March 14, 2011

DAVID E. WILLIAMS
VICE PRESIDENT, NETWORK OPERATIONS

SUBJECT: Audit Report – Network Distribution Center Activation Impacts (Report Number EN-AR-11-002)

This report presents the results of our audit of Network Distribution Center (NDC) Activation Impacts (Project Number 10XG016EN000). This is the second in a series of self-initiated NDC audits to address strategic, operational, and financial risks. Our objectives were to assess the financial and operational impacts of the NDC activations and determine whether the activations achieved anticipated benefits. See Appendix A for additional information about this audit.

Because of external factors such as a severe economic downturn, mailers entering mail closer to destinations, and electronic diversion of mail, the U.S. Postal Service has experienced a substantial decline in mail volume. As a result, excess capacity is growing in the mail processing network. Management realigned the bulk mail centers (BMCs) into NDCs to help eliminate excess capacity and generate cost savings.

Conclusion

The NDC activations generally went well but not all projected benefits have been realized. The NDC initiative generated approximately $111 million, or about 39 percent of projected annual savings[1] and a 10-percent improvement in package service performance.[2] To enhance saving opportunities, management could further improve transportation use in the NDCs.[3]

[1] Based on the NDC Activation Executive Summary, October 4, 2010.
[2] Service measurements were not available for all classes of mail processed through the NDCs.
[3] Management anticipates additional NDC transportation savings in FY 2011 as solutions for the one-way transportation imbalance created by the NDC initiative are implemented.

Table 1: NDC Activation Savings Impact

	Projected Savings	Actual Savings	Dollar Shortfall	Percentage Achieved
Transportation	$217,727,029	$77,428,839[4]	($140,298,190)	36%
Operating Expenses	65,143,027	33,901,588	(31,241,439)	52%
Total	**$282,870,056**	**$111,330,427**	**($171,539,629)**	**39%**

Transportation Savings

Management estimated transportation savings of $217.7 million from the NDC activation; however, as of October 2010, actual NDC transportation savings were $77.4 million, which is 36 percent of the original projection. Some of the savings achieved may also be the result of mail volume declines not necessarily attributable to the NDC activation. Mail volume declines were approximately 5 percent in NDC facilities.

The savings shortfall occurred primarily because management underestimated the mail volume between processing facilities created by the NDC initiative and the resulting increase in surface transportation needed to realign the transportation network. Also, trailer optimization continues to be a challenge despite management's continued monitoring. A review[5] of NDC trailer utilization data indicated significant excess space still exists. See Appendix B for our detailed analysis of this topic.

We recommend the vice president, Network Operations:

1. Ensure trailer capacity is being optimized to eliminate excess capacity in the transportation network.

2. Review trips in the Network Distribution Center network for additional consolidation opportunities.

Workhour Savings

Management estimated $65.1 million or 23 percent of NDC savings would come from a reduction in workhours, with savings beginning 2 months after each of the four activation phases.[6] The final phase of the NDC activation was completed in March 2010; however, actual workhour savings were only $33.9 million, about 52 percent of the projected savings. According to management, workhour savings shortfalls occurred because only six of the 19 planned Surface Transfer Center (STC)

[4] Savings excludes $63.8 million in potential savings from the surface utilization local management initiative. These potential savings from budget reductions could not be verified as related to NDC surface utilization.
[5] Excess trailer space was determined using NDC Average Utilization reports from Postal Service management for Quarter IV of FY 2010.
[6] NDC initiative was comprised of four phases. Phase 1 activation began in May 2009, and the final phase was completed in March 2010.

consolidations[7] into the NDC facilities have been implemented and the network experienced higher than expected volume declines. Management stated they are still evaluating opportunities to consolidate the other STCs into NDCs wherever possible. We are not making a recommendation on workhours or productivity in this report as we are planning an additional review on this issue. See Appendix B for our detailed analysis of this topic.

Impact on Service

Although service performance scores for package services improved in the NDC network, comprehensive data to measure service performance for all products was not available. However, available data for retail package services showed almost a 10 percent performance improvement for fiscal year (FY) 2010, compared with data for FY 2009. Also, Parcel Select®[8] service performance improved slightly, increasing from 98.51 percent in FY 2009 to 98.77 percent in FY 2010. We are not making a recommendation on this issue, because comprehensive service performance data for the NDC network is expected to be available by the end of FY 2011. See Appendix B for our detailed analysis of this topic.

