



OFFICE OF
**INSPECTOR
GENERAL**
UNITED STATES POSTAL SERVICE

Statistical Tests for Fiscal Year 2012

Management Advisory

February 19, 2013

Report Number FT-MA-13-009



BACKGROUND:

The Postal Accountability and Enhancement Act of 2006 requires the U.S. Postal Service to report its annual revenue and mail volume to the Postal Regulatory Commission. The Postal Service's Origin-Destination Information System-Revenue, Pieces, and Weight system is the primary system for collecting revenue, volume, and weight data for most classes of mail and extra services.

The Postal Service uses system data to develop new postage rates, conduct management studies, assist in budget preparation, and support decisions concerning mail operations. In addition, the Postal Service's independent public accounting firm uses this data and the underlying test results to support the financial statement audit.

This system's data is the result of the work of Postal Service data collection technicians. They observe employee work activity, sample live mail, and collect data at randomly selected sites; record the information on laptop computers; and transmit it for review.

Our objective was to determine whether the Postal Service conducted statistical mail tests in accordance with established policies and procedures.

WHAT THE OIG FOUND:

Data collection technicians did not always conduct system tests in accordance with established procedures. We identified 22 test errors in 13 of 45 tests observed. Specifically, data collection technicians did not always:

- Correctly enter and verify all data entered into their laptop computer.
- Follow and apply the appropriate test mail sampling methodology.
- Label test mail to ensure it was isolated from mail processing until the test was completed.
- Properly identify, isolate, and capture test mail.
- Protect their laptop computer.

These issues contributed, in part, to the Postal Service's conclusion that a significant internal control deficiency related to data collection sampling procedures existed as of September 30, 2012.

WHAT THE OIG RECOMMENDED:

We recommended management reinforce, through training, proper data collection methods to ensure test mail is identified, isolated, and captured during testing. We also recommended they reinforce the importance of protecting data collection laptop computers.

[Link to review the entire report](#)



February 19, 2013

MEMORANDUM FOR: JOSEPH D. MOELLER
MANAGER, REGULATORY REPORTING AND COST
ANALYSIS

A rectangular box containing a handwritten signature in cursive that reads "John E. Cihota". A small yellow question mark icon is located in the top right corner of the box.

FROM: John E. Cihota
Deputy Assistant Inspector General
for Financial and Systems Accountability

SUBJECT: Management Advisory – Statistical Tests for Fiscal
Year 2012 (Report Number FT-MA-13-009)

This report presents the results of our review of Statistical Tests for Fiscal Year 2012 (Project Number 12BD013FI000).

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

Attachments

cc: Joseph Corbett
Julie S. Moore
J. Ronald Poland
Brad Pafford
Deborah Giannoni-Jackson
Corporate Audit and Response Management

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Introduction

This report presents the results of our review of Statistical Tests for Fiscal Year (FY) 2012 (Project Number 12BD013F1000). The objective of our review was to determine whether the U.S. Postal Service conducted statistical Origin-Destination Information System-Revenue, Pieces, and Weight (ODIS-RPW) tests to collect revenue and volume data in accordance with established policies and procedures. The report addresses financial risk. We reviewed tests of the ODIS-RPW and conducted this work in support of the audit of the Postal Service's financial statements.¹ This review addresses financial risk. See [Appendix A](#) for additional information about this review.

ODIS-RPW is the primary probability sampling system that estimates revenue, volume, and weight for most classes of mail and extra services. Management uses test data to develop new rates, assist in budget preparation, conduct management studies, and support management decisions concerning mail operations. Data collection technicians (data collectors) observe employee work activity, sample live mail, and collect data at randomly selected sites; record the information on laptop computers; and transmit it for review. The data collectors record various mailpiece characteristics, such as revenue, weight, shape, indicia, barcode, postmark time, origin, and mail class. The Postal Service also relies on statistical programs' sample data for revenue protection and to estimate stamp usage in the calculation of Postage in the Hands of the Public (PIHOP).²

Conclusion

The Postal Service did not always follow established data collection policies and procedures. We identified 22 errors in 13 of 45 tests observed.³ Although we found a decrease in the number of tests with errors over the previous year, our review indicated continued noncompliance with prescribed policies and procedures previously reported in our FY 2011,⁴ 2010,⁵ and 2009⁶ reports. These errors included incorrectly entering and improperly verifying data entered into data collection laptop computers, using an inappropriate test mail sampling methodology, incorrectly labeling the test mail that was to be kept isolated from mail processing until the test was completed, improperly identifying test mail, and not taking the proper precautions to protect the data collection laptop computer. Noncompliance was primarily due to data collectors overlooking critical data entry errors and applying the incorrect sampling methodology.

