



Office of Inspector General | United States Postal Service

## Audit Report

# Small Package Sorting System Performance

Report Number 20-052-R20 | July 29, 2020



# Table of Contents

|   |   |  |    |
|---|---|--|----|
| Cover   |   | Recommendation #1.....                                   | 9  |
| Highlights.....                                 | 1 | Recommendation #2.....                                   | 9  |
| Objective .....                                 | 1 | Recommendation #3.....                                   | 9  |
| Finding.....                                    | 1 | Recommendation #4.....                                   | 9  |
| Recommendations.....                            | 2 | Recommendation #5.....                                   | 9  |
| Transmittal Letter .....                        | 3 | Recommendation #6.....                                   | 9  |
| Results.....                                    | 4 | Management’s Comments.....                               | 9  |
| Introduction/Objective .....                    | 4 | Evaluation of Management’s Comments .....                | 10 |
| Background.....                                 | 4 | Appendices .....   | 11 |
| Finding #1: SPSS Performance.....               | 4 | Appendix A: Additional Information.....                  | 12 |
| Management Oversight and Planning.....          | 5 | Scope and Methodology.....                               | 12 |
| Bulk Conveyor Belt Maintenance Upgrades.....    | 6 | Prior Audit Coverage .....                               | 12 |
| Mail Induction Stations Not Used .....          | 7 | Appendix B: Throughput and Productivity Performance..... | 13 |
| Improper Mail Placement.....                    | 7 | Appendix C: Management’s Comments.....                   | 18 |
| Employees Clocked Into Incorrect Operation..... | 8 | Contact Information .....                                | 22 |
| Best Practices.....                             | 8 |  |    |

# Highlights

## Objective

Our objective was to evaluate the performance of the U.S. Postal Service's Small Package Sorting System (SPSS) machines.

The continued growth of eCommerce and the package delivery market provides opportunities for the Postal Service to increase revenue. The Postal Service has directed resources and management attention toward building a world-class package platform to compete and gain business in the package delivery market. Part of this strategy includes purchasing package processing machines such as the SPSS to improve efficiency and meet demand.

The SPSS is an automated package sorter with five mail induction stations for employees to feed packages into the machine and 196 sortation bins. SPSS machines are expected to process 4,500 packages per machine hour (throughput goal) and 385 packages per employee workhour (productivity goal). The SPSS machine is designed to provide automated package sorting capability, alleviate existing processing capacity shortfalls, and reduce manual sorting and costs.

This is a follow-up to an earlier SPSS audit (Report Number NO-AR-18-002, dated November 29, 2017) that found the Postal Service, on average, nationally exceeded the throughput performance goal by 5 percent but was below the productivity goal by 17 percent.

Since that audit, the Postal Service has spent \$52.6 million to purchase and deploy 11 additional SPSS machines. In total, the Postal Service has invested \$187.2 million since FY 2014 to purchase 44 SPSS machines at 36 locations throughout the country. There were 41 SPSS machines in FY 2019 and the Postal Service added three more machines in FY 2020, but have no plans to add additional machines at this time.

We judgmentally selected sites for review based on FY 2018 and 2019 SPSS throughput and productivity data compared to goals and overtime usage. Specifically, we conducted site observations at one high performing site – the San Jose, CA, Processing and Distribution Center (P&DC) – and two lower performing sites – the Columbus, OH, P&DC and Indianapolis, IN, Mail Processing Annex

(Annex). We also conducted interviews with management at two additional lower performing sites – the Denver, CO, and Akron, OH, P&DCs.

Our primary fieldwork was completed before the President of the United States issued the national emergency declaration concerning the novel coronavirus disease outbreak (COVID-19) on March 13, 2020. The results of this audit do not reflect any process and/or operational changes that may have occurred as a result of the pandemic.

## Finding

SPSS machine performance nationally has decreased since our prior audit and both throughput and productivity performance goals are not being met. Specifically, SPSS machine performance of the 41 machines in use in FY 2019 showed:

- Twenty-eight machines (or about 68 percent) did not meet the throughput goal. On average, SPSS machines were 6 percent below the goal (or 269 packages processed per machine hour below the goal).
- Thirty-eight machines (or about 93 percent) did not meet the productivity goal. On average, SPSS machines were 28 percent below the goal (or 106 packages processed per employee workhour below the goal).

As of FY 2020 Quarter 2, SPSS performance for the 44 machines in use showed:

- Twenty-seven machines (or about 61 percent) did not meet the throughput goal. On average, SPSS machines were 6 percent below the goal (or 267 packages processed per machine hour below the goal).
- Forty-two machines (or about 95 percent) did not meet the productivity goal. On average, SPSS machines were 25 percent below the goal (or 95 packages processed per employee workhour below the goal).

During our review of lower performing sites, we determined the causes of lower throughput and productivity were due, at least in part, to insufficient management oversight and planning. Specifically, we found:

- Supervisors at the Indianapolis Annex were not present to initiate the start of SPSS machines at the beginning of the operation, leaving employees idle. Only supervisors and in-plant support personnel have access to start the machines.
- One SPSS machine at the Indianapolis Annex did not have the upgraded bulk conveyor belt installed, which caused packages to slide down the incline belt into the container unloading area.
- Not all mail induction stations at the Akron and Columbus P&DCs were used, despite sufficient mail volume and employee availability.
- Employees at the Columbus P&DC were not properly placing packages for the SPSS machine to scan.
- Employees at the Columbus and San Jose P&DCs were clocked into the incorrect operation, resulting in incorrect labor code usage for reporting workhours.

