



OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

Package Processing Performance During the December 2014 Peak Holiday Season

Audit Report

Report Number
NO-AR-15-006

May 27, 2015





OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

Highlights

Overall, the Postal Service's package processing improved during the December 2014 peak holiday season.

While the Postal Service was successful during the December 2014 peak holiday season, opportunities exist for improvement.

Background

Strong consumer demand for goods purchased over the Internet has driven growth in package volume in an otherwise declining mail market. In its 2012 *Five-Year Business Plan*, the U.S. Postal Service projects that package volume, which was 3.5 billion in fiscal year 2012, will grow by 5 to 6 percent per year through 2017. The Postal Service is busiest in December during the peak holiday season.

The Postal Service processed a record workload of 865.4 million packages during the December 2014 peak holiday season. Our objective was to assess the Postal Service's package processing performance during the December 2014 peak holiday season.

What The OIG Found

Overall, the Postal Service's package processing improved during the December 2014 peak holiday season. Specifically, total workload increased by 88.2 million packages while delayed packages decreased by 1.8 million as compared to the December 2013 peak holiday season. In addition, service scores for packages increased in six of the nine package categories.

While the Postal Service was successful during the December 2014 peak holiday season, opportunities exist for improvement. Specifically, [REDACTED]

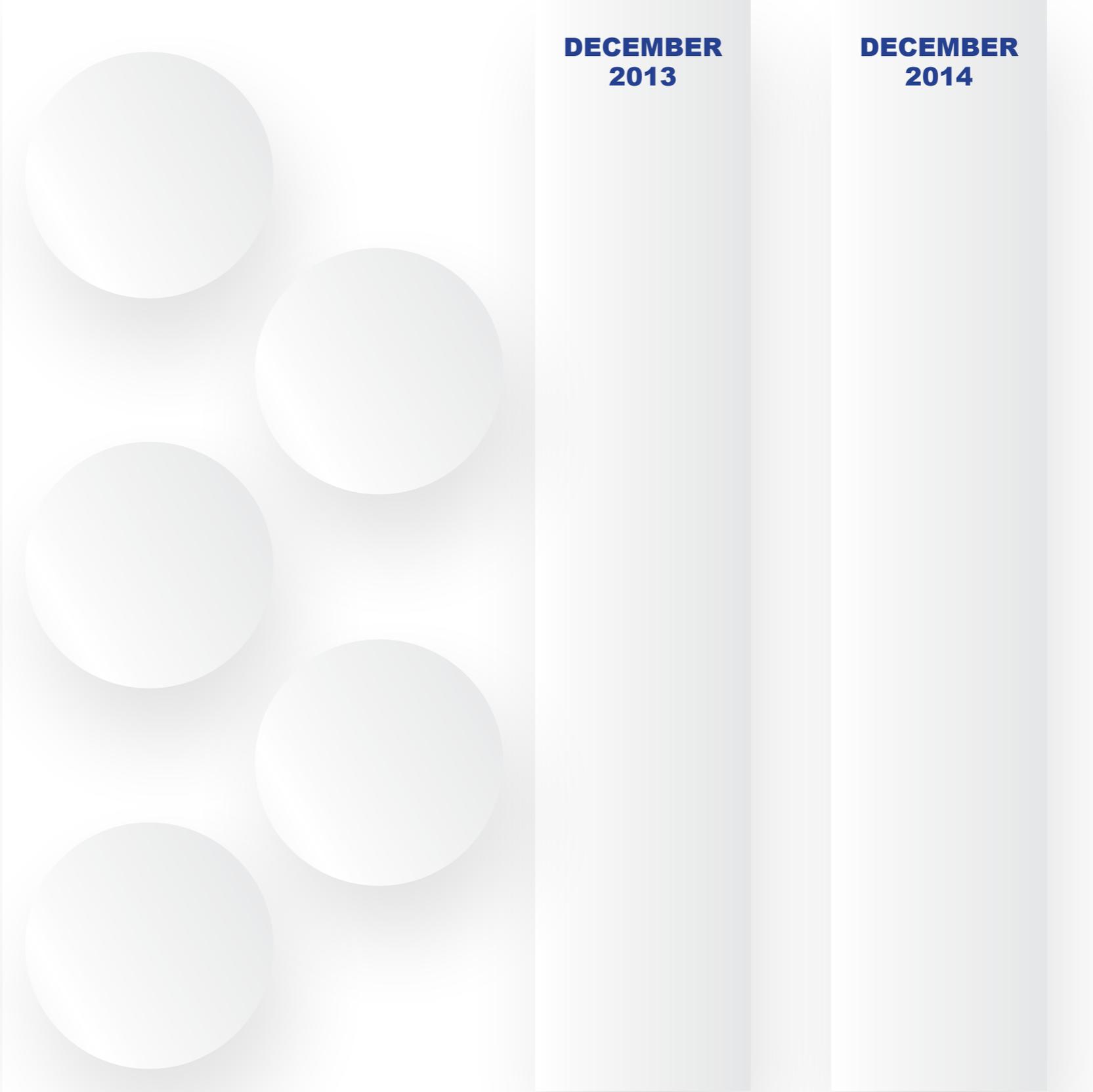
[REDACTED]
Through observations and interviews at eight facilities, we identified three factors that contributed to the mail processing package delays:

