



**AMTRAK** | Office of  
Inspector General  
[www.amtrakoig.gov](http://www.amtrakoig.gov)

# **AMTRAK INVOICE REVIEW:**

## Undetected Inaccuracies Resulted in Overpayments

Report No. OIG-A-2013-006 | February 15, 2013






## Office of Inspector General

# Memorandum

**To:** Gordon Hutchinson, Acting Chief Financial Officer

**From:** David R. Warren   
Assistant Inspector General, Audits

**Date:** February 15, 2013

**Subject:** *Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments*  
(Report No. OIG-A-2013-006)

The Amtrak Office of Inspector General (OIG) conducted this audit because of previously identified control weaknesses and the significant amount of money associated with Amtrak's on-time-performance incentive payments to host railroads. Over time, our office has identified more than \$83 million in overpayments and potential recoveries disclosed in OIG audit reports issued since 1995. This does not include the over-\$2 million identified in this report, but does include over \$19 million in overpayments that have already been collected. This report is part of a series of OIG audits of payments to host railroads. (See Appendix I for a list of prior reports).

The objective of this audit was to determine whether BNSF Railway's on-time-performance incentives invoiced to Amtrak from July through December 2006 were accurate. For a detailed discussion of our audit scope and methodology, see Appendix I.

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

## SUMMARY OF RESULTS

BNSF invoices to Amtrak for on-time-performance payments from July through December 2006 were not consistently accurate. The invoices were not accurately calculated in accordance with the operating agreement between Amtrak and BNSF. The invoice inaccuracies went undetected and Amtrak overpaid BNSF over \$2.1 million for the 6-month period.

The invoice inaccuracies went undetected and as previously reported,<sup>1</sup> Amtrak did not have in place an adequate invoice review process during this period. We recommended improvements to that process, including new invoice-review policies and procedures. Amtrak, in the last 6 months, has completed implementing those recommendations. We believe that the actions Amtrak has taken, if sustained, should improve the review process and help ensure that invoice errors are detected before payments are made. We are recommending that Amtrak's Acting Chief Financial Officer take action to recover the \$2,115,440 in overpayments.

## OPERATING AGREEMENTS

Effective September 1, 1996, Amtrak entered into an operating agreement with BNSF Railway (formerly known as Burlington Northern Railroad Company and the Atchison, Topeka, and Santa Fe Railway Company). The agreement provisions were further amended by subsequent amendment agreement changes. We reviewed and used the agreement and applicable amendments as the basis for determining the accuracy of BNSF's invoices for on-time-performance incentives.

The operating agreement includes incentives to encourage BNSF to facilitate Amtrak passenger train on-time operations. Generally, service performance payments and related incentives are calculated using provisions described in appendix V of the agreement—*Performance Payments and Penalties*.

---

<sup>1</sup> *On-Time-Performance Incentives: Inaccurate Invoices were Paid Due to Long-standing Weaknesses in Amtrak's Invoice-Review Process* (Audit Report No. 403-2010, April 21, 2011).

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

Appendix V of the operating agreement also sets forth the specific criteria, generally referred to as tolerances,<sup>2</sup> to be used to determine the on-time-performance incentive due the host railroad. The appendix also states how the provisions should be applied and how the on-time-performance incentives should be calculated. A train is considered on time, for incentive-calculation purposes, if it arrives on or before the scheduled arrival time, after taking into consideration allowed tolerance minutes.

## **INVOICES CONTAINED INACCURACIES IN ALL MONTHS REVIEWED**

BNSF's invoice amounts were not accurately calculated in accordance with the operating agreement in any of the months reviewed. Invoices for the audit period disclosed inaccuracies amounting to \$2,115,440—almost 37 percent of the nearly \$5.8 million in on-time-performance incentives invoiced and paid. Amtrak's invoice-review process did not detect any errors prior to making the on-time-performance payments. As previously reported,<sup>3</sup> Amtrak did not have in place an adequate invoice-review process during this period. We recommended improvements to that process, and Amtrak has completed implementing those recommendations. We believe that the actions Amtrak has taken, if sustained, should improve the review process and help ensure that invoice errors are detected before payments are made. (See Appendix II for further discussion of this issue).

Invoice inaccuracies can be grouped into three categories: (1) incorrect application of contract provisions, (2) inappropriately claimed tolerances, and (3) clerical errors.

