Continuous Improvement of Mail Processing Operations

Audit Report
Report Number
NO-AR-16-012
September 29, 2016
Office of Inspector General
United States Postal Service

Highlights

Based on our observations at the three P&DCs that had low efficiency, machine throughput was as much as 22 percent below the national average. Machine jam rates were as much as 35 percent higher than the national average.

Background

The U.S. Postal Service has about 265 mail processing facilities nationwide. Mail processing is an integrated group of activities required to sort and distribute mail for dispatch and eventual delivery. The Postal Service defines mail processing efficiency as mailpieces sorted per workhour. One tool the Postal Service uses to compare mail processing operations performance to efficiency targets is the Mail Processing Variance (MPV) model, which calculates workhour performance using efficiency targets.

We evaluated mail processing efficiency by Labor Distribution Code (LDC), which identifies major work assignments for employees; and focused on efficiencies in the automated letters, flats, and packages; trays and bundles; and manual and other indirect mail operations.

In addition, we conducted site observations at North Texas, Trenton, and Sacramento Processing and Distribution Centers (P&DC) because the MPV model identified them as having high efficiency in specific processing operations. For example, high performing sites all had current, updated operating plans.

We also conducted site observations at the Boston, Raleigh, and Richmond P&DCs because the MPV model identified them as having low efficiency in specific processing operations.

We compared each plant's efficiency to the national average MPV efficiency level and identified workhour savings opportunities.

Our objective was to evaluate the efficiency of the Postal Service's fiscal year (FY) 2015 mail processing operations.

What The OIG Found

We identified mail processing efficiency opportunities that would save the Postal Service about $473.8 million annually by reducing more than 11.5 million workhours. For processing facilities below national average MPV efficiencies, there are opportunities to increase efficiency to the national average by reducing about 7 million workhours in the automated letters and flats, manual, and other indirect mail operations. For processing facilities below the national percent achievement to the MPV target for automated packages, trays, and bundles, there is an opportunity to increase efficiency to the national percent achievement by reducing about 4.5 million workhours. Based on our observations at the three P&DCs that had low efficiency, this occurred because machine throughput (the rate at which machines process mail) was as much as 22 percent below the national average. Machine jam rates were as much as 35 percent higher than the national average. In addition, mail was not adequately prepared; machine feed stations ran out of mail; and machine operators did not properly align the edges of the mail (jog) or remove mailpieces that were too thick, stiff, long, or tall (cull) for automated processing.

We also noted issues related to inadequate management and supervision, including failure to update operating plans, follow daily machine schedules (run plans) for mail processing, and...
ensure automated processing began promptly when employees started work. Finally, supervisors did not ensure employees clocked into the operation number where work was being performed.

The Postal Service’s projected overtime budget for FY 2015 was almost 8.9 million workhours, or about $332 million for the mail processing operations we reviewed. The actual overtime used was about 12.2 million hours, or $455.4 million. Reducing the excess 3.3 million workhours would have decreased costs by about $123 million.

The Postal Service reduced about 4,900 mail processing employees (or about 8.7 million mail processing workhours) through attrition in FY 2015.

The Postal Service had an opportunity to increase efficiency by reducing 11.5 million workhours from the LDCs we reviewed. As noted above, these workhour reduction opportunities could have come from the Postal Service meeting its projected overtime budget (3.3 million workhours) and not replacing employees reduced through attrition (8.7 million workhours).

**What The OIG Recommended**

We recommended the vice president, Network Operations, reduce 11.5 million workhours from projected FY 2016 levels where possible; and evaluate operational efficiency, adjust staffing levels/workhours to workload, and ensure overtime workhours do not exceed budgeted levels when planning for FY 2017 projected workhours.

We also recommended the vice president, Network Operations, direct district managers to ensure that plant managers make certain that operating plans are updated; daily machine schedules (run plans) for mail processing are followed; automated processing begins promptly after employees start work; and employees clock into the operation number where work is being performed and understand and use proper procedures for preparing, feeding, jogging, and culling mail prior to processing.
MEMORANDUM FOR:
ROBERT CINTRON
VICE PRESIDENT, NETWORK OPERATIONS

FROM:
Michael L. Thompson
Deputy Assistant Inspector General
for Mission Operations

SUBJECT:
Audit Report – Continuous Improvement of Mail Processing Operations (Report Number NO-AR-16-012)

This report presents the results of our audit of the Continuous Improvement of Mail Processing Operations (Project Number 16XG019NO000).

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

Attachment

cc: Corporate Audit and Response Management
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Findings

Our audit focused on efficiencies in the following mail processing operations: automated letters, flats, packages, trays, and bundles; manual; and other indirect.

Introduction

This report presents the results of our self-initiated audit of the Continuous Improvement of Mail Processing Operations (Project Number 16XG019NO000). Our objective was to evaluate the efficiency of the U.S. Postal Service's fiscal year (FY) 2015 mail processing operations. See Appendix A for additional information about this audit.