Management's Comments

Management agreed with the findings and recommendations. Specifically, for recommendation 1, management initiated several strategies to reduce under-utilized surface transportation capacity. Additionally, for recommendation 2, management implemented a pilot program to evaluate the operational and business feasibility of truckload consolidation and deconsolidation by terminal handling suppliers, which will continue through the end of FY 2011.

See Appendix D for management's comments in their entirety.

Evaluation of Management's Comments

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

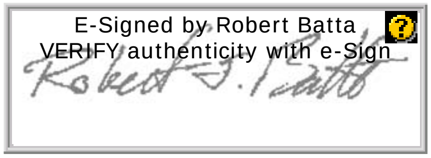
The OIG considers all the recommendations significant, and therefore requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. These recommendations should not be closed in the

[7] STCs are consolidation points for First-Class Mail® (FCM) and Priority Mail®.

[8] 'Parcel Select' is the registered trademark name for the Postal Service's economical ground delivery service for packages entered in bulk, including those entered at destination facilities. Parcel Select mailers (commercial mailers) pay postage that reflects the degree of worksharing they do in presorting their parcels and/or drop shipping their pieces at a destination facility located closer to the delivery point.

Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed.

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



Robert J. Batta
Deputy Assistant Inspector General
for Mission Operations

Attachments

cc: Patrick R. Donahoe
Megan J. Brennan
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Luke T. Grossman
Corporate Audit and Response Management

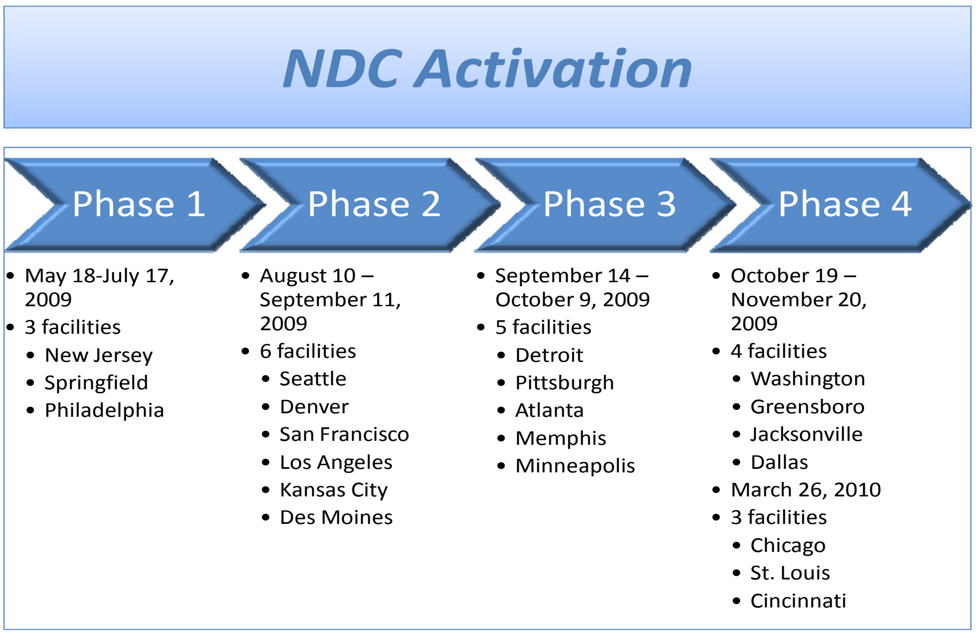
APPENDIX A: ADDITIONAL INFORMATION

BACKGROUND

BMCs were created in the early 1970s to support the distribution and transportation of Standard Mail®,[9] Periodicals,[10] and Package Services.[11] Declines in mail volume, increased mailer participation in discounts for mail preparation, and mail entered closer to destinations resulted in excess capacity and shrinking workloads at the 21 BMCs.

In May 2009, the Postal Service began the transition of BMCs into NDCs in four phases. The transition was completed in late March 2010. See Chart 1 for timeline.

Chart 1: NDC Activation Timeline



The NDC concept was to fill containers and trucks early in the network and dispatch them as deep into the network as possible. This was to be achieved by using three tiers of consolidation opportunity:

- Eleven Tier 1 Sites, which are responsible for distribution of local (turn-around) and destination Standard Mail, Periodicals, and Package Services for the Tier 1 service area. Some will also handle STC containerization and dispatch operations.

