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GOVERNANCE: Opportunities Exist to Improve the Efficiency of Procurement Practices for Goods and Services

Audit Report OIG-A-2015-005 | February 11, 2015

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AMTRAK

NATIONAL RAILROAD
PASSENGER CORPORATION

Office of Inspector General

Memorandum

To: Gerald Sokol, Jr.
Executive Vice President /Chief Financial Officer (CFO)

From: David R. Warren
Assistant Inspector General, Audits

Date: February 11, 2015

Subject: *Governance: Opportunities Exist to Improve the Efficiency of Procurement Practices for Goods and Services* (Audit Report OIG-A-2015-005)

This report provides the results of our data analytics review of procurement practices. Amtrak's (the company's) Procurement and Materials Management group in the Finance department has primary responsibility for establishing procurement policy, developing procedures, reviewing and approving purchase orders, and ensuring that goods and services are obtained in a timely, efficient, and economical manner. In Calendar Year (CY) 2013, the company paid about $2.3 billion to more than 17,000 vendors for goods and services.

Our reporting objective was to review procurement practices to determine whether there are opportunities to more economically procure goods and services. We focused our review on vendor prices, discounts, and payment terms for CY 2013, using Audit Command Language (ACL), a specialized data analysis software tool. We will provide the Finance department with the ACL testing tools that we developed for this review. We discuss our scope and methodology in Appendix A.

OPPORTUNITIES EXIST TO IMPROVE PROCUREMENT PRACTICES

Our work showed that the company's procurement manual establishes policies and procedures, and provides guidance on how to procure goods and services efficiently and effectively. However, weaknesses in existing procurement practices for purchasing and paying for goods and services have led to inefficiencies and loss of resources resulting from inefficient purchasing and payment practices. We identified weaknesses in the practices for the three areas reviewed: vendor prices, discounts, and payment terms. As a result, opportunities exist to improve procurement practices that could result in freeing up $9.4 million per year in funds that the company could put to better use.

Lowest-Price Vendors Not Always Used

The company does not always purchase materials at the lowest price available. We analyzed about $35 million worth of CY 2013 purchase orders for materials and found that if the company had purchased these materials from the lowest-cost vendor, it would have saved about $3.4 million.

We found that some of the causes for paying higher prices were weaknesses in material requirements forecasting and a limited number of approved vendors as acceptable suppliers of the items. For example, the company could have spent about $11,000 less if it had better forecasted the need for a frequently used item. A better forecast would have enabled procurement officials to establish a blanket purchase order with the low-cost vendor instead of using multiple individual orders to obtain the item from higher-cost vendors. In another instance, the company could have saved about $8,000 by purchasing a part from a low-cost vendor, but the low-cost vendor was not on the approved acceptable supplier list.

Early Payment Discounts Not Realized

The company could have saved about $84,000 by taking advantage of missed early payment discounts. According to accounts payable officials, the company missed the early payment discounts because of delays in confirming that goods were received. Officials said another reason for missing discounts was because in some cases invoices were missing purchase order numbers.

In addition, almost all invoices did not provide a discount for early payment. For CY 2013, we found that $1.4 billion of invoice amounts, or 97 percent of the total, did not provide early payment discounts. Best practices suggest that companies are more likely to pursue discounts with vendors who receive substantial business from a company. We estimate the company could have saved about $6 million if it had negotiated an early payment discount of 1 percent with the 20 highest dollar volume business vendors. Procurement officials stated that most vendors do not offer early payment discounts because they provide better pricing on their goods or services. However, our analysis of the purchase orders for materials showed that 77 vendors who did not offer the company early payment discounts charged about $2.4 million more than other vendors selling the same materials.

A Procurement official told us the department is considering implementing a dynamic discounting program. This type of program encourages vendors to improve their cash flow in exchange for offering variable discount rates on a sliding scale. The scale provides a greater discount for earlier payment and a reduced discount for later payment.

Extended Payment Terms Could Improve Cash Flow

We found a significant variation in the company's payment terms with vendors, and that longer, more standardized, payment terms would improve the company's cash flow. Negotiating extended payment terms would improve cash flow. We found that for CY 2013, purchase order invoices valued at about $1.4 billion had 17 different payment terms, ranging from 0 to 60 days. The most common payment term was 30 days for purchase orders valued at about $1 billion (72 percent). The company could have potentially improved its cash flow by about $78 million if payment terms on the $1.4 billion in purchase orders were extended to 45 days, and about $135 million if it were extended to 60 days.

Conclusion and Recommendation

The procurement practices discussed in this report could lead to funds being used more economically. We recognize that changes in vendor terms must be negotiated to realize these economies. Entering into to such discussions is cost beneficial because the company could reduce payments by about $3.4 million annually by using lower-price vendors and $6 million annually by negotiating early payment discounts. The potential savings of about $9.4 million—$3.4 million plus $6 million—for three years would result in freeing up about $28.2 million in funds that could be put to better use.