Figure 1 provides a percentage breakdown for the categories of inaccuracies we identified.

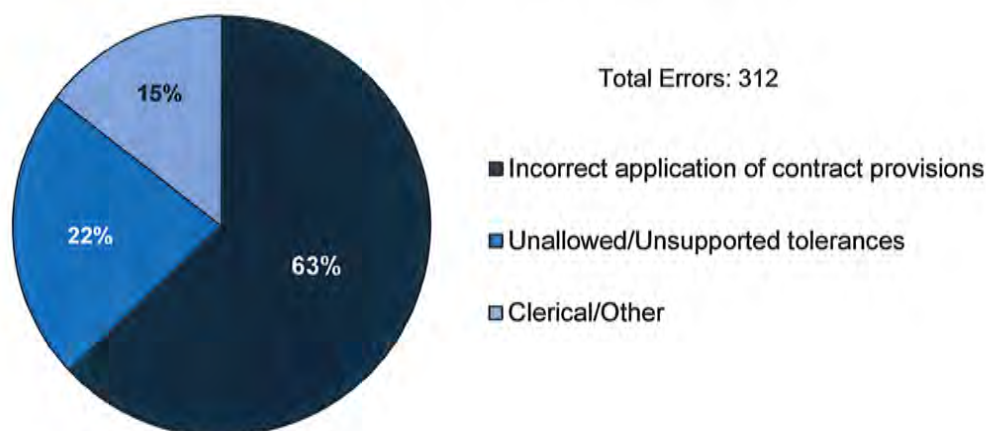
---

<sup>2</sup> Tolerances are allowances given for various reasons to the host railroad. The allowances are in the form of delay minutes that can be applied to an Amtrak train that is late in arriving at a checkpoint. The net effect of applying these minutes can result in a train's being recorded as on time for purposes of calculating the incentive payment.

<sup>3</sup> Audit Report No. 403-2010, April 21, 2011.

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
 Report No. OIG-A-2013-006, February 15, 2013

**Figure 1. Invoice Inaccuracy Categories by Percentage of Occurrences, July 2006–December 2006**



Source: Amtrak OIG analysis of BNSF and Amtrak data for July 1–December 31, 2006

### **Invoices Were Calculated Based on Incorrectly Applying Agreement Provisions**

BNSF incorrectly applied agreement provisions in calculating its incentives, which accounted for about 63 percent of total inaccuracies. Specifically, the host railroad used performance rates and run times that were not accurate.

For about 57 percent of the incorrectly applied agreement-provision inaccuracies, BNSF did not consistently use the performance rates contained in the agreement provisions. Performance rates are rates used to calculate the monthly on-time-performance incentives. The amounts vary for each individual train segment and are listed in appendix V, table 1, of the agreement.

For example, for trains that serve one of Amtrak's long-distance routes, BNSF used performance rates as the basis for its incentive calculations for September 2006. BNSF incorrectly applied the performance rates in 7 of the 10 segments along this route:

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
 Report No. OIG-A-2013-006, February 15, 2013

- In two of the segments, the host railroad used the performance rate listed for another segment.
- In three of the segments, BNSF used a performance rate in effect for a different time period.
- Finally, for two of the segments, we could not determine the basis for the performance rate used by BNSF.

These inaccuracies contributed to over \$70,000 in overpayments for this route in September 2006.

Further, BNSF used run times other than those contained in the agreement provisions, which caused about 43 percent of the inaccuracies. The run time is used as a basis for determining the on-time status of trains. BNSF used run times that varied between 1 and 23 minutes from those contained in the agreement, as detailed in Table 1. Over the 6-month audit period, we identified run time variances in 16 separate trains, which contributed to the overpayments.

**Table 1. Number of Trains with Inaccurate Run Time Variances, July–December 2006**

Number of Trains	Variance in Minutes
7	23
1	16
1	13
2	8
1	6
3	5
1	1
<b>16</b>	

*Source:* Amendment agreement changes to the 1996 operating agreement and Amtrak OIG analysis of BNSF and Amtrak data for July–December 2006

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

As an example of the potential dollar impact of just one run-time inaccuracy, for one train in July 2006, BNSF's invoice claimed 23 additional minutes than was shown in appendix V, table 1, of the agreement. We recalculated the on-time-performance incentives based on the run time stated in the agreement and found 13 out of 31 days in the month in which the train was considered late based on our calculation, yet BNSF claimed it was on time. This inaccuracy resulted in an overpayment of nearly \$40,000 for this train alone.