During our site visit to the San Jose P&DC, we identified best practices related to machine performance and management oversight that included:

- Daily meetings for supervisors to provide ongoing feedback to employees operating the SPSS machine and discuss opportunities for improvement.
- All five induction stations on the SPSS machine were used and employees were properly placing packages.
- Supervisors were consistently present during SPSS machine processing.
- Daily management team meetings which encouraged communication and ideas to improve SPSS productivity and throughput performance.

- Plant manager and management conducted quarterly meetings with P&DC employees to create a culture of accountability to ensure mail is processed efficiently.

We calculated the Postal Service could save about \$9 million in labor costs annually by correcting the causes of low SPSS productivity nationally. However, due to contractual labor agreements and limitation on current staffing options, the Postal Service may not be able to realize all these savings. Improving SPSS performance will reduce costs, increase operational savings, and support the Postal Service's package strategy.

## Recommendations

We recommended management:

- Reiterate the operations user guide requiring supervisors to be present to initiate the timely start of SPSS machine processing.
- Identify facilities with SPSS machines experiencing issues with packages sliding down the belt incline and take corrective action as appropriate.
- Provide a standard work instruction to facilities to use available mail induction stations based on mail volume and employee availability.
- Provide standard work instructions to SPSS facilities and employees and reiterate the importance of properly placing packages into SPSS machines.
- Reiterate the management operating data system guidance requiring management to monitor mail processing productivity and ensure employees are correctly logged into the appropriate operation to accurately reflect SPSS productivity performance.
- Provide standard work instructions requiring supervisors conduct periodic meetings to provide ongoing feedback to employees operating the SPSS machine and discuss opportunities for improvement.

# Transmittal Letter



OFFICE OF INSPECTOR GENERAL  
UNITED STATES POSTAL SERVICE

July 29, 2020

**MEMORANDUM FOR:** DR. JOSHUA D. COLIN  
ACTING VICE PRESIDENT, PROCESSING AND  
MAINTENANCE OPERATIONS

E-Signed by Inspector General  
VERIFY authenticity with eSign Desktop  
*Darrell E. Benjamin, Jr.*

**FROM:** Darrell E. Benjamin Jr.  
Deputy Assistant Inspector General  
for Mission Operations

**SUBJECT:** Audit Report – Small Package Sorting System Performance  
(Report Number 20-052-R20)

This report presents the results of our audit of the U.S. Postal Service's Small Package Sorting System Performance.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Todd J. Watson, Director, Network Processing, or me at 703-248-2100.

Attachment

cc: Postmaster General  
Corporate Audit Response Management

# Results

## Introduction/Objective

This report presents the results of our self-initiated audit of the U.S. Postal Service's Small Package Sorting System (SPSS) performance (Project Number 20-052). Our objective was to evaluate the performance of the Postal Service's SPSS machines.

## Background

The growth of eCommerce and the package delivery market provides opportunities for the Postal Service to increase revenue. The Postal Service directed resources and management's attention toward building a world-class package platform to compete and win business in the package delivery market. Part of this strategy includes purchasing package processing machines such as the SPSS to improve efficiency and meet demand.

The SPSS is an automated package sorter that includes five mail induction stations for employees to feed packages into the machine and 196 sortation bins. SPSS machines are expected to process 4,500 packages per machine hour (throughput) and 385 packages per employee workhour (productivity).<sup>1</sup> The SPSS machines provide automated package sorting capability, alleviate existing processing capacity shortfalls, and reduce manual sorting and costs.

This is a follow-up audit to the *Small Package Sorting System Performance* audit (Report Number NO-AR-18-002, dated November 29, 2017). In that audit, we found the Postal Service, on average, nationally exceeded the throughput performance goal by 5 percent but was below the productivity goal by 17 percent.

Since that audit, the Postal Service has spent \$52.6 million to purchase and deploy 11 additional SPSS machines. In total, the Postal Service has invested \$187.2 million to deploy 44 SPSS machines at 36 locations across the country.<sup>2</sup> There were 41 SPSS machines in FY 2019 and the Postal Service added three

more machines in FY 2020 but have no plans to add additional machines at this time.

We ranked the performance of the 41 SPSS machines that were deployed during the period October 2017 through September 2019 based on throughput, productivity, and overtime workhours. Throughput is the number of packages processed by the SPSS in an hour and productivity is the number of packages processed by the machine as compared to employee workhours used to staff the machine. We judgmentally selected for review five mail processing facilities with SPSS machines. We conducted site observations at one high performing site – the San Jose, CA, Processing and Distribution Center (P&DC) – and two lower performing sites – the Columbus, OH, P&DC and the Indianapolis, IN, Mail Processing Annex (Annex). We also interviewed management at two additional lower performing sites – the Denver, CO, and Akron, OH, P&DCs.<sup>3</sup> See [Appendix A](#) for additional information.

Our primary fieldwork was completed before the President of the United States issued the national emergency declaration concerning the novel coronavirus disease outbreak (COVID-19) on March 13, 2020. The results of this audit do not reflect any process and/or operational changes that may have occurred as a result of the pandemic.

## Finding #1: SPSS Performance

SPSS machine performance nationally has decreased since our prior audit and both throughput and productivity performance goals are not being met.

In FY 2019, the Postal Service had 41 SPSS machines in use at 34 locations. Twenty-eight machines (or about 68 percent) did not meet the throughput goal in FY 2019. On average, SPSS machines were 6 percent below the goal (or 269 packages processed per machine hour below the goal). As of FY 2020, Quarter (Q) 2,<sup>4</sup> the Postal Service had 44 SPSS machines in use at 36 mail

1 Decision Analysis Report (DAR) Business Case, *Additional Package Processing Equipment – FY 2017 Program*, February 17, 2017.