¹ This report does not present the results of audit work required under the Postal Accountability and Enhancement Act of 2006 (Postal Act of 2006).

² The process of deferring the recognition of revenue for postage purchased but for which services have not yet been provided.

³ These errors occurred in seven of 10 districts reviewed.

⁴ *Audit of Statistical Tests for Fiscal Year 2011* (Report Number [FF-AR-11-168](#), dated September 29, 2011).

⁵ *Audit of Statistical Tests for Fiscal Year 2010* (Report Number [FF-AR-10-222](#), dated September 14, 2010).

⁶ *Audit of Statistical Tests for Fiscal Year 2009* (Report Number [FF-AR-10-015](#), dated November 20, 2009).

As a result, these continued noncompliance issues contributed, in part,⁷ to the Postal Service determining that a significant internal control deficiency existed related to data collection sampling procedures as of September 30, 2012.

Repeat Test Errors

Over the past 3 fiscal years, we have identified the same test error types in our annual statistical programs capping reports (see Table 3 in [Appendix B](#) for a detailed analysis). Although these error types have decreased from last year, we continued to observe them. Test errors this fiscal year included data collectors who did not always:

- Enter and verify data entered into laptop computers (nine errors). As data from a mailpiece is entered into the laptop computer system, a record of each entry appears on the right side of the screen. After all the data for the mailpiece has been entered, the data collector must verify that the keyed information is correct by answering questions prompted by the ODIS-RPW software system.⁸ Specifically, we identified errors related to data collectors not correctly entering the:
 - Year for Forever Stamps (two errors).
 - Mailpiece ZIP Code (two errors).
 - Mailpiece skip interval⁹ (two errors).
 - Mail type, such as library mail versus media mail (two errors).
 - Date on a mailpiece (one error).

In most instances, data collectors stated the errors were due to an oversight. In one instance, the data collector stated they could not locate their hard copy of the *Forever Stamp Reference Guide* and, as a result, was not sure what information to enter into the laptop.

- Apply and follow the approved sampling methodology¹⁰ to identify mailpieces and/or containers and the random start number for testing (seven errors). A data collector must select the required mailpieces by applying the mailpiece skip interval to all selected mailpieces and to containers using the container skip interval.¹¹ In most instances, data collectors did not always:
 - Select the correct mailpiece for testing when performing the skip interval count (five errors).

⁷ Data collector testing errors were only one of the factors that contributed to the Postal Service's conclusion that a significant deficiency existed.

⁸ Handbook F-75, *Data Collection User's Guide for Reference, Volume, and Performance Measurement System*, Section 3.9, pages 3-65, October 2003.

⁹ A method of selecting samples from a larger population according to a random starting point and a fixed, periodic interval. Typically, every "nth" member is selected from the total population for inclusion in the test sample population.

¹⁰ Handbook F-75, Section 3.7.2.4.

¹¹ Handbook F-75, Section 3.7.2.4.

- Use the correct random start number when selecting containers and mailpieces to sample (one error).
- Apply the mailpiece skip interval after adjusting the skip interval between mail deliveries (one error).

Data collectors stated the errors were due to an oversight in counting the mailpieces and, in one instance, the data collector stated they forgot he had made an interval adjustment. When data collectors do not properly apply mailpiece and container skip intervals correctly, the Postal Service's ability to accurately estimate postal rates and mail volume is at risk.

- Use marking labels to reduce the risk of double counting and ensure that all mailpieces required for the test were isolated from mail processing until the test was completed (three errors). Data collectors must use marking labels to mark trays, bins, and all containers to be tested.¹² In one instance, the data collector stated the error was due to an oversight. Another data collector stated he did not use marking labels because there were no mail carriers at the unit during testing so he did not believe anyone would move the mail during the test. When data collectors do not follow ODIS-RPW test procedures, management's ability to accurately estimate postal rates and mail volume is at risk.
- Identify, isolate, and capture mail to be tested (three errors). For example, data collectors:
 - Included a tray of mail they should have excluded (one error).
 - Excluded mail from the test they should have included (two errors).

