



January 30, 2008

ASHLEY LYONS  
MANAGER, CORPORATE FINANCIAL PLANNING

SUBJECT: Audit Report – Audit of Statistical Tests for Fiscal Year 2007 –  
Cost and Revenue Analysis (Report Number FF-AR-08-084)

This report presents the results of our audit of statistical tests for the fiscal year 2007 Cost and Revenue Analysis (Project Number 07BD003FF000). We reviewed tests of the Origin-Destination Information System-Revenue, Pieces, and Weight (ODIS-RPW); the In-Office Cost System (IOCS); the Transportation Cost System (TRACS); and the System for International Revenue and Volume Outbound-International Origin-Destination Information System (SIRVO-IODS). We conducted the audit in support of the U.S. Postal Service's Cost and Revenue Analysis.

### **Background**

Under the Postal Reorganization Act of 1970, the U.S. Postal Service was required to break even financially over time. Total revenue was to equal total costs incurred by the Postal Service. Each class or type of mail service was to bear the direct and indirect costs attributable to that class or type. Because Postal Service revenue and cost accounting systems do not provide revenue and cost information at the mail category level, the Postal Service develops and uses various statistical systems and special studies to estimate the costs, revenues, and volumes for categories of mail. The Postal Service uses these estimates to prepare rate cases and budgets, conduct cost studies, measure mail flow and service performance, and report on cost coverage of its products.

Under the Postal Accountability and Enhancement Act of 2006 (the Postal Act of 2006), Postal Service products have been divided into two categories: market-dominant and competitive. Price increases in market-dominant products cannot exceed the increase in the Consumer Price Index (CPI) and apply to each class of mail. The price increase for the category as a whole must average the CPI. For competitive products, the Postal Regulatory Commission (PRC) has set rules for a price minimum that must cover the product's costs and a required contribution to institutional costs. The Postal Service can

change pricing on competitive products as it wishes, consistent with the PRC rules, provided the change is published in the Federal Register at least 30 days before the effective date.

The Postal Act of 2006 requires the Postal Service to submit annual reports to the PRC regarding its costs, revenues, rates, and quality of service. The act also requires the U.S. Postal Service Office of Inspector General (OIG) to audit regularly the data collection systems and procedures the Postal Service uses to collect such information and to submit reports on these audits to the Postal Service and the PRC. This audit is not one of those required by the Postal Act of 2006; instead, we performed this audit in support of the U.S. Postal Service's Cost and Revenue Analysis.

ODIS-RPW is the primary probability sampling system that estimates revenue, volume flow, weight, and performance measurement. The Postal Service uses data from tests to develop proposals for new rates, assist in budget preparation, conduct management studies, and support management decisions concerning mail flow and service performance in transportation and operations. The ODIS-RPW test requires data collectors to select mailpieces systematically 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.

IOCS is an employee work sampling system used to distribute the labor costs of clerks, mail handlers, city delivery carriers, and supervisors to the activities carried out by those employees and to classes and subclasses of mail and special services.

TRACS is a statistical sampling and data collection system that provides information to estimate purchased transportation costs for major classes and subclasses of mail and types of service. Although the Postal Service's total purchased transportation costs are available from the accounting records, the records do not indicate how much of the transportation costs should be attributed to each specific class and subclass of mail and special service. Since the characteristics of purchased transportation vary significantly by mode of transportation, TRACS has four separate sampling systems – highway, commercial air, network air, and rail.

SIRVO-IODIS is one of two sampling systems that estimate revenue, volume, and weight of international mail for the Postal Service. Postal Service management uses SIRVO-IODIS data to assist in budgeting and planning, based on forecasts of mail volume, workloads, and overall productivity.

### **Objective, Scope, and Methodology**

The objective of our audit was to determine whether the Postal Service conducted statistical tests to collect cost, revenue, and volume data in accordance with established policies and procedures. To accomplish our objective, we conducted fieldwork from

October 2006 through September 2007. We observed 89 selected data collectors performing cost and revenue analysis tests in 13 judgmentally selected districts.<sup>1</sup>

Specifically, we judgmentally selected and observed:<sup>2</sup>

- 57 ODIS-RPW tests
- 128 IOCS tests
- 14 TRACS tests
- 34 SIRVO-IODIS tests

We interviewed the data collectors performing selected tests and reviewed the reports provided by Statistical Programs managers of each test district.

