

June 11, 2010

STEVEN J. FORTE SENIOR VICE PRESIDENT, OPERATIONS

SUBJECT: Management Advisory Report – Assessment of Overall Plant Efficiency 2010 (Report Number NO-MA-10-001)

This report presents the results of the Postal Service's progress in reducing workhours based on recommendations in a prior report.¹ Our objective was also to assess the overall efficiency of the processing and distribution network for fiscal year (FY) 2009 (Project Number 10XG017NO000). This is a cooperative effort with the Postal Service and addresses operational risk. See Appendix A for additional information about this review.

Last year, we reported on efficiency levels and mail volume in processing and distribution centers (P&DCs) and facilities (P&DFs), and recommended the Postal Service reduce almost 23 million workhours by FY 2011. The goal of the previous effort was to report out on 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.

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 2008 reduced over 18 million workhours (achieving 82 percent of the recommended workhour savings) and improved productivity by over 6 percent. Moreover, from Quarter 1 (Q1), FY 2009 to Q1, FY 2010, the Postal Service maintained or improved service. See Appendix B for more information.

However, we found the Postal Service had not yet fully adjusted workhours in response to declining mail volume as a result of poor economic conditions, nor achieved all possible efficiencies in mail processing operations.

¹ Assessment of Overall Plant Efficiency (Report Number NO-MA-09-002, dated May 8, 2009).

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

- Overtime Hours
- Mail Handling
- Automated and Mechanized Equipment
- Allied Operations
- Manual Operations

The Postal Service could improve operational efficiency by reducing over 16.2 million workhours by the end of FY 2012. This would allow the Postal Service to achieve at least median productivity levels in the network and avoid costs of almost \$744 million based on workhour savings for 1 year.² See Appendix C for a detailed explanation of this cost avoidance.

Significant Workhour Reductions and Service Improvements

The Postal Service made significant reductions in workhours and improvements to operational efficiency in FY 2009. For instance, from FY 2008 to FY 2009, management used 40 million fewer workhours in mail processing,³ 18 million of which are attributable to the lower performing plants. Plants that had below–median productivity levels in FY 2008 achieved 82 percent of the recommended workhour savings and improved productivity by over 6 percent.

Overall, for all plants productivity also improved by more than 5 percent over the prior fiscal year and overtime decreased by more than 50 percent compared to FY 2008. In comparison, the Bureau of Labor Statistics reported a productivity increase of just 2.9 percent in the nonfarm business sector⁴ as measured by output per hour of all persons. For additional comparisons to the nonfarm business sector, see Appendix B.

The Postal Service made these reductions while maintaining or improving service from Q1, FY 2009 to Q1, FY 2010. To the Postal Service's credit, it achieved these levels even as it increased the number of 3-digit ZIP codes measured. See Appendix B for our detailed analysis of this topic.

² The cost avoidance of \$744 million per year represented almost 20 percent of the Postal Service net loss of \$3.8 billion in FY 2009.

³ These hours are recorded in a category referred to as Function 1. Total Function 1 hours include Network Distributions Centers (NDCs), International Service Centers (ISCs), Logistics and Distribution Centers (L&DCs), Priority Hubs, and Processing and Distribution Centers and Facilities.

⁴ The nonfarm business sector is a subset of the domestic economy and excludes the economic activities of the following: general government, private households, nonprofit organizations serving individuals, and farms. The nonfarm business sector accounted for about 77 percent of the value of gross domestic product (GDP) in 2000.

Changing 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 2009 with a net loss of almost \$3.8 billion and experienced a volume decrease from FY 2008 to FY 2009 of almost 25 billion mailpieces — a decrease of 13 percent.⁵ At the time of our review, the Postal Service continued to experience downward mail volume trends. The Postal Service ended Q1, FY 2010 with a net loss of \$297 million, as the economic recession contributed to a 4.9 billion mailpiece decline compared with the same period last year. The mail volume decline in Q1, FY 2010 marked the twelfth consecutive quarter of accelerating volume declines. See Appendix B for our detailed analysis of this topic.

Efficiency of Operations

Further opportunities exist for the Postal Service to reduce mail processing workhours by improving efficiency. For example, if the 144 plants below-median productivity in FY 2009 achieved just the median productivity level for each respective plant group,⁶ the Postal Service could realize workhour savings of over 16.2 million. See Appendix B for our detailed analysis of this topic.

Potential Sources of Workhour Reductions

We identified several potential sources to achieve the recommended workhour reductions, which we explain below. The Postal Service could reduce workhours if casual employees were no longer used. In addition, as of February 2010, 14,416 employees were eligible to retire in plants with below-median productivity levels. This represents a potential annual workhour reduction of almost 25 million workhours, far more than needed to achieve the savings identified. See Appendix B for additional information.

