



October 26, 2007

JERRY D. LANE
VICE PRESIDENT, CAPITAL METRO AREA OPERATIONS

SUBJECT: Audit Report – City Delivery Vehicle Mileage – Base Versus Actual –
Capital Metro Area (Report Number DR-AR-08-003)

This report presents the results of our audit of the City Delivery Vehicle Mileage – Base Versus Actual in the Capital Metro Area (Project Number 07XG023DR000). This is one in a series of reports on City Delivery Vehicle Mileage issued under the Value Proposition Agreement between the Vice President, Delivery and Retail, and the U.S. Postal Service Office of the Inspector General (OIG). Our overall objective was to evaluate the accuracy of city delivery route mileage information in the Capital Metro Area. Specifically, we evaluated (1) the accuracy of established route base mileage information in the Automated Vehicle Utilization System (AVUS) and (2) variances between the established route base mileages and actual mileages recorded.

Management can improve the accuracy of city delivery route mileage information in the Capital Metro Area. Specifically, AVUS route base mileage information did not agree with the authorized route base mileage in the Delivery Operations Information System for 23 percent of the routes reviewed. Additionally, management did not always have adequate support for mileage variances. Overall, these conditions existed because district officials did not monitor city delivery mileage information. As a result, we will report \$2,117,349 in unrecoverable questioned costs in our *Semiannual Report to Congress*.

Management agreed with our findings, recommendations, and monetary impact and has initiatives planned addressing the issues in this report. Management's comments and our evaluation of these comments are included in the report.

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



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, or me at (703) 248-2100.



Colleen A. McAntee
Deputy Assistant Inspector General
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INTRODUCTION

Background

The U.S. Postal Service has over 216,000 postal-owned vehicles that carriers use to deliver almost 680 million pieces of mail each day on over 163,000 city routes. In fiscal year (FY) 2005, the postal-owned vehicles traveled approximately 1.2 billion miles and used over 125 million gallons of fuel.

On motorized routes, city carriers are required to follow their authorized lines of travel at all times. This includes travel to and from authorized routes, lunch locations, break locations, refueling locations, and collection boxes.

Supervisors and managers use the Delivery Operations Information System (DOIS) and the Automated Vehicle Utilization System (AVUS) to assist them in managing daily carrier operations.¹ DOIS data includes mail volume, mail arrival and dispatch times, and projected office and street hours for routes. AVUS, a web-based application, includes daily vehicle utilization and authorized base and actual delivery vehicle mileage.

The Postal Service generally establishes city route base mileage during route inspections using Postal Service (PS) Form 3999, Inspection of Letter Carrier Route. District or unit management enters the base route mileage in DOIS after the route inspection. Delivery unit supervisors then manually establish or update a route in AVUS with the authorized base mileage. The beginning mileage is verified or entered when the carrier departs for the street by scanning the “Depart to Route” barcode that prompts for the mileage. Upon returning to the office, the carrier scans the “Return to Office” barcode, which prompts for the ending mileage. Supervisors review and analyze carriers’ actual mileage data using the AVUS Vehicle Daily Utilization Report. Supervisors conduct discussions with carriers on mileage deviations and make corrections in AVUS using the information in this report. Supervisors must edit AVUS information daily and the system stores the corrections through the end of the month. AVUS data is consolidated by reporting period and shared electronically

¹ The Postal Service released AVUS and DOIS nationally in 2002.

with the Vehicle Management Accounting System (VMAS) and Web-Enabled Enterprise Information System (WebEIS). Vehicle maintenance facilities use VMAS reports to monitor vehicle usage. The monthly mileage data is electronically sent to WebEIS² for each area to show mileage utilization. (See flowchart in Appendix C.)

The base route mileage information in DOIS and AVUS should agree to effectively manage city route mileage. When the AVUS actual route mileage does not agree with the AVUS authorized base route mileage, a variance exists. Factors such as incorrect recording of odometer readings, auxiliary assistance, and incorrect base miles recorded in AVUS could cause a variance.

The *AVUS Supervisor Users Guide*, dated November 2006, and Handbook M-39, *Management of Delivery Services*, dated March 1998 (and updated through March 2004) require supervisors to (1) update route information when changes to routes occur after inspection to ensure accurate route mileage is recorded and (2) edit carrier route information daily to correct errors.

**Objective, Scope,
and Methodology**

Our overall objective was to evaluate the accuracy of the city delivery route mileage information. Specifically, we evaluated the accuracy of established route base mileage in AVUS. We also evaluated variances between the established route base and actual mileages recorded.

To accomplish our objective, we interviewed managers and employees at headquarters, the area, and selected districts and units. We visited and reviewed information from delivery units in the Baltimore, Capital, Greater South Carolina, Greensboro, Mid-Carolinas, Northern Virginia, and Richmond Districts in the Capital Metro Area.

² WebEIS delivers easy access to detailed performance data continually gathered across the entire Postal Service. WebEIS lets managers measure performance and identify areas for improvement, increasing overall Postal Service efficiency.