We conducted this audit from October 2006 through January 2008 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 officials and included their comments where appropriate. We also issued interim reports to 13 district managers.

### **Prior Audit Coverage**

The OIG issued a report titled *Audit of Statistical Tests for Fiscal Year 2006 – Cost and Revenue Analysis* (Report Number FF-AR-07-093, dated February 16, 2007). The report stated that data collectors did not always use marking slips to identify test mail, follow mail exit point (MEP) and special instructions while conducting ODIS-RPW tests, and observe the entire contents of vehicles when collecting utilization data in TRACS testing.

In addition to the testing errors, data collectors in seven districts did not always follow procedures for protecting data collection equipment; data collectors in two districts had not attended the required training before conducting tests; and in two districts, Statistical Programs managers did not properly define MEPs.

Management agreed with the findings and took corrective action. We noted that the corrective actions were effective, except for protecting data collection equipment, which we address in this report.

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<sup>1</sup> We observed ODIS-RPW, IOCS, and TRACS tests in 12 districts and SIRVO-IODIS tests in three districts. In two of the three districts in which we observed SIRVO-IODIS tests, we also observed the other tests, for a total of 13 different districts.

<sup>2</sup> Appendix A presents the number of tests we observed in each district and the dates we observed the tests.

## Results

The Postal Service generally conducted tests of ODIS-RPW, IOCS, TRACS, and SIRVO-ODIS in accordance with established policies and procedures. However, we identified 26 testing errors during our 233 test observations.<sup>3</sup> We identified the errors in five of the 13 judgmentally selected districts. In this report, we discuss in detail only the most frequent testing errors, which we define as those that occurred in at least 5 percent of the tests observed for a system.

In addition to the testing errors, data collectors in three districts did not always follow procedures for protecting data collection equipment; and in one district, unit management did not always ensure that electronic scales were leveled and calibrated and did not document calibration results. We do not believe these errors affected the overall validity of the process, but program improvements are needed to maintain the integrity of the statistical data.

### **ODIS-RPW**

We observed 57 ODIS-RPW tests and identified the following issues in at least 5 percent of the tests observed in four different districts. The most frequent errors were that data collectors did not:

- Identify, isolate, and capture mail to be tested in four districts (five errors).
- Tag sampled mail after testing to release for processing in one district (three errors).

Postal Service policy states the data collector is responsible for identifying, isolating, counting, sampling, and recording the necessary mailpieces at the appropriate MEP.<sup>4</sup> Data collectors gave various reasons for why they did not identify, isolate, and capture the mail to be sampled. For example, a data collector in one district stated the error occurred because she did not observe and properly isolate mail coming off the truck; in another district, the data collector stated that not inquiring about the mail containers was an oversight; and in another district, the error occurred because the data collector did not properly mark the selected mail trays. Not properly identifying, isolating, and recording mail may decrease the overall reliability of the test results.

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<sup>3</sup> Appendix B is a summary of all 26 testing errors identified in our 233 test observations. Some tests had more than one error.

<sup>4</sup> Handbook F-75, *Data Collection User's Guide for Revenue, Volume, and Performance Measurement System*, Chapter 3, page 5, October 2003.

## IOCS

Of the 128 IOCS tests we observed, no errors occurred in at least 5 percent of the tests observed.

## TRACS

We observed 14 TRACS tests and identified one test error in which the data collector entered one Express Mail® piece as a Global Priority Mail® piece. Postal Service policy requires data collectors to review data and correct errors. In addition, the data collector must protect the integrity of the cost systems data.<sup>5</sup> The data collector stated this was his first TRACS reading that included Express Mail, and he was unfamiliar with the input procedures. When data is not properly input, there is an increased risk that test data may not be accurate.

## SIRVO-IODIS

We observed 34 SIRVO-IODIS tests and identified one issue in at least 5 percent of the tests observed. The most frequent error involved two data collectors in two districts who incorrectly entered revenue into the Computerized On-Site Data Entry System (CODES) laptops. In these tests, the revenue amount was not on the Information Based Indicia but was located elsewhere on the package. Postal Service policy requires data collectors to use Cannot Be Read when the revenue on the indicia is smudged, unclear, or not visible. The policy does not address how or whether the revenue should be entered when it can be obtained elsewhere on the mailpiece.<sup>6</sup> In both instances, the revenue amount was indicated on the Postal Service Form 2976-A, Customs Declaration Dispatch Note – CP77, located on the mailpiece. Postal Service policy also states it is crucial data collectors gather data in the same way. When the policy for testing procedures is not clear, there is an increased risk that revenue data may not be gathered and recorded consistently.