We recommend that you, where possible, implement the use of more economical purchasing practices identified in this report to help ensure that the lowest cost is paid for materials, negotiating discounts for early payments, and negotiating extended payment terms with vendors.

MANAGEMENT COMMENTS AND OIG ANALYSIS

In his response to the draft report, the Chief Financial Officer commented that Procurement & Logistics management agreed with the recommendation and where possible and practical, will implement the use of purchasing practices to help ensure that the best value is received for all items and services purchased. The response also discussed various ongoing and planned actions related to our recommendation. The proposed corrective actions address the intent of our recommendation. For management's complete response, see Appendix B.

Appendix A

SCOPE AND METHODOLOGY

This report provides the results of our data analytics review of procurement practices. We focused the scope of our work on analyzing CY 2013 purchasing data, and policies and practices the Procurement and Materials Management group used to make purchases. We also researched federal and private-sector procurement best practices. During our work, we met with officials and staff from the Procurement, Materials Management, and Finance departments. We performed our review from January 2014 to October 2014 in Washington D.C.

To determine whether opportunities exist for the company to achieve more economical operations, we compared the company's procurement practices to practices we identified from the federal government and private sectors. For each opportunity we identified, we estimated the potential economic benefit of implementing those practices. We discussed with procurement officials the reasons the company was not using certain best practices.

Specific key steps in our methodology included obtaining data from the company's procurement and accounts payable system—SAP[1]—for January through December 2013. We analyzed that data using ACL software to perform several data analytics tests to determine if the company is:

- **Obtaining the best price from its vendors**. Specifically, we developed a test to identify purchase orders valued over $10,000 that included the same material, but had unit prices that were at least 10 percent different from other vendors. These parameters were chosen to identify large material purchases with significant variance in unit prices. The test identified purchase orders for materials valued at about $35 million—about 12 percent of the $297 million material purchase orders processed in CY 2013. To identify opportunities to buy materials at the lowest cost, we compared the unit price paid for the same materials on these purchase orders. The results of this test cannot be projected to the entire population of purchase orders.

[1] SAP (ERP) software processes enterprise-wide data from various business areas such as finance, procurement, payroll, and sales and distribution.

- **Receiving early payment discounts and better payment terms.** We extracted invoices for goods and services valued at about $2.3 billion paid to more than 17,000 vendors. We then removed about $100 million worth of invoices from our analysis because they contained potentially erroneous data such as invalid invoice dates. From the resulting $2.2 billion worth of invoices, we selected the invoices paid against purchase orders, valued at about $1.44 billion, to analyze discounts lost or not available and various payment terms. To identify early payment discount opportunities, we compared the discounts lost or not realized against best practices. To identify opportunities for improving cash flow, we compared existing payment terms against extended payment terms.

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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Internal Controls

We reviewed internal controls related to the Procurement and Materials Management group's policies and practices for obtaining the lowest price for material, and negotiating early payment discount and extended payment terms. This report identifies opportunities for management control improvement in each of these areas. We did not review the department's overall system of manual and automated controls for purchasing.

Use of Computer-Processed Data

To achieve the audit objective, we relied on computer-processed data contained in SAP. We sampled source documents to provide reasonable assurance that the data were accurate. Based on these tests, we concluded the data are sufficiently reliable to be used in meeting the audit objective.

Prior Reports

We did not identify any prior audit reports relevant to this audit.

Appendix B

COMMENTS FROM AMTRAK'S MANAGEMENT

NATIONAL RAILROAD PASSENGER CORPORATION
60 Massachusetts Avenue, NE, Washington, DC 20002

Memo

AMTRAK

Date: February 2, 2015

From: Gerald Sokol, Jr.
Executive Vice President/Chief Financial Officer

To: David R. Warren
Assistant Inspector General, Audits

Department: Finance

Subject: Governance: Opportunities Exist to Improve the Efficiency of Procurement Practices for Goods and Services (Draft Audit Report for Project No. 015-2013)

cc: DJ Stadtler, Executive Vice President/Chief Operations Officer
Eleanor D. Acheson, Executive Vice President/Chief Legal Officer General Counsel
William H. Herrmann, Vice President/Managing Deputy General Counsel
Bernard F. Reynolds, Vice President, Chief Procurement & Logistics Officer
Matthew Gagnon, Senior Director Amtrak Controls
Melantha Paige, Senior Amtrak Controls Consultant
Robert Nanney, Deputy Chief Materials Management

Message:

This memorandum provides Procurement & Logistics'(P&L) response to the November 24, 2014, memorandum on Opportunities Exist to Improve the Efficiency of Procurement Practices for Goods and Services (Draft Audit Report for Project No. 015-2013).

P&L Management is in agreement with the Office of the Inspector General (OIG), and where possible and practical, Procurement will implement the use of purchasing practices to help ensure that the best value is received for all items and services purchased by Amtrak. Summarized below, please find actions that are currently underway, or that Procurement will initiate, to address the OIG's recommendations.

OIG Recommendation:
We recommend that you, where possible, implement the use of more economical purchasing practices identified in this report to help ensure that the lowest cost is paid for materials, negotiating discounts for early payments, and negotiating extended payment terms with vendors.

