



OFFICE OF
**INSPECTOR
GENERAL**
UNITED STATES POSTAL SERVICE

Carrier Optimal Routing System Phase II

Audit Report

August 21, 2012

Report Number DR-AR-12-005



HIGHLIGHTS

August 21, 2012

Carrier Optimal Routing System Phase II

Report Number DR-AR-12-005

BACKGROUND:

Carrier Optimal Routing (COR) is a computer modeling carrier routing and travel optimization program used to configure safe and efficient travel patterns for city delivery routes. The U.S. Postal Service implemented the system in October 2005, which has helped reduce workhours and vehicle costs, improve carrier safety, and establish more efficient lines-of-travel. Our first audit reviewed system usage and the related reductions in vehicle mileage for 32 districts (now 26 districts due to consolidations and reorganizations).

This audit objective was to review system usage to adjust and consolidate routes. We also reviewed global positioning system (GPS) usage in conjunction with COR. Additionally, we updated system usage for the districts reviewed in the first audit to culminate in a nationwide review.

WHAT THE OIG FOUND:

The Postal Service performed route adjustments using the COR system on 28,116 routes in the 47 districts reviewed. However, the Postal Service did not make route adjustments on 63,505 routes using the COR system. This condition occurred because the software was not user friendly, data preparation was labor-intensive and time-consuming, COR system technicians were not crossed-trained,

and manuals were not updated. In addition, districts did not use GPS devices to track route time and performance jointly with the COR system to perform route adjustments. As a result, the Postal Service will not realize over \$84 million annually in cost reductions in city delivery from consolidation of carrier routes.

WHAT THE OIG RECOMMENDED:

We recommended the vice president, Engineering Systems, continue to pursue funding availability to resolve performance issues and implement the Web COR system. We also recommended the vice presidents, Area Operations, re-emphasize performing route adjustments using the COR system. Additionally, we recommended cross-training to include database preparation and route adjustment processes. Lastly, we recommended the vice president, Delivery and Postal Operations, update city delivery manuals to perform route adjustments using the COR system.

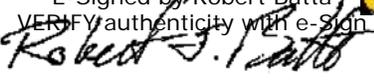
[Link to review the entire report](#)



August 21, 2012

MEMORANDUM FOR: DEAN J. GRANHOLM
VICE PRESIDENT, DELIVERY AND POST OFFICE
OPERATIONS

MICHAEL J. AMATO
VICE PRESIDENT, ENGINEERING SYSTEMS
VICE PRESIDENTS, AREA OPERATIONS

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


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

SUBJECT: Audit Report – Carrier Optimal Routing System
Phase II (Report Number DR-AR-12-005)

This report presents the results of our audit of the U.S. Postal Service's use of the Carrier Optimal Routing System Phase II (Project Number 11XG040DR000).

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, or me at 703-248-2100.

Attachments

cc: Elizabeth A. Schaefer
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Introduction

This report presents the results of our second audit¹ of the U.S. Postal Service Carrier Optimal Routing (COR) system (Project Number 11XG040DR000). Our objective was to review the Postal Service's use of the COR system for adjusting and consolidating routes. We also reviewed the Postal Service's use of the global positioning system (GPS) in conjunction with the COR system. This audit addresses operational risk. See [Appendix A](#) for additional information about this audit.

The Postal Service's mission is to provide the nation with reliable, affordable, universal mail service. Delivering the mail is the largest postal operation and also tends to be labor- and fuel-intensive. In October 2005, the Postal Service implemented the COR system to assist in performing route adjustments on city routes. Benefits of the COR system include having more efficient routes as well as reduced workhours, vehicle mileage, and delivery costs. The Postal Service must establish efficient delivery routes² to reduce costs while facing financial loss from declining mail volumes.

Conclusion

The Postal Service performed route adjustments using the COR system on 28,116 city routes in the 47 districts reviewed.³ The Postal Service did not adjust 63,505 city routes using the COR system. Three major factors contributed to district officials' not using the COR system to adjust routes. Specifically:

- The COR system software is not user friendly and has limitations for preparing lines of travel. Additionally, the data preparation process is labor intensive and time consuming.⁴
- District officials did not always cross-train COR technicians in COR database preparation and route adjustment processes to provide stability.
- City delivery handbooks and manuals were not updated to require use of the COR system to perform route adjustments.

¹ *Use of Carrier Optimal Routing System* (Report Number DR-AR-10-001, dated October 15, 2009) was conducted in fiscal year (FY) 2009 based on a value proposition between the U.S. Postal Service Office of Inspector General (OIG) and the Postal Service's vice president, Delivery. We updated the route adjustments data for the districts reviewed in the first audit in this report.

² The Postal Service's business strategy, *Delivery Results, Innovation, Value and Efficiency*, has an initiative for the vice president, Delivery and Post Office Operations, titled *Delivery Optimization*. The strategy is to optimize carrier routes by reducing and eliminating office time and adjusting (reducing) the number of routes.

³ This report addresses findings for the 21 districts included in Phase II.

⁴ This issue was identified in the previous COR audit.

In addition, some districts with GPS devices used them to track the route time and performance, but they did not use GPS jointly with the COR system to perform the route adjustments.⁵ An increased focus on using the COR system to adjust, align, and consolidate routes will reduce workhours and save more than \$84 million annually. See [Appendix B](#).

Use of Carrier Optimal Routing System

While the Postal Service completed route adjustments using the COR system on 28,116 routes, it did not complete an additional 63,505 routes in the 47 districts reviewed. The 47 districts include the 32 districts reviewed in FY 2009. These 32 districts were reduced to 26 districts after consolidations and reorganizations in the Postal Service. In the FY 2012 audit, we conducted fieldwork in 21 districts. The districts are identified with an asterisk in Table 1. For the 26 districts reviewed in the first COR audit, we updated the number of routes adjusted using the COR system only. We did not conduct any additional fieldwork in these districts.

A Postal Service memorandum⁶ and the Joint Alternate Route Adjustment Process (JARAP) Memorandum of Understanding (MOU)⁷ explained the system and the benefits of using the COR system to perform route adjustments to properly align city delivery routes. JARAP states that, when available, the Postal Service must use COR for route optimization and adjustments. To adjust routes, management prepares the route information, which includes ZIP Codes, addresses, geographic or map information, and other pertinent route data from the Delivery Operations Information System (DOIS) and puts the information into the COR system to adjust routes. COR system processes the data to consolidate routes and configure each route's line-of-travel, park points, and route time. Management reviews the COR system results and conducts a street validation, makes any corrections, and finalizes the route adjustments. See [Table 1](#) for routes not adjusted using the COR system.

⁵ GPS and COR are two separate programs and district officials were not mandated by headquarters to use them jointly to make route adjustments. However, six districts used GPS to monitor carriers after making COR route adjustments.

⁶ *Carrier Optimal Route and Route Adjustment*, dated January 25, 2005.

⁷ JARAP MOU, dated March 22, 2011.

