March 8, 2005

LYNN MALCOLM VICE PRESIDENT, FINANCE, CONTROLLER

SUBJECT: Audit Report – Audit of Statistical Tests for Fiscal Year 2004 – Cost and Revenue Analysis (Report Number FF-AR-05-076)

This report presents the results of our audit of the statistical tests for the fiscal year 2004 Cost and Revenue Analysis (Project Number 04XD002FF000). We conducted the audit in support of the Postal Service Cost and Revenue Analysis.

The Postal Service generally conducted tests of the Origin-Destination Information System-Domestic Revenue, Pieces, and Weight System (ODIS-RPW); the In-Office Cost System (IOCS); the Transportation Cost System (TRACS); and the System for International Revenue and Volume, Outbound (SIRVO) in accordance with policies and procedures. However, of the 438 tests observed, we identified 66 test errors in 47 tests, but we do not believe these errors affected the overall validity of the process. For example, employees did not always adhere to instructions for classifying and sampling data and conducting readings. Also, employees did not always enter data correctly into the Computerized On-Site Data Entry System. Unless improvements are made, the integrity of Postal Service data may be compromised. Since the Postal Service uses the results of statistical tests in the ratemaking process, the data must be as accurate and consistent as possible.

We recommended management reinforce, through training, the correct procedures for classifying mail; including all applicable mail; sampling mailpieces and returning mail in a timely manner to the mailstream; balancing and testing scales; and loading data into the computer for tests of the ODIS-RPW, IOCS, and SIRVO Systems. We also recommended management reinforce procedures so that managers, Statistical Programs, conduct process reviews, as required. Management agreed with our recommendations and has taken action to address the issues in this report. Management's comments and our evaluation of these comments are included in the report.

1735 N Lynn St. Arlington, VA 22209-2020 (703) 248-2100 Fax: (703) 248-2256 We appreciate the cooperation and courtesies provided by your staff during the audit. If you have any questions or need additional information, please contact Sheila Bruck or me at (703) 248-2300.

/s/ Colleen A. McAntee

Colleen A. McAntee
Deputy Assistant Inspector General
for Field Operations

#### Attachments

cc: Richard J. Strasser, Jr. J. Ron Poland Margaret A. Weir Steven R. Phelps

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#### **EXECUTIVE SUMMARY**

#### Introduction

This report presents the results of our audit of statistical tests for the fiscal year 2004 Cost and Revenue Analysis (Project Number 04XD002FF000). We conducted the audit in support of the Postal Service Cost and Revenue Analysis.

The Postal Service conducts statistical tests to collect cost, revenue, and volume data. Our audit objective was to determine whether these tests were performed in accordance with established Postal Service policies and procedures. We observed 188 data collectors performing cost and revenue analysis tests in 30 statistically selected districts and at 4 judgmentally selected airport and surface mail facilities. We issued 34 audit reports to district managers at the completion of our audits.

#### **Results in Brief**

The Postal Service generally conducted its tests of the Origin-Destination Information System-Domestic Revenue, Pieces, and Weight System (ODIS-RPW); the In-Office Cost System (IOCS); the Transportation Cost System (TRACS); and the System for International Revenue and Volume. Outbound (SIRVO) in accordance with policies and procedures. However, of the 438 tests observed, we identified 66 test errors in 47 tests. We do not believe these errors affected the overall validity of the process. For example, employees did not always adhere to instructions for classifying and sampling data and conducting readings. Also, employees did not always enter data correctly into the Computerized On-site Data Entry System. Unless improvements are made, the integrity of Postal Service data may be compromised. Also, the Postal Service uses the results of statistical tests in the ratemaking process; therefore, the data must be as accurate and consistent as possible.

# Summary of Recommendations

We recommended management reinforce, through training, the correct procedures for classifying mail; including all applicable mail; sampling mailpieces and returning mail in a timely manner to the mailstream; balancing and testing scales; and loading data into the computer for tests of the

ODIS-RPW, IOCS and SIRVO Systems. We also recommended management reinforce procedures so that managers, Statistical Programs, conduct process reviews as required.

# Summary of Management's Comments

Management agreed with our recommendations, and instructed managers, Statistical Programs, to reinforce, through training, the correct procedures for classifying mail, sampling mailpieces, returning mail to the mailstream, balancing scales, and loading data into the CODES laptop. Further, management instructed managers, Statistical Programs, to conduct process reviews in accordance with Statistical Programs policy. Management's comments, in their entirety, are included in Appendix C of this report.

