

## OFFICE OF INSPECTOR GENERAL UNITED STATES POSTAL SERVICE

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# Market Dominant Billing Determinants: Process Review

## Audit Report

Report Number CP-AR-17-006

March 8, 2017

Innovation

Productivity

Repeatability

**AUTOMATION** 

System



## OFFICE OF INSPECTOR GENERAL UNITED STATES POSTAL SERVICE

## **Highlights**

The total revenue for market dominant products for FY 2016 was over \$52 billion.

#### Background

Billing determinants are spreadsheets U.S. Postal Service employees manually produce to report volume and revenue for every price in each market dominant mail class. The five market dominant classes for which billing determinants are produced are: First-Class Mail, Periodicals, Standard Mail, Package Services, and Special Services.

The Postal Accountability and Enhancement Act of 2006 capped price increases for each class of market dominant mail to the change in the Consumer Price Index. The Postal Service uses billing determinants to estimate future revenue, develop prices for each class of mail, and ensure price increases do not exceed the Consumer Price Index. The billing determinants are also included in the Annual Compliance Report produced for the Postal Regulatory Commission, and are used to develop cost estimates and mailer discounts.

The total revenue for market dominant products for fiscal year 2016 was over \$52 billion. Prior audits identified data entry errors due to the manual preparation and complexity of the billing determinant spreadsheets.

Our objectives were to assess the efficiency of the billing determinant processes and evaluate the actions implemented in response to recent U.S. Postal Service Office of Inspector General audits to improve the internal controls.

### What the OIG Found

Opportunities exist to enhance the documentation of the billing determinant process, procedures, and internal controls. The Postal Service did not finalize standard operating procedures in response to prior audit recommendations. While the Postal Service has taken some initial steps to create standard operating procedures, the current documentation is not sufficient to accurately capture necessary details of the processes. Postal Service management considers current standard operating procedure drafts adequate; however, they did not perform validation to ensure the documented procedures were complete. Without comprehensive procedures, the Postal Service risks further billing determinant calculation errors.

Additionally, opportunities exist to improve internal control security over billing determinant data. Billing determinant spreadsheets containing both market dominant and competitive data are not encrypted, password protected, or otherwise secured during transmission. The Postal Service believes its network security is adequate to protect sensitive billing determinant data; however, its policy requires sensitive information be encrypted to prevent misuse. Without adequate safeguards, this sensitive, proprietary information is at risk for unauthorized access.

Finally, opportunities exist to enhance the accuracy and completeness of billing determinant calculations. The Postal Service requires preparers of billing determinant spreadsheets to manually update, calculate, and visually



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verify formulas and source data. The current manual process does not allow management to effectively prevent, detect, and correct miscalculations. The Postal Service allocates 10 days each quarter for five economists to manually develop the billing determinant spreadsheets. This manual process caused the Postal Service to submit inaccurate billing determinant calculations to the Postal Regulatory Commission.

### What the OIG Recommended

We recommended management finalize the current documented billing determinants procedures so that processes

are sufficiently detailed and repeatable to internally validate the billing determinant data.

We also recommended management properly encrypt, password protect, or otherwise secure billing determinant spreadsheets and the supporting data.

Finally, we recommended management implement automation options to improve data accuracy and revenue calculation techniques.

## **Transmittal Letter**

OFFICE OF INSPECTOR GENI UNITED STATES POSTAL SE	
March 8, 2017	
MEMORANDUM FOR:	SHARON D. OWENS VICE PRESIDENT, PRICING AND COSTING
	E-Signed by John Cihota
FROM:	John E. Cihota Deputy Assistant Inspector General for Finance, Pricing and Investments
SUBJECT:	Audit Report – Market Dominant Billing Determinants: Process Review (Report Number CP-AR-17-006)
	esults of our audit of the Market Dominant Billing Determinants: Number 16BG021CP000).
	ration and courtesies provided by your staff. If you have any nal information, please contact Sherry Fullwood, director, Cost, , or me at 703-248-2100.
Attachment	
cc: Corporate Audit and F	Response Management

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## **Findings**

Prior audits identified data entry errors due to the manual preparation and complexity of the billing determinant spreadsheets. Data entry errors increase the risk of incorrect annual price adjustments and can cause proposed prices to exceed price caps, resulting in non-compliance with the PAEA.