2 Three SPSS machines were deployed to three locations in fiscal year (FY) 2020.

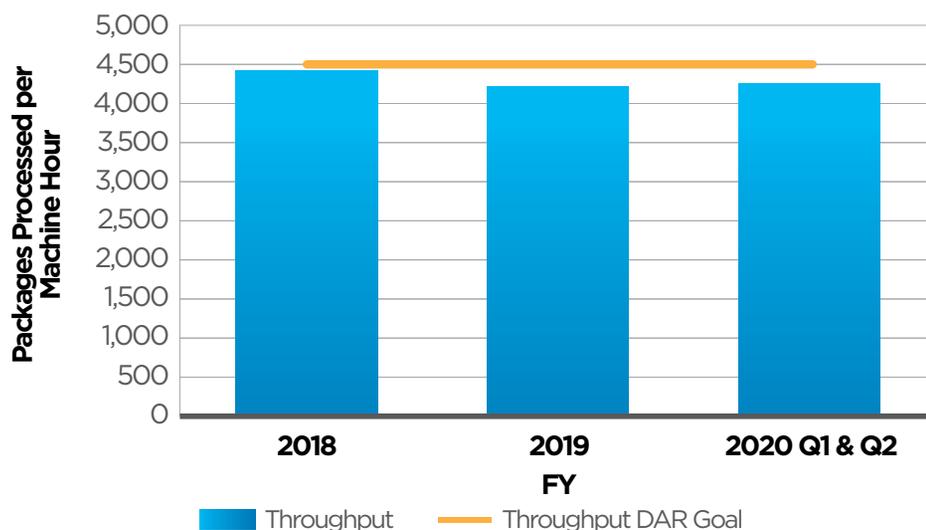
3 The OIG suspended audit-related travel before we visited the Akron and Denver P&DC sites. For these sites, we reviewed performance data, conducted phone interviews, and issued questionnaires to site management.

4 FY 2020 through Q2 is from October 1, 2019 through March 31, 2020.

***“There were 41 SPSS machines in FY 2019. The Postal Service added three more in FY 2020 but have no plans to add additional machines at this time.”***

processing facilities. Twenty-seven machines (or about 61 percent) did not meet the throughput goal through FY 2020, Q2. On average, SPSS machines were 6 percent below the goal (or 267 packages processed per machine hour below the goal). See Figure 1.

**Figure 1. SPSS Throughput National Averages**

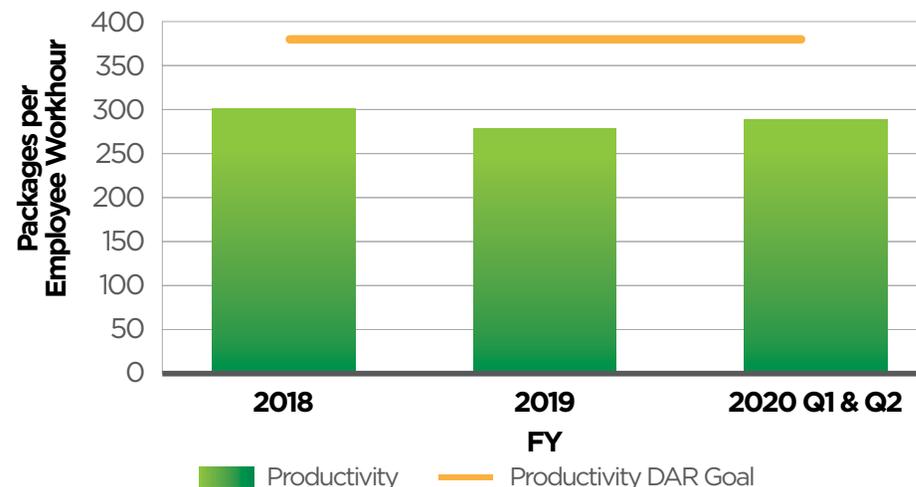


Source: U.S. Postal Service’s Management Operating Data System (MODS) and U.S. Postal Service Office of Inspector General (OIG) analysis.

In FY 2019, 38 machines (or about 93 percent) did not meet the productivity goal. On average, SPSS machines were 28 percent below the goal (or 106 packages processed per employee workhour below the goal) in FY 2019.

As of FY 2020, Q2, 42 machines (or about 95 percent) did not meet the productivity goal. On average, SPSS machines were 25 percent below the goal (or 95 packages processed per employee workhour below the goal) through FY 2020, Q2, as shown in Figure 2. See [Appendix B](#) for additional details.

**Figure 2. SPSS Productivity National Averages**



Source: MODS and OIG analysis.

During our review of lower performing sites, we determined the causes of lower throughput and productivity were due, at least in part, to insufficient management oversight and planning.

### Management Oversight and Planning

During our observations at the Indianapolis, IN, Annex, from March 10 - 12, 2020, supervisors were not always present at the beginning of operations to start the SPSS machine processing mail, leaving employees idle. We observed one machine sat idle for 13 minutes after the scheduled start time and the other machine sat idle for 25 minutes after the scheduled start time. The machines were staffed, had mail preloaded, and were ready for processing but were waiting

for the supervisor to start them. Postal Service policy<sup>5</sup> authorizes only supervisors and in-plant support personnel access to start the machines.