# Overall Evaluation of Management's Comments

Management's comments are responsive to our recommendations, and the actions taken should correct the issues identified in the report.

#### INTRODUCTION

### **Background**

The Postal Reorganization Act of 1970 requires the Postal Service to break even financially over a period of years. Total revenue must equal total cost for each class of mail. The act specifies that each class of mail or type of mail service should bear the direct and indirect costs attributable to it. To meet this requirement, the Postal Service must determine the cost, revenue, and volume of each mail class. subclass, and special mail service. 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-Domestic Revenue, Pieces, and Weight System The Origin-Destination Information System-Domestic Revenue, Pieces, and Weight System (ODIS-RPW) is one of two probability sampling systems that estimate revenue, volume flow, weight, and performance measurement for the Postal Service. 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 Postal Service developed the ODIS-RPW System to more efficiently and economically gather information that was previously collected by two separate systems, the Origin-Destination Information System and the Domestic Revenue, Pieces, and Weight System.

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, <u>Data Collection User's Guide for Revenue</u>, Volume, and Performance Measurement Systems, 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 what an employee is doing at a given point in time and developing estimates of the proportions of employee work time spent on various functions, including handling or processing categories of mail. Time proportions are then used to estimate the costs attributable to each class and subclass of mail and each special service.

Handbook F-45, <u>In-Office Cost System – Field Operating Instructions</u>, states that everyone 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 five separate sampling systems to collect data: highway, rail, Amtrak, passenger air, and network air. TRACS develops:

- Cubic-foot-mile distribution keys for highway and rail costs.
- Square-foot-mile distribution keys for Amtrak costs.
- Pound-mile distribution keys for passenger air costs.
- Pound distribution for night turn network air costs.
- Cubic feet distribution for day turn network air costs.

Handbook F-65, <u>Data Collection User's Guide for Cost</u> <u>Systems</u>, provides detailed instructions to data collectors for conducting the tests of truck, air, and rail trips.

### System for International Revenue and Volume, Outbound

The System for International Revenue and Volume, Outbound (SIRVO) is one of two sampling systems that estimate revenue, volume, and weight of international mail for the Postal Service. The Postal Service uses information collected by these systems to estimate the revenue, volume, and weight of outbound international mail. The Postal Service uses SIRVO data to advise management on budgeting and planning issues and to plan the Postal Service budget based on forecasts of mail volume, workloads, and overall productivity.

Handbook F-85, <u>Data Collection User's Guide for International Revenue</u>, <u>Volume</u>, <u>and Performance Measurement Systems</u>, provides detailed instructions to data collectors for conducting tests of international mail.

# Objective, Scope, and Methodology

The objective of our audit was to determine whether statistical tests conducted to collect cost, revenue, and volume data were performed in accordance with Postal Service policies and procedures. To accomplish our objective, we conducted fieldwork from January 13 through August 27, 2004. We observed 188 judgmentally selected data collectors performing cost and revenue analysis tests in 30 statistically selected districts and 4 judgmentally selected airport and surface mail facilities.

Specifically, we judgmentally selected and observed:1

- 108 ODIS-RPW tests.
- 263 IOCS tests.
- 25 TRACS tests.
- 42 SIRVO tests.

We interviewed the data collectors performing selected tests and reviewed the reports of each test provided by district Statistical Programs officials. In addition, we reviewed process review reports, using fiscal year (FY) 2003 data in 30 districts that showed whether managers conducted the 2,478 reviews of data collection procedures as required.

<sup>&</sup>lt;sup>1</sup>See table in Appendix B.

We conducted this audit from October 2003 through March 2005 in accordance with generally accepted government auditing standards, and included such tests of internal controls as were 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 the respective district managers in 34 districts.

#### **Prior Audit Coverage**

On February 10, 2004, the Office of Inspector General issued Report Number FF-AR-04-038, <u>Audit of Statistical Tests for Fiscal Year 2003 – Cost and Revenue Analysis</u>. The report stated that employees did not always adhere to instructions for sampling, equipment use, and telephone readings. Also, data was not always entered correctly into the Computerized On-Site Data Entry System (CODES).

Headquarters Statistical Programs directed district managers of Statistical Programs to reinforce, through training, issues identified in the report. However, our review determined that the problem areas discussed in the FY 2003 report still needed improvement.