#### Introduction

This report presents the results of our self-initiated audit of the Market Dominant Billing Determinants: Process Review (Project Number 16BG021CP000). This was a self-initiated audit to satisfy the mandate to regularly audit U.S. Postal Service data collection systems and procedures. Our objectives were to assess the efficiency of the billing determinant processes and evaluate the actions implemented in response to recent U.S. Postal Service Office of Inspector General (OIG) audits to improve internal controls. See Appendix A for additional information about this audit.

The Postal Accountability and Enhancement Act (PAEA) of 2006 established price caps on Postal Service prices. PAEA requires the Postal Service to file an Annual Compliance Report (ACR)<sup>1</sup> with the Postal Regulatory Commission (PRC)<sup>2</sup> within 90 days of the end of each fiscal year (FY). The ACR analyzes costs, revenue, rates, and quality of service for all products and determines whether each product is covering its attributable costs.<sup>3</sup>

Market dominant billing determinant are spreadsheets Postal Service employees manually produce to report volume and revenue for every Postal Service price in each market dominant mail class. The five market dominant classes of mail for billing determinants are: First-Class Mail (FCM), Periodicals, Standard Mail, Package Services, and Special Services. The Postal Service uses billing determinants to estimate future revenue, develop prices for each class of mail, and ensure price adjustments do not exceed the Consumer Price Index for each market dominant mail class.

The total revenue for market dominant products for FY 2016 was over \$52 billion. Prior audits identified data entry errors due to the manual preparation and complexity of the billing determinant spreadsheets. Data entry errors increase the risk of incorrect annual price adjustments and can cause proposed prices to exceed price caps, resulting in non-compliance with the PAEA. Conversely, inaccurate billing determinants could prevent the Postal Service from increasing prices as much as the law permits, negatively impacting revenue.

We reviewed and summarized prior audits for market dominant billing determinants to determine the status of findings and recommendations.<sup>4</sup> The prior audit reports identified incorrectly calculated revenues from FY 2012 to FY 2015. We recommended refiling with the PRC, exploring automation options, and establishing documented repeatable processes with internal control procedures. The Postal Service agreed to create documented, repeatable procedures by the end of calendar year (CY) 2016 for FCM, Periodicals, and Special Services billing determinants (see Table 1).

<sup>1</sup> Title 39 U.S.C. § 3652 requires the Postal Service to file an ACR to "demonstrate that all products during such year complied" with "costs, revenues, rates, and quality of service" requirements.

<sup>2</sup> An independent establishment of the executive branch of the U.S. government with regulatory oversight over many aspects of the Postal Service, including the development and maintenance of regulations for pricing and performance measures.

<sup>3</sup> The attributable cost of a product includes the costs that are directly or indirectly caused by that product.

<sup>4</sup> See Appendix A for prior reports issued.

Prior Audit		Report Issue Date	Red	commendat	ions	Implementation Dates					
	Report Number		Refile or Consult with PRC	Document a Repeatable Process	Explore Benefit of Automation	Sept. 30, 2015	Sept. 30, 2016	March 31, 2017			
FCM	CP-AR-15-003	6/11/2015	$\checkmark$	$\checkmark$		✓					
Periodicals	CP-AR-15-004	9/14/2015	$\checkmark$	$\checkmark$		✓					
Special Services	CP-AR-16-004	2/4/2016	$\checkmark$	$\checkmark$			$\checkmark$				
Standard Mail	CP-AR-16-007	7/11/2016	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$			
Package Services	CP-AR-16-009	8/5/2016	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$			
Total			5	5	2	2	1	2			

| Table 1. Recurring Findings

Source: OIG analysis.

#### Summary

Opportunities exist to better document the billing determinant process, procedures, and internal controls. The Postal Service did not finalize standard operating procedures (SOPs) in response to prior audit recommendations. While the Postal Service has taken some initial steps to create SOPs, the current documentation is insufficient to accurately capture necessary details of the processes. Postal Service management considers current SOP drafts adequate; however, they did not validate that the documented procedures were complete. Without comprehensive procedures, the Postal Service risks further billing determinant calculation errors.

