OFFICE OF
INSPECTOR
GENERAL
UNITED STATES POSTAL SERVICE

Assessment of Overall Plant Efficiency 2013

Management Advisory

September 26, 2013

Report Number NO-MA-13-007

OFFICE OF INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

HIGHLIGHTS

September 26, 2013

Assessment of Overall Plant Efficiency 2013

Report Number NO-MA-13-007

BACKGROUND:

In a prior review, we reported on fiscal year (FY) 2011 plant efficiency and recommended the U.S. Postal Service reduce more than 14 million workhours. The goal of the 2011 review was to report on the Postal Service's efforts to 'raise the bar' on productivity levels for those plants that were the least productive in the network nationwide. We took a similar approach in this review.

Our objectives were to follow up on the Postal Service's progress in reducing workhours, based on recommendations made in our prior report, and to assess the efficiency of the processing and distribution network for FY 2012.

WHAT THE OIG FOUND:

The Postal Service made substantial progress by reducing workhours in the network from the previous year. Plants that were the least productive reduced more than 3.4 million workhours, achieving 23.9 percent of the recommended workhour savings.

The Postal Service made these workhour reductions while increasing service scores from FYs 2011 to 2012. In addition, the Postal Service reduced overtime at plants by more than 13 percent compared to the prior year.

In FY 2012, productivity in all plants decreased by slightly more than 1.6 percent over the prior fiscal year. Part of the decrease in productivity was due to the plants processing more packages in FY 2012, as a percentage of total mail volume. Processing packages decreases overall productivity because it was more labor intensive to sort packages than to sort other types of mail.

We found the Postal Service had not yet fully adjusted workhours in response to declining mail volume or achieved all possible efficiencies in mail processing operations. Also, management had not 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.

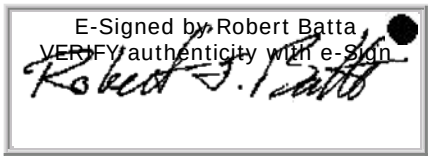
WHAT THE OIG RECOMMENDED:

We recommended the vice president, Network Operations, reduce 14,364,398 workhours with an annual associated economic impact of $628,670,104. These workhour reductions are to be completed no later than FY 2018. We also recommended that management periodically evaluate operating efficiency by assessing performance against the median productivity level for each plant grouping.

Link to review the entire report

September 26, 2013

MEMORANDUM FOR: DAVID E. WILLIAMS, JR.
VICE PRESIDENT, NETWORK OPERATIONS



FROM: Robert J. Batta
Deputy Assistant Inspector General
for Mission Operations

SUBJECT: Management Advisory – Assessment of Overall Plant Efficiency 2013
(Report Number NO-MA-13-007)

This report presents a follow up on the U.S. Postal Service's progress in reducing workhours based on the workhour recommendation made in a prior report, as well as the results of our assessment of the overall efficiency of the processing and distribution network for fiscal year 2012 (Project Number 13XG029NO000).

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

Attachment

cc: Corporate Audit and Response Management

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Introduction

This report presents a follow up on the U.S. Postal Service's progress in reducing workhours based on recommendations made in our prior report[1] and our assessment of the overall efficiency of the processing and distribution network for fiscal year (FY) 2012 (Project Number 13XG029NO000).

In FY 2012, we reported on efficiency levels and mail volume at processing and distribution centers (P&DCs) and processing and distribution facilities (P&DFs) and recommended the Postal Service reduce more than 14 million workhours by FY 2014. The goal of the previous effort was to report on the Postal Service's efforts to 'raise the bar' on productivity levels for those plants that were the least productive in the network nationwide. We took a similar approach in this report.

The Postal Service faces significant financial challenges, ending FY 2012 with a net loss of $15.9 billion and reaching its statutory borrowing limit of $15 billion. Without the expenses associated with the Postal Service Retiree Health Benefits Fund (PSRHBF), the agency would have ended FY 2012 with a net loss of $4.8 billion.[2] In addition, the Postal Service ended Quarters (Q)1 and 2, FY 2013, with a combined net loss of $3.1 billion, $2.8 billion of which were expenses associated with the PSRHBF. Without the PSRHBF expenses, the combined loss would have been about $300 million.

Conclusion

The Postal Service made substantial progress by reducing workhours in the network from the previous year. Plants that were the least productive in FY 2011 reduced more than 3.4 million workhours, achieving 23.9 percent of the recommended workhour savings.

The Postal Service made these workhour reductions while achieving increases in service scores from FYs 2011 to 2012. See Appendix A for our detailed analysis of this topic. In addition, we found the Postal Service reduced overtime at the plants by over 13 percent compared to FY 2011.

However, the Postal Service was slightly less efficient in FY 2012 than it was in FY 2011. For example, first-handling piece (FHP)[3] productivity[4] for all plants decreased by 1.6 percent over the prior fiscal year. We found the amount of package mail, as a percentage of total volume, increased from 1.9 percent in FY 2011 to 2.2 percent in FY 2012. This contributed to the decline in productivity from FYs 2011 to 2012, as it is

[1] *Assessment of Overall Plant Efficiency 2012* (Report Number NO-MA-12-001, dated April 27, 2012).
[2] Due to passage of Public Law 112-33, which changed the due date of the scheduled PSRHBF prefunding payment of $5.5 billion from September 30, 2011, to September 30, 2012, PSRHBF expenses were zero in 2011. As a result, total PSRHBF expenses in 2012, including the previously scheduled prefunding payment of $5.6 billion due by September 30, 2012, were $11.1 billion.
[3] A letter, flat or parcel that receives its initial distribution at a Postal Service facility. FHP records mail volume at the operation where it receives its first distribution handling.
[4] We calculated FHP productivity by dividing FHP volume by Function 1 mail processing workhours.

more labor intensive to sort packages than it is to sort other types of mail. See Appendix A for additional information.

We found 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. Also, management has not evaluated operational efficiency by assessing performance based on median productivity for each plant grouping.

