



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

Assessment of Overall Plant Efficiency 2012

Management Advisory Report

April 27, 2012

Report Number NO-MA-12-001



HIGHLIGHTS

IMPACT ON:

Mail processing operations nationwide.

WHY THE OIG DID THE AUDIT:

Our objectives were to follow-up on the U.S. Postal Service's progress in reducing workhours based on recommendations made in our prior report (Report Number NO-MA-11-004, May 20, 2011) and to assess the efficiency of the processing and distribution network for fiscal year (FY) 2011.

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 in FY 2010 reduced more than 5.9 million workhours (achieving 42.4 percent of the recommended workhour savings) and improved productivity by 6.95 percent.

Regarding efficiency for FY 2011, productivity for all plants improved by more than 5.9 percent over the prior fiscal year and overtime decreased by almost 4.2 percent compared with FY 2010.

The Postal Service made these workhour reductions with only slight declines in service from FYs 2010 to 2011. However, we found the Postal Service had not yet fully adjusted

workhours in response to declining mail volume (because of poor economic conditions) nor achieved all possible efficiencies in mail processing operations. Therefore, the Postal Service is using more workhours than necessary to process mail volume.

WHAT THE OIG RECOMMENDED:

We recommended the vice president, Network Operations, reduce more than 14 million workhours by FY 2014 with an associated economic impact of almost \$665 million and periodically evaluate operating efficiency by assessing performance against the median productivity level for each plant grouping.

WHAT MANAGEMENT SAID:

Management agreed with our recommendations to reduce workhours and periodically evaluate efficiency by assessing performance against the median productivity level for each plant grouping.

AUDITORS' COMMENTS:

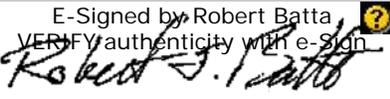
The U.S. Postal Service Office of Inspector General considers management's comments responsive to the recommendations and corrective actions should resolve the issues identified in the report.

[Link to review the entire report](#)



April 27, 2012

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

E-Signed by Robert Batta
VERIFY authenticity with e-Sign


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

SUBJECT: Management Advisory Report – Assessment of Overall
Plant Efficiency 2012 (Report Number NO-MA-12-001)

This report presents a follow up on the U.S. Postal Service's progress in reducing workhours based on the workhour recommendation made in our prior report dated May 20, 2011, as well as the results of our assessment of the overall efficiency of the processing and distribution network for fiscal year 2011 (Project Number 12XG003NO000).

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, or me at 703-248-2100.

Attachments

cc: Frank Neri
Corporate Audit and Response Management

TABLE OF CONTENTS

Introduction 1

Conclusion 1

Efficiency of Operations 2

 Workhour Reductions and Service 2

 Economic Conditions 3

 Plant Consolidations 3

 Potential Sources of Workhour Reductions 3

 Reduction in Overtime 3

 Reduction in Mail Handling 4

 Reduction in Stand-By Time 4

 Automated and Mechanized Equipment 4

 Manual Operations 5

 Allied Operations 5

 Indirect/Related Operations 5

Recommendations 6

Management’s Comments 6

Evaluation of Management’s Comments 6

Appendix A: Additional Information 7

 Background 7

 Objectives, Scope, and Methodology 9

 Prior Audit Coverage 10

 Workhour Reductions and Service 11

 Economic Conditions 12

Plant Consolidations 13

Efficiency of Operations 13

Potential Sources of Workhour Reductions 15

Overtime Usage 15

Excessive Mail Handling 16

Stand-By Time 17

Excess Manual Letter Mail 18

Excess Manual Flat Mail 18

Human Resources 19

Appendix B: Sources of Workhour Reduction by LDC 21

 Automated and Mechanized Equipment..... 21

 Automated Letter Mail Processing – LDC 11 21

 Mechanized and Automated Flat Mail Processing – LDC 12 22

 Throughput, Jam Rates, and Reject Rates 23

 Manual Operations 23

 Manual Operations – LDC 14..... 23

 Allied Operations – LDC 17..... 24

 Indirect/Related Operations – LDC 18..... 25

Appendix C: Monetary Impact..... 26

Appendix D: Management’s Comments 27

Introduction

This report presents a follow-up on the U.S. Postal Service's progress in reducing workhours based on a recommendation made in a prior report¹ and our assessment of the overall efficiency of the processing and distribution network for fiscal year (FY) 2011 (Project Number 12XG003NO000). The report addresses operational risk. See [Appendix A](#) for additional information about this audit.

In FY 2011, 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 2013. 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 and plan to conduct this type of analysis annually.

The Postal Service faces significant financial challenges. It concluded FY 2011 with a net loss of almost \$5.1 billion, despite reducing operating expenses by \$4.8 billion. In FY 2011, the loss from operations was just over \$4.9 billion. The net loss would have been \$10.6 billion had it not been for an extension of a provision allowing the Postal Service to defer certain benefit payments until August 1, 2012.²

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 2010 reduced more than 5.9 million workhours (achieving 42.4 percent of the recommended workhour savings) and improved productivity by 6.95 percent.

Regarding efficiency for FY 2011, productivity for all plants improved by more than 5.9 percent over the prior fiscal year and overtime decreased by almost 4.2 percent compared to FY 2010. We found that first-handling piece³ (FHP) productivity⁴ increased at a higher rate than non-farm business sector productivity as reported by the Bureau of Labor Statistics in the first 3 quarters of calendar year 2011. For comparisons to the non-farm business sector, see [Appendix A](#).