Additionally, opportunities exist to improve internal control security over billing determinant data. Billing determinant spreadsheets are not encrypted, password protected, or otherwise secured during transmission. The Postal Service believes its network security is adequate to protect sensitive billing determinant data; however, its policy requires sensitive information be encrypted to prevent misuse. Without adequate safeguards, this sensitive, proprietary information is at risk for unauthorized access.

Finally, billing determinant calculations could be more accurate and complete. The Postal Service requires preparers of billing determinant spreadsheets to manually update, calculate, and visually verify formulas and source data. The current, manual process does not allow management the opportunity to effectively prevent, detect, and correct miscalculations. The Postal Service allocates 10 days each quarter for five economists to manually develop the billing determinant spreadsheets. This manual process caused the Postal Service to submit inaccurate billing determinant calculations to the PRC.

### **Billing Determinant Documentation**

The Postal Service had not finalized documented, repeatable processes to ensure compliance with prior audit recommendations. In response to three previous reports,<sup>5</sup> the Postal Service agreed to create a documented, quality review process by the end of CY 2016. Management had begun to develop documented processes and provided five draft billing determinant SOPs prepared by the Pricing and Costing group<sup>6</sup> economists for each mail class. Documentation is a necessary part of an effective internal control system and provides a means to retain organizational knowledge.

<sup>5</sup> See Appendix A, Prior Audit for references to the following audit reports: Market Dominant Billing Determinants: First-Class Mail, Market Dominant Billing Determinants: Periodicals, and Market Dominant Billing Determinants: Special Services.

<sup>6</sup> The Pricing and Costing group supports the pricing, product, and operation changes of the Postal Service.

Management relied on the economists' draft SOPs to fulfill this commitment and did not finalize the documents to adequately address the prior recommendations. The draft SOP for Periodicals had not been updated since May 2015 and referenced a step in the process that is no longer performed. Further, the Periodicals SOP did not include important details such as the mail category codes<sup>7</sup> associated with particular mail classes. The SOP for FCM billing determinants was inconsistent and lacked necessary details of the process. It did not reflect the use of two different data sources. For example, the Postal Service used calculated<sup>8</sup> volume totals for some line items for single-piece and presort letters and used actual volume totals from the Revenue, Pieces and Weight (RPW) reports to calculate the remaining billing determinants.

Opportunities exist to improve internal controls and security of billing determinant data.

The billing determinant SOP documents for FCM, Periodicals, and Special Services were inconsistently prepared and their completeness and accuracy were not validated. Prior audits identified about \$377 million in calculation errors. Without comprehensive procedures, the Postal Service risks further billing determinant calculation errors.

### **Billing Determinants Internal Controls**

Opportunities exist to improve internal controls and security of billing determinant data. The RPW extract report,<sup>9</sup> Shape Indicia report,<sup>10</sup> and Special Weights report<sup>11</sup> are the main inputs for developing billing determinants. The RPW report contains market dominant and competitive product data. While market dominant data is available to the public, the competitive product data is classified as sensitive<sup>12</sup> and subject to appropriate safeguards. Additionally, the Revenue and Volume Reporting (RVR) group<sup>13</sup> uses data from various Postal Service systems (see Figure 1) to compile the RPW extract report and delivers it as an Excel spreadsheet via email to the Pricing group.

### While market dominant data is available to the public, the competitive product data is classified as sensitive and subject to appropriate safeguards.

#### Figure 1. RPW Data Sources



7 Code identifying a particular category of mail.

8

- A specific methodology created by the economist with formulas for certain categories and subcategories to calculate the revenue for the billing determinants.
- 9 The extract report provides a fine level of granularity, showing revenue and volume for individual price points for many products or services.
- 10 This report categorizes paid postage by stamps, Postage Validation Indicators, meter, and permit.
- 11 RPW volume broken down into specific weight and zone categories.
- 12 Hardcopy or electronic information or material that warrants or requires protection. Includes confidential, proprietary, and financial data.
- 13 The RVR group provides revenue and volume reporting for the Postal Service internal use and fulfill regulatory requirements.

In addition, RVR uses contractors to develop the Shape Indicia report and some Special Weights reports. The contractors use an external email account to send the spreadsheets to the Pricing group. These spreadsheets are not encrypted, password protected, or otherwise secured during transmission. Further, the Pricing economists develop billing determinants using spreadsheets with formulas that are not password protected or secured. Postal Service policy<sup>14</sup> requires sensitive information be encrypted in transit and at rest.

