



Office of Inspector General | United States Postal Service

## Audit Report

# Automated Delivery Unit Sorter Cost Savings

Report Number 20-095-R21 | October 1, 2020



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# Highlights

## Objective

Our objective was to determine if the U.S. Postal Service's Automated Delivery Unit Sorter (ADUS) achieved projected cost savings.

The Postal Service has deployed a wide range of automated sorting equipment to achieve cost savings associated with reducing less-efficient manual processing and enhancing productivity. The ADUS is one of its most recent efforts, automating the sorting of smaller packages (up to 30 pounds) in delivery units and small processing and distribution centers (P&DC).

Postal Service management issued two Decision Analysis Reports (DAR) in fiscal years (FY) 2017 and 2018 for the purchase and deployment of 20 ADUS machines for a combined [REDACTED]. These machines were installed at 10 delivery units and 10 small P&DCs across the country and were projected to capture cost savings of \$8.8 million in FYs 2018 and 2019. These savings were based on reducing about 165,000 workhours and meeting other machine performance metrics, such as average daily volume and machine throughput.

Packages processed on the ADUS are sorted to specific bins for carrier routes or other separations, such as outgoing package processing. ADUS sorts packages to their destinating bins and drops them into a container, such as a sack, hamper, or wire container. The 20 ADUS machines in the DARs were configured to use between 50 and 184 bins.

After the Postal Service deployed the initial 20 machines, management developed a 2019 DAR for the purchase of 21 more machines. As of October 2019, there were 41 machines deployed at 25 delivery units and 16 P&DCs nationwide. Another 10 ADUS machines are planned in a 2020 DAR. We evaluated cost savings for the first 20 machines because the 21 machines from the 2019 DAR were not fully deployed. We selected nine of the initial 20 machines for physical observations of operations.

Our fieldwork was completed before the President of the United States issued the national emergency declaration concerning the novel coronavirus disease outbreak (COVID-19) on March 13, 2020. The results of this audit do not reflect

process and/or operational changes that may have occurred as a result of the pandemic.

## Finding

The Postal Service realized \$3.4 million of the projected \$8.8 million in labor cost savings from the deployment of 20 ADUS machines – a shortfall of \$5.4 million. This shortfall was primarily the result of workhours for ADUS operations that were not included in the 2017 and 2018 DAR savings estimates.

Overall, the ADUS machines had a positive impact on operations because of their speed in processing packages compared to manual package sortation. However, we noted that the DAR estimates did not include workhours related to:

- *Automated workhours in 2017:* Estimates in the 2017 DAR did not include projections for operating hours on the ADUS machines. Instead, the DAR only provided manual workhour savings of 8,127 hours per year for Customer Service Operations (Function 4). In subsequent discussions in May 2020, Postal Service management provided estimated workhour savings in manual operations as well as estimated workhour usage in ADUS operations. As these estimates were not included in the DAR approved by Postal Service managers, OIG calculated the workhour savings using the approved DAR projections.
- *The high number of bins on ADUS machines and the use of sacks:* Thirteen of the 20 ADUS machines were configured to use between 104 to 184 bins. OIG found that six of the nine selected sites used sacks (to accommodate walking delivery routes or for other mail transportation needs) as mail containers, which resulted in more ADUS workhours. However,

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***“Overall, the ADUS machines had a positive impact on operations because of their speed in processing packages compared to manual package sortation.”***

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these sacks filled significantly faster than larger rolling hampers and had to be changed more often. The higher number of bins and the use of sacks required additional staffing, which resulted in additional workhours for the packages being processed. While the DAR discussed container options including sacks, it did not project workhour requirements associated with these options.

- *Bundle sortation at five sites and outgoing package processing at three of those five sites:* This required more staff to sort incoming bundles and outgoing packages, resulting in higher workhour usage than projected. While the DARs outlined bundle sortation and outgoing package processing capabilities as additional opportunities for machine usage, the DAR did not include workhour savings projections associated with bundle or outgoing package processing.

The ADUS machines were designed to optimize cost efficiencies, improve customer service, and generate a positive return-on-investment. Therefore, workhours needed for various ADUS machine configurations should be considered when evaluating operational efficiencies and achieving projected DAR savings.

