Office of Inspector General | United States Postal Service INSPECTOR GENERAL Audit Report **Operational Window Change Savings** UNITED STATES POSTAL SERVICE Report Number NO-AR-19-001 | October 15, 2018 RB

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## Highlights

### **Objective**

The objective of our audit was to determine if the U.S. Postal Service achieved its projected savings for the Operational Window Change (OWC).

On January 5, 2015, the Postal Service revised its First-Class Mail (FCM) service standards, eliminating single-piece overnight FCM service and shifting some mail from a 2-day to a 3-day service standard. These revisions enabled the Postal Service to expand its mail processing operational window to process mail on fewer machines, thus using less facility square footage. This change is known as the OWC. The OWC also required changes in mail transportation. The Postal Service projected the OWC would save over \$805 million annually.

In our *Mail Processing and Transportation Operational Changes* report (Report Number NO-AR-16-009, dated September 2, 2016) we determined the Postal Service achieved only \$81.1 million of its projected OWC savings and transportation costs exceeded the planned budget by over \$200 million in 2015, the first year after the OWC revisions occurred. In addition, mail processing productivity decreased by 4.5 percent that same year. We recommended management re-evaluate and update the projected operational and transportation financial impacts associated with the OWC and develop and implement a strategy to improve mail processing productivity. Management partially agreed with the recommendations, but did not state if they plan to re-evaluate the impact of the OWC on Postal Service productivity. Both recommendations are open and while they provided data related to budget reductions, they did not provide the OIG any additional information. We are reviewing the OWC savings again because in our

response to management comments in the prior audit, we said we planned to conduct additional audit work in this area.

### What the OIG Found

The Postal Service did not achieve its projected \$1.61 billion OWC savings for fiscal years (FY) 2016 and 2017.

"The Postal Service did not achieve its projected \$1.61 billion OWC savings for FYs 2016 and 2017." Postal Service management identified savings of \$275.25 million for FY 2016 and \$17.22 million for FY 2017, or about 18 percent of the projected savings for both years. We could only verify about \$73.43 million of the FY 2016 savings and \$17.22 million of the FY 2017 savings – about \$90.65 million, or 5.6 percent of the projected savings for both years. Outside of the projected savings presented to the Postal Regulatory Commission, the Postal Service identified an additional \$430.2 million in cost avoidance related to the OWC, \$232.8 million of which we could verify. Therefore, in total we verified \$323.48 million in savings and cost avoidance related to the OWC. The Postal Service identified the following categories for OWC annual savings:

Mail processing productivity gains were estimated to be almost \$679 million annually by balancing the mail processing workload across the day and matching workhours to workload. Management said they achieved savings of over \$200 million in FY 2016, but did not provide savings for FY 2017 because accurate data was not available due to changes in mail volumes. Our review determined that while costs did decrease in some mail processing operations, overall mail processing costs have increased by \$153 million since the OWC. Thus, we could not confirm the savings identified by management.

Further, we found that mail processing productivity is now 14 percent lower since the start of the OWC. Postal Service management said it's a lengthy process to adjust workhours for operations with decreasing letter and flats mail volume and increasing package volume which contributed to decreased productivity. They also indicated that management of those workhours could be improved at the facility level. Based on our analysis, we concluded that it is unlikely the Postal Service achieved productivity savings in FYs 2016 and 2017 related to the OWC.

Premium pay reductions were projected to be about \$65.7 million annually by moving employees from the night shift to the day shift. Employees working at night are paid a premium, known as night differential. Management said savings were about \$15.5 million in FY 2016, but they did not provide savings for FY 2017 because accurate data was not available due to changes in mail volumes. We verified the FY 2016 premium pay savings were achieved.

However, we found that mail processing overtime costs have increased by \$68.4 million, or 9 percent, since the OWC. We are currently conducting audit work in this area.

- Additional delivery point sequencing (DPS) was projected to be about \$32.8 million in annual savings from more mail being in DPS for delivery. Management said savings were about \$42.2 million in FY 2016, but did not provide any savings for FY 2017 because accurate data was not available due to changes in mail volumes. Management said they used the same methodology to calculate savings as the original projections, by taking one month of data and projecting it over the year to determine how much more volume was added to DPS in FY 2016. We found these savings were achieved.
- Reduction of secondary sorting was projected to be about \$16.7 million in annual savings by reducing outgoing secondary mail sorting, or doing less mail sorting at fewer facilities. Management said savings were about \$4.9 million in FY 2016 and about \$6.2 million in FY 2017. We found these savings were achieved.
- Use of more efficient processing machines was projected to save about \$11.5 million annually by transferring mail volume to more efficient mail processing machines, such as the Delivery Bar Code Sorter and Automated Flats Sorting Machine 100 machines. Management said savings were about \$10.74 million in FY 2016 and about \$11.02 million in FY 2017. We found these savings were achieved.

Although management provided savings amounts for FYs 2016 and 2017, they qualified the saving amounts as being only estimates. They said they could not determine the actual amount of OWC savings achieved for FYs 2016 and 2017 because significant declines in letter and flats mail volume and increases in package volume "skewed" the data. Management also said this was the reason they did not provide FY 2017 savings amounts for all OWC categories. Mail volume decreased by almost 5 billion pieces from FYs 2016 to 2017, making it more difficult for the Postal Service to achieve the OWC savings. However, the

### **Postal Service Management**

said they could not determine the actual amount of OWC savings achieved for FYs 2016 and 2017 because significant

Declines in letter and flats mail volume *and* 

Increases in package volume "skewed" the data.







We concluded that it is unlikely the Postal Service will ever achieve the projected annual \$805.5 million OWC savings.

The Postal Service did not develop an annual tracking methodology for each OWC savings category and did not develop a sensitivity analysis to account for changes in mail volume, changing labor cost, and transportation costs when projecting the OWC annual savings.



Postal Service did not re-evaluate its estimated annual savings. Management said they remain optimistic they will achieve the full savings.

