OFFICE OF
INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

Transportation Cost System - Air

Audit Report

**Report Number
CP-AR-17-009**

August 29, 2017

Highlights

The procedures the Postal Service used in FY 2016 to determine their sample size sufficiently supports their ability to attribute costs from TRACS – Air and the sampling data is generally accurate and reliable. However, opportunities for improvements exist.

Background

In fiscal year (FY) 2016, the U.S. Postal Service incurred total transportation contract costs for air, highway, rail, and water transportation of about $7 billion. Of that amount, about $2.5 billion (35 percent) was comprised of air transportation costs.

The Transportation Cost System (TRACS) - Air is a statistical sampling and data collection system that provides information for the Postal Service to allocate air transportation costs to mail products and services and set prices. During TRACS - Air tests, data collectors count and record mail product type, shape, and other characteristics in an automated system. In FY 2016, the Postal Service conducted 5,532 TRACS - Air sampling tests.

Our objective was to assess the accuracy and reliability of TRACS - Air sampling data. We did not review the cost allocation process during this audit.

What the OIG Found

The procedures the Postal Service used in FY 2016 to determine their sample size sufficiently supports their ability to attribute costs from TRACS – Air and the sampling data is generally accurate and reliable; however, opportunities for improvements exist. Specifically, the Postal Service did not always follow policies and procedures when conducting TRACS – Air tests. Issues identified included:

- District managers inappropriately canceled 143 of 946 (15.1 percent) tests that should have been rescheduled.

- Postal Service personnel could not always support completion of required training activities for data collectors due to problems with the training management system. For example, about 94 percent of data collectors did not have all records in the system to support that they completed the required training. Policy requires that training must be completed prior to conducting TRACS – Air tests.

- During eight of nine site visits, the OIG observed 22 instances where data collection policies and procedures were not followed, such as five instances where data collectors did not select sample items over the entire prescribed time segment.

These control weaknesses occurred because district managers provided inadequate oversight of data collectors and training activities. Postal Service Headquarters personnel rely on district managers to provide oversight such as verifying data sampling and ensuring completion of training activities.

These issues increase the risk of collecting inconsistent, inaccurate, and unreliable data, potentially leading to inaccurate cost attribution and decision making.

The Postal Service also misclassified 101 of 516 (19.6 percent) rescheduled tests in FY 2016. This occurred because defaults in the software do not correctly annotate the tests when they are rescheduled online by district managers and downloaded to the laptop by data collectors. When rescheduled tests are misclassified, the Postal Service is unable to do verification checks to prevent sampling error and bias. Management does verification checks to ensure that rescheduled tests are performed exactly one week later, as required by policy. Management stated they started using a different data source on July 6, 2017, for verification checks rather than relying on the original erroneous data source.

In addition, data collectors did not always properly select TRACS – Air sample mail items to count and record mail characteristics used to allocate air transportation costs to mail products and services. After we found 49 of 56,532 (0.1 percent) mail items sampled in FY 2016 did not match the required mail type to be tested, the Postal Service identified a coding error in the program used to verify TRACS – Air sample items. These 49 items should have been excluded from the sample data used to calculate the cost estimates.

Incorrect sampling can lead management and the Postal Regulatory Commission to rely on incorrect information when determining cost coverage and, ultimately, setting Postal Service prices. Since management corrected the coding issue during our audit, we are not making a corresponding recommendation.

What the OIG Recommended

We recommended management:

- Reiterate to district personnel the importance of the data validation and approval process.

- Develop a system to monitor and hold managers accountable for ensuring the completion and documentation of training activities.

- Provide data collectors with refresher training on policies and procedures.

- Modify data collection software to accurately annotate tests as rescheduled.

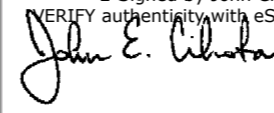- Periodically review analytics software to ensure it is functioning properly.

Transmittal Letter

August 29, 2017

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

E-Signed by John Cihota
VERIFY authenticity with eSign Desktop

John E. Cihota

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

SUBJECT: Audit Report – Transportation Cost System – Air
(Report Number CP-AR-17-009)

This report presents the results of our audit of the U.S. Postal Service's Transportation Cost System – Air (Project Number 17BG007CP000).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Sherry K. Fullwood, Director, Cost, Pricing, and Investments, or me at 703-248-2100.

