis of Amtrak salary data

Notes:
1. The sign-on bonus is a one-time payment and will not be a recurring part of management employees' salaries.
2. "Other" earnings for agreement employees include awards and reimbursement for meals and travel. "Other" earnings for management employees include performance-based awards and geographic pay adjustments.

Company leaders told us they are optimistic that these efforts will help address their challenges in recruiting and retaining engineering managers. The IMCS group could do more, however, to determine whether its efforts are effective. In particular, the group does not regularly analyze workforce data and monitor trends in common metrics such as employee turnover or intra-company personnel movements—a practice that would align with management control standards for monitoring systems and evaluating results.\textsuperscript{6} Monitoring changes in turnover and employee transfers would also help

\textsuperscript{6} Control standards call for management to establish monitoring activities to evaluate and improve the effectiveness of the internal control system.
the group determine whether the actions are addressing recruiting and retention challenges and earn a sufficient return on investment.

Access to this information is limited, in part because the Human Resources department’s Workforce Analytics group provides turnover data to departments on an ad hoc basis but does not routinely make the data available through existing workforce management tools, such as the workforce analytics dashboard. Asking the Workforce Analytics group to regularly update centrally accessed data systems with common industry workforce metrics would allow the IMCS group and other department leadership to measure changes resulting from workforce initiatives. This information could help the group make timely adjustments to these initiatives and thus avoid prolonged vacancies and continued turnover in engineering management positions.

CONCLUSIONS

The company faces the challenge of significantly expanding its workforce to support projects funded by IIJA at the same time it is recovering from the pandemic. Adding engineering managers to its ranks will require coordinated efforts from the Human Resources department and the IMCS group as the company competes with other IIJA funding recipients for talent in a tight labor market. Formalizing the Human Resources department’s compensation policies could help the company avoid further challenges recruiting and retaining talented engineering managers in positions that are difficult to fill. Further, using workforce data to monitor changes in key metrics could better position the IMCS group to assess its strategies and adapt them as necessary.

RECOMMENDATIONS

To minimize future challenges in recruiting and retaining skilled engineering managers, we recommend that the company take the following actions:

1. Establish formal compensation policies that define a schedule for regularly conducting analyses to identify whether the company is offering market-competitive salaries, and communicate the policies to all relevant parties.

2. Routinely analyze common workforce metrics such as employee turnover and share the metrics with relevant departments through existing workforce management tools.
3. Use the common workforce metrics to assess the effectiveness of recent efforts to address compensation or work-life balance issues and determine whether further adjustments are needed.

MANAGEMENT COMMENTS AND OIG ANALYSIS

In commenting on a draft of this report, the CHRO agreed with our recommendations and described the company’s plans to address them. We summarize the company’s comments and actions below:

**Recommendation 1**: Management agreed with our recommendation to establish formal compensation policies that define a schedule for regularly conducting analyses to identify whether the company is offering market-competitive salaries and communicate the policies to all relevant parties. The CHRO noted that the company is currently revising its compensation guidelines to establish formal policies and is conducting a market analysis. The company plans to formalize its updated compensation policies and to communicate roles and responsibilities to relevant parties by June 2023.

**Recommendation 2**: Management agreed with our recommendation to routinely analyze common workforce metrics such as employee turnover and share the metrics with relevant departments through existing workforce management tools. The company is creating a dashboard that will track attrition over four fiscal years. Management plans to conduct quarterly reviews when the tool is complete in December 2022.

**Recommendation 3**: Management agreed with our recommendation to use common workforce metrics to assess the effectiveness of recent efforts to address compensation or work-life balance issues and determine whether further adjustments are needed. The Service Delivery and Operations department will use the new dashboard, employee interviews, and surveys to determine the return on investment of workforce initiatives. Management plans to monitor the data on an ongoing basis, with an initial review scheduled for January 2023.
APPENDIX A

Scope and Methodology

This report provides the results of our review of the company’s efforts to address challenges in recruiting and retaining skilled engineering managers as it recovers from the pandemic and builds for the future. Our initial objective was to assess the impacts of the pandemic on the company’s workforce and its readiness to rebuild a management workforce that is sufficiently sized and skilled to execute the company’s recovery and growth plans. As a result of our survey work, we determined that staffing engineering management positions was a primary concern that could impact the company’s ability to restore operations and execute anticipated infrastructure projects. Accordingly, we narrowed our scope to focus on the management workforce challenges facing the IMCS group and the strategies the group and the Human Resources department employed to mitigate these challenges. We performed our work in Washington, D.C., from October 2020 through May 2022.

