

Office of Inspector General | United States Postal Service

## Audit Report

# Fiscal Year 2017 Statistical Tests

Report Number FT-FO-18-001 | December 19, 2017



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# Highlights

## Objective

Origin-Destination Information System - Revenue, Pieces, and Weight (ODIS-RPW) is the primary probability sampling system used by the U.S. Postal Service to assist in estimating mail revenue, volume flow, and weight. As part of this system, data collection technicians test and record mailpiece characteristics, such as shape, postmark date, and origin ZIP code. Management observes and reviews these tests to ensure that data collection technicians employ proper procedures and that the data is accurate.

Our objective was to determine whether the Postal Service conducted ODIS-RPW tests in accordance with established policies and procedures.

## What the OIG Found

The Postal Service did not always conduct statistical ODIS-RPW tests according to established policies and procedures. Specifically:

- Data collectors did not properly record mailpiece data in two of 24 on-site tests observed. These issues are similar to those previously reported.

- Reviewers did not identify one data entry error in one of three sampled digital data quality reviews. These reviews included 826 mailpieces with 9,912 possible characteristics.

These items did not have a material impact on financial statements.

In response to our prior reports and discussions throughout the year on the issues, management published updated Statistical Programs handbooks, provided quarterly training, and corrected the data entry errors.

## What the OIG Recommended

We believe actions taken by management to update policy, provide quarterly training, and correct the data entry errors have been effective; therefore, we are not making any recommendations at this time. We will continue to monitor these issues as part of our ongoing ODIS-RPW work.

# Transmittal Letter

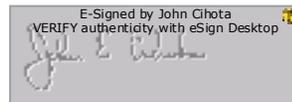


OFFICE OF INSPECTOR GENERAL  
UNITED STATES POSTAL SERVICE

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December 19, 2017

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



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

**SUBJECT:** Audit Report – Fiscal Year 2017 Statistical Tests  
(Report Number FT-FO-18-001)

This report presents the results of our audit of the U. S. Postal Service's Fiscal Year 2017 Statistical Tests (Project Number 17BM003FT000).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Lorie Nelson, Director, Finance, or me at 703-248-2100.

Attachment

cc: Postmaster General  
Corporate Audit Response Management  
Julie S. Moore

# Results

## Introduction/Objective

This report presents the results of our self-initiated audit of the U.S. Postal Service's Fiscal Year (FY) 2017 Statistical Tests (Project Number 17BM003FT000). Our objective was to determine whether the Postal Service conducted statistical Origin-Destination Information System – Revenue, Pieces, and Weight (ODIS-RPW) tests in accordance with established policies and procedures. See [Appendix A](#) for additional information about this audit.