Management Response:
We agree that our purchasing processes should be designed and executed in a manner that ensures that Amtrak receives the best price possible, in every procurement action, under the circumstances.

In the report, the OIG identified several findings, to support the proffered recommendation. In order to ensure that our response and related actions address each finding/issue, we have responded to each individual finding with the actions we are taking or will take in the near term to implement the OIG's recommendation.

Finding No. 1: Lowest Price Vendor Not Always Used
The OIG found some causes for paying higher prices were weaknesses in material requirements forecasting and a limited number of approved vendors.

Management Response – Finding 1:
P&L Management agrees with the above stated finding. To mitigate the risks identified above in Finding No.1, related to weaknesses in material requirements forecasting, P&L management is currently engaged in following activities to reduce and/or highlight materials demand and supply gaps:

- Contracted with an industry expert, professional services firm, within the past month to review P&L current materials requirement planning processes and protocols to ensure the SAP system is being utilized to its fullest. The engagement commenced in late January, 2015 and will continue for a 4-6 week period of time.

- P&L continues to facilitate and actively drive the Integrated Supply and Demand Planning (ISDP) program in collaboration with Amtrak Operations. ISDP has been in place for approximately (4) years with cross functional team meetings with the Mechanical department and the Engineering department focused on future demand changes and supply alignment. There are currently (6) different meetings that take place on a routine basis across Amtrak.

- P&L, in collaboration with the Mechanical department, has implemented a process enhancement called Back Shop Advanced demand material ordering.
This is a systemic material demand signal via Work Management System (WMS) into SAP providing the actual quantity of material required along with the timing. This has improved the material requirements visibility reducing supply gaps and expediting material deliveries.

- With these and other proactive steps taken, materials on blanket purchase orders have increased over 190% from 3,900 items to over 7,500 since January 2013. The benefit of this statistic is more materials are under contract, have negotiated pricing, proper terms and conditions in order to better support Operations.

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- With regard to a limited number of approved vendors, P&L will engage more actively with Mechanical's Rolling Stock Engineering and Engineering's Maintenance of Way Groups to better optimize opportunities in the marketplace. P&L must continue to source new suppliers with the understanding of the age of the equipment and the reduction in marketplace for such equipment. A planned course of action will be created and communicated to the OIG by April 30, 2015.

Finding No. 2: Early Payment Discounts Not Realized
The company missed the early payment discounts because of delays in confirming that goods were received.

Management Response – Finding 2:
P&L Management will work with IT and Operations to consider technology and manual procedural options to determine the best solution feasible for Amtrak in the short-term, and long-term. Where and when possible, we hope to have a process in place to systematically evaluate and identify the optimum payment times for all open payables.

P&L will complete the initial feasibility study and draft a plan of action by June 30, 2015.

Finding No. 3: Early Payment Discounts Not Offered and Best Price Not Received
Procurement officials stated that most vendors do not offer early payment discounts because they provide better pricing on their goods or services. However, our analysis of the purchase orders for materials showed that 77 vendors who did not offer the company early payment discounts charged about $2.4 million more than other vendors selling the same materials.

Management Response – Finding 3:
P&L Management will review procurement data used by the OIG and review existing contracts to determine which contracts represent opportunities to reduce cost through improved pricing and/or the addition of discounts to payment terms. We will identify and prioritize a list of procurement opportunities and establish a schedule by which we will reevaluate and/or re-compete these procurements by June 30, 2015.

In addition, P&L will work with Accounts Payable and our Treasurer to reevaluate options available through our Ariba Supplier Network, including Dynamic Discounting, by April 30, 2015 (We discussed these opportunities with the prior Treasurer in July, 2013, and determined then not to implement these options).

Finding No. 4: Negotiating Extended Payment Terms with Vendors
Extended Payment Terms Could Improve Cash Flow

Management Response – Finding 4:
P&L Management agrees with the above stated finding, and in connection with the efforts described in response to Finding – 3, P&L will re-visit and re-evaluate options to improve cash flows/working capital, by April 30, 2015.

Appendix C

ACRONYMS AND ABBREVIATIONS

ACL	Audit Command Language
Amtrak	the company
CY	Calendar Year
OIG	Amtrak Office of Inspector General

Appendix D

OIG TEAM MEMBERS

Vipul Doshi	Senior Director, Audits
Vijay Chheda	Senior Director, Audits
Ashish Tendulkar	Senior Auditor, IT
Kim Tolliver	Consultant

OIG MISSION AND CONTACT INFORMATION

Amtrak OIG's Mission	The Amtrak OIG's mission is to provide independent, objective oversight of Amtrak's programs and operations through audits, inspections, evaluations, 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 OIG Reports and Testimony	Available at our website: www.amtrakoig.gov
To Report Fraud, Waste, or Abuse	Report suspicious or illegal activities to the OIG Hotline (you can remain anonymous): Web: www.amtrakoig.gov/hotline Phone: 800-468-5469
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