## Recommendations

We recommended the Vice President, Delivery Operations ensure the Decision Analysis Report (DAR) savings estimates for future Automated Delivery Unit Sorter (ADUS) machine purchases include workhours for all anticipated operations, including bundles and outgoing package processing, and for those machines that use a high number of bins and sacks.

We also recommended the Vice President, Delivery Operations and the Vice President Processing and Maintenance Operations, ensure staffing on ADUS machines remain within the parameters outlined in the DAR or as determined by management.

# Transmittal Letter





OFFICE OF INSPECTOR GENERAL  
UNITED STATES POSTAL SERVICE

October 1, 2020

**MEMORANDUM FOR:** JOSHUA D. COLIN, Ph.D.  
VICE PRESIDENT, DELIVERY OPERATIONS

MIKE BARBER  
VICE PRESIDENT, PROCESSING AND MAINTENANCE  
OPERATIONS

Janet Sorensen 



**FROM:** Janet M. Sorensen  
Deputy Assistant Inspector General  
for Retail, Delivery & Marketing

**SUBJECT:** Audit Report – Automated Delivery Unit Sorter Cost Savings  
(Report Number 20-095-R21)

This report presents the results of our audit of the Automated Delivery Unit Sorter Cost Savings.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Rita F. Oliver, Director, Delivery and Retail Operations, or me at 703-248-2100.

Attachment

cc: Postmaster General  
Corporate Audit Response Management  
David E. Williams Jr.



Packages processed on the ADUS are sorted to specific bins for carrier routes or other separations, such as outgoing package processing. The ADUS sorts packages to their destinating bins and drops them into a container, such as a sack, hamper, or wire container. The number of bins on each ADUS can range from 16 to 200, in multiples of eight. The 20 ADUS machines were configured to use between 50 and 184 bins.

After the Postal Service deployed the initial 20 machines<sup>1</sup> (see [Appendix B](#) for the list), management developed a 2019 DAR for the purchase of 21 more machines. As of October 2019, there were 41 machines deployed at 25 delivery units and 16 P&DCs nationwide. Another 10 ADUS machines are planned in a 2020 DAR.

## Finding #1: ADUS DAR Projections Not Achieved

The Postal Service realized \$3.4 million of the projected \$8.8 million labor cost savings from the deployment of 20 ADUS machines – a shortfall of \$5.4 million (see Table 2). This shortfall was primarily the result of workhours for ADUS operations that were not included in the 2017 and 2018 DAR savings estimates. Savings in workhour labor cost for manual operations were achieved in manual operations at the delivery units (Function 4) and at the P&DCs (Function 1). However, the estimated labor cost to run the ADUS machines exceeded the projected costs, resulting in the overall savings shortfall.

**Table 2. Labor Cost Comparison (in thousands)**

	2017 DAR				2018 DAR				Combined			
	Projected		Actual		Projected		Actual		Projected		Actual	
	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019
Manual Function 4	\$1,554	\$1,588	\$1,514	\$2,850		\$3,903		\$3,537	\$1,554	\$5,491	\$1,514	\$6,387
Manual Function 1						\$8,419		\$5,461		\$8,419		\$5,461
<b>Total Manual Costs</b>	<b>\$3,142</b>		<b>\$4,364</b>		<b>\$12,322</b>		<b>\$8,998</b>		<b>\$15,464</b>		<b>\$13,362</b>	
ADUS Function 4			(\$1,326)	(\$1,872)		(\$1,724)		(\$1,997)		(\$1,724)	(\$1,326)	(\$3,869)
ADUS Function 1						(\$4,956)		(\$4,773)		(\$4,956)		(\$4,773)
<b>Total ADUS Costs</b>			<b>(\$3,198)</b>		<b>(\$6,680)</b>		<b>(\$6,770)</b>		<b>(\$6,680)</b>		<b>(\$9,968)</b>	
<b>Net Savings (Costs)</b>	<b>\$3,142</b>		<b>\$1,166</b>		<b>\$5,642</b>		<b>\$2,228</b>		<b>\$8,784</b>		<b>\$3,394</b>	
												<b>(\$5,390)</b>

Source: Postal Service and U.S. Postal Service Office of Inspector General (OIG) analysis of workhour costs.