During our site visit at the Columbus, OH, P&DC, from November 18 - 19, 2020, we observed that supervisors were generally not present for multiple tours<sup>6</sup> during SPSS operations. P&DC management stated the Tour 2 supervisor is responsible for overseeing several mail processing machines, making it difficult to be present at various stages of operations throughout the tour. Management also stated scheduled leave was the reason Tour 3 was without a supervisor 40 percent of the time. Supervisors are responsible for conducting operational walkthroughs during the tour and ensuring equipment is properly staffed.<sup>7</sup>

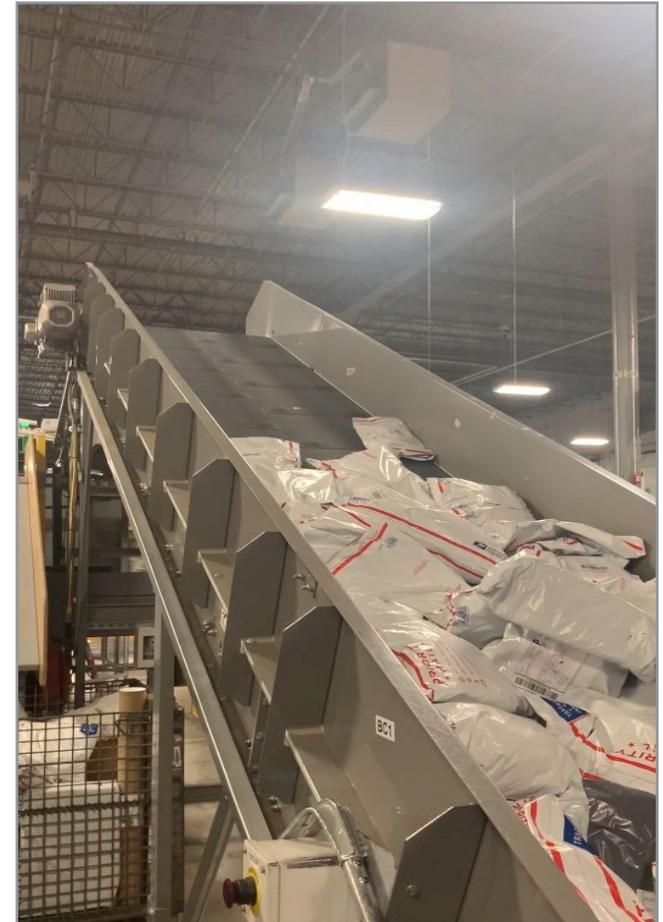
### Bulk Conveyor Belt Maintenance Upgrades

During our site visit to the Indianapolis, IN, Annex, we also observed one SPSS machine<sup>8</sup> did not have the upgraded bulk conveyor belt installed which caused packages to slide down the incline belt into the container unloading area. This was due to the packages' smooth material and the belt's non-textured surface (see Figure 3). As a result, employees manually pushed the packages up the incline with a makeshift metal pole.

In September 2017, Postal Service headquarters management issued a maintenance update<sup>9</sup> stating some facilities had reported difficulties with packages traveling up the incline belts of the SPSS bulk conveyor. The maintenance update recommended a belt modification to reduce slippage and, because the issue was not widespread, each facility was given discretion on whether to perform the modification. The management update stated the parts were relatively expensive and the installation was labor intensive.

Indianapolis Annex management purchased five belts in December 2017 at a cost of \$7,117 but did not install them. Rather, the belts were stored in an on-site storage room for the last two years (see Figure 4).

**Figure 3. Packages Sliding Down the Incline Belt**



 [Click here to watch the video.](#)

Source: OIG video taken at the Indianapolis Annex on March 10, 2020, at 2:47 p.m.

<sup>5</sup> *Operations User Guide for the Postal Service SPSS System*, Section 5.2, Fixed Mechanism Process Control System Login, March 5, 2016.

<sup>6</sup> A Postal Service work day is made up of three tours of eight hours each.

<sup>7</sup> Handbook PO-420, *Small Plant Best Practices Guidelines*, Section 2.2, Supervisor Duties, dated November 1999.

<sup>8</sup> This was observed on an SPSS machine deployed in FY 2015.

<sup>9</sup> *Maintenance Technical Support Center Update*, page 5-6, September 29, 2017.

**Figure 4. Friction Belts Not Installed**



Source: OIG photograph taken March 10, 2020, at 2:52 p.m. of the five SPSS conveyor friction belts in storage at the Indianapolis Annex.

Management at the Annex stated they decided not to install the belts because it would take a day to install each one and the machine would not be operational during installation. However, Postal Service headquarters maintenance management said the SPSS machine could remain operational while a belt is being replaced since the four remaining induction stations would be operational. During FY 2019, the Indianapolis Annex ranked 34th (last) in throughput and 25th in productivity out of 34 facilities.

### Mail Induction Stations Not Used

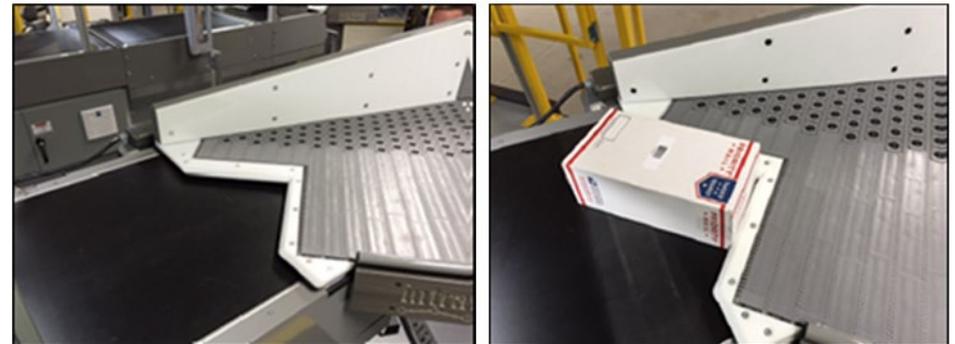
Management at the Columbus and Akron, OH, P&DCs did not use all available SPSS mail induction stations even though mail was available to process. At the Columbus P&DC, we observed one to two of the five induction stations not in use during machine operation. Columbus management stated they did not use all five induction stations because they felt the machine was running at capacity and using a fifth console to process packages would not increase productivity.