¹ Management Advisory Report – *Assessment of Overall Plant Efficiency 2011* (Report Number NO-MA-11-004, dated May 20, 2011).

² Legislation was passed postponing a congressionally mandated payment of \$5.5 billion to pre-fund retiree health benefits.

³ A FHP is a letter, flat, or parcel that receives its initial distribution at a Postal Service facility. FHP records mail volume in the operation where it receives its first distribution handling.

⁴ We calculated FHP productivity by dividing FHP volume by Function 1 workhours.

The Postal Service made these workhour reductions with only slight declines in service from FYs 2010 to 2011. See [Appendix A](#) for our detailed analysis of this topic.

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.

The Postal Service could improve operational efficiency by reducing more than 14.2 million workhours by the end of FY 2014. This would allow the Postal Service to achieve at least median productivity levels in the network and avoid costs of almost \$665 million based on workhour savings for 1 year. 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 138 plants with below-median productivity levels in FY 2011 achieved just the median productivity level for each respective plant group,⁵ the Postal Service could realize workhour savings of more than 14.2 million. See [Appendix A](#) for our detailed analysis of this topic.

Workhour Reductions and Service

The Postal Service reduced workhours and improved operational efficiency in FY 2011. For instance, from FYs 2010 to 2011, management used more than 9.1 million fewer workhours in mail processing.⁶ Plants that had below-median productivity levels in FY 2010 accounted for more than 5.9 million reduced workhours and achieved 42.4 percent of the recommended workhour savings, and improved productivity by 6.95 percent. Overall, total mail processing productivity also improved by 5.26 percent over the prior fiscal year.

The Postal Service made workhour reductions in FY 2011, but service declined slightly in the External First-Class Measurement System (EXFC) categories of overnight and 2-, and 3-day service. In addition, we found that FHP productivity increased at a higher rate than the non-farm business sector⁷ productivity, as reported by the Bureau of Labor Statistics in the first 3 quarters of calendar year 2011. See [Appendix A](#) for our detailed analysis of this topic.

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.

⁷ The non-farm business sector is a subset of the domestic economy and excludes the economic activities of the following: general government, private households, non-profit organizations serving individuals, and farms. This sector is comparable to the Postal Service environment.

Economic Conditions

The Postal Service faces the challenge of making additional workhour reductions while continuing to deal with declining mail volumes and a deteriorating financial condition. The Postal Service ended FY 2011 with a net loss of \$5.1 billion that would have been about \$10.6 billion had it not been for an extension of a provision allowing the Postal Service to defer certain benefit payments until August 1, 2012. The Postal Service experienced an overall volume decrease of almost 3 billion mailpieces from FYs 2010 to 2011 — a decrease of 1.7 percent.⁸ 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 2010 to 2011. In FY 2010, three P&DFs were closed and consolidated into other facilities. In addition, 27 partial consolidations were completed during this period. We found this consolidation strategy contributed to an overall productivity increase in the mail processing network for FY 2011. See [Appendix A](#) for our detailed analysis of this topic.

Potential Sources of Workhour Reductions

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

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

Reduction in Overtime

Management decreased overtime in all plants by almost 4.2 percent compared with FY 2010; however, further opportunities exist to reduce overtime. In FY 2011, the Postal Service used a higher percentage of overtime workhours in plants with below-median productivity levels than 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 1.3 million workhours. See [Appendix A](#) for our detailed analysis of this topic.

⁸ Based on the annual report for FY 2011.

Reduction in Mail Handling

Excessive mail handling used more workhours than necessary to process mail volume and lowered productivity. In general, plants with lower FHP productivity tended to sort the mail more than plants with higher FHP productivity. For example:

- On average, large Group 1 plants that operated above median productivity sorted each mailpiece 1.83 times from the moment it was received until it was dispatched from the facility.⁹ Group 1 plants with below median productivity on average sorted each mailpiece 1.86 times. If all Group 1 plants sorted mail at the 1.83 ratio, the Postal Service would save more than 1.2 million workhours.
- Similarly, the Postal Service could save more than 3.2 million workhours if plants with below-median productivity levels sorted mail at the average handling ratio of plants with above-median productivity levels. See [Appendix A](#) for our detailed analysis of this topic.

Reduction in Stand-By Time

Plants operating at below-median FHP productivity levels generally used a higher amount of mail processing stand-by time.¹⁰ This indicates that management might not be properly scheduling and staffing employees to match workload.

As an example, Group 1 plants with above-median FHP productivity levels used .05 percent of workhours in stand-by time operations. By standardizing the percentage of workhours used in stand-by time operations across the network, compared with total mail processing workhours used, Group 1 plants could reduce workhours by more than 20,000. Further, by standardizing the percentage of workhours used in stand-by time operations in all plant groups, the Postal Service could save more than 91,000 workhours. See [Appendix A](#) for our detailed analysis of this topic.

Furthermore, we identified potential sources of workhour reductions by LDC. These sources are discussed in [Appendix B](#).

Automated and Mechanized Equipment

Plants that operated below the median FHP productivity generally had lower productivity in automated and mechanized operations.¹¹ If all plants with below-median FHP productivity levels increased the number of mailpieces handled per hour by operation to

⁹ The handling ratio was determined by comparing FHP volume to the number of times a mailpiece was handled from receipt to dispatch.

