



Train Operations:

Opportunities to Reduce the Cost of Rebuilding and Manufacturing Components at Maintenance Facilities


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

This page intentionally left blank.



Memorandum

To: Scot L. Naparstek
Executive Vice President/Chief Operating Officer

From: Stephen Lord 
Assistant Inspector General, Audits

Date: April 16, 2018

Subject: *Train Operations: Opportunities to Reduce the Cost of Rebuilding and Manufacturing Components at Maintenance Facilities*
(OIG-A-2018-006)

Amtrak (the company) operates three major maintenance facilities in Wilmington, Delaware; Bear, Delaware; and Beech Grove, Indiana. Known as back shops, these three facilities are part of the Mechanical department; they employ more than 1,000 management and agreement personnel. In fiscal year (FY) 2017, these back shops spent \$218.9 million on the following:

- performing maintenance activities, such as overhauling locomotives and passenger cars, basic maintenance, and wreck repair
- reconditioning components, such as wheels
- rebuilding components, such as air conditioners
- manufacturing components, such as metal brackets

Because several previous reports of the Amtrak Office of Inspector General (OIG) identified inefficiencies in the Mechanical department,¹ we initiated an audit to assess the extent to which the department has opportunities to better manage its maintenance activities. While conducting our work, we identified opportunities to reduce the cost of

¹ *Amtrak Mechanical Maintenance Operations* (E-05-04), September 6, 2005, found that the company's maintenance operation was conducted mostly at time-based intervals and was characterized by a high number of reactive, unscheduled repair actions. In addition, *Mechanical Maintenance: Improved Practices Have Significantly Enhanced Acela Equipment Performance and Could Benefit Performance of Equipment Company-wide* (OIG-E-2012-008), May 21, 2012, found that the company made significant progress on its Acela fleet, but additional improvements in maintenance practices could be made company-wide.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

rebuilding and manufacturing components—a significant back shop activity performed by the same workforce. In FY 2017, rebuilding components cost the company a total of \$131 million and accounted for most of the back shops’ total costs, and manufacturing components cost the company about \$8 million.²

In February 2018, the Chief Mechanical Officer (CMO) informed us he is developing a plan to examine current staffing levels and realign the workload at the three back shops. He also noted that the company is updating the fleet strategy, including purchasing new passenger cars and locomotives, which will impact the future maintenance workload at the back shops. Because our work identified issues with the staffing levels and workloads at the back shops, we are reporting on these issues now so the CMO can consider them as he develops his realignment plan.

Specifically, this report (1) assesses opportunities for the Mechanical department to reduce costs by right-sizing its component workforce, and (2) identifies potential cost-savings associated with opening its component rebuild workload to competition. We will report on our broader assessment of the Mechanical department’s maintenance activities later.

Our scope and methodology is discussed in detail in Appendix A.

SUMMARY OF RESULTS

Additional opportunities exist to right-size the Mechanical department’s workforce and reduce the cost of rebuilding and manufacturing components. The department has taken some positive steps to improve the management of the back shops, including reducing staffing and forming a team to assess opportunities to contract out some work; nevertheless, we estimate that the Mechanical department could put \$7.5 million to \$25.8 million in funds to better use by making further staffing reductions and considering contracting out some activities.

Specifically, our analysis shows the following:

- Two of the three back shops have excess component rebuild employees, based on our analysis of their workload in FY 2017. We estimate that correcting this imbalance could reduce the costs of wages and benefits by about \$3 million

² This cost includes company labor, materials, overhead, warehousing, and freight costs.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

annually and allow the company to put these funds to better use. We found that the third back shop did not have excess component rebuild labor.

- The department also has not fully considered the extent to which it could achieve additional savings by competitively bidding some of its in-house component rebuild workload. The department has not done so because it has historically used in-house labor to perform these functions. In contrast, all seven Class I freight railroads contract out portions of their component rebuild work. Managers in the Mechanical department told us they recently convened a cross-functional team with participants from the Finance and Procurement departments to assess whether some of this workload could be competitively bid; however, the impact of this effort is not yet known. Nevertheless, we estimate that the department could put \$4.6 million to \$22.9 million in additional funds to better use by assessing whether to contract out portions of this workload.

As part of the plan to realign the back shops' workforce, we recommend that the CMO align the size of the component rebuild workforce with its current and future workload, and also assess which types of components should be competitively bid as part of the company's ongoing efforts to achieve greater back shop efficiencies. In commenting on a draft of this report, the CMO agreed with our recommendations and highlighted efforts the company has initiated that, if completed, will address the intent of the recommendations.