However, we concluded that it is unlikely the Postal Service will ever achieve the projected annual \$805.5 million OWC savings. The Postal Service did not develop an annual tracking methodology for each OWC savings category and did not develop a sensitivity analysis to account for changes in mail volume, changing labor cost, and transportation costs when they projected the OWC annual savings.

Even though the Postal Service has not achieved its projected OWC savings, reverting to the previous operational window would likely cause further service disruption and additional cost. The OWC and the service standard revisions enabled the Postal Service to consolidate 17 mail processing facilities and partially consolidate another 21 facilities. Reestablishing the previous operating window could be cost prohibitive for the Postal Service.

In addition to the OWC savings projections, the Postal Service projected annual transportation savings of over \$268 million from network changes. However, transportation costs have increased by more than \$1 billion, or 15.4 percent, since the OWC was implemented. Postal Service management said that transportation costs increased because the volume of packages require more space than other types of mail as well as higher driver contract rates.

In the first year of the OWC, FCM single piece and commercial service scores decreased by over 11 and 4 percentage points. In addition, delayed mail

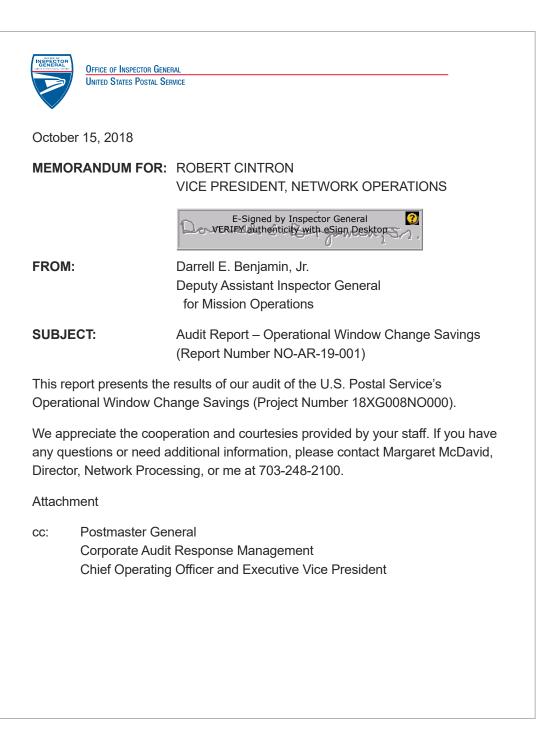
increased to about 2.5 billion pieces in FY 2015. FCM service scores and delayed mail improved in FYs 2016 and 2017. However, in the first two quarters of FY 2018, FCM service scores decreased to where they were the year after the OWC and there were about 2.5 billion pieces of delayed mail.

Outside of the projected savings presented to the Postal Regulatory Commission, the Postal Service identified an additional \$430.2 million in cost avoidance related to the OWC, \$232.8 million of which we could verify. Specifically, management said the OWC created additional facility space for new package processing machines by reducing the number of letter processing machines. The Postal Service also completed an upgrade to letter processing machines after implementing the OWC. Management said that this reduction of letter machines allowed the Postal Service to avoid costs it would have incurred to upgrade the letter machines. Based on our analysis of the data, we calculated a cost avoidance of \$232.8 million.

#### What the OIG Recommended

We recommended that management develop and implement, at a minimum, annual tracking methodologies for any significant projected operational costs or savings and use a sensitivity analysis to account for such impacts as changes in mail volume and labor and transportation costs. The issues identified in this report were the same issues identified in the prior report and we believe the open recommendations from the prior report would address these issues; therefore, we are not making additional OWC recommendations.

## Transmittal Letter



## Results

### Introduction/Objective

This report presents the results of our self-initiated audit of the U.S. Postal Service's operational window change (OWC) savings (Project Number 18XG008NO000). The objective of our audit was to determine if the Postal Service achieved its projected savings for the OWC.

### Background

The Postal Accountability and Enhancement Act of 2006 noted that the Postal Service had more facilities than it needed and should streamline its network to eliminate excess costs. The act required the Postal Service to prepare a strategy for rationalizing its facilities network and removing excess processing capacity and space.

In 2011, the Postal Service announced its Network Rationalization Initiative (NRI) to align the Postal Service's network processing capacity with its declining mail volume through equipment and facility consolidations and operational changes. Phase I of the NRI involved consolidating 141 mail processing facilities between 2012 and 2013 while Phase II, which began in January 2015, involved consolidating 82 facilities by October 2015.<sup>1</sup> As part of Phase II, on January 5, 2015, the Postal Service revised its First-Class Mail (FCM) service standards, eliminating single-piece overnight FCM service and shifting some mail from a 2-day to a 3-day service standard. These revisions enabled the Postal Service to expand its mail processing operational window to process mail on fewer machines, thus using less facility square footage. This change is known as the OWC. Processing and Distribution Centers (P&DC) nationwide had to adjust their mail processing and transportation operations to meet critical entry times (CET),<sup>2</sup> clearance times,<sup>3</sup> and dispatches of value<sup>4</sup> associated with

the OWC. Postal Service management described the OWC as one of its most significant changes since automating mail processing.

In testimony to the Postal Regulatory Commission (PRC), the Postal Service provided projected NRI savings, which included annual OWC savings. The OWC savings were broken out into the following categories:

- Mail Processing Productivity Gains<sup>5</sup>
- Mail Processing Premium Pay Reductions<sup>6</sup>
- Additional Delivery Point Sequencing (DPS)<sup>7</sup>
- Reduction in Outgoing Secondary<sup>8</sup>
- Use of more efficient processing machines<sup>9</sup>

The testimony showed a combined savings of \$1.1 billion annually for these categories. The Postal Service told us that it separated those savings categories between Phase I and Phase II (\$300 million for Phase I and \$805 million for Phase II), but could not provide support for the separated calculations. "We determined in our first OWC report that the Postal Service did not achieve its projected OWC savings and that transportation costs increased in 2015."