Table 1. COR System Route Adjustments

Number of Districts	District	Total Existing Routes	Total Adjusted Routes Using the COR System	Routes Not Using the COR System
1	Alabama	862	362	500
2	Albany*	871	63	808
3	Appalachian	533	346	187
4	Arizona	2,818	403	2,415
5	Arkansas*	575	108	467
6	Atlanta	1,660	305	1,355
7	Baltimore	1,661	231	1,430
8	Central Illinois	2,453	1,252	1,201
9	Central Pennsylvania*	1,331	39	1,292
10	Chicago*	2,284	1,544	740
11	Cincinnati	2,628	463	2,165
12	Colorado/Wyoming	2,586	1,385	1,201
13	Connecticut Valley	3,696	755	2,941
14	Dallas*	1,819	735	1,084
15	Detroit*	3,519	1,660	1,859
16	Gateway*	2,210	96	2,114
17	Greater Boston	3,727	2,292	1,435
18	Greater Indiana	1,822	547	1,275
19	Greater Michigan	1,101	472	629
20	Greater South Carolina*	665	63	602
21	Greensboro	1,276	848	428
22	Hawkeye*	910	167	743
23	Kentuckiana	1,159	394	765
24	Lakeland	3,321	1,302	2,019
25	Long Island*	2,124	861	1,263
26	Los Angeles*	2,465	832	1,633
27	Mid-Carolinas*	986	391	595
28	Mississippi	292	119	173
29	Nevada/Sierra	1,276	145	1,131
30	North Florida	1,465	484	981
31	Northern New England	655	188	467
32	Northern New Jersey*	3,423	1,151	2,272
33	Northern Ohio	3,309	499	2,810
34	Northern Virginia	1,066	396	670
35	Northland*	2,278	525	1,753
36	Philadelphia Metro*	2,636	987	1,649
37	Richmond*	1,334	170	1,164
38	Rio Grande*	2,150	523	1,627
39	Salt Lake City	1,116	299	817
40	San Francisco*	2,180	549	1,631
41	Seattle*	2,520	550	1,970
42	Sierra Coastal*	2,709	1,145	1,564
43	South Florida	3,944	682	3,262
44	South Jersey*	2,138	239	1,899
45	Suncoast	3,224	582	2,642
46	Tennessee	1,436	171	1,265
47	Western New York	1,408	796	612
Total		91,621	28,116	63,505

Source: Postal Service Headquarters. The asterisk identifies districts reviewed in COR Phase I.

Several factors contributed to the preceding condition in the 21 districts reviewed for COR Phase II:⁸

- The COR system software is not user friendly and has limitations for preparing lines-of-travel. Additionally, the data preparation process continues to be labor intensive and time consuming.
 - COR System Limitations: Officials stated the COR system software was not user friendly. Additionally, the software has limitations when preparing a route's data, such as lines-of-travel⁹ for city parks, having more than one mailbox on different sides of the same house, and having cluster box units, which are normally used for centralized delivery. Additionally, the COR system is a stand-alone system that does not retain line-of-travel information once the user exits the program.
 - Data Preparation: Data preparation still requires about 2 to 4 hours for the user to input data for each route. Data for each route in a zone must be downloaded from DOIS into the COR system and reviewed to ensure the routes are contiguous. In the previous audit, the OIG recommended the vice president, Information Technology Solutions, resolve performance issues with the Web Carrier Optimal Routing (WebCOR¹⁰) system and implement the web-based program nationwide. Management agreed to implement the recommendation and stated they planned to place WEBCOR into production by December 2009. During discussions in August and December 2011, officials informed the OIG that internal system configuration issues existed and there was no funding in the FY 2012 budget for expansion projects, such as WebCOR system.
- In the 21 districts, officials did not always cross-train COR technicians in COR database preparation and route adjustment processes to provide stability. Each district office had employees designated as COR technicians to perform the route adjustment process. To provide optimum performance during the COR route adjustment process, COR technicians should be cross-trained in both COR processes. Though cross-training is not a requirement, it can be a best practice, due to the lack of available personnel to perform duties as COR technicians. In the 21 districts reviewed, 16 had two technicians or more cross-trained, three had only one cross-trained, and two did not have any cross-trained (see [Table 2](#)).

⁸ In the first COR audit report we recommended that management resolve COR system performance issues, select and train at least four individuals as COR system subject matter experts, use route inspection data to complete the data preparation process, complete route adjustments using COR system, and track and monitor vehicle mileage. The recommendations to resolve COR system performance issues and track vehicle mileage were closed, but actions were not implemented because management indicated lack of funding to enhance COR. The remaining recommendations were implemented and closed.

⁹ The line of travel is the authorized travel pattern for city delivery routes.

¹⁰ WebCOR is a web-based version of the COR system that the Postal Service planned to implement to enhance COR and resolve some of the system performance issues.

Table 2. COR Technicians Cross-Training Status

Districts	Number of COR Technician Staff Trained for Data Preparation	Number of COR Technician Staff Trained for Route Adjustments	Number of COR Technician Staff Trained for Both Processes
Albany	5	5	2
Arkansas	3	3	1
Central Pennsylvania	6	20	7
Chicago	10	10	10
Dallas	2	4	2
Detroit	2	3	2
Gateway	3	5	0
Greater South Carolina	5	3	3
Hawkeye	10	5	5
Long Island	5	5	5
Los Angeles	7	7	7
Mid-Carolinas	2	5	0
Northern New Jersey	6	8	5
Northland	3	8	3
Philadelphia Metro	7	5	5
Richmond	11	6	6
Rio Grande	3	2	2
San Francisco	5	13	4
Seattle	5	6	1
Sierra Coastal	5	19	1
South Jersey	4	3	3
Total	109	145	74

Source: Postal Service District Delivery Management.

- According to district officials, they did not always cross-train COR technicians because staff was not readily available to perform COR system duties. The COR technician is not an official Executive and Administrative Schedule Postal Service position, therefore, district management used any available personnel to perform the function as needed. Some district officials indicated that the Postal Service needs to allot funding for permanent COR technician positions to retain continuity and stability.
- The Postal Service did not update city delivery handbooks to require the use of the COR system to perform route adjustments. Some district management officials

stated that Handbook M-39¹¹ and Handbook M-41¹² need to be modified to include these standards. In 2005, management provided guidelines for using the COR system to perform route adjustments to ensure proper alignment for city delivery routes.

An increased focus on using the COR system to adjust, align, and consolidate routes will reduce workhours. We identified monetary impact of more than \$84 million in city delivery costs.

Global Positioning System Usage With Carrier Optimal Routing System

District officials are not using GPS devices with the COR system to perform route adjustments. GPS devices are used to track established route time and performance. The GPS and COR system are two separate programs and district officials were not mandated by headquarters to use them jointly to make route adjustments. We did identify that six of the 21 districts reviewed used the GPS devices as a management tool to track vehicles and determine whether carriers were following the line-of-travel and times established by COR route adjustments (see [Table 3](#)). GPS devices could also be used to assist management with minimizing fuel usage and conducting street observations. The existing GPS provides an actual breadcrumb trail report for the vehicles line-of-travel.

¹¹ Postal Service Handbook M-39, *Management of Delivery Services*, dated March 1, 1998, with *Postal Bulletin* revisions through March 18, 2004.

¹² Postal Service Handbook M-41, *City Delivery Carriers Duties and Responsibilities*, dated March 1, 1998, with *Postal Bulletin* revisions through April 5, 2001.

