

St. Louis Network Distribution Center – Postal Vehicle Service Operations

Audit Report

September 21, 2012



St. Louis Network Distribution Center – Postal Vehicle Service Operations

Report Number NL-AR-12-008

BACKGROUND:

U.S. Postal Service network transportation using Postal Service vehicles and employees is referred to as Postal Vehicle Service (PVS). This report focuses on the St. Louis Network Distribution Center's (NDC) PVS truck driver operations. The St. Louis NDC has a staff of 15 PVS drivers responsible for an average of 1,657 moves per week, servicing 137 dock doors.

PVS operations at NDCs include yard operations in which drivers use specific trucks to move trailers and equipment in or around a facility yard. The operations require timely unloading of mail from trailers as they arrive at the facility and the timely loading of mail into trailers for direct movement from the facility yard. The process avoids unnecessary movement and placement of trailers in the yard.

Our objectives were to assess trailer loading practices at selected NDCs and determine whether staffing of PVS truck driver operations was efficient, effective, and economical.

WHAT THE OIG FOUND:

St. Louis NDC staff executed effective and efficient loading policies and practices. However, we found that managers did not adhere to the productivity standards of 40 trailer moves per day in the yard for PVS

drivers. Our analysis showed each driver performed an average of 16 moves per day. As a result, the facility expended more driver workhours than necessary. We estimate the Postal Service could reduce 6,984 driver workhours and save about \$299,000 annually if standards are met. We also observed drivers not consistently using safety belts while driving in the NDC yard.

WHAT THE OIG RECOMMENDED:

We recommended the vice president, Great Lakes Area Operations ensure that the St. Louis NDC managers periodically assess PVS truck driver workload and staffing. We also recommended the elimination of 6,984 annual workhours associated with improving productivity to the standard of 40 trailer moves in the yard per day, or 200 moves per week. Finally, we recommended that management reemphasize the safety policy that drivers must wear safety belts whenever their vehicles are in motion and provide management oversight for enforcement.

Link to review the entire report



September 21, 2012

MEMORANDUM FOR: JACQUELINE M. KRAGE-STRAKO

VICE PRESIDENT, GREAT LAKES AREA

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

FROM: Robert J. Batta

Deputy Assistant Inspector General

for Mission Operations

SUBJECT: Audit Report – St. Louis Network Distribution Center – Postal

Vehicle Service Operations - (Report Number NL-AR-12-008)

This report presents the results of our audit of the St. Louis Network Distribution Center, Postal Vehicle Service Operations (Project Number 12XG008NL001).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Jody J. Troxclair, director, Transportation, or me at 703-248-2100.

Attachments

cc: David E. Williams, Jr. Cynthia F. Mallonee Pamela S. Grooman

Corporate Audit and Response Management

TABLE OF CONTENTS

Introduction	1
Conclusion	2
Live Loading/Unloading Practices	2
Postal Vehicle Service Yard Move Productivity	2
Other Matters – Safety Concerns	3
Recommendations	3
Management's Comments	3
Evaluation of Management's Comments	4
Appendix A: Additional Information	5
Background	5
Objectives, Scope, and Methodology	6
Prior Audit Coverage	8
Appendix B: Detailed Analysis of Live Loading Practices	9
Appendix C: Detailed Analysis – Tractor Trailer Operator Work Load	. 11
Appendix D: Detailed Analysis of Safety Concerns	. 12
Appendix E: Monetary Impacts	. 13
Appendix F: Management's Comments	. 14

Introduction

This report focuses on St. Louis Network Distribution Center (NDC) Postal Vehicle Service (PVS) truck driver operations and related trailer loading (and unloading) practices. The objectives of our audit were to assess loading practices at selected NDCs and determine whether staffing of PVS transportation operations was efficient, effective, and economical. This self-initiated audit addresses operational risk. See Appendix A for additional information about this audit.

U.S. Postal Service network transportation using Postal Service vehicles and employees is referred to as PVS. Because PVS operations are local, they are managed at the facility level under guidance from district, area, and headquarters transportation officials. PVS activities at NDCs include yard operations, which is the movement of trailers and equipment in or around a facility yard (spotting), typically to and from the facility dock doors. This movement of trailers is performed by PVS drivers using spotter trucks¹ (see Figure 1).



