

May 8, 2009

WILLIAM P. GALLIGAN SENIOR VICE PRESIDENT, OPERATIONS

SUBJECT: Management Advisory Report – Assessment of Overall Plant Efficiency (Report Number NO-MA-09-002)

This report presents the results of our assessment of overall plant efficiency (Project Number 08XG042NO000). This is a cooperative effort with the U.S. Postal Service to assess the overall efficiency of the processing and distribution network. This review addresses operational risk. See Appendix A for additional information about this review.

Conclusion

Although the Postal Service has made significant improvements to operational efficiency, opportunities exist to do even more. The current economic conditions, along with continuing electronic diversion, have significantly reduced mail volumes. However, management has not yet fully adjusted workhours in response to changes in workload. nor achieved all possible efficiencies in mail processing operations provided by opportunities such as the introduction of additional automation. We identified five major areas needing improvement in order to realize significant workhour reductions.

- Overtime usage
- Mail handlings
- Use of automated and mechanized equipment
- Manual operations performance
- Allied operations¹

The Postal Service could improve operational efficiency by reducing nearly 23 million workhours based on fiscal year (FY) 2008 usage. This would allow the Postal Service to achieve at least median productivity² levels with all of its plants, and produce a cost avoidance of \$969,495,708 million based on workhour savings for 1 year. We will report these workhour savings as unrecoverable questioned costs³ in our Semiannual Report to Congress.

¹ These operations are recorded in Labor Distribution Code (LDC) 17 and include mail preparation, presort

operations, traying, sleeving, opening, pouching, and platform operations.

² We define median productivity as the First Handling Pieces (FHP) divided by Function 1 workhours achieved by the median plant in each of the seven plant groupings.

³ Unrecoverable questioned costs are costs deemed to be unnecessary.

Workhours in Relation to Workload and Economic Conditions

From FYs 2006 to 2008, the Postal Service made great strides in reducing workhours and increasing productivity, while improving the quality of service provided to the public. Management reduced mail processing workhours by more than 39 million in FY 2008 compared with FY 2006. Productivity improved from an average 671 mailpieces per hour in FY 2006 to an average 750 mailpieces per hour in FY 2008. Overtime also decreased from 13.4 percent in FY 2006 to 7.6 percent in FY 2008. The Postal Service made these improvements and still managed to increase service in all External First-Class (EXFC) measurement system service categories, as shown in Table 1.

TABLE 1. EXFC SERVICE SCORES						
FY Overnight 2-Day 3-Day						
2006	95.42	91.71	90.24			
2007	96.12	93.99	92.62			
2008	96.67	94.19	92.94			

However, the Postal Service faces the challenge of making additional workhour reductions as a result of large volume declines caused by poor economic conditions and increased competition from electronic communications. For example, the Postal Service experienced a volume decrease from FYs 2007 to 2008 of 9.5 billion mailpieces (4.5 percent), contributing to a net loss of \$2.8 billion in FY 2008. This was the single largest volume drop in Postal Service history. This volume decline accelerated in Quarter 1 of FY 2009, with volume declining by 5.2 billion mailpieces (9.3 percent) from the same quarter in the prior year, leading to a loss of \$384 million.

Postal Service debt increased in FY 2008 by the annual statutory limit of \$3 billion; at the end of the fiscal year, the debt reached \$7.2 billion, which was nearly one-half of the \$15 billion statutory debt limit. These continuing and accelerating volume declines and resulting income losses require the Postal Service to further reduce workhours. See Appendix B for more information about these trends.

Efficiency of Operations

Opportunities exist for the Postal Service to further reduce mail processing workhours by improving efficiency. For example, if the below-median 157 plants achieved just the median productivity level for each respective plant group,⁴ the Postal Service could realize workhour savings of 22.9 million based on FY 2008 workhours. The 22.9 million workhours represent a 17.3 percent decrease in workhours used in FY 2008 and could produce a cost savings in a single year of more than \$969 million. See Appendix C for our detailed analysis of this topic.

⁴ The facilities that process mail are divided into seven groups ranked either according to mail volume outlined in the Breakthrough Productivity Initiative (BPI) or ranked by facility square footage. See Appendix A for more information.

Plants that performed below the median productivity level also had significantly higher processing costs. For example, processing costs at Group 1 plants with productivity above the median were \$57 per 1,000 mailpieces FHP, compared with processing costs at Group 1 plants with FHP productivity below the median, which were \$101 per 1,000 mailpieces FHP. See Appendix D for a detailed explanation of this cost.

Potential Sources of Workhour Reductions

We identified several potential sources to improve efficiency and achieve the recommended workhour reductions, which are explained below. These potential sources total 18.9 million workhours, which represents 82.5 percent of the recommended savings. Further, our analysis showed the Postal Service could reduce workhours over the next 3 years through retirements and elimination of casual employees. As of January 1, 2009, 18,606 employees were eligible to retire, which represented a potential annual workhour reduction of 32.6 million workhours, far more than needed to achieve the savings we identified. See Appendix E for additional information.

Reduction in Overtime

Opportunities exist to reduce overtime. Generally speaking, in FY 2008, a higher percentage of overtime workhours was used by plants below the median productivity than by plants above the median productivity. If plants below the median achieved average overtime percentage of the above-median plants, more than 1.4 million workhours could be saved.

In addition, plants below the median did not use overtime in relation to the amount of volume as effectively as plants above the median did. For example, the average correlation between overtime usage and volume for Group 1 plants above the median was .81, compared with .74 for plants below the median. The average correlation for Group 2 plants above the median was .70, compared with .22 for plants below the median. The average correlation for Group 2 plants above the median was .70, compared with .22 for plants below the median. When overtime is not properly monitored and used in relationship to workload, the Postal Service uses more workhours than necessary and incurs higher labor costs as a result of the higher premium rate. See Appendix F for our detailed analysis of this topic.