¹⁰ Operation Number 340 is defined as operational stand-by time. It is intended for short-term use in response to situations that are not likely to continue. Operation Number 603 is defined as institutional stand-by time. It is used for employees placed on stand-by under provisions in National Agreements. Mail processing stand-by time is the total of hours in these two operation numbers.

¹¹ These operations include automated letter operations and the distribution of flat mail on automated and mechanized equipment.

the average of the plants with above-median FHP productivity, the Postal Service could save more than 2.6 million workhours in automated operations and more than 601,000 workhours in mechanized operations. In addition, plants with below-median productivity levels generally had higher jams per 10,000 pieces and higher reject rates on delivery bar code sorter (DBCS) machines and automated flat sorter machines (AFSMs) 100, indicating that procedures for jogging and culling the mail might 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 2.8 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 our detailed analysis of this topic. Second, the Postal Service did not take full advantage of automated and mechanized equipment and, consequently, worked an excessive amount of mail manually. The Postal Service's manual sort target is no more than 2.5 percent of the total letter volume and 6 percent of the total flat volume. The Postal Service could save more than 1.2 million workhours by using automation to sort letter and flat mail instead of manual sortation. 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 operations¹² (referred to as LDC 17) than plants with above-median productivity levels. Allied operations represented the largest percentage (37 percent) of workhour usage in mail processing operations in FY 2011. By standardizing the percentage of workhours used in allied operations across the network, as compared with total mail processing workhours used, the Postal Service could save more than 3.9 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 operations¹³ (referred to as LDC 18) than plants with above-median productivity levels. Indirect/related operations represented more than 7 percent of workhour usage in mail processing operations in FY 2011. By standardizing the percentage of work hours used in indirect/related operations across the network, as

¹² These operations are recorded in LDC 17 and include mail preparation, presort operations, traying, sleeving, opening, pouching, and platform operations.

¹³ These operations are recorded in LDC 18 and include stand-by time, rewrap of damaged mail, Express Mail[®] processing, empty equipment processing, office work and record keeping, Registered Mail[™] processing, and union steward time.

compared with total mail processing workhours used, the Postal Service could save more than 1.5 million workhours. See [Appendix B](#) for our detailed analysis of this topic.

In addition, as of January 2012, we found 17,522 employees were eligible to retire in plants with below-median productivity levels. This represents a potential annual workhour reduction of more than 30 million workhours, far more than needed to achieve the 14.2 million workhour savings identified. See [Appendix A](#) for additional information.

The Postal Service addressed operational efficiency by reducing workhours to better align with budgeted workhours. For example, it reduced FY 2011 mail processing workhours by about 4 percent from FY 2010 levels. However, management had not evaluated operational efficiency by assessing performance based on median productivity for each plant grouping.

Recommendations

We recommend the vice president, Network Operations:

1. Reduce 14,268,171 workhours by fiscal year 2014 with an associated economic impact of \$664,997,872.
2. Periodically evaluate operating efficiency by assessing performance against the median productivity level for each plant grouping.

Management's Comments

Management agreed with our two recommendations. Management agreed with our first recommendation to reduce 14,268,171 workhours with an associated economic impact of \$664,997,872 by FY 2014 by improving operational efficiency in the major areas highlighted in the report (overtime, mail handlings, stand-by time, automated and mechanized equipment, manual operations, allied operations and indirected/related operations). Management also agreed with our second recommendation to periodically evaluate operating efficiency. Management will evaluate efficiency at the operational level by using the Breakthrough Productivity Initiative model. Through the use of this model, management will make efficiency ranking comparisons and identify proven and best practices. 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 identified 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 activities¹⁴ 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 the preparation of 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.¹⁵ 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 sortation 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 2011 was 36.7 percent in LDC 17, and the largest percentage of FHP volume in FY 2011 was 85.2 percent in LDC 11.

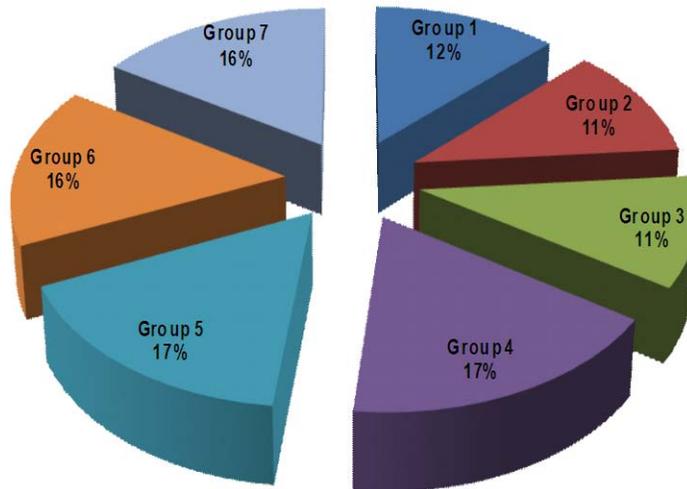
For our prior report, we divided the facilities that process mail into seven groups ranked by mail volume outlined in the Breakthrough Productivity Initiative (BPI).¹⁶ Chart 1 shows the percentage of mail processing facilities in each group.

¹⁴ Mail processing activities include culling, edging, stacking, facing, canceling, sorting, tying, pouching, and bundling.

¹⁵ Mail processing operations are in the Function 1 category.