<sup>1</sup> Our audit only evaluated cost savings for the first 20 machines because the 21 machines from the 2019 DAR were not fully deployed and to provide sufficient time for full deployment. We selected nine of the 20 machines for physical observations of operations. However, due to the coronavirus outbreak, we interviewed management by teleconference at two of the nine sites.

Looking at the workhour analysis by function, the Postal Service projected an overall decrease of 164,797 workhours, according to the 2017 and 2018

DARs. However, the total workhour reduction was 74,636, a shortfall of 90,161 workhours (see Table 3).

**Table 3. Workhour Analysis**

Workhours by Function	2017 DAR				2018 DAR				Combined			
	Projected		Actual		Projected		Actual		Projected		Actual	
	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019
Manual Function 4	(8,127)	(8,127)	(33,503)	(63,081)		(87,753)		(77,521)	(8,127)	(95,880)	(33,503)	(140,602)
Manual Function 1						(189,290)		(119,714)		(189,290)		(119,714)
<b>Total Manual Workhours</b>	<b>(16,254)</b>		<b>(96,584)</b>		<b>(277,043)</b>		<b>(197,235)</b>		<b>(293,297)</b>		<b>(293,819)</b>	
ADUS Function 4			29,350	41,441		33,171		43,770		33,171	29,350	85,211
ADUS Function 1						95,329		104,622		95,329		104,622
<b>Total ADUS Workhours</b>	<b>0</b>		<b>70,791</b>		<b>128,500</b>		<b>148,392</b>		<b>128,500</b>		<b>219,183</b>	
<b>NET Workhour Increase (Decrease)</b>	<b>(16,254)</b>		<b>(25,793)</b>		<b>(148,543)</b>		<b>(48,843)</b>		<b>(164,797)</b>		<b>(74,636)</b>	
	<b>90,161</b>											

Source: Postal Service and OIG analysis of eFLASH and Mail Processing Variance (MPV) workhours.

We noted that overall, ADUS machines had a positive impact on operations because of their speed in processing packages when compared to manual package sortation. However, we noted that the DAR estimates for the 20 ADUS machines in the 2017 and 2018 DARs did not include workhours related to:

- *Automated workhours in 2017 DAR:* Estimates in the 2017 DAR did not include projections for operating hours on the ADUS machines. Instead, the DAR only provided manual workhour savings of 8,127 hours per year for Customer Service Operations (Function 4). In subsequent discussions in May 2020, Postal Service management provided estimated workhour savings in manual operations as well as estimated workhour usage in ADUS operations.

As these estimates were not included in the DAR approved by Postal Service managers, OIG calculated the workhour savings using the approved DAR projections.

- *The high number of bins on ADUS machines and the use of sacks:* Thirteen of the 20 ADUS machines in the DARs were configured to use between 104 and 184 bins. The higher number of bins on a machine and the use of sacks required additional staffing, which resulted in additional workhours for the packages being processed, to efficiently sweep the machine and prevent machine stoppages that occur when a full container is not removed and replaced with an empty one in a timely manner. During our observations, we



also found that six sites<sup>2</sup> used sacks<sup>3</sup> as mail containers, which resulted in more ADUS workhours. These sacks filled significantly faster than the larger rolling hampers and had to be changed more often, requiring more staffing and resulting in higher workhour usage. While the DAR discussed container options including sacks, it did not project workhour requirements associated with the various options.

Further, our analysis of ADUS operations showed that five delivery units averaged six or more staff workhours per machine runtime and seven P&DCs averaged eight or more staff workhours. The 2017 DAR projected an average staffing level of three, while the 2018 DAR projected an average staffing level of 3 ½ staff per machine. According to Postal Service Headquarters management, an hour of runtime on an ADUS machine should equate to 3 ½ to 4 ½ labor hours in delivery units and 5 to 7 labor hours at P&DCs.

OIG analysis determined that 16 of the 20 sites recorded more workhours on ADUS operations than expected, based on the optimal staffing guidelines (see Table 4).

