



# OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

## Market Dominant Billing Determinants: Package Services

### Audit Report

Report Number  
CP-AR-16-009

August 5, 2016



3312	
545,31	3611
723,63	25250,52
99,09	18771,69
5,56	29037,1
31	47764,91
09	15359,49
3	28142,52
	8577,6
	17389,04
	1920,28
	188,04
	184,6



# OFFICE OF INSPECTOR GENERAL

## UNITED STATES POSTAL SERVICE

### Highlights

***The Postal Service uses billing determinants to ensure price adjustments do not exceed the price cap for each market dominant class of mail.***

### Background

The U.S. Postal Service prepares billing determinant spreadsheets to report revenue, volume, and weight for the five market dominant classes of mail: Package Services, Standard Mail, First-Class Mail, Periodicals, and Special Services.

One type of billing determinant — Package Services — is composed of four products: Alaska Bypass Service, Bound Printed Matter Flats, Bound Printed Matter Parcels, and Media and Library Mail. The Postal Service obtains data for Package Services billing determinants primarily from data sources that include prices, revenue, pieces, mail weights, and mail shapes.

The Postal Accountability and Enhancement Act of 2006 requires the Postal Service to produce an *Annual Compliance Report (ACR)* within 90 days of the end of each fiscal year. The report analyzes cost, revenue, pricing, and quality of service for all products.

The Postal Service files billing determinant spreadsheets to support the ACR. Management also uses billing determinant spreadsheets to help make decisions regarding price adjustments and to ensure these adjustments do not exceed price caps for each market dominant class of mail.

Our objective was to assess the procedures used to prepare fiscal years (FY) 2014 and 2015 Package Services billing determinant spreadsheets and the accuracy and completeness of the data.

### What The OIG Found

Opportunities exist to improve the accuracy of Package Services billing determinant data calculations; however, we found no issues with the completeness of the data.

FYs 2014 and 2015 Bound Printed Matter Parcels spreadsheets contained incorrect revenue totals, because the data was not correctly imported.

These errors existed because the Postal Service used manual processes to create the spreadsheets, and controls over the Package Services billing determinant practices were inadequate.

FYs 2014 and 2015 Alaska Bypass billing determinant spreadsheets were submitted to the Postal Regulatory Commission using FYs 2012 and 2013 revenue, pieces, and weight data. This data was used because the Postal Service could not obtain more current data in time to prepare the spreadsheets.



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The manual preparation and complexity of the Package Services billing determinant spreadsheets create a risk of data entry errors. Although these errors did not impact compliance with price cap requirements, future billing determinant errors might. Additionally, without accurate billing determinant spreadsheets, Postal Service management could make business decisions based on inaccurate information.

The Postal Service began enhancing internal controls over billing determinant spreadsheets by establishing an informal review and documenting the process for preparing them. The process document was in draft form at the time of our audit; however, the document could be improved by including a standard template, version control, and a higher level internal review process.

### What The OIG Recommended

We recommended management consult with the Postal Regulatory Commission to determine if the FYs 2014 and 2015 Package Services billing determinants should be refiled due to the identified errors. Also, we recommended management explore the cost-benefit of fully automating the process or using Microsoft Excel tools to prepare billing determinant spreadsheets. Lastly, we recommended management finish validating that all Package Services billing determinant spreadsheets are produced using documented and repeatable processes to minimize errors and include a higher level internal review.

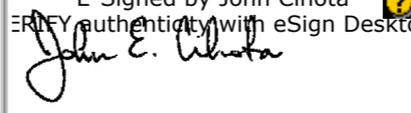
# Transmittal Letter



OFFICE OF INSPECTOR GENERAL  
UNITED STATES POSTAL SERVICE

August 5, 2016

**MEMORANDUM FOR:** SHARON D. OWENS  
VICE PRESIDENT, PRICING AND COSTING

E-Signed by John Cihota  
VERIFY authenticity with eSign Desktop  


**FROM:** John E. Cihota  
Deputy Assistant Inspector General  
for Finance, Pricing, and Investments

**SUBJECT:** Audit Report – Market Dominant Billing Determinants:  
Package Services (Report Number CP-AR-16-009)

This report presents the results of our audit of the Market Dominant Billing Determinants:  
Package Services (Project Number 16TG012CP000).