¹⁶ The Postal Service established the BPI to drive costs out while creating continuous improvement capability. The BPI uses comparative monitoring and performance ranking in operating units across the country. Higher performing units are sometimes used as models to identify best practices. Standard procedures are based on best practices and training is developed to share performance expectations. Targets are set to drive performance toward the highest levels.

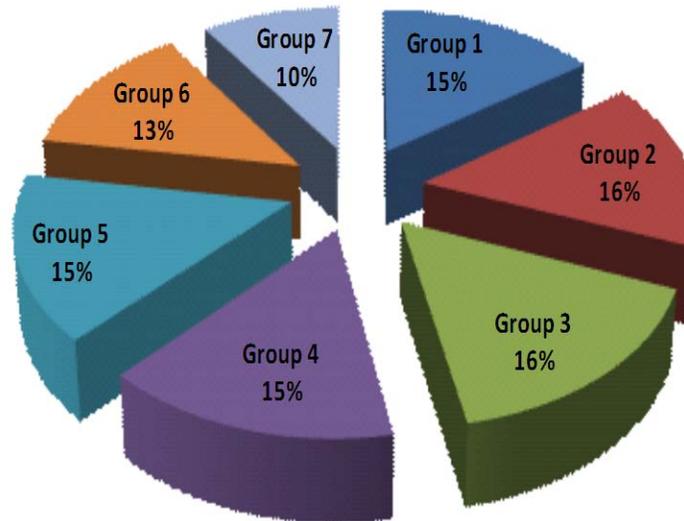
**Chart 1. Plant Groups Based on
FY 2006 BPI (Workload)**



Source: OIG

For the assessment of overall efficiency of the processing and distribution network for FY 2011, we developed seven new plant groups based on FHP mail volume in FY 2010. Chart 2 shows the percentage of mail processing facilities in these groups.

**Chart 2. Plant Groups Based on
FY 2010 FHP Volume**



Source: OIG

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 report¹⁷ and to assess the efficiency of the processing and distribution plant network for FY 2011. To accomplish our objectives, we identified trends in mail volume, workhours, overtime, and productivity for each of the seven plant groups for FYs 2010 and 2011.

We conducted this review from October 2011 through April 2012 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 March 13, 2012, 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 and the Enterprise Data Warehouse System. 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.

¹⁷ *Assessment of Overall Plant Efficiency 2011* (Report Number NO-MA-11-004, dated May 20, 2011).

Prior Audit Coverage

Report Title	Report Number	Final Report Date	Monetary Impact	Report Results
<i>Assessment of Overall Plant Efficiency</i>	NO-MA-09-002	5/8/2009	\$969,495,708	Although the Postal Service has made significant improvements to operational efficiency, opportunities exist to do even more.
<i>Assessment of Overall Plant Efficiency 2010</i>	NO-MA-10-001	6/11/2010	\$743,961,610	Management had not evaluated operational efficiency by assessing performance against productivity targets and other plants and adjusting staff and equipment resources in response to workload changes.
<i>Follow-Up on the Assessment of Overall Plant Efficiency 2010</i>	NO-MA-11-001	2/1/2011	None	The Postal Service made substantial progress by reducing workhours in the network from the previous year.
<i>Overtime Usage</i>	HR-AR-11-003	3/31/2011	None	Although the Postal Service had a number of issues contributing to its increased use of overtime, we found that management did not effectively plan for overtime usage.
<i>Assessment of Overall Plant Efficiency 2011</i>	NO-MA-11-004	5/20/2011	\$647,586,823	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.
<i>A Strategy for a Future Mail Processing & Transportation Network</i>	RARC-WP-11-006	7/6/2011	None	For at least the last decade, there has been a mismatch between the existing powerful network capacity and decreasing user needs. Without a strategic transformation, by 2020, the network capacity will greatly exceed demand.

As shown in the preceding table, we have conducted three overall efficiency reviews, one follow-up review of mail processing operations, and one review of national overtime usage. These reviews identified opportunities to improve efficiency and reduce more

than 53 million workhours that would produce more than \$2.3 billion in savings over 10 years. In response to our recommendations, management reduced workhours to better align with budgeted workhours. The audit of overtime usage showed that total overtime increased, because management did not effectively plan for overtime usage. Management agreed with the recommendations made in these reports.

Workhour Reductions and Service

From FYs 2010 to 2011, the Postal Service reduced workhours and improved operational efficiency. For instance, from FYs 2010 to 2011, management used more than 9.1 million fewer workhours in mail processing.¹⁸ Overall mail processing productivity improved from an average 849 mailpieces per hour in FY 2010 to an average 894 mailpieces per hour in FY 2011, representing a productivity increase of more than 5.26 percent.

We found that FHP productivity increased at a higher rate than the non-farm business sector productivity as reported by the Bureau of Labor Statistics (BLS) in the first 3 quarters of calendar year 2011 as shown in Table 1.

Table 1. Percentage of Productivity Changes by Calendar Quarter

Calendar Quarter	Percentage of Change in FHP Productivity 2010 – 2011	Percentage of Change in Non-Farm Business Sector Productivity 2010 - 2011
1 (January-March)	3.4%	1.3%
2 (April-June)	5.4%	0.7%
3 (July-September)	4.4%	1.1%

Source: BLS

The BLS compiles productivity and related cost measures designed for use in economic analysis and public and private policy planning. Data on output per hour and unit labor costs are available for the U.S. business sector, the non-farm business sector, and the manufacturing sector. These are the productivity statistics most often cited in the news.