Table 3. GPS Usage

Districts	Using GPS to Track Carriers After COR Route Adjustments	Not Using GPS to Track Carriers After COR Route Adjustments	No GPS Devices Deployed
Albany		✓	
Arkansas		✓	
Central Pennsylvania	✓		
Chicago		✓	
Dallas		✓	
Detroit	✓		
Gateway		✓	
Greater South Carolina	✓		
Hawkeye			✓
Long Island	✓		
Los Angeles ¹³	No response	No response	
Mid-Carolinas			✓
Northern New Jersey	✓		
Northland		✓	
Philadelphia Metro			✓
Richmond		✓	
Rio Grande		✓	
San Francisco		✓	
Seattle	✓		
Sierra Coastal		✓	
South Jersey			✓
Total	6	10	4

Source: Postal Service District Delivery Management.

According to some district officials, they usually used GPS devices to monitor carriers who were exceeding time limits established for their routes. Further, officials indicated the GPS program is a volunteer program; therefore all vehicles are not equipped with GPS devices. There were a total of 3,344 GPS devices in the 21 districts reviewed. Some district managers expressed concern regarding the GPS program, such as the limited number of devices, their longevity, and the excessive time it takes to repair disabled devices since there is one vendor nationwide who maintains the devices.

¹³ Los Angeles District officials did not respond to our numerous requests regarding whether they used GPS to track carriers after COR adjustments.

An earlier OIG report on the GPS program acknowledged the possibility of integrating the COR system with GPS as the technology is refined and embraced.¹⁴ We are not making a recommendation for GPS usage with the COR system, because the previous GPS report included a broad recommendation in this area.

Recommendations

We recommend the vice president, Engineering Systems:

1. Continue to pursue funding to resolve performance issues with the Web Carrier Optimal Routing system and implement the web-based program nationwide.

We recommend the vice presidents, Area Operations, require district managers to:

2. Re-emphasize performing route adjustments using the Carrier Optimal Routing system to achieve an annual economic impact of more than \$84 million.
3. Cross-train existing and additional personnel in both Carrier Optimal Routing system database preparation and route adjustment processes to ensure the availability of adequately trained resources.

We recommend the vice president, Delivery and Post Office Operations:

4. Update Postal Service Handbook M-39, *Management of Delivery Services*, and Postal Service Handbook M-41, *City Delivery Carriers Duties and Responsibilities*, to establish standards for using the Carrier Optimal Routing system to perform route adjustments.

Management's Comments

Management disagreed with the finding and recommendation 1, but provided alternate actions that should correct the deficiency. Management agreed in principle with the finding and recommendation 2, but disagreed with the monetary impact. In addition, management agreed with the finding and recommendation 3 and disagreed with the finding and recommendation 4.

Regarding recommendation 1, the vice president, Engineering Systems disagreed with the finding and recommendation. Management stated that WebCOR was developed and tested, but could not deliver the required performance or response time due to the architectural constraints of the operating environment. Engineering is working with Delivery Operations to make substantial improvements in the existing COR application that will achieve the same benefits as WebCOR. The first phase of the enhancements will be completed at the end of FY 2012 with additional enhancements completed in FY 2013.

¹⁴ *Global Positioning System: End-to-End Platform and Actionable, Robust Reports Needed to Achieve Goals and Potential Return-on-Investment* (Report Number DR-MA-11-003, dated September 30, 2011).

For recommendation 2, the vice president, Delivery and Post Office Operations, and all seven areas agreed in principle with the finding and recommendation, but disagreed with the monetary impact. The vice president, Delivery and Post Office Operations, stated that virtually all route adjustments should be completed using the COR system, with the exception of routes where using the system would not be conducive to making the adjustments. Area management stated that they have been emphasizing and will continue to emphasize maximizing the use of the COR system to perform route adjustments. Additionally, Southern and Eastern Area management stated they will issue letters by July 13 and August 1, 2012, respectively, to districts to further emphasize using the COR system and serve as policy reminders. However, Great Lakes Area management disagreed in part with the recommendation, stating that the COR system can only be used in zones in delivery units using the DOIS.

Management disagreed with the monetary impact. Specifically, management stated the cost savings assumed that all routes could be adjusted using COR, with no consideration of preparation and formal route inspection costs, and that routes previously adjusted with COR should reduce estimated cost savings. Further, management stated that FY 2012 and FY 2013 projected savings should be reduced as the number of COR adjustments increase and that overtime rates inflated the potential savings. Additionally, Pacific Area management stated that the number of routes used to calculate cost savings for their area was incorrect.

For recommendation 3, management agreed with the finding and recommendation. Management stated that cross-training COR technicians in both the data preparation and route adjustment processes would be beneficial. Management stated that technicians familiar with both processes are more productive and tend to make fewer errors. Management has conducted and will continue to conduct train-the-trainer classes at the district level to ensure there are adequate trained resources available to complete route adjustments, with training sessions scheduled later in 2012 and FY 2013.

Regarding recommendation 4, the vice president, Delivery and Post Office Operations, disagreed with the finding and recommendation. Management stated that inserting references to the COR system in Handbooks M-39 and M-41 is not necessary. COR is an accepted management tool for route adjustments that is consistent with all adjustment procedures in these handbooks. Management stated they did not recognize when district management does not use COR since the tool is not being mentioned by name in the handbooks as legitimate. See [Appendix C](#) for management's comments, in their entirety.

Evaluation of Management's Comments

The OIG considers management's comments responsive to recommendations 1, 2, and 3 and management's corrective actions should resolve the issues identified in the report. However, we do not consider management's comments to be responsive to recommendation 4.

The vice president, Engineering Systems, disagreed with recommendation 1, but provided alternative actions that should correct the deficiency. We acknowledge in the report that management informed the OIG in August and December 2011 that there was no funding for WebCOR. However, management has begun working with Delivery Operations to enhance the COR system with plans for continuous improvements to the system's functionality, which will be funded and delivered in FY 2013.

Management agreed in principle with recommendation 2, but disagreed with the monetary impact. Also, there was a partial disagreement by Great Lakes Area management regarding the belief that the COR system can only be used in zones in delivery units that use DOIS. We agree and our audit only included zones with 10 or more motorized routes in delivery units that use DOIS.

Regarding the monetary impact:

- Our calculations included the number of routes not adjusted using the COR system in DOIS units with 10 or more motorized routes for the period ending February 29, 2012.¹⁵ Per the JARAP, formal route inspections were not required. We recognize route adjustments were ongoing, therefore additional routes may have been adjusted after our cut-off period.
- Preparatory costs were not a factor because the COR databases had already been prepared for all zones with ten or more routes nationwide and also because this is a one-time investment and the Postal Service can use the databases for all future adjustments.
- Declines in available routes as more adjustments are performed had no bearing on our funds put to better use, because we did not claim savings on performing two route adjustments, but rather the 2-year impact of performing one route adjustment.
- We used the city letter carrier Level 2 annual overtime rate to calculate cost savings because it is the OIG's practice that, when we can eliminate hours but are unable to eliminate full positions, we claim the hours as overtime. Since overtime hours existed in the districts reviewed, reducing the hours worked will reduce that overtime.¹⁶

Regarding recommendation 3, management has conducted and will continue to conduct train-the-trainer classes at the district level to ensure that adequate training resources are available to complete adjustments, with training sessions scheduled later in 2012 and FY 2013.