- The processing of commingled Priority Mail® and First-Class Mail packages which can cause excess processing machine run time and delayed transportation of Priority Mail packages, which have more timely delivery requirements.
- The delayed deployment of a package processing machine during the peak holiday season resulting in possible loss of additional mail processing machine capacity. Also, some package processing machines were not fully utilized, which negatively impacted package processing.
- The timing and prioritization of hiring temporary employees during the peak period could be improved.

What The OIG Recommended

We recommended management enforce the segregation of Priority from First-Class Mail® for commercial mailers and post offices. We also recommended management ensure the timely installation of machines if needed for the peak holiday season; better utilize feed systems on package sorting machines; and improve the timing and prioritization of hiring temporary employees for the next peak holiday season.

Peak Holiday Season Package Processing Performance



Transmittal Letter



OFFICE OF INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

May 27, 2015

MEMORANDUM FOR: LINDA M. MALONE
VICE PRESIDENT, NETWORK OPERATIONS

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

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

SUBJECT: Audit Report – Package Processing Performance
During the December 2014 Peak Holiday Season
(Report Number NO-AR-15-006)

This report presents the results of our audit of Package Processing Performance During the December 2014 Peak Holiday Season (Project Number 15XG001NO000).

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Margaret B. McDavid, director, Network Processing and Transportation, or me at 703-248-2100.

Attachment

cc: Corporate Audit and Response Management

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Findings

Overall, the Postal Service's package processing improved during the December 2014 peak holiday season.

Introduction

This report presents the results of our audit of the U.S. Postal Service's December 2014 peak holiday season (Project Number 15XG001NO000). Our objective was to assess the Postal Service's package processing performance during the December 2014 peak holiday season. See [Appendix A](#) for additional information about this self-initiated audit.

Strong consumer demand for goods purchased over the Internet has driven growth in package volume in an otherwise declining mail market. In its 2012 *Five-Year Business Plan*, the Postal Service projected that volume, which was 3.5 billion packages in fiscal year 2012, will grow by 5 to 6 percent per year through 2017.

The peak holiday season is the time of year when the Postal Service is the busiest. During the December 2013 peak holiday season, the Postal Service processed a package workload¹ of 777.1 million packages, which was an 8.8 percent increase from December 2012. The performance generated positive publicity for the Postal Service as there were numerous complaints about its competitors' late package deliveries. The Postal Service processed a record workload of 865.4 million packages during the December 2014 peak holiday season, which was an increase of 11.4 percent over the prior peak holiday season.

Conclusion

Overall, the Postal Service's package processing improved during the December 2014 peak holiday season. Specifically, total workload increased by 88.2 million packages while delayed packages² decreased by 1.8 million as compared to the December 2013 peak holiday season. In addition, service scores³ for packages increased in six of the nine package categories.⁴ Although the Postal Service did not have the machine capacity in its network to process all package volumes on each day of the peak holiday season, it supplemented its package processing network with manual sorting operations.⁵

While the Postal Service was successful during the December 2014 peak holiday season, opportunities exist for improvement. Specifically, [REDACTED]

[REDACTED] We identified three factors that contributed to the mail processing package delays:

- The processing of commingled Priority Mail® and FCM packages which can cause excess processing machine run time and delayed transportation of Priority Mail packages, which have more timely delivery requirements.⁶
- The delayed deployment of a package processing machine during the peak holiday season resulting in possible loss of additional mail processing machine capacity. Also, some package processing machines were not fully utilized, which negatively impacted package mail processing.
- The timing and prioritization of hiring temporary employees during the peak period could be improved.