However, in FY 2019, the Columbus P&DC ranked 26th in throughput and 24th in productivity out of 34 sites. The Akron P&DC used five stations throughout the day, except on Tour 2 where they used three. Akron management stated a lack of staffing due to leave requests and limited or light-duty employees unable to perform the duties of the operation were the reasons they only use three induction stations during Tour 2. SPSS machines have five mail induction stations available for use and Postal Service policy requires operators to achieve consistent feed rates with induction stations one, two, and three processing the most packages and stations four and five processing at lower rates. When all inductions stations are in use, the SPSS machines can process more packages in less time which increases throughput.

### Improper Mail Placement

The Columbus, OH, P&DC employees did not place packages on the SPSS machine induction stations correctly. We observed employees were not using the induction template to prepare the packages to be scanned. Employees should place mailpieces with the address facing up so it can be properly scanned<sup>10</sup> (see Figure 5).

**Figure 5. SPSS Induction Template**



Source: United Sortation Solutions (USS) Operations Training Course Guide. The first photograph shows the template and the second shows the template with a package.

<sup>10</sup> Standard Work Instruction: *SPSS Automated Induction Stations*, December 9, 2015.

If mailpieces are not positioned properly, it may cause sorting problems downstream or even system shutdown.<sup>11</sup> Placing mail correctly would improve the rate at which the optical scanner scans address information, increase package processing volume, and improve throughput and productivity.

Correcting the causes of low throughput and productivity will reduce costs, increase operational savings, and support the Postal Service's package strategy. We calculated the Postal Service incurred about \$18 million in questioned costs<sup>12</sup> from November 2017 through October 2019. We also calculated over \$41 million in funds put to better use<sup>13</sup> from November 2019 through August 2022 for the 41 SPSS machines in use as of FY 2019. However, due to contractual labor agreements and limitation on current staffing options, the Postal Service may not be able to realize all these savings.

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***“Correcting the causes of low throughput and productivity will reduce costs, increase operational savings, and support the Postal Service’s package strategy.”***

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### **Employees Clocked Into Incorrect Operation**

During our observations at the Columbus, OH, and San Jose, CA, P&DCs, we observed employees working on SPSS machines who were clocked into non-SPSS operation codes. At the Columbus, OH, P&DC on November 19, four of seven employees working on the SPSS machine were clocked into incorrect operations. On November 20, three of eight employees working on the SPSS machine were clocked into incorrect operations. Further, at the San Jose, CA, P&DC, on November 19, one of 16 employees working on SPSS machines were clocked into incorrect operations. On November 20, three of 19 employees working on SPSS machines were clocked into incorrect operations. The supervisors at both locations were unaware that the employees

were not clocked into the correct operation and were not periodically monitoring reports to correct errors. Management must ensure employee clock rings are properly completed so labor costs can be accurately attributed and measured.<sup>14</sup> Correcting and preventing clock ring errors provides reliable data to evaluate operational efficiency.

### **Best Practices**

We identified certain best practices employed at the San Jose, CA, P&DC to increase efficiency and management oversight:

- Supervisors conducted daily meetings with SPSS operational staff to share daily goals and discuss safety awareness.
- Personnel use all five SPSS package induction stations to increase throughput capacity and efficiency.
- Supervisors were consistently present during SPSS machine processing to ensure machine operation starts on time and to troubleshoot issues.
- Management held daily team meetings to discuss planning and operational trends across shifts.
- The plant manager and management conducted quarterly meetings with P&DC employees to provide overall throughput and productivity accomplishments, recognize individual performance and to allow two-way feedback between staff and management.

The San Jose P&DC's SPSS throughput was 4,897 packages processed per machine workhour, 13 percent above the national average; and productivity averaged 403 packages per machine workhour, or about 40 percent above the national average for FYs 2018 and 2019.

<sup>11</sup> *USS Operations Training Course Guide*, Lesson 3, page 19, 2015.

<sup>12</sup> A cost the OIG believes is unnecessary.

<sup>13</sup> Funds that could be used more efficiently by implementing recommended actions.

<sup>14</sup> Handbook M-32, *Management Operating Data System*, September 2018.

### Recommendation #1

We recommend the **Acting Vice President, Processing and Maintenance Operations**, reiterate the operation user guide requiring supervisors to be present to initiate the timely start of Small Package Sorting System machine processing.

### Recommendation #2

We recommend the **Acting Vice President, Processing and Maintenance Operations**, identify facilities with Small Package Sorting System machines experiencing issues with packages sliding down the belt incline and take corrective action as appropriate.

### Recommendation #3

We recommend the **Acting Vice President, Processing and Maintenance Operations**, provide a standard work instruction to facilities to use available mail induction stations based on mail volume and employee availability.

### Recommendation #4

We recommend the **Acting Vice President, Processing and Maintenance Operations**, provide standard work instructions to Small Package Sorting System (SPSS) facilities and employees and reiterate the importance of properly placing packages into SPSS machines.

### Recommendation #5

We recommend the **Acting Vice President, Processing and Maintenance Operations**, Reiterate the management operating data system guidance requiring management to monitor Small Package Sorting System (SPSS) processing productivity and ensure employees are correctly logged into the appropriate operation to accurately reflect SPSS productivity performance.

### Recommendation #6

We recommend the **Acting Vice President, Processing and Maintenance Operations**, provide standard work instructions requiring supervisors conduct periodic meetings to provide ongoing feedback to employees operating the Small Package Sorting System machine and discuss opportunities for improvement.

## Management's Comments

Management agreed with the findings, recommendations, and monetary impact. See [Appendix C](#) for management's comments in their entirety.

Regarding recommendation 1, management stated they will reiterate the operation user guide instruction requiring supervisors to be present to initiate the timely start of SPSS machine processing. The target implementation date is September 30, 2020.