BACKGROUND

The Mechanical department is responsible for providing maintenance and overhaul services for the company's fleet of locomotives and passenger cars, reconditioning components (such as wheels), rebuilding components (such as air conditioners), and manufacturing components (such as metal brackets). Each back shop overhauls specific fleets of cars or locomotives. For a list of the costs of components and manufactured parts by location, see Appendix B.

The company has 921 non-supervisory agreement employees at the 3 back shops, and 265 of those employees (29 percent) work specifically on rebuilding and manufacturing components, as shown in Table 1. Component rebuild employees account for 45 percent of the total workforce at Wilmington, 17 percent at Bear, and 30 percent at Beech Grove.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

In FY 2017, the components these employees rebuilt cost the company \$131 million, and components they manufactured cost the company about \$8 million.

Table 1: FY 2017 Back Shop Employees and Component Cost

Location	Total Back Shop Employees	Component Employees		Rebuilt Component Cost (\$ millions)	Manufactured Component Cost (\$ millions)
		Number	Percent of Total		
Wilmington, DE	193	86	45%	\$ 26.3	\$ 6.2
Bear, DE	277	46	17%	\$ 26.4	\$ 1.6
Beech Grove, IN	451	133	30%	\$ 78.3	\$ 0.2
Total	921	265	29%	\$ 131.0	\$ 8.0

Source: OIG analysis of Amtrak data

THE COMPANY HAS TAKEN STEPS TO REDUCE ITS COMPONENT WORKFORCE BUT STILL HAS MORE EMPLOYEES THAN NEEDED

The company has decreased staff at the back shops from 1,007 non-supervisory agreement employees in FY 2014 to 921 in FY 2017, primarily through attrition. Additionally, each back shop has developed a labor model to evaluate staffing in comparison to its forecasted workload. However, our analysis shows that the component workforce at the two Delaware back shops is still larger than needed, and the company could save several million dollars annually by better aligning these workforces to their workloads, consistent with leading private and public practices for workforce planning.

Specifically, our analysis of company data showed that all three back shops have imbalances between their component rebuild and manufacturing workforces and workloads, as highlighted in Table 2. One location, Beech Grove, has 19 fewer employees than its workload, based on FY 2017 data. A senior Finance official stated—and we confirmed—that using overtime was more cost-effective than hiring additional employees at this facility.³ However, the company has 23 more employees at Wilmington and 6 more employees at Bear than needed for their workload—a total of 29 more employees than required in FY 2017, as shown in Table 2.

³ In FY 2017, approximately \$475,000 in overtime costs were charged at Beech Grove versus approximately [REDACTED] that 19 additional employees would have cost the company.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

Table 2. FY 2017 Rebuilt and Manufactured Component Workforce Compared to Workload

Location	Actual Hours Worked	Required Rebuilt and Manufactured Component Staffing ^a	Actual Rebuilt and Manufactured Component Staffing	Difference
Wilmington, DE	103,081	63	86	23
Bear, DE	66,174	40	46	6
Beech Grove, IN	249,082	152	133	(19)

Source: OIG analysis of Amtrak data

Note:

^a This calculation is the total actual hours worked divided by 1,637 hours, which represents the average time an employee is available to work each year after taking into account non-production activities such as vacation, sick leave, and training, according to Mechanical and Budgeting & Planning officials.

Mechanical department officials said that the excess staff at the two Delaware back shops is due, in part, to recent decreases in the overall maintenance workloads at these locations resulting from the use of more modern equipment. For example, beginning in FY 2014, the company put in service 70 new electric locomotives that require less maintenance than the fleet they replaced. We previously reported that the company did not fully assess the impact of the new locomotive purchases on its maintenance workforce and adjust it accordingly.⁴

Although the company has made efforts to reduce the overall back shop workforce and shifted some personnel to other functions, the 29 excess staff remaining at the 2 Delaware component shops represent a significant resource investment. Based on the company's financial data and interviews with company officials, we calculated that the cost of the average wages and benefits is ██████████ per back shop employee. Thus, as the Mechanical department moves ahead with its plans to realign the back shops, right-sizing the workforce could allow the company to save about \$3 million annually and put these funds to better use.