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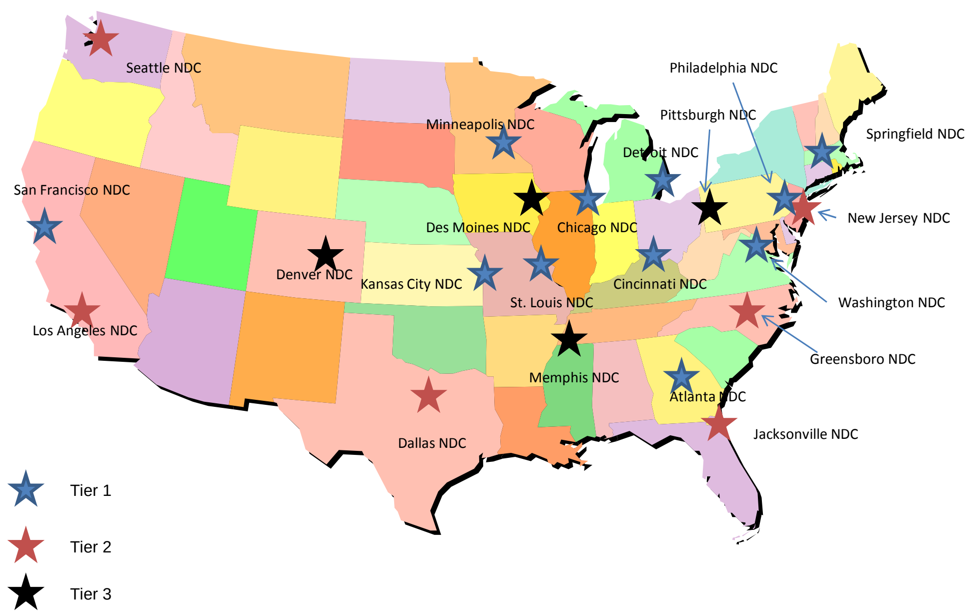
[9] Standard Mail is matter not required to be mailed as FCM or Periodicals. It is used to send advertisements, circulars, newsletters, small parcels, and merchandise.
[10] Periodicals mail is designed for newspapers, magazines, and other periodical publications whose primary purpose is transmitting information to an established list of subscribers or requesters.
[11] Package Services includes Parcel Post®; Parcel Select®; Bound Printed Matter; Media Mail®; and Library Mail. These services are used to mail merchandise, catalogs, printed material, and computer media.

- Six Tier 2 Sites, which include Tier 1 responsibilities and also perform distribution of the outgoing Standard Mail, Periodicals, and Package Services for assigned Tier 1 sites.

- Four Tier 3 Sites, which include Tier 1 and Tier 2 responsibilities and are the consolidation points for less-than-truckload network volumes from Tier 2 sites. (See Chart 2 for NDC Locations).

Chart 2: NDC Locations



The FY 2009 Summary Report to the Network Plan stated that the intent of the redesign of the BMC network was to better align workhours with workload and improve utilization of long-haul transportation.

Additional initiatives related to the NDCs were in progress at the time of this review that will affect costs and potential savings for the facilities. These initiatives include moving STCs and Logistics and Distribution Centers (L&DC) into NDCs, working Mixed States distribution[12] at some NDCs, and adding Flat Sequencing Systems (FSSs) into some NDCs. Chart 3 provides additional information regarding these initiatives.

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[12] Mixed states distribution is the residual volume remaining after a mailer presorts their volume to the depth of sort required by mailing standards. These pieces are for delivery in the service area of more than one area distribution center or automated area distribution center.

Chart 3: Other Initiatives at NDCs

Other Initiatives	Affected NDCs
STC	▪ Washington – completed in November 2009 ▪ Chicago – completed in June 2010 ▪ Atlanta – completed in August 2010 ▪ New Jersey[13] – completed in September 2010 ▪ Springfield – completed in October 2010 ▪ Dallas, Los Angeles, Memphis – in discussions with the areas ▪ Other NDCs – to be determined based on space constraints and potential to consolidate other operations
L&DC	▪ Philadelphia – completed in March 2010 ▪ Springfield – to be completed by April 2011
Mixed States	▪ Dallas, completed in October 2009 ▪ Los Angeles, Des Moines – completed in June 2010 ▪ New Jersey – to be completed in FY 2011
FSS	▪ New Jersey – 4 FSSs ▪ Philadelphia – 1 FSS ▪ Springfield – 4 FSSs

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to:

- Assess the financial and operational impacts of the NDC activation.
- Determine whether the activation achieved anticipated benefits.