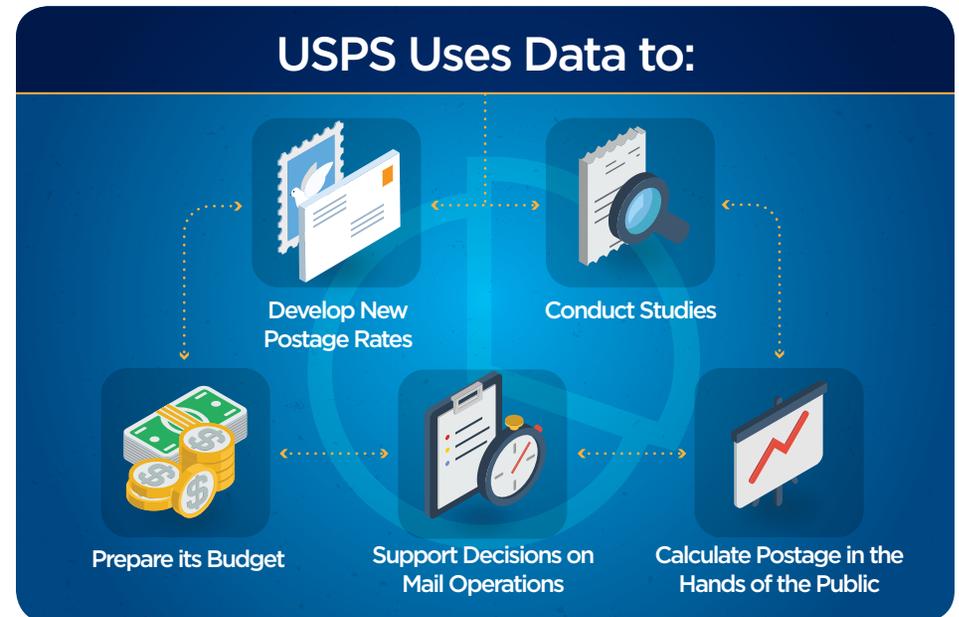
## Background

ODIS-RPW is a continuous, national probability statistical sampling system that provides statistical estimates of destinating mail revenue, volume, and weight. The Postal Service uses the data to develop new postage rates, conduct studies, prepare its budget, support decisions on mail operations, and calculate postage in the hands of the public (PIHOP).<sup>1</sup>

The Postal Service Board of Governors contracted with an independent public accounting (IPA) firm to express opinions on the Postal Service's financial statements and internal controls over financial reporting. The IPA firm maintains overall responsibility for testing and reviewing significant Postal Service accounts and processes and uses ODIS-RPW as one source of information to support its integrated audit. The U.S. Postal Service Office of Inspector General (OIG) coordinates audit work with the IPA firm to ensure adequate coverage.

District Statistical Programs managers schedule data collection training and assignments and manage day-to-day operations. These managers ensure quality data collection by conducting process reviews of data collection technicians (data collectors). The Supervisor, Statistical Programs (SSP),<sup>2</sup> helps managers coordinate and manage training, process review requirements, and administer unit data collection activities.

At randomly selected sites, the Statistical Programs group data collectors select a sample of mail for testing. Data collectors record sampled mailpiece revenue, weight, and additional mailpiece characteristics such as shape, indicia,<sup>3</sup> postmark date, origin ZIP code, mail class and mail markings, and extra services, into the Computerized On-Site Entry System (CODES)<sup>4</sup> laptop computer. To ensure data collectors employ proper test procedures, process reviewers<sup>5</sup> observe the data collectors perform on-site statistical tests. In addition, in FY 2016, the Postal Service



1 The process of deferring the recognition of revenue when postage has been purchased but where services (mail delivery) have not yet been provided.

2 The Statistical Programs group supports statistical systems through the administration and communication of policies and procedures; development of training and analytical tools; and testing of data collection software to ensure data quality.

3 Imprinted designation and markings on the mail that denote postage payment. It includes permit imprint, metered postage, PC Postage® products, and postage stamps.

4 CODES is a computerized data entry system that uses portable computers to record data for Statistical Programs that are designed to attribute costs to and report revenue, pieces, and weight for each mail class and product.

5 On-site ODIS-RPW process reviewers can be a Manager, Financial Programs Compliance (MFPC), a SSP, or a Field Financial Specialist (FFS).

implemented digital ODIS-RPW tests.<sup>6</sup> In a digital test, images of mailpieces are captured during mail induction and stored in the Statistical Programs Virtual Image Enterprise Warehouse (SP VIEW). The data collectors retrieve the images remotely from SP VIEW and record the mailpiece characteristics into CODES.

Management performs data quality reviews on digital tests at two levels. The first level of review, performed by either a MFPC, or a SSP, ensures the accuracy of data collector entries. The second level of review, completed by Statistical Programs Service Center (SPSC) personnel, ensures the accuracy of the first level review of data collector entries. SPSC personnel consolidate data from on-site process reviews and digital data quality reviews using a statistical analysis system program.