The data collector is responsible for identifying, isolating, counting, sampling, and recording the necessary mailpieces.¹³ In one instance, the data collector stated that he did not see the parcels to include in the test and, in another instance, the data collector stated that, although she included mail she should have excluded, she would have eventually noticed that the mail should not have been tested and excluded it at that point. In another test, the data collector stated that he set the mailpieces aside to enter them and then forgot he had set them aside. When employees do not follow testing procedures for properly including or excluding mailpieces, there is an increased risk that reported revenue and mail volume will not be accurate.

During our FY 2011 statistical tests review, we found the average data collector's statistical sampling experience for those we observed was 10 years. Although we did not collect data collection level of experience this year, we did determine that each of the 36 data collectors we observed was a full-time data collector. We did not observe any part-time data collectors.

¹² Handbook F-75, Chapter 3, pages 3-6.

¹³ Handbook F-75, Chapter 3, pages 3-207.

Other Observations

We also observed data collectors in two districts who did not follow procedures for protecting data collection equipment. Specifically, the data collectors did not place their laptop computers into hibernation mode or lock the keyboard when their laptops were unattended. Data collectors must preserve the integrity of test data by employing security measures when laptops are unattended.¹⁴ In one instance, the data collector stated he did not hibernate or lock the keyboard when his laptop was unattended because of an oversight, and another data collector believed it was not necessary to lock his laptop since he was working in isolation in the break room. Collected data could be lost or compromised when employees do not protect their computer laptops.

Recommendations

We recommend the manager, Regulatory Reporting and Cost Analysis, direct the manager, Statistical Programs, to:

1. Require district managers, Financial Programs Compliance, to reinforce, through individualized and quarterly training, sampling methodology policies and procedures, the requirement to use marking labels during testing, and the need to protect data collection equipment to preserve data integrity.
2. Require district managers, Financial Programs Compliance, to certify that all data collectors in districts with errors identified in this report have received remediated individual and quarterly training.

Management's Comments

Management agreed with the findings and recommendations in this report. Regarding recommendation 1, management prepared training modules that address sampling methodology policies and procedures, use of marking labels during testing, and the necessity of protecting data collection equipment. In addition, they directed Financial Programs Compliance (FPC) managers to use these modules for individualized training. Also, the managers will train data collectors and document this training in the Learning Management System. Data collectors who are unable to demonstrate 100 percent proficiency will receive individualized training from subject matter experts. Subsequent discussions with management identified that these actions are scheduled for completion by March 31, 2013.

Regarding recommendation 2, management issued a policy that requires FPC managers to complete a process review within 3 months of the finding on any data collector identified in a U.S. Postal Service Office of Inspector General (OIG) or Sarbanes-Oxley Act review. Subsequent discussions with management determined that

¹⁴ Handbook F-75, Appendix G-7 (Section IV.F); Handbook F-85, *Data Collection User's Guide for International Revenue, Volume, and Performance Measurement Systems*, Appendix B, Section IV, page B-9; and Statistical Programs Letter #6, FY 2008, Administration.

reviews of data collectors identified in our audit would be completed by February 24, 2013. 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 and corrective actions should resolve the issues identified in the report.

Appendix A: Additional Information

Background

The Postal Act of 2006 requires the Postal Service to report annual costs, revenue, volume, and quality of service to the Postal Regulatory Commission. As part of the effort to achieve this requirement, the Postal Service continually collects information about the revenue, volume, weight, and cost of the mail. ODIS-RPW is the primary probability sampling system that estimates revenue, volume, and weight for most classes of mail and extra services. The Postal Service uses test data to develop new rates, assist in budget preparation, conduct management studies, and support management decisions concerning mail operations. Data collectors observe employee work activity, sample live mail, collect data at randomly selected sites, record the information collected on laptop computers, and transmit it for review. The data collectors record various mailpiece characteristics, such as revenue, weight, shape, indicia, barcode, postmark time, origin, and mail class. The Postal Service also relies on statistical programs sample data for revenue protection and to estimate stamp usage in the calculation of PIHOP.