The Postal Service has about 265 mail processing facilities nationwide. Mail processing is an integrated group of activities required to sort and distribute mail for dispatch and eventual delivery. The Postal Service defines mail processing efficiency as the number of mailpieces sorted per workhour. One tool the Postal Service uses to compare mail processing operations performance to efficiency targets is the Mail Processing Variance (MPV) model. This model calculates workhour performance using efficiency targets.

We evaluated mail processing efficiency by Labor Distribution Code (LDC). Our audit focused on efficiencies in the following mail processing operations:

- Automated letters
- Automated flats
- Automated packages, trays, and bundles
- Manual
- Other indirect

We compared each plant's efficiency to the national average MPV efficiency level and identified workhour savings opportunities. In addition, we conducted site observations at the following processing and distribution centers (P&DC) because the MPV model identified them as having high efficiency in specific processing operations.

- North Texas – Automated letters
- Trenton – Automated flats
- Sacramento – Automated packages, trays, and bundles

We also conducted site observations at the following P&DCs because the MPV model identified them as having low efficiency in specific processing operations.

- Boston – Automated letters
- Raleigh – Automated flats
- Richmond – Automated packages, trays, and bundles

1 The Postal Service compiles workhour, workload, and other reports for management's use by functional category or LDC. An LDC is a 2-digit code that identifies major work assignments of employees.
We identified opportunities to improve mail processing efficiency. Specifically, there is an opportunity to reduce 11.5 million workhours for annual savings of about $473.8 million.\(^2\) We found the Postal Service had not adjusted workhours in response to declining mail volume or achieved all possible efficiencies in mail processing operations. As a result, more workhours were used to process the mail than necessary. We reviewed opportunity hours by LDC. Opportunity workhours are defined as actual hours worked minus projected workhours based on mail volume.

<table>
<thead>
<tr>
<th>LDC</th>
<th>LDC Description</th>
<th>Opportunity Workhours</th>
<th>Opportunity Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Automated letters</td>
<td>2,166,013</td>
<td>$89,019,756</td>
</tr>
<tr>
<td>12</td>
<td>Automated flats</td>
<td>656,656</td>
<td>29,505,847</td>
</tr>
<tr>
<td>13</td>
<td>Mechanized packages, trays, and bundles</td>
<td>4,483,225</td>
<td>183,704,463</td>
</tr>
<tr>
<td>14</td>
<td>Manual</td>
<td>2,714,924</td>
<td>106,365,594</td>
</tr>
<tr>
<td>18</td>
<td>Other indirect/related</td>
<td>1,527,720</td>
<td>65,222,518</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>11,548,539</td>
<td>$473,818,178</td>
</tr>
</tbody>
</table>


Based on our observations at the three P&DCs with low efficiency, this occurred because machine throughput (the rate at which machines process mail) was as much as 22 percent below the national average and machine jam rates were as much as 35 percent higher than national average. In addition, mail was not adequately prepared, machine feed stations ran out of mail, and machine operators did not properly align the edges of the mail (jog) or remove mailpieces that were too thick, stiff, long, or tall (cull) for automated processing. We also noted issues related to inadequate management and supervision, including failure to update operating plans, follow daily machine schedules (run plans) for mail processing, and ensure automated processing began promptly after employees started work. Finally, supervisors did not ensure employees clocked into the operation number where work was being performed.

During FY 2015, the Postal Service spent about $455.4 million for overtime in the mail processing operations we reviewed. Overtime workhours are paid at a premium rate, which is about 50 percent higher than the usual labor rate.

The Postal Service’s projected overtime budget for FY 2015 was almost 8.9 million workhours, or about $332 million for the mail processing operations we reviewed. Actual overtime used was about 12.2 million hours, or $455.4 million. Reducing the excess 3.3 million of overtime workhours would have decreased costs by about $123 million and decreased workhours for the mail processing operations in the LDCs we reviewed by about 2.9 percent.

In addition, the Postal Service reduced almost 4,900 mail processing employees (or about 8.7 million mail processing workhours) through attrition in FY 2015.

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\(^2\) In our New York Morgan Processing and Distribution Center Efficiency audit (Report Number NO-AR-16-008, dated May 4, 2016) we reported savings of about $8.6 million for FY 2015. We are deducting that amount from $473.8 million and will be reporting $465.2 million as monetary impact in our Semiannual Report to Congress.
Mail Processing Efficiency

We found that from FY 2014 to 2015, national mail processing efficiency declined in LDCs 11, 12, 13, and 14. During this same period, efficiency in LDC 18 improved. For example, in LDC 11 (Automated Distribution - Letters), efficiency declined by 276 mailpieces per workhour, or 3.5 percent (see Table 2).
Table 2. National Workload Productivity Mailpieces per Workhour

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>7,853</td>
<td>7,577</td>
<td>-276</td>
<td>-3.5%</td>
</tr>
<tr>
<td>12</td>
<td>2,455</td>
<td>2,343</td>
<td>-112</td>
<td>-4.6%</td>
</tr>
<tr>
<td>13</td>
<td>232</td>
<td>227</td>
<td>-5</td>
<td>-2.2%</td>
</tr>
<tr>
<td>14</td>
<td>606</td>
<td>556</td>
<td>-50</td>
<td>-2.2%</td>
</tr>
<tr>
<td>18</td>
<td>106</td>
<td>125</td>
<td>19</td>
<td>17.9%</td>
</tr>
</tbody>
</table>

Source: MPV model and OIG calculations.