### Finding #1: Data Entry – On-Site Tests

We identified three issues in two of the 24 on-site tests observed where the data collector did not properly enter mailpiece data into the CODES laptop computer.<sup>7</sup> Specifically:

- A data collector did not identify and record a First-Class Mail presorted mailpiece that should have been included in the sample. Postal Service policy<sup>8</sup> requires data collectors to record all selected mailpieces.
- Another data collector incorrectly recorded a presorted First-Class Mail stamp as a Forever Stamp. On another mailpiece, the data collector recorded an additional ounce stamp as a post card stamp. According to Postal Service policy,<sup>9</sup> before entering mailpiece data, it is critical to correctly identify the mail class and markings on each mailpiece.

These issues occurred due to data collector oversight. When mailpieces are not properly recorded, there is increased risk that estimated volumes and revenues may be misstated. Data collectors corrected the data entries after the OIG conveyed the errors. Also, in response to our prior reports<sup>10</sup> and discussions throughout the year on these issues, management published updated Statistical Programs handbooks<sup>11</sup> and provided quarterly training.<sup>12</sup> Therefore, we are not making a recommendation.

### Finding #2: Digital Data Quality Review Accuracy

Reviewers<sup>13</sup> did not identify one data entry error<sup>14</sup> in one of three sampled digital data quality reviews. These reviews included 826 mailpieces with 9,912 possible characteristics.<sup>15</sup> Specifically, one mailpiece contained four stamps, but only two of the four stamps were readable. Since some of the stamps were not readable, the data collector should have recorded the mailpiece as “Digital Image Cannot Be Recorded (CBR)” and left all remaining fields blank. Instead, as shown in [Table 1](#), the data collector incorrectly entered “No” in the “Digital Image CBR” field in the CODES laptop computer, indicating the image could be read; and also entered the two readable stamps as a 2013 Forever Stamp and one stamp in the “Stamp Type” field.<sup>16</sup>

The first level reviewer agreed with the data collector’s entries (by also entering “No” in the CBR field) but incorrectly noted the mailpiece should have been recorded as a 2017 Forever Stamp and a stamp (the “Stamp Type” field should have been left blank).

The second level reviewer correctly identified the mailpiece should have been recorded as “Digital Image CBR,” (by entering “Yes” in the CBR field) but

6 A digital ODIS-RPW test is designed to automate statistical sampling by replacing on-site data collection with selected mailpiece images collected during mail induction.

7 These issues did not materially affect national estimates.

8 Handbook F-75 (draft), *Policies for Revenue, Volume, and Performance Measurement Systems*, October 2016 – updated through Statistical Programs Letter #1, FY 2017, Chapter 4-4.6e, Selecting the Mailpieces.

9 Handbook F-75 (draft), October 2016, Chapter 5-3, Entering Mailpiece Data Into the CODES laptop.

10 See [Prior Audit Coverage](#).

11 Handbook F-75, *Revenue, Volume, and Performance Measurement Systems*, June 2017; and draft versions of Handbook F-85, *Revenue, Volume, and Performance Measurement Systems*, June 2017 – updated through Statistical Programs Letter #4, FY 2017, and Handbook F-95, *Statistical Programs Management Guide*, June 2017– updated through Statistical Programs Letter #4, FY 2017.

12 Training provided as necessary based on audit findings or Postal Service updates.

13 The reviewers were the MFPC/SSP at the first level and SPSC personnel at the second level.

14 These issues did not materially affect national estimates.

15 Each mailpiece is reviewed for 12 possible characteristics.

16 Refers to Stamps that do not say “Forever” on them.

incorrectly agreed the mailpiece should have been recorded as a 2013 and 2017 Forever Stamp (the “Stamp Type field should have been left blank).

**Table 1. Mailpiece Entries in Digital Test and Review**

Review Type	Digital Image CBR	Stamp Type Entered
Data Collector Entry	No*	One Stamp and a 2013 Forever Stamp*
First Level Review	No*	One Stamp and a 2017 Forever Stamp*
Second Level Review	Yes	One 2013 and one 2017 Forever Stamp*

Source: OIG analysis of Postal Service data.  
 \* Indicates digital data entry error.

