January 25, 2006

LAWRENCE K. JAMES
MANAGER, RIO GRANDE DISTRICT

SUBJECT: Audit Report – Address Management System – Southwest Area,
Rio Grande District (Report Number DR-AR-06-001)

This is one of a series of audit reports on the Postal Service's Address
Management System (AMS). This report presents the results of our self-initiated
audit of the AMS in the Southwest Area, Rio Grande District (Project Number
05YG023DR000). The information in this report will be included in a nationwide
capping report assessing AMS. Our objective was to assess the Postal Service's
management of delivery/AMS quality review results to ensure address
information is correct and complete to effectively process and deliver the mail in
the Southwest Area, Rio Grande District.

Postal Service officials in the Southwest Area, Rio Grande District, can
implement best management practices from the New York Metro Area, New York
City District, to improve the quality of AMS data. Approximately 106,444 AMS
data errors may exist in the Rio Grande District because street reviews are not
conducted for some routes. AMS officials did not use available district resources
(such as delivery supervisors) to conduct additional street reviews. Currently, the
Rio Grande District's AMS quality review program — administered by local AMS
officials — does not include street reviews using delivery supervisors, only AMS
staff. The Rio Grande District could incur processing and delivery costs of
$988,945 over the next 10 years because of the remaining AMS errors. We will
report $988,945 of funds put to better use in our *Semiannual Report to Congress*.
We recognize the Rio Grande District has experienced success with Delivery
Point Sequencing (DPS), as the district has produced one of the highest DPS
volumes in the Postal Service; however, a decrease in AMS data errors will
reduce operating costs.

We recommended providing training in AMS quality street reviews to all delivery
supervisors or appropriate designees. We also recommended establishing an
annual district schedule of AMS quality street reviews and direct delivery
supervisors or appropriate designees to review delivery routes annually. Finally,
we recommended the AMS office establish a tracking system for street reviews.

Management agreed with our findings and recommendations and the
$988,945 in funds put to better use. Management stated they are developing an
AMS Street Review Training DVD for distribution to all delivery offices throughout

the district. Management also stated they are implementing a program to review 700 routes per year beginning in fiscal year 2006. In addition, management will implement a tracking system to monitor route reviews completed and errors detected. Management's comments and our evaluation of these comments are included in the report. Management's actions taken and planned are responsive to the recommendations and should correct the issues identified in the findings.

The U.S. Postal Service Office of Inspector General (OIG) considers recommendations 1 through 3 significant, and requires OIG concurrence before closure. The OIG considers the support provided by management detailing corrective actions, in response to this report, to be sufficient to close the recommendations.

We appreciate the cooperation and courtesies provided by your staff during the audit. If you have any questions or need additional information, please contact Rita Oliver, director, Delivery and Retail, or me at (703) 248-2300.

E-Signed by Colleen McAntee
ERIFY authenticity with Approvel
C. McAntee

Colleen McAntee
Deputy Assistant Inspector General
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Attachments

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INTRODUCTION

Background	Address management has become the foundation for how the Postal Service moves mail. Over the years, the Postal Service has been striving to obtain the highest quality address information possible for internal use and for its customers. In March 1993, the Postal Service implemented Delivery Point Sequencing (DPS).[1] DPS is the process of putting barcode mail into the carrier's line of travel (LOT) to eliminate manual mail sorting, improve efficiency, and reduce costs.

In 1994, the Postal Service established the Address Management System (AMS) to capture, correct, and complete address information to enhance the efficiency of mail processing and delivery through automation. Address information in the AMS is captured in sort programs used to process mail in DPS. A sort program developer creates sort programs as part of the Sort Program System (SPS), which is part of the National Directory Support System (NDSS). DPS sort programs are transferred to either a Mail Processing Barcode Sorter (MPBCS) or a Delivery Barcode Sorter (DBCS)[2] for sorting mail into DPS.

Mail that cannot be processed on automated equipment requires manual processing, which is less efficient and is costly to the Postal Service. During the third quarter of fiscal year (FY) 2005, the Postal Service processed 23 billion pieces of mail nationwide, including 18 billion pieces (78 percent) processed on automated equipment and the remaining 5 billion pieces (22 percent) processed manually.

In 2003, the Postal Service outlined a strategy to Enhance Address Quality in its Intelligent Mail Corporate Plan. The strategy includes improving the address database, filling change of address orders, and using Address Change Service. To improve the address database, the Postal Service established a Delivery/AMS quality review program to evaluate the quality of AMS data and meet the goal of 100 percent accurate AMS data nationwide.