To accomplish this review, we:

- Interviewed Postal Service Headquarters and area managers.
- Reviewed NDC activation documents, including briefings to stakeholders.
- Observed NDC operations at selected facilities.
- Analyzed key impacts of the activation, including transportation costs/savings, workhour costs/savings, productivity, and service.
- We used data from the following systems: Enterprise Data Warehouse, Activity Based Costing, TIMESWeb, and Transportation Contract Support System.
- We relied on data/reports from FYs 2009 through 2010.

[13] The New Jersey STC and the New York STC were consolidated into the New Jersey NDC.

We conducted this performance audit from January 2010 through March 2011[14] in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We discussed our observations and conclusions with management on January 14, 2011, and included their comments where appropriate.

We assessed the reliability of computer generated data by interviewing postal managers knowledgeable about the data. We determined that the data were sufficiently reliable for the purposes of this report.

PRIOR AUDIT COVERAGE

Report Title	Report Number	Final Report Date	Report Results
Time-Definite Surface Network Risk Mitigation	EN-MA-09-001	3/20/2009	The concept of contracting out BMC operations may have merit; however, we identified 12 risks associated with the BMC outsourcing initiative. We recommended the Postal Service develop a written plan to address risks and concerns before moving forward. Management stated they were no longer pursuing the outsourcing of BMC work and would look at re-engineering product flows through their current infrastructure. Management agreed to take steps to mitigate those risks that are relevant to the new direction.
Network Distribution Center Phase 1 Activation	EN-MA-10-001	11/6/2009	The NDC Phase 1 activation planning process appeared adequate, the execution of the plan generally went well and the impact on operations were mostly positive. Management could enhance the process by completing customer supplier agreements, and the Article 12 employee excessing process earlier in the activation. Management's comments were responsive to the recommendations.

[14] The project was suspended from February 16 through April 26, 2010.

Report Title	Report Number	Final Report Date	Report Results
Status Report on the Postal Service's Network Rationalization Initiatives	EN-AR-10-001	1/7/2010	Mail volume decreased about 35 billion pieces between FYs 2005 and 2009, but management has not been able to adjust resources to fully offset the decrease in mail volume. Management reduced 205.2 million workhours and 37 million highway contract route miles, closed 68 airport mail centers and 12 remote encoding centers, realigned BMC operations with no BMC closures, and consolidated originating mail operations at 13 processing and distribution centers (P&DCs) and closed two P&DCs. Management's comments were responsive to the recommendations.
Full Service Intelligent Mail Program Customer Satisfaction	DA-MA-11-001(R)	11/23/2010	Surveys of Full Service Intelligent Mail participants disclosed one-third of the respondents described the program features as not useful. Non-participants explained the primary reasons they did not participate were high start-up costs and limited program benefits. This indicates that the Postal Service needs to re-emphasize program benefits and offer incentives to increase business mailer participation. Not addressing these concerns could limit program participation and customer satisfaction. Management generally agreed with the findings and recommendations.
U.S. Postal Service: Network Rightsizing Needed to Help Keep USPS Financially Viable	GAO-09-674T	5/20/2009	Maintaining the Postal Service's financial viability will require rightsizing its retail and mail processing networks by consolidating operations and closing facilities and reducing the size of the workforce. One major mail processing consolidation initiative management began was the realignment of the 21 BMCs and the STCs into what is referred to as NDCs.
U.S. Postal Service: Strategies and Options to Facilitate Progress toward Financial Viability	GAO-10-455	4/12/2010	The Postal Service can reduce operational costs by optimizing its mail processing network, eliminating excess capacity, and improving efficiency. GAO recommended Congress consider a panel of experts to develop proposals for operational reform.

Report Title	Report Number	Final Report Date	Report Results
U.S. Postal Service: Mail Processing Network Initiatives Progressing, and Guidance for Consolidating Area Mail Processing Operations Being Followed	GAO-10-731	6/16/2010	The Postal Service plans to integrate STC functions into the NDC network to eliminate redundancy in transporting mail. Management also plans to integrate other mail processing operations into the NDCs. Management projects a cost savings of about $233.8 million in FYs 2010 and 2011 from reductions in workhours and transportation costs. A definite timeline for STC integration has not been established.