1 The sum of Total Piece Handling (TPH) and non-add TPH. For manual operations, TPH is the total of First Handled Piece (FHP) and subsequent handling pieces. For machine operations, TPH is total pieces fed minus any reworks or rejects. For non-distribution operations, the TPH count is not added to the mail processing distribution total and is referred to as non-add TPH

2 The Postal Service considers mail delayed when it is not processed or dispatched to meet its established delivery day.

3 Measurements of how well the Postal Service performs to its service standards. Service standards are a stated goal for service achievement for each mail class.

4 The package categories include Express Mail®, Priority Air, Priority Surface, Priority Composite, First-Class Mail® (FCM) Overnight Composite, FCM 2 Day Composite, FCM 3 Day Composite, Package Services, and Parcel Select.

5 The Postal Service continues to review new package processing technology for incorporation into its network.

6 In general, Priority Mail packages are expected to be delivered faster than FCM packages. For example, a Priority Mail package mailed from Denver, CO, to Houston, TX, is expected to be delivered in 2 days while a FCM package is expected to be delivered in 3 days.

Total package workload for December increased in December 2014 compared to December 2013.

The Postal Service's December 2014 peak holiday season average service scores were higher than December 2013 for six of the nine classes of packages.

Peak Holiday Season Package Processing Performance

The Postal Service's performance improved from last year. Total package workload for December increased in December 2014 compared to December 2013. Specifically, package workload in mail processing increased by over 88 million packages, or 11.4 percent, compared to the December 2013 peak holiday season (see Table 1).

Table 1. Workload Comparison

	Peak Holiday Season	
	December 2013	December 2014
Package Workload	777,148,505	865,375,519
Workload Change	62,588,910	88,227,014
Percent Change		11.4%

Source: Enterprise Data Warehouse (EDW) and U.S. Postal Service Office of Inspector General (OIG) calculations.

The Postal Service was able to decrease the number of delayed packages during the December 2014 holiday peak season even with record package workload. Specifically, delayed packages decreased by over 1.8 million pieces while package workload increased by over 88 million pieces. In addition, delayed packages as a percentage of workload decreased from 3.12 percent in December of 2013 to 2.59 percent in December 2014 (see Table 2).

Table 2. Delayed Packages

Period	Package Workload	Delayed Packages	Delayed Packages as a Percent of Package Workload
December 2013	777,148,505	24,220,689	3.12%
December 2014	865,375,519	22,396,593	2.59%
Difference	88,227,014	(1,824,097)	-0.53%

Source: EDW, Mail Condition Reporting System, and OIG calculations.

The Postal Service's December 2014 peak holiday season average service scores were higher than December 2013 for six of the nine classes of packages. However, most scores did not meet performance targets. Only the parcel select service class achieved a performance score above the December 2014 performance target (see Table 3).

Specifically, at the Anaheim, CA; Industry, CA; Los Angeles, CA; Santa Clarita, CA; North Houston, TX; and Cincinnati, OH, processing and distribution centers (P&DCs), we observed Priority Mail® and FCM packages commingled and processed within the outgoing Priority operating window.

Table 3. Service Score Comparison by Class

Service Class	December 2013 Average Performance Score ⁷	December 2014 Average Performance Score	December 2014 Performance Targets
Express Mail	████	████	████
Priority Air	████	████	████
Priority Surface	████	████	████
Priority Composite	████	████	████
FCM O/N Composite	82.07	81.05	96.50
FCM 2 Day Composite	79.64	78.88	95.10
FCM 3-5 Day Composite	69.71	69.04	95.00
Package Services	77.56	85.81	90.00
Parcel Select	98.77	99.55	99.50

Source: Service and Field Operations Performance Measurement⁸ reports and OIG calculations.

Package Processing Delays

While the Postal Service was successful during the December 2014 peak holiday season, opportunities exist for improvement. It did not timely process ██████████.

A package is considered delayed in processing⁹ when it does not meet its established dispatch date and time. This can negatively impact customer demand for Priority, Express, and package mail. Customers' dissatisfaction with package delivery service performance might drive them to the competition, ██████████¹⁰.

Factors that Contributed to Package Processing Delays

We identified three factors that contributed to the mail processing package delays. Specifically, at the Anaheim, CA; Industry, CA; Los Angeles, CA; Santa Clarita, CA; North Houston, TX; and Cincinnati, OH, processing and distribution centers (P&DCs), we observed Priority Mail® and FCM packages commingled and processed within the outgoing Priority operating window.¹¹ This adversely impacted the overall Priority Mail flow by extending machine run times and artificially increasing the volume/weight of Priority Mail to be flown. In locations where airplane capacity is limited, excess volume was not included on the scheduled flight and had to be either rescanned to the next available flight or trucked to the destinating facility. This occurred because post offices and mailers did not make the required separations. This jeopardizes Priority Mail service performance as Priority Mail has more timely delivery requirements than FCM. See [Figure 1](#) for examples we observed of Priority Mail commingled with FCM.