In addition, we compared MPV model target productivities to actual productivities for FY 2015. We found that the Postal Service did not achieve its target productivities in the five LDCs we analyzed, with productivities ranging from 27.3 percent to 44.6 percent below their targets (see Table 3).

Table 3. National Workload Productivity FY 2015 Actual Compared to Target

<table>
<thead>
<tr>
<th>LDC</th>
<th>Target Productivity</th>
<th>Actual Productivity</th>
<th>Difference Actual to Target Productivity</th>
<th>Percent Difference Actual to Target Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>10,420</td>
<td>7,577</td>
<td>-2,843</td>
<td>-27.3%</td>
</tr>
<tr>
<td>12</td>
<td>3,727</td>
<td>2,343</td>
<td>-1,384</td>
<td>-37.1%</td>
</tr>
<tr>
<td>13</td>
<td>348</td>
<td>227</td>
<td>-121</td>
<td>-34.8%</td>
</tr>
<tr>
<td>14</td>
<td>1,004</td>
<td>556</td>
<td>-448</td>
<td>-44.6%</td>
</tr>
<tr>
<td>18</td>
<td>212</td>
<td>125</td>
<td>-87</td>
<td>-41.0%</td>
</tr>
</tbody>
</table>

Source: MPV model and OIG calculations.

Management and Supervision of Mail Processing Employees

We noted issues related to inadequate management and supervision, including failure to update operating plans, follow daily machine schedules (run plans) for mail processing, and ensure automated processing began promptly after employees started work. In addition, supervisors did not ensure employees clocked into the operation number where work was being performed; mail was not adequately prepared; machine feed stations ran out of mail; and machine operators did not properly align the edges of the mail (jog) or remove mailpieces that were too thick, stiff, long, or tall (cull) for automated processing.

Mail Processing Operating Plans

The three high performing sites we visited had current approved mail processing operating plans and the three low performing sites we visited did not have current approved mail processing operating plans (see Table 4).
Table 4. Mail Processing Operating Plan Status

<table>
<thead>
<tr>
<th>LDC</th>
<th>Site</th>
<th>MPV Performance Level</th>
<th>Current/Approved Operating Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>North Texas P&amp;DC</td>
<td>High</td>
<td>Yes</td>
</tr>
<tr>
<td>11</td>
<td>Boston P&amp;DC</td>
<td>Low</td>
<td>No</td>
</tr>
<tr>
<td>12</td>
<td>Trenton P&amp;DC</td>
<td>High</td>
<td>Yes</td>
</tr>
<tr>
<td>12</td>
<td>Raleigh P&amp;DC</td>
<td>Low</td>
<td>No</td>
</tr>
<tr>
<td>13</td>
<td>Sacramento P&amp;DC</td>
<td>High</td>
<td>Yes</td>
</tr>
<tr>
<td>13</td>
<td>Richmond P&amp;DC</td>
<td>Low</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Mail Processing Operating Plan System.

Operating plans are organized collections of operations, mail classes, automation, mechanization, average daily volumes, and target times which, in total, reflect the operational structure, strategy, processing goals, and customer commitments of a postal facility. Development of accurate operating plans is mandated by Network Operations at Postal Service Headquarters and is intended to aid facilities in scheduling, processing, and delivering its mail volume. Without current operating plans, management cannot determine proper staffing and scheduling to ensure all mail is processed timely.

Machine Run Plans

Daily schedules (run plans) for mail processing machines were not always available or followed. For example, the Boston P&DC only had about 51 percent of its run plans available to operations for their use in scheduling machine mail processing and maintenance times. We observed that not all supervisors were aware of run plans or used them as a decision-making tool. At the Raleigh P&DC, we observed that throughputs modeled on their run plan were higher than their actual throughput performance. Additionally, there were some mail processing sort plans that included operations not currently being run on the workroom floor.

Automated Processing

The Postal Service can maximize capacity by increasing machine throughput. For FY 2015, the Postal Service did not achieve established throughput goals on mail processing equipment. However, at the high performing sites we visited, operational throughput was higher than the average national operational throughput. At the low performing sites we visited, operational throughput was lower than the average national operational throughput (see Table 5).

The three low performing sites we visited did not have current approved mail processing operating plans.