The Postal Service experienced a slight decline in service scores in EXFC service categories of overnight, 2-day, and 3-day service as shown in Table 2.

¹⁸ These hours are recorded in a category referred to as Function 1, which includes hours worked in NDCs, ISCs, L&DCs, priority hubs, and P&DFs. There was a total of more than 9.12 million workhour savings in Function 1 hours, 9.03 million of which were attributable to all plants and 5.95 million attributable to plants with below-median FHP productivity.

Table 2. FYs 2010 and 2011 EXFC Service Scores

Fiscal Year	Overnight Percentage	2-Day Percentage	3-Day Percentage
2010	96.37%	93.75%	91.57%
2011	96.33%	93.53%	91.20%

Source: Postal Service

The Postal Service improved the Customer Experience Measurement (CEM) scores in the residential and business categories in all quarters from FYs 2010 to 2011 as shown in Tables 3 and 4.

Table 3. FYs 2010 and 2011 CEM Scores**Residential**

Fiscal Year	Quarter 1 Percentage	Quarter 2 Percentage	Quarter 3 Percentage	Quarter 4 Percentage
2010	86.16%	85.67%	87.13%	86.82%
2011	86.55%	86.80%	87.24%	88.06%
Difference	0.39%	1.13%	0.11%	1.24%

Source: Postal Service

Table 4. FYs 2010 and 2011 CEM Scores**Business**

Fiscal Year	Quarter 1 Percentage	Quarter 2 Percentage	Quarter 3 Percentage	Quarter 4 Percentage
2010	81.30%	81.57%	82.45%	81.95%
2011	82.32%	82.68%	83.15%	83.55%
Difference	1.02%	1.11%	0.70%	1.60%

Source: Postal Service

In addition, an Oxford Strategic Consulting study¹⁹ named the Postal Service the best postal service in the world's top 20 largest economies in terms of access to services, resource efficiency, and public trust.

Economic Conditions

FY 2011 was a difficult year for the U.S. economy and the Postal Service. As the economy continued to remain weak, mail volume and revenue continued to decline. Total FY 2011 mail volume declined by almost 3 billion pieces, or 1.7 percent, from 2010. While total mail volume declined, the package business grew by more than 5 percent to more than 2.1 billion pieces. Packages are also growing in relation to the product mix from 12.7 percent in FY 2006 to 16.1 percent in FY 2011.

¹⁹ *Delivering The Future: How The G20's Postal Services Meet The Challenges of The 21st Century* released on December 20, 2011.

The Postal Service concluded FY 2011 with a net loss of \$5.1 billion, despite reducing total costs by \$4.8 billion. The net loss would have been about \$10.6 billion had it not been for an extension of a provision, allowing the Postal Service to defer certain benefit payments until August 1, 2012.

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 2011, we examined consolidations that occurred in FY 2010. The Postal Service made progress in reducing the size of the mail processing network in FY 2010. For example, we found that the Postal Service completed 30 consolidations. It closed three P&DFs and consolidated them into other facilities.²⁰ In addition, it completed 27 partial consolidations during this period. We found that this consolidation strategy contributed to an overall FHP productivity increase in the mail processing network for FY 2011.

The facilities gaining mail volume from the 30 consolidations were all in plant groups 1-4, the larger plants in the network. We found that FHP productivity for just the 30 gaining plants also increased in FY 2011 (see Table 5).

**Table 5. FHP Productivity
30 Plants Gaining Volume From Consolidations for FY 2010**

Plant Group	Number of Plants	FY 2010	FY 2011	Percentage Change
1	12	990	1,054	6.5%
2	9	991	1,015	2.4%
3	6	1,152	1,243	7.9%
4	3	1,213	1,310	8.0%

Source: OIG

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

²⁰ The three P&DFs were the Marysville, Charlottesville P&DF, and Wilkes-Barre P&DFs.

groupings²¹ and determined the median FHP productivity for each group. We determined that if the 138 plants with below-median FHP productivity in FY 2011 achieved just the median FHP productivity level for each respective plant group, the Postal Service could realize more than 14.2 million workhour savings and avoid costs of almost \$665 million²² in a single year. For example, if Group 1 plants with below-median FHP productivity increased their productivity to the median productivity level (1,049 mailpieces per hour); the Postal Service could save more than 6.5 million workhours – 45.6 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	1,049	6,510,789	45.6%
2	1,048	2,785,448	19.5
3	1,127	1,988,477	13.9
4	1,304	1,253,074	8.8
5	1,342	1,363,247	9.6
6	1,446	263,793	1.8
7	1,405	103,343	0.72
Total	Not Applicable	14,268,171	100.00%

Source: OIG

The recommended savings of more than 14 million workhours represent a 14.8 percent decrease in the 96,675,117 workhours used by plants that operated below the median FHP productivity level in FY 2011 and an 8.3 percent decrease in the 171,236,043 workhours used by all plants (see Table 7).

Table 7. FY 2011 Opportunity Hour Percentage For Plants With Below-Median Productivity

Plant Group	FY 2011 Function 1 Workhour Usage	Workhour Savings	Percentage
1	42,187,768	6,510,789	15.4%
2	23,631,286	2,785,448	11.8
3	13,846,938	1,988,477	14.4
4	7,754,977	1,253,074	16.2
5	5,952,305	1,363,247	22.9
6	2,380,589	263,793	11.1
7	921,254	103,343	11.2
Total	96,675,117	14,268,171	14.8%
Total All Plants	171,236,043	Not Applicable	8.3%

²¹ For this analysis, we used plant groupings based on FY 2010 FHP mail volume (see [Appendix A](#)). We based savings on FHP mail volume and based productivity on median performers.