¹⁵ The number of routes adjusted using COR for the monetary calculation was provided by Postal Service Headquarters

¹⁶ We discussed the monetary impact methodology and dollar amounts during the audit and exit conferences with headquarters and area officials.

The intent of recommendation 4 was to establish standards for using the COR system to perform route adjustments. During our audit, we found inconsistencies in understanding the requirement for COR usage among district management. Inclusion of COR in the Postal Service handbooks could eliminate these misunderstandings and clarify exceptions to COR usage.

The OIG considers recommendations 1, 2, and 3 significant and, therefore, requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. These recommendations should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed.

Appendix A: Additional Information

Background

The Postal Service's mission is to provide the nation with reliable, affordable, universal mail service. Delivering the mail is the largest postal operation and also tends to be labor- and fuel-intensive. In FY 2011, the Postal Service reduced city delivery routes nationally despite an increase of 290,713 city delivery points and mail volume decline. There were nearly 8.3 million fewer delivery workhours used due to route adjustments and effective growth management.

The Postal Service implemented the COR system in October 2005. COR is a computer modeling carrier routing and travel optimization program that uses algorithms to configure compact contiguous routes and determine safe, efficient travel patterns and relays based on actual volume. COR is compatible with DOIS and receives delivery and route adjustment files directly from DOIS to complete route adjustments. The benefits of using COR include reduced workhours and vehicle costs, improved carrier safety, and more accurate route maps and lines-of-travel.

Postal Service Memorandum and the JARAP MOU outlined using the COR system to perform route adjustments to properly align city delivery routes. To adjust routes, management prepare the route information, which includes, ZIP Codes, addresses, geographic or map information, and other pertinent route data from DOIS and puts the information into the COR system to adjust routes. The COR processes the data to consolidate routes, and configure each route's line-of-travel, park points, and route time. Management then reviews COR system results and conducts a street validation to make any corrections, and finalize the route adjustments.

On April 30, 2010, the Postal Service and National Association of Letter Carriers (NALC) signed a route evaluation and adjustment agreement, the JARAP, which provides for evaluation and adjustment of any city route that either party determines should be evaluated. All route evaluation and adjustment decisions are made jointly by teams composed of NALC and Postal Service representatives. Additionally, on March 22, 2011, the Postal Service and NALC updated, signed, and reissued the JARAP MOU agreement for continued use through 2011.

The Postal Service uses GPS technology in some of its delivery operations to help delivery managers monitor and manage the city delivery street function and enhance the street management activity. GPS technology uses a web-based program with input from GPS data collection devices installed in Postal Service vehicles. The information is collected and sent to the web-based program that provides graphical and report information by vehicle and fleet summaries. GPS data collection is performed with existing Postal Service policy and procedures for street management.

Objective, Scope, and Methodology

Our objective was to review the Postal Service's use of the COR system to adjust and consolidate routes. We also reviewed the Postal Service's use of GPS with the COR system.

To accomplish our objective we:

- Reviewed applicable documentation, policies, and procedures such as: Handbook M-39 and Handbook M-41; Memorandums of Agreement and MOUs between the Postal Service and NALC regarding the Route Adjustment Process; and a headquarters policy memorandum regarding the COR system and route adjustments.
- Obtained and analyzed COR data for city carrier routes compiled by Postal Service Headquarters officials in the selected districts.¹⁷
- Obtained and analyzed data for districts and delivery zones from the COR system and DOIS.
- Judgmentally selected three districts from each of the seven Postal Service areas and reviewed all zones with 10 or more city routes in each district.
- Conducted meetings with headquarters and area officials.
- Conducted site visits and interviewed district officials.
- Interviewed appropriate delivery operations managers at the areas and in the districts to obtain information on the policies and procedures for performing carrier route adjustments and supporting performance documentation.

We conducted this performance audit from August 2011 through August 2012 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit 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 Postal Service Headquarter officials on March 21, 2012, and with area management officials from March 23 to 26, 2012, and included their comments where appropriate.

We assessed the reliability of COR adjustment data by reviewing existing DOIS and COR-adjusted data and obtaining verification of route adjustments performed by

¹⁷ COR data for the period ending February 29, 2012.

headquarters personnel. We determined that the data were sufficiently reliable for the purposes of this report.

Prior Audit Coverage

Report Title	Report Number	Final Report Date	Monetary Impact	Report Results
<i>Global Positioning System: End-to-End Platform and Actionable, Robust Reports Needed to Achieve Goals and Potential Return-on-Investment</i>	DR-MA-11-003	9/30/2011	None	GPS technology has been implemented on only 3 percent of delivery vehicles and not on trucks that transport mail. Existing GPS has helped in street management and anecdotally curtailed negative behavior and provided a basis for return-on-investment. However, the Postal Service could develop an end-to-end, single-sourced GPS platform and back-office accountability for its entire fleet with a focus on cost savings. Management generally agreed with the findings and recommendations.
<i>Use of the Carrier Optimal Routing System</i>	DR-AR-10-001	10/15/2009	\$323,158,121	While the Postal Service completed 15,634 routes using the COR system, it did not complete an additional 39,237 routes in the 32 districts reviewed. We also found that only three of the 32 districts reviewed were able to provide information on route mileage changes. Management generally agreed with our findings and recommendations; however, three of the six areas reviewed did not agree with the potential monetary impact.

Appendix B: Monetary Impact

We estimated more than \$257,958,873 over 3 years in questioned costs for the 63,505 routes not adjusted with the COR system and funds put to better use in 47 districts.

Recommendation	Impact Category	Amount
2	Questioned Costs ¹⁸	\$84,446,027
2	Funds Put to Better Use ¹⁹	\$173,512,846
Total		\$257,958,873

We estimated the total monetary impact by each area and district for 3 years, from FYs 2011 through 2013. See Tables 5 and 6, respectively.

Table 5. Area Monetary Impact²⁰

Area	Questioned Costs in FY 2011	Funds Put to Better Use in FY 2012	Funds Put to Better Use in FY 2013	Total Monetary Impact Over 3 Years
Capital Metro	\$8,498,031	\$8,715,601	\$8,745,464	\$25,959,097
Eastern	14,592,707	14,966,315	15,017,595	44,576,617
Great Lakes	24,597,264	25,227,013	25,313,449	75,137,726
Northeast	13,411,642	13,755,012	13,802,142	40,968,796
Pacific	11,856,225	12,159,773	12,201,436	36,217,433
Southwest	4,454,734	4,568,785	4,584,440	13,607,959
Western	7,035,425	7,215,549	7,240,272	21,491,246
Total	\$84,446,027	\$86,608,049	\$86,904,797	\$257,958,873

¹⁸ Unnecessary, unreasonable, unsupported, or an alleged violation of law, regulation, contract, costs. May be recoverable or unrecoverable and usually a result of historical events.

¹⁹ Funds that could be used more efficiently by implementing recommended actions.

²⁰ Figures may vary due to rounding.