We observed that not all supervisors were aware of run plans or used them as a decision-making tool.
### Table 5. Operational Throughput by Machine Type

<table>
<thead>
<tr>
<th>LDC</th>
<th>Site</th>
<th>Machine Type</th>
<th>Average National Operational Throughput</th>
<th>Operational Throughput</th>
<th>Operational Throughput / National Operational Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>North Texas P&amp;DC</td>
<td>Delivery Bar Code Sorter (DBCS)</td>
<td>23,854</td>
<td>25,190</td>
<td>106%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DBCS with Input/Output System (DIOSS)</td>
<td>19,150</td>
<td>22,372</td>
<td>117%</td>
</tr>
<tr>
<td>11</td>
<td>Boston P&amp;DC</td>
<td>DBCS</td>
<td>23,854</td>
<td>20,203</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DIOSS</td>
<td>19,150</td>
<td>14,945</td>
<td>78%</td>
</tr>
<tr>
<td>12</td>
<td>Trenton P&amp;DC</td>
<td>Automated Flat Sorting Machines (AFSM 100)</td>
<td>11,273</td>
<td>13,632</td>
<td>121%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flats Sequencing System (FSS)</td>
<td>16,972</td>
<td>18,872</td>
<td>111%</td>
</tr>
<tr>
<td>12</td>
<td>Raleigh P&amp;DC</td>
<td>AFSM 100</td>
<td>11,273</td>
<td>10,984</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FSS</td>
<td>16,972</td>
<td>16,209</td>
<td>96%</td>
</tr>
<tr>
<td>13</td>
<td>Sacramento P&amp;DC</td>
<td>Automated Parcel and Bundle Sorter (APBS)</td>
<td>3,874</td>
<td>4,162</td>
<td>107%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Automated Package Processing System (APPS)</td>
<td>5,830</td>
<td>6,846</td>
<td>117%</td>
</tr>
<tr>
<td>13</td>
<td>Richmond P&amp;DC</td>
<td>APBS</td>
<td>3,874</td>
<td>3,366</td>
<td>87%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>APPS</td>
<td>5,830</td>
<td>5,513</td>
<td>95%</td>
</tr>
</tbody>
</table>

Source: Electronic Maintenance Activity Reporting System and OIG analysis.

Lower throughput on mail processing machines increases the workhours needed to process the mail; and higher jam rates can lower throughput, damage mail, require reworking of mail, or cause missorts. We observed employees at the Boston P&DC not culling and jogging mail on DBCS and DIOSS machines.
Employees should start working in a timely manner once clocked into the correct operation. Initial set-up should take no longer than 10 minutes from the time the operator reports to the machine until it starts feeding mail. Additional time used before mail is being processed will result in lower productivity. For example, we observed workers at the Boston P&DC starting a DBCS an hour after their start time; and talking, looking at cell phones, and slowly labeling trays during machine set-up.

Supervisors must ensure that employees begin automated processing promptly after starting work, ensure mail is available at the start of the scheduled machine operating window to improve machine run times, and maintain continuous high throughput with constant mail flow to avoid machine starts and stops. The Postal Service can maximize capacity and achieve the throughput goals in support of the Delivering Results, Innovation, Value, and Efficiency (DRIVE) Optimize Network Operations initiative.³

Clock Ring Oversight

We found that employees at the Richmond P&DC were clocked into an automated processing operation during idle machine times and working manual operations without being recorded on those operations. As a result, the facility did not accurately report operational data used to evaluate productivity by operation. In addition, operational data integrity errors could result in erroneous decisions being made based on incorrect data. This issue occurred because operational supervisors did not ensure that employees clocked into the correct job function. Management must ensure employee clock rings are properly completed so labor costs can be accurately attributed and measured. Correcting and preventing clock ring issues provides reliable data to evaluate operational efficiency.

Mail Preparation

Mail was not always adequately prepared and staged at machines for automated processing at the facilities we visited. At the Raleigh P&DC we observed that mail was rarely staged at the Automated Flats Sorting Machines (AFSM 100) prior to automated processing. A well-run mail preparation operation that provides a steady flow of mail to machines is integral to an efficient and effective mail processing system and, therefore, must be considered a high priority management objective.

The culling,⁴ jogging,⁵ and availability of mail at the machine significantly affects throughput. Proper jogging, culling, and maintaining a full feeder ledge on machines can improve throughput. Machines should be set up with the required equipment and mail in place before they are scheduled to start processing mail, which should be staged in working containers near the operator for easy access. Ensuring mail is available and ready for processing at the start of the scheduled processing window can improve throughput and decrease workhours, thereby improving productivity.

Overtime Hours and Attrition

We identified opportunities to increase efficiency by reducing 11.5 million workhours from the LDCs we reviewed. As noted below, these workhour reduction opportunities could have come from the Postal Service meeting its projected overtime budget (3.3 million workhours) and not replacing employees reduced through attrition (8.7 million workhours).