We determined in our first OWC report, *Mail Processing and Transportation Operational Changes* (Report Number NO-AR-16-009, dated September 2, 2016), that the Postal Service did not achieve its projected

<sup>1</sup> In May 2015, the Postal Service deferred 68 consolidations.

<sup>2</sup> The latest time that mail must be available for it to be processed and dispatched in time to meet service standards.

<sup>3</sup> The latest time that mail must complete an operation if it is to meet the CET for the next required operation.

<sup>4</sup> The latest time of the day mail can be transported to meets its service standard.

<sup>5</sup> Savings associated with better use of both machine and labor resources.

<sup>6</sup> Savings associated with processing DPS during the day and avoiding night premiums.

<sup>7</sup> Savings resulting from moving mail currently processed in manual operations into automated or mechanized operations, which require fewer workhours to process the same volume.

<sup>8</sup> Outgoing secondary is a scheme or sort plan in which mail that was sorted in outgoing primary operation is further sorted to finer outgoing separations.

<sup>9</sup> Savings resulting from Carrier Sequence Barcode Sorter (CSBCS) and Upgraded Flats Sorting Machine (UFSM) 1000 volumes being migrated to more efficient equipment.

OWC savings and that transportation costs increased in 2015, the first year after the OWC revisions occurred. Specifically, we found the Postal Service only

achieved 10 percent of its projected OWC annual savings (see Table 1) and exceeded its FY 2015 transportation budget by over \$200 million.

Туре	Category	OWC Projected Savings (millions)	OIG- Verified Savings (millions)
Labor Cost Changes	Mail Processing Productivity Gains	\$678.67	\$64.3 <sup>10</sup>
	Mail Processing Premium Pay Reductions	65.75	0
	Additional DPS Sorting	32.87	0
Workload Reduction Cost Changes	Reduction in Outgoing Secondary Sorting	16.71	10.3
	Use of More Efficient Machines	11.51	6.5
Total		\$805.50	\$81.1

#### Table 1. Breakdown of Projected and Realized OWC Savings for 2015

Source: OWC savings obtained from Manager, Network Operations Engineering, and PRC filings in Docket No. N2012-1. The OIG verified the amounts based on a review of estimates and supporting data obtained from the Manager, Mail Transport Equipment. Calculated total difference due to rounding.

In addition, mail processing productivity decreased by 4.5 percent in the year following implementation of the OWC.

In the first report, we recommended the Vice President, Finance and Planning, re-evaluate and update the projected operational and transportation financial impacts associated with the OWC. Management partially agreed with the recommendation and said they would develop targets as part of the annual budget cycle; however, management did not say if they plan to re-evaluate the financial impacts of the OWC. While we agreed that developing annual targets as part of the budget process is critical, we emphasized that management should also re-evaluate and update the entire project's operational and transportation financial impacts associated with the OWC change and develop a plan to ensure savings are captured. Management said they do not intend to re-evaluate the impact of the OWC. Management said their target implementation date for this recommendation was December 31, 2016, and the recommendation is open.

We also recommended the Vice President, Network Operations, develop and implement a strategy to improve mail processing productivity in the new operational window before implementing any additional nationwide operational changes or consolidations. Management partially agreed with the recommendation and agreed to develop and implement strategies to improve mail processing productivity, but disagreed with ceasing all other operational changes. Management said their target implementation date for this recommendation was September 30, 2017, and they subsequently requested an extension until September 30, 2018.

We are reviewing the OWC savings again because in our response to management comments in the prior audit, we said we planned to conduct additional audit work in this area.

<sup>10</sup> The Postal Service did not provide realized savings for mail processing productivity gains. Rather it provided labor savings as tracked through its Delivering Results, Innovation, Value and Efficiency Initiative.

We found the Postal Service did <i>not</i> achieve its projected	Postal Service management identified savings of <b>\$275.25 million</b> in FY 2016	and <b>\$17.22 million</b> in FY 2017 — about 18% of the projected savings for both years	18%
\$1.61 billion OWC savings for FYs 2016 and 2017.	We could only verify about <b>\$73.43 million</b> of the FY 2016 savings	and \$17.22 million of the FY 2017 savings — about 90.65 million, or 5.6 percent of the projected savings for both years	5.6%

### Finding #1: Operational Window Change Savings Not Achieved

We found the Postal Service did not achieve its projected \$1.61 billion OWC savings for fiscal years (FY) 2016 and 2017. Postal Service management identified savings of \$275.25 million in FY 2016 and \$17.22 million in FY 2017 — about 18 percent of the projected savings for both years (see Table 2). We could only verify about \$73.43 million of the FY 2016 savings and \$17.22 million of the FY 2017 savings — about 90.65 million, or 5.6 percent of the projected savings for both years. Outside of the projected savings presented to the PRC, the Postal Service identified an additional \$430.2 million in cost avoidance related to the OWC, \$232.8 million of which we could verify. Therefore, we verified a total of \$323.48 million in savings and cost avoidance related to the OWC (see Table 3).

#### Table 2. Postal Service's Estimated OWC Savings, FYs 2016-2017

Category	Projected Savings (millions)	OWC Phase II Estima FY 2016	ted Savings (millions) FY 2017 <sup>11</sup>	Percentage of Savings
Mail Processing Productivity Gains	\$1,357.34	\$201.81	-	14.8
Mail Processing Premium Pay Reductions	131.49	15.55	-	11.8
Additional DPS Sorting	65.75	42.23	-	64.2
Reduction in Outgoing Secondary Sorting	33.42	4.91	\$6.2	33.3
Use of More Efficient Machines	23.01	10.74	11.02	94.5
Total	\$1,611.01	\$275.25	\$17.22	18.2

Source: Projected OWC savings obtained from the Manager, Network Operations Engineering, and PRC filings in Docket No. N2012-1. Estimated savings provided by the Manager, Mail Transport Equipment. Calculated total difference due to rounding.