Figure 1. Spotter Trucks at St. Louis NDC

Source: U.S. Postal Service Office of Inspector General (OIG), June 5, 2012.

NDCs are tasked with 'live unloading' and 'live loading' of all arriving and departing mail transportation trailers. Live unloading is when the highway contract route (HCR) or PVS driver brings a trailer directly to a dock door for unloading when it enters the facility, and live loading is when the HCR or PVS driver takes a loaded trailer directly from the dock and out the facility yard. In either case, the trailer is not placed in the yard (or spotted) for movement at a later time. Not spotting trailers in the yard ensures mail flow to the next operation or facility without delay and reduces total operating expenses at the

¹ Spotters are heavy duty trucks used to move trailers within an NDC yard operation.

same time. ² The St. Louis NDC has a staff of 15 PVS drivers responsible for an average of 1,657 moves per week, servicing 137 dock doors.

Conclusion

St. Louis NDC staff executed effective and efficient loading policies and practices. However, we found that managers did not adhere to the productivity standards of 40 trailer moves in the yard per day for PVS drivers. Our analysis showed each driver performed an average of 16 moves per day. As a result, the PVS drivers used more driver workhours than necessary. We estimate the Postal Service could reduce driver workhours by 6,984 and save about \$299,000 annually. We also observed that PVS drivers were not consistently using safety belts while driving within the NDC yard as required.

Live Loading/Unloading Practices

St. Louis NDC staff executed effective and efficient loading practices. Our observations at the facility revealed that they loaded mail on trailers to immediately depart and unloaded mail from trailers as they arrived at the facility yard, using contract drivers to complete trailer moves to and from the dock doors. This process avoids unnecessary movement and placement (spotting) of trailers in the yard and reduces overall transportation times and handling costs. St. Louis NDC management consistently followed the Postal Service's NDC policy for live loading and unloading when possible. See Appendix B for our detailed analysis of this topic.

Postal Vehicle Service Yard Move Productivity

St. Louis NDC management could make operations more efficient by holding PVS drivers to a standard of 40 moves³ per workday for each driver. Specifically, in 2005, the Postal Service's Breakthrough Productivity Initiative⁴ established productivity standards for NDC PVS operations, specifying that drivers (tractor-trailer operators) are expected to complete 40 trailer moves within an 8-workhour period. One driver can accomplish 200 trailer moves within a NDC yard during a 40-workhour week.⁵

We found that St. Louis NDC PVS drivers were averaging about 16 moves per workday. Furthermore, we conducted observations and analyzed operational workload data⁶ and confirmed that established productivity standards were reasonable and attainable for PVS drivers at the facility. Productivity standards were not met, because NDC managers did not fully assess workload and staffing requirements. If productivity was

² Standard Operating Procedures Live Loading and Unloading of Trailers at Network Distribution Centers.

³ A move consists of moving trailers and equipment from one location to another in the NDC yard.

⁴ The Breakthrough Productivity Initiative was initiated to drive costs out of the Postal Service while creating continuous improvement capability.
⁵ Hoodquarters and cosics are the costs of the Postal Service while creating continuous improvement capability.

⁵ Headquarters and senior area transportation managers have explained that this productivity standard was reasonable and appropriate.

⁶ Our analysis also included PVS driver workload associated with the St. Louis Annex, which is supported by the drivers from the NDC facility.

set at the standard of 40 moves per day, the Great Lakes Area could phase out about 6,984 annual workhours and save about \$299,000 (or \$598,000 over 2 years). See Appendix C for our detailed analysis of this topic.

Other Matters – Safety Concerns

We observed that St. Louis NDC PVS drivers were not consistently using safety belts while driving within the NDC yard as required. We shared this information with management during our review, and they immediately held safety talks. They further emphasized the policy by distributing another safety talk specifically on seat belt use. Postal Service policy states, "Drivers must wear safety belts whenever the vehicle is in motion." However, although management did hold initial safety talks, we still observed some drivers not wearing safety belts on our follow-up observations. Therefore, management needs to continue to consistently reinforce Postal Service policy on safety belt use. See Appendix D for our detailed analysis of this topic.

