February 16, 2007

LYNN MALCOLM
VICE PRESIDENT, CONTROLLER

SUBJECT: Transmittal of Audit Report – Audit of Statistical Tests for Fiscal
          Year 2006 – Cost and Revenue Analysis (Report Number FF-AR-07-093)

This report presents the results of our audit of the statistical tests for the fiscal year 2006 Cost and Revenue Analysis (Project Number 06BD005FF000, formerly Project Number 06XD005FF000). 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-IODIS). We conducted the audit in support of the U.S. Postal Service's Cost and Revenue Analysis.

The Postal Service generally conducted tests of the ODIS-RPW, IOCS, TRACS, and SIRVO-IODIS in accordance with established policies and procedures. Of the 285 tests observed, we identified 41 test errors. However, we do not believe these errors affected the overall validity of the process. In this report, we discuss only those errors[1] that occurred in at least 5 percent of the tests observed for that system. 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 mail exit points. Since the Postal Service uses the results of statistical tests in ratemaking, the data must be as accurate and consistent as possible. Consequently, improvements are needed to maintain the integrity of the statistical data.

We recommended management use training to reinforce data collection procedures to ensure the integrity of the statistical data. In addition, we recommended management reinforce policies for protecting Computerized On-Site Data Entry System laptops and other test equipment, require training for data collectors prior to their conducting tests, and properly define mail exit points. Management agreed with the recommendations and stated they will instruct Statistical Programs managers to reinforce data collection procedures to ensure the integrity of the statistical data. In addition, management

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[1] Fourteen tests had the 19 most frequently identified test errors: 18 in ODIS-RPW and one in TRACS. Some tests had more than one error. Appendix B is a summary of all test errors identified in our 285 test observations.

stated they would reinforce policies about data and laptop security, training requirements, and mail exit point (MEP) definition. Management's comments and our evaluation of these comments are included in the report.

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.

John E. Cihota
Deputy Assistant Inspector General
  for Financial Operations

Attachments

cc: H. Glen Walker
     J. Ron Poland
     Stephen J. Nickerson
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EXECUTIVE SUMMARY

Introduction

This report presents the results of our audit of statistical tests for the fiscal year 2006 Cost and Revenue Analysis. 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-IODIS). We conducted the audit in support of the U.S. Postal Service's Cost and Revenue Analysis.

The Postal Service conducts statistical tests to collect cost, revenue, and volume data. Our audit objective was to determine whether the Postal Service conducted these tests in accordance with established policies and procedures. We observed 119 data collectors performing cost and revenue analysis tests in 18 judgmentally selected districts. At the completion of our audits, we issued 18 audit reports to district managers.

Results in Brief

The Postal Service generally conducted its tests of the ODIS-RPW, IOCS, TRACS, and SIRVO-IODIS in accordance with established policies and procedures. We identified 41 testing errors in 285 tests observed. However, we do not believe these errors affected the overall validity of the process. In this report, we discuss only those errors[2] that occurred in at least 5 percent of the tests observed for that system. For example, the most frequently identified test errors involved data collectors not always:

- Using marking slips to identify test mail.

- Following mail exit point (MEP) and special instructions while conducting ODIS-RPW tests.

- Observing the entire contents of vehicles when collecting utilization data in TRACS testing.

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[2] Fourteen tests had the 19 most frequently identified test errors: 18 in ODIS-RPW and one in TRACS. Some tests had more than one error. Appendix B is a summary of all test errors identified in our 285 test observations.

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.

| **Summary of Recommendations** | We recommended management use training to reinforce data collection procedures to ensure the integrity of the statistical data.

We also recommended management reinforce policies for protecting Computerized On-Site Data Entry System (CODES) laptops and other test equipment, require training for data collectors prior to their conducting tests, and properly define MEPs. |

| **Summary of Management's Comments** | Management agreed with our recommendations and stated they will instruct Statistical Programs managers to reinforce data collection procedures to ensure the integrity of the statistical data. In addition, management stated they would reinforce policies about data and laptop security, training requirements, and defining MEPs. Management will complete these actions by March 5, 2007. We have included management's comments, in their entirely, in Appendix C. |

| **Overall Evaluation of Management's Comments** | Management's comments are responsive to our findings and recommendations and the actions taken or planned should correct the issues identified in this report. |