## Data Collection Equipment

Although not associated with any specific tests, we observed in three of the 13 districts that data collectors did not always follow procedures for protecting data collection equipment. Specifically, data collectors did not:

- Place the CODES laptops into hibernation mode or lock the keyboard when their laptops were unattended (two districts).
- Maintain the security of the CODES laptop and information because two employees shared a single logon identification (ID) (one district).

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<sup>5</sup> Handbook F-65, *Data Collection User's Guide for Cost Systems*, pages 5-5 and A-4, September 2001.

<sup>6</sup> *Statistical Programs Letter # 4*, Attachment 3, page 7, March 30, 2007.

- Secure CODES laptops and data collection equipment (two districts).

Postal Service policy<sup>7</sup> requires data collectors to preserve the integrity of test data by putting laptops into hibernation mode or locking the keyboard when laptops are unattended. In addition, the policy requires employees to protect logon IDs; employees may not share their logon IDs or permit others to use them.<sup>8</sup> Postal Service policy also requires data collectors to store the CODES laptops and all other test equipment in a locked area when not in use.

Data collectors gave various reasons for why they did not always protect testing equipment. For example, some data collectors stated they overlooked or forgot to perform the action; another data collector stated that since the office was small, he felt his computer was secure; and another data collector stated she believed that leaving the menu screen displayed on the computer provided enough security. The data collector who allowed another data collector to use his CODES logon ID stated it was an oversight. In another district, employees from the business mail entry unit, which was collocated with the Statistical Programs office, taped a door open for easy access. When precautions are not taken to secure equipment, there is an increased risk that equipment could be lost or stolen.

### Scale Calibration and Leveling

In one district, unit management could not provide documentation to support all the required monthly scale calibrations.<sup>9</sup> In addition, two data collectors in that district did not level the scales before conducting tests. Postal Service policy requires that data collectors calibrate and document electronic scales at least once each month.<sup>10</sup> Data collectors stated that because of time constraints, they did not document the calibrations. In addition, they stated they were aware of the requirement to level the scale but forgot to do so. When electronic scales are not properly leveled and calibrated, there is reduced assurance the mailpieces are weighed accurately and the appropriate postage fees are paid.

During our observations, we discussed the errors in the ODIS-RPW, IOCS, TRACS, and SIRVO-IODIS tests and other issues with data collectors and district Statistical Programs managers. Postal Service officials agreed with the errors we identified and made the appropriate corrections when possible.

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<sup>7</sup> Handbook F-75, Appendix G-7 (Section IV.F).

<sup>8</sup> Handbook AS-805, *Information Security*, Section 9-6.2.a, March 2002 (updated with *Postal Bulletin* revisions through November 23, 2006).

<sup>9</sup> As in the previous finding, Data Collection Equipment, these observations were not associated with any of the specific tests.

<sup>10</sup> Handbook F-85, *Data Collection User's Guide for International Revenue, Volume, and Performance Measurement Systems*, Appendix B, Section D, page B-8, February 2000.

### **Recommendation**

We recommended the Manager, Corporate Planning:

1. Reinforce data collection procedures by training data collectors to:
  - Identify, isolate, and capture test mail and tag the mail after testing (Origin-Destination Information System-Revenue, Pieces, and Weight tests).
  - Enter Express Mail data correctly into the Computerized On-Site Data Entry System laptop (Transportation Cost System tests).

### **Management's Comments**

Management agreed with our recommendation and stated that by February 29, 2008, Statistical Programs will instruct the district managers, Statistical Programs, to reinforce through training, the proper procedures for (1) identifying, isolating and capturing test mail and tagging the mail after testing on ODIS-RPW tests, and (2) entering Express Mail correctly for TRACS tests. Management's comments, in their entirety, are included in Appendix C.

### **Recommendation**

We recommended the Manager, Corporate Planning:

2. Clarify testing procedures to be used when revenue can be obtained elsewhere on the mailpiece other than the Information Based Indicia (System for International Revenue and Volume Outbound-International Origin-Destination Information System tests).