Recommendations

We recommend the vice president, Great Lakes Area Operations, require that St. Louis Network Distribution Center management:

- Periodically assess Postal Vehicle Service spotter truck driver workload and staffing requirements with respect to productivity standards to maintain appropriate staffing levels.
- 2. Eliminate 6,984 annual workhours associated with improving Postal Vehicle Service truck driver productivity to the Breakthrough Productivity Initiative standard of 40 moves per day, or 200 moves per week.
- 3. Ensure that St. Louis Network Distribution Center management continually reemphasize the safety policy that drivers must wear safety belts whenever their vehicles are in motion and provide management oversight for enforcement.

Management's Comments

Management agreed with all the findings and recommendations. In response to recommendation 1, management agreed to conduct annual efficiency reviews of spotter activity based on the criteria of 40 moves per day and 200 moves per week. The first review was completed July 14, 2012. In response to recommendation 2, management agreed to eliminate 6,982 annual workhours associated with PVS truck driver productivity. Three postal support employee tractor trailer operator (TTO) positions were eliminated effective July 14, 2012, and one TTO position was reverted to a different, open position effective August 11, 2012. They also plan to abolish two more TTO positions that were residual vacancies. In response to recommendation 3, management met with employees and conducted talks on the driver's responsibility to wear seat belts

when the vehicle is in motion, and management will monitor and enforce this policy. See Appendix F for management's comments, in their entirety.

Evaluation of Management's Comments

The OIG considers management's comments responsive to the recommendations and corrective actions should resolve the issues identified in the report. We consider recommendation 2 resolved and will be closed with the issuance of this 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 Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed.

Appendix A: Additional Information

Background

<u>PVS Operations:</u> Postal Service surface network transportation that uses Postal Service vehicles and employees is called PVS. Management typically assigns PVS vehicles and personnel to Postal Service network facilities, such as NDCs or processing and distribution centers in or near metropolitan areas. PVS operations typically include yard operations in which spotter trucks move or 'spot' trailers and equipment in or around a facility yard, typically an NDC yard. PVS is capital- and personnel-intensive. Nationwide, PVS capital assets include about 2,154 cargo vans, 1,814 tractors (including spotter tractors), and 3,892 trailers. PVS involves 7,720 employees, including 6,597 drivers, 575 administrative support personnel, and 548 managers. The American Postal Workers Union represents PVS drivers and support personnel.

The St. Louis NDC has a staff of 15 PVS drivers responsible for an average of 1,657 moves per week servicing 113 dock doors at the NDC and 24 dock doors at the annex.



Figure 2. Spotter Truck Moving Trailer in the St. Louis NDC Yard

Source: OIG, May 16, 2012.

<u>Live Loading and Unloading Process:</u> An essential component of the NDC network is the live unloading of trailers as they arrive at the facility and the live loading of trailers for direct movement from the facility yard.⁷ The process avoids unnecessary movement and placement (spotting) of trailers in the yard and reduces overall transportation times

⁷ Service Talk #2 Live Loading and Unloading of Trailers at Network Distribution Centers – service talk used to communicate information on the conversion of bulk mail centers into NDCs to NDC employees. It explains that an essential component of this new NDC network is the live loading and unloading of trailers as they arrive at the facility and identifies specific roles and responsibilities.

and handling costs. Outgoing mail received at Tier 1 NDCs from local processing facilities is containerized separately and must be unloaded and transferred to the Tier 2 NDC in time to be processed and dispatched into the network.⁸ This requires the live unloading of originating trailers and the live loading of trailers for the Tier 2 NDCs. Queuing and staging trailers for unloading at a later time may result in delays and service failures.

Objectives, Scope, and Methodology

The objectives of our audit were to assess loading practices at selected NDCs and determine whether staffing of PVS transportation operations was efficient, effective, and economical. During our work, we interviewed Postal Service officials at headquarters and the St. Louis NDC. We reviewed relevant Postal Service policies and procedures, interviewed managers and employees, and observed and photographed operations.