- *Bundle sortation at five sites and outgoing package processing at three of those five sites:* OIG observations and discussions with Postal Service management revealed three P&DCs and two delivery units required more staff to sort incoming bundles and outgoing packages (see Table 4). This sortation and package processing resulted in higher workhour usage than was projected in the DARs. While the DARs outlined bundle sortation and outgoing package processing capabilities as additional opportunities for machine usage, the DARs did not include workhour savings projections associated with bundle or outgoing package processing.

**Table 4. Analysis of ADUS Machine Configuration and Workhour Usage<sup>4</sup>**

ADUS Site	Facility Type	Bins	Used Sacks	Processed Bundles / Outgoing (OG)	Staff Hours per Run Time	Workhours Over Expected
[REDACTED]	Plant	154	YES	Bundles & OG	11	15,584
[REDACTED]	Delivery Unit	144	YES	no	10	12,952
[REDACTED]	Plant/Delivery Unit	162			9	10,491
[REDACTED]	Plant	184	YES	Bundles & OG	10	8,305
[REDACTED]	Plant/Delivery Unit	153			8	7,059
[REDACTED]	Plant/Delivery Unit	144			10	6,536
[REDACTED]	Plant/Delivery Unit	160			9	4,474
[REDACTED]	Plant/Delivery Unit	170			7	3,964
[REDACTED]	Plant/Delivery Unit	130			8	3,286
[REDACTED]	Delivery Unit	74			7	3,090

<sup>2</sup> Six of the nine OIG selected sites.

<sup>3</sup> Mail sacks were used to accommodate walking delivery routes or for other mail transport needs.

<sup>4</sup> The 11 sites with gray areas were not part of our observations (we did not visit or call them).

ADUS Site	Facility Type	Bins	Used Sacks	Processed Bundles / Outgoing (OG)	Staff Hours per Run Time	Workhours Over Expected
[REDACTED]	Delivery Unit	88			7	2,329
[REDACTED]	Delivery Unit	88			7	2,161
[REDACTED]	Delivery Unit	74	no	no	6	1,890
[REDACTED]	Plant/Delivery Unit	120	YES	Bundles & OG	6	1,813
[REDACTED]	Plant	104			5	734
[REDACTED]	Delivery Unit	50			4	294
[REDACTED]	Delivery Unit	97	no	no	4	
[REDACTED]	Delivery Unit	137	YES	Bundles	4	
[REDACTED]	Delivery Unit	50	no	no	3	
[REDACTED]	Delivery Unit	128	YES	Bundles	3	

Source: Postal Service and OIG observations and workhour analysis of eFLASH and MPV data.

Managers also raised concerns to the OIG about their ability to manage changing sortation requirements for new routes or package volume growth. Specifically, managers at five of the nine sample sites stated they could use additional bins on their ADUS machines to help enhance sortation efficiency and reduce manual sortation by reducing the number of co-mingled routes or outgoing separations. While we recognize potential space and equipment limitations may prevent additional bins at certain facilities, analyzing the feasibility of adding bins where circumstances allow would help address these issues.

Finally, Postal Service Headquarters management requested OIG consider the increased package volumes, which may have impacted their ability to meet workhour savings targets. Management provided package volume data for the 20 selected sites that showed an increase of 10.9 million pieces (9.9 percent) from FY 2018 to FY 2019. DARs projected that 112.3 million packages would be moved from manual operations to automated operations. OIG analyzed and compared the projected package volume to the actual automated volumes

for FYs 2018 and 2019. The Postal Service processed 133 million packages on ADUS machines, which exceeded the DARs projection by 20.7 million packages (18.4 percent). OIG determined that the increased package volume migrated to automated operations did not impact their ability to achieve workhour savings targets.

**Managers at five of the nine sample sites stated they could use additional bins on their ADUS machines to help enhance sortation efficiency.**

The ADUS machines were designed to optimize cost efficiencies, improve customer service, and generate a positive return-on-investment. Therefore, workhours needed for various ADUS machine configurations should be considered when evaluating operational efficiencies and achieving projected DAR savings.