### **Management's Comments**

Management agreed with our recommendation, and Statistical Programs updated the data recording procedures on December 7, 2007.

### **Recommendation**

We recommended the Manager, Corporate Planning:

3. Direct managers of Statistical Programs to include, in the existing quarterly data collector training, requirements for (a) data collection equipment protection and (b) scale calibration and documentation.

### **Management's Comments**

Management agreed with our recommendation and stated that by February 29, 2008, Statistical Programs will instruct the district managers, Statistical Programs, to include in the quarterly data collector training a review of the requirements to protect data collection equipment, calibrate scales, and document calibration of the scales. Management also stated that by March 31, 2008, Statistical Programs will update the relevant sections of Handbook F-95, *Statistical Programs Management Guide*.

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

Management's comments are responsive to recommendations 1, 2, and 3, and the planned or completed actions should correct the issues identified in the finding.

The OIG considers recommendations 2 and 3 significant, and therefore requires OIG concurrence before closure. The OIG has reviewed the information provided in support of recommendation 2 and agrees that it should be closed in the follow-up tracking system. The OIG requests written confirmation when corrective actions are completed for recommendation 3. This recommendation should not be closed in the follow-up tracking system until the OIG provides written confirmation the recommendation can be closed.

We appreciate the cooperation and courtesies provided by your staff during the audit. If you have any questions or need additional information, please contact Linda Libician-Welch, Director, Field Financial – West, or me at (703) 248-2100.



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for Financial Accountability

### Attachments

cc: H. Glen Walker  
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Vincent H. DeVito, Jr.  
Katherine S. Banks



**APPENDIX A. FISCAL YEAR 2007 COST AND REVENUE  
 ANALYSIS: SUMMARY OF OBSERVATIONS OF  
 DATA COLLECTION PROCEDURES<sup>11</sup>**

		ODIS-RPW		IOCS		TRACS		SIRVO-IODIS	
District	Week Data Collected	Number of Tests Observed	Total Number of Errors	Number of Tests Observed	Total Number of Errors	Number of Tests Observed	Total Number of Errors	Number of Tests Observed	Total Number of Errors
Atlanta	10/23/2006	4	0	10	0	1	0	0	0
Northern Virginia	10/23/2006	4	0	11	0	1	0	0	0
Northern New Jersey	11/16/2006	8	6	17	4	2	0	0	0
	8/20/2007	0	0	0	0	0	0	10	2
Santa Ana	12/4/2006	4	0	8	0	1	0	0	0
Gateway	12/11/2006	4	0	10	0	1	0	0	0
Bay-Valley	12/11/2006	4	7	10	1	1	1	0	0
	12/11/2006	0	0	0	0	0	0	13	0
Dakotas	1/29/2007	4	0	8	0	1	0	0	0
Pittsburgh	2/12/2007	8	2	17	0	2	0	0	0
Boston	7/09/2007	4	1	10	0	1	0	0	0
Albuquerque	7/23/2007	4	0	8	0	1	0	0	0
Massachusetts	8/06/2007	5	0	11	0	1	0	0	0
Southeast Michigan	8/06/2007	4	0	8	0	1	0	0	0
San Francisco	9/10/2007	0	0	0	0	0	0	11	2
<b>Total</b>		<b>57</b>	<b>16</b>	<b>128</b>	<b>5</b>	<b>14</b>	<b>1</b>	<b>34</b>	<b>4</b>

<sup>11</sup> Although the percentage of tests with errors appears high, each test contains multiple records and fields. Therefore, the percentage of erroneous test entries is much lower than the total number of tests containing errors.

## APPENDIX B. SUMMARY OF TESTING ERRORS AND OBSERVATIONS BY DISTRICT

The table below presents the detailed test errors<sup>12</sup> and observations identified by district.<sup>13</sup>