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[1] DPS resulted from an agreement in 1992 with the National Association of Letter Carriers (NALC) to change the automation environment.
[2] DPS mail is also sorted on carrier sequence barcode sorters (CSBCS), a type of mail processing equipment (MPE) used by smaller Postal Service facilities.

As part of the quality review program, National Customer Support Center (NCSC) teams annually conduct street reviews of 40 routes at each Postal Service district nationwide. The NCSC team selects 40 city or rural delivery routes based on Postal Service guidelines. For every route selected within a ZIP Code, two alternate routes are selected.

The street reviews include:

- Identifying all possible delivery addresses included in Address Information System products and the NDSS files.

- Validating the number of possible delivery addresses assigned to each carrier route.

- Validating the correct LOT or delivery sequence for each carrier route.

- Assigning ZIP+4 Codes to maximize compatibility with automated equipment.

- Verifying the standardization of addresses according to Publication 28, *Postal Addressing Standards.*

- Reviewing AMS database products to meet the needs and expectations of Postal Service customers.

When a district scores below 98 percent on the street review, the NCSC team will review it every 6 months, and districts scoring from 98 to 100 percent will receive an annual review. Districts scoring 99 percent or higher may receive abbreviated route reviews, at the discretion of area or district officials.

In addition to the NCSC street reviews, AMS district officials conduct street reviews of routes to maintain the accuracy of AMS data. Furthermore, carriers also identify AMS data changes based on their street deliveries. The carriers note address changes in their AMS edit books and submit the information to the AMS district officials for review and correction in the AMS database.

As the Postal Service continues to process increasing volumes of mail on automated equipment, the quality of address information takes on new importance. Use of correct and complete address information can reduce costs to the Postal Service.

Objective, Scope, and Methodology

Our objective was to assess the Postal Service's management of the Delivery/AMS quality review results to ensure address information is correct and complete to effectively process and deliver the mail. We obtained data on the FY 2004 Delivery/AMS quality review from the NCSC to analyze routes reviewed, AMS data errors identified, and performance scores. We selected the Southwest Area, Rio Grande District, and the New York Metro Area, New York City (NYC) District, to perform our site visits, based on the NCSC performance scores identified by Delivery/AMS quality review results.[3]

We obtained and reviewed prior AMS review results for the NYC District, which showed street review performance scores consistently above 99 percent. As a best management practice, we evaluated the feasibility and applicability of the NYC AMS data maintenance program to other Postal Service districts. Our review of the street review performance scores for the Rio Grande District showed they were consistently below 98 percent. At the Rio Grande District, we evaluated the AMS data maintenance process to determine whether the program could be improved. We sampled 203 AMS data errors identified by the NCSC national street review team in FY 2004 and assessed the effectiveness of the Rio Grande District's error correction process.

We conducted this audit from March 2005 to January 2006 in accordance with generally accepted government accounting standards and included such tests of internal controls as we considered necessary under the circumstances. We discussed our observations and conclusions with management officials and included their comments where appropriate. We did not use any computer-generated data to develop our conclusions.

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[3] The Rio Grande District was selected based on its historically low performance scores, and the NYC District was selected based on its historically high performance scores and improvements to the AMS process.

Prior Audit Coverage We did not identify any prior audits or reviews related to the objective of this audit.

AUDIT RESULTS

Address Management System	Opportunities exist for Postal Service officials in the Southwest Area, Rio Grande District, to improve the quality of AMS data by implementing best management practices from the New York Metro Area, NYC District. The Rio Grande District may have 106,444 errors in AMS data because an insufficient number of street reviews were conducted. AMS officials did not utilize available district resources, such as delivery supervisors, to conduct additional street reviews. Currently, the Rio Grande District's AMS quality review program, administered by local AMS officials, does not include conducting the street reviews using delivery supervisors, only AMS staff. In addition, the associate supervisors' training course given to Rio Grande delivery supervisors does not include an AMS review module. The Rio Grande District could incur processing and delivery costs of $988,945 over the next 10 years because of the remaining AMS errors. We will report $988,945 of funds put to better use in our *Semiannual Report to Congress.* (See Appendix A.) The Rio Grande District has experienced success with DPS, as the district has produced one of the highest DPS volumes in the Postal Service. However, a decrease in AMS data errors will reduce operating costs.[4]
Rio Grande District	The Rio Grande District has 4,748 city and rural routes. In FY 2004, the NCSC team reviewed 1 percent (40 of 4,748) of these routes according to Postal Service guidelines. The team identified 927 AMS errors, approximately 23 errors per route. NCSC teams did not review the remaining 99 percent of the routes (4,708 of 4,748). The district received a 96 percent AMS performance score. We reviewed 203 (22 percent) of the 927 errors and found that district officials had corrected all identified errors. In FY 2004, Rio Grande AMS officials reviewed another 2 percent (80 of 4,748) of the routes and identified 1,919 AMS data errors. The district corrected all errors. The Rio Grande District did not review the remaining 97 percent (4,628 of 4,748) of the total routes in the Rio Grande District. Based on FY 2004 NCSC team reviews