Mail Handlings

Excessive mail handling resulted in lower productivity and use of more workhours than necessary to process mail volumes. In general, plants with lower FHP productivity tended to handle the mail more times than plants with higher FHP productivity. For example, Group 1 plants operating above the median FHP productivity had an average handling ratio of 1.86. If all Group 1 plants handled mail at this ratio, almost 1.3 million

⁵ The closer the correlation calculation is to 1, the better the use of overtime as it relates to workload changes.

workhours could be saved. Overall, the Postal Service could save more than 3.9 million workhours if all plants with below-median FHP productivity handled mail at the average handling ratio of the plants with above-median FHP productivity. See Appendix G for our detailed analysis of this topic.

Automated and Mechanized Equipment

Plants that operated below the median FHP productivity generally had lower productivity in automated and mechanized operations. If all plants with below-median FHP productivity increased the pieces handled per hour by operation to the average of the plants above-median FHP productivity, the Postal Service could save more than 2.8 million workhours in automated operations and almost 1 million workhours in mechanized operations. In addition, plants with below-median productivity generally had lower throughput, higher jams per 10,000 pieces, and higher reject rates on the Delivery Bar Code Sorters (DBCS) and on the Automated Flat Sorting Machines (AFSM) 100. See Appendix H for our detailed analysis of this topic.

Manual Operations

Opportunities to improve efficiency in manual operations were two fold. First, plants with FHP productivity lower than the median also had lower productivity in manual operations. The Postal Service could save more than 3.9 million workhours if plants with below-median FHP productivity increased the mailpieces handled per hour to the average of the plants above-median FHP productivity. Second, Postal Service management did not take full advantage of automated and mechanized equipment and consequently worked an excessive amount of mail manually. The Postal Service target is for no more than 2.5 percent of the total letter volume and 6 percent of the total flat volume to be sorted manually. The Postal Service could save nearly 1.5 million workhours by using automation to sort letter and flat mail, instead of manual sortation. See Appendix I for our detailed analysis of this topic.

⁶ These operations include automated letter operations and the distribution of flat mail on automated and mechanized equipment.

Allied Operations - LDC 17

Plants with below-median FHP productivity generally used a larger percentage of workhours in allied operations (LDC 17) than plants with above-median FHP productivity. Allied operations represented the largest percentage (39 percent) of workhour usage in mail processing operations in FY 2008. See chart in Appendix A. Because these operations are impacted by building size, we used the plant groupings by square footage to determine potential workhour savings. We then calculated the percentage of allied operations to total Function 1 workhours. By standardizing the percentage of hours used in allied operations as compared with total Function 1 workhours used, the Postal Service could save more than 4 million workhours, representing the greatest opportunity to improve efficiency and achieve workhour reductions. See Appendix J for our detailed analysis of this topic.

Criteria

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 "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. ..."

Finally, the U.S. Government Accountability Office (GAO) stated in its testimony titled, *U.S. Postal Service Deteriorating Postal Finances Require Aggressive Actions to Reduce Costs* (GAO-09-332T, dated January 28, 2009), before the Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security, Committee on Homeland Security and Governmental Affairs, U.S. Senate, that

Accelerated volume declines and changes in the public's use of mail indicate that [the Postal Service] needs to move beyond incremental efforts and take aggressive action to streamline its workforce and network costs to assure its long-term viability.

Effect

The Postal Service could improve operational efficiency by reducing 22.9 million workhours based on FY 2008 usage. Overall, the unnecessary workhours cost the Postal Service more than \$969 million per year, which represents over one-third of the

⁷ These operations are recorded in LDC 17 and include mail preparation, presort operations, traying, sleeving, opening, pouching, and platform operations.

Postal Service net loss of \$2.8 billion in FY 2008. See Appendix K for a detailed explanation of this cost avoidance.

Causes

Postal Service management has been addressing operational efficiency by reducing workhours to better align with budgeted workhours. For example, they reduced FY 2008 mail processing workhours by approximately 8 percent from FY 2007 levels. However, 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 and severely declining economic trends.

We recommend the Senior Vice President, Operations:

- 1. Reduce 22.9 million workhours by FY 2011 with an associated economic impact of \$969,495,708. We will report \$969,495,708 in unrecoverable questioned costs in our *Semiannual Report to Congress*.
- 2. Periodically evaluate operating efficiency by assessing performance against productivity targets and adjusting resources (staff and equipment) in response to workload changes.

Management's Comments

Management agreed with the recommendations and monetary impact. In addition, management has been proactive and already begun to take corrective action. See Appendix L 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 recognizes that management has already begun to significantly reduce workhours and will in all likelihood complete the workhour reductions prior to the target date.

The OIG considers recommendation 1 significant, and therefore requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are 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. We will report \$969,495,708 in questioned costs in our *Semiannual Report to Congress*.

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.

gned by Office of Inspector (2)

FRIFY authenticity with Approve

Robert J. Batta Deputy Assistant Inspector General for Mission Operations

Attachments

cc: Patrick R. Donahoe Jordan M. Small David E. Williams, Jr. Robert D. Williamson Katherine S. Banks

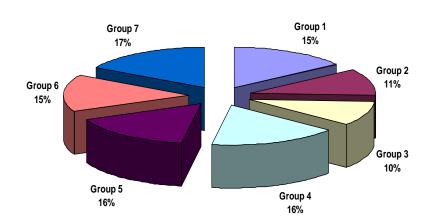
APPENDIX A: ADDITIONAL INFORMATION

BACKGROUND

Mail-processing is an integrated group of activities⁸ required to sort and distribute mail for dispatch and eventual delivery. Post offices, stations, and branches send outgoing mail to processing and distribution centers (P&DC) and processing and distribution facilities (P&DF) 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 has 317 facilities with mail processing operations.

The facilities that process mail are divided into seven groups ranked either according to mail volume outlined in the BPI⁹ or by facility square footage. Charts 1 and 2 below show the percentages of mail processing facilities contained in each group.