²² We based workhour reductions on FY 2011 usage and used the Level 06 fully loaded FY 2011 clerk rate of \$45.83 per hour and the Level 05 fully loaded FY 2011 mail handler rate of \$48.61 per hour (see [Appendix B](#)).

Potential Sources of Workhour Reductions

We identified five broad categories of potential savings. These categories include overtime, handling ratio, stand-by time, manual sortation of letters, and manual sortation 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	1,343,276	"Overtime Usage"
Reduce Handling Ratio	3,231,268	"Excessive Mail Handling"
Reduce Stand-By Time	91,898	"Stand-By Time"
Reduce Manual Sortation of Letters	844,773	"Excess Manual Letter Mail"
Reduce Manual Sortation of Flats	410,998	"Excess Manual Flat Mail"

Source: OIG

Overtime Usage

Management decreased overtime in all plants by almost 4.2 percent compared to FY 2010, and opportunities exist to further reduce overtime. The Postal Service could stabilize overtime usage and save more than 1.3 million 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 above median FHP productivity levels had an average overtime percentage rate of 5.70 percent. If all Group 1 plants operated at this overtime ratio, the Postal Service could save 577,069 workhours. Overall, the Postal Service could save more than 1.3 million 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	5.70%	577,069
2	7.25%	342,161
3	7.34%	192,542
4	7.67%	81,871
5	7.06%	85,644
6	8.75%	24,555
7	7.41%	39,434
Total	Not Applicable	1,343,276

Source: OIG

Excessive Mail Handling

The Postal Service could reduce the number of times mail is handled and save more than 3.2 million workhours. Excessive mail handling uses more workhours than necessary to process mail volume, which means productivity is lower.²³ In general, plants with lower FHP productivity levels tended to sort the mail more often than plants with high FHP productivity levels. For example, on average, Group 1 plants operating above the median FHP productivity sorted a mailpiece 1.83 times from the moment it was received until it was dispatched from the facility. Group 1 plants with below-median productivity, on average, sorted each mailpiece 1.86 times. If all Group 1 plants sorted mail at the 1.83 ratio, the Postal Service could save more than 1.2 million workhours. Further, the Postal Service could save more than 3.2 million workhours if plants with below-median FHP productivity sorted mail at the average handling ratio of the plants with above-median FHP productivity levels (see Table 10).

²³ We calculated the handling ratio by comparing FHP volume to total piece handling (TPH) volume. TPH measures the number of handlings used to distribute each mailpiece from receipt to dispatch. As an example, if the handling ratio is 1.5, the average mailpiece was handled 1.5 times from the moment it was received until it was dispatched from the facility. Management uses this information to measure performance and efficiency. This ratio can vary depending on mail flow and operating plans.

Table 10. Handling Ratio Savings

Plant Group	Above-Median Productivity – Average Handling Ratio	Group Workhour Savings
1	1.83	1,212,677
2	1.96	470,902
3	1.91	539,292
4	1.82	610,551
5	1.81	274,615
6	1.83	69,815
7	1.74	53,417
Total	Not Applicable	3,231,268

Source: OIG

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 .05 percent of workhours in stand-by time operations. By standardizing the percentage of workhours used in stand-by time operations across the network, compared with total mail processing workhours used, Group 1 plants could reduce workhours by more than 20,000. Further, by standardizing the percentage of workhours used in stand-by time operations in all plant groups, the Postal Service could save more than 91,000 workhours (see Table 11).

Table 11. Stand-By Time Savings

Plant Group	Above-Median Productivity – Stand-By Time Percentage	Group Workhour Savings
1	0.05%	20,679
2	0.04%	21,022
3	0.24%	3,944
4	0.24%	5,323
5	0.02%	27,905
6	0.11%	13,022
7	0.04%	3
Total	Not Applicable	91,898

Source: OIG

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 no more than 2.5 percent of the total letter volume. However, in FY 2011, plants with less than median FHP productivity sorted an excess of more than 476 million letters manually. The largest volume of excess manual letters was at Group 1 plants. The Postal Service could save 844,773 workhours by using automation rather than manual methods to sort letter mail (see Table 12).

Table 12. Excess Manual Letters

Plant Group	Excess Letters Worked More Than 2.5 Percent of Total Letter Volume	Group Workhour Savings
1	197,719,824	350,567
2	54,491,260	96,616
3	38,443,466	68,162
4	86,662,618	153,657
5	27,766,593	49,232
6	29,658,500	52,586
7	41,709,834	73,954
Total	476,452,094	844,773

Source: OIG

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 no more than 6 percent of the total flat volume. However, in FY 2011, plants with less than median FHP productivity sorted an excess of 246 million flats manually. The largest volume of excess manual flats was at Group 1 plants. The Postal Service could save 410,998 workhours by using automation to sort flat mail instead of manual sortation (see Table 13).

Table 13. Excess Manual Flats

Plant Group	Excess Flats Worked More than 6 Percent of Total Flat Volume	Group Workhour Savings
1	115,392,339	192,642
2	27,372,871	45,698
3	40,026,275	66,822
4	33,050,689	55,176
5	17,035,866	28,441
6	8,917,659	14,888
7	4,392,099	7,332
Total	246,187,797	410,998

Source: OIG

Human Resources

As of October 2011, 17,522 employees in plants with below-median productivity levels were eligible to retire. This represents a potential annual workhour reduction of more than 30 million workhours, far more than needed to achieve the savings identified (see Tables 14 and Table 15).