INTRODUCTION

Background	The Postal Reorganization Act of 1970 requires the U.S. Postal Service to break even financially over a period of years. Total revenue must equal total costs incurred by the Postal Service. The act specifies that each class or type of mail service should bear the direct and indirect costs attributable to that sub-class. To meet this requirement, the Postal Service must determine the cost, revenue, and volume of each mail class, subclass, and special mail service. However, Postal Service revenue and cost accounting systems do not provide revenue and cost information at the subclass and special service levels. Therefore, the Postal Service needs various statistical systems and special studies to develop estimates of costs, revenues, and volumes for categories of mail. The Postal Service uses these estimates to prepare rate cases and budgets, conduct cost studies, and measure mail flow and service performance.
Origin-Destination Information System-Revenue, Pieces, and Weight	The Origin-Destination Information System-Revenue, Pieces, and Weight (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 systematically select mailpieces 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, and origin and mail class.
	Handbook F-75, *Data Collection User's Guide for Revenue, Volume, and Performance Measurement Systems*, October 2003, states that data collectors are responsible for isolating, counting, and recording the appropriate mailpieces for the tests.
In-Office Cost System	The In-Office Cost System (IOCS) provides data for estimating labor costs in post offices and special processing facilities. The system does this by sampling the activity of

an employee at a given point in time and estimating the proportion of employee work time spent on various functions, including handling or processing categories of mail. Management then uses time proportions to estimate the costs attributable to each class and subclass of mail and each special service.

Handbook F-45, *In-Office Cost System – Field Operating Instructions*, October 2004, states that every employee who participates in a reading is responsible for properly collecting required information. This includes the data collector, the sampled employee, and others who may provide information to the data collector about the sampled employee.

Transportation Cost System	The Transportation Cost System (TRACS) is a statistical sampling and data collection system that provides information to estimate costs by subclass for the major cost accounts for interfacility purchased transportation. TRACS uses four separate sampling systems to collect data: highway, rail, passenger air, and network air. TRACS develops:

- Cubic-foot-mile distribution keys for highway and rail costs.

- Pound-mile distribution keys for passenger air costs.

- Pound distribution for night turn network air costs.

- Cubic foot distribution for day turn network air costs.

Handbook F-65, *Data Collection User's Guide for Cost Systems*, September 2001, gives detailed instructions to data collectors for testing truck, air, and rail trips.

System for International Revenue and Volume Outbound-International Origin-Destination Information System	The System for International Revenue and Volume Outbound-International Origin-Destination Information System (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.

Handbook F-85, *Data Collection User's Guide for International Revenue, Volume, and Performance Measurement Systems*, February 2000, gives detailed instructions to data collectors for testing international mail.

| **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 December 2005 through September 2006. We observed 119 data collectors performing cost and revenue analysis tests in 18 judgmentally selected districts. |

Specifically, we judgmentally selected and observed:[3]

- 76 ODIS-RPW tests
- 177 IOCS tests
- 17 TRACS tests
- 15 SIRVO-IODIS tests

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

We conducted this audit from December 2005 through February 2007 in accordance with generally accepted government auditing standards, and included such tests of internal controls as we considered necessary under the circumstances. We discussed our observations and conclusions with management officials and included their comments where appropriate. We also issued interim reports to 18 district managers.

Prior Audit Coverage   The U.S. Postal Service Office of Inspector General issued a report titled, *Audit of Statistical Tests for Fiscal Year 2005 – Cost and Revenue Analysis* (Report Number FF-AR-06-091, dated March 6, 2006). The report stated that employees did not always communicate with test site personnel, follow procedures for isolating mail to be sampled, use marking slips to identify sampled mail, bring required test materials to the test site, level scales properly,

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[3] See table in Appendix A.

follow scripted IOCS questions, or verify identification codes for dispatch and routing. Also, Statistical Programs managers did not always review MEPs.

Management agreed with our findings and directed district managers of Statistical Programs to reinforce, through training, the correct procedures for isolating mail to be sampled, using marking slips to identify sampled mail, bringing required test materials to the test site, leveling scales properly, following scripted IOCS questions, verifying identification codes for dispatch and routing, and conducting MEP reviews.

AUDIT RESULTS

| **Observations** | The Postal Service generally conducted tests of ODIS-RPW, IOCS, TRACS, and SIRVO-IODIS in accordance with established policies and procedures. However, we observed the following test errors for each system,[4] and noted other issues related to data collection equipment, training, and MEPs.[5] |

| **Test Results** | **ODIS-RPW**: |

We observed 76 ODIS-RPW tests and identified the following issues in at least 5 percent of the tests observed.[6] Specifically, data collectors did not:

- Use marking slips to identify sampled mail in 13 tests.

- Follow MEP and special instructions in five tests.

IOCS:

We observed 177 IOCS tests and did not identify any issues in at least 5 percent of the tests observed.[7]

TRACS:

We observed 17 TRACS tests and identified one test in which the data collector did not follow required procedures. Specifically, the data collector did not observe the entire contents of the vehicle when collecting the utilization data.

SIRVO-IODIS:

We observed 15 SIRVO-IODIS tests and did not observe any test errors.