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[4] In the third quarter, FY 2005, the Rio Grande District had a DPS mail volume of 83.7 percent. Achieving 80 percent for DPS volume places the district among the highest in the Postal Service. The NYC District had a DPS mail volume of 59.7 percent during the same period.

and the related error rate per route, 106,444 AMS data errors may exist due to not conducting reviews.

Rio Grande AMS officials stated that, although Postal Service policy did not require it, they reviewed the additional 80 routes according to guidelines for the Delivery/AMS national street review program. AMS District officials did not utilize available district resources, such as delivery supervisors, to conduct additional street reviews. Currently, the Rio Grande District's AMS quality review program, administered by local AMS officials, does not include conducting the street reviews using delivery supervisors, only AMS staff.

Rio Grande District officials expressed concerns with the NCSC's use of the AMS route combined score as a performance indicator and their route sampling methodology. Officials stated that the performance score includes AMS errors that do not have an operational cost impact, and an AMS route operational score would more accurately indicate the cost impact of AMS errors on processing and delivering the mail. Officials further stated that the NCSC's random sampling of 40 routes per district location may not accurately account for the district's overall performance. We plan to address these concerns in a capping report to Postal Service Headquarters.

NYC District	The NYC District has 2,300 city routes. In FY 2004, the NCSC team reviewed 2 percent (40 of 2,300) of these routes according to Postal Service guidelines. The team identified 199 AMS errors, approximately five errors per route, and the district received a 99 percent AMS performance score from the street review. The NCSC team did not review the remaining 98 percent of the routes (2,260 of 2,300).

In 1998, the NYC District began an extensive AMS quality review program, administered by local AMS officials, which requires delivery units to complete AMS street reviews using existing staff. As part of the program, NYC District officials added an AMS review module to the associate supervisors' training course given to NYC delivery supervisors. In addition, the NYC AMS office established AMS review schedules for all delivery units' existing staff

and an accountability system that monitors the completion of AMS street reviews conducted by delivery supervisors or their designees. As a result, the NYC District used existing staff to significantly increase its review coverage.

In FY 2004, through the review program, NYC District officials reviewed 2,288 of 2,300 routes, which included routes reviewed by the NCSC. The existing staff reviewed and implemented corrective actions for the AMS errors identified. The goal of the NYC District's program is to review all routes annually. AMS reviews conducted by delivery unit staff are being implemented by all districts in the New York Metro Area, and the program has been very successful. Since its inception, all districts have achieved significant increases in AMS performance scores.

Recommendation	We recommend the manager, Rio Grande District, implement an AMS quality review program similar to the NYC District that includes: 1. Providing training in Address Management System Quality Street reviews to all delivery supervisors or appropriate designees.
Management's Comments	Management stated they are developing an AMS Street Review Training DVD for distribution to all delivery offices throughout the district beginning in March 2006. Management's comments, in their entirety, are included in Appendix B of this report.
Recommendation	2. Establishing a district schedule of annual Address Management System Quality Street reviews and direct delivery supervisors or appropriate designees to review delivery routes annually.
Management's Comments	Management also stated they are implementing a program to review 700 routes per year beginning in FY 2006.
Recommendation	3. Requiring the Address Management System office to establish a tracking system to monitor completed street reviews.

Management's Comments	Management will implement a tracking system to monitor route reviews completed and errors detected. The system will include the date they detected and corrected errors.
Evaluation of Management's Comments	Management's comments are responsive to recommendations 1, 2, and 3. Management's actions taken and planned should correct the issues identified in the findings.

APPENDIX A

OIG CALCULATION OF
FUNDS PUT TO BETTER USE

The OIG identified $988,945 in funds put to better use. The following assumptions were used in the calculation of the $988,945.

Assumptions of the AMS cost savings model

- We used the New York Metro Area as our standard for predicting the cost savings possible for the Rio Grande District.