Regarding recommendation 2, management stated there is already a process in place for SPSS facilities to report maintenance deficiencies affecting mail processing. They further stated sites must report maintenance issues that cannot be resolved or are recurring and to obtain equipment. Management stated the process has been implemented.

Regarding recommendation 3, management stated they will reiterate all standard work instructions and best practices with all SPSS sites. The target implementation date is September 30, 2020.

Regarding recommendation 4, management stated they will reiterate all standard work instructions and best practices with all SPSS sites. The target implementation date is September 30, 2020.

Regarding recommendation 5, management stated they will ensure timeliness and consistency of data in the system by establishing a control in the Management Operating Data System regarding workhour adjustments by field users after the closeout period. The target implementation date is September 30, 2020.

Regarding recommendation 6, management stated they will reiterate all standard work instructions and best practices with all SPSS sites. The target implementation date is September 30, 2020.

Management did not comment on the monetary impact in their management's comments, but, based on correspondence with management, they agreed with the monetary impact.

## Evaluation of Management's Comments

The OIG considers management's comments responsive to recommendations 1 and 3 through 6 and corrective actions should resolve the issues identified in the report. The OIG considers management comments nonresponsive to recommendation 2.

Regarding recommendation 2, while the Postal Service has a process for facilities to report maintenance deficiencies affecting mail processing, the issue of packages sliding down the SPSS belt incline at the Indianapolis Annex went unreported until we identified it. This issue could be going unreported at other facilities and management's actions would not identify it. We view the disagreement on recommendation 2 as unresolved but do not plan to pursue it through the audit resolution process. Therefore, we are closing recommendation 2 with the issuance of this report.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. Recommendations 1 and 3 through 6 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 2 closed with the issuance of this report.

# Appendices

Click on the appendix title below to navigate to the section content.

|   |    |
|---|----|
| Appendix A: Additional Information .....                  | 12 |
| Scope and Methodology .....                               | 12 |
| Prior Audit Coverage .....                                | 12 |
| Appendix B: Throughput and Productivity Performance ..... | 13 |
| Appendix C: Management’s Comments .....                   | 18 |

# Appendix A: Additional Information

## Scope and Methodology

The scope of this audit was SPSS machine's nationwide performance for FYs 2018 through 2019 and as of FY 2020, Q2.

To accomplish our objective, we:

- Performed site observations to assess best practices and causes for inefficiency.
- Analyzed and evaluated data from the Postal Service's EDW, MODS, and Time and Collection System (TACS) systems to determine SPSS volume, productivity, throughput, workhours, and employee clock rings.
- Compared and evaluated actual productivity and throughput to DAR performance metrics.
- Observed and evaluated actual SPSS performance and employee clock ring procedures at the Columbus and San Jose P&DCs and the Indianapolis Annex to determine operational issues and best practices.

- Interviewed mail processing managers, supervisors, and maintenance operations personnel at the selected sites to identify performance issues and best practices.

We conducted this performance audit from October 2019 through July 2020 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 finding and conclusions based on our audit objective. We discussed our observations and conclusions with management on June 12, 2020 and included their comments where appropriate.

We assessed the reliability of EDW, MODS, and TACS by interviewing agency officials knowledgeable about the data and reviewing related documentation. We determined that the data were sufficiently reliable for the purposes of this report.

## Prior Audit Coverage

| Report Title                                    | Objective   | Report Number | Final Report Date | Monetary Impact (in millions) |
|---|---|---------------|-------------------|-------------------------------|
| <i>Small Package Sorting System Performance</i> | Evaluate the throughput and productivity performance of the Postal Service's 33 deployed SPSS machines. | NO-AR-18-002  | 11/29/2017        | \$25                          |

# Appendix B: Throughput and Productivity Performance

In FY 2019, the Postal Service had 41 SPSS machines in use at 34 mail processing facilities. Twenty-eight machines (or about 68 percent) did not meet the throughput goal. On average, SPSS machines were 6 percent below the goal (or 269 packages processed per machine hour below the goal). Thirty-eight machines (or about 93 percent) did not meet the productivity goal. On average, SPSS machines were 28 percent below the goal (or 106 packages processed per employee workhour below the goal). See Table 1 for FY 2019 throughput and productivity performance for each facility.

**Table 1. FY 2019 SPSS Throughput and Productivity by Facility**

| Facility <sup>15</sup>                                | Throughput   | Percent to Goal | Productivity | Percent to Goal |
|---|--------------|-----------------|--------------|-----------------|
| <b>Goal</b>   | <b>4,500</b> |                 | <b>385</b>   |                 |
| Akron, OH P&DC  | 4,616        | 3%              | 187          | -51%            |
| Atlanta, GA P&DC                                      | 3,885        | -14%            | 260          | -32%            |
| Baltimore, MD P&DC                                    | 3,662        | -19%            | 294          | -24%            |
| Charleston, SC P&DC                                   | 4,022        | -11%            | 222          | -42%            |
| Cincinnati, OH Network Distribution Center (NDC)      | 3,689        | -18%            | 298          | -23%            |
| Columbus, OH P&DC                                     | 3,903        | -13%            | 259          | -33%            |
| Dallas, TX P&DC                                       | 3,686        | -18%            | 347          | -10%            |
| Denver, CO P&DC                                       | 4,149        | -8%             | 174          | -55%            |
| Eugene, OR P&DC                                       | 4,401        | -2%             | 265          | -31%            |
| Indianapolis, IN Annex                                | 3,553        | -21%            | 253          | -34%            |
| Industry, CA P&DC                                     | 4,606        | 2%              | 280          | -27%            |
| Lancaster, PA P&DC                                    | 4,395        | -2%             | 264          | -31%            |
| Las Vegas, NV Annex                                   | 4,307        | -4%             | 634          | 65%             |
| Los Angeles, CA International Service Center (ISC) CA | 3,628        | -19%            | 391          | 2%              |
| Los Angeles, CA P&DC                                  | 3,994        | -11%            | 198          | -49%            |