The Vice President, Corporate Planning, also informed us that the company has begun the planning process to replace passenger cars and locomotives used along the Northeast Corridor, long distance routes, and on many state-supported routes. The new

⁴ *Acquisition and Procurement: Opportunities Exist to Improve Management of Technical Support Services Contracts* (OIG-A-2016-013), September 30, 2016.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

cars and locomotives to be purchased will most likely require less maintenance than the older fleet, which would affect the workload of the back shops and, potentially, the company's overall maintenance strategy.

THE DEPARTMENT COULD REDUCE COSTS BY COMPETITIVELY BIDDING ITS COMPONENT REBUILD WORK

The Mechanical department may also be missing opportunities to reduce costs because it has not assessed the cost-effectiveness of continuing to rebuild components in-house, which has been the company's historical practice, versus competitively bidding this work. In 2017, a company consultant identified some activities in the component rebuild workload that the Mechanical department could consider contracting out if they are determined to be cost-effective.⁵ The consultant noted that the seven Class I freight railroads commonly contract out the rebuilding of similar components. Officials from one Class I railroad confirmed that contracting out some component rebuild work is more cost-effective. We determined that \$114.6 million of the \$131 million the company spent rebuilding 13 types of components in FY 2017 (87 percent) was spent for 4 of these types of components. Table 3 shows the specific costs of these components and the extent to which Class I freight railroads contract out this work.

Table 3. FY 2017 Rebuilt Components' Cost and Comparison to Freight Railroads

Type of Component	Cost of Rebuilt Components (\$ millions)	Comparison with Class I Railroads
Rebuilding rolling stock trucks	\$ 51.8	5 of 7 contract out this work
Reconditioning wheels	\$ 39.4	4 of 7 contract out this work
Rebuilding air conditioners	\$ 13.3	7 of 7 contract out this work
Refurbishing air brake system components	\$ 10.1	7 of 7 contract out this work
Total	\$ 114.6	

Source: OIG analysis of Amtrak data and a company consultant's findings

Despite these potential cost savings, the company's three component rebuild shops have not tried to competitively bid most of their work because the company has

⁵ For this analysis, we focused on the rebuilt components and not the manufactured components because rebuilt components accounted for the bulk of the cost to the company (94 percent). However, the company is considering whether to contract out some of these manufactured components as part of its effort to reduce costs.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

historically used its in-house workforce to rebuild components. Several Government Accountability Office (GAO) reports have identified the benefits of competitive contracts, including estimated cost savings.⁶ Further, the Office of Management and Budget (OMB) found cost savings even when the work remains in-house because competition from external vendors helps the agencies identify efficiencies that can reduce costs.⁷ GAO also reported in 2012 and 2013⁸ that companies that followed a strategic sourcing approach ultimately increased competition, reducing costs by 4 percent to 20 percent, and that agencies that followed a similar approach saved 5 percent to 20 percent. Based on the company's FY 2017 cost data and the range of savings identified by GAO, we conservatively estimate that opening the four largest categories of rebuilt components to competitive bidding would allow the Mechanical department to put \$4.6 million to \$22.9 million in funds to better use.

A 2013 GAO report on public transit noted the possible complication that unions tend to oppose contracting out existing services, which threatens union members' jobs.⁹ The report also noted that under these conditions, companies must weigh union resistance against the financial pressures to increase cost-effectiveness. The Vice President of Labor Relations acknowledged this potential labor complication but stated that contracting out component rebuild work could be explored as part of a cost-savings or right-sizing initiative, and that the company would need to review the initiative with labor representatives.

Mechanical department officials told us that some potential cost savings might be realized through contracting out and that they have convened a cross-functional team

⁶ GAO, *Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue* (GAO-11-318SP), March 2011; GAO, *Strategic Sourcing: Improved and Expanded Use Could Save Billions in Annual Procurement Costs* (GAO-12-919), September 2012; and GAO, *Strategic Sourcing: Leading Commercial Practices Can Help Federal Agencies Increase Savings When Acquiring Services* (GAO-13-417), April 2013.

⁷ Executive Office of the President Office of Management and Budget, *Competitive Sourcing: Conducting Public-Private Competition in a Reasoned and Responsible Manner*, July 2003. This OMB study notes that regardless whether the federal government or the private contractor wins the competition, the act of competition alone generates an average cost savings of 10 to 40 percent.

⁸ GAO, *Strategic Sourcing: Improved and Expanded Use Could Save Billions in Annual Procurement Costs* (GAO-12-919), September 2012; and GAO, *Strategic Sourcing: Leading Commercial Practices Can Help Federal Agencies Increase Savings When Acquiring Services* (GAO-13-417), April 2013.