Reduction in Overtime

Management decreased overtime in the network by over 50 percent compared to FY 2008. However, further opportunities exist to reduce overtime. In FY 2009, 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 1.6 million workhours. See Appendix B for our detailed analysis of this topic.

⁵ Based on the Annual Report for FY 2009.

⁶ We divided the facilities that process mail into seven groups ranked according to mail volume outlined in the Breakthrough Productivity Initiative (BPI). See Appendix A for more information.

Mail Handling

Excessive mail handling used more workhours than necessary to process mail volume and lowered productivity. In general, plants with lower First Handling Piece (FHP) productivity⁷ 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 piece of mail 1.79 times from the moment it was received until it was dispatched from the facility.⁸ Group 1 plants with below median productivity on average sorted each piece of mail 1.88 times. If all Group 1 plants sorted mail at the 1.79 ratio, the Postal Service would save over 2 million workhours.
- Similarly, the Postal Service could save more than 4.3 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 B 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.⁹ If all plants with below-median FHP productivity levels increased the number of mailpieces handled per hour by operation to the average of the plants with above-median FHP productivity, the Postal Service could save more than 2.8 million workhours in automated operations and over 751,000 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 Barcode Sorters (DBCS) and Automated Flats Sorting Machines (AFSM) 100, indicating that procedures for jogging and culling the mail may need improvement. See Appendix B for our detailed analysis of this topic.

Manual Operations

Opportunities to improve efficiency in manual operations were twofold. First, plants with productivity levels lower than the median also had lower productivity in manual operations. The Postal Service could save more than 3.8 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. Second, the Postal Service did not take full advantage of automated and mechanized equipment and,

⁷ FHP productivity was calculated by dividing FHP volume by Function 1 workhours.

⁸ The handling ratio was determined by comparing FHP volume to the number of times a piece of mail was handled from receipt to dispatch.

⁹ These operations include automated letter operations and the distribution of flat mail on automated and mechanized equipment.

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 nearly 1.8 million workhours by using automation to sort letter and flat mail instead of manual sortation. See Appendix B for our detailed analysis of this topic.

Allied Operations

Plants with below-median productivity levels generally used a larger percentage of workhours in allied operations¹⁰ (referred to as Labor Distribution Code [LDC] 17) than plants with above-median productivity levels. Allied operations represented the largest percentage (38 percent) of workhour usage in mail processing operations in FY 2009. By standardizing the percentage of hours used in allied operations across the network, as compared with total mail processing workhours used, the Postal Service could save more than 4.5 million workhours. This represents the greatest opportunity to improve efficiency and achieve workhour reductions. See Appendix B for our detailed analysis of this topic.

The Postal Service could improve operational efficiency by reducing over 16.2 million workhours. This would allow the Postal Service to achieve at least median productivity levels in the network and avoid costs of almost \$744 million based on workhour savings for 1 year.¹¹ See Appendix C for a detailed explanation of this cost avoidance.

The Postal Service addressed operational efficiency by reducing workhours to better align with budgeted workhours. For example, they reduced FY 2009 mail processing workhours by approximately 14 percent from FY 2008 levels. However, management had not evaluated operational efficiency by assessing performance based on median productivity for each plant grouping.

We recommend the senior vice president, Operations:

- 1. Reduce 16.2 million workhours by FY 2012 with an associated economic impact of \$743,961,610.
- 2. Periodically evaluate operating efficiency by assessing performance against the median productivity level for each plant grouping.

Management's Comments

Management agreed with the findings, recommendations, and monetary impact. See Appendix D for management's comments, in their entirety.

¹⁰ These operations are recorded in LDC 17 and include mail preparation, presort operations, traying, sleeving, opening, pouching, and platform operations.

¹¹ The 744 million per year represented almost 20 percent of the Postal Service's net loss of \$3.8 billion in FY 2009.

Evaluation of Management's Comments

The U.S. Postal Service Office of Inspector General (OIG) considers management's comments responsive to the recommendations in the report. Management has been proactive with improving efficiency through workhour reductions. In addition, management has numerous programs in place that addresses the issues identified in the report.

The OIG considers recommendation one 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 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.

E-Signed by Robert Batta 0 VERIFY authenticity with Approvelt KOREST V. I with

Robert J. Batta Deputy Assistant Inspector General for Mission Operations

Attachment

cc: Patrick R. Donahoe Jordan M. Small Frank Neri Sally K. Haring

APPENDIX A: ADDITIONAL INFORMATION

BACKGROUND

Mail processing is an integrated group of activities¹² required to sort and distribute mail for dispatch and eventual delivery. Post offices, stations, and branches send outgoing mail to P&DCs and processing and distribution facilities (P&DFs) for processing and dispatch for a designated service area. The Postal Service has 298 facilities with mail processing operations.