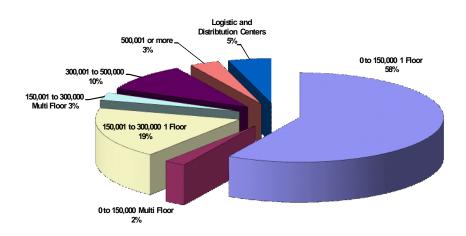
Chart 1. PLANT GROUPING BASED ON FY 2006 BPI GROUPINGS (WORKLOAD)



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⁸ Mail processing activities include culling, edging, stacking, facing, canceling, sorting, tying, pouching, and bundling.
⁹ The BPI was established by the Postal Service to drive costs out of the organization while creating continuous improvement capability. The BPI uses comparative monitoring and performance ranking in operating units across the country. Higher performing units are used as models and are studied to identify best practices. Standard procedures are established based on best practices and training is developed to share performance expectations. Targets are set to drive performance toward the highest levels. When BPI targets are achieved, responsible teams and employees are recognized and rewarded.

Chart 2. PLANT GROUPING BASED ON BUILDING SQUARE FOOTAGE



Labor Distribution Codes

The Postal Service uses LDC to compile workhour, labor utilization, and other financial reports for management use by functional category. For example, LDC 11 is used to record workhours used in automated letter operations, LDC 12 is used to record workhours used in distribution of flat mail on automated and mechanized equipment, and LDC 14 is used to report manual sortation of letters and flats. The Postal Service also uses LDC 17 to record hours used by employees involved in allied operations (mail processing operations other than distribution).

The largest percentage of workhour usage in mail processing operations in FY 2008 was in LDC 17, and the largest amount of FHP volume in FY 2008 was recorded in LDC 11. See FY 2008 workhour usage percentages and FHP volume percentages by LDC in Charts 3 and 4.

¹⁰ Mail processing operations are in the Function 1 category.

Chart 3. FY 2008 FUNCTION 1 WORKHOUR USAGE BY LDC

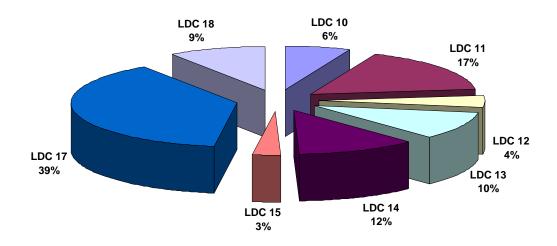
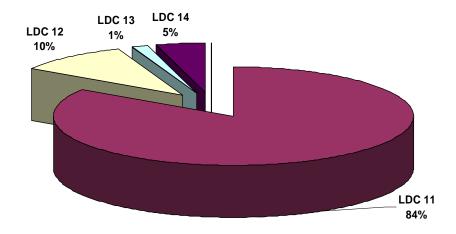


Chart 4. FY 2008 FUNCTION 1 FHP VOLUME BY LDC



OBJECTIVE, SCOPE, AND METHODOLOGY

Our objective was to assess the overall efficiency of the processing and distribution network. To accomplish our objective, we identified trends in mail volume, workhours, overtime, and productivity for each of the seven plant groups for FY 2008. We calculated the median FHP per workhour for FY 2008, ranked the plants within each group, and used the median productivity to calculate workhour savings for plants falling below the median level. We calculated workhour savings by raising the productivity level of the plants below the median level to the median productivity level. We also calculated overtime and handling ratios for each plant. We examined the costs of manual letter and flat operations, evaluated staffing and complement and evaluated

whether significant reductions could be made through attrition. We reviewed workhours, volumes and productivities for LDC 11, 12, and 14. We determined the ratio of LDC 17 workhours to total workhours for FY 2008 for each of the seven plant groups.¹¹

To conduct this review, we relied on computer-processed data maintained by Postal Service Operational Systems, which included the National Work Hour Reporting system, the Management Operating Data System (MODS), the Web-based Complement Information System, the Activity Based Costing (ABC) 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. In addition, we relied on OIG audits of Postal Service systems. Also, an OIG review of MODS concluded the data in this system was valid and reliable for the uses for which it was intended.¹²

We conducted this review from September 2008 through May 2009 in accordance with the President's Council on Integrity and Efficiency, *Quality Standards for Inspections*. We discussed our observations and conclusions with management officials on February 4, 2009, and included their comments where appropriate.

¹¹ We did not include LDC 10, 13, 15, and 18 in this review for the following reasons. LDC 10 was not assessed because supervisory hours are based on a ratio of supervisors to employees; supervisory staff will need to be adjusted as workhours are reduced. LDC 13 was not assessed because the majority of volume is recorded as Total Pieces Handled or Non Added, and because of a large array of equipment and methodology, a reasonable basis for comparison could not be performed. LDC 15 did not represent a significant total of workhours. Finally, LDC 18 represents a wide variety of functions that could not provide a reasonable basis for comparison.

¹² Management Operating Data System (Report Number MS-AR-07-003, dated August 21, 2007).

PRIOR AUDIT COVERAGE

REPORT TITLE	REPORT NUMBER	FINAL REPORT DATE	MONETARY IMPACT
Efficiency of the Oakland International Service Facility and the Regatta Facility	NO-AR-04-007	3/31/2004	\$17,013,959
Efficiency of the San Francisco International Service Center (ISC) and the General Service Administration Facility	NO-AR-04-006	3/31/2004	44,263,283
Efficiency of the New York International Service Center(ISC)	NO-AR-04-009	9/24/2004	98,355,534
Efficiency of the Air Mail Records Unit at the New York International Service Center	NO-AR-04-011	9/24/2004	9,248,967
Efficiency Review of the Mansfield, OH Main Post Office	NO-AR-05-004	12/8/2004	17,183,404
Efficiency Review of the Akron, OH Processing and Distribution Center	NO-AR-05-009	3/30/2005	73,996,558
Efficiency of the Air Mail Records Unit at the Los Angeles International Service Center	NO-AR-05-010	4/28/2005	1,847,858
Efficiency of the Los Angeles International Service Center	NO-AR-05-011	6/17/2005	26,075,474
Efficiency of the Air Mail Records Unit at the San Francisco International Service Center	NO-AR-05-012	9/6/2005	2,563,277
Efficiency Review of the Canton, OH Processing and Distribution Center	NO-AR-05-013	9/22/2005	63,617,713
Efficiency of the Chicago Air Mail Records Unit at the J. T. Weeker International Service Center	NO-AR-06-002	12/22/2005	1,121,794
Efficiency Review of the	NO-AR-06-003	2/22/2006	118,383,220