	Northern Virginia District	Bay-Valley District	Northern New Jersey District	Pittsburgh District	Boston District	San Francisco District	Total Test Errors
<b>ODIS-RPW</b>							
Data collector (DC) did not identify, isolate, and capture mail to be tested.		X (1)	X (2)	X (1)	X (1)		5*
DC did not tag sampled mail after testing to release for processing.		X (3)					3*
DC did not verify the information keyed into the CODES laptop.		X (2)					2
DC did not follow procedures to determine the appropriate random start, mailpiece, or container skip intervals.			X (2)				2
DC did not properly measure and record sampled mailpieces.			X (1)	X (1)			2
DC did not communicate effectively with unit personnel to ensure test mail was identified, flagged, and isolated.			X (1)				1
DC did not bring required test material to the site.		X (1)					1
<b>IOCS</b>							
DC did not follow scripted questions and asked leading questions.			X (2)				2
DC did not follow procedures to record a reading when the employee was late.			X (1)				1
DC recorded the reading 10 minutes after the allotted 30-minute window.			X (1)				1
DC did not have an electronic scale during an IOCS reading.		X (1)					1

\* Most frequent test error, occurring in more than 5 percent of the tests for a system.

<sup>12</sup> The numbers of testing errors are shown in parentheses.

<sup>13</sup> Nine of 15 district reports had no reported testing errors. See Appendix A for a complete list of districts and the test errors in each district.

	Northern Virginia District	Bay-Valley District	Northern New Jersey District	Pittsburgh District	Boston District	San Francisco District	Total Test Errors
<b>TRACS</b>							
DC was unfamiliar with entering Express Mail data into the CODES laptop.		X (1)					1*
<b>SIRVO</b>							
DC recorded revenue from postage amounts located elsewhere on the mailpiece when the mailpiece contained an unreadable postage paid amount.			X (1)			X (1)	2*
DC did not send a mailpiece with postage due to the revenue protection unit.						X (1)	1
DC recorded packages with a special drawing rights value as insured under special services, while other data collectors did not.			X (1)				1
<b>OTHER OBSERVATIONS<sup>14</sup></b>							<b>Total Number of Districts</b>
DC did not follow procedures for protecting data integrity and data collections equipment.	X (2)	X (5)				X (2)	3
Unit management did not always ensure that scales used in conjunction with CODES were leveled and calibrated.		X (6)					1
DC allowed another DC to use his CODES logon ID to enter mailpiece data.						X (1)	1

\* Most frequent test error, occurring in more than 5 percent of the total tests for a system.

<sup>14</sup> The observation issues are not listed in Appendix A because they are not considered test errors.

## APPENDIX C. MANAGEMENT'S COMMENTS

FINANCE



January 17, 2008

MS. LUCINE M. WILLIS

SUBJECT: Audit of Statistical Tests for Fiscal Year 2007 – Cost and Revenue Analysis  
(Report Number FF-AR-08-DRAFT)

Management agrees with the findings in the report on the audit of FY2007 Statistical Tests.

### Recommendation 1

Reinforce data collection procedures by training data collectors to:

- Identify, isolate, and capture test mail and tag the mail after testing (Origin-Destination Information System-Revenue, Pieces, and Weight tests).
- Enter Express Mail data correctly into the Computerized On-Site Data Entry System laptop (Transportation Cost System tests).

### Response

We agree with the finding and recommendation. By February 29, 2008, Statistical Programs will instruct the district Managers, Statistical Programs to reinforce through training the proper procedures for (1) identifying, isolating and capturing test mail, and tagging the mail after testing on ODIS-RPW tests, and (2) entering Express Mail correctly for TRACS tests. As additional information, effective Q3, FY2007, data collectors began scanning barcodes on pieces on TRACS tests. This provides additional data which can be compared to the Product Tracking System thereby improving the accuracy of Express Mail identification.

### Recommendation 2

Clarify testing procedures to be used when revenue can be obtained elsewhere on the mailpiece other than the Information Based Indicia (System for International Revenue and Volume Outbound-International Origin-Destination Information System tests).

### Response

We agree with this finding and recommendation. On December 7, 2007, Statistical Programs issued updated data recording procedures in Attachment 2 of SP Letter #3, FY2008, for recording revenue.

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Recommendation 3

Direct Managers, Statistical Programs to include, in the existing quarterly training, requirements for (a) data collection equipment protection and (b) scale calibration and documentation.

Response

We agree with this finding and recommendation. By February 29, 2008, Statistical Programs will direct the district Managers, Statistical Programs to include in the quarterly data collector training a review of the requirements to protect data collection equipment, calibrate scales, and to document calibration of the scales. By March 31, 2008, Statistical Programs will issue an SP Letter to update the relevant sections of Handbook F-95, Statistical Programs Management Guide.

Finally, note that this report and management's response do not contain information that may be exempt from disclosure under the FOIA.

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



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