### Recommendation #1

We recommend the **Vice President, Delivery Operations**, ensure Decision Analysis Report savings estimates for future Automated Delivery Unit Sorter machines include workhours for all anticipated operations, including bundles and outgoing package processing, and on those machines that use a high number of bins or sacks.

### Recommendation #2

We recommend the **Vice President, Delivery Operations**, and the **Vice President, Processing and Maintenance Operations**, ensure staffing on Automated Delivery Unit Sorter machines remain within parameters outlined in the Decision Analysis Reports or as determined by management.

## Management's Comments

Management disagreed with the finding and overall savings, partially agreed with recommendation 1, and agreed with recommendation 2. Management also disagreed with some of the report's content related to the workhour savings and methodology. Although they did recognize that the full workhour savings was not captured in the DARs, management stated the DARs included reduced savings for the plant machines, and noted that the workload increase was calculated into the overall workhour savings, and a 75 percent factor rate was applied to the planned savings and costs.

Regarding recommendation 1, management stated they will identify sites that require the use of sacks and include those workhours in future ADUS DARs. Management also stated that all future ADUS DARs will include any available bundle workload that can be processed during the operational window. Management stated they will consider increasing the utilization of the ADUS even if that workload was not included in the DAR, including unplanned outgoing package processing. The target implementation date is October 31, 2020.

Regarding recommendation 2, management stated they will conduct a Kaizen event to document work practices, identify inefficiencies, validate clock rings and authorized staffing. Management will also roll out a daily dashboard for current and future ADUS sites to track workhours and staffing. The target implementation date is February 28, 2021.

See [Appendix D](#) for management's comments in their entirety.

## Evaluation of Management's Comments

The OIG considers management's comments responsive to the recommendations in the report.

Regarding the Postal Service's comment on the higher number of bins and the use of sacks requiring additional staffing, the DAR established staffing between 3 and 5 employees per ADUS machine, depending on deployment location. This would equate to approximately 3.5 to 6 staff hours per machine run time hour. Our analysis indicated that three processing plants where ADUS machines used sacks averaged 10 or more workhours per machine workhour, a significant increase over what was estimated in the DAR.

Regarding management's comment on the 2017 DAR projections for the ADUS operating hours, our report notes that in discussions in May 2020, Postal Service management provided estimates that were not included in the DAR. As such, we calculated the workhour savings using the approved DAR projections and our report accurately reflects the workhour cost savings.

Regarding management's comment that the OIG's analysis was faulty in our comparison of projected package volume and workload, we took into consideration that package volume increased between FY 2018 and FY 2019. The Postal Service's package volumes have increased each year and are projected to continue to rise; this projection is known and is factored into Postal Service decisions that include packages or package handling equipment. We determined that the increase in package volume did not impact their ability to achieve workhour savings because many sites included in our review exceeded projected package processing targets, resulting in more packages processed than projected. This increased productivity would have accounted for much of the

package increase. Conversely, the remaining sites in our sample did not achieve projected targets for package processing. If these sites had met processing targets, they would have processed the bulk of any remaining increase in package volumes. Therefore, we determined that the increase in package volumes did not impact their ability to achieve workhours savings, and the report accurately reflects the calculated workhour costs savings.

Regarding management's comment that a difference of 16,148 exists between the OIG and Postal Service calculations achieved workhour savings, we based our calculations on the information provided in the approved DARs. As indicated in management's comments, the projected cost savings in the 2018 DAR (8,127 hours) were net savings and did not project the initial estimates for ADUS operating hours and projected manual workhour savings. Postal Service management is correct that there was extensive collaboration on the workhour issue and actual workhour numbers provided by management for the 2018

estimate (8,864), which differed from the net savings in the approved DAR. However, the information provided contained different numbers for FY 2019 than those in the approved DAR. Management's calculation of cost savings was based upon those figures and not the projections in the DAR. Therefore, our calculated workhour cost savings is accurately reflected and based on the amounts actually approved in the signed DARs.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. Recommendations 1 and 2 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.

