Sunday Parcel Delivery Service

Audit Report

Report Number
DR-AR-15-002

December 5, 2014
Highlights

Operational inefficiencies existed during Sunday parcel deliveries in scanning, sorting, vehicle loading, and using the DRT software in street delivery at 40 of 134 hubs we visited in four districts.

Background

In October 2013, the U.S. Postal Service entered into a Negotiated Service Agreement (NSA) with Amazon Fulfillment Inc. (Amazon) to deliver parcels on Sunday. This agreement is a specific contract the Postal Service executes with a single customer to increase revenue, improve operations or yield other benefits to the Postal Service. Carriers are to deliver Amazon Sunday parcels to customers in a logical and efficient order over multiple ZIP Codes using the Dynamic Routing Tool (DRT). The Postal Service’s DRT software creates a street route based on estimated miles traveled and the number of parcels for each route.

At the end of April 2014, the Sunday service was operating at 459 Postal Service hubs in 22 districts in the Pacific, Eastern, Southern, Great Lakes, and Northeast areas. Over 2.7 million parcels were delivered to customers on Sunday from these locations from January 1 through April 6, 2014. The Postal Service is in the process of adding Sunday delivery service at 786 additional hubs in 24 more districts across the country.

Our objective was to assess the Postal Service’s Sunday delivery service from an operational standpoint.

What The OIG Found

Operational inefficiencies existed during Sunday parcel deliveries in scanning, sorting, vehicle loading, and using the DRT software in street delivery at 40 of 134 hubs we visited in four districts. These inefficiencies occurred primarily because management did not always enforce policies and procedures and supervision was inconsistent at some hubs.

As a result, the Postal Service spent 17,446 more hours from June 15 through July 13, 2014, than DRT software required to conduct Sunday delivery operations. By improving efficiency, the Postal Service could reduce operating costs annually by $356,736 for 134 hubs in the districts we visited.

What The OIG Recommended

We recommended the vice presidents, Eastern, Northeast, Pacific, and Southern areas, direct managers in the Ohio Valley, Northern New Jersey, San Diego, and Dallas districts to eliminate inefficient operational practices, reduce workhours cited, and ensure adherence to Postal Service policies and procedures for Sunday parcel delivery service.
December 5, 2014

MEMORANDUM FOR:  
JOSHUA D. COLIN  
VICE PRESIDENT, EASTERN AREA  

DEAN J. GRANHOLM  
VICE PRESIDENT, PACIFIC AREA  

RICHARD P. ULUSKI  
VICE PRESIDENT, NORTHEAST AREA  

JO ANN FEINDT  
VICE PRESIDENT, SOUTHERN AREA  

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

SUBJECT:  
Audit Report – Sunday Parcel Delivery Service  
(Report Number DR-AR-15-002)  

This report presents the results of our audit of Sunday Parcel Delivery Service  
(Project Number 14XG022DR000).  

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 Post Office Operations, or me at 703-248-2100.  

Attachment  
cc: Corporate Audit and Response Management
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Introduction
This report presents the results of our self-initiated audit of the U.S. Postal Service’s Sunday parcel delivery service (Project Number 14XG022DR000). Our objective was to assess the Postal Service’s Sunday delivery service from an operational standpoint (see Appendix A for additional background information).

In October 2013, the Postal Service entered into a Negotiated Service Agreement (NSA) with Amazon Fulfillment Inc. (Amazon) for delivery of parcels on Sunday.\(^1\) Carriers are to deliver Amazon Sunday parcels to customers in a logical and efficient order over multiple ZIP Codes using the Dynamic Routing Tool (DRT). The Postal Service’s DRT software creates up to a 5-hour street delivery route based on the number of parcels and miles traveled. At the end of April 2014, the Sunday service was operating at 459 Postal Service Designated Delivery Units (DDU)/hubs\(^2\) in 22 districts in the Pacific, Eastern, Southern, Great Lakes, and Northeast areas. The Postal Service delivered over 2.7 million parcels to customers on Sunday from these locations. The Postal Service is in the process of adding 786 additional hubs in 24 more districts across the country, bringing the future total to 1,245 hubs and 46 districts.

Conclusion
Operational inefficiencies existed during Sunday parcel deliveries at hubs\(^3\) in scanning, sorting, staffing, vehicle loading, and using DRT in street delivery. These inefficiencies occurred primarily because management did not always enforce policies and procedures and supervision was inconsistent at some hubs. As a result, the Postal Service spent 17,446 more hours than required by DRT\(^4\) to conduct Sunday delivery operations. By improving efficiency, the Postal Service could reduce operating costs annually by $356,736 for the 134 hubs in the Ohio Valley, Northern New Jersey, San Diego, and Dallas districts.