Attachment

cc: Corporate and Audit Response Management

Table of Contents

Findings

The Postal Service did not always follow policies and procedures when conducting TRACS – Air tests. Also, the Postal Service misclassified tests and did not properly select samples for TRACS – Air.

Introduction

This report presents the results of our self-initiated audit[1] of the U.S. Postal Service's Transportation Cost System (TRACS) – Air (Project Number 17BG007CP000). Our objective was to assess the accuracy and reliability of TRACS - Air sampling data. See Appendix A for additional information about this audit.

The PAEA requires the Postal Service to file an *Annual Compliance Report* (ACR)[2] with the Postal Regulatory Commission (PRC)[3] within 90 days of the end of each fiscal year. The Postal Service develops the *Cost Segments and Components* (CSC) report as part of the ACR filing. The Transportation Cost Segment (Cost Segment 14) covers the contract costs for air, highway, rail, and water transportation. In fiscal year (FY) 2016, the total costs for Cost Segment 14 was about $7 billion. Of that amount, about $2.5 billion (35 percent) was comprised of air transportation costs.

TRACS - Air is a statistical sampling and data collection system that provides information for the Postal Service to allocate air transportation costs to mail products and services and set prices, as recorded in the CSC report under Cost Segment 14. During TRACS - Air tests, data collectors count and record mail characteristics[4] in the Computerized On-Site Data Entry System (CODES).[5] In FY 2016, the Postal Service conducted 5,532 TRACS - Air sampling tests.

Summary

The procedures the Postal Service used in FY 2016 to determine their sample size sufficiently supports their ability to attribute costs from TRACS – Air and the sampling data is generally accurate and reliable; however, opportunities for improvements exist.

Specifically, the Postal Service did not always follow policies and procedures when conducting TRACS – Air tests. However, issues identified included:

- District managers inappropriately canceled 143 of 946 (15.1 percent) tests that should have been rescheduled.

- Postal Service personnel could not always support completion of the required training curriculum[6] for data collectors due to problems with their training management system. For example, about 94 percent of data collectors did not have records to support that they completed the required training.[7] Policy requires that training must be completed prior to conducting TRACS – Air tests.

- During eight of nine site visits, the OIG observed 22 instances where data collection policies and procedures were not followed, such as five instances where data collectors did not select sample items over the entire prescribed time segment.

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1   The U.S. Postal Service Office of Inspector General (OIG) performed this review as part of its mandate under the Postal Accountability and Enhancement Act of 2006 (PAEA) to audit the data collection systems and procedures the Postal Service uses in its rate-making process.
2   U.S. Code, Title 39—Postal Service, Subsection 3652(a).
3   The PRC is an independent establishment of the executive branch of the U.S. government that has regulatory oversight over many aspects of the Postal Service, including the development and maintenance of regulations for pricing and performance measures.
4   Product type, shape, markings, count, and weight.
5   CODES is the central gathering place of data collected from a district.
6   The training curriculum includes web-based and live training, process reviews, and assessments.
7   In order to qualify to conduct a TRACS – Air test, data collectors are required to complete two web-based and 32 live training courses (nine General, 14 Mail ID, and 11 TRACS specific).

These control weaknesses occurred because district managers provided inadequate oversight of data collectors and training activities. Postal Service Headquarters personnel rely on district managers to provide oversight such as verifying data sampling and ensuring all training activities are completed and entered into the system of record. These issues increase the risk of collecting inconsistent, inaccurate, and unreliable data, potentially leading to inaccurate cost attribution and decision making.

The Postal Service also misclassified 101 of 516 (19.6 percent) rescheduled tests in FY 2016. This occurred because defaults in the software do not accurately annotate the tests when they are rescheduled online by district managers and downloaded to the laptop by data collectors. When rescheduled tests are misclassified, the Postal Service is unable to perform verification checks to prevent sampling error and bias. Verification checks are performed to ensure that rescheduled tests are performed exactly one week later, as required by policy. Management stated they started using a different data source on July 6, 2017 for verification checks rather than relying on the original erroneous data source.

In addition, data collectors did not always properly select TRACS – Air sample mail items to count and record mail characteristics used to allocate air transportation costs to mail products and services. After we found 49 of 56,532 (0.1 percent) mail items[8] sampled in FY 2016 did not match the required mail type to be tested, the Postal Service identified a coding error in the program used to verify TRACS – Air sample items. These 49 items should have been excluded from the sample data used to calculate the cost estimates. The error did not have a material impact.