<sup>11</sup> The Postal Service did not provide FY 2017 savings for mail processing productivity gains, mail processing premium pay reductions, and additional DPS sorting.

Category	Projected Savings (millions)	Postal Service's Estimated Savings/ Cost Avoidance (millions)	OIG-Verified Savings/ Cost Avoidance (millions)	Percentage of Savings/ Cost Avoidance Verified
Mail Processing Productivity Gains	\$1,357.34	\$201.81	\$O	0
Mail Processing Premium Pay Reductions	131.49	15.55	15.55	11.8
Additional DPS Sorting	65.75	42.23	42.23	64.2
Reduction in Outgoing Secondary Sorting	33.42	11.11	11.11	33.3
Use of More Efficient Machines	23.01	21.76	21.76	94.6
Total Projected Savings	\$1,611.01	\$292.46	\$90.65	5.6
Avoided Costs		430.2	232.8	54.1
Total		722.65	323.48	44.8

#### Table 3. Comparison of Postal Service Estimated OWC Savings/Cost Avoidance to OIG-Verified OWC Savings/Cost Avoidance

Source: Projected OWC savings obtained from Manager, Network Operations Engineering, and PRC filings in Docket No. N2012-1. The Postal Service's estimated savings and supporting data provided by the Manager, Mail Transport Equipment. The OIG verified the amounts based on a review of estimates and supporting data obtained from the Manager, Mail Transport Equipment. Calculated total difference due to rounding.

Although management provided savings amounts for FYs 2016 and 2017, they qualified the saving amounts as being estimates. They said they could not determine the actual amount of OWC savings achieved for FYs 2016 and 2017 because significant declines in letter and flats mail volume and increases in package volume "skewed" the data. Management also said that was the reason for not providing FY 2017 savings amounts for all OWC categories. However, management said they remain optimistic that they will achieve the full savings, but did not provide a timeline for achievement.

#### **Mail Processing Productivity Gains**

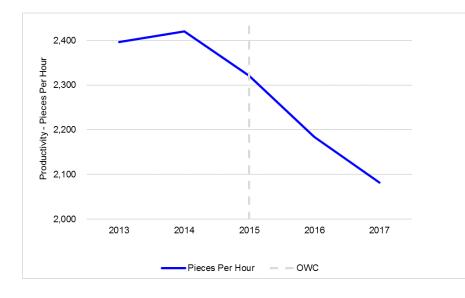
Mail processing productivity gains were expected to be almost \$679 million annually because of the OWC. In the original PRC filings,<sup>12</sup> Postal Service management said expanding the mail processing window would balance workload across the mail processing day and allow for more effective management of mail processing operations, which would result in mail processing productivity gains. In the filing, management estimated increases in productivity to mail processing operations, which were the basis for the savings calculation (see Appendix B).

Although the Postal Service based the projected savings it presented to the PRC on increased productivity, it provided data on mail processing costs for FY 2016 OWC savings amounts. Management said the Postal Service achieved savings of over \$200 million in FY 2016 due to decreased costs in some mail processing operations. Management said they excluded costs from eight package mail processing operations because of the increase in package volume, which "skewed" the data. We found that while costs did decrease in some mail processing operations, overall mail processing costs have increased by about \$153 million since the OWC.

<sup>12</sup> Mail Processing Network Rationalization Service Changes, 2012 (Docket No. N2012-1). USPS-T-4, filing ID 78328, dated December 5, 2011.

We evaluated the actual productivity changes in mail processing operations from FY 2014 to FY 2017 and found productivity decreased in all but two mail processing labor categories, or labor distribution codes (LDC) (see Appendix B). Overall mail processing productivity is 14 percent lower since the start of the OWC (see Figure 1). Productivity is calculated by dividing total mail pieces handled (TPH) and non-add TPH<sup>13</sup> by total workhours. We concluded it is unlikely the Postal Service achieved any productivity savings in FYs 2016 and 2017 related to the OWC; therefore, we disagree with the Postal Service's identified savings.

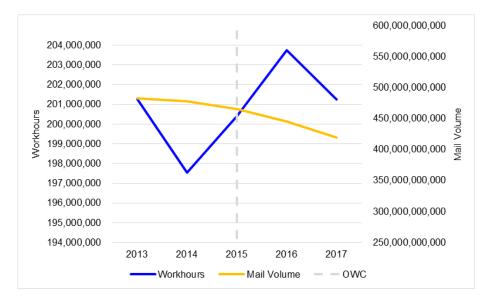
#### Figure 1. Mail Processing Productivity, FYs 2013-2017



Source: OIG analysis of Electronic Date Warehouse (EDW) data.

We also found that while mail volume has decreased, mail processing workhours increased after the OWC. Specifically, mail volume decreased by 12.4 percent and mail processing workhours increased by 1.9 percent (see Figure 2).

## Figure 2. Mail Processing Workhours<sup>14</sup> Compared to Mail Volume,<sup>15</sup> FYs 2013-2017



Source: OIG analysis of EDW data.

Postal Service management said the process used to adjust workhours and complement to significant mail volume changes can be lengthy. Also, decreasing letter and flats mail volume and increasing package volume contributed to decreased productivity. They also indicated that management of those workhours could be improved at the facility level.

<sup>13</sup> Non-Add TPH is the TPH count in non-distribution operations (e.g., bundle sorts on APPS or SPBS, or allied operations for which counts are obtained). While such volumes are computed as TPH, they are not added to the bottom line for mail processing distribution.

<sup>14</sup> Includes all mail processing workhours, overtime, and penalty overtime hours.

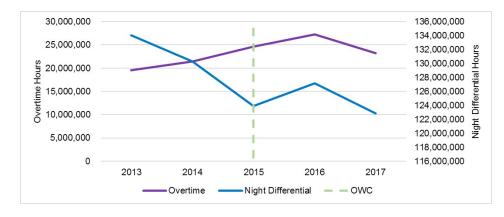
<sup>15</sup> Equals TPH plus non-add TPH.