Sunday Parcel Delivery Service
We visited 40 of the 134 hubs in four Postal Service districts and found operational inefficiencies at the hubs in scanning, sorting, staffing, vehicle loading, and using DRT in street delivery. Table 1 shows the number of instances in each efficiency category.

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1 The Postal Service entered into a Negotiated Service Agreement (NSA) with Amazon for delivery of parcels during the normal 6 days a week delivery schedule and on Sunday. Parcels are mailpieces that do not meet the mail processing category of letter-size mail or flat-size mail. Parcels are usually enclosed in mailing containers such as cartons. The scope of this audit is review of parcel operations on Sunday only.
2 A hub is a delivery unit that will accept, sort, and deliver parcels for two or more delivery units.
3 We visited 40 out of a total of 134 hubs that are in four Postal Service districts.
4 DRT calculates required staffing, hours, and miles based on carriers taking about 2 minutes per address delivery. DRT currently does not take into account any additional time for carrier deliveries of multiple parcel volume to high-rise apartments. The time is June 15 through July 13, 2014.
Table 1. Sunday Parcel Delivery Service
Operational Inefficiencies at the 40 Hubs Visited

| District                  | Operational inefficiencies existed during Sunday parcel deliveries in scanning, sorting, vehicle loading, and using the DRT software in street delivery at 40 of 134 hubs we visited in four districts. As a result, the Postal Service spent 17,446 more hours from June 15 through July 13, 2014, than DRT software required to conduct Sunday delivery operations. By improving efficiency, the Postal Service could reduce operating costs annually by $356,736.  

Hover over the district city names for details.

<table>
<thead>
<tr>
<th>District</th>
<th>San Diego</th>
<th>Cincinnati/Ohio Valley</th>
<th>Northern New Jersey</th>
<th>Dallas</th>
<th>TOTAL</th>
</tr>
</thead>
</table>


Scanning

We observed instances of operational inefficiencies at 12 of the 40 hubs involving parcel scanning delays or improper use of the Delivery Scheme-less Sortation (DSS) and Passive Adaptive Scanning systems (PASS) scanning equipment. For example:

- At the Riverside hub on Sunday, February 23, 2014, we observed Arrival at Unit (AAU) parcel scans occurring 2 hours after parcel drop shipments arrived at the location. We also observed AAU parcel scanning delays of over 2 hours at the Westerville hub on Sunday, May 18, 2014, when the clerk waited for the supervisor to arrive at the hub before completing the acceptance scan. Further, at the Englewood Annex hub on Sunday, June 1, 2014, we observed AAU parcel scanning delays of over 30 minutes because the supervisor who came from another unit encountered problems accessing the DRT system for that hub. In each of these cases, AAU parcel scanning delays affected timely communication of parcel status in the Postal Service’s Product Tracking System.

- At the Edison Post Office hub on Sunday, June 1, 2014, we observed 19 parcels scanned into DRT after the “End-of-Run” (EOR) barcode scan, which communicates completion of parcel scans. As a result, the DRT did not capture the 19 scanned parcels which the carrier used additional miles to deliver.

- At the Jersey City hub on Sunday, March 30, 2014, we observed use of the DSS and PASS scanning equipment in the incorrect Address Management System mode. We also observed at the Englewood Carrier hub on Sunday, June 1, 2014, parcels scanned with Intelligent Mail Device (IMD) equipment instead of DSS or PASS. As a result the data was not provided by DRT route and parcel sequence numbers for turn-by-turn delivery directions.

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5 The DSS uses a laptop with a wireless hand-held scanning device that reads the barcode on the parcel label.
6 The PASS has an overhead scanning device that reads the parcel barcode when the clerk places the parcel under the overhead scanner.
7 We observed drop shipments that had additional parcels, arrived later than expected, and were shipped incorrectly. We plan to recommend a separate future audit on these issues in relation to the NSA in the areas of scheduling, timeliness, and accuracy of drop shipments to the hubs.
8 Customers can track the location of their parcel using the parcels tracking number and determine its delivery status.
**Sorting**

We observed operational inefficiencies at 25 of the 40 hubs we visited where sorting occurred in containers not set up in the three-hamper system. This contributed to carriers re-handling parcels for vehicle loading and street delivery since they were not separated by route and sequence numbers. In some instances, limited floor space prohibited use of the containers in the three-hamper system. For example:

- At the Upper Arlington hub on Sunday, June 8, 2014, and the Hillsborough hub on Sunday, June 22, 2014, we observed parcels sorted onto nutting carts and into all-purpose containers (APC)⁹ (see Figures 1 and 2).