#### **AUDIT RESULTS**

#### **Observations**

The Postal Service generally conducted tests of its ODIS-RPW, IOCS, TRACS, and SIRVO in accordance with policies and procedures established by the Postal Service. However, we detected the following test errors during our observations.

#### **Test Results**

#### ODIS-RPW:

We observed 108 ODIS-RPW tests and detected 45 instances of incorrect application of data collection procedures<sup>2</sup> in 29 tests. Specifically, data collectors did not follow correct procedures for:

- Classifying mail in three tests.
- Including all applicable mail in four tests.
- Sampling mail in four tests.
- Entering data correctly into CODES in eight tests.
- Testing the accuracy of weigh scales in ten tests.

#### **IOCS**:

We observed 263 IOCS tests and detected 13 instances of incorrect application of data collection procedures<sup>3</sup> in 13 tests. Specifically, data collectors:

- Used leading questions while conducting telephone readings in nine tests.
- Performed on-site readings without using the CODES laptop in three tests.
- Did not identify mailpiece markings in one test.

<sup>&</sup>lt;sup>2</sup>See table in Appendix B.

<sup>&</sup>lt;sup>3</sup>See table in Appendix B.

#### TRACS:

We observed 25 TRACS tests and did not identify any significant errors.

#### SIRVO:

We observed 42 SIRVO tests and detected 8 incorrect applications of data collection procedures<sup>4</sup> in 7 tests. Specifically, data collectors did not:

- Test their scales before conducting SIRVO tests in two tests.
- Accurately count the number of mailpieces and volume in the randomly selected container in two tests.
- Handle mailpieces properly and enter accurate data into CODES in two tests. For example, a data collector did not isolate postage due mailings and enter correct postage.
- Release tested mailings on time for the processing unit to load onto the airport delivery truck in one test.

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

#### **Process Reviews**

We noted the managers of Statistical Programs in 13 districts did not complete 267 of 1,112 data collector process reviews. Managers stated that higher priority projects prevented them from completing all the reviews. Without the process reviews, managers could not ensure that the data collected was accurate and fully represented operations.

<sup>&</sup>lt;sup>4</sup> See Table in Appendix B.

Recommendation	We recommend the Vice President, Finance, Controller:					
	<ol> <li>Reinforce, through training, the correct procedures for classifying mail, including all applicable mail, sampling mailpieces and returning mail in a timely manner to the mailstream, balancing and testing scales, and loading data into the computer for tests of the Origin-Destination Information System-Domestic Revenue, Pieces, and Weight System; the In-Office Cost System; and the System for International Revenue and Volume, Outbound.</li> </ol>					
Management's	Management agreed with our recommendation and on					
Comments	February 28, 2005, instructed, managers, Statistical Programs, to reinforce, through training, the correct procedures for classifying mail, sampling mailpieces, returning mail to the mailstream, balancing scales, and loading data into the CODES laptop.					
Evaluation of	Management's comments are responsive to our					
Management's Comments	recommendation, and actions taken should correct the issues identified.					
Recommendation	We recommend the Vice President, Finance, Controller:					
	<ol><li>Reinforce procedures so that managers, Statistical Programs, conduct process reviews, as required.</li></ol>					
Management's	Management agreed with our recommendation and on					
Comments	February 28, 2005, instructed managers, Statistical Programs, to conduct process reviews in accordance with Statistical Programs policy.					
Evaluation of	Management's comments are responsive to our					
Management's Comments	recommendation, and actions taken should correct the issue identified.					