Washington Bulk Mail Center			
Efficiency of Carrier Sequence Barcode Sorters	NO-AR-06-005	8/2/2006	3,688,930
Efficiency Review of the Los Angeles, CA, Worldway Air Mail Center	NO-AR-06-006	9/12/2006	192,173,980
Efficiency Review of the Bridgeport Processing and Distribution Facility, Bridgeport, CT	NO-AR-07-004	4/25/2007	17,740,107
Efficiency Review of the Dallas Bulk Mail Center	NO-AR-07-005	5/31/2007	134,971,638
Summary Audit on the Timeliness of Mail Processing, Transportation and Delivery in the Chicago District	NO-AR-08-003	3/28/2008	231,337,397
Powered Industrial Vehicle Management System at the Raleigh Processing and Distribution Center	NO-AR-08-007	9/15/2008	3,345,456
Powered Industrial Vehicle Management System at the Providence Processing and Distribution Center	NO-AR-08-010	9/23/2008	1,576,086
Powered Industrial Vehicle Management System at the Louisville, KY Processing and Distribution Center	NO-AR-09-001	12/3/2008	1,970,108
		TOTALS	\$1,060,474,743

As shown in the preceding chart, we have conducted 20 efficiency reviews of mail processing operations. These reviews showed that 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. Consequently, more workhours were used than necessary to process the mail; in fact, these reviews identified opportunities to improve efficiency and reduce more than 3.4 million workhours that would produce almost \$1.1 billion in savings over 10 years. In response to our recommendations, Postal Service management reduced workhours to better align with budgeted workhours.

APPENDIX B: CHANGING ECONOMIC TRENDS

The Postal Service concluded FY 2008 with a net loss of \$2.8 billion. The loss occurred despite more than \$2 billion in cost-cutting measures. Mail volume in FY 2008 totaled 202.7 billion mailpieces, a decline of 9.5 billion mailpieces, or 4.5 percent, compared with the previous fiscal year, which represented the largest volume decline in Postal Service history. Declining mail volume was a symptom of the worsening national economy, particularly related to the financial and housing industries, and to trends toward the use of electronic mail. Total operating revenue in FY 2008 was \$74.9 billion, virtually unchanged from FY 2007, while operating expenses totaled \$77.7 billion. See Table 2 below.

TABLE 2. FY 2008 STATEMENT OF OPERATIONS¹³

	Years Ended September 3			
	2008	2007	2006	
Operating revenue	\$74,932	\$74,778	\$72,650	
Operating expenses:				
Compensation and benefits	53,585	54,186	54,665	
Retiree health benefits	7,407	10,084	1,637	
Transportation	6,961	6,502	6,045	
Other	9,785	9,333	9,334	
Total operating expenses	\$77,738	\$80,105	\$71,681	
(Loss) Income from operations	(2,806)	(5,327)	969	
Interest and investment income	36	195	167	
Interest expense on deferred retirement obligations	_		(231)	
Other interest expense	(36)	(10)	(5)	
Net (Loss) Income	\$(2,806)	\$(5,142)	\$900	

At the time of our review, the downward trends were continuing. The Postal Service ended Quarter 1 of FY 2009 with a net loss of \$384 million, as the economic recession contributed to a 5.2 billion mailpiece mail volume decline compared with the same period last year, as shown in Table 3.

TABLE 3. FY 2009 QUARTER 1 STATEMENTS OF OPERATIONS (unaudited)

	3 Months Ended December 31 ¹⁴		
	2008 2007		
Operating revenue	\$19,095	\$20,369	
Operating expenses:			
Compensation and benefits	13,657	13,643	
Retiree health benefits	1,814	1,840	
Transportation	1,750	1,842	

¹³ Dollar amounts shown in the Statement of Operations charts are in millions.

¹⁴ Fiscal Year 2009 began on October 1, 2008 and will end on September 30, 2009.

Other	2,254	2,358
Total operating expenses	\$19,475	\$19,683
(Loss) Income from operations	(380)	686
Interest and investment income	6	8
Other interest expense	(10)	(22)
Net (Loss) Income	\$(384)	\$672

A 9.3 percent drop in volume in Quarter 1 of FY 2009 marked the eighth consecutive quarter of accelerating volume declines. With no economic recovery expected for the remainder of FY 2009, the Postal Service projects volume for the year will be down by 12 to 15 billion mailpieces. If current revenue and volume trends continue, the Postal Service could experience a year-end net loss in FY 2009 significantly higher than FY 2008's \$2.8 billion loss.

APPENDIX C: EFFICIENCY OF OPERATIONS

Postal Service management could use resources more efficiently. We compared FHP productivity among the seven plant groupings¹⁵ and determined the median FHP productivity for each group. As shown in Table 4, 157 plants throughout the country operated at FHP productivity below the median.

TABLE 4. NUMBER OF PLANTS IDENTIFIED WITH POTENTIAL SAVINGS

PLANT GROUPING	NUMBER OF PLANTS
GROUP 1	24
GROUP 2	17
GROUP 3	16
GROUP 4	26
GROUP 5	25
GROUP 6	23
GROUP 7	26
TOTAL	157

If productivity were increased to the current median FHP productivity level, the Postal Service could realize workhour savings of 22.9 million based upon FY 2008 usage. This could produce a cost savings of more than \$969 million¹⁶ in a single year. For example, if Group 1 plants below the median increased their productivity to the average of the above-median plants (846 pieces per hour); the Postal Service could save almost 10.1 million workhours – 44 percent of these 22.9 million workhours. See Table 5.