We selected 23 delivery facilities from the universe of 304 delivery facilities with 15 or more routes in the Capital Metro Area. (See Appendix B.) We selected a random 4-month period (January through April 2007³) to review route information for each facility

To evaluate the accuracy of the established route base mileage information in AVUS, we compared the route base information recorded in AVUS to DOIS.⁴ To evaluate variances between the authorized base mileage and actual mileage recorded, we evaluated variances of 4 to 19 miles occurring 12 times or more within a month.⁵ In addition, we reviewed variances of 20 miles or more occurring any time within the review month. We ascertained whether a PS Form 3996, Carrier – Auxiliary Control, Route Carrier Daily Performance/Analysis Report,⁶ or other appropriate documentation explained or supported mileage variances.

We conducted this performance audit from March through October 2007 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 relied on data from DOIS and AVUS. We did not audit these systems, but performed a limited review of data integrity to support our reliance on data. We discussed our observations and conclusions with management officials on August 28, 2007, and included their comments where appropriate.

³ AVUS only retains data in the server for approximately 3 months.

⁴ We selected the delivery units and corresponding routes for the current 3-month period from AVUS. Route inspections conducted on routes selected in the sample could have occurred resulting in an updated PS Form 3999 and subsequent route adjustments. The route inspection and adjustments could have increased or decreased the authorized base mileage after the OIG selected the route data for review. The OIG adjusted the authorized base mileages for these routes where appropriate during our audit.

⁵ Because of the complexity of the auxiliary assistance issue, we did not evaluate auxiliary assistance mileage in this audit. We discuss these mileages in this report because of the significant impact they have on mileage variance.

⁶ This report assists supervisors in evaluating the performances of all routes within a delivery unit for a single day.

Prior Audit Coverage The OIG issued three reports directly related to our objective. These reports identified opportunities for management to improve the accuracy of city delivery route mileage information in the Eastern, Southeast and Southwest Areas. We have included a complete listing of the reports in Appendix D.

AUDIT RESULTS

City Delivery Mileage Information

Management can improve the accuracy of city delivery route mileage information in the Capital Metro Area. Specifically, AVUS route base mileage for 23 percent of the routes reviewed did not agree with the authorized route base mileage in DOIS. In addition, AVUS actual mileage exceeded base mileage by 60,503 miles. While there was support for some of the 60,503 miles we questioned, there was no evidence to support about 57 percent of the questioned miles. Overall, these conditions existed because district officials did not provide oversight by monitoring city delivery mileage information.

Authorized Base Mileage Information

Management did not always record city delivery route mileage information for the Capital Metro Area accurately. Specifically, the route base mileage data in AVUS – the system used to manage daily vehicle route information – did not always agree with the authorized route base mileage in DOIS. Of the 703 routes reviewed in the 23 delivery units, 163 (23 percent) did not agree with DOIS as shown in Table 1. Although most differences were generally only one or two miles, eight delivery units had at least one route with a difference of 10 miles or more.

TABLE 1 ROUTE BASE MILEAGE: AVUS VS. DOIS					
DISTRICT	TOTAL NUMBER OF DELIVERY UNITS	TOTAL NUMBER OF ROUTES	AVUS VERSUS DOIS (IN AGREEMENT)	AVUS VERSUS DOIS (NOT IN AGREEMENT)	PERCENTAGE OF ROUTES NOT IN AGREEMENT
Baltimore	3	111	80	31	28%
Capital	5	198	188	10	5%
Greater South Carolina	1	27	7	20	74%
Greensboro	3	92	78	14	15%
Mid-Carolinas	1	23	6	17	74%
Northern Virginia	6	154	121	33	21%
Richmond	4	98	60	38	39%
TOTAL	23	703	540	163	23%

SOURCE: AVUS and DOIS Reports

Unit supervisors at five of the delivery units reviewed stated they were unaware they should be reviewing AVUS and DOIS mileage information. In general, unit management indicated that updating and correcting data in AVUS was not always a high priority because supervisors focused on managing mail delivery operations.

The base route mileage information in DOIS and AVUS should agree to effectively manage city route mileage. Correct route base mileage information is also critical to ensuring that carriers are maintaining the authorized line of travel on routes so that carriers deliver the mail in the quickest manner possible and at the least expense (i.e., fuel, wear and tear on vehicles, etc.).

Supporting
 Documentation for
 Mileage Variances

Management did not always have adequate support for variances between AVUS base mileage and actual mileage. Based on our analysis, we questioned 60,503 in mileage variances. Although supervisors were able to provide evidence to support some of the 60,503 questioned mileage variances,⁷ there was no evidence available to support 34,407 of the questioned miles. (See Table 2.)