Incorrect sampling can lead management and the Postal Regulatory Commission to rely on incorrect information when determining cost coverage and ultimately setting Postal Service prices. Since management corrected the coding issue during our audit, we are not making a corresponding recommendation.

Internal Controls

Opportunities exist to strengthen internal controls and ensure sampling data is complete and accurate. Data analysis identified inappropriately canceled tests and insufficient training records needed to ensure competence in data collectors. Further, during eight of nine site visits, the OIG observed 23 instances where data collection policies and procedures were not followed.

Canceled Tests

During FY 2016, the Postal Service canceled 946 out of 6,633[9] (14.3 percent) planned TRACS - Air tests. Of the 946 canceled tests, 143 (15.1 percent) were inappropriately canceled when they should have been rescheduled. The justification annotated in CODES was "no mail available for testing during the assigned time segment." However, reports listing scanned mail showed that items in the qualifying mail class[10] were scanned during the assigned time segment.

Postal Service policy[11] states that if qualifying mail was actually scanned, the test should be rescheduled. Tests were inappropriately canceled because district managers, Financial Programs Compliance (MFPC),[12] did not verify that mail items

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8   A mail item can be a parcel, or a sack or tray that contains multiple mail pieces.

9   The Postal Service actually conducted 5,532 tests. The difference of 155 tests were due to (1) 17 tests that were not conducted or canceled in CODES, and (2) 138 tests were deleted due to exceptions, such as mail items sampled that were scanned well outside the time segment or not testing the correct air mode.

10   For TRACS - Air sampling purposes, the primary mail classes are Priority Mail, Express Mail, International Mail, First-Class Mail, and Other for other mail class group.

11   Handbook F-65, *Transportation Cost System*, dated November 2016.

12   MFPCs oversee a Statistical Programs unit at the district level. The Statistical Programs unit is responsible for the collection of data used by Postal Service Headquarters to make corporate decisions at all levels. The responsibilities of an MFPC include allocating resources to conduct TRACS - Air tests, implementing a quality assurance system, conducting training, and performing process reviews. MFPCs are also responsible for verifying that mail items meeting the test criteria were not available during the test window prior to cancelling a test.

meeting the test criteria[13] were not scanned during the assigned time segment, as required by policy. By the time Postal Service Headquarters receives notice of a test cancellation, it is unable to un-do the inappropriately canceled test.

Training Program

The Postal Service has an established training curriculum to ensure data collectors have the necessary knowledge and skills to gather data properly and without bias.

The training curriculum for data collectors that perform TRACS – Air tests is shown in Table 1.

Table 1. Training Curriculum

	Completion Requirements	
Training Type	**New Data Collector** (less than 12 months of experience)	**Experienced Data Collector** (more than 12 months of experience)
34 Courses[14] (nine General, 14 Mail Identification, and 11 TRACS - Air specific)	Must be completed before performing TRACS - Air tests	N/A
Process Review[15]	At least twice in the first 12 months	One per fiscal year
Assessment[16]	One per fiscal year[17]	One per fiscal year[17]

Source: Handbook F-95, Statistical Programs Management Guide;[18] Process Activated Training System (PATS).

In addition to the training listed in Table 1, the Postal Service develops national quarterly training, which is disseminated to the district offices. Quarterly training is provided at the district level. Management can amend training topics to fit the requirements for each office.

The Postal Service could not provide all training records for 410 of 437 (93.8 percent) data collectors who performed TRACS - Air tests in FY 2016, as shown in Table 2. Management stated that hard copy training records are required to be maintained at local district offices, and should be entered in the online training system. The responsibility for entering training records into the system can vary by district. Management could not provide all training records due to an issue with Postal Service's training management system. Management could not provide all training records due to an issue with Postal Service's training management system.

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13 Data collectors need to select the "correct mail" for sampling. Correct mail is mail processed at the specified test facility, test date, time segment, air mode, and mail class according to the sampling plan.
14 These courses are a one-time requirement that must be fulfilled before a TRACS - Air qualification is granted. A data collector must be qualified before conducting a TRACS – Air tests.
15 A process review consists of the MFPC or Supervisor, Statistical Programs (SSP), observing a data collector conducting a live test.
16 Data collectors complete assessments (or exams) using a web-based application available on the Statistical Programs website.
17 If an assessment score is less than 88 percent, an additional process review is required within three months of the assessment date.
18 Dated July 2016.