**Figures 1 and 2. Hub Use of Nutting Carts and APCs**

![Figures 1 and 2. Hub Use of Nutting Carts and APCs](source: OIG photographs taken June 8, 2014, Upper Arlington hub; and June 22, 2014, Hillsborough hub.)

The Postal Service’s three-hamper system requires separation of parcels by route and sequence numbers to reduce carrier re-handling and expedite vehicle loading time for street delivery. Hamper one is used to hold parcels with sequence numbers 1 through 30; hamper two for parcels with sequence numbers 31 through 60; and hamper three for parcels 61 through the last sequence number (see illustration in Figure 3).

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⁹ A wheeled multi-purpose container constructed of square steel tubing and sheet steel. The container can be pushed by hand or pulled by tractor.
Staffing

We observed instances of operational inefficiencies at 21 of the 40 hubs we visited (53 percent) that included overstaffing, charging time to incorrect codes, and employees performing cross-craft functions. For example:

- At the Jersey City Post Office hub on Sunday, March 30, 2014, we observed a DRT requirement of 10 carriers based on parcel volume of 1,680; however, 23 carriers were actually used that day. We also observed the supervisor electing not to use the DRT process or DRT-created routes for the hub and relying on an unauthorized alternate route structure, which required the additional staff.

- At the Taft Post Office hub on Sunday, March 23, 2014, we observed carriers not charging time to the designated Sunday delivery labor distribution code (LDC) 23 and operational codes 724 and 723. We also observed Postal Support Employee (PSE) clerks not charging time to LDC 43 and operational code 077. The Postal Service established dedicated LDCs and operational codes to track carrier and clerk workhours associated with Sunday delivery.

- At the Frisco, Englewood, and University City Station hubs, we observed supervisors and city carrier assistants (CCA) performing clerk scanning and sorting responsibilities during large parcel drop shipments (see Figures 4 through 7).
Postal Service union agreements include restrictions governing assignment of employees across crafts. The Postal Service must ensure that cross-craft assignments meet the restrictive circumstances outlined in the union work rule agreements to help prevent potential future revenue loss associated with arbitration awards.10

10 We plan to recommend a separate future audit on Postal Service work rules governing the use of staff in cross-craft functions during Sunday parcel delivery service.
Vehicle Loading

We observed instances of operational inefficiencies during vehicle loading at 30 of the 40 hubs we visited, which is based on the clerk’s sorting of volume by route and sequence number. These inefficiencies included carriers taking time for parcel searches and re-handling, and not using DRT street delivery information when loading parcels into the vehicles. We also observed instances where vehicles had insufficient loading space for some parcels that may require multiple street delivery trips or split routes. For example:

- At the Grantville hub on Sunday, June 1, 2014, we observed carriers searching for and retrieving packages from sorting containers on the dock during vehicle loading. We also observed carriers at this hub and at the Frisco Post Office hub on Sunday, May 18, 2014, re-sorting and loading parcel volume to 5-digit ZIP Codes or geographical addresses. Instead they should have used the DRT route and parcel sequence number, which ensures inclusion of all packages (see Figures 8 through 11).

Figures 8 and 9. Carriers Searching For/Retrieving Packages from Containers

Figures 10 and 11. Carriers Re-sorting Packages During Vehicle Loading
At the Grantville hub on Sunday, June 1, 2014, we observed vehicles with insufficient loading space to accommodate large parcels (size and volume) which resulted in carriers being unable to make parcel deliveries in one load. Supervisors made changes\(^\text{11}\) to split routes and parcel volume was loaded between two or more vehicles (see Figure 12). Larger vehicles were not available at the hub and carriers were not trained to drive the vehicles.\(^\text{12}\)

**Figure 12. Insufficient Vehicle Capacity for Delivery of Parcel Volume**

*Split Routes—Parcel Volume Loaded Between Two or More Vehicles*

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\(^{11}\) Routes may become overburdened when additional parcels are drop shipped by Amazon at the hubs.

\(^{12}\) We plan to make an audit referral for a future review on the Postal Service’s use of delivery vehicles in Sunday delivery operations.
Street Delivery

We observed instances of operational inefficiencies at 19 of the 40 hubs visited where hub supervisors modified the DRT software turn-by-turn street delivery directions either because they were not fully knowledgeable about Sunday operations or based the modification on their knowledge of delivery operations. Some hub supervisors indicated that the recommended DRT route information was not as efficient as their modifications and deviations, which they believed would save workhours and vehicle miles. As illustrated in Table 2, at nine locations, DRT created 69 routes with 2,429.6 route miles used for delivery. When management did not use DRT at these locations, there were 99 routes with 3,533 route miles used, a variance of 30 routes and 1,103.4 miles. Thus, carriers used more routes and miles than necessary to deliver the mail.