We appreciate the cooperation and courtesies provided by your staff. If you have any  
questions or need additional information, please contact Charles L. Turley, director, Cost,  
Pricing, and Investments, or me at 703-248-2100.

Attachment

cc: Corporate Audit and Response Management

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# Findings

***Opportunities exist to improve the accuracy of Package Services billing determinant data calculations; however, there were no issues with the completeness of the data.***

***In FYs 2014 and 2015, the Package Service's billing determinant spreadsheets were not accurate for Bound Printed Matter (parcels and flats), resulting in revenue reporting errors of about \$3.9 million***

## Introduction

This report presents the results of our self-initiated audit of the U.S. Postal Service's Market Dominant Billing Determinants: Package Services (Project Number 16TG012CP000). Our objective was to assess the procedures used to prepare fiscal years (FY) 2014 and 2015 Package Services billing determinants and the accuracy and completeness of the data. See [Appendix A](#) for additional information about this audit.

The Postal Service manually prepares billing determinant spreadsheets to report revenue, volume, and weight for every Postal Service price in the five market dominant classes of mail: Package Services, Standard Mail, First-Class Mail, Periodicals, and Special Services. This project is the fifth in a series of five billing determinant audits. This audit focuses on the four Package Services products: Alaska Bypass Service, Bound Printed Matter Flats, Bound Printed Matter Parcels, and Media and Library Mail. The Postal Service obtains data for Package Services billing determinants primarily from data sources that include prices, revenue, pieces, mail weights, and mail shapes.

The Postal Accountability and Enhancement Act of 2006 (PAEA) requires the Postal Service to produce and file with the Postal Regulatory Commission (PRC) an *Annual Compliance Report (ACR)*<sup>1</sup> within 90 days of the end of each fiscal year. The report analyzes cost, revenue, pricing, and quality of service for all products. The Postal Service files billing determinant spreadsheets to support the ACR. Management also uses billing determinant spreadsheets to help make decisions regarding price adjustments and to ensure these adjustments do not exceed price caps<sup>2</sup> for each market dominant class of mail.

## Summary

Opportunities exist to improve the accuracy of Package Services billing determinant data calculations; however, there were no issues with the completeness of the data. Specifically, FYs 2014 and 2015 Bound Printed Matter spreadsheets contained incorrect revenue totals, as the data was not correctly imported. The errors existed because the Postal Service used manual processes to create the spreadsheets and controls over the Package Services billing determinant practices were inadequate.

FYs 2014 and 2015 Alaska Bypass billing determinants spreadsheets were submitted to the PRC using FYs 2012 and 2013 revenue, pieces, and weight data. This data was used because the Postal Service could not obtain the current data in a timely manner for submission. The manual preparation and complexity of the Package Services billing determinant spreadsheets create a risk of data entry errors.

The Postal Service began enhancing internal controls over billing determinant spreadsheets by establishing an informal review and documenting the process for preparing them. The process document was in draft form at the time of our audit; however, the document could be improved by including a standard template, version control, and a higher level internal review process. Although these errors did not impact compliance with price cap requirements, future billing determinant errors might. Additionally, without accurate billing determinant spreadsheets, Postal Service management could make business decisions based on inaccurate information.

## Billing Determinant Accuracy

In FYs 2014 and 2015, the Package Service's billing determinant spreadsheets were not accurate for Bound Printed Matter (parcels and flats), resulting in revenue reporting errors of about \$3.9 million.<sup>3</sup>

<sup>1</sup> The ACR presents an analysis of costs, revenue, pricing and quality of service for all products.