Table 2. Data Collectors Without All Training Records

CONDITION	NUMBER OF DATA COLLECTORS
MISSING ALL 34 TRAINING COURSES (100%)	61
MISSING 17 OR MORE TRAINING COURSES (GREATER THAN 50%)	206
MISSING BETWEEN 1 AND 16 TRAINING COURSES (LESS THAN 50%)	143
TOTAL	**410**

Source: Postal Service LMS.

Further, during FY 2016, Postal Service personnel did not always complete the required process reviews[19] and assessments. Specifically:

- 42 of 415 (10.1 percent) experienced data collectors did not have a process review during the fiscal year.

- 2 of 22 (9.1 percent) new data collectors did not have the required two process reviews during the first 12 months.

- 25[20] of 437 (5.7 percent) data collectors received a score of less than 88 percent on the assessment. These individuals did not have an additional process review within three months of the assessment date.

Policies and Procedures

During our observations of TRACS – Air tests, the OIG found that data collectors did not always follow data collection policies and procedures when conducting TRACS - Air tests, as shown in Table 3. Generally, these observations were not reoccurring for all site visits;[21] however, inconsistent practices existed for all except one location.[22]

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19 Postal Service explained that a policy change in January of 2016 made MFPCs and SSPs solely responsible for conducting process reviews. As a result of this policy change, districts stated, in response to Postal Service Headquarters inquiries, that they did not have enough time to conduct process reviews as required. Prior to the policy change, subject matter experts were also allowed to conduct process reviews.
20 Seven of these individuals were experienced data collectors who were among the 42 missing the annual process review.
21 The OIG visited nine Postal Service locations and observed one test per each location.
22 Linthicum MD P&DC.

Table 3. Noncompliance with Policy and Inconsistent Practices

Condition[23]	Philadelphia PA P&DC[24]	Seattle WA P&DC	Seattle WA PMA[25]	Northern VA P&DC	Southern MD P&DC	Morgan NY P&DC	Trenton NJ P&DC	Lancaster PA P&DC	Linthicum MD P&DC	Count of each type of issue
Did not select items over entire prescribed time segment	X	X	X	X	X					5
Did not observe Dispatch & Routing (D&R) tag application		X	X	X			X			4
Grouped Priority parcels during test					X			X		2
Did not select correct sample size		X	X							2
Sampled item before the prescribed time segment						X		X		2[26]
Did not record all identifying information in CODES software (for one mail piece)						X				1[27]
Did not notify facility prior to visit		X	X							2
Selected items that were easier to sample	X							X		2
Did not lock laptop upon leaving		X								1
Did not arrive one hour before test						X				1
Count of Issues at Each Location	**2**	**5**	**4**	**2**	**2**	**3**	**2**	**2**	**0**	**22**

Source: OIG observations.

The most frequent observations were related to data collectors not selecting a proportionate mail sample. Specifically, for five of the observations related to mail not being selected over the entire prescribed time segment, the data collectors selected items to sample immediately at the beginning of the time segment rather than randomly selecting mail pieces over the two hour time segment. Data collectors must select items evenly over the time segment to ensure a proportionate sample (for example, five mail

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23 The criteria for these conditions can be found in one of the following three guides: Reference Guide, *Transportation Cost System* (TRACS) Air, dated March 2017; Handbook F-65; or Handbook F-95.
24 Processing and Distribution Center (P&DC).
25 Priority Mail Annex (PMA).
26 The OIG observed the data collector at Lancaster PA P&DC start the test before the designated time segment. For the Morgan NY P&DC, the OIG compared information in CODES to EDW and found one test item was selected before the time segment.
27 For Morgan NY P&DC, one mail piece's country of origin was Bermuda. However, the data collector recorded in CODES as First Class Domestic Mail. It should have been recorded as International Mail.

pieces selected during the first hour, and five mail pieces selected during the second hour).[28]

We attempted to review the FY 2016 training records for the data collectors who performed tests during our observations; however, the Postal Service could not provide all training records for seven of the eight[29] data collectors, as shown in Table 4:

Table 4. Data Collectors Training Status

Site	Data Collector	Number of Courses Missing
Northern VA P&DC	Data Collector 1	9
Southern MD P&DC	Data Collector 2	32
Seattle WA P&DC and Seattle WA PMA	Data Collector 3	14
Morgan NY P&DC	Data Collector 4	20
Philadelphia P&DC	Data Collector 5	20
Trenton NJ P&DC	Data Collector 6	32
Linthicum MD P&DC	Data Collector 7	23
Lancaster PA P&DC	Data Collector 8	0[30]

Source: Postal Service LMS.