<table>
<thead>
<tr>
<th>Office</th>
<th>Routes Using DRT</th>
<th>Routes Not Using DRT</th>
<th>Route Variance</th>
<th>Mileage Using DRT</th>
<th>Mileage Not Using DRT</th>
<th>Mileage Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jersey City</td>
<td>9</td>
<td>15</td>
<td>6</td>
<td>105.5</td>
<td>167.8</td>
<td>62.3</td>
</tr>
<tr>
<td>Secaucus</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>105.1</td>
<td>132.7</td>
<td>27.6</td>
</tr>
<tr>
<td>Hoboken</td>
<td>11</td>
<td>13</td>
<td>2</td>
<td>98.4</td>
<td>145.4</td>
<td>47.0</td>
</tr>
<tr>
<td>Riverside(^{13})</td>
<td>11</td>
<td>20</td>
<td>9</td>
<td>513.1</td>
<td>813.4</td>
<td>300.3</td>
</tr>
<tr>
<td>Palm Desert</td>
<td>9</td>
<td>14</td>
<td>5</td>
<td>457.5</td>
<td>739.7</td>
<td>282.2</td>
</tr>
<tr>
<td>Fairfield</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td>595.5</td>
<td>785.1</td>
<td>199.6</td>
</tr>
<tr>
<td>El Cajon</td>
<td>11</td>
<td>17</td>
<td>6</td>
<td>450.1</td>
<td>634.2</td>
<td>184.1</td>
</tr>
<tr>
<td>Cincinnati Western</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>61.7</td>
<td>57.9</td>
<td>-3.8</td>
</tr>
<tr>
<td>Cincinnati Taft</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>42.7</td>
<td>56.8</td>
<td>14.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>69</strong></td>
<td><strong>99</strong></td>
<td><strong>30</strong></td>
<td><strong>2,429.6</strong></td>
<td><strong>3,533.0</strong></td>
<td><strong>1,103.4</strong></td>
</tr>
</tbody>
</table>

Figure 13 optimizes deliveries using DRT as it depicts 11 routes with a total of 513 miles. In contrast, Figure 14 does not optimize deliveries because DRT was not used, resulting in 20 routes with a total of 813 miles.

\(^{13}\) The contingency plan was partially used on the day of our observation at the Riverside hub.
We also observed instances of operational inefficiencies where the DRT software did not provide parcels route and sequence numbers due to invalid address mapping information in the Postal Service’s Route Smart software database. In addition, we observed instances where the DRT software did not account for multiple deliveries to the same location such as high-rise apartments, one-way streets, local road constructions, or daily commuter traffic.

Postal Service officials indicated they were aware of the operational inefficiencies and have ongoing initiatives to improve Sunday delivery, like having teams make hub site visits to implement necessary corrective actions and ensure adherence to policies and procedures. Postal Service officials also informed the OIG that they were working on new initiatives to improve street delivery, such as additional delivery time for high-rise apartments, updates to address mapping directions based on corrections, and audio DRT turn-by-turn directions. Officials further indicated they have new initiatives underway regarding the use of efficient sorting containers to facilitate timely scanning, sorting, and vehicle loading.

These operational inefficiencies noted at the hubs in the areas of scanning, sorting, staffing, vehicle loading, and street delivery occurred primarily because management did not always enforce policies and procedures for Sunday parcel delivery hub operations. District officials indicated they performed site visits to hubs, conducted training, and held weekly teleconference meetings regarding Sunday operations to review performance factors and ensure Postal Service Package Reporting website data accuracy. However, we found supervision was inconsistent at the hubs, including instances where Sunday operating policies and procedures were unavailable.

As a result, the Postal Service spent 17,446 more hours than required by DRT software to conduct Sunday delivery operations. By improving efficiency, the Postal Service could reduce operating costs annually by $356,736 for the 134 hubs in the Ohio Valley, Northern New Jersey, San Diego, and Dallas districts.

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14 The OIG reviewed address errors in the report titled Address Management System Data (Report Number DR-AR-14-003, dated February 28, 2014).
15 We plan to recommend a separate future audit on DRT software issues.
16 Interim meetings held with Postal Service officials in July and August 2014.
Recommendations

We recommend the vice presidents, Eastern, Northeast, Pacific, and Southern areas, direct managers for the Ohio Valley, Northern New Jersey, San Diego, and Dallas districts to:

1. Eliminate 17,446 workhours at the hubs cited.
2. Reinforce and ensure adherence to Postal Service policies and procedures for Sunday parcel delivery service at the hubs.
3. Eliminate inefficient operational practices in the areas of scanning, sorting, staffing, vehicle loading, and using the Dynamic Routing Tool software in street delivery.

Management’s Comments

Management agreed in principle with the findings and recommendations, but disagreed with the associated monetary impact.