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¹⁵ For this analysis, we used plant groupings based on FY 2006 BPI Groupings (Workload). (See Appendix A.) We based the savings on FHP mail volume, with productivity based on median performers.

¹⁶ The workhour reductions were based on FY 2008 usage, using the PS-06 fully loaded FY 2008 clerk rate of \$42.25 and the PS-05 fully loaded FY 2008 mailhandler rate of \$43.17. (See Appendix K.)

TABLE 5. BASELINE WORKHOUR REDUCTIONS

PLANT GROUPING	MEDIAN FHP PRODUCTIVITY	GROUP PLANT SAVINGS	PERCENTAGE OF TOTAL SAVINGS
GROUP 1	846	10,063,889	44.03
GROUP 2	926	4,215,631	18.44
GROUP 3	908	2,526,837	11.06
GROUP 4	1,002	3,138,620	13.73
GROUP 5	1,141	1,517,845	6.64
GROUP 6	1,223	584,850	2.56
GROUP 7	1,368	807,650	3.53
TOTAL		22,855,321	

The recommended savings of almost 22.9 million workhours represents a 17.29 percent decrease in the 132,193,194 workhours used by plants that operated below the median FHP productivity in FY 2008, and a 9.78 percent decrease in the 233,692,856 workhours used by all plants. See Table 6.

TABLE 6. OPPORTUNITY HOUR PERCENTAGE FOR PLANTS BELOW-MEDIAN

PLANT GROUPING	FY 2008 FUNCTION 1 WORKHOUR USAGE	BASELINE REDUCTIONS	PERCENTAGE
GROUP 1	53,519,276	10,063,889	18.80
GROUP 2	25,238,997	4,215,631	16.70
GROUP 3	17,008,954	2,526,837	14.86
GROUP 4	18,016,991	3,138,620	17.42
GROUP 5	9,756,923	1,517,845	15.56
GROUP 6	5,414,382	584,850	10.80
GROUP 7	3,237,672	807,650	24.95
TOTAL	132,193,194	22,855,321	17.29
OVERALL TOTAL	233,692,856		9.78

APPENDIX D: ABC COST PER 1,000 PIECES FHP FY 2008

Using ABC, we calculated the costs per 1,000 pieces FHP. Costs were higher at plants with below-median productivity and in some cases, were as much as 76 percent higher at plants with lower productivity. For example, costs at Group 1 plants with below-median productivity were \$101 per 1,000 pieces FHP, compared with \$57 per 1,000 pieces FHP at sites with above-median productivity. See Table 7.

TABLE 7. ABC COST PER 1,000 PIECES FHP

PLANT GROUPING	AVERAGE FY 2008 COST FOR ABOVE- MEDIAN PLANTS	AVERAGE FY 2008 COST FOR BELOW- MEDIAN PLANTS	COST DIFFERENCE	PERCENTAGE COST DIFFERENCE
GROUP 1	\$57	\$101	\$44	76
GROUP 2	\$66	\$86	\$20	31
GROUP 3	\$71	\$94	\$24	34
GROUP 4	\$61	\$84	\$23	37
GROUP 5	\$54	\$73	\$19	35
GROUP 6	\$64	\$66	\$3	4
GROUP 7	\$73	\$128	\$54	74

APPENDIX E: POTENTIAL SOURCES OF WORKHOUR REDUCTIONS

As shown in Table 8, we identified eight potential sources to improve efficiency and achieve the 22.9 million workhour reductions. These potential sources total almost 18.9 million workhours, which represents 82.5 percent of the recommended savings.

TABLE 8. POTENTIAL SOURCES OF WORKHOUR REDUCTIONS

SOURCE OF WORKHOUR REDUCTION	POTENTAIL WORKHOUR SAVINGS	FOR DETAILED EXPLANATION SEE APPENDIX
Reduce Overtime	1,446,250	Appendix F
Reduce Handling Ratio	3,921,048	Appendix G
Reduce Manual Sortation of Letters	1,064,196	Appendix I
Reduce Manual Sortation of Flats	490,892	Appendix I
Improve Efficiency in LDC 11 Operations	2,807,505	Appendix H
Improve Efficiency in LDC 12	998,020	Appendix H
Improve Efficiency in LDC 14 Operations	3,943,654	Appendix I
Improve Efficiency in LDC 17 Operations	4,192,803	Appendix J
TOTAL	18,864,368	
FHP PRODUCTIVITY SAVINGS	22,855,321	Appendix C
PERCENTAGE	82.54 percent	

Human Resources

The Postal Service may be able to reduce workhours through retirements and elimination of casual employees. As of January 1, 2009, 18,606 employees were eligible to retire. If all eligible employees retired, there would be an annual workhour reduction of 32.6 million hours. As of that same date, there were also 4,188 casual employees, elimination of which would reduce another 7.3 million workhours. See Tables 9 and 10.

¹⁷ A total of 5,879 career employees entered the workforce after January 1, 2003; however, present union contracts protect these employees from layoffs. The contract expires in 2010.

