

# Terminal Handling Services Modernization – Phoenix, AZ

## AUDIT REPORT

Report Number 23-092-R23 | September 25, 2023



# Table of Contents

## Cover

<b>Highlights</b> .....	1
Background .....	1
What We Did .....	1
What We Found .....	1
Recommendations .....	1

<b>Transmittal Letter</b> .....	2
---------------------------------	---

<b>Results</b> .....	3
----------------------	---

Introduction/Objective.....	3
Background .....	3
Finding #1: Terminal Handling Services Key Performance Indicators....	4
Container Utilization .....	4
Bypass Utilization .....	6
Mail Tendering .....	6
Recommendation #1 .....	8
Recommendation #2 .....	8
Recommendation #3 .....	8
Recommendation #4.....	8
Recommendation #5 .....	8
Recommendation #6.....	8
Management’s Comments .....	8
Evaluation of Management’s Comments.....	9

<b>Appendices</b> .....	10
-------------------------	----

Appendix A: Additional Information.....	11
Scope and Methodology .....	11
Prior Audit Coverage .....	12
Appendix B: Management’s Comments .....	13

<b>Contact Information</b> .....	19
----------------------------------	----

# Highlights

## Background

The Postal Service uses Terminal Handling Services (THS) to load mail into air containers and deliver them to the air supplier for transportation. As part of its Delivering for America plan to achieve financial stability and service excellence and meet the evolving mailing and shipping needs of the American public and business customers, the U.S. Postal Service is discontinuing contracted services for THS and bringing operations in-house. On August 22, 2022, the West Valley Processing and Distribution Center (P&DC) in Phoenix, AZ, was selected as the first site to transition its THS operations from the contracted service to in-house Postal Service operations. Through the transition, they maintained existing key performance indicators, policies and procedures, and plant management oversight, and hired former contracted personnel as Postal Service employees. The THS duties include maximizing container utilization and timely delivery of containers to reduce transportation costs and avoid delayed mail – both key to the Postal Service’s goals of financial stability and service excellence.

## What We Did

Our objective was to assess the effectiveness of the THS operations at the West Valley P&DC. To assess the effectiveness of THS operations, we reviewed three key performance indicators including air container utilization, bypass utilization, and timely tendering of mail to the air supplier. In addition, we analyzed air container data from October 2021 to May 2023, and further supported our analysis with a site visit to the West Valley P&DC during the week of May 22, 2023, to review the THS operations.

## What We Found

The THS operations at the West Valley P&DC were less effective since transitioning from contracted supplier services to in-house Postal Service operations, based on evaluation of the three key performance indicators. Specifically, Postal Service management did not effectively monitor the THS operations to ensure the performance indicators were achieved for container utilization, bypass utilization, and timely tendering of mail to the air supplier. As a result, we estimated the Postal Service incurred \$11 million in questioned costs from October 2021 through May 2023, due to missed opportunities to increase container and bypass utilization.

## Recommendations

We recommended management (1) refine and reissue key performance indicators for in-house THS operations; (2) perform periodic review of the density goal and communicate updated goals as needed; (3) monitor daily operations and processing of mail to meet the THS goals; (4) re-evaluate the operating windows for timely arrival of mail at the THS; (5) perform periodic reviews to verify the scale is functional, and the THS personnel are accurately weighing and recording container weights; and (6) conduct an after-action review and implement lessons learned in future transitions.

# Transmittal Letter



OFFICE OF INSPECTOR GENERAL  
UNITED STATES POSTAL SERVICE

---

September 25, 2023

**MEMORANDUM FOR:** ROBERT CINTRON  
VICE PRESIDENT, LOGISTICS  
  
MICHAEL L. BARBER  
VICE PRESIDENT, PROCESSING AND MAINTENANCE OPERATIONS

*Mary H. Lloyd*

**FROM:** Mary Lloyd  
Deputy Assistant Inspector General  
for Mission Operations

**SUBJECT:** Audit Report – Terminal Handling Services Modernization – Phoenix, AZ  
(Report Number 23-092-R23)

This report presents the results of our audit of Terminal Handling Services at the West Valley Processing and Distribution Center, Phoenix, AZ.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Brandi Adder, Director, Transportation, or me at 703-248-2100.

Attachment

cc: Postmaster General  
Corporate Audit Response Management  
Chief Logistics Officer

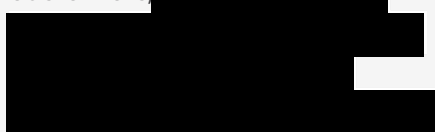
# Results

## Introduction/Objective

This report presents the results of our self-initiated audit of the Terminal Handling Services (THS) at the West Valley Processing and Distribution Center (P&DC), Phoenix, AZ (Project Number 23-092). Our objective was to assess the effectiveness of the THS operations at the West Valley P&DC. See [Appendix A](#) for additional information about this audit.