#### **Mail Processing Premium Pay Reductions**

Premium pay reductions were projected to be over \$65 million annually by moving employees from the night shift to the day shift. Eligible employees receive premium pay, known as night differential pay, for all work performed between 6 p.m. and 6 a.m. Management said savings were about \$15.5 million in FY 2016, but they did not provide savings for FY 2017. Based on the data provided and our analysis of premium pay, FY 2016 savings are reasonable. Management said they did not achieve all the premium pay savings due to an increase in package volume which the Postal Service processes at night.

Although the Postal Service saved money by reducing premium pay, mail processing overtime costs increased by over \$68 million, or about 9 percent, and penalty overtime costs increased to almost \$5 million, or about 13 percent (see Figure 3). We are currently conducting audit work in this area.

#### Figure 3. Overtime<sup>16</sup> Compared to Night Differential, FYs 2013-2017



Source: OIG analysis of EDW data.

#### **Additional Delivery Point Sequencing**

Additional DPS savings was projected to be almost \$33 million annually from more mail being in DPS for delivery. In the original PRC filings<sup>17</sup>, the

Postal Service said the extended operating window would allow for additional DPS, resulting in less handling by carriers. Further, the planned facility consolidations would allow for manually processed mail to be moved to automated operations, requiring less time to process the same volume.

Management said savings were about \$42 million in FY 2016, but did not provide any savings for FY 2017. Management said they used the same methodology to calculate savings as the original projections, by taking data for the month of August and projecting it over the year to determine how much more volume was added to DPS in FY 2016. Our analysis determined that while manual volume

decreased by over 72 percent from FY 2014 to FY 2017, the DPS volume was unstable. DPS mail increased by more than 1.2 billion pieces from FYs 2015 to 2016, but then decreased by more than 3.5 billion pieces in FY 2017 (see Table 4). Overall, DPS mail decreased by more than 2 billion pieces after the OWC. Despite the instability in DPS volume, the OIG verified the FY 2016 savings were reasonable.

" Despite the instability in DPS volume, the OIG verified the FY 2016 savings were reasonable."

#### Table 4. Manual and DPS Volumes, FYs 2014-2017

59,959,064	
59,959,004	100,595,872,018
190,781,247	100,803,732,996
98,448,130	102,052,270,037
26,826,281	98,551,217,355
	190,781,247 98,448,130

Source: EDW.

<sup>16</sup> Includes mail processing overtime and penalty overtime hours.

<sup>17</sup> Mail Processing Network Rationalization Service Changes, 2012 (Docket No. N2012-1). USPS-T-9, filing ID 78325, dated December 5, 2011.

#### **Reduction in Outgoing Secondary Sorting**

Reduction of secondary sorting was projected to be over \$16 million in annual savings. In the PRC filing<sup>18</sup>, the Postal Service projected these savings based on doing less mail sorting at fewer facilities. The Postal Service estimated it could reduce outgoing secondary sorting volume by four billion letters and 200 million flats.

Management said savings were almost \$5 million in FY 2016 and over \$6 million in FY 2017 due to reduced outgoing secondary volume. However, management said that, as of FY 2017, the Postal Service was still over its projected secondary sorting target volume by 1.8 billion letters and 94.7 million flats. The OIG verified the volume of letters and flats remaining in secondary operations and the reduction in volume and these savings are reasonable.

#### **Use of More Efficient Machines**

Use of more efficient processing machines was projected to save about \$11.5 million annually by transferring mail volume to more efficient mail processing machines such as the Delivery Bar Code Sorter (DBCS) and Automated Flat Sorting Machine (AFSM) 100 machines. The Postal Service estimated it could transfer 1.5 billion letters from the CSBCS and 640 million flats from the USFM 1000 to the DBCS and AFSM 100.

Management said savings were about \$10.74 million in FY 2016 and about \$11.02 million in FY 2017. The Postal Service said it no longer has any CSBCS machines and has decreased UFSM 1000 volume to 39.9 million. The OIG verified elimination of CSBCS machines and the decrease in UFSM 1000 volume, and these savings are reasonable based on the reduction in volume.

### Reliability of Postal Service's Operational Window Change Savings Projections

The Postal Service did not include objective analyses for most of its projected OWC savings. According to the PRC filings,<sup>19</sup> increases in mail processing productivity (see Appendix B), which accounted for over 84 percent of projected OWC savings, were based on the presenter's operational experience and not on any pilot study. In addition, the projected savings were based on FY 2010 data and the Postal Service did not develop a sensitivity analysis to consider future changes to mail volume and changing labor costs. Further, the Postal Service did not track achievement of savings each year or have annual targets established. Postal Service management said the projected savings were sound at the time they were made; however, they said the significant decrease in letter and flat volume and the increase in package volume has affected their ability to determine if the savings were achieved. Mail volume decreased by almost 5 billion pieces from FYs 2016 to 2017<sup>20</sup> making it more difficult for the Postal Service to achieve the OWC savings. However, the Postal Service did not re-evaluate its estimated annual savings. Management reduced their budget in FYs 2017 and 2018 by \$330 million each year in anticipation of projected OWC savings, but actual savings were not tracked. Management added there will be no further budget reductions for projected OWC savings.

In the three years following the OWC, the Postal Service has not achieved its projected savings. The lack of objective analysis for productivity improvements, consideration for potential changes in mail volume, and tracking of savings may account for the Postal Service's inability to achieve all the OWC savings. We believe it is unlikely the Postal Service will ever achieve all of the projected OWC savings.

<sup>18</sup> Mail Processing Network Rationalization Service Changes, 2012 (Docket No. N2012-1). USPS-T-9, filing ID 78325, dated December 5, 2011.

<sup>19</sup> Mail Processing Network Rationalization Service Changes, 2012 (Docket No. N2012-1). USPS-T-4, filing ID 78328, dated December 5, 2011.

<sup>20</sup> Annual Compliance Determination Report, Fiscal Year 2017. Filing ID 104398, dated March 29, 2018.