Table 6. District Monetary Impact²¹

District	Annual Savings FY 2011	Annual Savings FY 2012	Annual Savings FY 2013	Totals for 3 Years
Alabama	\$631,241	\$647,402	\$649,620	\$1,928,263
Albany*	229,335	235,207	236,012	700,554
Appalachian	278,019	285,137	286,114	849,271
Arizona	913,404	936,789	939,999	2,790,192
Arkansas*	251,916	258,366	259,251	769,533
Atlanta	771,908	791,671	794,383	2,357,962
Baltimore	739,590	758,525	761,124	2,259,239
Central Illinois	5,804,019	5,952,616	5,973,011	17,729,645
Central Pennsylvania*	293,143	300,648	301,678	895,469
Chicago*	5,746,840	5,893,973	5,914,168	17,554,982
Cincinnati	2,208,204	2,264,739	2,272,499	6,745,442
Colorado/Wyoming	1,914,854	1,963,879	1,970,608	5,849,340
Connecticut Valley	2,308,680	2,367,788	2,375,901	7,052,369
Dallas*	1,232,442	1,263,996	1,268,327	3,764,765
Detroit*	5,333,333	5,469,879	5,488,621	16,291,833
Gateway*	268,490	275,364	276,307	820,161
Greater Boston	2,659,001	2,727,078	2,736,422	8,122,501
Greater Indiana	1,004,558	1,030,277	1,033,807	3,068,641
Greater Michigan	1,227,885	1,259,322	1,263,636	3,750,843
Greater South Carolina*	42,055	43,132	43,280	128,467
Greensboro	3,930,391	4,031,019	4,044,830	12,006,240
Hawkeye*	335,612	344,205	345,384	1,025,201
Kentuckiana	266,004	272,814	273,749	812,567
Lakeland	5,212,140	5,345,583	5,363,899	15,921,622
Long Island*	2,857,675	2,930,839	2,940,881	8,729,395
Los Angeles*	6,096,126	6,252,201	6,273,623	18,621,950
Mid-Carolinas*	1,256,888	1,289,068	1,293,484	3,839,440
Mississippi	52,414	53,755	53,940	160,109
Nevada/Sierra	197,638	202,698	203,393	603,729
North Florida	34,804	35,695	35,818	106,317
Northern New England	233,271	239,243	240,063	712,578
Northern New Jersey*	5,123,679	5,254,858	5,272,862	15,651,399
Northern Ohio	1,662,109	1,704,663	1,710,504	5,077,275
Northern Virginia	430,081	441,092	442,603	1,313,776
Northland*	2,323,182	2,382,661	2,390,825	7,096,668
Philadelphia Metro*	4,704,371	4,824,814	4,841,346	14,370,531
Richmond*	1,327,118	1,361,096	1,365,759	4,053,973
Rio Grande*	964,989	989,695	993,086	2,947,769
Salt Lake City	451,005	462,552	464,136	1,377,693
San Francisco*	1,340,998	1,375,331	1,380,044	4,096,373
Seattle*	899,731	922,766	925,928	2,748,424
Sierra Coastal*	4,419,101	4,532,240	4,547,769	13,499,110
South Florida	603,895	619,356	621,478	1,844,729
South Jersey*	1,173,400	1,203,441	1,207,565	3,584,406
Suncoast	683,033	700,520	702,920	2,086,473
Tennessee	165,113	169,340	169,920	504,373
Western New York	3,842,345	3,940,718	3,954,220	11,737,283
TOTALS	84,446,027	86,608,049	86,904,797	257,958,873

²¹ Figures may vary due to rounding. The asterisk identifies districts reviewed in COR Phase I.

Notes:

- We calculated questioned costs using the estimated total average hours that could be reduced per day on routes in the 47 reviewed districts that had not been adjusted using the COR system multiplied by the city letter carrier Level 2 annual overtime rate for FY 2011.
- We calculated funds put to better use for FYs 2012 and 2013 using the city letter carrier Level 2 annual overtime rate for FYs 2012 and 2013.
- The escalation factor from FYs 2011 to 2012 is \$0.68 cents.
- The escalation factor from FYs 2012 to 2013 is \$0.09 cents.

We based the escalation factor on the Postal Service's National Average Labor Rates Table, FY 2011 Actual, FYs 2012 and 2013 Projection.

Appendix C: Management's Comments

RICHARD P. ULUSKI
VICE PRESIDENT, AREA OPERATIONS
NORTHEAST AREA



July 3, 2012

Lucine Willis
Director, Audit Operations
1735 North Lynn Street
Arlington, VA 22209-2020

SUBJECT: Transmittal of Draft Audit Report – Carrier Optimal Routing System Phase II
(Report Number DR-AR-12-DRAFT)

We have reviewed the above-referenced report, including the two recommendations to the Area Vice Presidents as they apply to the Northeast Area. While the Northeast Area is in agreement with the recommendations, we do not concur with the findings. Specifically, we are not in agreement with the identified savings opportunity of \$40,968,796 over three years. The methodology used in the analysis has the following issues:

- The analysis does not include any costs incurred for data prep in the use of COR.
- The COR program will not provide the same savings across route structure. The savings on a curb line and some foot routes utilizing COR are minimal. In addition, it "assumes all routes" not yet adjusted offer the same opportunity in savings.
- The methodology used considers only potential savings and not the costs of performing formal count and inspections (currently the only way to utilize COR).
- All potential savings calculated utilizing level 2 carriers at the OT rate which inflates the actual potential savings.
- Routes adjusted while implementing FSS and utilized COR are included in the potential savings and should not be.

Recommendation #2

Re-emphasize performing route adjustments using the Carrier Optimal Routing system to achieve an annual economic impact of more than \$84 million.

Response:

The Northeast Area generally concurs with this recommendation and has and will continue to provide direction that we need to maximize the use of COR. Not all routes (such as VIM, curb and some foot routes) offer savings with COR. Also, zones that are currently not in DOIS could not be adjusted with COR. In addition, as stated above, currently the only

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opportunity to leverage COR would be during a formal count and inspection and these costs are not included in the analysis.

Action:

The Northeast Area will continue to track and monitor all route adjustments.

Recommendation #3

Cross-train existing and additional personnel in both Carrier Optimal Routing system database preparation and route adjustment processes to ensure the availability of adequately trained resources.

Response:

The Northeast Area is in agreement with this recommendation.

Action:

The Northeast Area with support from Delivery Programs at headquarters has provided on-site training to all Northeast Area districts with the exception of New York and Caribbean where the tool has minimal opportunity for use. This training will be offered again in a train-the-trainer format this Fall to ensure all Districts have the expertise for maximizing the use of COR.

The Northeast Area has no issues with FOIA release once the potential savings have been addressed.



Richard P. Uluski

SYLVESTER BLACK
VICE PRESIDENT, WESTERN AREA OPERATIONS



July 3, 2012

Lucine M. Willis
Director, Audit Operations
1735 North Lynn Street
Arlington, VA 22209-2020

SUBJECT: Transmittal of Draft Audit Report - Carrier Optimal Routing System Phase II
(Report Number DR-AR-12-DRAFT)

We have reviewed the above referenced report, including the recommendations to the Area Vice Presidents as they apply to the Western Area. The Western Area is in agreement with the recommendations although we do not agree with the findings. We do not agree with the identified savings opportunity of \$21,491,246 over three years based on the following:

- The COR program will not provide the same savings across route structure.
- Once a zone has been optimized during the initial COR adjustment, any subsequent route adjustments on that zone do not offer the same COR savings.