## Background

As part of its Delivering for America 10-year strategic plan, and to achieve financial stability, service excellence, and meet the evolving mailing and shipping needs of the American public and business customers,



In July 2022, an agreement was reached, and a Memorandum of Understanding was signed between the Postal Service and the National Postal Mail Handlers Union to pilot the in-house THS operations.<sup>1</sup>

On August 22, 2022, the West Valley P&DC in Phoenix, AZ, was the first THS site to be transitioned from the contracted supplier to in-house Postal Service operations. According to the Postal Service, they seamlessly transitioned by maintaining existing key performance indicators, policies and procedures, and plant management oversight, and hiring former contracted personnel as Postal Service employees to perform the THS duties. Those duties include maximizing container utilization and timely delivery of containers to reduce transportation costs and avoid delayed mail – both key to the Postal Service’s goals of financial stability and service excellence.



As part of the THS operations, the THS personnel receive mail in Mail Transport Equipment (MTE)<sup>2</sup> from processing plants and build it into bypass or mixed containers. Mail bound for the same destination is loaded into air bypass containers and skips the sorting process at the air supplier hub, saving the Postal Service time and money. Mail for multiple destinations is loaded into mixed air containers, which require additional sorting at the air supplier hub, incurring an additional charge per mail piece. The Postal Service requires the THS personnel to convert bypass containers that are less than 87 percent full into mixed containers. In addition, the THS personnel take mail containers arriving from

the air supplier and break down the mail to distribute to the local destinating processing plants.

We conducted a site visit to the West Valley P&DC during the week of May 22, 2023, to review THS operations. We also analyzed air container data from Informed Visibility (IV) and Enterprise Data Warehouse (EDW) from October 2021 to May 2023.

To assess the effectiveness of the THS operations, we reviewed the three existing Key Performance Indicators (KPI):

- Air Container Utilization – The THS should fully utilize each air container and correctly follow established stacking standards, such as T-stacking,<sup>3</sup> for best density.<sup>4</sup>
- Bypass Utilization – The THS should maximize the use of planned bypass containers. If there is not sufficient mail to fill a bypass container to about 87 percent, based on a visual check, then the container should be converted to mixed to maximize the overall utilization of the container.

1 As of June 2023, 65 out of 71 THS facilities are still contractor operated. Four facilities were brought in-house and two have always been operated by Postal Service.  
2 MTE consists of containers (sacks, pouches, trays, wheeled containers, pallets, etc.) used to hold mail during processing and transporting within or between Postal Service facilities, delivery units, and other mailers.  
3 T-stacking is an airline industry-approved method of building containers with solid walls using tightness, flat surfaces (tabletops), teamwork, interlocking “T’s,” and successive tiers.  
4 Density is the weight of the mail volume in the air container divided by the cubic capacity of that container (pounds per cubic foot, or lbs./ft<sup>3</sup>).

- Volume Arrival Profile (VAP)<sup>5</sup> to Air Supplier (i.e., mail tendering) – The THS must deliver 75 percent of air containers to the air supplier one hour before final tender and 100 percent by final tender time.<sup>6</sup>

### Finding #1: Terminal Handling Services Key Performance Indicators

We evaluated the three existing KPIs<sup>7</sup> and found the THS operations at the West Valley, AZ, P&DC were less effective since transitioning from contracted supplier to in-house Postal Service operations. Specifically, Postal Service management did not effectively monitor the THS operations to ensure KPIs were achieved for container utilization, bypass utilization, and timely tendering of mail to air supplier.

#### Container Utilization

The THS did not fully utilize each air container. During our audit, Postal Service headquarters management informed us that their national density goal of 7.25 pounds per cubic foot has been outdated for many years.<sup>8</sup> Additionally, they stated that they had not established a specific density goal for the THS, due to mail mix and network changes with the

implementation of the Delivering for America plan. However, they subsequently provided an expected average density threshold ranging from 5.25 to 5.30<sup>9</sup> pounds per cubic foot for the THS based on the mail mix. To be conservative, we used the 5.25 pounds per cubic foot density threshold for our analysis on both contracted and in-house operations for air containers tendered to the air supplier.

As such, we determined the average density achieved from October 2021 through May 2023 was 4.6 pounds per cubic foot. We also noted that 22,328 of the 31,574, air containers (or about 70.7 percent) did not meet the density threshold and 23 air containers were over the maximum weight<sup>10</sup> limit.

While the percent of air containers that met the density threshold increased slightly since the THS operations transitioned from the contracted supplier service to in-house Postal Service operations (29.2 percent to 29.4 percent), the average density had decreased from 4.8 to 4.4 pounds per cubic foot, respectively (see Table 1).

**Table 1. Average Density of Air Containers**

THS Status	Density Threshold Met	Count of Air Containers	Percent (%)	Average Density (lbs./ft <sup>3</sup> )
Contracted <sup>11</sup>	No	13,492	70.8	4.1
Contracted	Yes	5,573	29.2	6.4
<b>Subtotal Contracted</b>		<b>19,065</b>	<b>100</b>	<b>4.8</b>
In-House <sup>12</sup>	No	8,836	70.6	3.6
In-House	Yes	3,673	29.4	6.2
<b>Subtotal In-House</b>		<b>12,509</b>	<b>100</b>	<b>4.4</b>
Combined	No	22,328	70.7	3.9
Combined	Yes	9,246	29.3	6.3
<b>Total</b>		<b>31,574</b>	<b>100%</b>	<b>4.6</b>

Source: OIG analysis of container data in EDW from October 2021 to May 2023.