To perform our work, we reviewed documents and interviewed officials from the Human Resources department and Service Delivery and Operations department to understand these challenges and the company’s efforts to address them. To determine the extent of the challenges, we analyzed the IMCS group’s workforce data. We also analyzed payroll data to compare earnings of management employees to those of agreement employees. Additionally, we reviewed the Human Resources department’s documentation relating to the extent of the challenges and the strategies it has implemented or was in the process of implementing to assess its ability to work with the IMCS group to evaluate the effectiveness of each strategy.

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 Control

We reviewed internal controls related to recruiting and retaining a skilled engineering workforce. Specifically, we assessed internal control components and underlying
principles and determined that the following three components of internal control were significant to our objective:

- **Risk Assessment.** Management should define objectives clearly to enable the identification of risks and define risk tolerances.
- **Control Activities.** Management should implement control activities through policies.
- **Monitoring.** Management should establish and operate monitoring activities to monitor the internal control system and evaluate the results.

We developed audit work to ensure that we assessed each of these control areas. Specifically, we interviewed officials in the Service Delivery and Operations department and Human Resources department. We also reviewed documentation relating to the Human Resources department’s strategy for working with the IMCS group to identify and address the challenges in recruiting and retaining skilled engineering managers. We identified the key controls for each of the three internal control components and assessed their operating effectiveness. We concluded that the Control Activities and Monitoring components had significant deficiencies.

We determined that it was necessary to evaluate information systems controls because we analyzed employee master data from the company’s SAP system. To assess the system’s controls, we reviewed documentation from independent reviews of the company’s SAP system (Human Resources module). The reviews identified some exceptions that the company subsequently resolved. We did not identify any additional deficiencies in the design, implementation, and operating effectiveness of controls for the system for the control objectives relevant to our audit objective.

Because our review was limited to the internal control components relevant to our audit objective, we may not have identified all internal control deficiencies that existed at the time of this review.

**Computer-processed Data**

We obtained computer-processed data from the Human Resources department and Service Delivery and Operations department, which we used to analyze employee headcount and turnover. We interviewed the officials who oversee the data to understand how they collect, process, and manage the data to determine their reliability. To further verify data reliability, we also performed our own data-reliability
reviews, including basic checks for duplicates, outliers, and other inconsistencies. In addition, we obtained employee master data from the company’s SAP system. Because of safeguards designed for the protection of the de-identified data, staff outside the audit team conducted tests to determine the reliability of SAP data and provided the audit team with reports that confirmed data accuracy. We determined that the data were sufficiently reliable to enable us to accurately report staffing levels, workloads, and employee turnover.

Prior Reports

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

Memo

Date: July 8, 2022

From: Qiana Spain, EVP CHRO

To: Jim Morrison, Assistant Inspector General, Audits

Department: Human Resources

cc: Stephen Gardner, CEO & President
    Eleanor Acheson, EVP General Counsel
    Nathan Counts, AVP Total Rewards
    Robert Foster, AVP Talent Acquisition
    Carol Hanna, VP Controller
    Roger Harris, EVP Marketing & Revenue
    Laura Mason, EVP Capital Delivery
    Scot Napperstok, EVP COO
    Daryse Nelson-Dorney, VP People Solutions & Delivery
    Dennis Newman, EVP Strategy & Planning
    Ghazal Parsa, AVP Service Delivery
    Steven Predmore, EVP CSO
    Mark Richards, Sr. Director Amtrak Risk & Controls
    Mark Vierling, VP CIO
    Gerhard Williams, SVP Service & Delivery Ops
    Tracie Wimbler, EVP CFO
    Christian Zacariassen, EVP CIO

Subject: Management Response to Human Resources: The Company is Addressing Engineering Management Workforce Challenges, but Additional Work Remains (Draft Interim Audit Report for Project No. 002-2021)

This memorandum provides Amtrak's response to the draft interim audit report titled, "The Company is Addressing Engineering Management Workforce Challenges, but Additional Work Remains". Management appreciates the opportunity to respond to the OIG's recommendations.