We divided the facilities that process mail into seven groups ranked by mail volume outlined in the BPI.¹³ Chart 1 shows the percentage of mail processing facilities in each group.



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

¹² Mail processing activities include culling, edging, stacking, facing, canceling, sorting, tying, pouching, and bundling.
¹³ The Postal Service established the BPI 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 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.

Labor Distribution Codes

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

The largest percentage of workhour usage in mail processing operations in FY 2009 was in LDC 17 and the largest amount of FHP volume in FY 2009 was in LDC 11.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to assess the Postal Service's progress in reducing workhours based on recommendations made in our prior report and to assess the overall efficiency of the processing and distribution network for FY 2009. This audit is a cooperative effort with the Postal Service.

To accomplish our objectives, we identified trends in mail volume, workhours, overtime, and productivity for each of the seven plant groups for FY 2009. We calculated the median FHP per workhour for FY 2009, 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 productivity levels for LDCs 11, 12, and 14. We determined the ratio of LDC 17 workhours to total workhours for FY 2009 for each of the seven plant groups.¹⁵

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 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

¹⁴ Mail processing operations are in the Function 1 category.

¹⁵ We did not include LDCs 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; and LDC 18 represents a wide variety of functions that could not provide a reasonable basis for comparison.

verified the accuracy of the data by confirming our analysis and results with Postal Service managers and other data sources.

We conducted this review from February through June 2010 in accordance with Quality Standards for Inspections.¹⁶ We discussed our conclusions with management officials on April 20, 2010, and included their comments where appropriate.

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 Washington Bulk Mail Center	NO-AR-06-003	2/22/2006	118,383,220

¹⁶ The President's Council on Integrity and Efficiency (PCIE) and the Executive Council on Integrity and Efficiency (ECIE) last promulgated these standards in January 2005. Since then, The Inspector General Act of 1978 as amended by the IG Reform Act of 2008 created the Council of the Inspectors General on Integrity and Efficiency (CIGIE), which combined the PCIE and ECIE. To date, the Quality Standards for Inspections have not been amended to reflect adoption by the CIGIE and, as a result, still reference the PCIE and ECIE.

Report Title	Report Number	Final Report Date	Monetary Impact
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
Assessment of Overall Plant Efficiency	NO-MA-09-002	5/8/2009	969,495,708
Review of Sunday Operations at the Denver Processing and Distribution Center	NO-AR-09-012	9/25/2009	38,250,365
Dallas Processing and Distribution Center Outgoing Mail Consolidation	NO-AR-10-003	02/24/2010	11,997,208
		Total	\$2,073,326,374

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 than necessary were used to process the mail. These reviews identified opportunities to improve efficiency and reduce more than 26.6 million workhours that would produce over \$2 billion in savings over 10 years. In response to our recommendations, Postal Service management reduced workhours to better align with budgeted workhours.

APPENDIX B: DETAILED ANALYSIS

Follow-up to Prior Audit

In the first report,¹⁷ we recommended workhour savings of 22,855,321, with an associated economic impact of \$969,495,708. We compared the performance of the plants identified as having below-median productivity levels in FY 2008 with their performance in FY 2009. We found that plants that were below median in FY 2009 improved productivity by 6.05 percent. These plants achieved 82 percent of our recommended workhour reduction and reduced workhours by 18,689,908 (14.14 percent) as shown in Table 1.

TABLE 1. BELOW-MEDIAN PLANTS' WORKHOUR SAVINGS FY 2008 TO FY 2009

Plant Grouping	FY 2008 Workhours	FY 2009 Workhours	Savings Achieved	Recommended Savings	Associated Economic Impact	Percentage of Recommended Savings Achieved
Group 1	53,519,276	46,383,843	(7,135,432)	10,063,889	\$426,752,086	71%
Group 2	25,238,997	21,621,746	(3,617,252)	4,215,631	\$178,692,106	86%
Group 3	17,008,954	14,647,606	(2,361,348)	2,526,837	\$107,518,518	93%
Group 4	18,016,991	15,696,450	(2,320,541)	3,138,620	\$133,021,541	74%
Group 5	9,756,923	8,227,137	(1,529,785)	1,517,845	\$ 64,371,851	101%
Group 6	5,414,382	4,726,232	(688,150)	584,850	\$ 24,868,649	118%
Group 7	3,237,672	2,200,272	(1,037,400)	807,650	\$ 34,270,955	128%
Total	132,193,194	113,503,287	(18,689,908)	22,855,321	\$969,495,708	82%

We also compared the performance of all plants in FY 2008 with their performance in FY 2009. These sites do not include Network Distributions Centers (NDCs), International Service Centers (ISCs), Logistics and Distribution Centers (L&DCs), and Priority Hubs and, therefore, only represent 81 percent of total Function 1 workhours. The plants reduced workhours by 32,637,112 from FY 2008 to FY 2009.