### **Invoices Contained Unallowed/Unsupported Tolerances**

BNSF claimed tolerances for delays that were either not allowed by the agreement or not supported by adequate source documents; these contributed to about 22 percent of the total inaccuracies. For example, BNSF claimed:

- Tolerance minutes for delays attributable to [REDACTED]. Tolerances for these types of delays were not allowed by the agreement. As an example, in September 2006, for Train 7, BNSF claimed a 23-minute tolerance for the following delay: "Pick up BNSF business cars." Amtrak's delay report supports a 16-minute delay attributable to setting out private cars. However, we questioned the entire 23-minute tolerance claimed because it was not allowed by appendix V, section A, of the agreement. The error contributed to the nearly \$21,000 in overpayments for Train 7 in September 2006.
- Tolerances that were not allowed by the agreement, appendix V, section A.3, or approved by Amtrak through a separate request.
- Incorrect [REDACTED] tolerances. Appendix V, section A.1(c), stipulates how the [REDACTED] time should be accounted for in calculating the on-time-performance status of trains. BNSF did not calculate the [REDACTED] tolerances in accordance with this section of the agreement.
- Incorrect tolerances for the recovery time base as specified in appendix V, section A.1(d), of the agreement.

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

## **Invoices Contained Clerical Errors**

Clerical errors caused about 15 percent of the invoice inaccuracies. A common inaccuracy was a difference between the amount paid and the amount shown on the on-time-performance report. The detailed reports provided as part of the invoice showed that the incentives were calculated, but the summary spreadsheet, which is what Amtrak's payment is based on, showed that BNSF billed and Amtrak paid a different amount.

For example, for one segment of Train 3, BNSF's on-time-performance report showed that the company earned no incentives for August 2006. Our calculation confirmed this. However, the summary report on the BNSF invoice showed that BNSF billed—and Amtrak paid—\$9,084 for this segment.

## **RECOMMENDATION**

We recommend that Amtrak's Acting Chief Financial Officer take action to recover the \$2,115,440 that Amtrak overpaid BNSF for on-time-performance incentives.

## **MANAGEMENT COMMENTS AND OIG ANALYSIS**

In commenting on a draft of this report, management stated that the report provides useful information on which Amtrak management can take action. Management also indicated its intent to enter into appropriate conversations with BNSF once this report is issued. Specifically, management stated that the Managing Deputy General Counsel, on behalf of Amtrak's Transportation and Finance departments, will pursue any amounts that are recoverable under the law and within the terms of the applicable operating agreement between Amtrak and BNSF. Additionally, management stated that it remains committed to making valuable improvements to the host railroad invoice-administration review process, and has progressively improved the invoice-review process. Management's comments meet the intent of our recommendation.

Amtrak's memorandum commenting on the draft report is reprinted as Appendix III.



*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

**Appendix I**

**SCOPE AND METHODOLOGY**

This report provides the results of an OIG review to determine the accuracy of BNSF's on-time-performance incentives invoiced to Amtrak from July through December 2006. We performed our work from April 2010 through December 2012. We provided a draft of this report to Amtrak management on December 13, 2012, and requested a written response within 30 calendar days. Management provided its response. Certain information in this report has been omitted due to its confidential nature.

For the 6-month period from July through December 2006, BNSF invoiced \$5,783,690, and Amtrak paid a net amount of \$5,785,070. The difference was due to \$1,380 in prior-period adjustments billed to Amtrak.

To determine the accuracy of BNSF's on-time-performance incentives invoiced to Amtrak and establish our criteria, we reviewed the operating agreement and its amendments. We then reviewed relevant prior audit reports, which included an earlier review concerning management's internal controls over payments to host railroads (see *Prior Audit Reports*, below). We also obtained Amtrak delay reports for analysis of on-time-performance incentives claimed, reviewed the detailed support of incentives submitted to Amtrak, and compared Amtrak delay reports with BNSF on-time-performance detail data, including departure and arrival times, tolerances claimed, delay minutes, and reasons for delays.<sup>4</sup> Further, we compared invoices with all available supporting documentation and compared the checkpoint performance rate used to calculate incentive payments with the applicable amendment agreement change. Lastly, we calculated the overbilled and/or under-billed amounts resulting from inaccurate BNSF invoices.