The Postal Service has detailed data collection policies and procedures and a training program. These issues occurred because of an insufficient system to monitor district MFPCs and data collectors. Postal Service Headquarters personnel rely on district MFPCs to provide oversight, verify data sampling, and enforce the training program.

Although the district MFPCs receive monthly reports from headquarters to assist in identifying individuals who have not completed training activities, there is no process in place to monitor and hold managers accountable for ensuring these requirements are completed. In addition, district MFPCs provide quarterly training events to data collectors; however, each MFPC is responsible for the content of their district's training.[31]

Data collectors perform tests independently; therefore, it is necessary that they have a sound understanding of data collection processes and procedures to ensure correct sampling techniques are applied, and data are recorded accurately and precisely. When district MFPC's are not held accountable for following and monitoring established policies, the Postal Service may have unqualified data collectors performing tests. These problems increase the risk of collecting inconsistent, inaccurate, and unreliable data. This could lead to inaccurate cost attribution, which would impact management and the PRC's reliance on information needed to determine cost coverage and Postal Service price setting.

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28 Reference Guide, *Transportation Cost System (TRACS) Air*, page 3.
29 The same data collector performed the TRACS - Air tests that were observed by the OIG at the Seattle P&DC and Seattle PMA; therefore, eight data collectors were observed during the nine site visits.
30 For this data collector, Postal Service was able to provide supporting documentation of all training.
31 Handbook F-95, *Statistical Programs Management Guide*, dated July 2016.

Data Integrity

The Postal Service misclassified tests and did not properly select samples for TRACS – Air. One issue involved a classification error that could prevent management from performing verification checks to prevent sampling error and bias, and the other issue involved a coding error that resulted in misallocation of air transportation costs.

Classification Error

The Postal Service misclassified 101 of 516 (19.6 percent) rescheduled tests. The CODES laptop software automatically checks for a mismatch between the actual date and the scheduled date during a TRACS – Air test. If a mismatch exists, the CODES laptop software asks the data collector whether the test is a rescheduled test. When the data collector answers yes, the test is annotated as rescheduled.

However, the tests can also be rescheduled on the CODES Web Based Unit (WBU)[32] by the district manager. The sample file,[33] which includes the rescheduled date, would then be re-downloaded to the laptop by the data collector. When this occurs, the actual date and the scheduled date match; therefore, the CODES laptop software does not ask the data collector whether the test is a rescheduled test. When the rescheduled question does not appear, the system is designed to default to the answer "no". Consequently, the test is not annotated as rescheduled when it is transmitted to the CODES WBU, resulting in the misclassification.

District managers are required to conduct rescheduled tests one week after the originally scheduled test date, on the same day of the week.[34] Postal Service Headquarters personnel conduct verification checks to ensure this policy is followed. When rescheduled tests are classified inaccurately, the Postal Service is unable to perform verification checks to ensure tests are performed according to sample selection methodologies. Failure to follow prescribed sampling methodologies could cause sampling bias.

Management stated they started using the sample file on July 6, 2017, to determine which tests are rescheduled rather than relying on the system-generated question to be answered correctly.

Coding Error

Data collectors did not properly select TRACS – Air sample mail items to count and record mail product type, shape, and other characteristics used to allocate air transportation costs to mail products and services. The OIG found 49 (171 mail pieces[35]) of 56,532 (0.1 percent) mail items sampled in FY 2016 were not the specified mail class[36] to be tested. For example, the data collector should have sampled mail items that were labeled First-Class Mail, based on the testing criteria the data collector was required to follow,[37] but instead sampled mail items labeled International Mail. The Postal Service stated it had built a control several years ago in the Statistical Analysis Software (SAS) program[38] used to verify TRACS – Air sample items to find these types of errors and remove the items from the sample data used to calculate the cost estimates. However, this control was not functioning properly. When the OIG informed the Postal Service of the discrepancy, Postal Service personnel found a coding error in a section of the SAS program that did not resolve this data collection error as intended.