5 VAP is a plan that refers to the volume of mail departing the THS to the air supplier after it has been built into air containers.

6 The final tendering time for the THS operation at the West Valley P&DC is 5:00 a.m.

7 The KPIs were never formalized/updated and reissued when the THS operations transitioned in-house.

8 Standard Work Instruction: Weigh, Tender, and Load Operation was issued in 2017.

9 The 5.25 to 5.30 pounds per cubic foot average density threshold for the Phoenix THS was provided by Postal Service management to the Office of Inspector General (OIG) on July 18, 2023.

10 Target and maximum weight vary based on air container type.

11 The THS contracted analysis included data from October 2021 to August 2022.

12 The THS in-house analysis included data from September 2022 to May 2023.

In addition, we conducted a site visit the week of May 22, 2023, and similar to our analysis, we found the THS did not meet the 5.25 pounds per cubic foot density threshold. Specifically, on May 23, 2023, the average density of air container tendered to the air supplier was 4.8 pounds per cubic foot.

In our visit to the THS, we identified inconsistency in timing of the mail arrival from processing into the THS, which contributed to both employee inactivity and underutilized containers. THS personnel were waiting for mail to arrive from the processing unit prior to the last hour. Between the hours of 10:00 p.m. and 3:00 a.m., about 68 percent of the mail arrived from processing to the THS;<sup>13</sup> and about 32 percent arrived in the last hour between 3:00 a.m. and 4:16 a.m. (see Table 2).

**Table 2. MTE Containers Arriving at THS**

Hour	Number of MTE Containers	Percent (%)
By 10 p.m.	90	18.1
10 – 11 p.m.	40	8.0
11 – 12 p.m.	42	8.4
12 p.m. – 1 a.m.	26	5.2
1 – 2 a.m.	60	12.0
2 – 3 a.m.	80	16.1
<b>Subtotal Prior to 3 a.m.</b>	<b>338</b>	<b>67.9</b>
3 – 4 a.m.	120	24.1
4:01 – 4:16 a.m.	40	8.0
<b>Subtotal After 3 a.m.</b>	<b>160</b>	<b>32.1</b>
<b>Total</b>	<b>498</b>	<b>100%</b>

Source: OIG analysis from THS counts of MTE per hour for May 23, 2023.

We further analyzed the container data and determined the density of air containers readied for dispatch prior to and after 3:00 a.m. was 5.4 and 3.8 pounds per cubic foot, respectively (see Table 3).

THS personnel were intensely working and rushing to load the mail sacks and packages into the containers during the last hour to meet the required dispatch time for transportation of containers to the air supplier and did not have sufficient time to properly stack the mail, maximize container utilization, and achieve the density threshold.

**Table 3. Average Density by Hour**

Hour <sup>14</sup>	Number of Air Containers	Average Density (lbs./ft <sup>3</sup> )
1 a.m.	12	6.0
2 a.m.	11	5.6
3 a.m.	9	4.6
<b>Subtotal Prior to 3 a.m.</b>	<b>32</b>	<b>5.4</b>
4 a.m.	17	3.6
5 a.m.	2	4.4
6 a.m.	1	3.4
<b>Subtotal After 3 a.m.</b>	<b>20</b>	<b>3.8</b>
<b>Total</b>	<b>52</b>	<b>4.8</b>

Source: OIG analysis of container data in EDW for May 23, 2023.

Furthermore, THS personnel did not follow the standard work instruction<sup>15</sup> requirements for weighing and recording the weight of each container before dispatching. During our site visit, we observed the scale used for weighing containers was non-operational. THS supervisors stated the scale had not been consistently used for multiple years. As such, we found THS personnel were incorrectly reporting the container weights and density calculations based on estimated weight and not the actual weight of each container. During our audit, management took corrective action to repair the scale as of June 8, 2023, and reported it is now in use to weigh containers for reporting the actual container weights.

<sup>13</sup> Prior to transitioning to in-house operations, the volume of mail arriving at the THS from processing had to be 84 percent by 3:00 a.m.

<sup>14</sup> Hourly scans were based on container possession scans by the air supplier. Container tender scans by the Postal Service were not used for this analysis due to missing scans for 19 of the 52 containers on May 23, 2023.

<sup>15</sup> The THS Unload and Receive Operation, issued in 2017.

## Bypass Utilization

The THS did not maximize the use of planned bypass containers. We analyzed the data for bypass utilization from October 2021 to May 2023<sup>16</sup> and determined the THS missed the opportunity to build 2,246 of the 8,203 (or about 27.4 percent) expected bypass containers for this period.

We further analyzed the data and determined the missed opportunity for bypass containers was about 25.8 percent when THS services were contracted, and increased to about 32.6 percent after operations were brought in-house (see Table 4 for overall comparison, and Figure 1 for monthly break down).

In addition, during our site visit on May 23, 2023, and similar to our analysis, we observed 20 bypass

containers being converted to mixed containers (between 1:00 a.m. and 4:00 a.m.). The THS could maximize bypass containers if mail is received timely from processing.