Recommendation #2

Re-emphasize performing route adjustments using Carrier Optimal Routing system to achieve an annual economic impact of more than \$84 million.

Response:

The Western Area has always emphasized the use of COR during route adjustments and will continue to provide direction that we need to maximize the use of COR. Any deviation from the use of COR will need to be approved by the Manager, Delivery Programs.

Recommendation #3

Cross-train existing and additional personnel in both Carrier Optimal Routing system database preparation and route adjustment processes to ensure the availability of adequately trained resources.

Response:

The Western Area has conducted numerous COR training classes over the past few years in both COR data prep or COR route adjustments. These training classes have been train-the-trainer classes as each District is tasked with conducting training within their District to ensure they have the trained resources needed to complete adjustments.

A handwritten signature in black ink, appearing to read "Sylvester Black".

Sylvester Black

cc: Shaun E. Mossman
Alan B. Catlin
Steve J. Juhl

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DREW T. ALIPERTO
VICE PRESIDENT, PACIFIC AREA OPERATIONS



July 3, 2012

Lucine Willis
Director, Audit Operations
11735 North Lynn Street
Arlington, VA 22209

Subject: Response to Draft Audit Report Carrier Optimal Routing System Phase II
(Report Number #DR-AR-12-DRAFT)

We have reviewed the above-referenced our response for the two recommendations applies for the Pacific Area Operations. While the Pacific Area is in agreement with the recommendations, we do not concur with the findings. Specifically we are not in agreement with the identified savings opportunity of \$ 36,217, 433 over 3 years.. The methodology used in the analysis has the following issues:

- The analysis does not include any costs for the data prep in the use of COR. This is an extensive manual process.
- The analysis assumes the same savings on every route no matter the mode of deliveries or the number of deliveries per route.
- The potential savings was calculated on utilizing level 2 carriers at the OT rate which inflates the actual savings.
- The number of routes in the savings calculation for the Pacific Area is not correct.
- The report reflects opportunity on 3986 routes, however the sum is 2526 routes that are not currently mapped in COR.

Recommendation #2

Re-emphasize performing route adjustments using the Carrier Optimal Routing system to achieve an annual economic impact of more than \$84 million.

Response:

The Pacific Area generally agrees with the recommendation and will continue to provide direction and oversight on the use of COR to maximize route adjustment savings.

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Action:

The Pacific Area will provide direction, support and oversight for route adjustments.

Recommendation #3

Cross-train existing and additional personnel in both Carrier Optimal Routing system database preparation and route adjustment processes to ensure the availability of trained resources.

Response:

The Pacific Area is in agreement with this recommendation.

Action:

COR training will be offered in the train the trainer format in fy2013 in the Pacific Area.

The Pacific Area has no issues with FOIA release once the potential savings have been addressed.



Drew T. Aliperto

cc: Dean Granholm, Vice President, Delivery and Post Office Operations
Belinda Olson/A, MOS, Pacific Area
Cynthia Larson, Manager Delivery Programs Support, Pacific Area
Sally K. Haring, Corporate Audit and Response Management

JO ANN FEINDT
VICE PRESIDENT, SOUTHERN AREA OPERATIONS



July 5, 2012

Lucine M. Willis
Audit Operations
Office of Inspector General

SUBJECT: Draft Audit Report – Carrier Optimal Routing System Phase II
(Report Number DR-AR-12-DRAFT)

Thank you for providing the Southern Area with the opportunity to review and respond to this Draft report. As specified in the report, I will attempt to address the three topics that you requested; findings, recommendations, and monetary impact.

In the audit the data shows the Postal Service adjusted 28,116 routes in 47 districts were adjusted in COR. During much of this time, the Postal Service has been under some type of joint route adjustment process that has been negotiated at the national level with the NALC. While the agreement does state “when available COR will be used” as this audit specifies but there have been limitations in getting all routes adjusted in COR.

Recommendation 2:

Re-emphasize performing route adjustments using Carrier Optimal Routing system to achieve an annual economic impact of more than \$ 84 Million.

Management Response:

We agree that utilizing COR in future Route Count and Inspections will be beneficial in capturing savings. A letter will be sent to all District Managers within the Southern Area reminding them of this Organizational commitment to utilize the COR system.

A letter to all Southern Area District Managers to ensure COR is utilized for further route adjustments will be issued by July 13, 2012.

The responsible manager is Scott Hooper, Manager Delivery Programs Support.

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Recommendation 3:

Cross-Train existing and additional personnel in both Carrier Optimal Routing system database preparation and route adjustment processes to ensure availability of adequately trained resources.

Management Response:

We agree to continue to train personnel in the Carrier Optimal Routing System in both database preparation and route adjustment processes. However, it must not be outlined as the only method for formal adjustments. As you have pointed out in your audit; software, data prep, and trained personnel are issues that prevent 100% of routes being adjusted in COR. Should this be required as the only method for formal adjustment, fewer adjustments may be made restricting the ability of the Postal Service to capture savings from volume loss.

A letter requesting the names of all current and future District personnel who are trained or require to be trained will be sent to the Southern Area District Managers. The training of additional personnel will be completed by Qtr4, FY 2012.

The responsible manager is Scott Hooper, Manager Delivery Programs Support.

This audit provides a monetary impact of \$257,958,873 from FY11 through FY13 for potential savings on routes not adjusted in COR. The data to support this number was not included in the report; however, it doesn't appear that COR route adjustments for FY 12 and FY13 were factored into the calculation. If the Postal Service continues to adjust routes in COR this FY and beyond wouldn't the unquestioned costs be reduced as the number of COR adjustments increase. According to the charts, the costs go up each year not down.

Should you have any questions regarding this response or need additional data from the Southern Area please contact Scott Hooper, Manager Delivery Programs at 214-819-8671.

We have no FOIA issues with this report.



Jo Ann Feindt

cc: Manager, Operations Support
Manager, Delivery Programs Support
Manager, Corporate Audit and Response Management

JORDAN M. SMALL
VICE PRESIDENT, AREA OPERATIONS
EASTERN AREA



July 13, 2012

MEMORANDUM FOR LUCINE M. WILLIS, DIRECTOR, AUDIT OPERATIONS

SUBJECT: REVISED RESPONSE
Carrier Optimal Routing System Phase II
Project Number: 11XG040DR000
Report Number: DR-AR-12-DRAFT

The Eastern Area has reviewed the subject Draft Audit Report (Project Number 11XG040DR000) and is adding to its July 6th response to address the monetary impacts stated in the audit.

The Eastern Area is not in agreement with the methodology utilized in determining the Total Monetary Impact of \$44,576,617.00 over three years.