Recommendation #1: Management agrees with this recommendation.

Establish formal compensation policies that define a schedule for regularly conducting analyses to identify whether the company is offering market-competitive salaries and communicate the policy to all relevant parties.

Amtrak is in the process of revising compensation guidelines and will complete a full-scale market analysis in 2022.
Amtrak Office of Inspector General

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NATIONAL RAILROAD PASSENGER CORPORATION

Management Response/Action Plan:
HR Compensation will create a formal compensation policy that defines a schedule for conducting market analyses to identify whether it is offering market-competitive salaries and communicate the policy to all relevant parties.

Responsible Amtrak Official(s):
Nathan Counts (AVP, Total Rewards)
Amanda Bastien (Sr Dir Comp Rewards & Relocation)

Target Completion Date: June 30, 2023

Recommendation #2: Management agrees with this recommendation.
Routinely analyze common workforce metrics such as employee turnover and share the metrics with relevant departments through existing workforce management tools.

Management Response/Action Plan:
Amtrak is in the process of creating an enterprise-wide attrition dashboard. The dashboard will include separations and attrition percentage for the past four fiscal years. Once dashboard goes live, management will conduct quarterly reviews.

Responsible Amtrak Official(s):
Denise Nelson-Burney (VP, People Solution and HR Delivery)
Ghazal Parsa (AVP, HR Service Delivery)

Target Completion Date: December 30, 2022

Recommendation #3: Management agrees with this recommendation.
Use the common workforce metrics to assess the effectiveness of recent efforts to address compensation or work-life balance issues and determine whether further adjustments are needed.

Management Response/Action Plan:
Amtrak Human Resource Business Partners, and Service Delivery & Operation’s and Capital Delivery’s Workforce Management teams will use the workforce metrics provided by HR Service Delivery to assess the effectiveness of our recent efforts to address compensation and work-life balance issues. The use of common workforce analytics such as attrition rates, time in position, and vacancy rate will provide quantitative feedback on effectiveness of the compensation efforts. Qualitative data collection techniques such as exit interviews and employee engagement surveys will also be utilized to assess the ongoing effectiveness of work-life balance efforts. We will initially target the C3 and C4 band Sr Field Engineer and Assistant Production Engineer positions within IMCS. These positions represented the majority of the 23 newly added positions to share responsibilities for continuous coverage and are the positions most likely to be filled by the agreement ranks. Ongoing monitoring of changes in employee turnover and intra-company personnel movements will help the information to determine the recruiting and retention effectiveness and return on investment.
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NATIONAL RAILROAD PASSENGER CORPORATION

Responsible Amtrak Official(s):
Tonia McMillan (AVP, HR Business Partners)
Sukman Khan (Sr Dir Workforce Planning Analytics, Human Resources)
Matt Porto (Sr Dir Workforce Planning Analytics, SD&C)
Matt Mroz (Sr Dir Workforce Planning Analytics, Capital Delivery)

Target Completion Date: January 31, 2023
APPENDIX C

Abbreviations

CHRO  Chief Human Resources Officer
CY    calendar year
FY    fiscal year
IIJA   Infrastructure Investment and Jobs Act
IMCS   Infrastructure Maintenance and Construction Services
OIG    Amtrak Office of Inspector General
the company Amtrak
APPENDIX D

OIG Team Members

Eileen Larence, Deputy Assistant Inspector General, Audits

Leila Kahn, Senior Director

David Grossman, Senior Audit Manager

Elizabeth Sherwood, Senior Auditor, Lead

Felix Kungu, Senior Auditor

Alison O’Neill, Communications Analyst
**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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or

800-468-5469

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