APPENDIX B: DETAILED ANALYSIS

Transportation Savings

The NDC initiative was projected to save $283 million, but only 36 percent of transportation savings have been realized. An estimated $218 million (77 percent) of the total savings was attributed to improved trailer utilization resulting in trip eliminations, which were to be realized at the end of the implementation phase. However, at the end of FY 2010, 6 months after the NDC implementation was completed, only 36 percent of the projected savings had been realized. As noted in Table 2 below, surface additions were a major factor in the overall savings shortfall.

Table 2: NDC Transportation Savings Impact

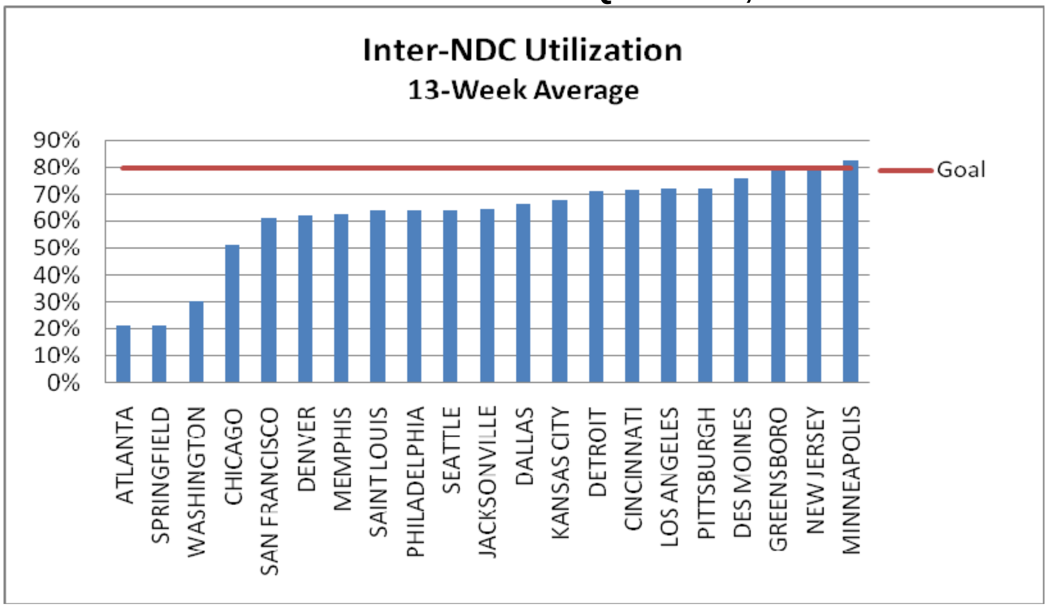
Transportation[15]	
Estimated Transportation Savings July 2009	$217,727,029
Surface Additions	(278,890,032)
Surface Eliminations	222,750,390
Rail Elimination	45,017,681
Air to Surface Eliminations[16]	88,550,800
Actual Savings October 1, 2010[17]	$77,428,839
NDC Transportation Savings Shortfall	($140,298,190)

The NDC initiative improved utilization of long-haul transportation. Postal Service management monitors and adapts its processing and transportation networks as customer mailing patterns change, mail volume fluctuates, and new technologies become available. This oversight has resulted in a 2-percent utilization improvement of trips between NDCs, compared to the same period last year.[18] Although hundreds of highway and rail contract routes have been adjusted or eliminated, excess trailer space remains on surface transportation.

A review of trailer utilization reports confirms excess space exists on trips to and from the NDCs. According to postal management, trailer utilization percentage is based on the target threshold. Specifically, the NDC has a goal of 80-percent utilization for trips between NDCs. As noted in Chart 4, the majority of the NDCs did not meet the 80-percent goal for inter-NDC[19] transportation utilization, which averaged 62 percent.