The reviewers overlooked the data collector’s incorrect entries for this mailpiece. Postal Service policy<sup>17</sup> requires mailpieces in a digital test to be marked as CBR if the mailpiece characteristics<sup>18</sup> are unreadable due to poor image quality. Effective reviews are critical to ensure the quality of statistical data used to estimate volumes and revenues. When mailpieces are not properly recorded, there is increased risk that this data may be misstated.

As a result of our audit, management corrected the entry to properly reflect the mailpiece as CBR. Therefore, we are not making a recommendation.

## Management’s Comments

Management agreed with the findings pertaining to identifying and recording mailpieces. Although the report did not contain any recommendations, management advised they will take action to remediate the findings. Specifically, they reiterated proper procedures for recording mailpieces at a December 7, 2017, national training webinar. In addition, management directed MFPCs to instruct data collectors to complete an assessment related to identifying and recording mailpiece indicia by December 30, 2017.

Regarding digital data quality reviews, management did not agree that reviewers overlooked a data entry error but, instead, they misclassified it on the review spreadsheet. They stated the reviewers consulted with the program manager to correctly categorize the error. Management agreed that the misclassification did not materially affect national estimates and stated they will continue to carefully complete and review every mailpiece during digital data quality reviews.

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

## Evaluation of Management’s Comments

The OIG considers management’s comments responsive to the findings. Regarding the digital data entry error, we reported this issue, in part, to provide management and the IPA firm with information regarding the integrity of the test. Management corrected the entry to properly reflect the mailpiece as CBR.

<sup>17</sup> Handbook F-75 (draft), February 2017 – updated through Statistical Programs Letter #2, FY 2017, Chapter 7-4.2, Mail Characteristics Recorded During the Digital Test.  
<sup>18</sup> Mailpiece characteristics are the mail class and mail markings, origin ZIP Code, indicia, extra services, and total mailpiece revenue.

# Appendices

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# Appendix A: Additional Information

## Scope and Methodology

The IPA firm randomly selected 24 ODIS-RPW on-site tests.<sup>19</sup> To achieve our objective, during Quarter (Q) 1, FY 2017,<sup>20</sup> we observed eight data collectors<sup>21</sup> select mail to be tested, and record various mailpiece characteristics into their CODES laptop computer at nine mail facilities within four sampled districts. We also interviewed Statistical Programs management and the data collectors performing the selected tests. In addition, we reviewed the reports<sup>22</sup> provided by management for each test.

Early in FY 2017, the Postal Service revised its methodology for calculating PIHOP to place less reliance on ODIS-RPW data from statistical tests. Because ODIS-RPW data was no longer a direct input into the PIHOP estimation model, the IPA firm revised its key control<sup>23</sup> testing approach in this area to focus on higher level review controls. Further, as the Postal Service continued to progress into a digital environment, it implemented digital tests that can be performed remotely. Accordingly, beginning in Q2,<sup>24</sup> at the IPA firm's request, we revised the audit methodology to focus on two controls:

- Control 801.CA039, Non-Digital Data Gathering/Process Reviews. For each on-site non-digital test reviewed, we observed process reviewers select up to 15 stamped mailpieces for review and obtained screenshots from the CODES laptop computer of the data entries for each selected sample mailpiece. In addition, we observed the process reviewers document any mail isolation, container subsampling, and recording errors. We also interviewed the process reviewers and data collectors performing the selected tests and obtained and reviewed the reports<sup>25</sup> and checklists<sup>26</sup> provided by management for each test.

- Control 801.CA045DG, Digital Review and Certification of Data. We re-performed three selected sets of nationwide digital ODIS-RPW tests performed by various data collectors and reviewers. We reviewed the digital mailpiece images in SP VIEW and compared them to both the data collectors and reviewers entries into the CODES laptop computer for that same digital mailpiece image.

See Table 2 for all ODIS-RPW tests the OIG reviewed.