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32 CODES WBU is the web-based central gathering place of data collected from a district.
33 The sample file contains the test information and scheduled test dates.
34 Handbook F-95, *Statistical Programs Management Guide*, dated July 2016.
35 Mail pieces are pieces of mail found within each mail item. For example, one mail sack can contain several small parcels in that sack.
36 Mail class includes Priority Mail Express, First-Class Mail, Priority Mail, International Mail, and Other.
37 Handbook F-65, *Transportation Cost System*, dated November 2016.
38 SAS is a software suite developed by the SAS Institute for advanced analytics, multivariate analyses, business intelligence, data management, and predictive analytics.

As a result of this audit, management conducted an impact analysis using the FY 2017, Quarter 2 air transportation attributable costs data. This analysis showed these errors resulted in a misallocation of $32,060 to mail products and services.[39] This amount represented 0.01 percent of the total $546,416,000 in attributable costs. During this audit, management took corrective action to fix the coding error.

The Postal Service could not definitively state how long the coding error had been occurring or whether checks for errors occurred before implementation because it was implemented around FY 2009. Postal Service personnel stated they review output reports from the SAS program every two weeks to ensure it is functioning properly. However, the Postal Service stated they generally check for errors that have a major impact on the attributable cost calculations, so these errors were likely overlooked.

Although the errors did not have a material impact on reporting air transportation costs, programming errors, regardless of size, increase the risk of inaccurate cost attribution. This could lead management and the PRC to rely on incorrect information when determining cost coverage and ultimately setting Postal Service prices.

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39 Misallocation of costs can occur when Postal Service costs are misclassified as volume variable, product-specific, or institutional.

Recommendations

We recommend the Manager, Statistical Programs:

1. Reiterate to district managers, Financial Programs Compliance, the importance of verifying scanned mail reports during the data validation and approval process.

2. Develop a system to monitor and hold managers accountable for ensuring training activities are completed and entered into the system of record.

3. Provide all data collectors with uniform, ongoing refresher training on data collection processes and procedures.

4. Modilfy data collection software to accurately annotate tests as rescheduled.

We recommend the Manager, Cost System and Analysis:

5. Check coding in Statistical Analysis Software programs periodically for all errors to ensure the coding is accurate and functioning properly.

Management's Comments

Management generally agreed with all the findings and recommendations.

Regarding recommendation 1, management agreed to reiterate to district personnel the importance of the data validation and approval process. Specifically, management will inform personnel at the next National Quarterly Training Webinar. Further, they instituted a policy of notifying district managers when tests are inappropriately canceled instead of rescheduled. Management's target implementation date is September 30, 2017.

Regarding recommendation 2, management partially agreed with the recommendation. Although they do not believe a system needs to be developed to monitor and hold managers accountable for ensuring training activities are completed and recorded, they have implemented policy to inform area personnel, quarterly of those districts with incomplete training documentation in the training system. Management's target implementation date is September 30, 2017. Management added that the absence of electronic training documentation is not necessarily an indication that training has not been completed.

Regarding recommendation 3, management stated that they agree and already provide uniform, ongoing refresher training to all districts. However, management will review the OIG's findings with the data collectors at the next National Quarterly Training Webinar. Management's target implementation date is September 30, 2017.

Regarding recommendation 4, management modified mainframe programs to address rescheduled tests inaccurately annoted; therefore, they do not believe a CODES software modification is necessary.

Regarding recommendation 5, management agreed to check coding in the SAS programs for all errors annually and will develop a checklist of potential errors to focus their code inspection prior to finalizing the FY 2017 TRACS data. Management's target implementation date is November 30, 2017.

See Appendix B for management's comments in their entirety.

Evaluation of Management's Comments

The OIG considers management's comments responsive to the recommendations in the report and corrective actions should resolve the issues identified in the report.

Regarding recommendation 2, management believes that more frequent reporting would be sufficient to monitor and hold managers accountable for entering training documentation into the system of record. We believe this corrective action will resolve the issue.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. Recommendations 1, 2, 3, and 5 should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed. We consider recommendation 4 closed with the issuance of this report.