The ODIS-RPW test requires data collectors to systematically select mailpieces for testing using a random start for all mail available on the randomly selected day. Data collectors record various mailpiece characteristics, such as revenue, weight, shape, indicia, barcode, postmark time, origin, and mail class. Information collected from tests is uploaded to the Computerized On-Site Data Entry System Web Base Unit which resides on the mainframe at the San Mateo, CA Computer Operations Service Center. Finance uses ODIS-RPW sample data to prepare the Revenue, Pieces, and Weight report, which is the official summary of postal revenue, volume, and weight.

Management reviews every person involved with collecting statistical programs data to ensure they are properly performing all processes they regularly execute. A data collector with less than 1 year of experience in a program is reviewed at least twice during the first year in that program. A data collector with more than 1 year of experience in a program is reviewed at least once during the fiscal year that they are in that program. Local management is responsible for initiating action for any improvement opportunities noted during the observations. Once a process review is completed, the reviewer must enter the results in the Process Support and Tracking System. This system provides reports used to identify training opportunities.

Objective, Scope, and Methodology

The objective of our review was to determine whether the Postal Service conducted statistical ODIS-RPW tests to collect revenue and volume data in accordance with established policies and procedures.

To achieve our objective, we judgmentally selected and observed 36 data collectors select mail to be tested and record various mailpiece characteristics into the data

collection laptop computer system. We observed these data collectors perform 45 ODIS-RPW tests in 10 districts. (See [Appendix B](#) for a detailed analysis of our observations and testing errors by district.) We also interviewed the data collectors performing the selected tests and district managers of FPC. In addition, we reviewed the reports for each test that FPC district managers provided.

We conducted this review from May 2012 through February 2013 in accordance with the Council of the Inspectors General on Integrity and Efficiency, *Quality Standards for Inspection and Evaluation*. We did not assess the reliability of the ODIS-RPW data and did not rely on that data for the purposes of this report. The Postal Service independent public accounting firm performs independent testing to assess the Postal Service's financial statements and to validate testing results. We discussed our observations and conclusions with management on January 10, 2013, and included their comments where appropriate.

Prior Audit Coverage

Report Title	Report Number	Final Report Date	Monetary Impact
<i>Statistical Tests for Fiscal Year 2011</i>	FF-MA-11-168	9/29/2011	None
<p>Report Results: Data collectors did not always follow proper random start and mailpiece/container skip intervals; verify the information keyed into the laptop computer system; properly identify, isolate, and capture mail to be sampled/tested; or use marking labels to identify mail being tested. In addition, data collectors did not conduct the necessary interviews with facility personnel. Management agreed with the recommendations.</p>			
<i>Statistical Tests for Fiscal Year 2010</i>	FF-AR-10-222	9/14/2010	None
<p>Report Results: Data collectors did not always follow proper random start and skip intervals or verify the information keyed into the data collection laptop computer system. In addition, data collectors did not always follow procedures for protecting data collection equipment. Management agreed with the recommendation.</p>			
<i>Statistical Tests for Fiscal Year 2009</i>	FF-AR-10-015	11/20/2009	None
<p>Report Results: Data collectors did not always follow proper random start and skip intervals, verify the information keyed into the data collection laptop computer system, or use marking labels to identify mail being tested. In addition, data collectors did not always follow procedures for protecting data collection equipment. Management agreed with the recommendation.</p>			

Appendix B: Detailed Analysis

Tables 1, 2, and 3 present information on testing errors identified in each district and a summary comparison of the conditions reported in our FYs 2011, 2010, and 2009 capping reports.

**Table 1: Summary of FY 2012 ODIS-RPW Observations
and Testing Errors by District**

District*	Number of Data Collectors Observed	Number of Tests Observed	Total Number of Errors	Number of Tests with Errors
Atlanta	5	7	5	2
Bay-Valley	2	2	4	2
Colorado/Wyoming	4	7	0	0
Connecticut Valley	1	1	1	1
Dallas	4	6	0	0
Fort Worth	3	4	2	1
Greater Boston	5	6	0	0
Sacramento	3	3	2	2
San Francisco	2	2	1	1
Western Pennsylvania	7	7	7	4
Total	36	45	22	13

Source: ODIS-RPW checklist for each test during FY 2012.

*The districts shaded in grey had no reported test errors.