Management relies on the security of the Postal Service network to protect sensitive RPW data rather than using security tools available under the Postal Service's Cyber Security program.<sup>15</sup> Additionally, management believes the Postal Service's Sarbanes-Oxley (SOX)<sup>16</sup> compliance program provides an adequate internal control structure for the billing determinant process. However, SOX compliance over financial reporting spreadsheets does not include billing determinants.

If compromised, billing determinant data combined with specific product cost information could enable competitors to exploit the strengths and weaknesses of individual postal products. For example, competitors could use this information to change their prices in a way that could negatively impact Postal Service revenue. Suppliers could also use this information to seek higher rates for services provided. Without adequate safeguards, this confidential, proprietary information is at risk. The Postal Service stated in its ACR that if this data were to get in the hands of competitors, "this risk could create commercial harm and the potential for millions of dollars in lost revenue." Additionally, unprotected cells in the billing determinant spreadsheets are at risk of unintentional or malicious changes to formulas that could result in inaccurate reporting.

#### **Data Accuracy**

Billing determinant calculations could be more accurate and complete. The Postal Service requires preparers of billing determinant spreadsheets to manually update, calculate, and visually verify formulas and source data. Additionally, the data sets are too large to regularly manipulate through manual processes. For example, with Special Services billing determinants, fee groups were manually entered and transposed, resulting in reporting errors. The current manual process does not allow management the opportunity to effectively prevent, detect, and correct miscalculations.

Postal Service policy mandates end-users computing spreadsheets and other user-developed programs, must be regularly reviewed for processing integrity, ability to sort, summarize, and report accurately. The billing determinant process could be improved by implementing automation procedures. For example, the OIG used its Statistical Analysis System (SAS) to create a uniform master template for all five classes of mail to enhance the development and validation of billing determinant data. See Appendix B for the automation methodology. The Postal Service currently uses SAS and could expand the functionality to enhance the billing determinant process and reduce the number of calculation errors in the future.

An analysis of FY 2015 billing determinant data, when compared to the RPW and Shape Indicia reports, identified revenue errors and procedural inconsistencies that totaled \$50,027,032 for the Special Services and FCM billing determinants. The Postal Service allocated 10 days each quarter for five economists to manually develop the billing determinants. Automation options with unique identifiers using SAS could reduce calculation errors and the labor hours used to manually develop the billing determinant spreadsheets.

The billing determinant process could be improved by implementing automation procedures. For example, the OIG used its Statistical Analysis System (SAS) to create a uniform master template for all five classes of mail to enhance the development and validation of billing determinant data.

<sup>14</sup> Handbook AS-805, Information Security, May 2015, section 3-5.

<sup>15</sup> Processes and technology designed to protect networks, computers, programs, and data from attack, damage, or unauthorized access.

<sup>16</sup> SOX was enacted in 2002 in response to a series of large corporate financial scandals that caused a decline in the public's trust of corporate accounting and reporting practices.

## **Recommendations**

We recommend managment finalize current billing department procedures, properly secure data, and implement automation options. We recommend the vice president, Pricing and Costing:

- 1. Finalize the current, documented billing determinant procedures so that processes are sufficiently detailed and repeatable to internally validate the billing determinant data.
- 2. Properly encrypt, password protect, or otherwise secure billing determinant spreadsheets and the supporting data.
- 3. Implement automation options to improve data accuracy and revenue calculation techniques.

### **Management's Comments**

Management agreed with the findings and recommendations 1 and 2. Management disagreed with recommendation 3.

Management agreed with recommendation 1, and stated that since the completion of the audit work, the billing determinant process has been finalized and fully documented for First Class Mail, Periodicals, and Special Services.

Management agreed with recommendations 2, and stated all sensitive documents will be treated in accordance with information security policies. Additionally, management will create a secured, encrypted shared drive for the development of billing determinants and work with contractors to ensure the use of Postal Service email account. Management will implement these changes by December 31, 2017.