TABLE 9. POTENTIAL COMPLEMENT REDUCTION FOR PLANTS BELOW THE MEDIAN

PLANT GROUPING	TOTAL FUNCTION 1 EMPLOYEES	RETIREMENT ELIGIBLE	CAREER ENTERED ON DUTY AFTER 1/1/2003	CASUALS	TOTAL	PERCENTAGE OF TOTAL EMPLOYEES
GROUP 1	30,030	8,189	1,874	1,500	11,563	39
GROUP 2	13,504	3,669	807	799	5,275	39
GROUP 3	8,976	2,107	942	579	3,628	40
GROUP 4	9,743	2,574	900	561	4,035	41
GROUP 5	5,140	1,065	663	416	2,144	42
GROUP 6	2,933	649	414	263	1,326	45
GROUP 7	1,651	353	279	70	702	43
TOTALS	71,977	18,606	5,879	4,188	28,673	40

TABLE 10. POTENTIAL WORKHOUR REDUCTION FOR PLANTS BELOW THE MEDIAN¹⁸

PLANT GROUPING	TOTAL FUNCTION 1 EMPLOYEES	RETIREMENT ELIGIBLE	CAREER ENTERED ON DUTY AFTER 1/1/2003	CASUALS	TOTAL	PERCENTAGE OF TOTAL EMPLOYEES
GROUP 1	52,762,710	14,388,073	3,292,618	2,635,500	20,316,191	39
GROUP 2	23,726,528	6,446,433	1,417,899	1,403,843	9,268,175	39
GROUP 3	15,770,832	3,701,999	1,655,094	1,017,303	6,374,396	40
GROUP 4	17,118,451	4,522,518	1,581,300	985,677	7,089,495	41
GROUP 5	9,030,980	1,871,205	1,164,891	730,912	3,767,008	42
GROUP 6	5,153,281	1,140,293	727,398	462,091	2,329,782	45
GROUP 7	2,900,807	620,221	490,203	122,990	1,233,414	43
TOTALS	126,463,589	32,690,742	10,329,403	7,358,316	50,378,461	40

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¹⁸ Workhour savings are based on 1,757 hours per year.

APPENDIX F: OVERTIME USAGE

Postal Service management could stabilize overtime usage and save more than 1.4 million workhours. When overtime is not properly monitored and controlled, the Postal Service incurs higher labor costs because these workhours are paid at a higher premium rate.

For example, Group 1 plants operating above the median FHP productivity had an average overtime percentage rate of 6.65 percent. If all Group 1 plants operated at this overtime ratio, 417,003 workhours could be saved. Overall, the Postal Service could save more than 1.4 million workhours if all plants with below-median FHP productivity reduced their overtime percentages to the average of the plants above-median FHP productivity. See Table 11.

PLANT GROUPING	ABOVE-MEDIAN PRODUCTIVITY - AVERAGE OVERTIME PERCENTAGE	GROUP WORKHOUR SAVINGS
GROUP 1	6.65	417,003
GROUP 2	8.01	378,471
GROUP 3	7.98	269,597
GROUP 4	8.16	153,970
GROUP 5	8.96	94,076
GROUP 6	8.96	65,329
GROUP 7	8.38	67,803
TOTAL		1,446,250

TABLE 11. OVERTIME CALCULATIONS

Overtime and Workload Correlation

Plants with below-median productivity did not use overtime effectively in relation to workload or FHP volume. For example, the average correlation between overtime usage and workload for Group 1 plants above the median was .81, compared with .74 for plants below the median. The average correlation for Group 2 plants above the median was .70, compared with .22 for plants below the median.¹⁹

This analysis indicates that, especially in the plants with the largest workloads, the plants above the median productivity level used overtime more efficiently in relation to volume or workload. See Table 12.

¹⁹ The closer the correlation number is to one the better the correlation between the overtime usage and volume.

TABLE 12. COEFFICIENT OF CORRELATION – FHP TO OVERTIME WORKHOURS

PLANT GROUPING	ABOVE- MEDIAN	BELOW- MEDIAN
GROUP 1	0.81	0.74
GROUP 2	0.70	0.22
GROUP 3	0.53	0.49
GROUP 4	0.54	0.53
GROUP 5	0.46	0.37
GROUP 6	0.62	0.61
GROUP 7	0.32	0.07

APPENDIX G: EXCESSIVE MAIL HANDLING

The Postal Service could save more than 3.9 million workhours by reducing the number of times mail is handled. Excessive mail handling uses more workhours than necessary to process mail volumes, which means that productivity is lower. In general, plants with lower FHP productivity handled the mail more often than plants with high FHP productivity did. For example, Group 1 plants operating above the median FHP productivity had an average handling ratio of 1.86. If all Group 1 plants handled mail at this ratio, almost 1.3 million workhours could be saved. Further, the Postal Service could save more than 3.9 million workhours if all plants with below-median FHP productivity handled mail at the average handling ratio of the plants above-median FHP productivity. See Table 13.

TABLE 13. HANDLING RATIO CALCULATION

PLANT GROUPING	ABOVE-MEDIAN PRODUCTIVITY – AVERAGE HANDLING RATIO	GROUP WORKHOUR SAVINGS
GROUP 1	1.86	1,296,350
GROUP 2	1.90	687,943
GROUP 3	1.92	132,216
GROUP 4	1.88	733,871
GROUP 5	1.74	617,387
GROUP 6	1.74	326,788
GROUP 7	1.68	126,494
TOTAL		3,921,048

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²⁰ The handling ratio is calculated by comparing the FHP and the total piece handlings (TPH). TPH is the number of handlings necessary to distribute each piece of mail from the time of receipt to dispatch. As an example, if the handling ratio is 1.5, the average piece of mail receives 1.5 handlings from the time it is received until it is dispatched from the facility. This performance information can be used to measure performance and efficiency. This ratio can vary depending on mail flows and operating plans.

APPENDIX H: AUTOMATED AND MECHANIZED EQUIPMENT

Plants that operated below the median FHP productivity 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 2.8 million workhours in automated operations and almost 1 million workhours in mechanized operations. In addition, plants with below-median productivity generally had lower throughput, higher jams per 10,000 pieces, and higher reject rates on the DBCSs and on the AFSM 100s.

Automated Letter Mail Processing – LDC 11

Plants that operated below the median FHP productivity generally had lower productivity in LDC 11. For example, Group 1 plants operating above the median FHP productivity had an average LDC 11 productivity of 3,941 pieces per hour. If all Group 1 plants operated at this productivity level, 1.2 million workhours could be saved. Further, the Postal Service could save more than 2.8 million workhours if all plants with belowmedian FHP productivity increased the pieces handled per hour in LDC 11 operations to the average of the plants with above-median FHP productivity. See Table 14.