## Mail Tendering

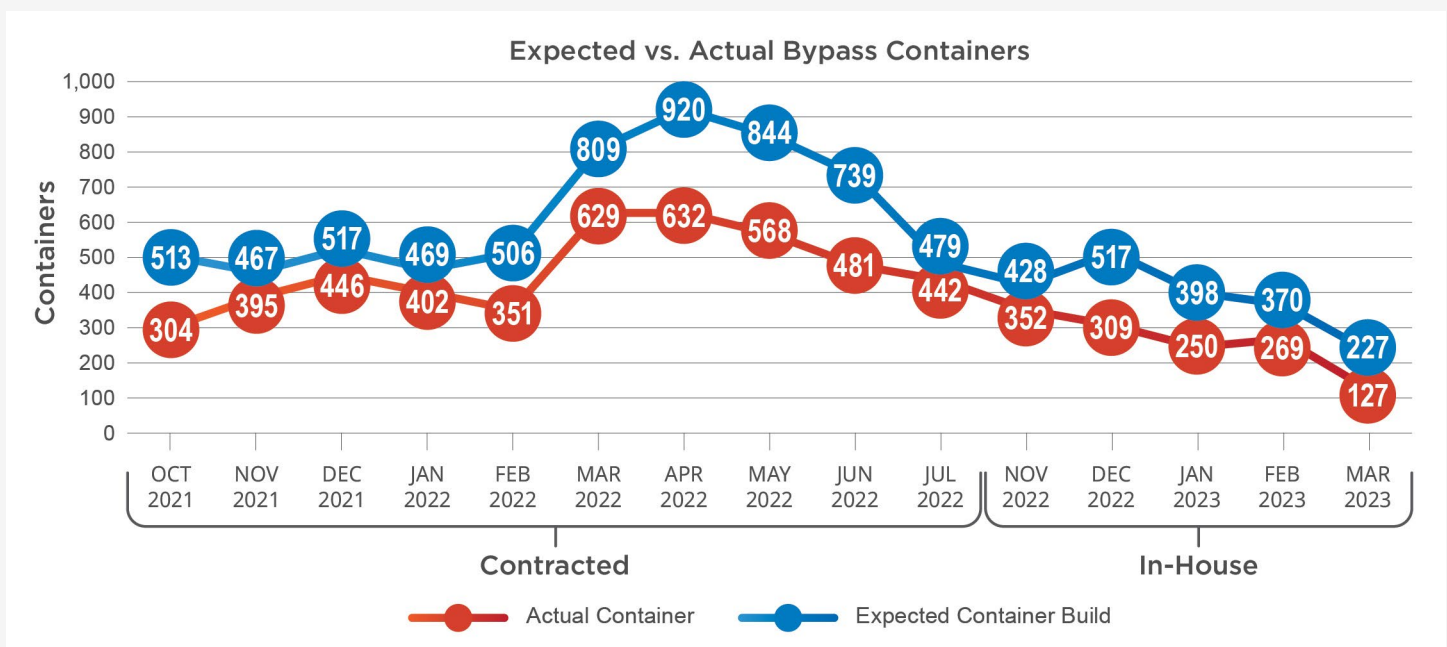
The THS did not consistently deliver 75 percent of the air containers to the air supplier one hour before final tender and 100 percent by final tender time (5:00 a.m.). We analyzed the container scan data from October 2021 to May 2023, and determined the THS did not meet the 75 percent goal on 113 out of 506 days (or 22.3 percent of the time) and did not meet the 100 percent goal on 121 out of 506 days (or 23.9 percent of the time).

**Table 4. Bypass Containers Missed Opportunity**

THS Status	Actual Containers	Expected Container Build	Difference of Actual vs Expected	Missed Percent (%)
Contracted	4,650	6,263	(1,613)	25.8
In-House	1,307	1,940	(633)	32.6
<b>Total</b>	<b>5,957</b>	<b>8,203</b>	<b>2,246</b>	<b>27.4%</b>

Source: OIG analysis of the Bypass Report data in IV October 2021 to May 2023.

**Figure 1. Bypass Container Comparison**



Source: OIG analysis of the Bypass Report data in IV from October 2021 to May 2023.

<sup>16</sup> The bypass container analysis did not include data for the months of August to October 2022 and April and May 2023, due to it not being available in IV.



In addition, since the transition of the THS operations to in-house, the number of days for not meeting the 75 and the 100 percent goals increased significantly. Specifically, the percent achieved for meeting the 75 percent goal decreased from 85.1 percent to 68.4 percent. The percent achieved for meeting the 100 percent goal decreased from 79 percent to 72.4 percent (see Table 5).

Furthermore, during our site visit on May 23, 2023, while we determined that the THS delivered 75 percent of the air containers to the air supplier one hour before final tender, they did not meet 100 percent by final tender time (5:00 a.m.).

Overall, the KPIs were not achieved for container utilization, bypass utilization, and mail tendering due to the following:

- West Valley P&DC management was not monitoring the daily processing and timely movement of mail sent from the P&DC to the THS to minimize the downstream operational impacts at the THS.
- West Valley P&DC management was not monitoring THS operational activity. Specifically, they were not aware that the scale for weighing containers had not consistently worked for about a decade, and that estimated container weights were recorded for calculating density of the containers.