³ The Optimize Network Platform Initiative is responsible for evaluating and right-sizing the mail processing infrastructure to increase operating efficiency, reduce costs, and provide reliable and consistent service.
⁴ To remove pieces that are too stiff, thick, long, or tall for machine processing.
⁵ To hit or shake a handful of mailpieces against a hard surface to align their edges.
The Postal Service’s projected overtime budget for FY 2015 was 7.9 percent of total workhours, equating to almost 8.9 million workhours, or about $332 million for the mail processing operations we reviewed. Actual overtime used was 10.8 percent of total workhours, equating to about 12.2 million hours, or $455.4 million in the mail processing operations we reviewed. Reducing the excess 3.3 million workhours would have decreased costs by about $123 million (see Table 6) and workhours for the mail processing operations in the LDCs we reviewed by about 2.9 percent (see Table 7).

Table 6: Comparison of FY 2015 Actual and Budgeted Overtime

<table>
<thead>
<tr>
<th>Actual Overtime Hours</th>
<th>Budgeted Overtime Hours</th>
<th>Difference</th>
<th>Actual Overtime Costs</th>
<th>Budgeted Overtime Costs</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>12,195,117</td>
<td>8,891,344</td>
<td>3,303,773</td>
<td>$455,448,226</td>
<td>$332,062,991</td>
<td>$123,385,235</td>
</tr>
</tbody>
</table>

Source: Labor Utilization Reporting System (LURS) and OIG analysis.

Table 7: Effect of Reducing FY 2015 Overtime Workhours

<table>
<thead>
<tr>
<th>Total Mail Processing Workhours for the LDCs Reviewed</th>
<th>Excess Overtime Workhours</th>
<th>Difference</th>
<th>Excess Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>112,548,663</td>
<td>3,303,773</td>
<td>109,244,890</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

Source: LURS and OIG analysis.

None of the P&DCs we visited stayed within the FY 2015 overtime budget of 7.9 percent of mail processing total workhours. However, the low efficiency plants exceeded the budget by 5.8 percent while the high efficiency plants only exceeded the budget by 3.4 percent. In addition, the Postal Service reduced almost 4,900 mail processing employees (or about 8.7 million mail processing workhours) through attrition in FY 2015.
We recommend the vice president, Network Operations:

1. Reduce 11.5 million workhours from projected fiscal year (FY) 2016 levels where possible and when planning for FY 2017 projected workhours by evaluating operational efficiency, adjusting staffing levels/workhours to workload, and ensuring overtime workhours do not exceed budgeted levels.

We also recommend the vice president, Network Operations, direct district managers to ensure that plant managers make certain that:

2. Operating plans are updated.

3. Daily machine schedules (run plans) for mail processing are followed.

4. Automated processing begins promptly after employees start work.

5. Employees clock into the operation number where work is being performed.

6. Employees understand and use proper procedures for preparing, feeding, jogging, and culling mail prior to processing.

Management’s Comments

Management agreed with the findings and recommendations 2 through 6, but only agreed in part with recommendation 1. Management also stated that they significantly disagreed with the amount of potential workhour savings.

Regarding recommendation 1, management stated that they constantly seek continuous improvement in mail processing operations to make them more efficient, move mail into automation, increase productivity, improve service, and reduce costs. They also agreed there are opportunities to improve mail processing productivity and efficiency; however, they disagreed that they could achieve savings of 11.5 million workhours in FY 2017. Management cited a downward trend for mail processing workhours from FY 2011 through 2014 that reversed in FYs 2015 and 2016, and stated that a consistent increase in package volume of 4 to 5 percent every year since 2012 was the cause for the reversal. Management’s target implementation date for achieving mail processing efficiency improvements is September 30, 2019.

Management stated that recommendation 2 is identical to recommendation 6 in our audit of Mail Processing and Transportation Operational Changes (Report Number NO-AR-16-009, dated September 2, 2016). Management also stated that they will direct all processing centers to update current operating plans housed in the mail processing operating plan system and set up a process to ensure compliance. The target implementation date is October 31, 2016.

Regarding recommendation 3, management stated that they will reinforce the requirement that run plans for all machine operations are reviewed and updated to support current mail processing operating plans at all processing plants. The target implementation date is November 30, 2016.
Regarding recommendation 4, management stated that they will reinforce the importance of promptly starting operations. They will issue a service talk for all managers and supervisors, Distribution Operations, to reinforce the requirement to ensure automated processing begins promptly after the huddle board review. The target implementation date is November 30, 2017.

Regarding recommendation 5, management stated that they will issue service talks for all managers and supervisors, Distribution Operations, reinforcing the requirement for employees to clock into the correct operation and emphasizing the impact of properly clocking into operations on productivity data. Management also stated that they will task supervisors with monitoring employee compliance. The target implementation date is November 30, 2017.

Regarding recommendation 6, management stated that training and standard operating procedures already include instructions on proper procedures for preparing, feeding, and culling mail prior to processing. However, they will develop and deliver service talks to employees regarding proper work methods for each type of equipment and the impact on machine performance and productivity. Management will establish a schedule for delivery of these service talks so they are periodically repeated. The target implementation date is November 30, 2016.