Management disagreed with recommendations 3 as written. However, management will evaluate automation components for the billing determinant process by May 31, 2017. If the evaluation produces a solution which satisfies requirements, management will implement the solution.

See Appendix C for management's comments in their entirety.

### **Evaluation of Management's Comments**

The OIG considers management's comments responsive to the recommendations in the report and corrective actions should resolve the issues identified in the report.

Even though the Postal Service did not agree with recommendation 3, management was interested in the opportunity to use SAS to replace manual processes. The OIG demonstrated how it used SAS during the audit. We believe the Postal Service's plans to assess how automation can potentially be used to replace manual billing determinant processes provides a positive step towards automating processes.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. The corrective actions for all recommendations should resolve the issues identified in the report. Recommendations 1, 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

The Postal Service uses RPW data and its price list to develop the volume and price data for the billing determinant spreadsheets. Billing determinants are presented in the ACR as a part of the process to develop cost estimates and set discounts for mailers who perform worksharing, which is mail sorting or other work the Postal Service would otherwise perform.

The RVR group is responsible for compiling the RPW extract and Shape Indicia report, which are the foundation for developing the billing determinants. After the RVR group completes the RPW report, it is forwarded via email to the Pricing and Costing group. Once the billing determinants are developed, the Postal Service submits the billing determinant spreadsheets to the PRC for final approval.

A secure computing infrastructure would allow the Postal Service to protect information resources from accidental or intentional unauthorized use. The Postal Service defines internal controls as procedures that reduce the risk of inaccurate reporting. The Postal Service uses the Committee of Sponsoring Organizations of the Treadway Commission (COSO)<sup>17</sup> internal control framework to help ensure SOX compliance.

#### **Objectives, Scope, and Methodology**

Our objectives were to assess the efficiency of the billing determinant processes and evaluate the actions implemented in response to recent OIG audits to improve the internal controls. To accomplish our objective, we:

- Reviewed and summarized prior market dominant billing determinant audits.
- Assessed the data inputs, procedures, and internal control for the billing determinant processes.
- Used the COSO framework to develop a checklist to assess market dominant billing determinant internal controls, which included: control environment, risk assessment, control activities, information, communications, and monitoring.
- Interviewed and observed the RVR group to identify and assess billing determinant data feeds and processes.
- Interviewed the Pricing group responsible for preparing the market dominant billing determinants for FCM, Periodicals, Special Services, Standard Mail, and Package Services, to assess the process.
- Identified and reviewed policies and procedures established for the market dominant billing determinants.
- Developed and validated the market dominant billing determinant process flows.
- Identified and evaluated adjustment factors for market dominant billing determinants, to determine methodology and consistency of application.
- Analyzed the FY 2015 market dominant billing determinant data for FCM, Periodicals, and Special Services to determine whether prior audit issues continue to exist.

<sup>17</sup> COSO Internal Control – Integrated Framework, 2013.

- Analyzed record layout for each market dominant billing determinant, to identify common fields and develop a standard template.
- Used data validation and verification techniques to identify possible automation opportunities, to leverage and improve the market dominant billing determinant process.

The scope of the project was FY 2015 market dominant billing determinants for FCM, Periodicals, and Special Services. We also reviewed the data inputs and source documentation for billing determinants, which include market dominant and competitive product data.

We conducted this performance audit from August 2016 through March 2017 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 objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We discussed our observations and conclusions with management on February 9, 2017 and included their comments where appropriate.

### **Prior Audit Coverage**

Report Title	Objective	Report Number	Final Report Date	Monetary Impact
Market Dominant Billing Determinants: Package Services	Assess procedures used to prepare FYs 2014 and 2015 Package Services billing determinants and the accuracy and completeness of the data.	CP-AR-16-009	8/5/2016	None
Market Dominant Billing Determinants: Standard Mail	Assess procedures used to prepare Standard Mail billing determinant spreadsheets as well as the accuracy and completeness of FYs 2014 and 2015 Standard Mail billing determinants.	CP-AR-16-007	7/11/2016	None
Market Dominant Billing Determinants: Special Services	Assess completeness and accuracy of data used in billing determinants for Special Services.	CP-AR-16-004	2/4/2016	None
Market Dominant Billing Determinants: Periodicals	Assess accuracy and completeness of data used to prepare FY 2013 and 2014 Periodicals billing determinants.	CP-AR-15-004	9/14/2015	None
Market Dominant Billing Determinants: First-Class Mail	Assess completeness and accuracy of data used in market dominant billing determinants for FCM.	CP-AR-15-003	6/11/2015	None

### Appendix B: U.S. Postal Service Office of Inspector General Automation Methodology

#### Summary

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. The billing determinant process could be improved using SAS to create a uniform master template for all five classes of mail to enhance the development and validation of billing determinant data. The implementation of SAS to automate the manual procedures could reduce future calculation errors and increase the efficiency of the billing determinant process.