ABOVE-MEDIAN GROUP PLANT PRODUCTIVITY -WORKHOUR GROUPING AVERAGE LDC 11 SAVINGS **PRODUCTIVITY** GROUP 1 3,941 1,228,559 GROUP 2 3,790 516,208 GROUP 3 3,556 197,490 GROUP 4 4.076 516,159 GROUP 5 4,692 264,873

4,813

5.495

16,656

67,559

2,807,506

TABLE 14. LDC 11 FY 2008

Mechanized and Automated Flat Mail Processing – LDC 12

GROUP 6

GROUP 7

TOTAL

Plants with FHP productivity lower than the median also had lower LDC 12 productivity on average. For example, Group 1 plants operating above the median FHP productivity had an average LDC 12 productivity of 1,602 pieces per hour. If all Group 1 plants

operated at or above the LDC 12 median productivity of 1,602 pieces per hour, 251,573 workhours could be saved. Further, the Postal Service could save more than 998,015 workhours if all plants with below-median FHP productivity increased the pieces handled per hour in LDC 12 operations to the average of the plants with above-median FHP productivity. See Table 15.

TABLE 15. LDC 12 FY 2008

PLANT GROUPING	ABOVE-MEDIAN PRODUCTIVITY – AVERAGE LDC 12 PRODUCTIVITY	GROUP WORKHOUR SAVINGS
GROUP 1	1,602	251,573
GROUP 2	1,470	117,748
GROUP 3	2,007	143,229
GROUP 4	1,675	152,458
GROUP 5	1,942	198,216
GROUP 6	1,576	114,179
GROUP 7	1,336	20,613
TOTAL		998,015

Throughput, Jam Rates, and Reject Rates

The average throughput for the DBCSs and the AFSM 100s were lower in Group 1 plants with below-median FHP productivity than in plants with above-median productivity for the DBCSs and AFSM 100s. In addition, the DBCSs' and the AFMS 100s' jam rate and reject rates were higher in plants with below median FHP productivity. These trends indicate management at these plants may 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 16 and 17.

TABLE 16. GROUP 1 DBCSs FY 2008

GROUP 1 SITES	AVERAGE THROUGHPUT	JAM RATE	REJECT RATE
ABOVE-MEDIAN	37,754	2.22	1.0
BELOW-MEDIAN	37,348	2.37	1.2
DIFFERENCE	406	15	2

TABLE 17. GROUP 1 AFSM 100s FY 2008

GROUP 1 SITES	AVERAGE THROUGHPUT	JAM RATE	REJECT RATE
ABOVE-MEDIAN	15,335	25.14	4.6
BELOW-MEDIAN	14,775	29.40	5.8
DIFFERENCE	560	-4.26	-1.1

APPENDIX I: MANUAL OPERATIONS

Opportunities to improve efficiency in manual operations were twofold:

- Plants with FHP productivity lower than the median also had lower productivity in manual operations.
- Postal Service 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 above the median FHP productivity had an average LDC 14 productivity of 313 mailpieces per hour. If all Group 1 plants operated at the average of 313 mailpieces per hour, more than 1.8 million workhours could be saved. Further, the Postal Service could save more than 3.9 million workhours if all plants with below-median FHP productivity increased the mailpieces handled per hour in LDC 14 operations to the average of the plants above-median FHP productivity. See Table 18.

TABLE 18. LDC 14 FY 2008

PLANT GROUPING	ABOVE-MEDIAN PRODUCTIVITY- AVERAGE LDC 14 PRODUCTIVITY	GROUP WORKHOUR SAVINGS
GROUP 1	313	1,838,198
GROUP 2	317	786,852
GROUP 3	319	308,538
GROUP 4	366	466,384
GROUP 5	504	328,125
GROUP 6	446	88,912
GROUP 7	612	126,645
TOTAL		3,943,654

Excess Manual Letter Mail

Plants that operated at less than the median FHP productivity levels generally worked an excessive amount of letter mail manually. The Postal Service target is that no more than 2.5 percent of the total letter volume should be sorted manually. However, in FY 2008, plants with less than median FHP productivity sorted an excess of more than 761.5 million letters manually. The largest percentage of excess manual letters was at Group 1 plants. The Postal Service could save more than 1 million workhours by using automation to sort letter mail, instead of manual sortation. See Table 19.

TABLE 19. EXCESS MANUAL LETTERS

PLANT GROUPING	EXCESS LETTERS WORKED OVER 2.5 PERCENT OF TOTAL LETTER VOLUME	GROUP WORKHOUR SAVINGS	PERCENTAGE OF EXCESS LETTERS
GROUP 1	234,269,642	322,342	30.76
GROUP 2	175,998,689	284,026	23.11
GROUP 3	108,154,986	188,235	14.20
GROUP 4	95,244,758	133,957	12.51
GROUP 5	53,885,719	62,109	7.08
GROUP 6	36,677,624	40,505	4.82
GROUP 7	57,293,942	33,022	7.52
TOTAL	761,525,359	1,064,196	

Excess Manual Flat Mail

Plants that operated at less than the median FHP productivity levels also generally worked an excessive amount of flat mail manually. The Postal Service target is that no more than 6 percent of the total flat volume should be sorted manually. However, in FY 2008, plants with less than median FHP productivity sorted an excess of nearly 274.2 million flats manually. The largest percentage of excess manual flats was at Group 1 plants. The Postal Service could save 490,892 workhours by using automation to sort flat mail, instead of manual sortation. See Table 20.