Even though the Postal Service has not achieved its projected OWC savings, reverting to the previous operational window would likely cause further service disruption and additional cost. The OWC and the service standard revisions enabled the Postal Service to consolidate 17 mail processing facilities and partially consolidate another 21 facilities. Reestablishing the previous operating window could be cost prohibitive for the Postal Service.

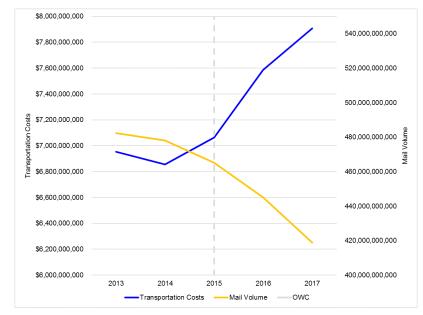
"Even though the Postal Service has not achieved its projected OWC savings, reverting to the previous operational window would likely cause further service disruption and additional cost. "

#### **Transportation**

In addition to the OWC savings projections, the Postal Service projected annual transportation savings of over \$268 million because of the NRI. The original PRC filings<sup>21</sup> said the change in the operating window was expected to allow the Postal Service to move mail from surface transportation to air transportation and to more efficiently utilize their surface transportation network to carry the mail with less capacity. Expected mail processing facility closures would also reduce transportation costs by requiring less movement of mail through the network.

However, we found transportation costs have increased more than \$1 billion, or over 15 percent, while mail volume has decreased by almost 60 billion pieces, or over 12 percent, since the year before the OWC (see Figure 4).





Source: OIG analysis of EDW data.

Postal Service management said transportation costs increased because package volume increased and packages require more space than other types of mail. Management also said higher driver contract rates increased transportation costs.

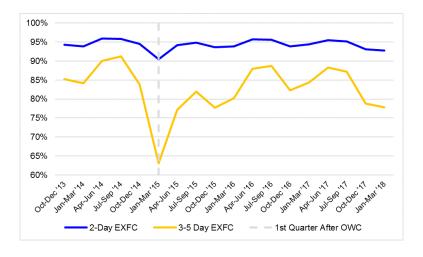
The issues in this report related to not achieving projected OWC savings, decreased mail processing productivity, and increased transportation costs were the same issues identified in the prior report and we believe the open recommendations from the prior report would address these issues, therefore, we are not making additional OWC recommendations.

<sup>21</sup> Mail Processing Network Rationalization Service Changes, 2012. (Docket No. N2012-1). USPS-T-10, filing ID 78318, dated December 5, 2011.

## First-Class Mail Service Scores and Delayed Mail since the Operational Window Change

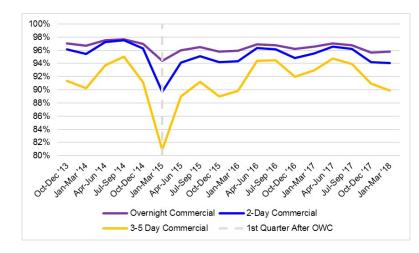
Additionally, not only did the Postal Service not achieve the projected savings, service scores decreased and delayed mail increased following the OWC. In the first year of the OWC, FCM single piece and commercial<sup>22</sup> service scores decreased up to over 11 and 4 percentage points, respectively. In addition, delayed mail<sup>23</sup> increased to more than 2.4 billion pieces in FY 2015. FCM service scores and delayed mail volume improved in FYs 2016 and 2017. However, in the first two quarters of FY 2018, FCM service scores have decreased and there were more than 2.6 billion pieces of delayed mail (see Figures 5, 6, and 7).

#### Figure 5. Single-Piece Service Scores



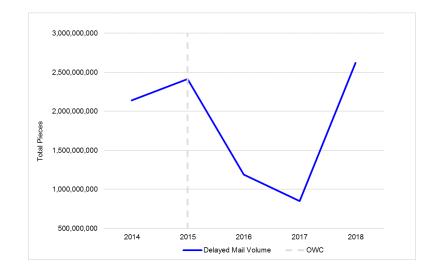
Source: OIG analysis of EDW data.

#### Figure 6. Commercial Service Scores



Source: OIG analysis of EDW data.

#### Figure 7. Delayed Mail, FYs 2014–2018<sup>24</sup>



Source: OIG analysis of EDW data.

<sup>22</sup> Business mailing with a minimum of 500 pieces.

<sup>23</sup> Mail not processed in time to meet the established delivery day.

<sup>24</sup> FY 2018 data is through March 31, 2018.

#### **Operational Window Change Cost Avoidances**

Outside of the projected savings presented to the PRC, the Postal Service identified an additional \$430.2 million in cost avoidances related to the OWC, \$232.8 million of which we could verify (see Table 5). Specifically, management said the OWC created additional facility space for new package processing machines by reducing the number of letter processing machines. The Postal Service also completed an upgrade to letter processing machines after implementing the OWC. Management said that this reduction of letter machines allowed the Postal Service to avoid costs it would have incurred to upgrade the letter machines.

#### Table 5. Operational Window Change Cost Avoidance

	Postal Service Calculation	OIG Calculation
DBCS	\$96,151,744	\$96,151,744
Small Package Sorting System (SPSS)	113,850,000	48,300,000
Automated Package and Bundle Sorters (APBS) - Bin Expansion	117,675,000	54,641,850
Automated Package Processing Systems (APPS) - Bin Expansion	20,352,000	11,557,875
Universal Sort System (USS)	77,619,300	17,640,750
AFSM 100	4,541,135	4,541,135
Total	\$430,189,179	\$232,833,354

For the SPSS, APBS, and APPS, our analysis excluded facilities that had been partially consolidated or consolidated and then reopened. We also took into account the amount of space that machine removal created to determine the OWC's impact on each facility. For the USS, the Postal Service's avoided costs included 14 USS machines that had not been approved yet. We excluded these from our calculations along with a machine at a previously consolidated facility and a machine at a Network Distribution Center (NDC) because the OWC had very little impact on NDCs.