Significant Workhour Reductions and Service Improvements

From FYs 2008 to 2009, the Postal Service made significant reductions in workhours and improvements to operational efficiency. For instance, from FYs 2008 to 2009, management used 40 million fewer workhours in mail processing.¹⁸ Overall mail processing productivity improved from an average 750 mailpieces per hour in FY 2008

¹⁷ Management Advisory Report – Assessment of Overall Plant Efficiency (Report Number NO-MA-09-002, dated May 8, 2009).

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 the P&DCs and P&DFs. There was a total 40 million workhour savings in Function 1 hours, 32.6 million of which were attributable to all plants and 18.6 attributable to plants below median productivity.

to an average 789 mailpieces per hour in FY 2009, representing a productivity increase of over 5 percent. Mail processing overtime was reduced 50.9 percent from FYs 2008 to 2009.

We reviewed Bureau of Labor Statistics trends and found that in the nonfarm business sector, productivity, as measured by output per hour of all persons, increased just 2.9 percent in 2009. Output in the nonfarm business sector decreased by 3.6 percent compared to a Postal Service volume decline of 13 percent. This decrease in output for private industry was the largest since this statistic was complied beginning in 1948 and the decrease in volume was the largest in Postal Service history. Workhours in the nonfarm business sector decreased by 6.4 percent compared to the Postal Service Function 1 workhour decline of 14 percent. Overtime rate for the nonfarm business sector in 2009 was 7 percent compared to the Function 1 overtime rate of 4 percent.

The Postal Service made these improvements and maintained service in External First-Class (EXFC) measurement system service categories of overnight and 2-day, and had a one-point decline in 3-day service as shown in Table 2. These service levels were achieved even as the Postal Service expanded the number of 3-digit ZIP codes included in the EXFC measurement system from 463 to 891 in FY 2009.

Fiscal Year	Overnight	2-Day	3-Day
2008	96	94	92
2009	96	94	91

TABLE 2. EXFC SERVICE SCORES

Service scores in all EXFC categories were maintained or improved from Quarter 1 of FY 2009 to Quarter 1 of FY 2010 as shown in Table 3.

TABLE 3. EXFC SERVICE	SCORES
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Fiscal Year	Quarter	Overnight	2-Day	3-Day
2009	1	96	92	86
2010	1	96	92	89

Despite continuing economic challenges, the Postal Service continued to deliver high levels of service, with 94 percent of customers surveyed rating the Postal Service as "excellent, very good or good" in the period July 1 to September 30, 2009. In addition, the Ponemon Institute¹⁹ named the Postal Service the "Most Trusted Government Agency" for the fifth year in a row. More than 87 percent of the 7,000 Americans surveyed in the 2009 Privacy Trust Study of the United States Government ranked the Postal Service first among 74 agencies. The top ranking means Americans trust the

¹⁹ The Ponemon Institute is a research center dedicated to privacy, data protection, and information security policy.

Postal Service as the government agency best able to keep their information safe and secure.

In FY 2009, the number of customer complaints regarding delayed mail decreased 1.7 percent compared to FY 2008 and, according to a Gallup Poll conducted in June 2009, 95 percent of Americans said it was important to them, personally, that the Postal Service stay in business.

Changing Economic Trends

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 2009 with a net loss of almost \$3.8 billion. The loss occurred despite \$6.1 billion in cost-cutting measures that included reductions in the number of employees, overtime hours, transportation, and other costs. Mail volume in FY 2009 totaled 177 billion pieces, a decline of 13 percent, or 25 billion pieces, compared to 2008, the largest in Postal Service history. Declining mail volume was attributed mainly to the economic environment, competition, and electronic diversion.²⁰ Total operating revenue decreased from \$74.9 billion in FY 2008 to \$68 billion in FY 2009 (a 9 percent decrease) while operating expenses totaled \$71.8 billion.

At the time of our review, the Postal Service continued to experience downward mail volume trends. The Postal Service ended Q1, FY 2010 with a net loss of \$297 million, as the economic recession contributed to a 4.9 billion mailpiece decline compared with the same period last year. An 8.87 percent drop in volume in Q1, FY 2010 marked the twelfth consecutive quarter of accelerating volume declines. The Postal Service is expecting mail volume to continue to decrease throughout 2010 despite economic indicators pointing to a slow recovery.

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..."

²⁰ Examples of electronic diversion include filing taxes electronically, receiving electronic refunds, and using electronic publications.