We extracted reports from the Yard Management System (YMS)⁹ that detailed all outbound dispatches at the St. Louis NDC for a 3-week period. We analyzed this data to determine whether the facility had a further opportunity to live load its outbound dispatches. We based this analysis on the Postal Service policy, Standard Operating Procedures Live Loading and Unloading of Trailers at Network Distribution Centers. We also obtained computer-generated data from the Vehicle Tracking Analysis and Performance System (VTAPS)¹⁰ for the St. Louis NDC that included a consecutive 17 -week period from November 1, 2011, through March 12, 2012. This data represented the PVS yard operational workload (moves) for the period for all operations at the St. Louis NDC. We identified 25,085 yard moves. Because the VTAPS data did not include yard moves performed at the St. Louis Annex, which is supported by the NDC drivers, we incorporated manual records obtained from the NDC. The manual records started May 15, 2012, and continued for 5 weeks. We combined the moves performed at the NDC and the annex. We examined this workload with previously established Postal Service productivity standards of 40 moves per day for NDC PVS spotter driver operations.

We assessed the reliability of YMS and VTAPS data. We validated data from the YMS as they pertain to spotter moves in the yard at the St. Louis NDC. We observed spotters moving trailers within the yard and compared those to the YMS spotter move report for the same period. We concluded the data were accurate and reliable. We also verified the accuracy of the data through discussions with Postal Service officials knowledgeable about the data and the system that produced the data. We determined that the data were sufficiently reliable for the purposes of this report.

⁸ Tier 1 sites distribute local and destination Standard Mail, Periodicals, and Package Services for the Tier 1 service area. Tier 2 sites include Tier 1 responsibilities and the distribution of outgoing Standard Mail, Periodicals, and Package Services for assigned Tier 1 sites.

⁹ YMS is an automated system that tracks vehicles through a facility yard.

¹⁰ VTAPS manages vehicle operations by providing real-time actionable information, effective vehicle tracking and control utilities, and flexible access to data required to evaluate and improve vehicle operations. Interface will provide times schedule, drop ship, and times data for use in VTAPS.

We conducted this performance audit from April through September 2012 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 August 21, 2012, and included their comments where appropriate.

Prior Audit Coverage

	Report	Final Report	Monetary Impact	
Report Title	Number	Date	This is a second	Report Results
Postal Vehicle Service Transportation – Philadelphia Bulk Mail Center	NL-AR-09-005	7/17/2009	\$4,336,804	The OIG identified a total of 12,250 unnecessary workhours. Management should verify the removal of 3,500 workhours and phase out an additional 8,750 workhours agreed to during our audit. Management should also periodically assess PVS workload and staffing requirements to maintain appropriate staffing levels. Management agreed with our findings and recommendations.
Postal Vehicle Service Transportation Routes – Washington Network Distribution Center	NL-AR-10-007	8/4/2010	\$2,791,349	The OIG identified 6,968 unnecessary workhours and had agreement from the Washington NDC. Management should verify the phasing out the workhours. In addition, NDC managers need to periodically assess PVS workload and staffing requirements to maintain appropriate staffing levels. Management agreed with our findings and recommendations.
Atlanta Network Distribution Center – Postal Vehicle Service Operations	NL-AR-12-007	6/21/2012	\$694,105	The OIG identified a total of 8,714 unnecessary workhours. Management should eliminate 6,968 workhours, and NDC managers need to periodically assess PVS workload and staffing requirements. Also, management should eliminate an additional 1,746 workhours by following prescribed standard operating procedures for movement of trailers in the yard to maintain appropriate staffing levels. Management agreed with our findings and recommendations with reservations.