<sup>2</sup> The inflation-based limit on Postal Service prices as described in PAEA.

<sup>3</sup> The amount cited is the absolute value of our calculations, which is the sum of the figures regardless of whether they are positive or negative.

Bound Printed Matter contained data input errors. When tracing mail category codes<sup>4</sup> from the billing determinant spreadsheets to the revenue, pieces, and weight (RPW) reports,<sup>5</sup> Postal Service employees could not reconcile all mail category codes in FY 2014. In FY 2015, the billing determinant spreadsheets methodology was changed, correcting the mail category code issue. However, in Quarter (Q)1 of FY 2015, a volume component of the billing determinant spreadsheets was incorrectly reported as revenue. These errors resulted in misstated revenue reported to the PRC totaling \$3,972,250 for FYs 2014 and 2015 combined. See Table 1 for the total revenue errors by product.

**Table 1. Package Services Billing Determinant Revenue Errors**



**Bound Printed Matter**

Source: U.S. Postal Service Office of Inspector General (OIG) calculations.

In FYs 2014 and 2015, the spreadsheets tabs and headings were mislabeled for each product. Postal Service employees responsible for preparing the billing determinants spreadsheets stated they were used only as an internal document and, therefore, labels are not always updated. The employees indicated they learned how to prepare the spreadsheets through on-the-job training. They also used other staff to check for errors once the spreadsheets were completed. However, these mislabeled documents were filed with the PRC.

Although these errors did not impact compliance with price cap requirements, future billing determinant errors increase the risk of noncompliance.

### **Alaska Bypass Data Accuracy**

When submitting billing determinants to the PRC, the Postal Service's standard practice is to use the previous year's data. If there is a price change for a specific product, the most recent 4 quarters of billing determinants data is used for support. The FYs 2014 and 2015

<sup>4</sup> An alphanumeric code that identifies a mail class, presort level, and shape.

<sup>5</sup> A report of volume, work content, and revenue based on statistical samples of the mailstream.

Alaska Bypass mail billing determinants were submitted to the PRC using FYs 2012 and 2013 RPW data. All other Package Services products – Bound Printed Matter Flats, Bound Printed Matter Parcels, and Media Mail and Library Mail used the FYs 2013 and 2014 data in accordance with the standard practice.

The billing determinant economist stated more recent Alaska Bypass data was not available in time to meet the filing deadline. Because of PRC filing deadlines, the Cost and Pricing group has about 10 calendar days from when it obtains source data from the RPW group to compile billing determinant spreadsheets. In this instance, the information was not available timely from the RPW group. However, this timing issue was resolved in March 2016 and prior year data will be available to prepare the Alaska Bypass billing determinant spreadsheet going forward.

As a result, the billing determinant revenue data used, totaling \$66,785,352, was not the most recent available data for FYs 2014 and 2015 in accordance with the standard practice. Using current data will help the Postal Service properly assess Alaska Bypass prices based on current market conditions and more accurately calculate volume and revenue.

### **Billing Determinant Manual Processes**

To prepare billing determinant spreadsheets, Postal Service employees manually sorted and filtered source data and visually verified that the correct data was imported into the spreadsheets. Next, they updated the spreadsheet calculations and labels where necessary. This manual process resulted in mislabeled spreadsheets and calculation errors.

The manual process can be time consuming and may not allow sufficient time for a quality review process. Once all the data is collected, the pricing economist has about 10 days to complete the billing determinants before they must be submitted to the PRC.<sup>6</sup> Automating the billing determinants process as much as possible may help to reduce manual entry errors, allow time for internal reviews, and aid in timely filings. The Postal Service could also use additional Microsoft Excel tools to identify data changes and adopt a formal review process for billing determinant spreadsheets.