Specific concerns with the methodology utilized are as follows:

- The savings calculated utilizing Carrier Level 2 Annual OT rate for FY11 is not representative and inflates the potential savings.
- Route Structures and Methods of Delivery determine COR savings and the relative Route Reductions. The methodology utilized assumes each route will realize the same savings based on COR adjustments.
- Offices with one to two routes do not have the opportunity with COR in terms of potential savings compared to larger park and loop offices.
- The Offices in many Districts listed in the OIG Transmittal of Draft Audit Report include routes of this nature.
- During FY11 the methodologies used in determining questionable costs did not take into consideration the Joint JARAP process defining Management and

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NALC agreement to adjust routes utilizing COR. The NALC had to agree to the use of COR for adjusting routes.

- The methodology does not consider what the current savings are on routes that were not COR adjusted when calculating FY12 and FY13. There is no offset to the monetary impact based on work hours saved to base on routes not COR adjusted.

The Eastern Area is in agreement with recommendations 2 and 3 as identified below.

Recommendation 2

The Vice Presidents of Area Operations re-emphasize performing route adjustments using the COR system.

Management Response/Action Plan

Management agrees with this recommendation. A letter will be issued from the desk of the Area Vice President to the District Managers restating the Area policy for the mandatory use of COR route adjustments. Requests for an exception must be submitted in writing to the Area Manager of Delivery Programs Support along with proper justification. The Manager of Delivery Programs Support will review the request and issue a written decision back to the district.

Targeted Implementation Date

August 1, 2012

Responsible Official:

Marie Myers, Manager Delivery Programs Support, Eastern Area

Recommendation 3

The Vice Presidents of Area Operations provide cross-training to include database preparation and route adjustment processes.

Management Response/Action Plan

Management agrees with the benefits of providing cross-training to field users. The Eastern Area will roll out COR training to the districts utilizing the training format previously developed by Headquarters Delivery Programs. Districts will identify skilled Subject Matter Experts (SME) who will serve as trainers for their respective districts. The Area Delivery Programs group will prepare the trainers and provide the necessary training materials. Trainers will then provide training to selected audiences within each district. Training will be broken down into two four day sessions. The first session will provide training in data base preparation and the second session will provide training on the route adjustment process.

Targeted Implementation Date

September 2012

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Responsible Official:

Marie Myers, Manager Delivery Programs Support, Eastern Area

This report has no exemptions under the Freedom of Information Act.

for 
Jordan M. Small

cc: Dean J. Granholm, Vice President, Delivery and Post Office Operations
Michael J. Amato, Vice President, Engineering Systems
Joshua D. Colin Ph.D., Manager Operations Support, Eastern Area
Marie Myers, Manager Delivery Programs Support, Eastern Area

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JACQUELINE KRAGE STRAKO
VICE PRESIDENT
GREAT LAKES AREA OPERATIONS



July 6, 2012

LUCINE M. WILLIS
DIRECTOR AUDIT OPERATIONS
OFFICE OF INSPECTOR GENERAL

SUBJECT: Response to Draft Audit Report – Carrier Optimal Routing System
Phase II (Report Number DR-AR-12-DRAFT)

The following is in response to the recommendations made pertaining to the Draft Audit Report – Carrier Optimal Routing System Phase II (Report Number DR-AR-12-DRAFT). Listed below are follow-up responses to the recommendations.

Recommendation 2:

We recommend the Vice President, Area Operations, require district managers to: Re-emphasize performing route adjustments using the Carrier Optimal Routing system to achieve an annual impact of more than \$84 million dollars.

Response:

The Great Lakes Area agrees, in part, with this recommendation. We recognize the savings potential associated with the use of Carrier Optimal Routing (COR) when performing route adjustments and have emphasized the importance of capturing the savings associated with Carrier Optimal Routing.

We disagree however, that COR can be used in all cases. For example, COR cannot be used in those offices where Delivery Operation Information System (DOIS) is not being utilized.

We also disagree with the potential savings associated with this report. The assumptions used do not take into account any of the costs associated with the review, analysis, consultation, and implementation of adjustments. The estimated savings are based on overtime costs only. While there would some overtime savings, base routes are established to create a normal 8-hour day at straight hours. The only overtime savings would be generated on relief to routes that were found to be overburdened.

We disagree with the report's assumption that all routes that are not currently adjusted in COR could be reviewed, analyzed, and adjusted in the same time period.

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Recommendation 3:

Cross-train existing and additional personnel in both Carrier Optimal Routing system database preparation and route adjustment process to ensure the availability of adequately trained resources.

Response:

The Great Lakes Area agrees that adequate personnel need to be trained. The Great Lakes Area has provided and documented classroom training to more than 270 individuals on COR database preparation and COR route adjustments since COR was launched in 2005. The Great Lakes Area sponsored a "train the trainer" class in July 2011 to provide 36 of our COR subject matter experts the tools necessary to conduct additional training as needed at the local level. Those trainers have trained an additional 80 people locally on COR database preparation and COR route adjustments in the past year.

Leveraging COR is a major emphasis of the Great Lakes Area. In spring 2012 Formal Route Count and Inspections, COR was utilized 80% of the time in the final route adjustment process. Those routes not adjusted by COR were because:

1. The unit was not a DOIS location.
2. Current addressing (Fire Protection District Numbers) is not recognized in COR.

We recognize the importance of periodically adjusting city delivery routes to establish safer, more efficient routes; and to reduce work hours, vehicle mileage, and delivery costs. COR will be utilized for adjusting city routes in those instances where data and the infrastructure to conduct the adjustments exist.

If you have any questions, please contact Larry Diegel, Area Manager, Delivery Programs Support at 630-539-5335.



Jacqueline Krage Strako
Vice President, Great Lakes Area Operations

cc: Dean Granholm, Vice President, Delivery and Post Office Operations
Ron Woodall, Area Manager, Operations Support
Larry Diegel, Area Manager, Delivery Programs
Manager, Corporate Audit Response Management

AREA VICE PRESIDENT
CAPITAL METRO AREA OPERATIONS



July 6, 2012

Lucine M. Willis
Director, Audit Operations

SUBJECT: Draft Audit Report – Carrier Optimal Routing System Phase II
Report Number DR-AR-12-Draft

Thank you for the opportunity to respond to the recommendations from your Carrier Optimal Routing (COR) system audit. The Capital Metro leadership reviewed your report and agrees with your recommendations. I have included below our responses to the recommendations directed to the Vice Presidents of Area Operations.

Recommendation 1 was addressed by the Vice President, Engineering Systems.

Recommendation 2:

Re-emphasize performing route adjustments using the Carrier Optimal Routing system to achieve an annual economic impact of more than \$84 million.

Management Response:

The Capital Metro Area agrees with this recommendation. It is the policy of the Capital Metro Area to use COR for all City route adjustments. In the past couple of years, we have emphasized the benefit of using COR for route adjustments and assisted our Districts in building a cadre of COR technicians. As a result, during this Spring's route inspection and adjustment process, nearly 80 percent of the units where we did inspections were adjusted using COR. The exceptions were virtually all in one District, caused by poor COR data preparation procedures.

As we prepare for route inspections during FY2013, we continue to emphasize the need to commit resources and build our COR skills and experience. We are in the process of scheduling additional COR training this Summer and again in the Winter. We will devote a special effort to ensure that all our Districts have the necessary competencies to use COR effectively.