⁷ Percent of service standard achievement.

⁸ A Postal Service system that generates a variety of reports that provide information on Postal Service productivity, service, mail conditions, and operating performance at the national, area, and district levels.

⁹ Delayed processing occurs when committed mail is not processed and finalized in time to be dispatched on the designated Dispatch of Value (DOV) to meet the programmed delivery day. Processed mail that is not on the platform or designated dispatch area, prior to the DOV, is designated as Delayed Processing.

¹⁰ ██████████

¹¹ The window of time used to sort outgoing Priority Mail.

We observed one package processing machine being relocated during the peak holiday season, but not ready to process mail.

Figure 1. Priority Mail® Commingled With FCM



Source: OIG photographs taken December 15, 2014, at the North Houston P&DC.

Also, we observed one package processing machine being relocated during the peak holiday season, but not ready to process mail. Specifically, the Santa Clarita, CA, P&DC planned for an additional automated parcel and bundle sorter (APBS)¹² machine, but it was not ready for use. Instead, it was being assembled with an estimated completion date of mid-January 2015. If this machine had been functional and able to process mail, it would have eliminated some of the delayed package volumes.

We also observed the APBS and automated package processing sorter (APPS) feed systems being underutilized during Priority Mail® processing.

We also observed the APBS and automated package processing sorter (APPS)¹³ feed systems being underutilized during Priority Mail® processing. Personnel were not keeping the machines' feed systems filled with the packages (see Figures 2 and 3 for examples). This resulted in lower throughputs¹⁴ and more manually processed mail.

Figure 2. APBS Feed System (conveyor belt)



Source: OIG photograph taken December 15, 2014, at the North Houston P&DC.

¹² An upgraded small parcel and bundle sorter with a new control system, barcode, and optical character reader technology, and improved induction stations.

¹³ APBS and APPS are mail processing machines that sort parcels.

¹⁴ A measurement of pieces processed per unit of time. For this equipment, it is measured in pieces processed per hour.

Finally, we found there are opportunities to improve the prioritization and timing of hiring temporary employees.

Figure 3. APPS Feed System (conveyor belt)



Source: OIG photograph taken December 15, 2014, at the North Houston P&DC.

Finally, we found there are opportunities to improve the prioritization and timing of hiring temporary employees. The Postal Service did not have the machine capacity in its network to process all package volumes on each day of the peak season. It supplemented its automation with manual sorting operations.

To handle the increased package volumes during the December 2014 peak holiday season, the Postal Service planned to hire 20,175 temporary employees to sort mail. It actually hired 19,802 temporary postal support employees and material handler assistants (MHA)¹⁵ for this purpose.

At the Anaheim, CA; Industry, CA; and North Houston, TX, P&DCs, Postal Service management stated the process for hiring casuals began too late to adjust for attrition and turnover prior to the peak season. During the hiring process, some individuals accepted the temporary MHA positions while waiting for higher paying career casual assistant (CCA)¹⁶ jobs. As CCA jobs became available, these MHAs left their temporary positions to accept the CCA jobs, leaving mail processing operations understaffed.

¹⁵ A casual who loads, unloads, and moves bulk mail and performs other duties incidental to the movement and processing of mail.

¹⁶ An employee who delivers and collects mail on foot or by vehicle in a prescribed area.

Recommendations

We recommend management enforce the segregation of Priority from First-Class Mail® for commercial mailers and post offices; ensure the timely installation of machines; better utilize feed systems; and improve the timing and prioritization of hiring temporary employees for the next peak holiday season.

We recommend the vice president, Network Operations:

1. Enforce the segregation of Priority from First-Class Mail® for commercial mailers and post offices.
2. Ensure the timely installation of machines if needed for the peak holiday season.
3. Enhance the utilization of the automated parcel and bundle sorter and automated package processing sorter feed systems to continuously convey packages.
4. Improve the timing and prioritization of hiring temporary employees for the next peak holiday season.

Management's Comments

Management did not explicitly agree with the findings, but agreed with all recommendations. Management disagreed with our methodology for calculating revenue at risk because a single package could have been reported delayed several days in a row, and using the total delayed packages to calculate the revenue at risk is not accurate.