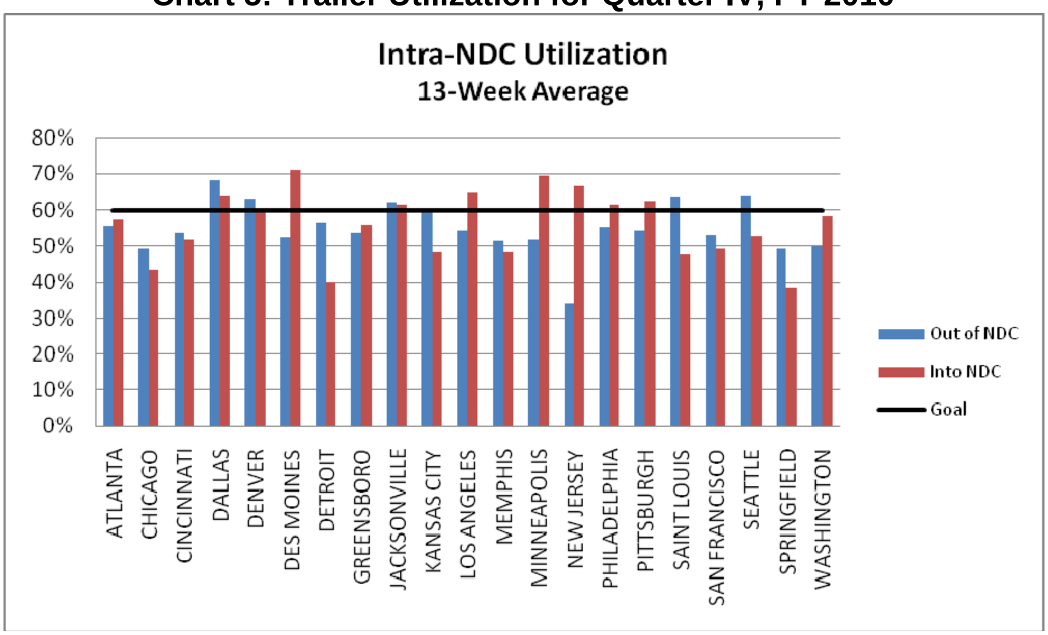
[15] The majority of NDC mail is transported by surface, via highway contracts. Rail is transported by railroad.
[16] Savings from mail that formerly traveled on airline carriers that is now being transported via surface transportation.
[17] Savings excludes $63.8 million surface utilization local management initiative.
[18] Baseline was a 4-week average in April 2009.
[19] Inter-transportation are trips between NDCs.

Chart 4: Trailer Utilization for Quarter IV, FY 2010[20]



The NDC initiative has a 60-percent utilization goal for trips within the service area of each NDC, which is called intra-NDC transportation. However, the trend for intra-NDC transportation averaged 55 percent for the same timeframe (see Chart 5).

Chart 5: Trailer Utilization for Quarter IV, FY 2010



[20] Weeks of June 26, 2010, through October 1, 2010. No report for the week of September 18, 2010.

Headquarters management continues to monitor NDC trailer utilization and encourage trailer optimization and trip eliminations by providing the field with weekly NDC trailer utilization reports and performing on-site transportation reviews.

Workhour Savings

The NDC initiative has reduced workhours in the NDC network but less than projected. Postal Service management projected annual savings from operating expenses from the NDC activation would be approximately $65 million with an estimated savings of 1.7 million workhours. However, only 864,000 workhours had been achieved through the activation – the equivalent of $33.9 million annually (or 52 percent) of the original projected savings. In FY 2010, NDC workload declined 5 percent compared to FY 2009, which impacted workhour saving projections.

Impact on Service

While service performance scores for package services improved in the NDC network, comprehensive data to measure service performance for all NDC products was not available. However, the Postal Service has implemented a service performance measurement system for a segment of retail and commercial package services.[21] According to management, more comprehensive NDC service performance data is expected to be available in late FY 2011.

Service performance for retail package services is measured from retail to delivery using scanned retail packages with delivery confirmation. In FY 2010, performance for about 12.8 million retail package mailpieces were measured; management estimates this represents about 20 percent of the mail volume for all retail package services products (see Table 3).