TABLE 20. EXCESS MANUAL FLATS

PLANT GROUPING	EXCESS FLATS WORKED OVER 6 PERCENT OF TOTAL FLAT VOLUME	GROUP WORKHOUR SAVINGS	PERCENTAGE OF EXCESS FLATS
GROUP 1	134,598,120	269,864	49.09
GROUP 2	37,084,930	80,527	13.53
GROUP 3	8,978,977	23,139	3.27
GROUP 4	22,662,777	33,928	8.27
GROUP 5	35,939,505	51,737	13.11
GROUP 6	15,100,724	17,867	5.51
GROUP 7	19,807,176	13,829	7.22
TOTAL	274,172,209	490,892	

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APPENDIX J: ALLIED OPERATIONS – LDC 17

Plants with below-median FHP productivity used a greater percentage of workhours in allied workhours, LDC 17, than plants with above-median FHP productivity. As an example, Group 1 plants with above-median FHP productivity used 39 percent of workhours in LDC 17. By standardizing the percent of workhours used in LDC 17 as compared with total Function 1 workhours used, Group 1 plants could reduce more than 1.6 million workhours. Further, by standardizing the percent of workhours used in LDC 17 in all plant groups, the Postal Service could save nearly 4.2 million workhours. See Table 21.

TABLE 21. LDC 17 FY 2008

PLANT GROUPING	ABOVE-MEDIAN PRODUCTIVITY AVERAGE LDC 17 PERCENTAGE TO TOTAL FUNCTION 1	GROUP WORKHOUR SAVINGS
GROUP 1	39.26	1,686,740
GROUP 2	34.19	632,279
GROUP 3	35.31	825,712
GROUP 4	34.02	450,920
GROUP 5	32.89	264,022
GROUP 6	32.58	172,540
GROUP 7	32.58	160,590
TOTAL		4,192,803

APPENDIX K: CALCULATION OF QUESTIONED COSTS

RECOMMENDED ACTION AND EMPLOYEE CATEGORY IMPACTED	WORKHOUR REDUCTION	WORKHOUR RATE	COST AVOIDANCE BASED ON 1 FISCAL YEAR
Level 6 Clerk	18,662,518	\$42.25	\$788,501,550
Level 5 Mailhandler	4,192,803	\$43.17	180,994,157
TOTAL	22,855,321		\$969,495,708

APPENDIX L: MANAGEMENT'S COMMENTS

WILLIAM P. GALLIGAN SENIOR VICE PRESIDENT OPERATIONS



April 30, 2009

Lucine M. Willis Director, Audit Operations 1735 North Lynn St. Arlington, VA 22209-2020

SUBJECT: Draft Management Advisory Report — Assessment of Overall Plant Efficiency (Report Number NO-MA-09-Draft)

Thank you for the opportunity to review and comment on the Assessment of Overall Plant Efficiency draft audit report.

Management agrees with the recommendations in this draft report and will address each separately below.

Recommendation 1:

Reduce 22.9 million workhours by FY 2011 with an associated economic impact of \$969,495,708. We will report \$969,495, 708 in unrecoverable questioned costs in our Semiannual Report to Congress.

Response:

Management agrees with this recommendation. Management will continue to improve operational efficiency. In response to the specific areas of improvement identified in the report, the following information is provided:

 Overtime usage. The Mail Processing Employee Scheduler and Mail Processing Staffing Opportunity Model (MPES/MPSOM) provide operations managers a tool to react to and plan for volume variations in their operations and schedule accordingly. The MPES and MPSOM are used in plants and allows management to plan and monitor specific overtime reduction parameters, such as off day and supervisory overtime. Through use of specific reports in MPES and MPSOM, managers can focus on overtime reduction.

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- 2. Mail handlings. Our existing efforts to maximize tray density have improved our Total Pieces Handled to First Handled Pieces ratio (the number of pieces handled compared to the number of first handling pieces). A new sort program tool called, Sort Program Optimization, will yield additional benefits in this area. Sort Program Optimization ensures a systematic approach to sort program development by ensuring volume-based, system-driven, standardized sorts are made by our automation equipment. This tool will enable greater tray density and fewer sort handling and tray handlings. Deployment is expected to be completed by 2010.
- 3. <u>Use of automated and mechanized equipment</u>. Management continues to maximize the use of our most efficient equipment by removing obsolete processing equipment such as Multiline Optical Character Readers and Mail Processing Bar Code Sorters. With the inception of the Run Plan Generator (RPG), managers and supervisors plan machine runs and track performance to their plans. The RPG in concert with MPES, allows managers to better use automated equipment and staffing associated with these operations.
- 4. Manual operations performance. Continuous improvement efforts using Lean Six Sigma (LSS) have enabled management to develop programs and plans that can be replicated in the field to maximize savings opportunities. The LSS projects have identified manual mail reduction opportunities through automation improvements in coding and image resolution. Using a process developed by Field Operations Standardization Implementation, Operations Industrial Engineers in the field coordinate replication activities and leverage work methods and operational performance improvements. Replication of these projects nationwide will provide additional manual savings.
- 5. Allied operations. Significant savings have been identified involving Powered Industrial Vehicle equipment as well as allied and indirect position reductions. These initiatives will continue in 2010. In addition, an LSS project to remove scales that weighed mail on the work room floor was replicated nationwide and saved allied hours associated with weighing mail.

Recommendation 2:

Periodically evaluate operating efficiency by assessing performance against productivity targets and adjusting resources (staff and equipment) in response to workload changes.

Response:

Will & Balligan William P. Galligan

Management agrees with this recommendation. Operational-level Breakthrough Productivity Initiative (BPI) targets are updated yearly based upon top quartile performances throughout the nation. These targets establish the foundation for performance expectations of the BPI Scorecard and Mail Processing Variance models, as well as staffing tools such as MPES. The models also enable efficiency ranking comparisons to identify best in class performance for activities such as the identification of proven practices for organizational standardization.

Additionally, BPI modeling is used to identify recoverable savings opportunities through Local Management Initiatives (LMI) within the budget process. Management is currently pursuing the expansion of BPI modeling to include factors such as local complement mix and wage rates.

We do not believe that this report contains any propriety or business information and may be disclosed pursuant to the Freedom of Information Act.

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cc: Mr. Pajunas Mr. Williams Mr. Manz Ms. Banks Ms. Malone Mr. Oronzio