Table 14. Potential Complement Reduction for Plants Below the Median

Plant Group	Total Function 1 Employees	Retirement Eligible	Percentage of Total Employees
1	24,346	8,140	33%
2	13,563	4,273	32
3	7,956	2,497	31
4	4,523	1,321	29
5	3,100	860	28
6	1,143	335	29
7	400	96	24
Total	55,031	17,522	32%

Source: OIG

Table 15. Potential Workhour Reduction for Plants Below the Median²⁴

Plant Group	Total Function 1 Workhours	Retirement Eligible Workhours	Percentage of Total Workhours
1	42,313,348	14,147,320	33%
2	23,572,494	7,426,474	32
3	13,827,528	4,339,786	31
4	7,860,974	2,295,898	29
5	5,387,800	1,494,680	28
6	1,986,534	582,230	29
7	695,200	166,848	24
Total	95,643,878	30,453,236	32%

Source: OIG

²⁴ We based workhour savings on 1,738 workhours per year.

Appendix B: Sources of Workhour Reduction by LDC

We identified potential sources for improving efficiency. These sources are listed by each major mail processing operation by LDC. These potential workhour savings represent 11,675,402 workhours or almost 82 percent of the recommended workhour savings. See Table 16.

Table 16. 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	2,645,810	“Automated Letter Mail Processing”
Improve Efficiency in LDC 12 Operations	601,416	“Mechanized and Automated Flat Mail Processing”
Improve Efficiency in LDC 14 Operations	2,881,548	“Manual Operations”
Improve Efficiency in LDC 17 Operations	3,988,349	“Allied Operations”
Improve Efficiency in LDC 18 Operations	1,558,279	“Indirect/Related Operations”
Total	11,675,402	Not Applicable
FHP Productivity Savings	14,268,171	“Appendix A, Efficiency of Operations”
Percentage	81.8%	Not Applicable

Source: OIG

Automated and Mechanized Equipment

Plants that operated below the median FHP productivity level generally had lower productivity in automated and mechanized operations. If all plants with below-median FHP productivity increased the pieces handled per hour to the average of the plants with above-median FHP productivity, the Postal Service could save more than 2.6 million workhours in automated operations and more than 601,000 workhours in mechanized operations. In addition, plants with below-median productivity generally had higher jams per 10,000 mailpieces and higher reject rates on the DBCS machines and on the AFSM 100s, indicating that procedures for jogging and culling 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 3,997 mailpieces per hour. If all Group 1 plants operated at this productivity level, the Postal Service could save more

than 1.1 million workhours. Further, the Postal Service could save more than 2.6 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 17).

**Table 17. Automated Letter Mail Processing
LDC 11, FY 2011**

Plant Group	Above-Median Productivity – Average LDC 11	Group Workhour Savings
1	3,997	1,166,793
2	3,573	338,456
3	3,910	450,872
4	4,439	356,765
5	5,000	224,369
6	4,889	81,157
7	5,522	27,398
Total	Not Applicable	2,645,810

Source: OIG

Mechanized and Automated Flat Mail Processing – LDC 12

Plants with below-median FHP productivity levels also had generally lower LDC 12 productivity. For example, Group 2 plants operating at above-median FHP productivity had an average LDC 12 productivity of 2,160 mailpieces per hour. If all Group 2 plants operated at this productivity level, the Postal Service could save 137,748 workhours. Further, the Postal Service could save 601,416 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 (see Table 18).

**Table 18. Mechanized and Automated Flat Mail Processing
LDC 12, FY 2011**

Plant Group	Above-Median Productivity – Average LDC 12	Group Workhour Savings
1	1,955	120,347
2	2,160	137,748
3	2,253	136,132
4	1,996	127,169
5	1,888	49,557
6	1,439	20,485
7	1,715	9,978
Total	Not Applicable	601,416

Source: OIG

Throughput, Jam Rates, and Reject Rates

The average throughput for the DBCS was lower in Group 1 plants with below-median FHP productivity than in plants with above-median FHP productivity. In addition, the DBCS and the AFSM 100 jam and reject rates were higher in plants with below-median FHP productivity levels. These trends indicate that management at these plants might not be properly instructing employees on procedures for jogging and culling the mail. In addition, equipment at these plants may not be properly or sufficiently maintained (see Tables 19 and 20).

Table 19. Group 1 DBCS Machines, FY 2011

Group 1 Plants	Average Throughput	Jam Rate	Reject Rate
Above-Median	35,956	2.02	0.82%
Below-Median	35,820	2.31	0.92%
Difference	136	-0.28	-0.10%

Source: OIG

Table 20. Group 1 AFSM 100, FY 2011

Group 1 Plants	Average Throughput	Jam Rate	Reject Rate
Above-Median	14,846	21.17	3.00%
Below-Median	14,886	25.77	3.30
Difference	-40	-4.60	-0.30%

Source: OIG

Manual Operations

Opportunities to improve efficiency in manual operations were twofold:

- Plants with FHP productivity below the median 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 FHP productivity lower than the median 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 556 mailpieces per hour. If all Group 1 plants operated at this productivity level, the Postal Service could save more than 1.3 million workhours. Further, the Postal Service could save more than 2.8 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 21).