### Methodology

Automation using SAS requires two primary components: a unique identifier and a universal master template. We created a unique identifier to cross-reference the billing determinants with source data. We created a universal master template to allow for data standardization and validation. The universal master template was applied across all five market dominant billing determinants, for current and future years. We reviewed each class of mail to make certain every line item could be transferred into this template.

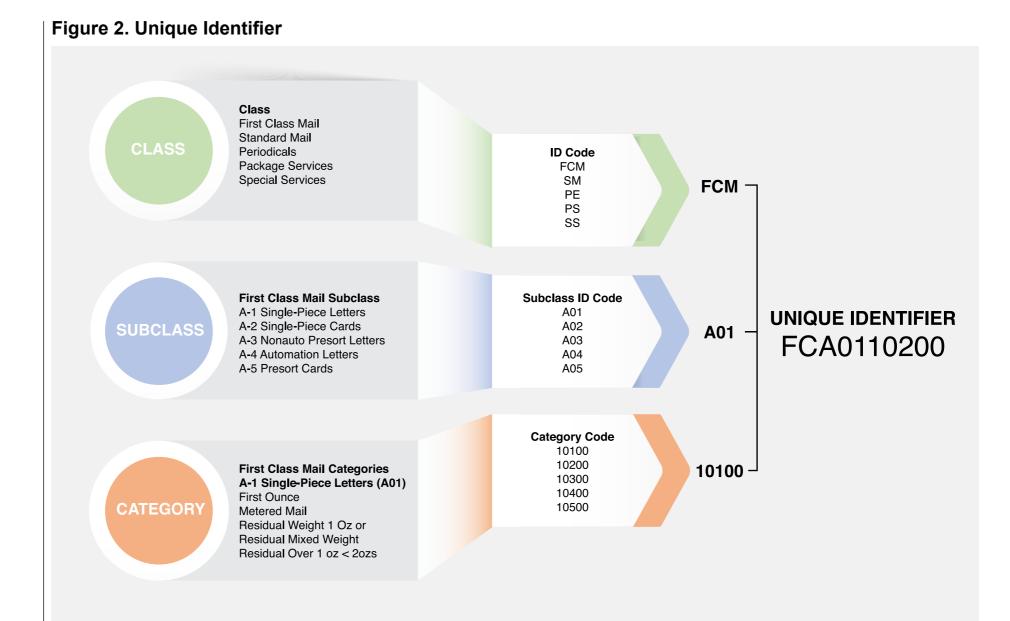
Master template column headers are as follows:

1.	Unique Identifier	13.	Q2 Price – AR
2.	Class	14.	Q2 Postage
3.	Subclass	15.	Q3 Units
4.	Category	16.	Q3 Price – BR
5.	Sub Category		Q3 Price – AR
6.	Туре		Q3 Postage
7.	Quarter 1 (Q1) Units	19.	Q4 Units
8.	Q1 Price – Before Rate (BR)	20.	Q4 Price – BR
9.	Q1 Price – After Rate (AR)	21.	Q4 Price – AR
10.	Q1 Postage	22.	Q4 Postage
11.	Q2 Units	23.	Total Units
12.	Q2 Price – BR	24.	Total Postage

Column Headers are defined as:

#### 1. Unique Identifier

A unique identifier is an alphanumeric code that is exclusively assigned to one individual record in a database. Creating a unique identifier has a two-fold effect. First, it identifies a line item within the billing determinant, unique to itself so that an employee can easily identify each line item. Second, it allows easy cross-referencing of the billing determinant to the source data (see Figure 2).



As represented in Figure 2, a unique identifier can be easily created by combining codes from the class, subclass, and category.