Appendix B: Detailed Analysis of Live Loading Practices

After conducting our observations at the St. Louis NDC, we extracted a historical outbound trip report from YMS that detailed all of the outbound dispatches being made by the facility for a 3-week period to determine whether trips could be live loaded given time constraints. We also obtained the spotter activity archive report for the same period. Using these reports, we compiled a list of trips and sorted by dock door to determine what time trips were departing from a specific door and the new location of the trailers. If there was more than 1 hour between trips leaving from the same door, we determined the trips were candidates for live loading. We then considered other factors, including the percentage of load on each trip, dock space for staging mail for subsequent trips, and location of move. We determined St. Louis management consistently followed the Postal Service's NDC policy for live loading and unloading when possible. Based on our analysis of live loading, we determined that St. Louis is executing effective and efficient loading practices, as 95 percent of the outbound trips were being live loaded, as shown in Table 1.

Table 1. St. Louis NDC Outbound Trip Analysis

Date	Total Trips	Trips that Could Be Live Loaded
Wednesday, May 16, 2012	70	7
Thursday, May 17, 2012	68	2
Friday, May 18, 2012	71	7
Saturday, May 19, 2012	68	1
Sunday, May 20, 2012	30	0
Monday, May 21, 2012	56	1
Tuesday, May 22, 2012	73	5
Wednesday, May 23, 2012	72	7
Thursday, May 24, 2012	71	4
Friday, May 25, 2012	72	1
Saturday, May 26, 2012	71	2
Sunday, May 27, 2012	30	1
Monday, May 28, 2012	26	1
Tuesday, May 29, 2012	55	1
Wednesday, May 30, 2012	69	3
Thursday, May 31, 2012	69	2
Friday, June 1, 2012	76	4
Saturday, June 2, 2012	74	2
Sunday, June 3, 2012	32	3
Monday, June 4, 2012	57	1
Tuesday, June 5, 2012	66	7
Total Potential Live Loads Identified in 3 Weeks	1,276	62
Percentage of Trips with Potential to be Live Loaded		5%

Source: Postal Service, YMS Outbound Trip Status Reports, as of June 19, 2012.

Appendix C: Detailed Analysis - Tractor Trailer Operator Work Load

The St. Louis NDC has 15 TTO drivers over three tours that are responsible for moving trailers around the St. Louis NDC yard and the St. Louis Annex yard, with spotter trucks. The work includes movement of trailers for operations of the NDC as well as operations associated with the St. Louis Annex, which is located on the same street, 1/2 mile away.

We reviewed all yard moves associated with the NDC operations within a 4.5-month period from November 1, 2011, to March 12, 2012. We examined 25,085 yard moves over 133 days. We also reviewed yard moves tracked manually at the annex for a 5 week period from May 15 to June 24, 2012. After analyzing the moves, we determined that each TTO driver moved an average of 16 moves per day. The national standard for yard moves is 40 moves per day (see Table 2).

Table 2. Average Moves per Driver per Day

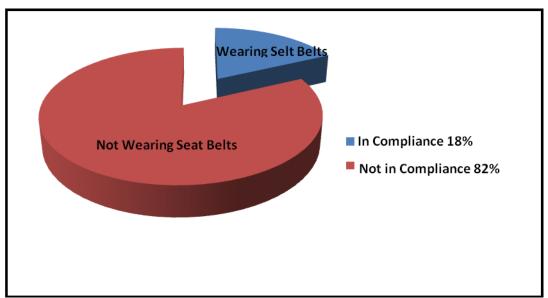
Facility	Average Weekly Moves	Drivers	Average Move Per Driver Per Week	Average Move Per Driver Per Day
St. Louis NDC	1,320	-	-	-
St. Louis Annex	337	-	-	-
TOTAL	1,657	15	110	16

Note: Because the drivers are only assigned to the NDC, the moves per driver are viewed as a total. Source: Postal Service, VTAPS and manual reports from St. Louis Annex, as of June 24, 2012.

Appendix D: Detailed Analysis of Safety Concerns

During our observations of PVS vehicles in motion within the NDC yard, we found that only 18 percent of the drivers were wearing seat belts (see Chart 1).

Chart 1. Percentage of Drivers Wearing Seat Belts
Based on OIG Observations



Source: OIG, June 5, 2012.

Appendix E: Monetary Impacts

We concluded that St. Louis NDC management could phase out 6,984 workhours by following established productivity standards. This would save the Postal Service \$298,974 annually (\$598,948 over 2 years), as reflected in Table 3.