Management stated that Sunday delivery is still in the test phase and many tools and standard operating procedures are evolving as they learn from their experiences. Management indicated that training materials for expanding districts have changed dramatically since inception. They also agreed that not all units are operating at optimum levels, but they have reduced costs since program inception and will continue to improve efficiency as they leverage technology.

Management stated that the OIG erred in assuming that the manual addition of parcels after the EOR scan or button click results in those pieces not being placed in the turn-by-turn directions or given sequence numbers. Officials indicated that parcels can be manually added at any time during the process including after the EOR scan or button click. Management further stated that manually adding parcels that fail to scan occurs in a separate window of the DRT and contains a “Submit for Processing” button that sends those addresses for routing within the existing turn-by-turn directions even after the EOR occurs.

Regarding recommendation 1, management disagreed with eliminating the initial 53,972 annual workhours at the cited hubs. Management stated they found fault with the workhour savings calculations, because we used DRT projected workhours compared to actual Sunday carrier workhours and DRT only projects street hours. Management indicated that total actual carrier hours in the parcel reporting website include office time that was projected at 1 hour per route for loading and office functions outlined in the current training documents for Sunday delivery. Management stated the calculations excluded the 1 hour per route loading time in the comparison of DRT projected workhours to actual Sunday carrier workhours. This resulted in a difference of 2,730 workhours for the four hubs over the 5-week period used, or 28,392 annually.

Management also stated that DRT street projections only account for parcels inserted into the carrier turn-by-turn directions. Furthermore, with manifest issues and exception addresses that cannot be manually added into the turn-by-turn directions, there were a total of 24,437 uncredited parcels missing from the DRT projections. These parcels were delivered by the four hubs using an estimated 1,512 additional workhours over the 5-week period, or 15,726 workhours annually. Officials concluded that there was an annual savings of 9,854 workhours. In addition, management stated that our observations showed instances where the DRT software did not account for multiple deliveries, traffic, and local road conditions; therefore, our acknowledgement that DRT software was imperfect and comparing those estimated times against actual workhours as a basis for savings seems to present a flawed comparison.

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17 Postal Service mistakenly used hubs instead of districts.
Regarding recommendation 2, management agreed and is actively testing software solutions to ensure employees use the turn-by-turn directions. Area and district officials are visiting hub units on Sundays to observe employees and ensure they are following policies, and headquarters management conducts a weekly teleconference with area offices to discuss Sunday delivery performance. Management stated they have implemented corrective action.

Regarding recommendation 3, management agreed to eliminate operational inefficiencies, stating that their weekly performance teleconference addresses these issues. However, management still considers the Sunday delivery program and the dynamic routing of packages to be part of a test. Standard operating procedures, guidelines, and DRT software and methodologies are still evolving and under development. Also, this program is less than 1 year old and not fully implemented. Management stated their corrective actions to address the reported inefficiencies are ongoing and they will continue to note deficiencies in the process and software and make changes as necessary.

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.

The OIG acknowledges that the Postal Service began Sunday parcel delivery service in November 2013. We began our audit in February 2014 and, at that time, 239 hubs were operating in four Postal Service areas of operations. During our audit, management expanded this service to over 1,300 hubs in all seven Postal Service areas of operations. A test usually has a controlled, finite group of locations and beginning and ending dates, and involves data collection and program implementation. A test does not normally consist of rapid and continuing expansion of sites; therefore, the OIG considers this a program. We also reviewed the National Service Agreement with Amazon and did not see any reference to Sunday delivery being conducted as a test.

Regarding management’s comment that sorting parcels using a three-hamper system was a best practice and some hubs had equipment and space constraints, our review identified only three of the 40 hubs visited with equipment and/or space constraints. In the remaining hubs, management was not aware of the three-hamper system or elected not to use the best practice.

Regarding recommendation 1, management disagreed with the OIG’s assessment that the Postal Service could save 53,972 workhours based on a comparison of DRT software estimates against actual workhours. Management stated OIG did not take into account office time and unmanifested/uncredited parcels manually added to the carrier’s routes. Based on additional discussions with management and additional documentation provided, we revised both the potential workhours and monetary impact savings in the report.