Table 3: Retail Package Service Performance Comparison

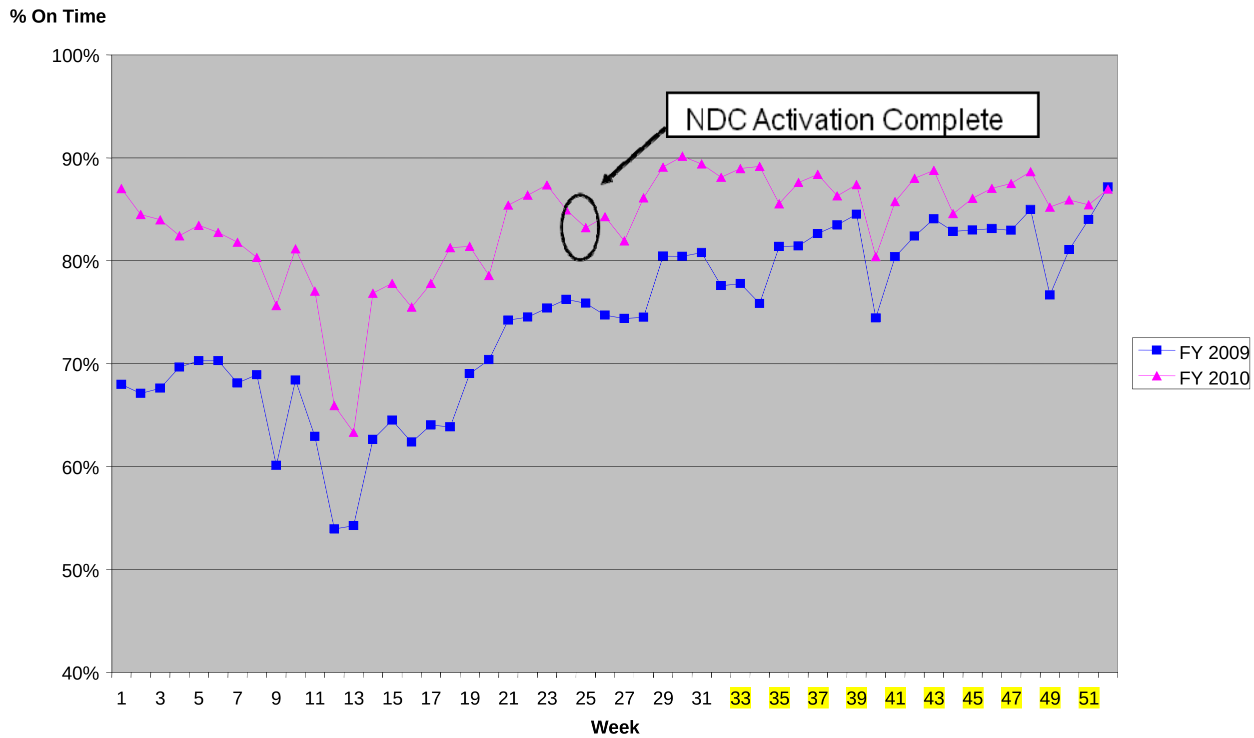
	Total Pieces Measured	On-Time Pieces	Percent-on-Time
FY 2009	12,369,803	9,093,158	73.5%
FY 2010	12,823,255	10,694,856	83.4%

Based on available data, FY 2010 performance scores for this segment of package services improved almost 10 percent[22] compared to FY 2009 performance scores for the same segment, but remained below established targets.[23]

[21] Service performance is measured on Retail Package Services with delivery confirmation and on Parcel Select products (commercial package service) with a delivery scan.
[22] NDC activation began in mid-May of FY 2009, and performance may not reflect a true year-to-year comparison.
[23] Target on-time performance goal for FYs 2009 and 2010 was 90 percent.

NDC activation began in week 33 of FY 2009 and was completed in week 25 of FY 2010. A comparison of package service performance for weeks 33 through 52 of FY 2010 showed a 5-percent increase compared to the package service performance for the same period in FY 2009 (see Chart 6 for trend).

Chart 6: NDC National Package Service Performance Trends



Performance for Parcel Select package services is measured using a delivery scan. In FY 2010, performances for about 272.3 million commercial package mailpieces were measured (see Table 4).

Table 4: Parcel Select Performance Comparison

	Total Pieces Measured	On-Time Pieces	Percent-on-Time
FY 2009	218,097,502	214,845,548	98.51%
FY 2010	272,351,597	269,000,951	98.77%

The Postal Service does not have an established system to measure service performance for all NDC mail volume. The package services volume measured for retail and commercial package services represents about 14 percent of the total NDC volume.

In FY 2010 the NDC network handled more than 2 billion pieces,[24] a decrease of about 5 percent from FY 2009.

Chart 7: NDC Workload

NDC	FY 2009	FY 2010
Atlanta	90,271,808	57,027,468
Chicago	127,935,424	96,254,723
Cincinnati	101,980,185	88,340,520
Dallas	143,885,595	247,527,192
Denver	108,170,733	87,666,354
Des Moines	56,141,918	89,885,772
Detroit	83,736,384	50,566,902
Greensboro	113,573,914	97,937,340
Jacksonville	100,102,266	93,911,400
Kansas City	93,244,531	89,960,802
Los Angeles	122,579,588	111,342,596
Memphis	88,056,291	84,724,621
Minneapolis	90,904,723	68,941,586
New Jersey	114,925,609	192,628,357
Philadelphia	83,264,833	79,445,880
Pittsburgh	79,653,564	82,068,127
San Francisco	88,933,352	52,652,754
Seattle	118,028,700	99,966,794
Springfield	92,972,217	55,658,506
St Louis	53,123,002	60,629,842
Washington	200,325,535	151,898,752
National	**2,151,810,172**	**2,039,036,288**

The Intelligent Mail Barcode® (IMb)[25] pilot system was used to measure samples of mail during the NDC activation phase. In the November 2010 Mailer's Technical Advisory Committee meeting, Postal Service management announced the first live IMb full-service mail performance measurement results[26] were disappointing.