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 groupings²¹ and determined the median FHP productivity for each group. We found that if the 144 plants with below-median productivity in FY 2009 achieved just the median productivity level for each respective plant group,²² the Postal Service could realize workhour savings of almost 16.2 million and avoid costs of almost \$744 million ²³ in a single year. For example, if Group 1 plants below the median increased their productivity to the average of the above-median plants (841 pieces per hour); the Postal Service could save over 6.6 million workhours – 41 percent of the almost 16.2 million workhours. See Table 4.

Plant Grouping	Median FHP Productivity	Group Plant Savings	Percentage of Total Savings
Group 1	841	6,605,764	40.9%
Group 2	958	2,593,725	16.1%
Group 3	939	2,176,348	13.5%
Group 4	1,050	2,962,436	18.3%
Group 5	1,208	1,127,394	7.0%
Group 6	1,217	445,597	2.8%
Group 7	1,383	239,232	1.5%
Total		16,150,495	

TABLE 4. BASELINE WORKHOUR REDUCTIONS

The recommended savings of nearly 16.2 million workhours represents about a15 percent decrease in the 108,366,658 workhours used by plants that operated below the median FHP productivity level in FY 2009 and an 8 percent decrease in the 201,566,048 workhours used by all plants. See Table 5.

²¹ For this analysis, we used plant groupings based on FY 2006 BPI Groupings (Workload; see Appendix A.) We based savings on FHP mail volume and based productivity on median performers.

²² We divided the facilities that process mail into seven groups ranked according to mail volume outlined in the Breakthrough Productivity Initiative (BPI). See Appendix A for more information.

²³ We based workhour reductions on FY 2009 usage and used the Level 06 fully loaded FY 2009 clerk rate of \$45.67 and the Level 05 fully loaded FY 2009 mail handler rate of \$47.08 (see Appendix C).

Plant Grouping	FY 2009 Function 1 Workhour Usage	Group Plant Savings	Percentage
Group 1	43,887,481	6,605,764	15.05%
Group 2	20,433,679	2,593,725	12.69%
Group 3	13,927,424	2,176,348	15.63%
Group 4	15,423,286	2,962,436	19.21%
Group 5	7,725,942	1,127,394	14.59%
Group 6	4,718,013	445,597	9.44%
Group 7	2,250,832	239,232	10.63%
Total	108,366,658	16,150,495	14.90%
Overall Total	201,566,048		8.01%

TABLE 5. OPPORTUNITY HOUR PERCENTAGEFOR PLANTS BELOW-MEDIAN

Potential Sources of Workhour Reductions

As shown in Table 6, we identified several potential sources to improve efficiency and achieve recommended workhour reductions. These potential sources total almost 19.8 million workhours, which represents 122.5 percent of the recommended savings, far more than needed to achieve the savings identified.

TABLE 6. POTENTIAL SOURCES OF WORKHOUR REDUCTIONS

	Potential Workhour	For Detailed Explanation See The Following Sections in this
Source Of Workhour Reduction	Savings	Appendix
Reduce Overtime	1,659,007	Overtime Usage
Reduce Handling Ratio	4,377,691	Excessive Mail Handling
Reduce Manual Sortation of Letters	1,011,581	Excess Manual Letter Mail
Reduce Manual Sortation of Flats	782,878	Excess Manual Flat Mail
Improve Efficiency in LDC 11 Operations	2,833,330	Automated Letter Mail Processing
Improve Efficiency in LDC 12 Operations	751,649	Mechanized and Automated Flat Mail Processing
Improve Efficiency in LDC 14 Operations	3,854,992	Manual Operations
Improve Efficiency in LDC 17 Operations	4,516,662	Allied Operations
TOTAL	19,787,790	
FHP PRODUCTIVITY SAVINGS	16,150,495	Appendix C
PERCENTAGE	122.5%	

Human Resources

As of February 2010, 14,416 employees in plants below the median productivity level were eligible to retire. This represents a potential annual workhour reduction of almost 25 million workhours, far more than needed to achieve the savings identified. As of that same date, there were also 2,106 casual employees. The Postal Service could reduce 3.6 million workhours if casual employees were no longer used.²⁴ See Tables 7 and 8.