**Table 2. ODIS-RPW Tests Reviewed by the OIG**

Quarter	Tests and Type	Districts	Observed
1	9 on-site tests	4	8 data collectors <sup>27</sup>
2	8 on-site tests and 1 digital test	8	4 FFSs, 2 MFPCs, and 2 SSPs
3	5 on-site tests	5	4 FFSs and 1 MFPC
4	2 on-site tests and 2 digital tests	2	1 FFS and 1 SSP

Source: OIG analysis and IPA firm.

We conducted this performance audit from November 2016 through December 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

<sup>19</sup> ODIS-RPW tests can be conducted at different types of postal facilities such as a post offices or processing plants.

<sup>20</sup> October 1 through December 31, 2016.

<sup>21</sup> Statistical Programs employees.

<sup>22</sup> Final Header Report, Summary Analysis Report, and Detailed Analysis Report.

<sup>23</sup> A key control is designed to prevent or detect financial statement misstatements.

<sup>24</sup> January 1 through March 31, 2017.

<sup>25</sup> Final Header Report, Summary Analysis Report, and Detailed Analysis Report.

<sup>26</sup> Control 801.CA039 checklists such as the Control 39 Data Gathering Worksheet, ODIS-RPW Process Reviews: Control 39, Postal Service (PS) Form 1444-B-Administration, PS Form 1444-E-ODIS-RPW, or PS Form 1444-E-ODIS-RPW Worksheet.

<sup>27</sup> We observed three different data collectors conduct tests in one district. Two districts used two data collectors and one district used one data collector.

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 November 9, 2017, and included their comments where appropriate.

We did not assess the reliability of any computer-generated data for the purposes of this report. The IPA firm provided the OIG with the sampled tests for review.

## Prior Audit Coverage

Report Title	Objective	Report Number	Final Report Date	Monetary Impact
<i>Fiscal Year 2016 Statistical Test Review</i>	To determine whether the Postal Service conducted statistical mail tests in accordance with established policies and procedures.	FT-FO-17-001	12/22/2016	None
<i>Fiscal Year 2015 Statistical Test Review</i>	To determine whether the Postal Service conducted statistical mail tests in accordance with established policies and procedures.	FT-FO-16-001	12/18/2015	None

# Appendix B: Management's Comments

Sharon Owens  
Vice President, Pricing and Costing



November 30, 2017

LORI LAU DILLARD  
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Audit Report – Fiscal Year 2017 Statistical Tests  
Report Number FT-FO-17-DRAFT

Management agrees with the majority of the subject report and responds as follows:

#### Recommendation

The report made no recommendations. The Office of Inspector General (OIG) audit report stated that it believes that the corrective actions taken by management to update policy, provide quarterly training, and correct the data entry errors have been effective.

#### Management Response/Action Plan:

We agree with the findings pertaining to the identification and recording of mailpieces in the CODES laptop computer. Management will complete the following actions to remediate these findings by:

- Reiterating the proper procedures for identifying and recording mailpieces in the CODES laptop at a national training webinar scheduled for December 7, 2017.
- Directing managers, Financial Programs Compliance (MFPCs) to instruct all ODIS-RPW data collectors to complete an ODIS-RPW Forever Indicia Assessment related to identifying and recording mailpiece indicia by December 30, 2017. MFPCs will be directed to monitor the completion status of this assessment in the CODES Web Base Unit.

#### Management Response/Action Plan:

Management does not agree that the reviewers "overlooked" a data entry error in one of three sampled digital data quality reviews.

The reviewers identified but misclassified the error on the review spreadsheet. Before documenting the error, the reviewers consulted with the Program Manager to correctly categorize the error. Management agrees that the misclassification does not materially affect national estimates. Management will continue to carefully complete and review every mailpiece during digital data quality reviews.

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Responsible Official:

Joseph G. Hurley  
Manager, Statistical Programs

If you have any questions, please contact Joseph G. Hurley at (202) 268-3134.

  
Sharon Owens

cc: Joseph Corbett  
Joseph G. Hurley  
Sally Harrig



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