⁹ GAO, *Public Transit: Transit Agencies' Use of Contracting to Provide Service* (GAO-13-782), September 2013.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

to assess whether some activities of the component workload could be competitively bid. The team includes participants from the following departments:

- Mechanical, including back shop managers, component rebuild shop managers, and process engineers
- Finance, including Financial Planning and Analysis
- Procurement, including Materials Management

However, this initiative is new, and the full scope and impact of this effort is unclear. Nevertheless, our analysis could help inform the CMO's broader effort to realign the back shop workloads and achieve greater work force efficiencies through competition.

CONCLUSIONS

The Mechanical department has taken some positive steps to better manage the component rebuild workforce in the company's three back shops, including (1) reducing overall staffing levels and (2) forming a team to study opportunities for contracting out. However, our work has identified additional opportunities to reduce the costs of rebuilding components that the company should consider as it develops broader plans to right-size the work force and achieve greater work force efficiencies through competition. Our recommended actions support the company's efforts to reduce the company's net operating loss and could result in \$7.5 million to \$25.8 million in funds that the department could put to better use.

RECOMMENDATIONS

As part of the company's effort to help realign the back shops' workload, we recommend that the Chief Operating Officer direct the CMO to take the following actions:

1. Align the back shops' component workforce with their current and projected workloads to ensure that back shop staff are productively employed.
2. Assess the cost-effectiveness of continuing to perform any of the component rebuild work in-house and determine which types of components, if any, should be competitively bid as part of the ongoing company effort to achieve greater back shop efficiencies.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

MANAGEMENT COMMENTS AND OIG ANALYSIS

In commenting on a draft of this report, the Vice President, Chief Mechanical Officer, stated that the company agreed with our recommendations. He also identified efforts the company has initiated and plans to initiate in order to address the intent of our recommendations. The company's actions are summarized below:

- **Recommendation 1:** Management agreed with our recommendation to align the back shops' component workforce with their current and projected workloads. The company stated that it has initiated efforts to identify workforce imbalances and expects to begin evaluating its labor standards against third-party suppliers to ensure that the company is receiving the best value from its workforce.
- **Recommendation 2:** Management agreed with our recommendation to assess the cost-effectiveness of continuing to perform component rebuild work in-house. The Mechanical department has established a process to evaluate opportunities to perform work either with internal or external resources and plans to evaluate the best approach for certain components, such as air brakes, within the next 90 days.

For management's complete response, see Appendix C.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

APPENDIX A

Scope and Methodology

This report (1) identifies opportunities for the Mechanical department to reduce maintenance costs by right-sizing its component workforce, and (2) identifies the potential cost-savings associated with opening its component rebuild workload to competition. This report is part of a larger, ongoing audit assessing the extent to which the Mechanical department has opportunities to better monitor and manage its maintenance activities. Certain information in this report has been redacted due to its sensitive nature.

Our work focused on all of the company's component rebuild and manufacturing activity performed at its three back shops—Wilmington, Delaware; Bear, Delaware; and Beech Grove, Indiana—for FY 2014 through FY 2017. We performed our audit work from May 2017 through March 2018 in Washington, D.C.; Chicago, Illinois; Wilmington, Delaware; and Beech Grove, Indiana.

To identify opportunities to reduce maintenance costs through right-sizing, we calculated the number of employees needed to perform rebuild and manufacturing activities at each location in FY 2017, based on the company's production reports. We divided the total number of hours charged to component rebuild and manufacturing work orders by the number of hours each full-time employee was projected to be available to work during the fiscal year. The number of available hours (1,637) represents the average time an employee is able to work each year after taking into account time spent on non-work activities—including training, vacation, and sick leave—which the back shop plant managers confirmed. We then compared the number of employees needed to complete the component rebuild and manufacturing production volume with the actual staffing levels.

To determine the average wages and benefits per employee, we interviewed accounting personnel. To determine the potential cost savings, we multiplied the number of excess staff times this average cost of wages and benefits.

To identify opportunities to contract out some component rebuild work, we organized FY 2017 production activity by the type of component rebuilt. We compared our analysis to a consultant's report that identified the types of components currently rebuilt by the company, many of which the Class I freight railroads often contract out.

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

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

We identified the top four types of components with the largest amount of spending in FY 2017; they represented 87 percent of the company's rebuilt components.