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

**Evaluation of Management’s Comments**

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

Regarding management’s disagreement with achieving workhours savings of 11.5 million in FY 2017, our analysis found the Postal Service had not adjusted workhours in response to declining mail volume or achieved all possible efficiencies in mail processing operations. As a result, the Postal Service used more workhours to process the mail than necessary; therefore, we believe that our analysis is reasonable.

Specifically, for processing facilities below national average MPV efficiencies, there are opportunities to increase efficiency to the national average by reducing about 7 million workhours in the automated letters and flats, manual, and other indirect mail operations. For processing facilities below the national percent achievement to the MPV target for automated packages, trays, and bundles, there is an opportunity to increase efficiency to the national percent achievement by reducing about 4.5 million workhours. These workhour reduction opportunities could come from the Postal Service meeting its projected overtime budget (3.3 million workhours) and not replacing employees reduced through attrition (8.7 million workhours).

Regarding management’s comment that recommendation 2 is the same as recommendation 6 from the *Mail Processing and Transportation Operational Changes* audit (Report Number NO-AR-16-009, dated September 2, 2016), recommendation 6 focused on management requiring updated operating plans for the January 2015 operating window change. Recommendation 2 in this report is to ensure management requires operating plans be continually updated, as appropriate.

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

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Appendix A: Additional Information

**Background**

The Postal Service has about 265 mail processing facilities nationwide. Mail processing is an integrated group of activities required to sort and distribute mail for dispatch and eventual delivery. The Postal Service defines mail processing efficiency as the number of mailpieces sorted per workhour. One tool the Postal Service uses to compare mail processing operations performance to efficiency targets is the MPV model, which calculates workhour performance using efficiency targets.

In addition, the Postal Service compiles workhour, labor use, and other financial reports for management use by functional category, or LDC. For the LDCs we reviewed, see Table 8.

**Table 8: Labor Distribution Codes and Descriptions**

<table>
<thead>
<tr>
<th>LDC</th>
<th>LDC Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Automated letters</td>
</tr>
<tr>
<td>12</td>
<td>Automated flats</td>
</tr>
<tr>
<td>13</td>
<td>Mechanized packages, trays, and bundles</td>
</tr>
<tr>
<td>14</td>
<td>Manual</td>
</tr>
<tr>
<td>18</td>
<td>Other indirect/related</td>
</tr>
</tbody>
</table>


For the mail processing operations we reviewed for FY 2015, the largest percentage of workhours used was 35 percent and the largest volume of mail was 292.1 billion pieces, both in LDC 11.

**Objective, Scope, and Methodology**

Our objective was to evaluate the efficiency of the Postal Service’s FY 2015 mail processing operations. To accomplish our objective we:

- Evaluated FY 2015 efficiency of processing and distribution centers, processing and distribution facilities, annexes, and customer service facilities with mail processing volumes and workhours. The universe consisted of about 265 mail processing facilities nationwide with a total workload volume of about 327 billion mailpieces in the LDCs we evaluated. We included LDCs 11, 12, 13, 14, and 18 in our analysis.

- Conducted site observations at the following P&DCs because the MPV model identified them as having high efficiency in specific processing operations:
  - North Texas – Automated letters
  - Trenton – Automated flats
  - Sacramento – Automated packages, trays, and bundles
Conducted site observations and interviews at the following P&DCs because the MPV model identified them as having low efficiency in specific processing operations:

- Boston – Automated letters
- Raleigh – Automated flats
- Richmond – Automated packages, trays, and bundles

Analyzed operations by LDC to determine opportunity workhours:

- For all plants with LDC 11 and LDC 12 processing, we compared plant MPV productivity to national average MPV productivity. If a plant was below national average MPV productivity, there was an opportunity for the plant to increase its efficiency in these LDCs through workhour reductions.

- For all plants with LDC 13 processing, we noted that the productivity is affected by the facility's equipment set. Therefore, we accounted for this uniqueness by comparing each facility's percent achievement to MPV target to the national percent achievement to MPV target. If a plant was below the national percent achievement to MPV target, there was an opportunity for the plant to increase its efficiency in this LDC through workhour reductions.

- For all plants with LDC 14 and 18 processing, we compared plant MPV productivity to national average MPV productivity. If a plant was below the national average MPV productivity, there was an opportunity for the plant to increase its efficiency in these LDCs through workhour reductions.

Analyzed FY 2015 overtime budget and costs in the LDCs we reviewed.

Analyzed FY 2015 mail processing employee attrition.

We conducted this performance audit from March through September 2016, 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 September 1, 2016, and included their comments where appropriate.