### **Billing Determinant Documented Procedures**

Documentation is a necessary part of an effective internal control system and best practices. As recommended in the prior billing determinant audits, the Postal Service began strengthening internal controls by developing a process document<sup>7</sup> and informally reviewing billing determinants before submitting them to the PRC. While these initiatives helped to reduce the magnitude of errors in FY 2015, the process could be improved. For example, the process document:

- Was outdated based on the procedures communicated to the audit team. For example, in FY 2014 the calculations did not always extract the appropriate input data resulting in incorrect revenue amounts.
- Did not include a standard template or version control.
- Did not include a higher level review before submission to the PRC.

Improved internal controls for billing determinant spreadsheets should include clearly written procedures and a higher level review to assess the accuracy and completeness of the volume, price, and revenue data.

<sup>6</sup> According to *Title 39, Code of Federal Regulations 3050.25*, enacted July 1, 2003, the Postal Service has 40 days after the end of a quarter to submit billing determinants to the PRC. About 30 of the 40 days are spent obtaining source data.

<sup>7</sup> As of June 14, 2016, the process document was in draft form.

# Recommendations

***We recommend management consult with the PRC to determine whether FY 2014 and 2015 Package Services billing determinants need to be refiled, explore the cost-benefit of fully automating the spreadsheet process or further leveraging Microsoft Excel tools to prepare them, and complete efforts to validate that all Package Services billing determinant spreadsheets are produced using documented and repeatable procedures and include a higher level internal review.***

We recommend the vice president, Pricing and Costing:

1. Consult with the Postal Regulatory Commission to determine if fiscal years 2014 and 2015 Package Services billing determinants need to be refiled due to the identified errors.
2. Explore the cost-benefit of fully automating the process or further leveraging Microsoft Excel tools to prepare billing determinant spreadsheets.
3. Complete ongoing efforts to validate that all Package Services billing determinant spreadsheets are produced using documented and repeatable procedures to minimize errors and include a higher level internal review.

## Management's Comments

Management disagreed with recommendation 1 and \$68.0 million of the \$70.8 million of the other impact identified. Management agreed with recommendations 2 and 3.

Management disagreed with recommendation 1 and stated the identified errors were immaterial and did not impact financial reporting or compliance with price cap requirements. Management noted, as it relates to \$68 million attributed to the Alaska Bypass billing determinants, that they disagreed because they used the best available information at the time the report was produced to perform the calculations in question.

Management agreed with recommendation 2 and will explore ways to automate all or parts of the billing determinants, to include conducting a cost benefit analysis to determine if the proposed solutions have a return on investment. Management will conduct these analyses by March 31, 2017.

Management agreed with recommendation 3 and will further enhance their documentation of the development of Package Services billing determinants, to include having repeatable, documented processes and a higher level review. Management will implement these changes by March 31, 2017.

See [Appendix B](#) for management's comments in their entirety.

## Evaluation of Management's Comments

The OIG considers management's comments partially responsive to the recommendations in the report.

Management disagreed with recommendation 1 to consult with the PRC to determine whether the FY 2014 and 2015 Package Services billing determinants should be refiled. Management also disagreed with the errors associated with the Alaska Bypass billing determinants. Although the Bound Print Matter errors identified did not have an impact on compliance with price cap requirements in this instance, the expectation is that reports submitted to the regulator are accurate and are based on the previous year's information. As the PRC has not established a formal materiality threshold for the Postal Service to use, when inaccurate information is identified, the Postal Service should, at a minimum, consult with the regulator on the impact of the inaccuracies and determine next steps. Management asserts that the Alaska Bypass billing determinant methodology used the best available information at the time the report was produced. However, the unavailability of the prior year's data was due to internal process inefficiencies, which were resolved in March 2016. As such, the related \$70.8 million is identified as other impact.

We do not plan to pursue the disagreement through the formal audit resolution process and consider recommendation 1 closed, not implemented with the issuance of the report.

The corrective actions for recommendations 2 and 3 should resolve the issues identified in the report. These recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. Recommendations 2 and 3 should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed.