# Appendices

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# Appendix A: Additional Information

## Scope and Methodology

The scope of this audit was to evaluate ADUS operations associated with the 2017 and 2018 DAR Business Case documents.<sup>5</sup> To accomplish this, we:

- Evaluated data for 20 ADUS sites, along with 19 associated sites serviced by these machines (see [Appendix C](#)). We excluded the initial pilot machine at the [REDACTED]
- Reviewed applicable policies and procedures related to the ADUS operations.
- Performed observations in January and February 2020 at seven judgmentally selected ADUS sites and interviewed management at two P&DC sites.<sup>6</sup>
- Performed a comparative fiscal year analysis of package volumes, workhours, and performance based on the DARs' initiative.
- Interviewed headquarters, district, and delivery unit personnel to discuss ADUS operations and how savings were calculated and monitored.

We conducted this performance audit from December 2019 through October 2020 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 conclusion based on our audit objective. We discussed our observations and conclusions with management on August 20, 2020 and included their comments where appropriate.

We relied on computer-generated data from the Postal Service's eFLASH, Mail Processing Variance, and WebEOR systems. Although we did not test the validity of controls over these systems, we assessed the accuracy of the data by reviewing existing information, comparing data from other sources, observing operations, and interviewing Postal Service officials knowledgeable about the data. Therefore, we determined the data were sufficiently reliable for the purposes of this report.

## Prior Audit Coverage

The OIG did not identify any prior audits or reviews related to the objective of this audit.

<sup>5</sup> DAR business case is a document developed to justify a project investment and to assist the approving authorities in making decisions concerning the use of Postal Service funds.

<sup>6</sup> In FY 2019, five sites exceeded the 2,500-piece throughput goal – [REDACTED]. Four sites did not meet the 2,500-piece throughput goal – [REDACTED].

## Appendix B: 20 ADUS Sites from 2017 and 2018 DARs

Area	District	ADUS Site	Facility Type
Southern	Fort Worth	[REDACTED]	Plant/Delivery Unit
Northeast	Greater Boston	[REDACTED]	Delivery Unit
Pacific	Sierra Coastal	[REDACTED]	Delivery Unit
Capital Metro	Greensboro	[REDACTED]	Delivery Unit
Great Lakes	Gateway	[REDACTED]	Plant
Northeast	Northern New England	[REDACTED]	Plant/Delivery Unit
Southern	South Florida	[REDACTED]	Delivery Unit
Great Lakes	Greater Indiana	[REDACTED]	Plant
Western	Dakotas	[REDACTED]	Plant/Delivery Unit
Southern	Rio Grande	[REDACTED]	Plant/Delivery Unit
Western	Portland	[REDACTED]	Plant/Delivery Unit
Southern	Rio Grande	[REDACTED]	Plant
Northeast	New York	[REDACTED]	Delivery Unit
Pacific	Sierra Coastal	[REDACTED]	Delivery Unit
Eastern	Philadelphia	[REDACTED]	Delivery Unit
Western	Hawkeye	[REDACTED]	Plant
Pacific	Sacramento	[REDACTED]	Plant/Delivery Unit
Pacific	San Francisco	[REDACTED]	Delivery Unit
Pacific	San Francisco	[REDACTED]	Delivery Unit
Capital Metro	Capital	[REDACTED]	Delivery Unit
<b>Total</b>		<b>20</b>	

Source: Postal Service.

# Appendix C: List of ADUS Sites and Associated Sites

Area	District	ADUS Site and Associated Service Site
Southern	Fort Worth	[REDACTED]
Northeast	Greater Boston	[REDACTED]
Pacific	Sierra Costal	[REDACTED]
Capital Metro	Greensboro	[REDACTED]
Great Lakes	Gateway	[REDACTED]
Northeast	Northern New England	[REDACTED]
Southern	South Florida	[REDACTED]
Great Lakes	Greater Indiana	[REDACTED]
Western	Dakotas	[REDACTED]
Southern	Rio Grande	[REDACTED]
Western	Portland	[REDACTED]
Southern	Rio Grande	[REDACTED]
Northeast	New York	[REDACTED]
Pacific	Sierra Costal	[REDACTED]

Area	District	ADUS Site and Associated Service Site
Eastern	Philadelphia Metropolitan	[REDACTED]
Western	Hawkeye	[REDACTED]
Pacific	Sacramento	[REDACTED]
Pacific	San Francisco	[REDACTED]
Pacific	San Francisco	[REDACTED]
Capital Metro	Capital	[REDACTED]

Source: Postal Service.