Table 2: Detail of FY 2012 ODIS-RPW Test Errors¹⁵ and Observations by District¹⁶

Test Errors and Other Observations	Atlanta District	Western Pennsylvania District	Greater Boston District	Connecticut Valley District	Sacramento District	Bay-Valley District	San Francisco District	Dallas District	Fort Worth District	Colorado/Wyoming District	Total Test Errors
ODIS-RPW											
Data collectors did not enter correctly or verify the information keyed into the ODIS-RPW computer.	X(3)	X(2)			X(1)	X(2)			X(1)		9
Data collectors did not follow procedures or apply the appropriate random start or mailpiece/container skip intervals.	X(1)	X(5)		X(1)							7
Data collectors did not use marking labels for trays, bins, and all mail containers being tested.	X(1)						X(1)		X(1)		3
Data collectors did not properly identify, isolate, and capture mail to be sampled/tested.					X(1)	X(2)					3
Total Test Errors											22
Other Observation(s)											
Data collectors did not follow procedures to protect data integrity and data collection equipment.								X(1)	X(1)		2

Source: OIG analysis.

¹⁵ The numbers of tests errors are shown in parentheses.

¹⁶ One of 10 districts observed had no reported errors.

Table 3: Summary of Repeat Testing Errors Previously Reported

Description of Testing Errors	Number of Testing Errors			
	FY 2012	FY 2011*	FY 2010*	FY 2009*
ODIS-RPW – Number of Tests Observed	45	65	63	63
Data collectors did not enter correctly or verify the information keyed into the ODIS-RPW computer.	9	19	5	4
Data collectors did not follow procedures or apply the appropriate random start and mailpiece/container skip intervals.	7	26	5	12
Data collectors did not use marking labels for trays, bins, and all mail containers being tested.	3	13	0	4
Data collectors did not properly identify, isolate, and capture mail to be sampled/tested in ODIS-RPW tests.	3	11	0	1
Other Observation(s)				
Data collectors did not follow procedures to protect data integrity and data collection equipment.	2	13	7	10

Source: FY 2012 review results and prior statistical test capping reports.

*We are showing testing errors and observation reported this year and the years they were previously reported in our annual fiscal year capping reports.

Appendix C: Management's Comments

FINANCE



February 6, 2013

JUDY LEONHARDT
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Statistical Tests for Fiscal Year 2012 Draft Management Advisory (Report Number FT-MA-13-DRAFT)

Management agrees with the findings in the subject report and responds as follows:

Recommendation 1:

Require district managers, Financial Programs Compliance, to reinforce, through individualized and quarterly training, sampling methodology policies and procedures, the requirement to use marking labels during testing, and the need to protect data collection equipment to preserve data integrity.

Management Response/ Action Plan:

We agree with the recommendation and have already prepared training modules designed for individualized training. We directed the managers, Financial Programs Compliance, to use these modules, which cover: sampling methodology policies and procedures; the requirement to use marking labels during testing; and the need to protect data collection equipment to preserve data integrity. The managers are also directed to provide training to the data collectors and to document the training in the Learning Management System (LMS).

After all data collection technicians received the training, they were required to take an assessment specifically targeted at the skills identified in the OIG report. Data collectors who were unable to demonstrate 100% proficiency received individualized training from subject matter experts.

Responsible Official:

J. Ron Poland

Recommendation 2:

Require district managers, Financial Programs Compliance, to certify that all data collectors in districts with errors identified in this report have received remediated individual and quarterly training.

Management Response/ Action Plan:

We agree with the recommendation. In Postal Quarter 2, FY2012 we introduced a policy in Statistical Programs Letter #3, FY2012, which requires the district managers, Financial Programs Compliance, to complete a process review on any data collector identified in an OIG or SOX audit within 3 months of the finding.

Responsible Official:

J. Ron Poland

Finally, please note that this report and management's response do not contain information that may be exempt from disclosure under the Freedom of Information Act.

If you have any questions, please contact Ron Poland at (202) 268-2634.

A handwritten signature in black ink, appearing to read "Joseph D. Moeller", with a long horizontal flourish extending to the right.

Joseph D. Moeller

Manager, Regulatory Reporting and Cost Analysis

cc: Joseph Corbett
J. Ron Poland
Brad Pafford
Sally K. Haring