---

<sup>4</sup> For one of the train routes reviewed, we excluded from the scope of our work a comparison of departure and arrival times from the Amtrak delay reports with BNSF detail data. We accepted, without verification, BNSF's on-time-performance detail data for the departure and arrival times only. We used this methodological approach because of the small dollar amounts associated with the trains on this route. In our judgment, this adjustment to our methodology had no material impact on the dollar amount of our findings.

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

The audited amount totaled about \$5.8 million. The operating agreement that was applicable during the audit period was effective September 1, 1996; the agreement was amended through amendment agreement change records. We reviewed and used this agreement as the basis for determining the accuracy and validity of BNSF's monthly invoices for on-time-performance incentives and to verify the compliance of BNSF invoices with appendix V of the operating agreement.

Our work was performed in accordance with generally accepted government auditing standards. These 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 did not review BNSF's internal control structure from July through December 2006. However, we did assess the adequacy of Amtrak's invoice-review process by performing substantive testing of invoices that were paid and by relying on our prior audits to the invoice-review process management controls.

### **Computer-Processed Data**

To achieve our objective, we used computer-processed data contained in Amtrak's electronic records of BNSF invoices. To test the validity of the data, we compared Amtrak's electronic data with BNSF's hard-copy invoices. We also compared total amounts paid on the electronic invoices against the total amounts paid in Amtrak's accounts-payable system for all 6 months. The data in the accounts payable system were not verified, but we consider the data sufficiently reliable for purposes of the audit objective. Based on these tests, we conclude that the data are sufficiently reliable to be used in meeting our objective.

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

## **Prior Audit Reports**

Our review of prior OIG reports found previously identified control weaknesses and significant dollar amounts associated with Amtrak's payments to host railroads, including BNSF. This report is part of a series of OIG audits of Amtrak's host railroad payments. We reviewed the following Amtrak OIG audit reports and used information from them in conducting our audit:

*Amtrak Invoice Review: Undetected Errors Resulted in Overpayments* (Report No. OIG-A-2012-019, September 5, 2012)

*Amtrak Invoice Review: Inaccurate Invoices Were Paid, But Progress is Being Made to Improve the Invoice-Review Process* (Report No. OIG-A-2012-005, February 16, 2012)

*On-Time-Performance Incentives: Inaccurate Invoices were Paid Due to Weaknesses in Amtrak's Invoice-Review Process* (Report No. OIG-A-2012-004, February 15, 2012)

*On-Time-Performance Incentives: Inaccurate Invoices Were Paid Due to Long-standing Weaknesses in Amtrak's Invoice-Review Process* (Audit Report No. 403-2010, April 21, 2011)

*BNSF On-Time-Performance Incentives: Inaccurate Invoices and Lack of Amtrak Management Review Lead to Overpayments* (Audit Report No. 407-2003, September 24, 2010)

*CSX On-Time-Performance Incentives: Inaccurate Invoices and Lack of Amtrak Management Review Lead to Overpayments* (Audit Report No. 406-2005, March 30, 2010)

*Host RRCA & Operations Management Controls* (Audit Report No. 401-2008, August 21, 2008)

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

**Appendix II**

**AMTRAK'S ACTIONS TO IMPROVE ITS  
INVOICE-REVIEW PROCESS**

Since 2008, we have made recommendations aimed at helping Amtrak improve its invoice-review process. A summary of our recommendations—and the company's responses—are detailed below.

In August 2008, we reported<sup>5</sup> that management controls over Amtrak's invoice-review process were inadequate and ineffective. The host railroad invoices consistently had errors that went undetected and the invoices were paid. As a result, Amtrak in many cases overpaid for incentives and services. We recommended improvements to the invoice-review process. Amtrak, in the last 6 months, has completed implementing those recommendations.

Specifically, we made recommendations with regard to the functions, responsibilities, and organizational structure of the two groups responsible for host railroad activities. Amtrak has restructured its organization. The group responsible for reviewing and approving payment of monthly host railroad invoices previously reported to the Vice President, Transportation. In October 2010, this group—now called the Host Railroad Invoice Administration (HRIA) group—began reporting to the Chief Financial Officer.