<sup>15</sup> Most of the facilities listed have one SPSS machine with the exception of the Industry, CA P&DC (4), Indianapolis, IN Annex (2), Queens, NY P&DC (2), North Peninsula, CA DDC (2), and Stamford, CT P&DC (2).

| Facility <sup>15</sup>                                 | Throughput   | Percent to Goal | Productivity | Percent to Goal |
|--|--------------|-----------------|--------------|-----------------|
| <b>Goal</b>  | <b>4,500</b> |                 | <b>385</b>   |                 |
| Merrifield, VA P&DC                                    | 3,911        | -13%            | 219          | -43%            |
| Mid-Carolina, NC P&DC                                  | 3,925        | -13%            | 289          | -25%            |
| North Houston, TX P&DC                                 | 4,590        | 2%              | 294          | -24%            |
| North Peninsula, CA Delivery Distribution Center (DDC) | 4,803        | 7%              | 338          | -12%            |
| North TX P&DC  | 4,111        | -9%             | 355          | -8%             |
| Oakland, CA P&DC                                       | 4,359        | -3%             | 299          | -22%            |
| Queens, NY P&DC  | 4,044        | -10%            | 180          | -53%            |
| Raleigh, NC P&DC                                       | 3,905        | -13%            | 230          | -40%            |
| Richmond, VA P&DC                                      | 3,623        | -19%            | 275          | -29%            |
| Rochester, NY P&DC                                     | 4,218        | -6%             | 213          | -45%            |
| Royal Palm, FL P&DC                                    | 4,838        | 8%              | 264          | -31%            |
| Sacramento, CA P&DC                                    | 4,046        | -10%            | 374          | -3%             |
| St. Paul, MN P&DC                                      | 4,373        | -3%             | 452          | 17%             |
| San Bernardino, CA P&DC                                | 3,643        | -19%            | 300          | -22%            |
| San Jose, CA P&DC                                      | 4,801        | 7%              | 377          | -2%             |
| Santa Clarita, CA P&DC                                 | 4,430        | -2%             | 308          | -20%            |
| Seminole, FL P&DC                                      | 4,710        | 5%              | 350          | -9%             |
| Stamford, CT P&DC                                      | 4,629        | 3%              | 320          | -17%            |
| West Valley, AZ P&DC                                   | 4,395        | -2%             | 243          | -37%            |
| <b>National Average</b>                                | <b>4,231</b> | <b>-6%</b>      | <b>279</b>   | <b>-28%</b>     |

Source: MODS and OIG analysis.

As of FY 2020 through Q2, the Postal Service had 44 SPSS machines in use at 36 mail processing facilities. Twenty-seven (or about 61 percent) machines did not meet the throughput goal. On average, SPSS machines were 6 percent below the goal (or 267 packages processed per machine hour below the goal). Forty-two machines (or about 95 percent) did not meet the productivity goal. On average, SPSS machines were 25 percent below the goal (or 95 packages processed per employee workhour below the goal). See Table 2 for FY 2020 throughput and productivity performance for each facility.

**Table 2. FY 2020 Qs 1 and 2 SPSS Throughput and Productivity by Facility**

| Facility               | Throughput   | Percent to Goal | Productivity | Percent to Goal |
|------------------------|--------------|-----------------|--------------|-----------------|
| <b>Goal</b>            | <b>4,500</b> |                 | <b>385</b>   |                 |
| Akron, OH P&DC         | 4,937        | 10%             | 157          | -59%            |
| Atlanta, GA P&DC       | 4,289        | -5%             | 285          | -26%            |
| Baltimore, MD P&DC     | 3,639        | -19%            | 308          | -20%            |
| Buffalo, NY P&DC       | 4,449        | -1%             | 214          | -44%            |
| Charleston, SC P&DC    | 3,963        | -12%            | 263          | -32%            |
| Cincinnati, OH NDC     | 3,078        | -32%            | 273          | -29%            |
| Columbus, OH P&DC      | 3,925        | -13%            | 268          | -30%            |
| Dallas, TX P&DC        | 3,788        | -16%            | 324          | -16%            |
| Denver, CO P&DC        | 4,273        | -5%             | 210          | -45%            |
| Eugene, OR P&DC        | 4,198        | -7%             | 283          | -26%            |
| Indianapolis, IN Annex | 3,560        | -21%            | 341          | -11%            |
| Industry, CA P&DC      | 4,816        | 7%              | 282          | -27%            |
| Lancaster, PA P&DC     | 4,204        | -7%             | 304          | -21%            |
| Las Vegas, NV Annex    | 4,650        | 3%              | 552          | 43%             |
| Los Angeles, CA ISC    | 3,396        | -25%            | 252          | -35%            |
| Los Angeles, CA P&DC   | 4,186        | -7%             | 214          | -44%            |