- Postal Service headquarters management did not establish formalized density goals over time and did not effectively communicate these goals to local management. The THS personnel did not know the official density goal and were using the unofficial goal of 6.5 pounds per cubic foot.
- West Valley P&DC management prioritized mail processing at the P&DC for other carriers due to earlier cut-off times for tendering mail, resulting in less time to prepare and tender mail and meet the THS air supplier VAP requirements. Additionally, management did not establish an internal goal to measure arrival of mail from processing.
- West Valley P&DC implemented a pilot program in March 2023 using fewer processing machines and extending the mail processing operating window from 1 a.m. to 4 a.m., resulting in time delays for sending mail to the THS.

As a result of not maximizing container utilization and meeting the 5.25 pounds per cubic foot average density threshold, we estimated the Postal Service incurred questioned costs of \$10.4 million from October 2021 through May 2023. Further, due to the missed opportunities to increase bypass utilization, we estimated the Postal Service incurred \$564,932 in questioned costs from the same period. Lastly, the mail is at risk of delay due to not tendering mail timely to the air supplier.

**Table 5. Days Met 75 Percent and 100 Percent Goals**

Mail Tended Goal	Contracted		In-House		Combined	
	Number of Days	Percent (%)	Number of Days	Percent (%)	Number of Days	Percent (%)
Not Met 75%	42	14.9	71	31.6	113	22.3
Met 75%	239	85.1	154	68.4	393	77.7
<b>Total</b>	<b>281</b>	<b>100%</b>	<b>225</b>	<b>100%</b>	<b>506</b>	<b>100%</b>
Not Met 100%	59	21.0	62	27.6	121	23.9
Met 100%	222	79.0	163	72.4	385	76.1
<b>Total</b>	<b>281</b>	<b>100%</b>	<b>225</b>	<b>100%</b>	<b>506</b>	<b>100%</b>

Source: OIG analysis of container scan data in EDW from October 2021 to May 2023.

As Phoenix THS was the first site to transition from a contracted supplier to in-house operations, there is an opportunity for Postal Service to apply lessons learned from the issues identified in this report to future transitions, so they can effectively meet the Delivering for America goals.

#### Recommendation #1

We recommend the **Vice President, Logistics**, refine and reissue Key Performance Indicators associated with in-house Terminal Handling Services operations, to include conducting a study to formalize the density goal for container utilization and developing timeliness goals for mail volume arriving at the Terminal Handling Services from processing.

#### Recommendation #2

We recommend the **Vice President, Logistics**, perform periodic review of the density goal and communicate updated goals as needed.

#### Recommendation #3

We recommend the **Vice President, Processing and Maintenance Operations**, in coordination with the **Vice President, Logistics**, after issuance of the Key Performance Indicators, direct plant management to monitor daily operations and processing of mail to meet the Terminal Handling Services goals.

#### Recommendation #4

We recommend the **Vice President, Processing and Maintenance Operations**, in coordination with the **Vice President, Logistics**, direct plant management to re-evaluate the operating windows to make changes which may improve timely arrival of mail at the Terminal Handling Services.

#### Recommendation #5

We recommend the **Vice President, Logistics**, and the **Vice President, Processing and Maintenance Operations**, direct plant management to perform periodic reviews to verify the scale is functional and Terminal Handling Services personnel are weighing containers and accurately recording container weights.

#### Recommendation #6

We recommend the **Vice President, Logistics**, and the **Vice President, Processing and Maintenance Operations**, conduct an after-action review, and implement lessons learned to increase operational efficiency and management oversight in future transitions.

## Management's Comments

Management partially agreed with finding 1; agreed with recommendations 2, 3, 4, and 5; and

disagreed with recommendations 1 and 6, and the monetary impact. See [Appendix B](#) for management's comments in their entirety.

Regarding the finding, management agreed that timely tendering of mail to the air supplier can be improved. However, management disagreed that transitioning to insourcing caused the incursion of \$11 million in questioned costs from October 2021 through May 2023. Additionally, management disagreed that the West Valley P&DC was not monitoring the daily processing of timely movement of mail from mail processing to the THS, and that air containers were not fully utilized. Furthermore, management stated the report misstated the standard work instructions date as 2017 instead of 2022. Lastly, management disagreed with the methodology used to calculate the monetary impact.

Regarding recommendation 1, management stated that the insourcing of the operation eliminated the THS, and it became a function of mail processing. While management disagreed with the recommendation as written, they agreed with establishing key performance targets. They also stated that the THS will be supported by timely mail flow from mail processing enabling timely delivery and tendering of containers to meet contractual requirements. Management did not provide a target implementation date.

Regarding recommendation 2, management stated they would modify how they measure density in the future as a target, instead of measuring it as a goal. The target implementation date is November 30, 2023.

Regarding recommendation 3, management stated they will communicate the importance of daily monitoring by sending out a reminder. The target implementation date is December 30, 2023.