The Postal Service could improve operational efficiency by reducing more than 14.3 million workhours. This would allow the Postal Service to achieve at least median productivity levels in the network and avoid costs of about $628 million. See Appendix C for a detailed explanation of this cost avoidance.

Efficiency of Operations

Further opportunities exist for the Postal Service to reduce mail processing workhours by improving efficiency. For example, if the 130 plants with below-median productivity levels in FY 2012 achieved just the median productivity level for each respective plant group,[5] the Postal Service could realize workhour savings of more than 14.3 million. See Appendix A for our detailed analysis of this topic.

Workhour Reductions and Service

The Postal Service achieved workhour reductions in FY 2012. For instance, from FYs 2011 to 2012, management used 5 million fewer workhours in mail processing.[6] Plants that had below-median productivity levels in FY 2011 accounted for 3.4 million reduced workhours and achieved 23.9 percent of the recommended workhour savings.

The Postal Service reduced workhours in FY 2012, while increasing service scores in the External First-Class (EXFC) categories of overnight, 2-day, and 3-day service. For example, EXFC service scores for overnight, 2-day, and 3-day service in FY 2011 were 96.28, 93.49 and 91.18, respectively, compared to 96.59, 94.96 and 92.36 in FY 2012. In addition, the Postal Service improved its Customer Experience Measurement (CEM) scores in the residential and business categories in all quarters from FYs 2011 to 2012. For example, in Q1, FY 2012, the residential CEM score was 88.6 percent, an increase of 2.0 percent from the prior fiscal year. See Appendix A for our detailed analysis of these topics**.**

[5] We divided the facilities that process mail into seven groups ranked according to FHP mail volume in FY 2010 (see Appendix A for more information).
[6] These hours are recorded in a category referred to as Function 1. Total Function 1 hours include network distribution centers (NDCs), international service centers (ISCs), logistics and distribution centers (L&DCs), Priority hubs, P&DCs, and P&DFs.

Economic Conditions

The Postal Service faces the challenge of making additional workhour reductions while continuing to deal with declining mail volume and a deteriorating financial condition. The Postal Service ended FY 2012 with a net loss of $15.9 billion and reached its statutory borrowing limit of $15 billion. Without the expenses associated with the PSRHBF, the agency would have ended FY 2012 with a net loss of $4.8 billion. In addition, the Postal Service experienced an overall volume decrease of more than 8 billion mailpieces from FYs 2011 to 2012, a decrease of 5 percent.[7] Further, the agency ended Qs1 and 2, FY 2013 with a combined net loss of $3.1 billion, $2.8 billion of which were expenses associated with the PSRHBF. Without the PSRHBF expenses, the combined loss would have been about $300 million. See Appendix A for our detailed analysis of this topic.

Plant Consolidations

The Postal Service reduced the size of the mail processing network from FYs 2011 to 2012. In FY 2011, the Postal Service completed 48 full and partial plant consolidations. Six of the seven plant groups experienced a rise in productivity in the plants gaining mail volume from consolidations. This indicated the plant consolidation strategy has been generally successful. See Appendix A for our detailed analysis of this topic.

Potential Sources of Workhour Reductions

We identified six major areas where the Postal Service could realize workhour savings:

- Overtime.
- Stand-By Time.
- Automated and Mechanized Equipment.
- Manual Operations.
- Allied Operations.
- Indirect/Related Operations.

Reduction in Overtime

Management decreased overtime at all plants by over 13 percent in FY 2012, compared to FY 2011; however, further opportunities exist to reduce overtime. In FY 2012, the Postal Service generally used a higher percentage of overtime workhours at plants with below-median productivity levels than in those with above-median productivity levels. If plants below the median achieve the average overtime percentage of the above-median plants, the Postal Service would realize savings of more than 1.2 million overtime workhours. See Appendix A for our detailed analysis of this topic.

[7] Based on the Postal Service's annual report and Form 10-K for FY 2012.

Reduction in Stand-By Time

Plants operating at below-median FHP productivity levels generally used a higher amount of mail processing stand-by time.[8] This indicates that management might not be properly scheduling and staffing employees to match workload.

As an example, Group 1 plants[9] with above-median FHP productivity levels used .08 percent of workhours in stand-by time operations and Group 1 plants below the median used .17 percent of workhours in stand-by time operations. If Group 1 plants below the median achieve the average stand-by time percentage of the above-median plants, the Postal Service would realize savings of more than 55,000 workhours. Further, if all plant groups below the median achieve the average stand-by time percentage of the above-median plants, the Postal Service could save more than 129,000 workhours. See Appendix A for our detailed analysis of this topic.

Furthermore, we identified potential sources of workhour reductions by Labor Distribution Code (LDC). These sources are discussed in Appendix B.

Automated and Mechanized Equipment

Plants that operated below-median FHP productivity generally had lower productivity in automated and mechanized operations.[10] If all plants with below-median FHP productivity levels increased the number of mailpieces handled per hour by operation to the average of the plants with above-median FHP productivity, the Postal Service could save more than 2.7 million workhours in automated operations and more than 753,000 workhours in mechanized operations. In addition, plants with below-median productivity levels generally had higher jams per 10,000 pieces on delivery barcode sorters (DBCS) and the automated flats sorting machine (AFSM) 100. Further, plants with below-median productivity levels generally had higher reject rates on the AFSM 100. This indicates that procedures for jogging and edging the mail may need improvement. See Appendix B for our detailed analysis of this topic.

Manual Operations

Opportunities to improve efficiency in manual operations were twofold. First, plants with productivity levels lower than the median also had lower productivity in manual operations. The Postal Service could save more than 2.7 million workhours if plants with below-median productivity levels increased the mailpieces handled per hour to the average of the plants with above-median FHP productivity levels. See Appendix B for

[8] Stand-by time is tracked through operation 340. It is intended for short-term use in response to situations that are not likely to continue. Institutional stand-by time is tracked through operation 603, and is used for employees placed on stand-by under provisions in national labor agreements. Mail processing stand-by time is the total hours in these two operation numbers.

[9] We developed seven plant groups based on FHP volume. The plants with the highest volume are designated as Group 1.