#### **Recommendation #1:**

The **Vice President, Network Operations**, develop and implement, at a minimum, annual tracking methodologies for any significant projected operational costs or savings and use a sensitivity analysis to account for such impacts as changes in mail volume and labor and transportation costs.

### **Management's Comments**

Management disagreed with the finding and recommendation. Management stated that the changing business environment made it nearly impossible to isolate savings related to the OWC and they will no longer be attributing savings against the OWC. See Appendix C for management's comments in their entirety.

Management stated the OIG should compare their actual savings versus planned savings on a full-up annualized basis. Management said the OIG doubled the annualized savings and that it takes years to reach the full annualized savings for a project. Further, management stated that achieving the full \$805.5 million in annual savings is still contingent on completion of all planned network changes.

Management also believes that all \$292 million of claimed annualized savings they identified are valid. Management stated the OIG did not accept the productivity improvement in FY 2016 because overall mail processing costs have increased. Management said the increase in mail processing costs was because of significant package growth and they believe mail processing costs associated with packages should be excluded. In total, management stated they achieved \$524 million (\$292 million of savings and \$232 million in avoided costs) of the \$805.5 million annual savings.

Management disagreed with the recommendation because they stated it recommends processes that are already in place. Management stated they

already perform projected savings and sensitivity analyses to programs they initiate.

### **Evaluation of Management's Comments**

The OIG considers management's comments unresponsive to the recommendation in the report. Management stated the recommended processes are already in place, but they did not consider changes in mail volume or labor costs for the OWC. Management stated that they typically document these initiatives in Decisions Analysis Reports (DAR) or through the Ready Now/Future ready process and DARs are living documents that can be updated as new data becomes available. However, the Postal Service did not update the projections based on the changes in mail volume and informed us multiple times they would not update the projected savings. Further, management stated the increase in package volumes was not projected in the original model, but even after the package volume did increase, management did not update its projected savings.

Regarding management's assertion that the OIG doubled the estimated savings, the Postal Service's estimated savings were \$805.5 million annually and we reviewed savings for both FY 2016 and 2017, totaling \$1.6 billion of estimated savings over both years. As shown in Table 2, the Postal Service provided savings for both FY 2016 and 2017. We reviewed the savings for each year to determine the amount of savings achieved for FYs 2016 and 2017.

We disagree with management's assertion that the Postal Service cannot achieve full savings until all network changes are made. The OWC was a onetime change in 2015, and the Postal Service should have realized most of the savings at this point. Further, while the Postal Service has delayed implementing the remaining mail facility consolidations, it has re-opened some consolidated facilities to process mail. This is another example of why the Postal Service should have re-evaluated its projected savings.

Regarding management's concern that we did not accept their savings calculation for productivity improvements in FY 2016, we believe we are accurate in not accepting the savings. In the savings estimate presented to the PRC, the Postal Service provided its expected percentage productivity improvements by mail processing operations resulting from the OWC. The Postal Service then applied these expected improvements to the actual cost of mail processing operations and calculated its savings estimate by taking the difference between pre-OWC mail processing costs and mail processing costs with the expected productivity improvements applied. As stated in our report, overall mail processing productivity decreased by 14 percent; therefore, there was no improvement in mail processing productivity after the OWC. Whereas non-package mail processing costs did decrease in FY 2016, it was not the result of increases in productivity and was more likely the result of lower mail volume and less workload to process. Our analysis clearly shows that mail processing productivity has decreased since the OWC.

We disagree with management's assertion that they achieved \$524 million of the projected \$805.5 million in annual savings. As noted in Table 3, we validated only \$90.65 million of the \$292 million of OWC savings provided for both FY 2016 and 2017. In addition, the \$232 million we validated as avoided costs were not part of the original \$805.5 million annual OWC savings presented to the PRC.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. Recommendation 1 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**

### **Scope and Methodology**

The scope of this project was FY 2016 and 2017 OWC savings. To accomplish our objective, we:

- Reviewed and documented estimated NRI savings the Postal Service presented to the PRC and the \$805.5 million the Postal Service attributed to the OWC.
- Reviewed the Postal Service's estimated savings for:
  - Mail processing productivity
  - Premium pay
  - DPS volume
  - Outgoing secondary sorting
  - Use of more efficient machines
- Evaluated the Postal Service's savings data and compared them to our analysis and the methodology presented in the PRC filings to determine whether savings were reasonable.

### **Prior Audit Coverage**

 Interviewed the Manager, Processing Operations, and the Manager, Mail Transport Equipment about estimated savings for the OWC, transportation impact, and actions taken on open recommendations.

We conducted this performance audit from February through October 2018, 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 finding and conclusions based on our audit objective. We discussed our observations and conclusions with management on July 25 and August 20, 2018, and included their comments where appropriate.

We assessed the reliability of computer-generated data by interviewing knowledgeable agency officials and reviewing related documentation. We determined that the data for mail processing productivity, premium pay, DPS, outgoing secondary sorting, and use of inefficient machines were sufficiently reliable for the purposes of this report.

Report Title	Objective	Report Number	Final Report Date	Monetary Impact
Mail Processing and Transportation Operational Changes	Determine the timeliness of mail processing and transportation since the January 5, 2015, service standard revisions.	NO-AR-16-009	9/2/2016	None