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[4] In this report, we discuss in detail only those test errors that occurred in at least 5 percent of the tests observed for that system. Appendix B is a summary of all test errors identified.
[5] See Appendix A for a list of districts we audited and dates we observed tests.
[6] We identified a total of 33 test errors during ODIS-RPW test observations.
[7] We identified a total of seven errors during IOCS test observations.

Data Collection Equipment	In seven of the 18 districts, data collectors did not always follow procedures for protecting the data collection equipment. Specifically, data collectors did not:

- Place the CODES laptops into hibernation mode or lock the keyboard when their laptops were unattended (six districts).

- Secure the key to the CODES storage cabinet (one district).

- Secure the weight scales when not in use (one district).

Postal Service policy[8] requires data collectors to preserve the integrity of test data by putting laptops into hibernation mode or locking the keyboard when laptops are unattended. Additionally, the policy requires data collectors to store the CODES laptops and all other test equipment in a locked area when not in use. Data collectors cited various causes for why they did not always protect testing equipment. For example, data collectors in three districts stated they overlooked or forgot to perform the action; in two districts, data collectors stated they were unaware of the policy; and, in one district, data collectors were aware of the policy but stated that since the laptops hibernate automatically after a few minutes, they did not think they needed to initiate hibernation.

Data Collection Training	Data collectors in two districts performed tests without first receiving the required Process Activated Training. Postal Service policy[9] states that only trained data collectors under the direction of the Statistical Programs office are permitted to conduct tests. The Statistical Programs manager in one district stated he believed the data collectors had received the required training and, in the other district, the manager stated it was an oversight that the data collector had not received the required training.

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[8] Handbook F-75, *Data Collection User's Guide for Revenue, Volume, and Performance Measurement Systems,* October 2003, Appendix G-7 (Section IV.F).
[9] Handbook F-75, Appendix G-8 (J).

Mail Exit Point	Statistical Programs managers in two districts did not properly define MEPs, as required.[10] Specifically, in one district, the manager had not updated the MEP to include references to accountable mail and, in the other district, the manager did not define in the MEP whether the mail flow was stream-based or shape-based. According to Postal Service policy, to ensure the accuracy of a MEP, units must fully describe and properly document the characteristics that make up a MEP. The manager in one district stated the unit had updated most of their MEP descriptions, and the manager in the other district stated the unit did not update the MEP due to an oversight. If management does not review MEPs as required, it could impact the precision of sample estimates. 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.

Recommendation	We recommend the Vice President, Controller:
	
	1. Use training to reinforce data collection procedures to ensure data collectors:
	
	   • Utilize marking slips to identify test mail and follow mail exit point and special instructions during Origin-Destination Information System-Revenue, Pieces, and Weight tests.
	
	   • Observe the entire contents of the vehicle when collecting utilization data during Transportation Cost System tests.

Management's Comments	Management agreed with our recommendation and stated by March 5, 2007, they will instruct Statistical Programs managers to reinforce data collection procedures to ensure the integrity of the statistical data.
Evaluation of Management's Comments	Management's comments are responsive to our findings and recommendation and the action planned should correct the issue identified in this report.

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[10] Handbook F-75, Appendix J, pages J-25 and J-26.

Recommendation	We recommend the Vice President, Controller: 2. Reinforce policies for protecting the Computerized On-Site Data Entry System laptops and other test equipment, adhering to training requirements for data collectors, and properly defining mail exit points.
Management's Comments	Management stated they would reinforce policies about data and laptop security, training requirements and defining MEPs by March 5, 2007.
Evaluation of Management's Comments	Management's comments are responsive to our findings and recommendation and the actions taken or planned should correct the issues identified in this report.

APPENDIX A. FISCAL YEAR 2006 COST AND REVENUE ANALYSIS: SUMMARY OF OBSERVATIONS OF DATA COLLECTION PROCEDURES[11]

District	Week Data Collected	ODIS-RPW		IOCS		TRACS		SIRVO-IODIS	
		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
Central Florida	12/5/2005	4	0	10	1	1	0	-	-
New York	12/5/2005	8	0	18	0	0	0	-	-
South Jersey	1/23/2006	4	4	8	0	1	0	-	-
Chicago	1/23/2006	8	4	19	2	2	0	-	-
Columbus	3/20/2006	4	10	10	2	1	1	-	-
Arkansas	3/27/2006	5	0	10	0	1	0	-	-
Capital	5/1/2006	4	4	10	0	1	0	-	-
Seattle	5/8/2006	4	0	9	0	1	0	-	-
Nevada-Sierra	5/8/2006	4	5	6	0	1	0	-	-
Greater Michigan	5/15/2006	3	5	9	0	1	0	-	-
Los Angeles	5/30/2006	8	0	21	0	2	0	-	-
Maine	6/26/2006	4	0	9	0	1	0	-	-
Alaska	7/31/2006	4	0	10	0	1	0	-	-
Tennessee	7/31/2006	4	0	10	0	1	0	-	-
Northern Illinois	8/7/2006	4	1	9	2	-	0	-	-
Central Plains	8/14/2006	4	0	9	0	1	0	-	-
South Florida	2/21/2006	-	-	-	-	-	-	10	0
Dallas	6/23/2006	-	-	-	-	-	-	5	0
Total		**76**	**33**	**177**	**7**	**1**	**1**	**15**	**0**