[10] These operations include automated letter operations and the distribution of flat mail on automated and mechanized equipment.

our detailed analysis of this topic. Second, the Postal Service did not take full advantage of automated and mechanized equipment and worked an excessive amount of mail manually. The Postal Service's manual sort target is only 2.5 percent of the total letter volume and 6 percent of the total flat volume. The Postal Service could save nearly 1.4 million workhours by using automation to sort letter and flat mail instead of manually sorting it. See Appendix A for our detailed analysis of this topic.

Allied Operations

Plants with below-median productivity levels generally used a larger percentage of workhours in allied operations[11] (called LDC 17) than plants with above-median productivity levels. Allied operations represented the largest percentage (36 percent) of workhour usage in mail processing operations in FY 2012. If plants below the median achieve the average percentage of workhours used in allied operations of the above-median plants, the Postal Service would realize savings of more than 3.3 million workhours. This represents the greatest opportunity to improve efficiency and achieve workhour reductions. See Appendix B for our detailed analysis of this topic.

Indirect/Related Operations

Plants with below-median productivity levels generally used a larger percentage of workhours in indirect/related operations[12] (called LDC 18) than plants with above-median productivity levels. Indirect/related operations represented 6.9 percent of workhour usage in mail processing operations in FY 2012. If plants below the median achieve the average percentage of workhours used in indirect/related operations of the above-median plants, the Postal Service would realize savings of more than 1 million workhours. See Appendix B for our detailed analysis of this topic.

In addition, as of January 2013, we found that 13,877 employees at plants with below-median productivity levels were eligible to retire. This represents a potential annual reduction of more than 24 million workhours if these employees retired. See Appendix A for additional information.

The Postal Service addressed operational efficiency by reducing workhours to better align with budgeted workhours. It reduced FY 2012 mail processing workhours by 2.3 percent from FY 2011 levels. However, we found the Postal Service had not yet fully adjusted workhours in response to declining mail volume or achieved all possible efficiencies in mail processing operations. Also, management had not evaluated operational efficiency by assessing performance based on median productivity for each plant grouping.

[11] These operations are recorded in LDC 17 and include mail preparation, presort operations, traying, sleeving, opening, pouching, and platform operations.
[12] These operations are recorded in LDC 18 and include rewrap of damaged mail, Express Mail processing, empty equipment processing, office work and recordkeeping, Registered Mail processing, and union steward time.

Recommendations

We recommend the vice president, Network Operations:

1. Reduce 14,364,398 workhours with an annual associated economic impact of $628,670,104. These workhour reductions are to be completed no later than FY 2018.

2. Periodically evaluate operating efficiency by assessing performance against the median productivity level for each plant grouping.

Management's Comments

Management agreed with the recommendations and economic impact in the report. Management stated they have made substantial progress in reducing mail processing workhours in the last 5 years. Regarding recommendation 1, management agreed to improve operational efficiency and reduce 14,364,398 workhours by September 2018. Regarding recommendation 2, management stated that productivity targets are established and will be reevaluated periodically. See Appendix D for management's comments, in their entirety.

Evaluation of Management's Comments

The U.S. Postal Service Office of Inspector General (OIG) considers management's comments responsive to the recommendations and corrective actions should resolve the issues indentified in the report.

The OIG considers recommendation 1 significant, and therefore requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective action is completed. This recommendation should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendation can be closed.

Appendix A: Additional Information

Background

Mail processing is an integrated group of activities[13] required to sort and distribute mail for dispatch and eventual delivery. Post offices, stations, and branches send outgoing mail to P&DCs and P&DFs for processing and dispatch for a designated service area. P&DCs report directly to area offices on mail processing matters. They also provide instructions on preparing collection mail, dispatch schedules, and sort plan requirements to associate offices and mailers.

The Postal Service compiles workhour, labor use, and other financial reports for management use by functional category or LDC.[14] For example, LDC 11 records workhours in automated letter operations, LDC 12 records workhours in distribution of flat mail on automated and mechanized equipment and LDC 14 records manual sorting of letters and flats. The Postal Service uses LDC 17 to record hours by employees involved in allied operations or mail processing operations other than distribution, and it uses LDC 18 to record indirect/related workhours.

The largest percentage of workhour usage in mail processing operations in FY 2012 was 36.4 percent in LDC 17, and the largest percentage of FHP volume in FY 2012 was 85.2 percent in LDC 11.

For our prior report,[15] and for the assessment of overall efficiency of the processing and distribution network for FY 2012, we developed seven plant groups based on FHP mail volume in FY 2010. Table 1 shows the mail volume breakdowns in each group and Figure 1 shows the percentage of mail processing facilities in these groups.

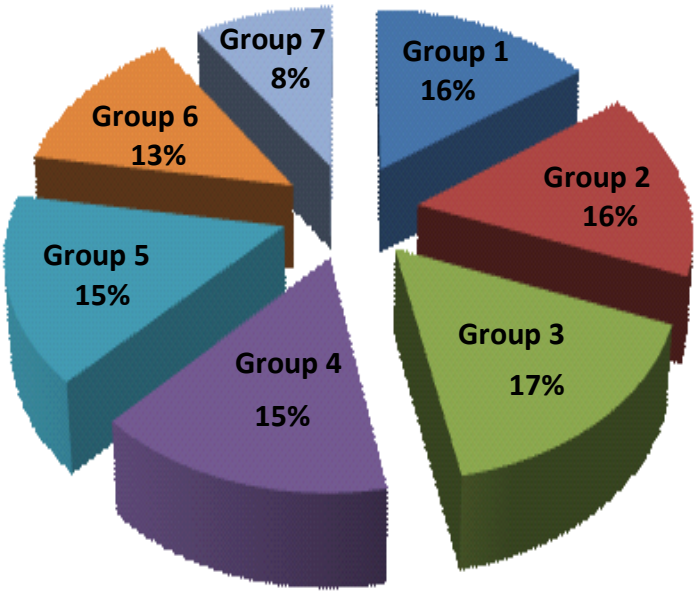
[13] Culling, edging, stacking, facing, canceling, sorting, tying, pouching, and bundling.
[14] Mail processing operations are in the Function 1 category.
[15] *Assessment of Overall Plant Efficiency 2012* (Report Number NO-MA-12-001, dated April 27, 2012).