TABLE 7. POTENTIAL COMPLEMENT REDUCTION FOR PLANTS BELOW THE MEDIAN

Plant Grouping	Total Function 1 Employees	Retirement Eligible	Career Entered On Duty After 1/1/2004	Casuals	Total	Percentage of Total Employees
Group 1	22,839	6,331	1,330	573	8,234	36%
Group 2	10,637	2,709	656	513	3,878	36%
Group 3	7,457	1,756	778	429	2,963	40%
Group 4	7,943	2,095	808	235	3,138	40%
Group 5	3,859	816	510	189	1,515	39%
Group 6	2,118	477	323	99	899	42%
Group 7	1,106	232	189	68	489	44%
Total	55,959	14,416	4,594	2,106	21,116	38%

TABLE 8. POTENTIAL WORKHOUR REDUCTION FOR PLANTS BELOW THE MEDIAN²⁵

	Total		Career Entered			Percentage
Plant	Function 1	Retirement	On Duty After			of Total
Grouping	Employees	Eligible	1/1/2004	Casuals	Total	Employees
Group 1	39,557,148	10,965,292	2,303,560	992,436	14,261,288	36%
Group 2	18,423,284	4,691,988	1,136,192	888,516	6,716,696	36%
Group 3	12,915,524	3,041,392	1,347,496	743,028	5,131,916	40%
Group 4	13,757,276	3,628,540	1,399,456	407,020	5,435,016	40%
Group 5	6,683,788	1,413,312	883,320	327,348	2,623,980	39%
Group 6	3,668,376	826,164	559,436	171,468	1,557,068	42%
Group 7	1,915,592	401,824	327,348	117,776	846,948	44%
Total	96,920,988	24,968,512	7,956,808	3,647,592	36,572,912	38%

²⁴ In plants below the median productivity level, 4,594 career employees entered the workforce after January 1, 2004. However, present union contracts protect all career employees from layoffs. These contracts expire in 2010 and 2011. Although management cannot force employees into retirement, the Postal Service offered an incentive in October 2009 to retirement-eligible employees covered by the American Postal Workers Union 2006-2010 national agreement and the National Postal Mail Handlers Union 2006- 2011 national agreement. Approximately 9,600 Function 1 employees retired under this incentive.

²⁵ We based workhour savings on 1,732 hours per year.

Overtime Usage

Management decreased overtime in the network by over 50 percent compared to FY 2008. However, further opportunities exist to reduce overtime. The Postal Service could stabilize overtime usage and save more than 1.6 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 3.12 percent. If all Group 1 plants operated at this overtime ratio, the Postal Service could save 475,903 workhours. Overall, the Postal Service could save more than 1.6 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.

Plant Grouping	Above-Median Productivity – Average Overtime Percentage	Group Workhour Savings
Group 1	3.12%	475,903
Group 2	3.56%	448,697
Group 3	4.43%	185,394
Group 4	4.26%	172,086
Group 5	5.15%	303,898
Group 6	5.94%	38,789
Group 7	5.93%	34,242
Total		1,659,007

TABLE 9. OVERTIME CALCULATIONS

Excessive Mail Handling

The Postal Service could reduce the number of times mail is handled and save more than 4.3 million workhours. Excessive mail handling uses more workhours than necessary to process mail volumes, which means that productivity is lower.²⁶ 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

²⁶ We calculated the handling ratio by comparing FHP volume and the total piece handlings (TPH) volume. TPH measures the number of handlings used to distribute each piece of mail from receipt to dispatch. As an example, if the handling ratio is 1.5 then the average piece of mail 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 flows and operating plans.

above the median FHP productivity sorted a piece of mail 1.79 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 piece of mail 1.88 times. If all Group 1 plants sorted mail at the 1.79 ratio, the Postal Service could save over 2.0 million workhours. Further, the Postal Service could save more than 4.3 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.

Plant Grouping	Above-Median Productivity – Average Handling Ratio	Group Workhour Savings
Group 1	1.79	2,044,018
Group 2	1.85	422,187
Group 3	1.90	172,233
Group 4	1.86	666,405
Group 5	1.71	563,935
Group 6	1.74	305,427
Group 7	1.64	203,487
Total		4,377,691

TABLE 10. HANDLING RATIO CALCULATION

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 2.8 million workhours in automated operations and more than 751,000 workhours in mechanized operations. In addition, plants with below-median productivity generally had higher jams per 10,000 pieces, 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 below the median FHP productivity level generally had lower productivity in LDC 11. For example, Group 1 plants operating above median FHP productivity had an average LDC 11 productivity of 3,900 pieces per hour. If all Group 1 plants operated at this productivity level, the Postal Service could save 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 pieces handled per hour

in LDC 11 operations to the average of the plants with above-median FHP productivity. See Table 11.

Plant Grouping	Above-Median Productivity – Average LDC 11 Productivity	Group Workhour Savings
Group 1	3,900	1,341,820
Group 2	3,859	455,972
Group 3	3,523	152,261
Group 4	4,001	518,330
Group 5	4,682	189,911
Group 6	4,794	116,254
Group 7	5,485	58,782
Total		2,833,330

TABLE 11. LDC 11 FY 2009

Mechanized and Automated Flat Mail Processing – LDC 12

Plants with FHP productivity levels below 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 1,733 pieces per hour. If all Group 1 plants operated at this productivity level, the Postal Service could save 105,255 workhours. Further, the Postal Service could save 751,649 workhours if all plants with below-median FHP productivity levels increased the pieces handled per hour in LDC 12 operations to the average of the plants with above-median FHP productivity. See Table 12.