- Office Time. We acknowledge that the Postal Service DRT program’s projected street hours exclude the estimated 1 hour per route loading time. We reviewed actual carrier workhours from the Time Attendance and Collection System reports showing the hours used by CCAs, supervisors, and clerks performing work during Sunday delivery operations. The reports showed the CCAs using less than the 1 hour of office time for allied services and loading. We recalculated each district’s workhour savings and included the office workhours with the DRT hours.
Unmanifested/Uncredited Parcels. We agree unmanifested/uncredited parcels that were missing due to manifest and exception address issues should be considered in the savings calculation. However, we disagree with management’s estimate of 15,726 workhours savings. The OIG reduced management’s estimate from 15,726 down to 11,008 workhours, a reduction of 4,718 workhours. The adjustment was made because management did not offset the total uncredited parcels by the number of manifested parcels that were not taken to the street for delivery; instead, parcels were scanned at the hub as attempted delivery because the carrier knew the business was closed on Sunday. Thus they did not actually use the allocated workhours to deliver the parcel.

We updated the report to reflect a decrease in both workhours and cost savings to account for office time and unmanifested/uncredited parcels. Specifically, workhours were revised from 53,972 to 17,446 and monetary impact was revised from $1.126 million to $356,736.

The OIG considers all the recommendations significant and, therefore, requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. These recommendations should not be closed in the Postal Service’s follow-up tracking system until the OIG provides written confirmation that they can be closed.
Appendices

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In October 2013, the Postal Service entered into an NSA with Amazon for delivery of parcels during the normal 6-day delivery week and on Sunday. Carriers deliver Amazon Sunday parcels packages to customers in a logical and efficient order over multiple ZIP Codes using the DRT. The Postal Service’s DRT software creates up to a 5-hour street delivery route based on the number of parcels and miles traveled (see Figure 15).

**Figure 15: Postal Service Sample Timeline for Sunday Delivery**

![Sample Timeline for Sunday Delivery](postal-service-sample-timeline-sunday-delivery.png)

Source: Postal Service website.
DRT uses the Navigation Technologies (NAVTEQ) mapping program, which is an application that incorporates latitude and longitude information to sequence mailing addresses in a delivery turn-by-turn direction over multiple ZIP Codes. DRT also provides hub supervisors with the required number of routes, PSEs, CCAs, and vehicles. CCAs and PSEs, who are non-career workforce employees, are the first option for Sunday delivery operations before regular full-time staff, due to their lower hourly wage rate. Hub supervisors may use full-time staff in emergencies.

PSEs scan parcels from Amazon drop shipments using the DSS or PASS to obtain DRT route and parcel sequence numbers for each parcel to sort into designated hampers. CCAs will load sorted parcels into their vehicles and make street delivery based on DRT turn-by-turn directions. At the end of each Sunday delivery operation, hub supervisors report any irregularities, such as ZIP Code problems, re-deliveries/second drops, missed shipments, missing mailing labels, non-scannable mailing labels, and issues regarding truck bed loading of parcels using the Postal Service’s package reporting website.

At the end of April 2014, Sunday service was operating at 459 Postal Service DDUs/ hubs in 22 districts in the Pacific, Eastern, Southern, Great Lakes, and Northeast areas. The Postal Service is adding 786 additional hubs in 24 more districts across the country, bringing the future total to 1,245 hubs and 46 districts (see Table 3).

Table 3. Sunday Parcel Delivery Service in Postal Areas, Districts, and Delivery Units/Hubs

<table>
<thead>
<tr>
<th>Area</th>
<th>Districts as of April 2014</th>
<th>Hubs as of April 2014</th>
<th>Parcels as of April 2014</th>
<th>Future Additional Districts</th>
<th>Future Additional Hubs</th>
<th>Total Future Districts</th>
<th>Total Future Hubs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific</td>
<td>4</td>
<td>118</td>
<td>998,572</td>
<td>3</td>
<td>133</td>
<td>7</td>
<td>251</td>
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<td>95</td>
<td>454,525</td>
<td>2</td>
<td>40</td>
<td>7</td>
<td>135</td>
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<tr>
<td>Northeast</td>
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<td>Western</td>
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<td>Capital Metro</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>191</td>
<td>6</td>
<td>191</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>459</strong></td>
<td><strong>2,756,264</strong></td>
<td><strong>24</strong></td>
<td><strong>786</strong></td>
<td><strong>46</strong></td>
<td><strong>1,245</strong></td>
</tr>
</tbody>
</table>

Source: Postal Service Headquarters Amazon coordinator hub data as of July 2, 2014. Postal Service Parcel Reporting website data as of April 6, 2014.

Objective, Scope, and Methodology

Our objective was to assess the Postal Service’s Sunday delivery service from an operational standpoint. To accomplish our objective, we:

- Reviewed Postal Service documentation, including applicable policies and procedures, related to Sunday delivery service.
- Reviewed prior OIG and Government Accountability Office audit reports to identify those related to the Postal Service’s Sunday delivery service.

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18 A delivery unit that will accept, sort, and delivery parcels for two or more delivery units.
Interviewed appropriate delivery operations managers and personnel at the headquarters, area, and district levels, who are responsible for Sunday delivery service, to discuss implementation, status, and results.