Table 1. FY 2010 FHP Mail Volume Breakdown by Plant Group

Plant Group	FHP Volume Range (in millions)
1	1,300 and above
2	765 to 1,299
3	476 to 764
4	340 to 475
5	221 to 339
6	136 to 220
7	0 to 135

Source: OIG and the Enterprise Data Warehouse (EDW).

Figure 1. Plant Groups Based on FY 2010 FHP Volume



Source: OIG and EDW.

Objectives, Scope, and Methodology

Our objectives were to follow up on the Postal Service's progress in reducing workhours based on recommendations made in our prior report[16] and to assess the efficiency of the processing and distribution network for FY 2012. To accomplish our objectives, we identified trends in mail volume, workhours, overtime, and productivity for each of the seven plant groups for FYs 2011 and 2012.

We conducted this review from March through September 2013 in accordance with the Council of the Inspectors General on Integrity and Efficiency, *Quality Standards for Inspection and Evaluation.* We discussed our observations and conclusions with management on July 30, 2013, and included their comments where appropriate.

To conduct this review, we relied on computer-processed data maintained by Postal Service operational systems, which included the Management Operating Data System, the EDW System, Web Complement Information System (WebCOINS), and the National Maintenance Activity Reporting System (nMARS). We did not test the validity of controls over these systems. However, we verified the accuracy of the data by confirming our analysis and results with Postal Service managers and other data sources. We determined that the data were sufficiently reliable for the purposes of this report.

[16] *Assessment of Overall Plant Efficiency 2012* (Report Number NO-MA-12-001, dated April 27, 2012).

Prior Audit Coverage

Report Title	Report Number	Final Report Date	Monetary Impact (in millions)
Use of Non-Traditional Full-Time and Postal Support Employee Positions in Processing Operations	NO-AR-13-003	5/17/2013	$30.6
Report Results: If the Postal Service had hired postal support employees up to contract limits, it could have reduced labor and overtime costs, resulting in savings of more than $30.6 million in FY 2012. We recommended the Postal Service provide additional training to improve the utilization and supervision of non-traditional full-time positions and periodically evaluate postal support employee staffing to optimize usage of these employees. Management agreed with our recommendations.			
Supervisor Workhours and Span of Control	NO-MA-13-005	4/4/2013	$12
Report Results: Although the Postal Service generally reduced supervisor workhours in relation to craft employee workhours, it did not always achieve its span of control target. Specifically, we found that, based on the 1:25 span of control target, there was a shortage of 412 regular supervisors nationwide and an excess of 1.8 million replacement supervisor workhours used in FY 2012. We recommended the Postal Service reevaluate span of control targets and determine the appropriate targets, fill vacant supervisor positions to the appropriate span of control level and reduce supervisor replacement workhours accordingly. We also recommended the Postal Service ensure that span of control targets are achieved during the consolidation process to the fullest extent possible. Management agreed with our recommendations.			

Report Title	Report Number	Final Report Date	Monetary Impact (in millions)
Assessment of Overall Plant Efficiency 2012	NO-MA-12-001	4/27/2012	$665
Report Results: The Postal Service made substantial progress by reducing workhours in the network from the previous year. However, we found the Postal Service had not yet fully adjusted workhours in response to declining mail volume because of poor economic conditions or achieved all possible efficiencies in mail processing operations. We recommended the Postal Service reduce 14,268,171 workhours by FY 2014 and periodically evaluate operating efficiency. Management agreed with our recommendations.			
Assessment of Overall Plant Efficiency 2011	NO-MA-11-004	5/20/2011	$647.6
Report Results: The Postal Service had not yet fully adjusted workhours in response to declining mail volume because of poor economic conditions, nor did they achieve all possible efficiencies in mail processing operations. We recommended the Postal Service reduce 14,017,630 workhours by FY 2013 and periodically evaluate operating efficiency. Management agreed with our recommendations.			
Follow-Up on the Assessment of Overall Plant Efficiency 2010	NO-MA-11-001	2/1/2011	None
Report Results: The Postal Service made substantial progress by reducing workhours in the network from the previous year. We made no recommendations in this report.			

As shown in the preceding table, we have conducted two overall efficiency reviews and one follow-up review of mail processing operations in the past 3 years. In response to our recommendations, management reduced workhours to better align with budgeted workhours. Management agreed with the recommendations made in these reports.

In addition, the supervisor span of control review showed that too many replacement supervisor workhours were used based on the span of control criteria. Using replacement supervisors was not effective in improving overall plant performance because they are not as effective as regular supervisors. In the audit of non-traditional full-time and postal support employee positions, we found that not using flexible employee positions to the fullest extent possible in FY 2012 meant the Postal Service did not fully realize labor cost savings and overtime reduction.

Workhour Reductions and Service

Although the Postal Service successfully reduced workhours from FYs 2011 to 2012, the reduction in workhours did not decrease at the same rate as FHP volume, resulting in an overall decrease in operational efficiency. For instance, from FYs 2011 to 2012, management reduced workhours by using 5 million fewer in mail processing,[17] a decrease of 2.34 percent. However, FHP volume dropped by 8.4 billion mailpieces from the prior fiscal year, a decrease of 4.39 percent. As a result, overall productivity decreased from 894 mailpieces per hour in FY 2011 to 875 mailpieces per hour in FY 2012.

We found the amount of package mail, as a percentage of total volume, increased from 1.9 percent in FY 2011 to 2.2 percent in FY 2012. This contributed to the decline in productivity from FYs 2011 to 2012, as it is more labor intensive to sort packages than it is to sort other types of mail.

However, the Postal Service achieved service score increases in the EXFC service categories of overnight, 2-day, and 3-day as shown in Table 2.

Table 2. FYs 2011 and 2012 EXFC Service Scores

Fiscal Year	Overnight Percentage	2-Day Percentage	3-Day Percentage
2011	96.28%	93.49%	91.18%
2012	96.59%	94.96%	92.36%

Source: EDW.