## **APPENDIX A. ABBREVIATIONS**

CODES Computerized On-Site Data Entry System

FY Fiscal Year

IOCS In-Office Cost System

ODIS-RPW Origin-Destination Information System-Domestic

Revenue, Pieces, and Weight System

OIG Office of Inspector General

SIRVO System for International Revenue and Volume,

Outbound

TRACS Transportation Cost System

# APPENDIX B. FY 2004 COST AND REVENUE ANALYSIS: SUMMARY OF OBSERVATIONS OF DATA COLLECTION PROCEDURES<sup>5</sup>

								Syster Interna	
		Domestic Revenue						Reve	
		Pieces and Weight		In-Office	Cost	Transp	ortation	and Volume,	
		System		System		Cost System		Outbound	
	Week								Total
	Data	Number of	Total	Number	Total	Number	Total	Number	Number
<b>D</b>	Collected	Tests	Number	of Tests	Number	of Tests	Number	of Tests	_ of
District	(FY 2003)	Observed	of Errors	Observed	of Errors	Observed	of Errors	Observed	Errors
	1/26/04	4	0	9	0	1	0	-	-
	2/23/04	4	2	8	1	1	0	-	-
	3/8/04	4	7	8	0	0	0	-	-
	3/8/04	4	0	8	0	1	0	-	-
	3/15/04	4	0	8	0	1	0	-	-
	3/22/04	4	0	8	0	1	0	-	-
	3/22/04	4	1	8	4	1	0	-	-
	3/15/04	4	0	9	0	1	0	-	-
	3/29/04	4	3	10	0	1	0	-	-
	3/29/04	4	0	8	0	1	0	-	-
	4/12/04	3	4	8	1	1	0	-	-
	4/5/04	3	3	9	0	1	0	-	-
	4/5/04	4	0	10	0	1	0	-	-
	4/19/04	4	0	10	0	1	0	-	-
	4/19/04	3	0	9	0	1	0	-	-
	4/26/04	3	0	10	0	0	0	-	-
	4/26/04	4	1	10	0	0	0	-	-
	4/26/04	3	4	8	0	0	0	-	-
	5/10/04	3	4	8	0	1	0	-	-
	5/3/04	3	2	8	4	1	0	-	-
	5/18/04	3	0	9	0	1	0	-	-
	6/7/04	3	6	9	0	1	0	-	-
	6/28/04	4	2	10	0	0	0	-	-
	6/21/04	4	0	8	0	1	0	-	-
	6/28/04	4	0	10	1	1	0	-	-
	8/23/04	4	0	8	0	1	0	-	-
	7/12/04	4	1	10	2	1	0	-	-
	7/12/04	3	1	10	0	1	0	-	-
	7/12/04	3	4	8	0	1	0	-	-
	7/19/04	3	0	7	0	1	0	-	-
	8/9/04	-	-	•	-	•	-	10	0
	1/13/04	-	-	•	-	•	-	10	5
	2/2/04	-	-	•	-	•	-	12	1
	5/24/04	-	-	•	-	•	-	10	2
TOTALS		108	45	263	13	25	0	42	8

<sup>&</sup>lt;sup>5</sup> Although the percentage of tests with errors appears high, each test contains multiple records and fields. Thus, the percentage of erroneous test entries would be much lower than the total number of tests containing errors.

## **APPENDIX C. MANAGEMENT'S COMMENTS**

LYNN MALCOLM ACTING VICE PRESIDENT FINANCE, CONTROLLER



February 15, 2005

KIM H. STROUD

SUBJECT: Audit of Statistical Tests for Fiscal Year 2004—Cost and Revenue Analysis (Report Number FF-AR-05-DRAFT)

This letter responds to your request for comments on the subject of audit of statistical tests for the FY2004 Cost and Revenue Analysis. Management's comments on the recommendations contained in the audit are attached.

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

Attachment

cc: Richard J. Strasser, Jr. J. Ron Poland Margaret A. Weir Steven R. Phelps

Synu Malcolm

475 L'ENFANT PLAZA SW RM 8011 WASHINGTON DC 20260-5200 202-268-4177 FAX: 202-268-6934 Management Response to Office of the Inspector General Audit Report: Audit of Statistical Tests for the Fiscal Year 2004 Cost and Revenue Analysis

Reinforce, through training, the correct procedures for classifying mail, including all
applicable mail, sampling mailpieces and returning mail in a timely manner to the
mailstream, balancing and testing scales, and loading data into the computer for tests of
the Origin-Destination Information System-Domestic Revenue, Pieces, and Weight
System; the In-Office Cost System; and the System for International Revenue and Volume,
Outbound.

We agree with the finding and the recommendation. By February 28, 2005, we will instruct the managers, Statistical Programs to reinforce through training the correct procedures for classifying mail, sampling mailpieces, returning mail to the mailstream, balancing scales, and loading data into the CODES laptop.

Reinforce procedures so that statistical program managers conduct process reviews as required.

We agree with the finding and the recommendation. Since completion of process reviews is a component of the FY2004 and FY2005 National Performance Assessment unit indicators for area finance managers, we anticipate a higher rate of completion, other than what was observed during FY2003. By February 28, 2005, we will instruct the managers, Statistical Programs to conduct process reviews in accordance with Statistical Programs policy.