Regarding recommendation 4, management stated they will review mail processing operating windows for opportunities to improve the timely arrival of mail at the THS. The target implementation date is January 31, 2024.

Regarding recommendation 5, management stated they will emphasize the importance of accurately weighing and recording container

weights. Additionally, management will issue a directive regarding periodic validation that scales are functioning properly. The target implementation date is January 31, 2024.

Regarding recommendation 6, management stated there is no need for this recommendation because it is a standard practice to continually evaluate all processes and systems to increase operational efficiency. Management added that any major system changes are evaluated during and after the transition to determine opportunities and lessons learned.

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

The OIG considers management's comments responsive to recommendations 2, 3, 4, and 5, and corrective actions should resolve the issues identified in the report. We consider management's comments nonresponsive to recommendations 1 and 6 and will pursue concurrence through the formal audit resolution process.

Regarding the finding and monetary impact, we communicated the scope period to Postal Service officials, which was from October 2021 through May 2023 and covered the contracted services and the in-house operations. Therefore, the \$11 million in questioned costs covers the entire scope period, and was a conservative estimate based on utilization requirements and monthly average percentage of missed bypass containers. Additionally, to support our conclusion that West Valley P&DC management was not monitoring the timely movement of mail from processing to the THS, we used site observations conducted during the week of May 22, 2023, reviewed daily activity reports, and interviewed THS personnel and management. Further, our analysis of container utilization was based on an average container density threshold of 5.25 pounds per cubic foot, which was provided by Postal Service management and accounted for changes in the mail mix. Finally, regarding the stated inaccuracy of the issuance date of the standard work instructions, management confirmed the 2017 date during the audit. To date, management has not provided supporting documentation for the 2022 issuance date.

Regarding recommendation 1, while management disagreed with this recommendation as written, they agreed with establishing the key performance indicators and ensuring timely movement of mail from processing to the THS. Based on the OIG's evaluation, management's response meets the intent of the recommendation. However, we view management's disagreement with recommendation 1 as unresolved as a target implementation date was not provided and will work with management through the formal audit resolution process.

Regarding recommendation 6, management stated they continually evaluate all processes and systems to increase operational efficiency; however, management did not provide the documented best practices in support of their assertions. We view management's disagreement with recommendation 6 as unresolved and will work with management through the formal audit resolution process.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. Recommendations 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.

# Appendices

Appendix A: Additional Information.....	11
Scope and Methodology .....	11
Prior Audit Coverage .....	12
Appendix B: Management's Comments .....	13

# Appendix A: Additional Information

## Scope and Methodology

The scope of this project was to analyze the THS mail air container data from October 2021 to May 2023 for the West Valley P&DC, Phoenix, AZ, THS operations. To accomplish our objective, we:

- Identified, reviewed, and evaluated Postal Service THS policies, procedures, and guidelines.
- Interviewed Postal Service headquarters management regarding the oversight of THS operations and the transition of the THS operations to in-house.
- Conducted site observations at the THS operations and also observed mail processing at the West Valley P&DC, Phoenix, AZ, to assess the effectiveness of processing and timely delivery of mail to the THS and air supplier.
- Interviewed Postal Service management at the West Valley P&DC to determine roles and responsibilities related to monitoring the THS operations.
- Analyzed and evaluated container data from the IV and EDW systems to determine container utilization, bypass utilization, and timely tendering of mail to the air supplier.

We conducted this performance audit from April 2023 through September 2023 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 28, 2023, and included their comments where appropriate.

In planning and conducting the audit, we obtained an understanding of the THS processing operations and internal control structure to help determine the nature, timing, and extent of our audit procedures. We reviewed the management controls for overseeing the program and mitigating associated risks. Additionally, we assessed the internal control components and underlying principles, and we determined that the following three components were significant to our audit objective:

- Control Activities
- Information and Communication
- Monitoring Activities

We developed our audit work to ensure that these controls were assessed. Based on the work performed, we identified internal control deficiencies that were significant within the context of our objective. Our recommendations, if implemented, should correct the weaknesses we identified.

We assessed the reliability of the air container scan data in the IV and EDW systems by interviewing Postal Service officials knowledgeable about the data, testing for completeness, tracing selected data to the site observation data, and comparing it to source data. We determined that the data was sufficiently reliable for the purposes of this report.

## Prior Audit Coverage

Report Title	Objective	Report Number	Final Report Date	Monetary Impact
<i>Management Alert – Air Mail Not Moving as Assigned at the Los Angeles Terminal Handling Services</i>	The purpose of this alert was to bring these issues to the Postal Service’s attention and make recommendations for immediate corrective action.	21-201-R21	9/16/21	\$0
<i>Terminal Handling Services – Denver, CO</i>	The objective was to assess the effectiveness of Terminal Handling Services (THS) operations in Denver, CO.	20-314-R21	6/4/21	\$4,191,125
<i>Terminal Handling Services – Southern Area</i>	The objective was to assess the effectiveness of the Terminal Handling Services (THS) the U.S. Postal Service uses to sort and transport mail in the Southern Area.	NL-AR-18-009	7/27/18	\$4,510,962
<i>Terminal Handling Services – Capital Metro Area</i>	The objective was to assess the effectiveness of the Terminal Handling Services (THS) used to sort and transport mail for the Postal Service in the Capital Metro Area.	NL-AR-18-004	2/2/18	\$0