The Postal Service also improved CEM scores in the residential and business categories in all quarters from FYs 2011 to 2012 as shown in Tables 3 and 4.

[17] These hours are recorded in a category referred to as Function 1, which includes hours worked at NDCs, ISCs, L&DCs, Priority hubs, P&DCs, and P&DFs. There was a total of more than 5 million workhour savings in Function 1 hours, 4.89 million of which were attributable to all plants and 3.42 million of which were attributable to plants with below-median FHP productivity.

Table 3. FYs 2011 and 2012 CEM Scores – Residential

Fiscal Year	Q 1 Percentage	Q 2 Percentage	Q 3 Percentage	Q 4 Percentage
2011	86.6%	86.8%	87.2%	88.1%
2012	88.6%	87.6%	88.7%	88.6%
Difference	**2.0%**	**0.8%**	**1.5%**	**0.5%**

Source: CEM.

Table 4. FYs 2011 and 2012 CEM Scores – Business

Fiscal Year	Q 1 Percentage	Q 2 Percentage	Q 3 Percentage	Q 4 Percentage
2011	82.3%	82.7%	83.2%	83.6%
2012	84.1%	83.8%	84.1%	84.4%
Difference	**1.8%**	**1.1%**	**0.9%**	**0.8%**

Source: CEM.

In addition, the Ponemon Institute, LLC's[18] *Most Trusted Company for Privacy Study,* ranked the Postal Service as the fourth most trusted company and, for the 7th year in a row, the most trusted government agency.

Economic Conditions

FY 2012 was a difficult year for the Postal Service. Total mail volume declined by more than 8 billion pieces, or 5 percent, from 168.3 billion pieces in FY 2011 to 159.9 billion pieces in FY 2012. In addition, total FY 2012 revenue declined by $488 million, or 0.7 percent, from $65.7 billion in FY 2011 to $65.2 billion in FY 2012. However, while total mail volume and revenue declined, the package business grew by 7.5 percent, to more than 3.5 billion pieces. Packages in FY 2012 represented about 18 percent of Postal Service revenues.

The Postal Service concluded FY 2012 with a net loss of $15.9 billion, which included $11.1 billion in mandated retiree health benefit payments. The agency also reached its statutory borrowing limit of $15 billion. Further, the Postal Service concluded Qs1 and 2 of FY 2013 with a combined net loss of $3.1 billion, $2.8 billion of which were expenses associated with the PSRHBF. Given the Postal Service's current financial situation, the postmaster general told a House Committee on April 17, 2013, that the Postal Service is operating with a broken business model and the gap between revenues and costs will only get worse in the coming years unless the laws that govern the Postal Service are changed.

[18] Ponemon Institute, LLC is dedicated to advancing responsible information and privacy management practices in business and government. To achieve this objective, the institute conducts independent research, educates leaders in the private and public sectors, and verifies the privacy data protection practices of organizations in a variety of industries.

Title 39 U.S.C. Part 1, Chapter 1, §101 states that the Postal Service ". . . shall provide prompt, reliable, and efficient services to patrons in all areas . . ." Further, the September 2005 *Postal Service Strategic Transformation Plan* states that "The Postal Service will continue to provide timely, reliable delivery to every address at reasonable rates." The Postal Accountability and Enhancement Act, P.L. 109-435, Title II, dated December 20, 2006, highlights ". . .the need for the Postal Service to increase its efficiency and reduce its costs, including infrastructure costs, to help maintain high quality, affordable postal services . . ."

Plant Consolidations

To determine whether plant consolidations affected mail processing efficiency in FY 2012, we examined consolidations that occurred in FY 2011. The Postal Service made progress in reducing the size of the mail processing network in FY 2011 as they completed 48 full and partial plant consolidations. These 48 consolidations resulted in 39 plants gaining mail volume.[19] As shown in Table 5, six of the seven plant groups experienced a rise in productivity in the gaining plants from FYs 2011 to 2012, indicating the consolidation strategy has been generally successful. Group 1 gaining plants experienced a slight decline in productivity of 1.35 percent. This decline occurred because even though the eight gaining plants received mail from consolidations, their overall volume declined and workhour reductions could not keep pace.

Table 5. FHP Productivity at 39 Plants Gaining Volume from Consolidations in FY 2011

Plant Group	Number of Gaining Plants	FY 2011 Productivity	FY 2012 Productivity	Percentage Change
1	8	1,105	1,090	-1.35%
2	8	1,017	1,024	0.68%
3	6	1,139	1,162	2.02%
4	8	1,167	1,169	0.15%
5	4	1,317	1,322	0.38%
6	3	1,581	1,620	2.43%
7	2	1,459	1,576	8.02%

Source: OIG and EDW.

Efficiency of Operations

Further opportunities exist for the Postal Service to reduce mail processing workhours by improving efficiency. We compared FHP productivity among the seven plant groupings[20] and determined the median FHP productivity for each group. We determined that if the 130 plants with below-median FHP productivity in FY 2012 achieved just the median FHP productivity level for each respective plant group, the

[19] There were 39 unique gaining plants because some received volume from more than one of the 48 consolidations.
[20] For this analysis, we used plant groupings based on FY 2010 FHP mail volume. We based savings on FHP mail volume and based productivity on median performers.

Postal Service could realize more than 14.3 million workhour savings and avoid costs of over $628 million[21] over 4 years.

For example, if Group 1 plants with below-median FHP productivity increased their productivity to the median productivity level (1,078 mailpieces per hour), the Postal Service could save more than 7.7 million workhours — 54.2 percent of the more than 14 million workhours (see Table 6).

Table 6. Baseline Workhour Reductions

Plant Group	Median FHP Productivity	Workhour Savings	Percentage of Total Savings
1	1,078	7,782,966	54.2%
2	1,016	2,403,728	16.7%
3	1,107	1,969,106	13.7%
4	1,265	1,150,863	8.0%
5	1,347	730,028	5.1%
6	1,418	236,094	1.6%
7	1,363	91,612	0.64%
Total	**Not Applicable**	**14,364,398**[22]	**100.00%**[23]

Source: OIG and EDW.