# Appendices

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## Appendix A: Additional Information

### Background

Postal Service employees manually produce billing determinant spreadsheets to report revenue, volume, and weight for every Postal Service price in each class of market dominant mail. Billing determinant spreadsheets are filed in support of the Postal Service's ACR. The ACR analyzes cost, revenue, pricing, and quality of service for all products. One type of billing determinant — Package Services — is composed of four products: Alaska Bypass Service, Bound Printed Matter Flats, Bound Printed Matter Parcels, and Media and Library Mail.

The Postal Service uses billing determinant spreadsheets to ensure that price adjustments do not exceed the price cap for each market dominant class of mail and to employ economic forecasting to produce price indices. Calculation errors on these spreadsheets could cause proposed prices to exceed price caps, which violates the PAEA.

### Objective, Scope, and Methodology

Our objective was to assess the procedures used to prepare FYs 2014 and 2015 Package Services billing determinants and the accuracy and completeness of the data. To accomplish our objective we:

- Identified and reviewed Package Services billing determinant source data, including the RPW Report, Move Update<sup>8</sup> files, and Shape Indicia report.<sup>9</sup>
- Interviewed Postal Service subject matter experts to evaluate data handling and processing procedures.
- Reviewed and recalculated revenue, volume, and weight to identify errors and assure completeness.
- Reviewed price cap calculations to ensure identified errors did not impact the percentage change in rate for Package Services.
- Coordinated with the PRC on audit results.

The scope of this project was the FYs 2014 and 2015 Package Services billing determinants. It included a review of the data and processing used to calculate billing determinant information for domestic market dominant Package Services.

We conducted this performance audit from February through August 2016 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. 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. We discussed our observations and conclusions with management on June 30, 2016, and included their comments where appropriate.

We did not assess the reliability of any computer-generated data for the purposes of this report as the data had low levels of anticipated risk.

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<sup>8</sup> The standard for reducing the number of mailpieces requiring forwarding or return by periodically matching the mailer's address records with change-of-address orders received and maintained by the Postal Service.

<sup>9</sup> This is a report developed from postage statements detailing the shape and postage paid mail class, presort level, and weight.

## Prior Audit Coverage

Report Title	Report Number	Final Report Date	Monetary Impact
<i>Market Dominant Billing Determinants: Special Services</i>	CP-AR-16-004	2/4/2016	None
<p><b>Report Results:</b> We found the Special Services billing determinant spreadsheets contained inaccuracies totaling \$101 million that the Postal Service could have prevented by improving procedures for preparing the spreadsheets. Management partially agreed with our recommendations. Management agreed there are opportunities to strengthen the billing determinants process, but believes that the net value of \$86.2 million is a more accurate depiction of the revenue impact than the OIG's \$101 million absolute value method calculation. However, management disagreed with the recommendation to refile corrected billing determinants with the PRC. Management also stated that while the audit was underway, they were working on completing the documentation of the Special Services billing determinants process and establishing a quality review process.</p>			
<i>Market Dominant Billing Determinants: Periodicals</i>	CP-AR-15-004	9/14/2015	None
<p><b>Report Results:</b> We found the Periodicals billing determinant spreadsheets contained inaccuracies totaling \$7.6 million that the Postal Service could have prevented by improving procedures used to prepare the spreadsheets. Management partially agreed with our recommendations. Management agreed there are opportunities to strengthen the billing determinants process and believes that a \$2.2 million net value is a more accurate depiction of the revenue impact than the OIG's \$7.6 million absolute value. Also, management agreed to disclose the methodology used to calculate editorial discounts and the reason this calculation methodology differed from the rest of the billing determinant spreadsheets. However, management disagreed with the recommendations to refile corrected billing determinants with the PRC and to ensure source data is labeled correctly. Management also stated that while the audit was underway, they completed documentation of the billing determinants process for Periodicals.</p>			
<i>Market Dominant Billing Determinants: First-Class Mail</i>	CP-AR-15-003	6/11/2015	None
<p><b>Report Results:</b> We found the First-Class Mail billing determinant spreadsheets contained inaccuracies totaling \$156.8 million that the Postal Service could have prevented by improving procedures used to prepare the spreadsheets. Management partially agreed with our recommendations. Management agreed there are opportunities to strengthen the billing determinants process and believes that a \$39.9 net value is a more accurate depiction of the revenue impact than the OIG's \$156.8 million absolute value. Management also stated they have begun documenting the process, including establishing quality reviews. However, management disagreed with the recommendation to refile the FY 2013 billing determinants.</p>			