Obtained and analyzed Sunday delivery service data compiled by the Postal Service for the 22 district locations in the five postal areas (Pacific, Eastern, Northeast, Great Lakes, and Southern) that were providing Sunday parcel delivery service at 459 DDUs/hubs as of April 2014.\(^\text{19}\) We did not perform a statistical sample due to the small universe of 22 district locations not producing reliable results. Therefore, we selected single hubs in four districts (San Diego, Ohio Valley, Northern New Jersey, and Dallas) in the five areas postal based on hub size, operational timeframe, routes, parcel volume, staffing, and OIG resources. We excluded the Great Lakes Area since it had only one recently added district (Greater Indiana) and low parcel volume. The four selected districts had 134 hubs, from which we selected a minimum sample of 81 (60 percent) to achieve a 95 percent confidence that the samples would reflect the universe with a precision of plus/minus 7 percent. Of the 81 hubs, we judgmentally selected 40 (49 percent) for physical site visits based on size, operational timeframe, routes, parcel volume, staffing, and OIG resources. We projected monetary impact for each district location for the 134 hubs based on the variance between DRT required hours and actual time incurred using results from site visits.

We conducted this performance audit from January through December 2014, 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 headquarters management on July 23 and August 18, 2014. We also discussed our observations and conclusions with Eastern and Southern area management on August 28, 2014, and Northeast and Pacific area management on September 4 and 5, 2014. We included management’s comments where appropriate.

We relied on data obtained from Postal Service database systems, such as the Parcel Reporting website and the Postal Service’s dynamic routing website. We did not directly audit the systems but performed a limited data integrity review to support our data reliance. We assessed the reliability of the systems’ data by reviewing existing information about the data and the systems that produced them and interviewing agency officials knowledgeable about the data. We determined the data were sufficiently reliable for the purposes of the report.

**Prior Audit Coverage**

The OIG did not identify any prior audits or reviews related to the objective of this audit conducted during the past 3 years.

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\(^{19}\) Postal Service parcel reporting website year-to-date reports, January 1 through April 21, 2014.
Appendix B: Management’s Comments

EDWARD F. FINELAN, JR.
VICE PRESIDENT, DELIVERY OPERATIONS

UNITED STATES POSTAL SERVICE

October 8, 2014

LORI DILLARD
ACTING DIRECTOR, AUDIT OPERATIONS

SUBJECT: Sunday Parcel Delivery Service (Report Number DR-AR-14-DRAFT)

The subject report was addressed to four Area Vice Presidents that had Sunday delivery at the time of the audit and each of them provided a response, however the following represents a consolidated USP response. We appreciate the opportunity to provide feedback and to clarify Headquarters position on the Sunday Parcel Delivery particularly to show that calculations and savings outlined in the report are over estimated and do not reflect actual performance by the Areas which has been in line or exceeding expectations therefore we disagree with the monetary impact as stated in the report.

As an initial matter, we believe that an audit such as this is premature in that Sunday delivery is still in its test phase and many tools and standard operating procedures are evolving as we continue to learn from our experiences. We conduct weekly telecons with Sunday delivery field managers to review issues and share successes. As a result, Headquarters training material for expanding districts has changed dramatically from the initial round. We also strive to improve performance from week to week and agree that not all units are operating at optimum levels but we have been very successful in driving costs out of the system since this programs inception. As we develop a more integrated and dynamic Sunday delivery operation, we will continue to improve efficiency leveraging ever changing technology.

Findings:

Scanning Discrepancies, 12 of 40 hubs

Riverside Hub 2/23/14, Edison Hub 3/1/14, Jersey City Hub 3/30/14

We agree that performance of the acceptance scan of the shipment should begin as soon as the shipment arrives. However, the auditor erred in assuming that the manual addition of parcels after the End of Run (EOR) scan or button click results in those pieces not being placed in the turn by turn directions or provided sequence numbers. Parcels can be manually added at any time during the process including after the EOR scan or button click occurs. Manually adding parcels that fail to scan occurs in a separate window of the Dynamic Routing Tool (DRT) and contains a “Submit for Processing” button that send those addresses for routing with the existing turn by turn directions even after the EOR occurs. We agree with the finding that the PADS and/or USA system must be in the Dynamo mode for dynamic routing to occur and further that the IQD cannot be used to obtain dynamic routing.

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Washington, DC 20020
202-268-0500
Sorting Discrepancies, 26 of 40 hubs
Upper Arlington Hub 6/8/14

USPS disagrees. In USPS training, hub units are encouraged to use multiple hoppers per dynamic route broken out by sequence number sets (1 - 25, 26 - 50, etc.). This was based on the simple fact that most Sunday dynamic routes will generate more package volume than the standard 1040 hopper will hold. If multiple hoppers are used then it makes sense to improve the loading efficiency by distributing the parcels by sequence number sets. However, we recognize that equipment and/or space constraints may prevent this in every hub and that deviations may be necessary in some cases. This is not a policy it is a best practice to be used if necessary.