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[11] 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 TEST ERRORS AND OBSERVATIONS BY DISTRICT

The table below presents the detailed test errors[12] and observations identified by district.[13]

	Capital District	Central Florida District	Chicago District	Columbus District	Dallas District	Greater Michigan District	Nevada-Sierra District	Northern Illinois	South Jersey District	Total Test Errors
ODIS-RPW										
Data Collectors (DCs) did not use marking slips to identify test mail.	X (4)		X (1)	X (4)		X (1)	X (1)		X (2)	13
DCs did not follow mail exit point or special instructions.				X (3)		X (2)				5
DCs did not communicate effectively with unit personnel.							X (1)		X (2)	3
DCs did not follow procedures to determine the appropriate random start and mailpiece and/or container skip intervals.			X (2)				X (1)			3
DCs did not bring required test material to the site.			X (1)					X (1)		2
DCs did not correctly identify test mailpieces.				X (2)						2
DCs did not select the correct country code in International mailpieces.						X (2)				2
DCs did not identify and isolate mail to be tested.				X (1)			X (1)			2
DCs did not notify unit management prior to conducting test.							X (1)			1

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[12] The numbers of tests with errors are shown in parentheses.
[13] Nine of 18 district reports had no reported testing errors. See Appendix A for details.

	Capital District	Central Florida District	Chicago District	Columbus District	Dallas District	Greater Michigan District	Nevada-Sierra District	Northern Illinois	South Jersey District	Total Test Errors
IOCS										
DCs did not follow scripted questions and asked leading questions.		X (1)	X (2)	X (1)				X (2)		6
DCs did not request to speak with a supervisor prior to conducting tests.				X (1)						1
TRACS										
DCs did not observe the entire contents of the vehicle when collecting utilization data.				X (1)						1
OTHER OBSERVATIONS										**Total Number of Districts**
DCs did not follow procedures to protect data collections equipment.	X	X	X		X	X	X	X		7
DCs conducted test prior to receiving the required training.				X				X		2
Manager of Statistical Programs did not properly define mail exit points.				X			X			2

APPENDIX C. MANAGEMENT'S COMMENTS

Lynn Malcolm
Vice President, Controller

UNITED STATES
POSTAL SERVICE

February 6, 2007

KIM H. STROUD
DIRECTOR, AUDIT REPORTING

SUBJECT: Audit of Statistical Tests for Fiscal Year 2006 – Cost and Revenue Analysis
(Report Number FF-AR-07-DRAFT)

This letter responds to your request for comments on the subject of audit of statistical tests for the
fiscal year 2006 Cost and Revenue Analysis. Management's comments on the recommendations
contained in the audit are enclosed.

As requested in your transmittal letter, management has reviewed the draft report for Freedom of
Information Act (FOIA) exemptions. Finding no reason for an exemption, we feel the report in
total should be made publicly available under FOIA.

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

Lynn Malcolm
Lynn Malcolm

Enclosure

cc: H. Glen Walker
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Management Response to the Office of Inspector General Audit Report:
Audit of Statistical Tests for the Fiscal Year 2006 Cost and Revenue Analysis

1. Use training to reinforce data collection procedures to ensure data collectors:

    • Utilize marking slips to identify test mail and follow mail exit point and special
       instructions during ODIS-RPW tests.
    • Observe the entire contents of the vehicle when collecting utilization data
       during TRACS tests.

    We agree with the finding and the recommendations. By March 5, 2007, we will instruct the
    Managers, Statistical Programs to reinforce through training data collection procedures to
    ensure data collectors (1) utilize marking slips to identify test mail and follow mail exit point
    and special instructions during ODIS-RPW tests, and (2) observe the entire contents of the
    vehicle when collecting utilization data during TRACS tests.

2. Reinforce policies for protecting the Computerized On-Site Data Entry System
    (CODES) laptops and other test equipment, adhering to training requirements for data
    collectors, and properly defining mail exit points.

    We agree with the finding and the recommendation. Correspondence informing the
    Managers, Statistical Programs of actions required for data and laptop security were issued
    by Statistical Programs on December 21, 2006. By March 5, 2007, we will reinforce
    Statistical Programs policies with the Managers, Statistical Programs for protecting the
    CODES laptops and other test equipment, adhering to training requirements, and properly
    defining mail exit points.