# Appendix B: Management's Comments



September 12, 2023

JOHN CIHOTA  
DIRECTOR, AUDIT SERVICES

SUBJECT: Management Response: Terminal Handling Services Modernization –  
Phoenix, AZ Report Number 23-092-DRAFT

Thank you for providing the Postal Service with an opportunity to review and comment on the recommendation contained in the draft audit report, – Terminal Handling Services Modernization – Report Number 23--092-DRAFT. Management in general agrees with most of the report's recommendations and will work to address the issues raised in the audit, however management does not agree with the Financial Impacts presented in this report. Additionally, information contained in this report is sensitive and we request that the report be restricted from FOIA requests.

#### Agreements with Findings:

Management agrees that timely tendering of mail to the air supplier can be improved. However, it should be noted that [REDACTED] has not refused air containers at the [REDACTED] air stop since insource. While the site needs to improve the tender to [REDACTED] this deficiency has not affected service.

#### Disagreements with Findings:

Management disagrees with the WHAT WE FOUND statement contained within the HIGHLIGHTS section of the report.

#### **Excerpt from the report:**

##### **"WHAT WE FOUND:**

The THS operations at the West Valley P&DC were less effective since transitioning from contracted supplier services to in-house Postal Service operations, based on evaluation of the three key performance indicators. Specifically, Postal Service management did not effectively monitor the THS operations to ensure the performance indicators were achieved for container utilization, bypass utilization, and timely tendering of mail to the air supplier. As a result, we estimated the Postal Service incurred \$11 million in questioned costs from October 2021 through May 2023, due to missed opportunities to increase container and bypass utilization."

As written, the WHAT WE FOUND statement implies that transitioning the THS operation at the West Valley P&DC from contracted supplier to in-house Postal Service

operations caused an incursion of \$11 million in questioned costs from October 2021 through May 2023. The THS was insourced, or transitioned from contracted to in-house, in August 2022, therefore it is not possible for the action of insourcing the THS to have caused the entire \$11 million question costs amount which spans a time period before and after insourcing.

Further, management disagrees with the statement that West Valley P&DC management was not monitoring the daily processing of timely movement of mail from the P&DC to the THS. There was no evidence presented in the report to support that conclusion.

Management disagrees with the finding that "The THS did not fully utilize each air container." Mail product mix must be considered when assessing density opportunity. The [REDACTED] network has seen a significant decrease in First Class Letter volume because of moving First Class lanes from Air to Surface. Since Letter Trays are heavier than other mail pieces, a decline in First Class Letter Trays would result in lower density. Moving mail from Air to Surface while still achieving expected service is a national activity that aligns with the Delivering for America plan. The decline in density that can be attributed to the Air to Surface changes would have occurred regardless of whether the PHX THS had been left as a contracted out THS or insourced. Asserting underutilization of containers and calculating lost opportunity of cubic feet using the methodology cited is inaccurate.

#### Disagreements with Monetary Findings:

Management disagrees with the methodologies used to calculate the Monetary Findings of \$11 million of questioned costs. For the Container Utilization section, the methodology for calculating opportunity cubic capacity not utilized based off density is flawed; and for the Bypass Utilization section, the methodology used of taking a percentage of total handling units to calculate lost bypass opportunity is flawed.

For the Container Utilization section, the report takes a target density of 5.25 and applies it to the cubic capacity of each ULD size to generate target weights for each ULD size. Then the report takes the actual weight of ULDs tendered and calculates the difference between the target weight and the actual weight. That difference is converted to cubic capacity (using the target density of 5.25) and multiplied by the highest [REDACTED] tiered rate per cube achieved for that time period to produce \$10.4 million of questioned costs.

Firstly, taking weight and converting it to cubic capacity to say that there was additional space within an air container that could have been filled with more mail is flawed because it does not consider the changing mail mix. First Class mail weighs more than Priority mail. With moving mail from Air to Surface as explained previously, less First Class mail is flying, therefore the mail that is staying on the air is less dense. Less dense mail cannot be compressed to make it take up less space to pack an air container more tightly. Without visual evidence of each air container analyzed, it is not possible to determine whether the space within the container was maximized.



Secondly, assuming that it were possible to calculate lost utilization of space in an air container using the weight of the container which was refuted in the previous paragraph, the report uses an unadjusted 5.25 density target for all air containers which is not accurate because of the following: bypass containers are allowed to be 87% full and [REDACTED] grants the Postal Service a daily credit of [REDACTED] cubic feet at each air stop. Therefore, the density of each bypass container in the analysis needs to be adjusted to only consider 87% of the target weight and 87% of the container cubic capacity, and [REDACTED] cubic feet needs to be subtracted for each day.

Thirdly, the report uses the highest tier achieved in each period to calculate the questioned costs.

For the Bypass Utilization section, the report multiplies the percentage of missed bypass containers by total handling units to determine the number of handling units converted to mixed. That quantity is then multiplied by the [REDACTED] hub sort rate per piece achieved for that period to produce \$0.56 million of questioned costs.