# Appendix D: Management's Comments



September 24, 2020

LAZERICK POLAND  
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Response to Draft Audit Automated Delivery Unit  
Sorter Cost Savings (Project No. 20-095-DRAFT)

Postal management has reviewed the Findings and Recommendations outlined in the Office of Inspector General (OIG) Audit: Automated Delivery Unit Sorter Cost Savings Project No.20-095. Although Postal management recognizes it did not capture the full workhour savings identified in the DAR, it does not agree with the overall savings identified by the OIG nor all of the observations/recommendations in the report. The following are a few examples where Postal management does not concur with the content of the draft:

**OIG Audit Comments:** The higher number of bins and the use of sacks required additional staffing, which resulted in additional workhours for the packages being processed. While the DAR discussed container options including sacks, it did not project workhour requirements associated with these options.

**Postal Management Comments:** The DAR included a reduced savings for the Plant machines due to the sortation into sacks, higher number of bins and the inability to induct mail for only a portion of a machine at a time. Delivery units induct mail by ZIP which reduces the number of bins that need to be monitored. The Postal Service concurs that foot route zones - which utilize sacks - need to be accounted for in delivery units.

**OIG Audit Comments:** Estimates in the 2017 DAR did not include projections for operating hours on the ADUS machines. Instead, the DAR only provided manual workhour savings of 8,127 hours per year for Customer Service Operations (Function 4).

**Postal Management Comments:** The 2017 DAR actually provided the difference between the projected operating hours and the manual workhours to determine the planned overall workhour savings of 8,127 hours per year.

475 L'ENFANT PLAZA SW  
WASHINGTON DC 20260

This was brought to the OIG's attention but not corrected in the report.

**OIG Audit Comments:** OIG analyzed and compared the projected package volume to the actual automated volumes for FYs 2018 and 2019. The Postal Service processed 133 million packages on ADUS machines, which exceeded the DAR projection by 20.7 million packages (18.4 percent). OIG determined that the increased package volume migrated to automated operations did not impact their ability to achieve workhour savings targets.

**Postal Management Comments:** The OIG's analysis was faulty in their comparison of projected package volume and workload. Increases in workload should be calculated into the overall workhour savings. Under the current OIG analysis if a site was projected to utilize 1000 hours to manual sort the packages and 500 hours projected to run that same mail across the ADUS the OIG sees this as 500 hours should have been saved. Yet if the volume increased by 18% the site would have used 590 hours to run the projected volume along with the 18% increase in volume and 1180 hours to manually sort that same volume. Under the current analysis utilized the site shows a shortfall of 90 hours even though they exceeded the overall savings based on the increased volume (1180-590 = 590 hours saved). Utilizing the Plant assumptions for workhours in the 2018 DAR (which is the lower savings rate between the two), the 20.7 million additional packages equates to 68,771 additional ADUS hours and is equivalent to 136,184 manual distribution hours or an additional 67,413 hours of cost avoidance. This item alone accounts for 75% of the missed opportunity identified in the audit.

**OIG Audit Comments:** Looking at the workhour analysis by function, the Postal Service projected an overall decrease of 164,797 workhours, according to the 2017 and 2018 DARs. However, the total workhour reduction was 74,636, a shortfall of 90,161 workhours (see Table 3).

**Postal Management Comments:** Despite the fact Postal Management worked closely with the OIG in collecting workhour information for this report, a variance of 16,148 hours still exists between data validated by Postal Management and data displayed in the Audit. (F4 shortfall of 3,984 to DAR and F1 shortfall of 70,029). It should also be noted that the DAR had a planned capture rate of 75% and applied the 75% factor to the planned savings (LDC 14 and 43p) and the planned costs (LDC 13 and 41). This did not change the overall savings but did impact the planned LDC 41 and 13. This resulted in the planned hours in LDC 41 being 25% less than what the sites should have earned.