| Facility                | Throughput   | Percent to Goal | Productivity | Percent to Goal |
|-------------------------|--------------|-----------------|--------------|-----------------|
| <b>Goal</b>             | <b>4,500</b> |                 | <b>385</b>   |                 |
| Merrifield, VA P&DC     | 4,084        | -9%             | 252          | -35%            |
| Mid Florida P&DC        | 5,534        | 23%             | 327          | -15%            |
| Mid-Carolina, NC P&DC   | 3,989        | -11%            | 254          | -34%            |
| North Houston, TX P&DC  | 4,318        | -4%             | 255          | -34%            |
| North Peninsula, CA DDC | 4,628        | 3%              | 362          | -6%             |
| North Texas P&DC        | 4,325        | -4%             | 437          | 14%             |
| Oakland, CA P&DC        | 4,402        | -2%             | 364          | -5%             |
| Queens, NY P&DC         | 3,869        | -14%            | 204          | -47%            |
| Raleigh, NC P&DC        | 3,753        | -17%            | 224          | -42%            |
| Richmond, VA P&DC       | 4,108        | -9%             | 262          | -32%            |
| Rochester, NY P&DC      | 4,222        | -6%             | 223          | -42%            |
| Royal Palm, FL P&DC     | 4,172        | -7%             | 238          | -38%            |
| Sacramento, CA P&DC     | 4,202        | -7%             | 363          | -6%             |
| Saint Paul, MN P&DC     | 4,335        | -4%             | 365          | -5%             |
| San Bernardino, CA P&DC | 3,739        | -17%            | 283          | -26%            |
| San Jose, CA P&DC       | 4,874        | 8%              | 356          | -8%             |
| Santa Clarita, CA P&DC  | 5,022        | 12%             | 217          | -44%            |
| Seminole, FL P&DC       | 4,651        | 3%              | 377          | -2%             |
| Stamford, CT P&DC       | 4,725        | 5%              | 316          | -18%            |

| Facility                | Throughput   | Percent to Goal | Productivity | Percent to Goal |
|-------------------------|--------------|-----------------|--------------|-----------------|
| <b>Goal</b>             | <b>4,500</b> |                 | <b>385</b>   |                 |
| West Valley, AZ P&DC    | 4,101        | -9%             | 231          | -40%            |
| <b>National Average</b> | <b>4,233</b> | <b>-6%</b>      | <b>290</b>   | <b>-25%</b>     |

Source: MODS and OIG analysis.

# Appendix C: Management's Comments

JOSHUA COLIN, PHD.  
VICE PRESIDENT  
PROCESSING AND MAINTENANCE OPERATIONS/A



July 20, 2020

LAZERICK C. POLAND  
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Draft Audit Report – Small Package Sorting System Performance  
(Project Number 20-052)

Thank you for providing the Postal Service with the opportunity to review and comment on the subject draft report.

Management agrees with the recommendations in the audit and will address each separately below.

**Recommendation #1:**

We recommend the Acting Vice President, Processing and Maintenance Operations, reiterate the operation user guide requiring supervisors to be present to initiate the timely start of Small Package Sorting System (SPSS) machine processing.

**Management Response/Action Plan:**

Management agrees with this recommendation. Processing Operations will reiterate the operation user guide requiring supervisors to be present to initiate the timely start of Small Package Sorting System machine processing.

**Target Implementation Date:**

September 30, 2020

**Responsible Official:**

Manager Processing Operations, Network Operations

**Recommendation #2:**

We recommend the Acting Vice President, Processing and Maintenance Operations, identify facilities with Small Package Sorting System machines

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202 268-3096

experiencing issues with packages sliding down the belt incline and take corrective action as appropriate.

**Management Response/Action Plan:**

There is already a process in place for SPSS facilities to report maintenance deficiencies impacting mail processing. Sites are required to report maintenance issues that cannot be resolved or are reoccurring in nature to the Maintenance Technical Support (MTSC) and to obtain equipment.

**Target Implementation Date:**

Currently Implemented

**Responsible Official:**

Director, Maintenance Operations

**Recommendation #3:**

We recommend the Acting Vice President, Processing and Maintenance Operations, provide a standard work instruction to facilities to use available mail induction stations based on mail volume and employee availability.

**Management Response/Action Plan:**

Management agrees with this recommendation. Processing and Maintenance operations will reiterate all standard work instructions and best practices with all SPSS Sites.

**Target Implementation Date:**

September 30, 2020

**Responsible Official:**

Manager Processing Operations, Network Operations

**Recommendation #4:**

We recommend the Acting Vice President, Processing and Maintenance Operations, provide standard work instructions to Small Package Sorting System (SPSS) facilities and employees and reiterate the importance of properly placing packages into SPSS machines.

**Management Response/Action Plan:**

Management agrees with this recommendation. Processing and Maintenance operations will reiterate all standard work instructions and best practices with all SPSS Sites.

**Target Implementation Date:**

September 30, 2020

**Responsible Official:**

Manager Processing Operations, Network Operations

**Recommendation #5:**

We recommend the Acting Vice President, Processing and Maintenance Operations, Reiterate the management operating data system guidance requiring management to monitor Small Package Sorting System (SPSS) processing productivity and ensure employees are correctly logged into the appropriate operation to accurately reflect SPSS productivity performance.

**Management Response/Action Plan:**

Management agrees with the recommendation. By establishing control in MODS workhours adjustment by field user after closeout period, we will ensure timeliness and consistency of data in the system.

**Target Implementation Date:**

September 30, 2020

**Responsible Official:**

Manager Processing Operations, Network Operations

**Recommendation #6:**

We recommend the Acting Vice President, Processing and Maintenance Operations, provide standard work instructions requiring supervisors conduct periodic meetings to provide ongoing feedback to employees operating the Small Package Sorting System machine and discuss opportunities for improvement.

**Management Response/Action Plan:**

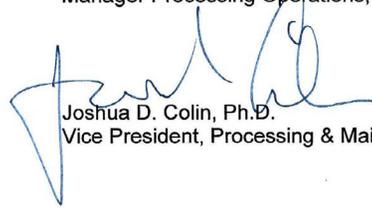
Management agrees with this recommendation. Processing and Maintenance operations will reiterate all standard work instructions and best practices with all SPSS Sites.

**Target Implementation Date:**

September 30, 2020

**Responsible Official:**

Manager Processing Operations, Network Operations



Joshua D. Colin, Ph.D.

Vice President, Processing & Maintenance Operations (Acting)

OFFICE OF  
**INSPECTOR  
GENERAL**  
UNITED STATES POSTAL SERVICE

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