- We assumed that all Postal Service areas other than New York Metro had not implemented an error reduction program over the time period of the AMS street reviews. These areas were our control group for purposes of estimating the net benefit of the New York Metro program.

- The AMS National Street Review Model is used to calculate cost savings. Therefore, we assumed that it realistically represented costs that the Postal Service could save if it implemented a program that would reduce the incidence of AMS errors. However, in our opinion, any costs saved would have to be related to a reduction in overtime or casual hours, and therefore, labor rates used should be hourly overtime rates (which was not the case).

- We used the AMS National Street Review Model unchanged, with one exception: the model had FY 1999 labor rates imbedded. We updated these rates to reflect FY 2006 rates by escalating by 3 percent per year to arrive at a projection.

- We assumed that the cost of implementing an error reduction program would be negligible.

- We assumed that the average cost per error for the Rio Grande District would remain constant before and after program implementation.

- If the Rio Grande District began implementing a program immediately, FY 2006 would be devoted to setup and training. We assumed that cost savings would not begin until FY 2007. Our calculation of savings (funds put to better use) is a discounted cash flow analysis over a 10-year period. The amount we will report in our *Semiannual Report to Congress* is the present value of the estimated savings over the 10 years.

- AMS errors can never be reduced to zero. We assumed the practical lower limit to be a 1 percent error rate. However, this constraint did not affect the calculation for the Rio Grande District in this instance.

- We assumed that error rates on rural routes would respond to an error reduction program in the same way as city routes.

- In our analysis of the New York Metro Area, we excluded the Caribbean District due to uncertainties regarding implementation of an error reduction program.

- Not all categories of AMS errors have associated costs. We assumed that costly and noncostly errors would respond to an error reduction program in the same manner. That is, if the overall reduction rate for all AMS errors was 20 percent, the reduction rate for costly errors was also 20 percent.

- We will report $988,945 in funds put to better use in our *Semiannual Report to Congress.*

APPENDIX B. MANAGEMENT'S COMMENTS

GEORGE L. LOPEZ
VICE PRESIDENT, SOUTHWEST AREA OPERATIONS

UNITED STATES POSTAL SERVICE

January 4, 2006

COLLEEN MCANTEE
DEPUTY ASSISTANT INSPECTOR GENERAL FOR CORE OPERATIONS

SUBJECT: Rio Grande District Address Management Systems
             Report # DR-AR-06-DRAFT

The Rio Grande District agrees with the findings put forth in the report of $988,945 over 10 years of funds put to better use or approximately $21 per route.   These funds will be used to perform additional AMS quality street reviews as outlined below.

Recommendation 1:
Provide training in AMS quality street reviews to all delivery supervisors or appropriate designees

Response
The district will develop an AMS Street Review Training DVD to be distributed to all delivery offices throughout the district. Production will be coordinated with the Information Systems office and will begin in January, 2006 with a targeted completion date of mid-March 2006.   Distribution of the DVDs will begin in mid-March, 2006.

Recommendation 2:
Establish a district schedule of annual AMS quality street reviews and direct delivery supervisors or appropriate designees to review delivery routes annually.

Response
The District will implement a program of reviewing 700 routes per year in FY 06.

Routes to be reviewed are determined by the results of the most recent national AMS quality street review. Offices showing the poorest performance on the review will have all routes reviewed until a total of 700 routes is reached.   If all offices scoring below 98% on the national AMS quality street review are reviewed in total and the total number of routes is less than 700, offices in the larger cities with the most potential for return will be reviewed until a total of 700 routes is reviewed.

Responsibility for conducting the reviews will be at the delivery unit level with coordination by the responsible Manager, Post Office Operations or PCES Postmaster. The office of Address Management Systems will advise offices of the number of routes they are to review.

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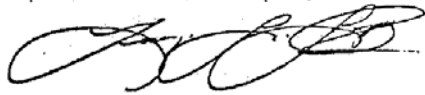214-819-8650
FAX: 214-905-9227

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Recommendation 3:
Require the Address Management Systems office to establish a tracking system to monitor completed street reviews.

Response
The AMS office will implement a tracking system to record reviews completed to include the overall score and a breakdown of the errors detected. The tracking system will begin with the first route reviewed. Included in the tracking system will be a date that errors identified were corrected by the Address Management Systems office.

The Rio Grande District does not see any proprietary or other business information in the report that should be exempt from disclosure under the Freedom of Information Act.

George L. Lopez