In October 2010, management submitted a request to the Postal Regulatory Commission for a temporary waiver from service performance reporting for certain categories of Package Services, Periodicals, and all Standard Mail. According to management, more comprehensive service performance data will be available by the end of FY 2011.

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[24] Total Pieces Handled in the NDC network is measured by handled units/containers, such as sacks or pallets.
[25] The IMb, formerly referred to as the 4-State Customer barcode, is a new Postal Service barcode that has the ability to track individual mailpieces and provide customers with greater visibility into the mailstream.
[26] Results for July through September 2010.

APPENDIX C: OTHER IMPACT

Finding	Impact Category	Amount
Transportation Savings	Predicted Savings Shortfall[27]	$140,298,190
Workhour Savings	Predicted Savings Shortfall	31,241,439
	Total	**$171,539,629**

[27] Predicted savings shortfall is the difference between the savings predicted by the Postal Service for a project and the actual savings realized, or the OIG estimate of savings that will be realized.

APPENDIX D: MANAGEMENT'S COMMENTS

DAVID E. WILLIAMS
VICE PRESIDENT, NETWORK OPERATIONS

UNITED STATES POSTAL SERVICE

March 1, 2011

LUCINE WILLIS
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Draft Audit Report – Network Distribution Center Activation Impacts (Report Number EN-AR-11-DRAFT)

Thank you for providing the opportunity to review and comment on the subject report. The audit assessed the financial and operational impacts of the Network Distribution Center (NDC) activations and whether the activations achieved anticipated benefits.

The Office of Inspector General raises two points in the draft audit that should be clarified.

Overall, we agree with the recommendations presented and continue to address the challenge of under-utilized transportation capacity as noted in following management responses.

Recommendation 1:
Ensure trailer capacity is being optimized to eliminate excess capacity in the transportation network.

Management Response/Action Plan:

Network Operations has initiated several strategies to reduce under-utilized surface transportation capacity. We have developed tools to assist in quick identification of under-utilized surface lanes for immediate follow-up. These opportunities are discussed during area business reviews that are conducted to monitor progress on trip elimination. In coordination with Supply Management, we have revised operating schedules for advertisement of one-way trips in lieu of soliciting round trip requirements to coincide with the NDC model design. Network Operations has also modified transportation scheduling to triangulate trips to ensure each stop on the schedule has the capability to utilize available capacity. We are currently revisiting all Inter-NDC transportation schedules implemented to investigate opportunities for re-routing less-than-truckload volume through Tier 3 NDC gateways to optimize the network and eliminate

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under-utilized trips. Finally, we are adjusting schedules where it is feasible to create seasonal based contract structures to eliminate unnecessary capacity during low volume periods.

Target Implementation Date:

Ongoing

Responsible Official:

Cheryl Martin, Manager, Surface Operations

Recommendation 2:
Review trips in the Network Distribution Center network for additional consolidation opportunities.

Management Response/Action Plan:

Network Operations with support from Supply Management has implemented a pilot to evaluate the operational and business feasibility of truckload consolidation and deconsolidation by terminal handling suppliers. The pilot began on September 25, 2010 and will continue until the end of fiscal year 2011. The benefits realized have demonstrated significant improvement in trailer cube utilization that has allowed the Postal Service to operate fewer long-haul trips between NDC locations. Truckload consolidation is being achieved by bed-loading volume into trailers at origins with higher mail volume, which facilitates in eliminating network (trip) imbalances. The pilot expansion plan will increase the number of lanes in the test from 3 to 20.

Target Implementation Date:

December 2011

Responsible Official:

Cheryl Martin, Manager, Surface Operations

In closing, we have reviewed the audit report and do not believe that any portion of the document requires exemption from disclosure under the Freedom of Information Act (FOIA).

David E. Williams

- 3 -

cc: Ms. Brennan
Ms. Grooman
Mr. Neri
Mr. Grossmann
Corporate Audit and Response Management