We assessed the reliability of computer-processed data by verifying the accuracy of the data by confirming our analysis and results with Postal Service managers and other data sources. In addition, we relied on prior OIG audits of Postal Service systems. We determined that the data were sufficiently reliable for the purposes of this report.
# Prior Audit Coverage

## Efficiency Review of the New York Morgan Processing and Distribution Center

**Report Number:** NO-AR-16-008  
**Final Report Date:** 5/4/2016  
**Monetary Impact (in millions):** $93.1

**Report Results:** Our report identified opportunities to improve mail processing efficiency at the NY Morgan P&DC. Specifically, there is an opportunity to reduce 385,365 workhours over the next 5 years, for a savings of about $15.2 million annually. We recommended management evaluate operational efficiency and adjust workhours to workload, ensure consistent use of the Run Plan Generator to schedule mail processing machine operations, ensure employees understand and use proper procedures for jogging and culling the mail prior to processing, ensure managers update Management Operating Data System (MODS) data timely and supervise employee operation movements, ensure Human Resources makes appropriate base operations assignments for new employees, and complete annual MODS reviews as required by Handbook M-32. Management agreed with the recommendations.

## Efficiency Review of the San Francisco, CA, Processing and Distribution Center

**Report Number:** NO-AR-15-001  
**Final Report Date:** 11/19/2014  
**Monetary Impact (in millions):** $43.3

**Report Results:** Our report determined that in FY 2013, the San Francisco P&DC processed 259 fewer mailpieces per workhour than comparable P&DCs. This occurred because management did not adjust workhours to workload, analyze operational efficiency through benchmarking, adequately supervise employees, or fully utilize automation equipment. The OIG identified specific mail processing functional areas that could be more efficient, resulting in 486,781 fewer workhours and an annual cost avoidance of over $21 million. We also recommended management periodically evaluate operational efficiency and staffing to determine whether additional workhour adjustments are needed based on workload and analyze operational efficiency by benchmarking operations against those of similarly sized plants. Additionally, we recommended management maximize the use of automated equipment and improve supervision of employees. Management agreed with most of our recommendations.

## Efficiency Review of the Cincinnati, OH Network Distribution Center – Operations and Transportation

**Report Number:** NO-AR-14-011  
**Final Report Date:** 9/11/2014  
**Monetary Impact (in millions):** $5.0

**Report Results:** Our report identified Opportunities exist to improve the efficiency of some operations at the Cincinnati NDC by better managing workhours and processing more mail pieces per hour. The Cincinnati NDC had an average piece per hour productivity of 112 for its distribution operations, while comparable NDCs had an average piece per hour productivity of 186. In addition, the Cincinnati NDC used a higher percentage of workhours for other operations than comparable NDCs. Officials did not use best practices to benchmark efficiency against other NDCs; did not always follow NDC guidelines for properly sorting, labeling, and consolidating mail; and did not fully analyze existing transportation as required. Management agreed with two recommendations, partially agreed with one recommendation, and disagreed with two recommendations.

## Assessment of Overall Plant Efficiency 2013

**Report Number:** NO-MA-13-007  
**Final Report Date:** 9/26/2013  
**Monetary Impact (in millions):** $628.7

**Report Results:** Our report determined that the Postal Service had not yet fully adjusted workhours in response to declining mail volume or achieved all possible efficiencies in mail processing operations or evaluated operational efficiency by assessing performance based on median productivity for each plant grouping. Therefore, the Postal Service used over 14 million workhours more than necessary to process mail volume. We recommended management reduce 14,364,398 workhours by no later than FY 2018 and periodically evaluate operating efficiency by assessing performance against the median productivity level for each plant grouping. Management agreed with the recommendations.
September 23, 2016

LORI LAU DILLARD
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Draft Audit Report – Continuous Improvement of Mail Processing Operations (Report Number NO-AR-16-Draft)

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

The OIG conducted a study of FY 2015 mail processing workhours. They reviewed overall performance and conducted onsite visits to six processing and distribution centers. Three of the plants, North Texas, Trenton NJ, and Sacramento CA were identified through the MPV model as having high efficiency in specific mail processing operations. The other three plants, Boston MA, Raleigh NC, and Richmond VA were identified as having low efficiency in specific mail processing operations. The OIG used observations at these plants to make five (5) specific recommendations to take in regard to mail processing. The OIG used the national data on mail processing performance to generate calculations leading to a recommendation to reduce the FY 2017 budget by 11.5 million workhours, which would result in a savings of $473.8 million.

Management agrees with recommendations 2 – 6 which are for specific actions in mail processing. Management disagrees with recommendation 1 that there is opportunity to save 11.5 million workhours in FY 2017. While we agree there is opportunity to improve mail processing efficiency that will result in workhours savings, we have significant disagreement of the magnitude of savings that it is possible to achieve.

The OIG has recommended the Vice-President, Network Operations take the actions listed below.
Recommendation 1:
Reduce 11.5 million workhours from projected fiscal year 2016 levels where possible and when planning for fiscal year 2017 projected workhours by evaluating operational efficiency, adjusting staffing levels/workhours to workload, and ensuring overtime workhours do not exceed budgeted levels.

Management Response/Action Plan:
The Postal Service agrees in part with this recommendation. Management constantly seeks continuous improvement in mail processing operations to make them more efficient, move mail into automation, increase productivity, improve service, and reduce costs. We develop annual targets as part of its budget cycle to allocate appropriate cost reduction goals to the Field based on identified efficiency opportunities. There is no doubt opportunity for improvement in mail processing productivity and efficiency.