Plant Grouping	Above-Median Productivity – Average LDC 12 Productivity	Group Workhour Savings
Group 1	1,733	105,255
Group 2	1,727	144,818
Group 3	2,234	139,446
Group 4	1,892	160,297
Group 5	2,020	88,394
Group 6	1,544	92,784
Group 7	1,295	20,654
Total		751,649

TABLE 12. LDC 12 FY 2009

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 productivity. In addition, the DBCS and the AFSM 100 jam reject rates were higher in plants with below-median FHP productivity levels. These trends indicate that management at these plants may not be properly instructing employees on procedures for jogging and culling the mail. In addition, equipment at these plants may not be properly or sufficiently maintained. See Tables 13 and 14.

Group 1 Plants	Average Throughput	Jam Rate	Reject Rate
Above-Median	37,245	2.07	1.0
Below-Median	37,088	2.31	1.1
Difference	157	24	1

TABLE 13. GROUP 1 DBCS FY 2009

Group 1 Plants	Average Throughput	Jam Rate	Reject Rate
Above-Median	14,945	23.68	3.9
Below-Median	14,967	29.49	4.7
Difference	-22	-5.81	-0.8

Table 14. Group 1 AFSM 100 FY 2009

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 above median FHP productivity had an average LDC 14 productivity of 383 mailpieces per hour. If all Group 1 plants operated at the average of 383 mailpieces per hour, the Postal Service could save more than 2.1 million workhours. Further, the Postal Service could save more than 3.8 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 15.

Plant Grouping	Above-Median Productivity– Average LDC 14 Productivity	Group Workhour Savings
Group 1	383	2,180,515
Group 2	365	526,530
Group 3	391	368,416
Group 4	373	344,987
Group 5	515	229,303
Group 6	522	97,343
Group 7	688	107,898
Total		3,854,992

TABLE 15. LDC 14 FY 2009

Excess Manual Letter Mail

Plants that operated at below median FHP productivity levels generally worked an excessive amount of letter mail manually. The Postal Service manual sort target is no more than 2.5 percent of the total letter volume. However, in FY 2009, plants with less than median FHP productivity sorted an excess of more than 498.7 million letters manually. The largest percentage (42.2) of excess manual letters was at Group 2 plants. The Postal Service could save more than 1 million workhours by using automation, rather than manual methods, to sort letter mail. See Table 16.

Plant Grouping	Excess Letters Worked Over 2.5 Percent of Total Letter Volume	Group Workhour Savings	Percentage of Excess Letters
Group 1	42,033,708	85,262	8.43%
Group 2	210,428,326	426,839	42.20%
Group 3	59,042,667	119,764	11.84%
Group 4	45,514,328	92,323	9.13%
Group 5	48,490,804	98,360	9.72%
Group 6	32,790,922	66,514	6.58%
Group 7	60,401,316	122,520	12.11%
Total	498,702,070	1,011,581	

TABLE 16. EXCESS MANUAL LETTERS

Excess Manual Flat Mail

Plants that operated at below-median FHP productivity levels also generally worked an excessive amount of flat mail manually. The Postal Service manual sort target is no more than 6 percent of the total flat volume. However, in FY 2009, plants with less than median FHP productivity sorted an excess of 270 million flats manually. The largest percentage (47) of excess manual flats was at Group 1 plants. The Postal Service could save 782,878 workhours by using automation to sort flat mail, instead of manual sortation. See Table 17.

Plant Grouping	Excess Flats Worked Over 6 Percent of Total Flat Volume	Group Workhour Savings	Percentage of Excess Flats
Group 1	126,907,406	367,965	47.00%
Group 2	36,067,937	104,578	13.36%
Group 3	27,836,684	80,712	10.31%
Group 4	35,699,309	103,509	13.22%
Group 5	12,644,030	36,661	4.68%
Group 6	19,079,606	55,321	7.07%
Group 7	11,771,936	34,132	4.36%
Total	270,006,907	782,878	

TABLE 17. EXCESS MANUAL FLATS

Allied Operations – LDC 17

Plants with below-median FHP productivity levels used a greater percentage of workhours in allied operations or LDC 17 than plants with above-median FHP productivity levels. As an example, Group 1 plants with above-median FHP productivity levels used 36 percent of workhours in LDC 17. By standardizing the percentage of hours used in allied operations across the network, as compared with total mail processing workhours used, Group 1 plants could reduce more than 1.8 million workhours. Further, by standardizing the percentage of workhours used in LDC 17 in all plant groups, the Postal Service could save more than 4.5 million workhours. See Table 18.