Table 3. PVS Potential Savings – Funds Put to Better Use¹¹

Recommendation	Impact Category	Amount
	Funds Put to Better Use	\$598,948

Source: OIG, as of June 30, 2012.

Total Excess Workhours and Associated Cost Reductions Findings: We employed a 10year cash flow methodology, discounted to present value, by applying the following factors published by Postal Service Headquarters Finance. We then took 20 percent of the total to represent the savings for 2 years, as shown in Table 4.

Table 4. Highlights from 10-Year Cash Flow

Cost Category	Fiscal Year (FY) 2013 Total	FY 2014 Total	10-Year Total (FYs 2013 to 2022)	20% (or 2-Year Savings)
Personnel - Productivity	309,615	315,188	2,989,738	598,948

Source: OIG, as of June 30, 2012.

Table 5. Discount Rate/Escalation Factor for Computing Monetary Impact

Rates by Type ¹²	Factor
Discount Rate/Cost of Borrowing	2.6%
Labor Escalation Rate	1.8%

Source: Postal Service. Finance Memorandum dated November 23, 2011.

¹¹ Impact Category: Funds that could be used more efficiently by implementing recommended actions.
¹² Rates published November 23, 2011.

Appendix F: Management's Comments

JACQUELINE KRAGE STRAKO VICE PRESIDENT, OPERATIONS GREAT LAKES AREA



September 14, 2012

LUCINE M. WILLIS DIRECTOR AUDIT OPERATIONS

SUBJECT: OIG DRAFT AUDIT REPORT – Postal Vehicle Service Operations St. Louis Network Distribution Center (Report Number – NL-AR-12-DRAFT)

In response to the OIG Draft Audit Report – Postal Vehicle Service Operations – St. Louis Network Distribution Center - (Report Number – NL-AR-12-DRAFT), the Great Lakes Area offers the following:

<u>Recommendation #1:</u> Periodically assess Postal Vehicle Service spotter truck driver workload and staffing requirements with respect to productivity standards to maintain appropriate staffing levels.

Management Response: We agree with the audit findings and will conduct annual efficiency reviews of spotter activity based on the criteria of 40 moves per day and 200 moves per week. This will include YMS data and manual tracking of all moves performed at the St. Louis Metro Annex.

Target Implementation Date: July 14, 2012

Responsible Official: James Freebersyser

Recommendation #2: Eliminate 6,984 annual work hours associated with improving Postal Vehicle Service truck driver productivity to the Breakthrough Productivity Initiative standard of 40 moves per day, or 200 moves per week.

Management Response: We agree with the findings and the recommendation to eliminate 6,984 annual work hours associated with improving Postal Vehicle Service truck driver productivity. Three PSE TTO's assigned to the St. Louis NDC are no longer working at the St. Louis NDC. All applied and were selected to NTFT positions at the St. Louis P&DC. This was effective on July 14, 2012. In addition, we are reverting one Tour One TTO position. The TTO driver holding

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this position was a successful bidder on a vacant VOA position. This was effective on August 11, 2012. We are also abolishing two Tour Three TTO positions that were residual vacancies.

Target Implementation Date: August 11, 2012

Responsible Official: James Freebersyser

Recommendation #3: Ensure that the St. Louis Network Distribution Center management continually re-emphasize the safety policy that drivers must wear safety belts whenever their vehicles are in motion and provide management oversight for enforcement.

Management Response: We agree with the findings and the recommendation to re-emphasize the seat belt policy. Management has met with the employees and conducted Plan 5 talks on the TTO's responsibility to wear seat belts when the vehicle is in motion. Vehicle Management will monitor and enforce this policy.

Target Implementation Date: September 22, 2012

Responsible Official: Steven Jarboe

Please contact Steven Jarboe, Acting Plant Manager, St. Louis NDC, at 314-895-9201 if you have any questions regarding this response.

Jacqueline Krage Strako

cc: David Williams Pamela Grooman Cindy Mallonee

Manager, Corporate Audit Response Management