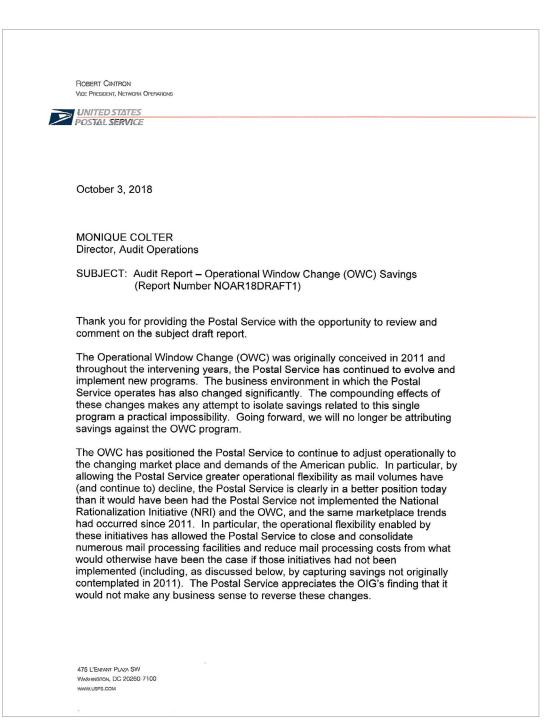
## Appendix B: Mail Processing Productivity, FYs 2014-2017

LDC	Description	Category	Estimated Increase in PRC Testimony	Actual Productivity Change	Percentage of Total Workhours in FY 2017
11	Automated	DBCS	22%	6 70/	10.0%
	Letters	Optical Character Reader (OCR)	22%	-6.7%	18.8%
12	Automated Flats	AFSM 100	15%	1E E9/	A 70/
12	Automated Flats	Flat Sorting Machine (FSM 1000)	15%	-15.5%	4.2%
		Mechanized Parcels	8%	18.5%	13.2%
13	Mechanized Packages, Trays, and Bundles	Small Parcel and Bundle Sorter (SPBS) - Non-Priority	8%		
		SPBS - Priority	8%		
		Manual Flats	3%		
14	Manual	Manual Letters	3%	-19.6%	10.5%
- 14	Manual	Manual Parcels	3%		10.5%
		Manual Priority	3%		

LDC	Description	Category	Estimated Increase in PRC Testimony	Actual Productivity Change	Percentage of Total Workhours in FY 2017
		Cancellation	15%		
		Dispatch	20%	-	
		Flats Preparation	0%		
		Mail Preparation - metered	0%		
		Opening Unit - Bulk Business Mail	15%		
17	Other Direct	Opening Unit - Preferred Mail	15%	-21.0%	34.9%
17	Operations	Opening - Manual transport	15%	-21.0%	34.3%
		Platform	20%		
		Pouching Operations	25%		
		Presort	25%		
		Mechanical Sort - Sack Outside	15%		
		Manual Sort - Sack Outside	25%		
		Air Contract Data Collection Server and Incoming/Scan Where You Band	0%		
		Business Reply/Postage Due	0%		
		Registry	50%		
18	Indirect Related	Damaged Parcel Rewrap	0%	82.8%	5.9%
		Empty Equipment	10%		
		Miscellaneous	10%		
		Mail Processing Support	25%		

Source: Mail Processing Productivity Goals obtained from Mail Processing Network Rationalization Service Changes, 2012 (Docket No. N2012-1). USPS-T-4, filing ID 78328, dated December 5, 2011. OIG analysis of EDW data.

## Appendix C: Management's Comments



#### Savings Not Achieved

There are several issues and concerns with the savings not achieved in this report. The OIG should compare our performance of actual savings vs. planned savings on a full-up annualized basis. Management has demonstrated \$292M in actual annualized savings vs. the targeted annualized savings of \$805M. In addition, we have avoided \$232M of additional spend by the elimination of automation equipment which was made possible by OWC. Combined, this accounts for \$524M of the \$805M savings. Although we appreciate the OIG's validation of the avoided costs, we disagree with the OIG's calculation of both the actual savings achieved and the target used. The OIG has only accepted \$91M of actual saving, and has doubled the annualized savings target to \$1.61B. Although it takes multiple years to reach the full annualized savings amount for a project, the comparison should always be against the one, full-up year's savings. In this case, that is \$805M, and is still contingent upon completion of all planned network changes

The completion status of this program also presents a challenge, as there are a number of events that have not transpired, and upon which the savings was predicated. This program was originally designed to occur all at once and savings from OWC are dependent on all ancillary events being complete. Since the project has elements that are not complete, even the targeted savings of \$805M cannot be expected to be fully achieved at this point.

Management believes all \$292 of claimed savings are valid. The OIG is not accepting the productivity improvement in FY 2016 because the overall mail processing costs have increased. However, this is due to the extreme growth in package volumes that led to additional costs in package operations which were not projected to change in the original model. In order to isolate the impact of OWC, management excluded those additional costs related to package operations from its calculations and believes the productivity improvement is correct. Therefore, it is our position that of the \$805M targeted annualized savings for OWC, the USPS has saved \$292M and avoided an additional \$232M of spend on automation upgrades and facility space as a result of this program. This amounts to \$524M of savings.

With regard to transportation, the incomplete nature of the program means that additional sortation and transportation nodes are still maintained in the network. Also, as noted in management's response to NO-AR-16-009, the changes in the modes of transportation and the impact of space requirements to support the significant package growth have driven up transportation costs. Added to this are recent developments in the trucking industry which have driven up rate costs and forced a rebalancing of modes to allow for timely delivery of mail.

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#### **Recommendation 1:**

The Vice President, Network Operations, develop and implement, at a minimum, annual tracking methodologies for any significant projected operational costs or savings and use a sensitivity analysis to account for such impacts as changes in mail volume and labor and transportation costs.

#### Management Response/Action Plan:

Management disagrees with this recommendation, because it recommends processes that are already in place. The Postal Service already performs projected savings and sensitivity analysis to programs it initiates. These are always based upon the planned implementation timeline and known forecasts. These initiatives, which are typically documented in a Decision Analysis Report (DAR) or through the Ready Now/Future Ready process, are then tracked to ensure savings are captured. DARs, which are covered in handbook F-66, are living documents which can be updated as new data becomes available. The Postal Service considers itself to already be in compliance with this recommendation.

Target Implementation Date: N/A

Responsible Official: N/A

Robert Cintron Vice President, Network Operations

cc: David E. Williams Corporate Audit and Response Management

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> 1735 North Lynn Street Arlington, VA 22209-2020 (703) 248-2100