The recommended savings of more than 14 million workhours represent a 15.2 percent decrease in the 94,289,097 workhours used by plants that operated below the median FHP productivity level in FY 2012, and an 8.6 percent decrease in the 166,350,453 workhours used by all plants (see Table 7).

[21] We based workhour reductions on FY 2012 usage and used the Level 06 salary and fringe FY 2012 clerk rate of $43.23 per hour and the Level 05 salary and fringe FY 2012 mail handler rate of $45.56 per hour.
[22] Difference due to rounding.
[23] Difference due to rounding.

Table 7. Opportunity Hour Percentage For Plants With Below-Median Productivity, FY 2012

Plant Group	FY 2012 Function 1 Workhour Usage	Workhour Savings	Percentage
1	42,591,859	7,782,966	18.3%
2	23,200,216	2,403,728	10.4%
3	13,499,561	1,969,106	14.6%
4	7,112,793	1,150,863	16.2%
5	4,892,126	730,028	14.9%
6	2,281,126	236,094	10.3%
7	711,416	91,612	12.9%
Total Plants Below-Median	**94,289,097**	**14,364,398**[24]	**15.2%**
Total All Plants	**166,350,453**	**14,364,398**	**8.6%**

Source: OIG and EDW.

Potential Sources of Workhour Reductions

We identified four broad categories of potential savings. These categories include overtime, stand-by time, manual sorting of letters, and manual sorting of flats. Although not mutually exclusive with the workhour opportunities identified by LDC, the savings are provided since the Postal Service has established programs to improve these operational areas (see Table 8).

Table 8. Broad Sources of Workhour Reductions

Source of Workhour Reduction	Potential Workhour Savings	For Detailed Explanation, Click on the Section Title
Reduce Overtime	1,231,264	"Overtime Usage"
Reduce Stand-By Time	129,132	"Stand-By Time"
Reduce Manual Sorting of Letters	540,534	"Excess Manual Letter Mail"
Reduce Manual Sorting of Flats	820,998	"Excess Manual Flat Mail"

Source: OIG analysis.

[24] Difference due to rounding.

Overtime Usage

Management decreased overtime at all plants by over 13 percent compared to FY 2011, and opportunities exist to further reduce overtime. The Postal Service could stabilize overtime usage and save more than 1.2 million overtime workhours. When management does not properly monitor and control overtime, the Postal Service incurs higher labor costs, because these workhours are paid at a higher premium rate.

For example, Group 1 plants operating at above-median FHP productivity levels had an average overtime percentage rate of 5.25 percent. If all Group 1 plants operated at this overtime rate, the Postal Service could save 440,874 overtime workhours. Overall, the Postal Service could save more than 1.2 million overtime workhours if all plants with below-median FHP productivity reduced their overtime percentages to the average of the plants with above-median FHP productivity (see Table 9).

Table 9. Overtime Savings

Plant Group	Above-Median Productivity – Average Overtime Percentage	Group Workhour Savings
1	5.25%	440,874
2	6.23%	263,866
3	6.30%	180,294
4	6.29%	157,997
5	5.91%	141,061
6	8.13%	13,310
7	10.08%	33,863
Total	**Not Applicable**	**1,231,264**[25]

Source: OIG and EDW.

Stand-By Time

Plants operating at below-median FHP productivity levels generally used a higher amount of stand-by time. This indicates that management may not be properly scheduling and staffing employees to match the workload. As an example, Group 1 plants with above-median FHP productivity levels used .08 percent of workhours in stand-by time operations and Group 1 plants below the median used .17 percent of workhours in stand-by time operations. If Group 1 plants below the median achieve the average stand-by time percentage of above-median plants, the Postal Service would realize savings of more than 55,000 workhours. Further, if below the median plants in each plant group achieve the average stand-by time percentage of the above-median plants, the Postal Service could save more than 129,000 workhours (see Table10).

[25] Difference due to rounding.

Table 10. Stand-By Time Savings

Plant Group	Above-Median Productivity – Stand-By Time Percentage	Group Workhour Savings
1	0.08%	55,736
2	0.05%	28,564
3	0.23%	10,035
4	0.41%	14,572
5	0.16%	2,529
6	0.16%	16,545
7	0.05%	1,151
Total	**Not Applicable**	**129,132**

Source: OIG and EDW.

Excess Manual Letter Mail

Plants operating at below-median FHP productivity levels generally worked an excessive amount of letter mail manually. The Postal Service's manual sort target is 2.5 percent of the total letter volume. However, in FY 2012, plants with below-median FHP productivity sorted an excess of more than 397 million letters manually. The largest volume of excess manual letters was at Group 1 plants. The Postal Service could save 540,534 workhours by using automation rather than manual methods to sort letter mail (see Table 11).

Table 11. Excess Manual Letters

Plant Group	Excess Manual Letters Worked More Than 2.5 Percent of Total Letter Volume	Group Workhour Savings
1	107,411,147	146,037
2	92,002,964	125,088
3	41,546,873	56,487
4	33,038,939	44,920
5	101,446,883	137,928
6	17,504,178	23,799
7	4,614,818	6,274
Total[26]	**397,565,804**	**540,534**

Source: OIG and EDW.

Excess Manual Flat Mail

Plants operating at below-median FHP productivity levels also generally worked an excessive amount of flat mail manually. The Postal Service's manual sort target is 6 percent of the total flat volume. However, in FY 2012, plants with less than median FHP productivity sorted an excess of 420 million flats manually. The largest volume of excess manual flats was at Group 1 plants. The Postal Service could save 820,998 workhours by using automation to sort flat mail instead of manual sorting (see Table 12).

[26] Differences due to rounding.

Table 12. Excess Manual Flats

Plant Group	Excess Manual Flats Worked More than 6 Percent of Total Flat Volume	Group Workhour Savings
1	119,131,244	236,361
2	91,652,074	181,841
3	69,463,514	137,818
4	42,184,803	83,696
5	58,808,124	116,678
6	11,961,909	23,733
7	27,368,297	40,871
Total	**420,569,964**[27]	**820,998**

Source: OIG and EDW.