Workhours by Function	2017 DAR				2018 DAR				FY 2018 and FY 2019 Combined			
	Projected		Actual		Projected		Actual		Projected		Actual	
	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019
Manual Function 4 Labor (LDC 43P)	(31,815)	(34,812)	(35,140)	(64,731)	(3,059)	(85,591)	(2,847)	(82,234)	(34,884)	(120,803)	(37,987)	(148,965)
Manual Function 1 Labor (LDC 14)					(1,822)	(168,508)	(277)	(116,811)	(1,822)	(168,508)	(277)	(116,811)
<b>Total Manual Workhours</b>	<b>(66,626)</b>		<b>(99,871)</b>		<b>(269,390)</b>		<b>(202,169)</b>		<b>(326,016)</b>		<b>(302,040)</b>	
ADUS Function 4 Labor (LDC 41)	22,951	25,113	28,649	40,259	1,160	32,504	2,653	43,417	24,111	57,617	31,302	83,676
ADUS Function 1 Labor (LDC 13)					918	84,863	(3,193)	105,761	918	84,863	(3,193)	105,761
<b>Total ADUS Workhours</b>	<b>48,064</b>		<b>68,908</b>		<b>119,446</b>		<b>148,638</b>		<b>167,509</b>		<b>217,546</b>	
<b>NET Workhour Increase (Decrease)</b>	<b>(18,562)</b>		<b>(30,963)</b>		<b>(138,945)</b>		<b>(63,531)</b>		<b>(158,507)</b>		<b>(84,494)</b>	
												<b>74,013</b>

**Recommendation 1:** We recommended the Vice President, Delivery Operations ensure the Decision Analysis Report (DAR) savings estimates for future Automated Delivery Unit Sorter (ADUS) machine purchases include workhours for all anticipated operations, including bundles and outgoing package processing, and for those machines that use a high number of bins and sacks.

**Postal Service Response/Action Plan:** Agrees in Part Postal Management will identify sites that require the use of sacks and include those workhours in future ADUS DARs. Postal Management already has processes in place to identify workhours for all anticipated operations when deploying automated equipment. If new technology or operational constraints in neighboring facilities allow for a higher utilization on the ADUS post DAR, Postal Management will consider increasing the utilization of the ADUS even if that workload was not included in the DAR. For ADUS, engineering was still working on bundle sortation software in July of 2018 - which was post-DAR. All future ADUS DARs will include any available bundle workload that can be processed during the operational window. Outgoing package processing was not planned for these sites - but ultimately a portion of the volume was moved to the idle ADUS machines.

**Target Implementation Date:**

October 2020

**Responsible Officials:**

Manager, Processing & Distribution Center Operations  
 Manager, Customer Service Operations

**Recommendation 2:** We also recommended the Vice President, Delivery Operations and the Vice President Processing and Maintenance Operations, ensure staffing on ADUS machines remain within the parameters outlined in the DAR or as determined by management.

**Postal Service Response/Action Plan: Agrees**

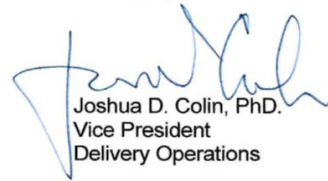
Postal Management will conduct a Kaizen event in F1 and DMAIC F4 ADUS site to document work practices, identify inefficiencies, validate clock rings and authorized staffing for the different types of sortation, MTE and quantity of sort bins. In addition, a daily dashboard will be rolled out for current and future ADUS sites to allow for daily tracking of workhours and the staffing on ADUS so as to quickly identify and address outliers.

**Target Implementation Date:**


February 2021

**Responsible Official:**

Manager, Processing & Distribution Center Operations  
Manager, Customer Service Operations



Joshua D. Colin, PhD.  
Vice President  
Delivery Operations



Mike L. Barber  
Vice President  
Processing and Maintenance Operations

cc: CARM

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

For media inquiries, contact Agapi Doulaveris  
Telephone: 703-248-2286  
[adoulaveris@uspsig.gov](mailto:adoulaveris@uspsig.gov)