We also assigned a three digit alphanumeric code for the class itself. In the example above, we used A01 to identify single-piece letters as the subclass to FCM.

We designed category codes in blocks of five digits. This five-digit code allowed us to streamline categories along all five mail classes. The five-digit codes make it easier to add up to 99 new categories when necessary. This creates the option to expand thousands of new line items within a subclass. In Figure 3 above, "10200" is the category code for "Metered Mail"; for subclass "A01 Single Piece Letters." If a new category is added to "First Ounce" and "Metered Mail", at least 99 additional accounts can be added.

#### 2. Class

The five classes are FCM, Periodicals, Standard Mail, Package Services, and Special Services.

#### 3. Subclass – a subset of class

Subclasses for each class are as follows:

- a. FCM: A-1 Single Piece letters, A-2 Single Piece Cards, etc.
- b. Periodicals: Regular Rate, Nonprofit, etc.
- c. Standard Mail: Reg. Auto Letter C1-1, Reg. Non-Auto Letters C1-2, etc.
- d. Special Services: E-1 Mail for the Blind, F-1 Certified Mail, Post Office (PO) Boxes, etc.
- e. Package Services: Alaska Bypass, Bound Printed Matter Media, Library Mail, etc.

#### 4. Category - a subset of subclass

Categories for each subclass are as follows:

- a. FCM: A-1 Single Piece Letters: First Ounce and Metered Mail.
- b. Periodicals: Regular Rate: Advertising Pounds and Editorial Pounds.
- c. Standard Mail: Regular Auto Letters C1-1: Mixed Automation Area Distribution Center (AADC) Automation Letters and AADC Automation Letters.
- d. Special Services: PO Boxes: Fee Group 1 and Fee Group 2.
- e. Package Services: Alaska Bypass: Zones 1, 2 and 3.

#### 5. Subcategory - a subset of category

Subcategories for each class are as follows:

- a. FCM: A1 through A3 there are no subcategories, A-4: First Ounces and Additional Ounces.
- b. Periodicals: Destination Delivery Unit, Destination Flat Sequencing System, Destination Sectional Center Facility, etc.
- c. Standard Mail: No Destination Entry and National Distribution Center Destination Entry, etc.
- d. Special Services: Size 1, Size 2, Size 3, etc.
- e. Package Services: Volume 1, Volume 2, etc.

#### 6. Type

Subcategory line items are composed of Pounds, Pieces, Bundles, Sacks, Volume, Pallets, or Transactions. This distinguishes the type of line item.

#### 7. Quarter(x) Units

The units for that particular quarter, (x) being the quarter number. (Step 7 also defines steps 11, 15, and 19 listed above in the column headers list.)

#### 8. Quarter(x) Price – BR

Because future years are not predicted when a price change is in effect, all quarters will have a Before Rate (BR) and After Rate (AR) category. BR is the rate before the price change took effect for that year. Q(x) is the quarter number. (Step 8 also defines steps 12, 16, and 20 listed above in the column headers list.)

#### 9. Quarter(x) Price – AR

AR is the price change that took effect within the fiscal year. Q(x) is the quarter number. (Step 9 also defines steps 13, 17, and 21 listed above in the column headers list.)

#### 10. Quarter(x) Postage

Q(x) is a calculated dollar amount for a particular line item: Units x Price x a Ratio, and (x) is the quarter number. For quarters where no price change occurred, the ratio would be 100 percent. For quarters where price changes took effect, the ratio will be used to split the quarters out. Each class has a unique way of performing this task. (Step 10 also defines steps 14, 18, and 22 above in the column headers list.)

#### 23. Total Units

The unit summary of all 4 quarters.

#### 24. Total Postage

The postage summary of all 4 quarters.