Plant Grouping	Above-Median Productivity Average LDC 17 Percentage To Total Function 1	Group Workhour Savings
Group 1	36.49	1,827,998
Group 2	32.98	1,222,182
Group 3	36.11	583,092
Group 4	35.77	435,877
Group 5	36.35	265,280
Group 6	37.06	136,410
Group 7	38.37	45,823
Total		4,516,662

TABLE 18. LDC 17 FY 2009

APPENDIX C: MONETARY IMPACT

Recommended Action and Employee Category Impacted	Workhour Reduction	Workhour Rate	Cost Avoidance Based on 1 FY
Level 6 Clerk	11,633,833	\$45.67	\$531,317,154
Level 5 Mail Handler	4,516,662	\$47.08	212,644,456
Total	16,150,495		\$743,961,610

Table 19: Calculation of Unrecoverable Questioned Costs²⁷

To calculate the total of unrecoverable questioned costs, we determined the median FHP productivity for each group and found that 144 plants throughout the country operated at FHP productivity below the median. If the plants with below-median productivity achieved just the median productivity level for each respective plant group, the Postal Service could realize workhour savings of 16,150,495 and avoid costs of \$743,961,610 in a single year.

We determined the workhours used by clerks and mailhandlers in each group and multiplied by the appropriate workhour rate. For example, if Group 1 plants below the median increased their productivity to the average of the above-median plants, the Postal Service could save 6,605,764 workhours, representing an economic impact of \$305,631,267, as shown in Table 20.

Plant Grouping	Recommended Workhour Savings	Associated Economic Impact
1	6,605,764	\$305,631,267
2	2,593,725	\$119,113,703
3	2,176,348	\$ 99,946,172
4	2,962,436	\$136,046,297
5	1,127,394	\$ 51,774,238
6	445,597	\$ 20,463,486
7	239,232	\$ 10,986,447
Total	16,150,495	\$743,961,610

Table 20: Associated Economic Impact by Group

²⁷ Unrecoverable costs that are unnecessary, unreasonable or an alleged violation of law or regulation.

APPENDIX D: MANAGEMENT'S **COMMENTS**

UNITED STATES

June 7, 2010

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

SUBJECT: Draft Management Advisory Report – Assessment of Overall Plant Efficiency 2010 (Report Number NO-MA-10-Draft)

Thank you for the opportunity to review and comment on the Assessment of Overall Plant Efficiency 2010 draft audit report

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

Reduce 16.2 million workhours by the end of FY 2012 with an associated economic impact of \$743,961,610.

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:

- <u>Overtime Hours</u> As described in the draft report, overtime was reduced by over 50
 percent in FY 2009 compared to FY 2008. Subsequently, an incentive retirement was
 offered to craft employees. Overtime use will be targeted to budgeted plan levels in
 alignment with complement, attrition, and productivity improvements. This will allow for
 savings to be captured as a result of lower workhour rates. 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.
- 2. Mail Handling 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 Plan Optimization (SPO), 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 handlings and tray handlings. Outgoing letter SPO is currently being tested, with field deployment expected in July 2010. Other SPO deployment is expected in fiscal year (FY) 2011. Other FY2010 stretch initiatives that are improving operational efficiency are Delivery Bar Code Sorter Optimization, Automated Package Parcel System Optimization, Area Mail Processing, Distribution Compression, and Supervisor Distribution Operations Reduction.

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Management is currently developing a Distribution Compression model for alpha and beta testing, with subsequent deployment to the field later this year. This model will be designed to standardize methods used to improve the balance of complement with workload and facility capacity.

- 3. <u>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. Additional FY2010 stretch initiatives also include Advanced Facer-Canceller System Tarping and Removal of underutilized units and reduction of Upgraded Flat Sorting Machine (UFSM) 1000 keying, with feasibility studies underway for retirement of all UFSM 1000 equipment. Managers continue to utilize the Run Plan Generator (RPG) to plan machine runs and track performance to plan. The RPG in concert with MPES allows managers to improve use of automated and mechanized equipment and the staffing associated with those operations.
- <u>Allied Operations</u> Significant savings have been identified involving Powered Industrial Vehicle equipment, as well as allied and indirect position reductions. These initiatives will continue through 2010 into 2011.
- 5. <u>Manual Operations</u> 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. In addition to these efforts, one of our FY2010 stretch initiatives is to compress Labor Distribution Code 14 manual distribution to a twelve hour, one tour operation, which will further reduce manual workhours.

Recommendation 2:

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

Response

Management agrees with this recommendation. Operational level Breakthrough Productivity Initiative (BPI) targets are updated yearly based upon the 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 performances 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 within the budget process.

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

Steven J Forte