Implementation Date:

Ongoing

Responsible Official:

Jeff Lewis, Manager, Delivery Programs Support

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- 2 -

Recommendation 3:

Cross-train existing and additional personnel in both the Carrier Optimal Routing system database preparation and route adjustment processes to ensure the availability of adequately trained resources.

Management Response:

The Capital Metro Area agrees with this recommendation. The Capital Metro Area wants each of our COR technicians to be trained in both the COR data preparation and the COR route adjustment processes. In our experience, COR techs who are familiar with both processes are more productive and make fewer errors. Additionally, they provide the Districts with more flexibility. Initially, we allowed Districts to have techs trained in only one process. Our current training process encourages developing techs to understand and be able work with the full COR functionality.

Implementation Date:

Ongoing

Responsible Official:

Jeff Lewis, Manager, Delivery Programs Support

Recommendation 4 was addressed by the Vice President, Delivery and Post Office Operations.

The data provided in this audit is insufficient to allow us to verify the conclusions on monetary impacts as described in Appendix B. However, we do agree that the use of COR significantly reduces workhour and vehicle costs.

The Capital Metro Area did not identify any portions of this draft report and management's response that contain information that should be exempt from disclosure under the FOIA.



David C. Fields

MICHAEL J. AMATO
VICE PRESIDENT
ENGINEERING SYSTEMS



July 9, 2012

LUCINE M. WILLIS
DIRECTOR, AUDIT OPERATIONS

SUBJECT: DRAFT – Carrier Optimal Routing System Phase II (Report Number DR-AR-12-DRAFT)

Thank you for the opportunity to review and comment on the subject draft audit report.

Recommendation:

We recommend the vice president, Engineering Systems:

1. Continue to pursue funding to resolve performance issues with the Web Carrier Optimal Routing system and implement the web-based program nationwide.

Response:

We disagree with the recommendation to pursue funding to resolve performance issues with webCOR. Development on webCOR was discontinued in 2011. The webCOR application was developed and tested, but could not deliver the required performance or response time due to the architectural constraints of the operating environment that was established. As such, we have been working with delivery to make substantive improvements in the existing COR application. The first phase of enhancements will be completed at the end of this fiscal year, with additional functionality to be funded, developed and delivered in FY2013. The organization will be able to achieve the same benefits expected from webCOR through the improvements to COR that are currently in progress. This information was previously provided to the OIG for consideration in August of 2011, and again in December 2011, though it is not noted or incorporated in the findings or recommendations.

Freedom of Information Act (FOIA)

We consider the information pertaining to the solutions developed for both COR and WebCOR to be sensitive in nature and may contain proprietary or other business information that may be exempt from disclosure under 39 USC 410© (2) of the Freedom Of Information Act (FOIA). Allowing the information about these applications, the processes used to optimize routes, or the actual routing information to be released to the general public could compromise the security of our carriers, and potentially, the security of the mail left after carriers effect delivery. Identification of route information, route optimization techniques and anything that is specific to route sequence or scheduling should be redacted in its entirety from the final report in response to any FOIA requests and removed prior to any publication of the report outside the Postal Service, including any electronic internet posting.

If you have any questions, please contact Victoria K. Stephen, manager, Delivery and Retail Technology at (703) 280-7304.

A handwritten signature in black ink, appearing to read "Michael J. Amato".

Michael J. Amato

cc: Ms. Haring
Ms. Stephen

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DEAN J. GRANHOLM
VICE PRESIDENT
DELIVERY AND POST OFFICE OPERATIONS



July 10, 2012

Lucine M. Willis
Director, OIG Audit Operations
1735 North Lynn St
Arlington, VA 22209-2020

SUBJECT: Draft Audit Report – Carrier Optimal Routing System Phase II (Report Number DR-AR-12-Draft)

Thank you for the opportunity to review and comment on this subject draft audit report.

Overall, we concur with your conclusions that the Carrier Optimal Routing (COR) System brings exceptional opportunities to reduce delivery costs to the U S Postal Service (USPS) by consolidating city carrier routes and creating more efficient lines of travel. We also agree that virtually all route adjustments should be completed utilizing the COR system. There are certain routes, mostly vertical/high rise routes for example, that are not conducive to using COR.

However, we do not agree that reviving the development of the web-based COR system (WebCOR) is of significant value to the U S Postal Service. While there are some limited benefits from using a web-based system, the disadvantages far outweigh the benefits. The costs for further development are prohibitive and the increased time required in WebCOR to perform route adjustment functions and develop the carrier's travel path could reduce the number of users of this important software. In addition, the costs for re-training current COR users in a new system would be detrimental to USPS at this time.

We do agree that there are several changes that could be made to the current COR software that would increase both the use and quality of the system and they would greatly decrease the operating system errors. We have submitted to our IT engineering portfolio manager a Statement of Work to make changes to the current system and we have completed an IT Technical Requirements document for those changes. These changes include tracking mileage before and after the COR adjustments.

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We understand that there are still some Districts that find the COR system difficult to use, but many Districts complete all adjustments using COR with no difficulties. Those Districts reporting that it is not user friendly are frequently the ones that have used it the least and who have the least number of employees trained to use the software. Additional training and the successful use of the system should allay these concerns. We also feel it is not a valid excuse for those Districts claiming the reason for not using COR is due to this tool not being specifically mentioned in the M-39 Handbook.

We agree that the initial database preparation is somewhat labor intensive, but it is a one-time investment that is worth making since the databases can be utilized in perpetuity for all future adjustments. In addition, COR databases have already been prepared for all zones with ten or more city delivery routes nationwide so this should no longer be an issue.

We do not agree with the \$84 million annual cost reduction figure used for over 63,000 routes not using COR in their last route adjustments. The OIG data did not indicate if any of these units had used COR in previous route adjustments. COR savings could be reduced significantly after the initial adjustment using this program, and as indicated earlier, not all routes are candidates for COR usage. This savings figure also does not take into account any of the preparatory cost these units would encounter in preparing for and implementing COR adjustments. We also disagree with using an overtime factor as a basis to determine savings with this program.

Following is the response to your recommendations to the Vice President, Delivery and Post Office Operations.

Recommendation 4

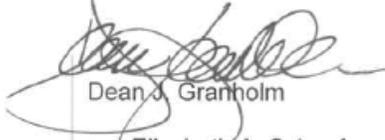
We recommend that the Vice President, Delivery and Post Office Operations:

4. Update Postal Service Handbook M-39, Management of Delivery Services and Postal Service Handbook M-41, City Delivery Carriers Duties and Responsibilities, to establish standards for using the Carrier Optimal Routing system to perform route adjustments.

Response:

Delivery Operations does not agree with this recommendation. Inserting references to the COR system in these handbooks is not necessary. COR is an accepted management tool for route adjustments that is consistent with all adjustment procedures in the M-39 and M-41 Handbooks. All proper union notification with this

program has been completed. We do not recognize the non-use of COR by district managers due to absence of this program by name in existing handbooks as legitimate.



Dean J. Granholm

cc: Elizabeth A. Schaefer
Philip K. Knoll
Deborah Giannoni-Jackson
Corporate Audit and Response Management