Regarding recommendation 1, management stated the separation of Priority Mail® from First-Class Mail® is a strategy being actively tracked and pursued. During the peak holiday season, this was one of the indicators tracked and discussed with area leadership on a daily basis. Management plans to implement this recommendation by November 1, 2015, for the December 2015 peak holiday season.

Regarding recommendation 2, management stated the current draft deployment schedule for the small package sorting system has 16 additional machines being deployed prior to November 1, 2015.

Regarding recommendation 3, management stated the current field strategy for peak season is that staffing be sufficient to staff package processing continuously through breaks and lunches. Management plans to implement this recommendation by September 30, 2015, for the December 2015 peak holiday season.

Regarding recommendation 4, management stated areas plan peak holiday season hiring months in advance and there is a large turnover of seasonal employees. They stated that over hiring in anticipation of the turnover is not a good business practice as the exact turnover is not known. They also stated sites continually adjust hiring as needed to ensure continuous processing and minimal disruptions. Management plans to implement this recommendation by November 30, 2015, for the December 2015 peak holiday season.

See [Appendix B](#) 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. Regarding management's disagreement with the methodology for calculating revenue at risk, we agree that a single package could have been reported delayed several days in a row. However, if a package is delayed more than one day, it increases the possibility of a customer taking their business to a competitor. Therefore, we believe our calculation of revenue at risk, while inherently uncertain, is a sound conservative estimate.

The OIG considers recommendation 1 significant and therefore, requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. This recommendation should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendation can be closed.

Appendices

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Appendix A: Additional Information

Background

Total online sales increased 12.6 percent in calendar year 2010 from the prior year — to \$176.2 billion — and online retail sales in the U.S. are expected to grow to \$278.9 billion by 2015. The package segment is growing to accommodate this uptick in online sales; and it offers an opportunity for the Postal Service to make up for the reduction in FCM volume and the flattening of Standard Mail® volume. In its 2012 *Five-Year Business Plan*, the Postal Service projected that volume, which was 3.5 billion packages in FY 2012, will grow by 5 to 6 percent per year through 2017.

Through the Delivering Results, Innovation, Value, and Efficiency (DRIVE)¹⁷ initiative, the Postal Service's goal is to establish a package processing and delivery network that supports package growth and delivery expectations. Customers are demanding benefits such as free shipping and increased tracking and visibility.

During the December 2013 peak holiday season, the Postal Service processed 777.1 million packages, which was an 8.8 percent increase from December 2012. The performance generated positive publicity for the Postal Service as its competitors received numerous complaints about late package deliveries.

Objective, Scope, and Methodology

Our objective was to assess the Postal Service's package processing performance during the December 2014 peak holiday season. To meet our objective, we:

- Visited eight facilities¹⁸ with high delayed package volume and observed operations during the peak holiday season.
- Interviewed Postal Service Headquarters personnel and personnel at the eight facilities.
- Analyzed December 2013 and 2014 peak holiday season mail volume, mail processing, and service data.

We used computer-processed data from the Mail Condition Reporting System, Service and Field Operations Performance Measurement System, MODS, National Maintenance Activity Reporting System, and EDW. We did not test the validity of controls over these systems. However, we assessed the reliability and verified the accuracy of the data by confirming our results with Postal Service managers and other data sources. We determined the data were sufficiently reliable for the purposes of this report.

We conducted this performance audit from October 2014 through May 2015, 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management on April 14, 2015, and included their comments where appropriate.

¹⁷ A management process used to improve business strategy development and execution. The goal of DRIVE Initiative 43 is to "Build a World-Class Package Platform."

¹⁸ Anaheim, CA; Industry, CA; Los Angeles, CA; Santa Clarita, CA; Brooklyn, NY; Queens, NY; North Houston, TX P&DCs and the Cincinnati, OH, National Distribution Center.

Prior Audit Coverage

Report Title	Report Number	Final Report Date	Monetary Impact (in millions)
<i>Readiness for Package Growth – Processing Capacity</i>	NO-AR-14-002	1/21/2014	None
<i>Postal Service Performance During the Fiscal Year 2013 Fall Mailing Season</i>	NO-AR-13-002	3/29/2013	\$10.9

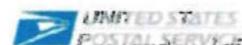
Report Results: The Postal Service has sufficient machine capacity to process all non-peak period package volume. It can process an average of about 29 million packages daily, which is more than sufficient to process the 24 million packages it receives. During the December peak period, the Postal Service augments its machine capacity with manual processing. The Postal Service does this to avoid having excess machine capacity and its associated costs for the other 11 months of the year. But, to meet anticipated package growth, the Postal Service could improve machine throughput by properly staffing machines and adjusting the mail arrival schedule. Management agreed with the recommendations.