We also recommended that Amtrak develop and implement formal procedures that clearly define the invoice-review group's objectives and responsibilities. In response to our recommendation, Amtrak has implemented detailed procedures that clearly define the group's objectives and responsibilities.

We further recommended that Amtrak perform a real time, thorough, and complete review of railroad invoices prior to approving payment, and automate the invoice-review process. Amtrak has now begun performing real time, thorough, and complete reviews of railroad invoices prior to payment. HRIA has increased its staff by three

---

<sup>5</sup> *Host RRCA & Operations Management Controls* (Audit Report 401-2008, August 21, 2008).

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

positions. Amtrak has also developed and implemented an HRIA checklist for the invoice-review process. The checklist holds employees accountable for making complete invoice reviews; it also provides managers with an understanding of the steps taken to review the invoice and any issues that prevent a full review from being performed. Additionally, group officers certify, by signing the checklist, that they have reviewed the appropriate documentation and recalculated the invoice prior to approving it for payment. Finally, HRIA has worked with the Information Technology Department to develop reports to facilitate a thorough and complete review of invoices prior to payment.

We believe that the actions Amtrak has taken, if sustained, should improve the review process and help ensure that invoice errors are detected before payments are made. At some future point, we will conduct a follow-up review of Amtrak's invoice-review process.

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
 Report No. OIG-A-2013-006, February 15, 2013

**Appendix III**

**COMMENTS FROM AMTRAK'S  
 ACTING CHIEF FINANCIAL OFFICER**

**Memo**



Date January 17, 2013

*G. L. Hutchinson*  
 From Gordon Hutchinson, Acting Chief Financial  
 Officer

To David Warren, Assistant Inspector  
 General, Audits

Department Finance

Subject BNSF On-Time Performance Incentives

cc William Herrmann, *Managing Deputy  
 General Counsel, Litigation*  
 Jean Dober, *Associate General Counsel  
 Litigation*  
 David A. Nichols, *Chief Transportation  
 Officer*  
 Paul Vitek, *Assistant Vice President  
 Host Railroads*  
 Bob Thomas, *Assistant Controller*  
 Melantha Paige, *Senior Audit Liaison*

This letter is in response to the Office of Inspector General's ("OIG") draft audit report number 404-2010 "Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments," dated December 13, 2012. The subject of the audit is Burlington Northern Santa Fe Railway's ("BNSF") on-time performance incentives invoiced in the period July 2006 through December 2006 pursuant to the September 1, 1996 Operating Agreement entered into between Amtrak and BNSF.

The OIG's draft audit report provides useful information on which Amtrak management can take action. Management remains committed to making valuable improvements to the host railroad invoice administration review process and has progressively improved the invoice review process. With this information from the OIG's report, the Managing Deputy General Counsel, on behalf of Amtrak's Transportation and Finance Departments, will pursue any amounts that are recoverable under the law and within the terms of the applicable Operating Agreement between Amtrak and BNSF, as amended. As soon as the final version of this report is issued, we will initiate appropriate discussions with BNSF and will keep the OIG apprised of our progress.

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

**Appendix IV**

**OIG TEAM MEMBERS**

David R. Warren	Assistant Inspector General, Audits
Dan Krueger	Senior Director, Audits
See See Young	Senior Director, Audits
Jana Brodsky	Auditor-in-Charge
Satish Parikh	Senior Auditor
Edgardo Carlos	Senior Auditor
Anil Gunaratne	Senior Auditor

*Amtrak Office of Inspector General*  
**Amtrak Invoice Review: Undetected Inaccuracies Resulted in Overpayments**  
Report No. OIG-A-2013-006, February 15, 2013

## 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](http://www.amtrakoig.gov).

---

**To Report Fraud, Waste, and Abuse**      Report suspicious or illegal activities to the OIG Hotline (you can remain anonymous):  
Web:      [www.amtrakoig.gov/hotline](http://www.amtrakoig.gov/hotline)  
Phone:      800-468-5469

---

**Congressional and Public Affairs**      E. Bret Coulson, Senior Director  
Congressional and Public Affairs  
Mail:      Amtrak OIG  
            10 G Street, N.E., 3W-300  
            Washington, DC 20002  
Phone:      202-906-4134  
Email:      [bret.coulson@amtrakoig.gov](mailto:bret.coulson@amtrakoig.gov)