Appendices

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Background

TRACS is a statistical sampling and data collection system that provides information to estimate costs by mail product for the major purchased transportation cost accounts. Because the characteristics of transportation purchases vary significantly by transportation mode, TRACS uses separate sampling systems to collect surface and air data: TRACS - Air and TRACS - Surface. Postal Service uses TRACS - Air test data to distribute air transportation costs to different categories of mail, set prices, develop the costs of products and services, and provide operations information to management.

In FY 2016, the U.S. Postal Service incurred total transportation contract costs for air, highway, rail, and water transportation of about $7 billion. Of that amount, about $2.5 billion (35 percent) was comprised of air transportation costs. Additionally, Postal Service attributed about $6.1 billion in transportation costs to products in FY 2016, including about $2.3 billion for air transportation costs, as shown in Table 5.

Table 5. Attributed Costs by Air Modes (in Thousands)

Air Mode	Costs
Commercial Air	$168,370
FedEx Day Operation	1,709,414
United Parcel Service (UPS)	137,899
FedEx Night Operation	59,646
Other[40]	214,472
Total	**$2,289,801**

Source: Postal Service Cost Segment 14 – Transportation data, FY 2016.

The Postal Service conducts TRACS - Air tests on mail transported by Commercial Air, FedEx Day Operation, and UPS. These tests provide information needed to estimate the percentage of pounds or cubic feet of volume for specific categories of mail transported by these operations.

During these tests, data collectors count and record mail by product, shape, and other characteristics in CODES. Specifically, data collectors perform the following steps during a TRACS - Air test:

1. Observe the D&R[41] tag application by Mail Processing.

2. Observe the D&R tag scanning by Mail Processing.

3. Select D&R tagged mail items to sample.

4. Scan the D&R tag barcode into the laptop.

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40 "Other" includes air costs associated with transporting mail in Alaska, Hawaii, the Caribbean and Pacific Islands, and other remote areas in the U.S.
41 The D&R tag is a barcoded label attached to a mail item when the originating facility prepares the mail item for dispatch.

5. Record shape, markings, count, and weight for each mail piece or mail pieces in the selected container.

6. Scan all barcodes on the item and mail pieces to gather and validate information during processing.

7. Review data and check for errors.

8. Transmit test to CODES.

The Postal Service does not directly sample FedEx Night Operation or alternate modes of transportation in TRACS – Air tests. For FedEx Night Operation, the Postal Service uses census data to estimate weight and volume information. For alternative modes of transportation, the Postal Service uses current TRACS – Air data to distribute costs to products.

Objective, Scope, and Methodology

Our objective was to assess the accuracy and reliability of TRACS – Air sampling data.

To accomplish our objective, we:

■ Reviewed TRACS – Air data collection policies and procedures.

■ Interviewed the Cost Systems and Analysis team[42] and Statistical Programs team[43] to understand sampling methodology and each team's responsibilities. We also interviewed district MFPCs and SSPs to understand their responsibilities.

■ Analyzed TRACS – Air sampling data to determine if tests were performed as planned and to determine if data collectors who performed the tests received proper training.

■ Compared TRACS – Air sampling data to EDW to verify its accuracy.

■ Visited nine Postal Service locations to determine if TRACS - Air tests are conducted accurately. To select these locations, we reviewed Postal Service's FY 2017 quarters 2 and 3 sampling schedule and found TRACS - Air tests scheduled during the same week at different facilities within a commuting area. We listed the locations selected in Table 3.

■ Used the OIG Management Operating Data System (MODS)[44] risk model to determine whether MODS operations used to track data collectors' work hours showed up on exception reports for containing errors in reported work hours or volume. The OIG MODS risk model exception reports identify (1) work hours recorded in an operation with no mail volume, or (2) mail volume recorded in an operation with no work hours. In theory, the MODS operations to track data collectors' work hours should not be in the exception reports because the data collectors do not handle mail. We did not identify issues after reviewing the OIG MODS exception reports.

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42 This team uses TRACS -Air data to develop the distribution key for each mode of transportation.
43 This team provides training materials, data collection policies and procedures, and general support to districts.
44 MODS collects and reports data on mail volume, workhours, and machine use at major mail processing facilities.

We conducted this performance audit from February through August 2017 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management on August 2, 2017, and included their comments where appropriate.