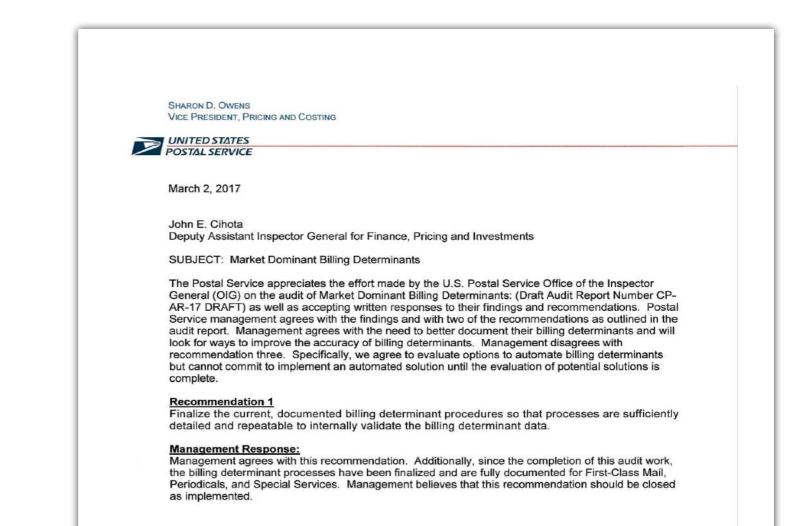
See Figure 3 for an example of how the master template was applied. The first row represents the headers described above.

#### Figure 3. SAS Master Template

Unique							Q1 Price -	Q1	Price -				Total
Identifier	Class	Subclass	Category	Sub Category	Туре	Q1 Units	BR	AR		Q1 Postage	etc	<b>Total Units</b>	Postage
PEB010010	Periodicals	Nonprofit	Advertising Pounds	Destinating Delive	e Pounds	59,614	-	\$	0.146	\$8,704	-9	200,779	\$28,421
PEB010020	Periodicals	Nonprofit	Advertising Pounds	DFSS	Pounds	2,152,402	-		0.223	479,986		7,271,381	1,555,172
PEB010030	Periodicals	Nonprofit	Advertising Pounds	Destinating SCF	Pounds	16,135,960	-		0.223	3,598,319		59,627,493	12,650,422
PEB010040	Periodicals	Nonprofit	Advertising Pounds	Destinating ADC	Pounds	1,096,732	-		0.239	262,119		2,884,156	674,703
PEB010050	Periodicals	Nonprofit	Advertising Pounds	Zones 1&2	Pounds	1,218,980	-	1	0.262	319,373		4,755,066	1,184,229
PEB010060	Periodicals	Nonprofit	Advertising Pounds	Zone 3	Pounds	655,649	-	1	0.287	188,171		2,605,853	709,011
PEB010070	Periodicals	Nonprofit	Advertising Pounds	Zone 4	Pounds	678,106	-	1	0.353	239,371		2,663,652	897,274
PEB010080	Periodicals	Nonprofit	Advertising Pounds	Zone 5	Pounds	700,378	<u> </u>		0.452	316,571		2,545,578	1,092,189
					etc								

Once the unique identifiers have been created and the cross-referencing has been established with the source data, SAS quickly validates the data, making the process more efficient.

### Appendix C: Management's Comments



#### **Recommendation 2**

Properly encrypt, password protect, or otherwise secure billing determinant spreadsheets and the supporting data.

#### Management Response:

Management agrees with this recommendation. All sensitive documents and files will be treated in accordance with USPS CyberSafe information security policies. We are working with the contractor that supports the development of the Special Weight and Shape and Indicia Reports to use a Postal Service email account. In addition, we are working with the Cybersecurity Group to develop a secure encrypted shared drive where information can be shared between the Revenue and Volume Reporting Group and Pricing for the development of billing determinants.

#### Target Implementation Date:

Management will encrypt, password protect, or otherwise secure billing determinant spreadsheets and the supporting data by December 31, 2017.

#### **Responsible Management Official:**

Manager, Pricing

475 L'ENFANT PLAZA SW WASHINGTON DC 20260-4012 (202) 268-3736 FAX: (202) 268-6251

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#### Recommendation 3

Implement automation options to improve data accuracy and revenue calculation techniques.

<u>Management Response:</u> Management disagrees with this recommendation as written. Management will evaluate options to automate the billing determinants process to improve accuracy by May 31, 2017. If the evaluation yields solutions that meet our requirements, we will implement the automated solution as appropriate.

#### Target Implementation Date:

Management will evaluate ways to automate components or all of the billing determinants process by May 31, 2017.

#### Responsible Management Official:

Manager, Pricing

Sharme Owens

cc: Manager, Corporate Audit and Response Management



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