To estimate the potential savings from contracting out, we used GAO estimates of savings when companies use strategic sourcing to increase competition. GAO found that companies that followed a strategic sourcing approach ultimately increased competition, reducing costs by 4 percent to 20 percent. Similarly, agencies that followed this approach saved 5 percent to 20 percent. OMB estimated that opening in-house activities to competition saved 10 percent to 40 percent. For this report, we chose to estimate cost savings with GAO's more conservative range of percentages—4 percent as the low end and 20 percent as the high end of potential savings.

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 objectives.

Internal Controls

We reviewed management oversight over the component rebuild process. This included analyzing the labor planning models the company uses to evaluate the size of the workforce needed, based on the projected workload. We discussed these controls with back shop managers to understand how they apply to the rebuilt component workload. We did not conduct an independent review of company controls.

Computer-Processed Data

The company uses the Systems Applications and Products (SAP) software solution, an integrated, module-based Enterprise Reporting Package that shares data between functional modules. SAP is also interfaced to and from external partner systems, such as the company's Work Management System (WMS).

Company budgeting and planning managers generated standard cost center reports for FY 2014–FY 2017 from the SAP Business & Planning Consolidation module. We used these reports to determine the total spending and headcount at the back shops. We

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

validated the total spending and headcount in the cost centers through interviews with a Finance department official, who recreated reports to verify the totals.

We also analyzed standard production reports from FY 2014–FY 2017 provided by the Material Accounting group. These reports were generated from the SAP Project Systems module using data populated from WMS. We used these production reports to determine the volume of rebuilt components and as a basis to categorize the components by type. We validated this data by recreating a portion of the production reports.

We determined that for the purposes of our audit, the data were reliable.

Prior Audit Reports

We identified and reviewed the following relevant reports by our office and GAO:

Amtrak OIG:

- *Acquisition and Procurement: Opportunities Exist to Improve Management of Technical Support Services Contracts* (OIG-A-2016-013), September 30, 2016
- *Mechanical Maintenance: Improved Practices Have Significantly Enhanced Acela Equipment Performance and Could Benefit Performance of Equipment Company-wide* (OIG-E-2012-008), May 21, 2012
- *Amtrak Mechanical Maintenance Operations* (E-05-04), September 6, 2005

GAO:

- *GAO, Navy Force Structure: Actions Needed to Ensure Proper Size and Composition of Ship Crews* (GAO-17-413), May 2017
- *GAO, Human Capital: Strategies to Help Agencies Meet Their Missions in an Era of Highly Constrained Resources* (GAO-14-168), May 2014
- *GAO, Public Transit: Transit Agencies' Use of Contracting to Provide Service* (GAO-13-782), September 2013
- *GAO, Strategic Sourcing: Leading Commercial Practices Can Help Federal Agencies Increase Savings When Acquiring Services* (GAO-13-417), April 2013

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

- GAO, *Strategic Sourcing: Improved and Expanded Use Could Save Billions in Annual Procurement Costs* (GAO-12-919), September 2012
- GAO, *Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue* (GAO-11-318SP), March 2011

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

APPENDIX B

Costs of Components and Manufactured Parts by Back Shop in FY 2017 (in millions)

Component	Back Shop			Total Cost of Components
	Wilmington, DE	Bear, DE	Beech Grove, IN	
Rolling stock trucks	\$1.6	\$18.4	\$31.7	\$51.8
Wheels	\$13.6	\$0.0	\$25.8	\$39.4
Air conditioners	\$2.6	\$0.0	\$10.7	\$13.3
Air brake parts	\$0.0	\$4.0	\$6.2	\$10.1
Electronics	\$6.1	\$0.0	\$0.7	\$6.8
Seats	\$0.0	\$3.3	\$0.0	\$3.3
Couplers	\$0.1	\$0.0	\$1.9	\$2.0
Traction motors	\$1.4	\$0.0	\$0.0	\$1.4
Engine parts	\$0.0	\$0.0	\$1.3	\$1.3
Coffee makers	\$0.8	\$0.0	\$0.0	\$0.8
Toilets	\$0.0	\$0.7	\$0.0	\$0.7
Fans	\$0.0	\$0.0	\$0.0	\$0.0
Fire extinguishers	\$0.0	\$0.0	\$0.0	\$0.0
Subtotal	\$26.3	\$26.4	\$78.3	\$131.0
Manufactured parts	\$6.2	\$1.6	\$0.2	\$8.0
Total	\$32.5	\$28.0	\$78.5	\$139.0

Source: OIG analysis of Amtrak data

Note: Numbers are rounded.