**Table 21. Manual Operations
LDC 14, FY 2011**

Plant Group	Above-Median Productivity – Average LDC 14	Group Workhour Savings
1	556	1,375,954
2	560	743,934
3	560	278,859
4	624	195,867
5	775	152,770
6	901	79,996
7	932	54,168
Total	Not Applicable	2,881,548

Source: OIG

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 35 percent of workhours in LDC 17. By standardizing the percentage of workhours used in allied operations across the network, compared with total mail processing workhours used, Group 1 plants could reduce workhours by almost 1.8 million. Further, by standardizing the percentage of workhours used in LDC 17 in all plant groups, the Postal Service could save almost 4 million workhours (see Table 22).

**Table 22. Allied Operations
LDC 17, FY 2011**

Plant Group	Above-Median Average LDC 17 Percentage to Total Mail Processing Workhours	Group Workhour Savings
1	35%	1,797,526
2	35%	1,159,211
3	34%	548,313
4	36%	182,209
5	39%	174,349
6	35%	94,252
7	38%	32,490
Total	Not Applicable	3,988,349

Source: OIG

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. By standardizing the percentage of workhours used in allied operations across the network, compared with total mail processing workhours used, Group 1 plants could reduce workhours by more than 637,000. Further, by standardizing the percentage of workhours used in LDC 18 in all plant groups, the Postal Service could save more than 1.5 million workhours (see Table 23).

**Table 23. Indirect/Related Operations
LDC 18, FY 2011**

Plant Group	Above-Median Average LDC 18 Percentage to Total Mail Processing Workhours	Group Workhour Savings
1	7%	637,292
2	7%	382,921
3	7%	236,706
4	6%	105,966
5	6%	128,334
6	6%	47,161
7	6%	19,898
Total	Not Applicable	1,558,279

Source: OIG

Appendix C: Monetary Impact

To calculate total questioned costs, we determined median FHP productivity for each group and found that 138 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 14,268,171 and avoid costs of \$664,997,872 in a single year.

Monetary Impact

Finding	Impact Category	Amount
Efficiency of Operations	Questioned Costs ²⁵	\$664,997,872

²⁵ Unnecessary, unreasonable, unsupported, or an alleged violation of law, regulation, contract, etc. These costs may be recoverable or unrecoverable and are usually a result of historical events.

Appendix D: Management's Comments

DAVID E. WILLIAMS
VICE PRESIDENT, NETWORK OPERATIONS



April 9, 2012

SHIRIAN HOLLAND
ACTING DIRECTOR, AUDIT OPERATIONS

SUBJECT: Assessment of Overall Plant Efficiency 2012
(Report Number NO-MA-12-Draft)

Thank you for the opportunity to respond to the recommendations contained in the Draft Audit Report- Assessment of Overall Plant Efficiency 2012 (Report Number NO-MA-12-Draft). Management agrees with all recommendations.

Recommendation 1:

Reduce 14,268,171 work hours by FY 2014 with an associated economic impact of \$664,997,872.

Management Response/Action Plan:

Management agrees with the recommendation. Management will continue to improve operational efficiency. Management plans to improve operational efficiency and reduce work hours in each of the eight major areas highlighted in the report.

Overtime Usage – We will drive the use of overtime to budgeted plan levels in alignment with complement levels, attrition rates, and productivity improvements. Opportunities identified with off day overtime and begin/end tour overtime will be identified and reduced.

Excessive Mail Handling – We will continue utilizing the Sort Program Optimization (SPO) tool to develop volume based, system driven sort programs to increase tray density. This will also drive fewer sort handlings and tray handlings. This coupled with the continued deployment of the AFCS 200 will allow us to capture volumes on the cancelling equipment and direct mail to specific machines or downstream facilities.

Standby Time - The appropriate use of operational and institutional Standby Time will be tracked and measured to accurately report the use of the hours and identify facilities with excessive hours.

Automated and Mechanized Equipment – Management continues to increase the use of our most efficient equipment by removing or reducing excess equipment.

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

- 2 -

Management continues to use the Run Plan Generator (RPG) to plan machine runs and track performance to plan. The RPG model allows management to improve the use of the automated and mechanized equipment and reduce the staffing associated with those operations.

Manual Operations – Continuous improvement efforts using LSS have enabled management to develop programs and plans that can be replicated in the field to maximize savings opportunities. The use of the LCREM machine to automated manual volumes will be continually maximized to reduce manual letter operations.

Allied Operations – Opportunities have been identified to improve the Powered Industrial Vehicle equipment utilization as well as allied and indirect reductions. Reduction of PIV equipment and the associated jobs associated with the equipment will continue.

Indirect/Related Operations - Identification and reduction of Indirect positions will continue in FY 2012.

Target Implementation Date:

September 2014

Responsible Official:

Frank Neri, Manager Processing Operations

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 the recommendation. Operational level Breakthrough Productivity Initiative (BPI) targets establish the foundation for performance expectations of the BPI Scorecard and Mail Processing Variance models. The models also enable efficiency ranking comparisons to identify best in class performances for activities such as the identification of proven practices and best methods for organizational standardization.

Target Implementation Date:

September 2014

Responsible Official:

Frank Neri, Manager Processing Operations

- 3 -

This report and management's response do not contain information that may be exempt from disclosure under the Freedom of Information Act (FOIA).



David E. Williams

- 4 -

cc: Sally K. Haring
Frank Neri