Human Resources

As of January 2013, 13,877 employees at plants with below-median productivity levels were eligible to retire. This represents a potential annual reduction of more than 24 million workhours if these employees retired (see Tables 13 and 14).

Table 13. Potential Complement Reduction for Below-Median Plants

Plant Group	Total Function 1 Employees	Retirement Eligible	Percentage of Total Employees
1	21,281	6,369	30%
2	13,007	3,689	28%
3	7,058	2,059	29%
4	3,556	929	26%
5	2,112	527	25%
6	992	243	24%
7	289	61	21%
Total	**48,295**	**13,877**	**29%**

Source: OIG and WebCOINS.

[27] Difference due to rounding.

Table 14. Potential Workhour Reduction for Below-Median Plants[28]

Plant Group	Total Function 1 Workhours	Retirement Eligible Workhours	Percentage of Total Workhours
1	37,028,940	11,082,060	30%
2	22,632,180	6,418,860	28%
3	12,280,920	3,582,660	29%
4	6,187,440	1,616,460	26%
5	3,674,880	916,980	25%
6	1,726,080	422,820	24%
7	502,860	106,140	21%
Total	**84,033,300**	**24,145,980**	**29%**

Source: OIG and WebCOINS.

[28] We based workhour savings on 1,740 workhours per year.

Appendix B: Sources of Workhour Reduction by Labor Distribution Code

We identified potential sources for improving efficiency. These sources are listed by each major mail processing operation LDC. These potential workhour savings represent 10,544,879 workhours, or more than 73 percent of the recommended workhour savings (see Table 15).

Table 15. Potential Sources of Workhour Reductions

Source of Workhour Reduction	Potential Workhour Savings	For Detailed Explanation, Click on Section Name
Improve Efficiency in LDC 11 Operations	2,740,369	"Automated Letter Mail Processing"
Improve Efficiency in LDC 12 Operations	753,726	"Mechanized and Automated Flat Mail Processing"
Improve Efficiency in LDC 14 Operations	2,706,109	"Manual Operations"
Improve Efficiency in LDC 17 Operations	3,303,510	"Allied Operations"
Improve Efficiency in LDC 18 Operations	1,041,165	"Indirect/Related Operations"
Total	**10,544,879**	
FHP Productivity Savings	14,364,398	"Appendix A, Efficiency of Operations"
Percentage of FHP Savings	**73.4%**	

Source: OIG analysis.

Automated and Mechanized Equipment

Plants that operated at below-median FHP productivity levels generally had lower productivity in automated and mechanized operations. If all plants with below-median FHP productivity increased the mailpieces handled per hour to the average of the plants with above-median FHP productivity, the Postal Service could save more than 2.7 million workhours in automated operations and more than 753,000 workhours in mechanized operations. In addition, plants with below-median productivity levels generally had higher jams per 10,000 pieces on the DBCS and on the AFSM 100. Further, plants with below-median productivity levels generally had higher reject rates on the AFSM 100. This indicates that procedures for jogging and edging the mail may need improvement.

Automated Letter Mail Processing - LDC 11

Plants that operate at below-median FHP productivity levels generally had lower productivity in LDC 11. For example, Group 1 plants operating at above-median FHP productivity had an average LDC 11 productivity of 3,944 mailpieces per hour. If all Group 1 plants operated at this productivity level, the Postal Service could save more than 1.4 million workhours. Further, the Postal Service could save more than 2.7 million workhours if all plants with below-median FHP productivity levels increased the pieces handled per hour in LDC 11 operations to the average of the plants with above-median FHP productivity (see Table 16).

Table 16. Automated Letter Mail Processing LDC 11
FY 2012

Plant Group	Above-Median Productivity – Average LDC 11	Group Workhour Savings
1	3,944	1,440,110
2	3,494	310,923
3	3,821	494,317
4	4,282	289,004
5	4,632	140,107
6	4,438	48,229
7	4,947	17,680
Total	**Not Applicable**	**2,740,369**[29]

Source: OIG and EDW.

Mechanized and Automated Flat Mail Processing - LDC 12

Plants with below-median FHP productivity levels also generally had lower LDC 12 productivity. For example, Group 3 plants operating at above-median FHP productivity had an average LDC 12 productivity of 2,163 mailpieces per hour. If all Group 3 plants operated at this productivity level, the Postal Service could save 103,728 workhours. Further, the Postal Service could save 753,726 workhours if all plants with below-median FHP productivity levels increased the mailpieces handled per hour in LDC 12 operations to the average of the plants with above-median FHP productivity levels (see Table 17).

[29] Difference due to rounding.

Table 17. Mechanized and Automated Flat Mail Processing LDC 12, FY 2012

Plant Group	Above-Median Productivity – Average LDC 12	Group Workhour Savings
1	1,891	318,632
2	2,067	172,995
3	2,163	103,728
4	1,767	106,569
5	1,871	31,514
6	1,608	15,792
7	1,710	4,497
Total	**Not Applicable**	**753,726**[30]

Source: OIG and EDW.

Throughput, Jam Rates, and Reject Rates

The average throughput for the DBCS and the AFSM 100 was lower at Group 1 plants with below-median FHP productivity than at plants with above-median FHP productivity. In addition, the DBCS and the AFSM 100 jam rate was higher in plants with below-median FHP productivity and the reject rate for the AFSM 100 was also higher in plants with below-median FHP productivity levels. These trends indicate that management at these plants may not be properly instructing employees on procedures for jogging and edging the mail. In addition, equipment at these plants may not be properly or sufficiently maintained (see Tables 18 and 19).

Table 18. Group 1 DBCS Machines, FY 2012

Group 1 Plants	Average Throughput	Jam Rate	Reject Rate
Above-Median	35,730	2.01	1.07%
Below-Median	35,528	2.28	1.04%
Difference	**202**	**-0.27**	**0.03%**

Source: OIG and nMARS.

[30] Difference due to rounding.