Report Results: The Postal Service made significant progress reducing delayed mail during the 2012 fall mailing season and increasing service performance for timely delivery of mail. We can largely attribute these improvements to initiatives to address delayed mail, including the use of a fall mailing season readiness checklist and expanded the use of the Intelligent Mail barcode service performance diagnostic tool which allows the Postal Service to track mail through the mail processing network.

While the Postal Service is to be commended for these improvements, opportunities to further reduce delayed mail remain. Our observations determined that mail was not always properly color coded and, in some cases, could not be staged properly due to floor congestion caused by unprocessed mail transportation equipment. As a result, the Postal Service cannot ensure the timely processing, dispatch, and delivery of Standard Mail. Although delayed mail trended downward, any amount of delayed mail could result in possible revenue loss as affected mailers and customers seek alternatives. We conservatively estimate that \$3.8 million in revenue could be at risk if customers elect to use alternative advertising or delivery methods. Management agreed with the recommendation to improve the color coding of mail.

Appendix B: Management's Comments

LINDA M. MALONE
Vice President, Network Operations



May 14, 2015

LORI LAU DILLARD

SUBJECT: Package Processing Performance During the December 2014 Peak Holiday Season (NO-AR-15-DRAFT)

This is in response to the OIG audit on Package Processing Performance During the December 2014 Peak Holiday Season.

Management disagrees with the assumptions made in the financial computations of the at risk revenue. The assumptions that were made in that all packages that were reported delayed during peak season were at risk of revenue loss are not accurate. A single package could have been reported delayed several days in a row, thus using the total delayed packages during peak to calculate the at risk revenue is not accurate.

Recommendation 1

We recommend the vice president, Network Operations: Enforce the segregation of Priority from First-Class Mail® for commercial mailers and post offices.

Management Response/Action Plan:

Management agrees with this recommendation. The separation of First Class SPRS from Priority Mail is a strategy that is being actively tracked and pursued. During the peak season this was one of the indicators that was tracked and discussed with the area leadership on a daily basis.

Target Implementation Date: 11-1-15

Responsible Official:

Henry Dominguez, Manager, Processing and Distribution Center Operations

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Recommendation 2

We recommend the vice president, Network Operations: Ensure the timely installation of machines if needed for the peak holiday season.

Management Response/Action Plan:

Management agrees with this recommendation. The timely installation of future machines is critical for successful peak package processing. The current draft deployment schedule for the SPSS machine has 16 additional machines being deployed prior to November 1, 2015.

Target Implementation Date: 11-1-15

Responsible Official:

John Dunlop, Manager Network Operations Engineering

Recommendation 3

We recommend the vice president, Network Operations: Enhance the utilization of the automated parcel and bundle sorter and automated package processing sorter feed systems to continuously convey packages.

Management Response/Action Plan:

Management agrees with this recommendation. Current field strategy is that staffing be sufficient to staff the package processing through the entire tour, to include breaks and lunches.

Target Implementation Date: 9-30-15

Responsible Official:

Henry Dominguez, Manager, Processing and Distribution Center Operations

Recommendation 4

We recommend the vice president, Network Operations: Improve the timing and prioritization of hiring temporary employees for the next peak holiday season.

Management Response/Action Plan:

Management agrees with this recommendation. The areas plan their Peak hiring months in advance. Human Resources and Operations determine the number of employees needed by site. Constraints to the hiring have been that since these employees are seasonal hires, there is a large turnover during the Peak period. A seasonal problem that the field faces in a large number of these seasonal employees are working for supplemental money for the holiday season and end up resigning after the first pay period. Every attempt to alleviate this where possible,

but to over hire in anticipation of this occurring is not a good business practice as we do not know exactly the number that would be needed. Sites adjust as needed to ensure the processing is continuous and disruptions are minimal.

Target Implementation Date: 11-30-15

Responsible Official:

Henry Dominguez, Manager, Processing and Distribution Center Operations



Linda Malone

cc: *Manager, Corporate Audit Response Management*
Manager, Processing Operations
Manager, Network Operations Engineering
Manager, Processing and Distribution Center Operations
Manager, Service and Field Operations Performance Measurement



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