We disagree that we could achieve 11.5 million in workhour savings in FY 2017. The mail processing workhour trend is presented in the table below.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total F1 Workhours</th>
<th>Hour Variance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>215,401,392</td>
<td>-5,117,948</td>
<td>-2.43%</td>
</tr>
<tr>
<td>2012</td>
<td>210,283,444</td>
<td>-6,478,768</td>
<td>-3.18%</td>
</tr>
<tr>
<td>2013</td>
<td>203,804,676</td>
<td>-6,432,762</td>
<td>-2.33%</td>
</tr>
<tr>
<td>2014</td>
<td>199,171,914</td>
<td>2,736,767</td>
<td>1.36%</td>
</tr>
<tr>
<td>2015</td>
<td>201,908,681</td>
<td>2,272,489</td>
<td>1.11%</td>
</tr>
<tr>
<td>2016*</td>
<td>204,181,170</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Total F1 Hours for 2016 includes projected workhours for weeks 49 – 53 based on SPLY performance.

The Postal Service was on a downward trend for mail processing workhours from 2011 through 2014. During this period we achieved a maximum year to year workhour reduction of 6.5 million workhours. However, the trend has reversed for the past two years, increasing by 2.7 and 2.3 million workhours. The major factor that impacts this trend is the increase in package volume which is more labor intensive. Package network volume has increased 4% to 8% consistently every year since 2012.

Target Implementation Date:
End of FY 2019

Responsible Managers:
Manager, Processing Operations
We also recommend the vice president, Network Operations, direct district managers to ensure that plant managers make certain that:

**Recommendation 2:**
Operating plans are updated.

**Management Response/Action Plan:**
This recommendation is considered the same as recommendation 6 in the Mail Processing and Transportation Operational Changes audit (Report Number NO-AR-16-DRAFT). Our response is the same as for that audit. Management agrees with this recommendation. Management already has directed all processing centers to update their current operating plans housed in the Mail Processing Operating Plan System (MPOPS) and will set up a process to ensure compliance.

**Target Implementation Date:**
October 2016

**Responsible Managers:**
Manager, Processing Operations

**Recommendation 3:**
Daily machine schedules (run plans) for mail processing are followed.

**Management Response/Action Plan:**
Management agrees with this recommendation. Management will reinforce that run plans for all machine operations are reviewed and updated to support current mail processing operating plans at all processing plans.

**Target Implementation Date:**
November 2016

**Responsible Managers:**
Manager, Processing Operations

**Recommendation 4:**
Automated processing begins promptly after employees start work.

**Management Response/Action Plan:**
Management agrees with this recommendation. Part of Lean Management is to do huddle board review at the beginning of the tour. This is a quick touch point to discuss performance and make announcements. Management will reinforce the importance of promptly starting operations. Management will issue a service talk for all Managers and Supervisors, Distribution Operations reinforcing the
requirement to ensure employees begin automated processing promptly after huddle board review. Supervisors will be tasked with monitoring employee adherence to this requirement.

**Target Implementation Date:**
November 2017

**Responsible Managers:**
Manager, Processing Operations

**Recommendation 5:**
Employees clock into the operation number where work is being performed.

**Management Response/Action Plan:**
Management agrees with this recommendation. Management will issue a service talk for all Managers and Supervisors, Distribution Operations reinforcing the requirement for employees to clock on to the correct MODS operation. The need for accurate MODS data and the many uses will be reinforced. Supervisors will be tasked with monitoring employee adherence to this requirement. A service talk will be issued for delivery to all employees emphasizing the impact of proper clock rings to productivity data. This will be emphasized as part of the engagement process, encouraging employees to take ownership of their job performance, providing an understanding of how their correct clock rings affect data used locally at the plant as well as nationally.

**Target Implementation Date:**
November 2017

**Responsible Managers:**
Manager, Processing Operations

**Recommendation 6:**
Employees understand and use proper procedures for preparing, feeding, jogging, and culling mail prior to processing.

**Management Response/Action Plan:**
Management agrees with this recommendation. Training and Standard Operating Procedures (SOPs) already include instruction on the proper procedures for preparing, feeding, jogging, and culling mail prior to processing. Service talks will be developed and delivered to employees for each type of equipment (letter, flat, package / bundle) on proper work methods, and their impact on machine performance and productivity. This will be emphasized as part of the engagement process, encouraging employees to take ownership of their job performance, providing an understanding of how their actions in properly
preparing and feeding the mail impacts machine performance and productivity. A schedule for delivery of the service talks will be established so they are periodically repeated rather than a one-time event.

**Target Implementation Date:**
November 2016

**Responsible Managers:**
Manager, Processing Operations

Robert Cintron
Vice President, Network Operations

cc: Corporate Audit Response Management
Contact us via our Hotline and FOIA forms.
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1735 North Lynn Street
Arlington, VA 22209-2020
(703) 248-2100