## Appendix B: Management's Comments

SHARON D. OWENS  
VICE PRESIDENT, PRICING AND COSTING



August 1, 2016

SHERRY FULLWOOD  
(A) DIRECTOR, AUDIT OPERATIONS

SUBJECT: Market Dominant Billing Determinants – Package Services

The Postal Service appreciates the effort made by the U.S. Postal Service Office of the Inspector General (OIG) on the audit of Market Dominant Billing Determinants: Package Services (Draft Audit Report Number CP-AR-16 DRAFT) as well as their offer to allow a written response to their findings and recommendations. Postal Service management agrees with two of the recommendations as outlined in the audit report but disagrees with one recommendation. Management agrees with the need for accuracy in developing and reporting their billing determinants and will look for ways to better document and improve the billing determinants processes. However, management disagrees with \$68 million of the \$70.8 million in monetary impact outlined in the report as we used the best data available when the report was produced.

#### **Recommendation 1**

Consult with the Postal Regulatory Commission to determine whether the fiscal year 2014 Package Services billing determinates should be refiled due to the identified errors.

#### **Management Response:**

Management disagrees with this recommendation. As it pertains to issues identified in Bound Printed Matter Billing Determinants, the amount reported (\$4.0 million) is well below the threshold of materiality and should be considered de Minimis. The impact is less than 0.00004 percent of Bound Printed Matter revenue over the two year evaluation period and had no impact on pricing or cap compliance. As it pertains to Alaska Bypass, the Postal Service does not agree that there is an error associated with the Alaska Bypass billing determinants. The Audit Report identifies \$66.8 million as the most recent available data was not used. The methodology was explained several times during the audit work and management used the best available information at the time the report was produced to perform the calculations in question. Therefore, the Postal Service disagrees with the recommendation to refile the billing determinants with the PRC and with the identification of the \$66.8 million in monetary impact.

#### **Recommendation 2**

Explore the cost-benefit of fully automating the process or further leveraging Microsoft Excel tools to prepare billing determinant spreadsheets.

#### **Management Response:**

Management agrees with this recommendation and will explore ways to automate all or parts of the development of billing determinants and conduct a cost benefit analysis to determine if proposed solutions have a return on investment.

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(202) 268-3736  
FAX: (202) 268-6251

**Target Implementation Date:**

Management will explore ways to automate parts or all of the billing determinants process by the end of Quarter 2, fiscal year 2017.

**Responsible Management Official:**

Manager, Pricing

**Recommendation 3**

Complete ongoing efforts to validate that all Package Services billing determinant spreadsheets are produced using documented and repeatable processes to minimize errors and include a higher level internal review.

**Management Response:**

Management agrees with this recommendation and will further enhance our documentation of the development of the Package Services determinates so that we have a documented and repeatable process with documented higher level review.

In summary, the Postal Service agrees that opportunities exist to improve the quality of billing determinants data but the Postal Service has already made significant progress in addressing this. Management does not disagree with the monetary impact as outlined in the audit report.

**Target Implementation Date:**

Management will further enhance and finalize documentation of the Package Services billing determinants process by the end of Quarter 2, fiscal year 2017.

**Responsible Management Official:**

Manager, Pricing



Sharon Owens

cc: Manager, Corporate Audit and Response Management



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