Firstly, taking the missed bypass percent which is a percentage of air containers and multiplying it by the total handling units to generate missed bypass handling units is incorrect. It cannot be assumed that the missed percentage of bypass containers equates to the missed percentage of bypass handling units. Instead, the data would need to be analyzed at the handling unit level to determine which pieces for a given bypass received a hub sort scan, and of those pieces, how many would have fit in a bypass container if it hadn't been converted to mixed.

Secondly, the report uses the highest tier achieved in each period to calculate the questioned costs.

#### Factual inaccuracies:

The report misstates in Footnote 10 & 17 that the Standard Work Instructions (SW) for THS were issued in 2017. Other documents were issued in prior years, however the two SWI documents referenced in the report were issued in 2022.

The following responses are provided addressing the specific recommendations as stated in the draft report:

**Recommendation #1:**

We recommend the **Vice President, Logistics**, refine and reissue Key Performance Indicators associated with in-house Terminal Handling Services operations, to include conducting a study to formalize the density goal for container utilization and developing timeliness goals for mail volume arriving at the Terminal Handling Services from processing.

**Management Response/Action Plan:**

Management disagrees with this recommendation as written. Although we agree to establish performance targets for the operation, this recommendation references the Terminal Handling Services. The insourcing of the operation eliminated the Terminal Handling Services. The insourced operation is a function of Mail Processing and as such the build operation will be supported by timely mail flow from upstream operations that enables the achievement of tender of ULDs to meet the [REDACTED] contractual requirements.

**Target Implementation Date:**

N/A

**Responsible Official:**

N/A

**Recommendation #2:** We recommend the **Vice President, Logistics**, perform periodic review of the density goal and communicate updated goals as needed.

**Management Response/Action Plan:**

Management agrees with this recommendation with the modification of referring to density as a target, not a goal.

**Target Implementation Date:**

11/30/2023

**Responsible Official:**

Senior Director of Air Logistics  
Senior Logistics Regional Directors

**Recommendation #3:** We recommend the **Vice President, Processing and Maintenance Operations** in coordination with **the Vice President, Logistics**, after issuance of the Key Performance Indicators, direct plant management to monitor daily operations and processing of mail to meet the Terminal Handling Services goals.

Management Response/Action Plan:

Management agrees with this recommendation. The Vice President, Processing and Maintenance Operations will send out a reminder of the importance of daily monitoring.

Target Implementation Date:

12/30/2023

Responsible Official:

Senior Director Processing Operations

**Recommendation #4:** We recommend the **Vice President, Processing and Maintenance Operations**, in coordination with the **Vice President, Logistics**, direct plant management to re-evaluate the operating windows to make changes which may improve timely arrival of mail at the Terminal Handling Services.

Management Response/Action Plan:

Management agrees with this recommendation. The Vice President, Processing and Maintenance Operations in coordination with the Vice President, Logistics will direct plant management to review the operating windows to determine whether there are opportunities to make changes which may improve the timely arrival of mail at the Build Operation.

Target Implementation Date:

1/31/2024

Responsible Official:

Senior Director Strategic Planning & Implementation

**Recommendation #5:** We recommend the **Vice President, Logistics**, and the **Vice President, Processing and Maintenance Operations**, direct plant management to perform periodic reviews to verify the scale is functional and Terminal Handling Services personnel are weighing containers and accurately recording container weights.

Management Response/Action Plan:

Management agrees with this recommendation. Vice President, Processing and Maintenance Operations will send out a reminder of the importance of weighing containers and accurately recording container weights. The Sr Director Maintenance Operations will issue a directive regarding periodic validation of scale functionality.

Target Implementation Date:

1/31/2024

Responsible Official:

Sr Director Strategic Planning & Implementation

Sr Director Maintenance Operations

**Recommendation #6:** We recommend the **Vice President, Logistics**, and the **Vice President, Processing and Maintenance Operations**, conduct an after-action review, and implement lessons learned to increase operational efficiency and management oversight in future transitions.

**Management Response/Action Plan:**

Management disagrees with the need for this recommendation. As standard practice, USPS continually evaluates all processes and systems to increase operational efficiency. Any major system changes are evaluated during and after the transition to determine opportunities and lessons learned.

**Target Implementation Date:**

N/A

**Responsible Official:**

N/A

E-SIGNED by Robert Cintron  
on 2023-09-18 17:51:30 CDT

---

Robert Cintron  
Vice President  
Logistics

E-SIGNED by Jason R De Chambeau  
on 2023-09-18 16:34:15 CDT

---

Mike L. Barber  
Vice President  
Processing and Maintenance Operations

*cc: Corporate Audit & Response Management*

# OFFICE OF INSPECTOR GENERAL

UNITED STATES



Contact us via our [Hotline](#) and [FOIA](#) forms. Follow us on social networks. Stay informed.

1735 North Lynn Street, Arlington, VA 22209-2020  
(703) 248-2100

For media inquiries, please email [press@uspsig.gov](mailto:press@uspsig.gov)  
or call (703) 248-2100