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

APPENDIX C

Management Comments



NATIONAL RAILROAD PASSENGER CORPORATION
4001 Vandever Ave., Wilmington, DE 19802

Memo

Date	April 10, 2018	From	Charles King <i>CP</i>
To	Stephen Lord, Assistant Inspector General, Audits	Department	Operations, Mechanical
		Subject	Components Report for Discussion
		cc	Scot Naparstek Robert Moriarty Daniel Ruppert

In response to the Memorandum dated March 5, 2018 entitled report *Train Operations: Opportunities to Reduce the Cost of Rebuilding Components, For Discussion Purposes Only Project No. 010-2017*, management concurs with the two recommendations.

The OIG DRAFT Statement of Facts for Discussion Purposes Only report summarizes areas of potential opportunities for cost savings through component rebuild. The OIG suggests that freight railroads contract out much of the work that Amtrak currently performs with internal employees. Further, the OIG suggests that a more competitive process for component repair needs to be evaluated in an effort to save \$7.5 to \$25.8 Million. The OIG report provides two suggested recommendations:

OIG Recommendation

1. *Align the back shops' component workforce with their current and projected workloads to ensure that back shop staff are productively employed.*

Management Response

Amtrak management agrees with the OIG recommendation, and is beginning efforts that would identify areas where workforce and headcount imbalance may exist using this report. Taking this a step further, management will be evaluating Amtrak labor standards against 3rd Party Market suppliers to ensure that the greatest value for Amtrak is obtained.

OIG Recommendation

2. *Assess the cost-effectiveness of continuing to perform any of the component rebuild work in-house and determine which types of components, if any, should be competitively bid as part of the ongoing company effort to achieve greater back shop efficiencies.*

Management Response

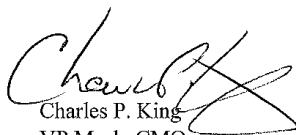
Amtrak management agrees with the OIG recommendation, and in conjunction with the efforts for the first recommendation, Management has initiated efforts to drive competitive value through analysis with 3rd party competition. Mechanical Management plans to start by looking at the following components to determine the greatest value for Amtrak.

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

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

Stephen Lord
April 10, 2018
Page 2

Management would look at all Air Brake valves, tread and disc brake units and seek competition to create greater value. Seat rebuilds, and all HVAC work would also be evaluated. The mechanical department has established a process for evaluating opportunities to perform work with internal vs external resources through the Component Cost Optimization Team mentioned in the report. This process has already been used to evaluate some HVAC work, fire extinguishers and evaporators. The air brake, seat and other HVAC components would be the next step in the evaluation process and we would look to have this completed within 90 days.


Charles P. King
VP Mech, CMO

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

APPENDIX D

Acronyms and Abbreviations

CMO	Chief Mechanical Officer
FY	fiscal year
GAO	Government Accountability Office
OIG	Amtrak Office of Inspector General
OMB	Office of Management and Budget
SAP	Systems Applications and Products
The company	Amtrak
WMS	Work Management System

Amtrak Office of Inspector General
**Train Operations: Opportunities to Reduce the Cost of Rebuilding
and Manufacturing Components at Maintenance Facilities**
OIG-A-2018-006, April 16, 2018

APPENDIX E

OIG Team Members

Eileen Larence, Deputy Assistant Inspector General, Audits

Michael Kennedy, Senior Director

Melissa Hermes, Senior Audit Manager

Jana Brodsky, Senior Auditor, Lead

Cindi Anderson, Senior Auditor

Alison O'Neill, Communications Analyst

OIG MISSION AND CONTACT INFORMATION

Mission

The Amtrak OIG's mission is to provide independent, objective oversight of Amtrak's programs and operations through audits and investigations focused on recommending improvements to Amtrak's economy, efficiency, and effectiveness; preventing and detecting fraud, waste, and abuse; and providing Congress, Amtrak management, and Amtrak's Board of Directors with timely information about problems and deficiencies relating to Amtrak's programs and operations.

Obtaining Copies of Reports and Testimony

Available at our website 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

Stephen Lord

Assistant Inspector General, Audits

Mail: Amtrak OIG
10 G Street NE, 3W-300
Washington, D.C. 20002

Phone: 202-906-4600

Email: Stephen.Lord@amtrakoig.gov