We assessed the reliability of the TRACS - Air data by comparing information in CODES to EDW, reviewing the methodology for the SAS programing used to perform data quality checks, and interviewing Cost Systems and Analysis team and Statistical Programs team to determine how TRACS - Air data were collected and used. Through our evaluation of this information, we determined that the data were sufficiently reliable for the purposes of this report.

Prior Audit Coverage

The OIG did not identify any prior audits or reviews in the last five years related to the objective of this audit.

Sharon Owens
Vice President, Pricing and Costing

**UNITED STATES
POSTAL SERVICE**

August 24, 2017

LORI LAU DILLARD
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Transportation Cost System – Air (Report Number CP-AR-17-DRAFT)

The Postal Service has reviewed the audit performed by the Office of Inspector General on "Transportation cost System – Air" and appreciates the opportunity to provide feedback. Management agrees with the majority of the subject report. Shown below are the recommendations and corresponding management responses.

Recommendation 1:
Reiterate to district personnel the importance of the data validation and approval process.

Management Response/Action Plan:
Management agrees with this recommendation. Statistical Programs will reiterate the importance of verifying all scanned mail reports during the TRACS Air data validation and approval process. This will be implemented at the next National Quarterly Training Webinar. Statistical Programs has also instituted a policy within the Statistical Programs Service Center of notifying district managers, financial programs compliance when tests are inappropriately cancelled instead of rescheduled.

Target Implementation Date: September 2017

Responsible Official: Manager, Statistical Programs

Recommendation 2:
Develop a system to monitor and hold managers accountable for ensuring training activities are completed and entered into the system of record.

Management Response/Action Plan:
Management partially agrees with this recommendation. We don't believe that a new system needs to be developed to monitor and hold managers accountable, but rather more frequent reporting to the areas regarding districts that are deficient in entering training information timely. The Statistical Programs Service Center has instituted a policy of reporting quarterly to the applicable areas those districts which have incomplete training documentation in the Learning Management System.

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We also believe that the lack of electronic documentation is not necessarily an indication of a lack of training completion. While the lack of electronic training documentation could pose some level of risk to data integrity, the Postal Service evaluates the quality of data collector training through the combination of national standardized training sessions, quarterly assessments, process reviews, eModule training completion records, and ad hoc data analysis.

Target Implementation Date: September 2017

Responsible Official: Manager, Statistical Programs

Recommendation 3:
Provide all data collectors with uniform, ongoing refresher training on data collection processes and procedures.

Management Response/Action Plan:

Management agrees with this recommendation. The Postal Service already provides uniform, ongoing refresher training to all districts. These include:
1. Quarterly training materials, which cover new policy and 'Back to Basics' refreshers for the districts to utilize for their district quarterly training.
2. Quarterly training materials, which are developed using district commonly missed quarterly assessment questions.
3. Process review forms, which provide a standard format for on-the-job performance reviews to be completed by MFPCs and SSPs in all districts.
4. PATS training processes, which provide a standard format for new data collector or refresher training sessions.

We will be reviewing the OIG findings in this report with the data collectors in September at the next national quarterly training session.

Target Implementation Date: September 2017

Responsible Official: Manager, Statistical Programs

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Recommendation 4:
Modify data collection software to accurately annotate tests as rescheduled.

Management Response/Action Plan:
Management agrees with this recommendation. The Cost Team has already modified the mainframe programs to keep the original test date when the rescheduled test records are uploaded to the mainframe. There is no need for a CODES software modification.

Target Implementation Date: August 2017

Responsible Official: Manager, Cost Systems & Analysis

Recommendation 5:
Check coding in Statistical Analysis Software programs periodically for all errors to ensure the coding is accurate and functioning properly.

Management Response/Action Plan:
Management agrees with this recommendation. We will schedule an annual meeting, to be held prior to submitting the final deliverables for the fiscal year, to review the SAS programs and ensure that the coding is accurate and functioning properly. We will develop a checklist of potential errors, including the one identified by the OIG, in order to focus this code inspection. The checklist will be completed and the first annual code inspection meeting will occur in November 2017, prior to finalizing the FY17 TRACS data.

Target Implementation Date: November 2017

Responsible Official: Manager, Cost Systems & Analysis

Sharon Owens
Sharon Owens

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