Table 19. Group 1 AFSM 100 Machines FY 2012

Group 1 Plants	Average Throughput	Jam Rate	Reject Rate
Above-Median	14,509	18.45	2.25%
Below-Median	14,359	21.82	2.55%
Difference	**150**	**-3.37**	**-0.30%**

Source: OIG and nMARS.

Manual Operations

Opportunities to improve efficiency in manual operations were twofold:

- Plants with below-median FHP productivity also had lower productivity in manual operations.
- Management did not take full advantage of automated and mechanized equipment and; consequently, worked an excessive amount of mail manually.

Manual Operations - LDC 14

Plants with below-median FHP productivity also had lower productivity in LDC 14. For example, Group 1 plants operating at above-median FHP productivity had an average LDC 14 productivity of 562 mailpieces per hour. If all Group 1 plants operated at this productivity level, the Postal Service could save more than 1.6 million workhours. Further, the Postal Service could save more than 2.7 million workhours if all plants with below-median FHP productivity levels increased the mailpieces handled per hour in LDC 14 operations to the average of the plants with above-median FHP productivity levels (see Table 20).

Table 20. Manual Operations LDC 14
FY 2012

Plant Group	Above-Median Productivity – Average LDC 14	Group Workhour Savings
1	562	1,687,411
2	475	382,747
3	520	165,776
4	554	113,161
5	719	150,517
6	906	118,173
7	1,205	88,324
Total	**Not Applicable**	**2,706,109**

Source: OIG and EDW.

Allied Operations - LDC 17

Plants with below-median FHP productivity levels used a greater percentage of workhours in allied operations LDC 17 than plants with above-median FHP productivity levels. As an example, Group 1 plants with above-median FHP productivity levels used 36 percent of workhours in LDC 17. If all Group 1 below-median plants used 36 percent of workhours in allied operations, the Postal Service could reduce workhours by almost 1.3 million. Further, if all below-median plant groups achieve the average percentage of workhours in allied operations of the above-median plants, the Postal Service could save more than 3.3 million workhours (see Table 21).

Table 21. Allied Operations LDC 17
FY 2012

Plant Group	Above-Median Average LDC 17 Percentage to Total Mail Processing Workhours	Group Workhour Savings
1	36%	1,293,792
2	34%	1,117,067
3	34%	474,633
4	35%	201,385
5	38%	98,146
6	35%	97,317
7	38%	21,169
Total	**Not Applicable**	**3,303,510**[31]

Source: OIG and EDW.

Indirect/Related Operations - LDC 18

Plants with below-median FHP productivity levels used a greater percentage of workhours in indirect/related operations LDC 18 than plants with above-median FHP productivity levels. As an example, Group 1 plants with above-median FHP productivity levels used 7 percent of workhours in LDC 18. If all Group 1 below-median plants used 7 percent of workhours in indirect/related operations, the Postal Service could reduce workhours by more than 200,000. Further, if all below-median plants in each group achieve the average percentage of workhours in indirect/related operations of the above-median plants, the Postal Service could save more than 1 million workhours (see Table 22).

[31] Difference due to rounding.

Table 22. Indirect/Related Operations LDC 18
FY 2012

Plant Group	Above-Median Average LDC 18 Percentage to Total Mail Processing Workhours	Group Workhour Savings
1	7%	208,593
2	6%	360,819
3	6%	281,959
4	6%	89,718
5	6%	40,492
6	5%	51,819
7	7%	7,765
Total	**Not Applicable**	**1,041,165**

Source: OIG and EDW.

Appendix C: Monetary Impact

To calculate total questioned costs, we determined the median FHP productivity for each group and found that 130 plants throughout the country operated at below-median FHP productivity. If these plants achieved just the median productivity level for each respective plant group, the Postal Service could realize workhour savings of 14,364,398 and avoid costs of $628,670,104 annually.

Recommendation	Impact Category	Amount
1	Questioned Costs[32]	$628,670,104

[32] Unnecessary, unreasonable, unsupported, or an alleged violation of law, regulation, contract, etcetera. May be recoverable or unrecoverable. Usually a result of historical events.

Appendix D: Management's Comments

DAVID E. WILLIAMS
VICE PRESIDENT, NETWORK OPERATIONS

UNITED STATES POSTAL SERVICE

September 17, 2013

JUDITH LEONHARDT
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Draft Management Advisory – Assessment of Overall Plant Efficiency 2013 (Report Number NO-MA-13-DRAFT)

Thank you for the opportunity to respond to the recommendations contained in the Draft Management Advisory – Assessment of Overall Plant Efficiency 2013 (Report Number NO-MA-13-DRAFT).

The Postal Service made substantial progress in reducing mail processing workhours in the last five years. We project to use 89.4 million fewer mail processing workhours in FY 2013 than we used in FY 2008. This represents a 30.5% reduction over five years.

Management agrees with the recommendation outlined in the audit.

Recommendation 1:
Reduce 14,364,398 workhours by fiscal year 2018, with an associated economic impact of $628,670,104.

Management Response/Action Plan:
Management agrees with this recommendation. Among other initiatives, such as consolidation of mail processing operations, management will improve efficiencies by addressing improvement opportunities in the six major areas cited in the report.

Target Implementation Date:
September 2018

Responsible Official:
Manager, Processing Operations

475 L'ENFANT PLAZA SW
WASHINGTON, DC 20260-7100
202-268-4305
FAX: 202-268-3331
www.usps.com

Recommendation 2:
Periodically evaluate operating efficiency by assessing performance against the median productivity level for each plant grouping.

Management Response/Action Plan:
Management agrees with this recommendation. Productivity targets are established and re-evaluated periodically based upon the 75th percentile performance. These models have proven to drive improvements in processing efficiency and help identify best practices for improving efficiencies. Management will continue to use and refine these models to drive the necessary improvements.

Target Implementation Date:
September 2014

Responsible Official:
Manager, Processing Operations

This report and management's response do not contain information that may be exempt from disclosure under the FOIA.

David E. Williams

cc: Ms. Brennan
Corporate Audit and Response Management