Staffing Discrepancies, 21 of 40 hubs
Jersey City Hub 3/9/14, Taft Hub 3/22/2014, Frisco, Englewood and University City Hubs (No dates provided)

We agree that staffing should be based on USPS HQ staffing estimates or as recent DRT history indicates. We also agree that carriers and clerks should use the proper operation numbers as specifically established for Sunday package delivery operations. USPS has provided for regular weekly feedback to Area, District and post office managers when proper operational numbers are not used thus allowing for correction before final processing. We agree that all craft jurisdictional work functions should be to within the confines of current contractual language. We additionally agree that hub units should use the DRT generated routes and turn by turn directions rather than local knowledge (crafts) in situations when the DRT data is compromised due to a significant amount of missing manifest data. USPS is developing software to assist management in determining when DRT generated directions are not being utilized.

Vehicle Loading, 30 of 40 hubs
Granville Hub 6/7/14, Frisco Hub 5/18/14

We agree that the DRT turn by turn directions should be used for the delivery of Sunday parcels and that failing to do so impacts loading efficiency. USPS recognizes that there is shortage of larger vehicles needed to support the growth not only in overall package volume but also in larger packages. In the interim, USPS is testing shelving systems for the LLV to increase vertical cube capacity and organization.

Street Delivery, 16 of 40 hubs
We agree that the DRT turn by turn directions should be used for the delivery of Sunday parcels.

OIQ Recommendations:
1. Eliminate 63,972 workhours at the hubs cited

USPS disagrees. We find fault with the OIQ calculations used to determine the 53,972 annual workhour overage to DRT projections. The OIQ in using DRT projected workhours compared to actual Sunday carrier workhours failed to account for the fact that the OIQ program only projects street hours. Total actual carrier hours in the parcel reporting website includes office time that was projected at an hour per route for loading and allied office functions as outlined in
our current training documents for Sunday package delivery. Failing to account for that time in the actual carrier hours to DRT projections resulted in a difference of 2,730 workhours for the four hubs over the five week period used. Annually this comes to 28,192 workhours using the OIG calculation method (hours/5 weeks)*52 weeks).

Additionally, DRT street projections only account for parcels that were inserted into the carrier turn by turn directions. Due to manifested issues and exception addresses that cannot be manually added into the turn by turn directions, there were a total of 24,427 uncredited parcels missing from the DRT projections. These parcels are still delivered. Using each of the hubs actual carrier parcel per hour rate we estimate an additional 1,512 workhours for the four hubs over the five week period used. Annually this comes to 16,728 workhours using the OIG calculation method (hours/5 weeks)*52 weeks). These two figures combined reduce the OIG estimate of 23,972 annual workhours by 44,118 bringing the annual savings to 9,854.

Furthermore, the OIG states in the audit (page 5, 1st paragraph) “we observed instances where the DRT software did not account for multiple deliveries to the same location such as high-rise apartments, one-way streets, local road conditions, or daily commuter traffic”. Acknowledging that the estimated workhours of the DRT software is imperfect and then using those estimated times against the actual workhours as a basis for savings seems to present a flawed comparison, particularly when correction of these issues would have likely resulted in higher workhour estimates by the DRT software.

2. Reinforce and ensure adherence to Postal Service policies and procedures for Sunday parcel delivery service at the hubs.

USPS is in agreement with this recommendation and is actively testing software solutions to ensure that the turn by turn directions are used. Areas and districts have begun testing Sunday hub units to observe and policies are being followed. Furthermore USPS headquarters has a weekly teleconference with the Area offices to discuss Sunday performance.

Target Implementation Date: Completed

3. Eliminate inefficient operational practices in the areas of scanning, sorting, staffing, vehicle loading, and using the Dynamic Routing Tool software in street delivery.

USPS agrees with this recommendation and is actively testing software solutions to ensure that the turn by turn directions are used. Areas and districts have begun testing Sunday hub units to observe and policies are being followed. Furthermore USPS headquarters has a weekly teleconference with the Area offices to discuss Sunday performance.

Target Implementation Date: On going

Responsible Official: Scott Hooper

This report and management’s response does not contain information that may be exempt from disclosure under the Freedom of Information Act.

Edward F. Phelan, Jr.
Contact us via our Hotline and FOIA forms, follow us on social networks, or call our Hotline at 1-888-877-7644 to report fraud, waste or abuse. Stay informed.

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