Table 2 VARIANCES: QUESTIONED MILES VS. UNSUPPORTED MILES				
DISTRICT	DELIVERY UNITS REVIEWED WITHIN DISTRICT	MILES QUESTIONED	TOTAL UNSUPPORTED MILES	PERCENTAGE OF UNSUPPORTED MILES
Baltimore	3	11,775	8,030	68%
Capital	5	12,993	8,349	64%
Greater South Carolina	1	2,338	0	0%
Greensboro	3	7,990	7,024	88%
Mid-Carolina	1	811	448	55%
Northern Virginia	6	6,557	3,996	61%
Richmond	4	18,039	6,560	36%
TOTAL	23	60,503	34,407	57%

SOURCE: AVUS and DOIS Reports

Supervisors did not consistently monitor carriers' AVUS Vehicle Daily Usage Reports to review, analyze, and either correct errors or document why actual mileage exceeded base mileage. Further, supervisors did not always conduct and document discussions with carriers on routes where actual mileage exceeded the base mileage in AVUS. Supervisors stated that higher priorities, such as managing mail delivery operations, impacted their ability to perform this daily function.

Although some delivery unit supervisors stated they did accomplish these tasks, they did not always maintain documentation supporting this. Of the 574 days of route

⁷ See comment on page 8 for an explanation of the questioned mileage variances.

mileage data reviewed, we identified 309 days with mileage variances due to data errors or omissions. (See Table 3.)

TABLE 3 DAILY ERRORS IN AVUS ⁸			
DISTRICT	TOTAL NUMBER OF REVIEW DAYS	ERROR DAYS	PERCENTAGE
Baltimore	70	42	60%
Capital	124	85	69%
Greater South Carolina	23	0	0%
Greensboro	78	49	63%
Mid-Carolina	24	2	8%
Northern Virginia	154	57	37%
Richmond	101	74	73%
TOTAL	574	309	54%

SOURCE: AVUS Vehicle Daily Usage Report

For example, in the Richmond District, the [REDACTED] and [REDACTED] Post Offices accounted for 52 of the 74 total errors identified for the days reviewed. In the Capital District, the [REDACTED], [REDACTED], [REDACTED], and [REDACTED] Post Offices accounted for 70 of the 85 total errors identified for the days reviewed. Most of these errors related to incorrect odometer recordings, negative actual mileage, or missing odometer readings⁹ and should also have been detected and corrected. According to the *AVUS Supervisor's Guide*, the supervisor should conduct daily reviews and provide feedback to employees regarding input errors. The guidance further suggests this process should take a minimal amount of time.

⁸ We define errors for this analysis as errors with negative total actual mileage, a daily actual mileage variance of 500 miles or more, blank odometer readings or odometer readings of zero. These errors were not included in the mileage variance analysis of questioned mileage.

⁹ Postal Operations Handbook 701, *Fleet Management*, dated March 1991 (updated with *Postal Bulletins* revisions through March 31, 2005) states that carriers should record mileage in tenths of a mile. The OIG identified some unit personnel that rounded up or down the tenths of the mile on the odometer while others ignored the tenths of a mile. We plan to address this issue in the national capping report to Postal Service Headquarters.

Based on our sample results, we projected the Capital Metro Area incurred unrecoverable questioned costs of approximately \$2,117,349 over an 11-month period. (See Appendix A.) The OIG will report the \$2,117,349 in unrecoverable questioned costs in our *Semiannual Report to Congress*.

Audit Comment

In the 23 units reviewed, auxiliary assistance¹⁰ miles represented approximately 28 percent of the 60,503 questioned miles. Because of the complexity of the auxiliary assistance issue, we did not evaluate auxiliary assistance mileage in this audit. We noted auxiliary assistance mileage in this report because of its significant impact on mileage variances and as information for management to review.

Recommendations

We recommend the Vice President, Capital Metro Area Operations, direct District Managers to:

1. Provide increased oversight by monitoring mileage information for accuracy.
2. Inform all delivery unit supervisors how to update the Automated Vehicle Utilization System with route changes made in the Delivery Operations Information System and provide training as necessary.
3. Re-emphasize to unit supervisors that route mileage information is a priority and they must timely update it and correct errors.
4. Direct supervisors to review, analyze, and correct errors daily; document reasons for actual mileage exceeding authorized mileage; and maintain supporting documentation for 30 days.

¹⁰ Auxiliary assistance is a process designed to allow delivery unit supervisors to provide assistance on a route or for a vacancy by transferring a portion of deliveries to one or more carriers for that day.

**Management's
Comments**

Management agreed with our findings, recommendations, and monetary impact, and indicated they issued written instructions to all district managers to ensure proper maintenance of the DOIS and AVUS database systems. They also stated district managers would ensure they train all supervisors with vehicle responsibility on AVUS. In addition, management indicated district managers would issue a policy letter emphasizing the importance of route mileage information and the requirement to update and correct errors on a daily basis. Finally, management stated district managers would require managers and supervisors to review, analyze, and correct AVUS data on a daily basis; document mileage variances exceeding authorized mileage on PS Form 1813; and maintain supporting documentation for a minimum of 30 days. We have included management's comments, in their entirety, in Appendix E.

**Evaluation of
Management's
Comments**

Management's comments are responsive to the findings and recommendations. Management's actions taken and planned should correct the issues identified in the findings.

APPENDIX A

CALCULATION OF COST SAVINGS IN THE CAPITAL METRO AREA

The OIG identified \$2,117,349 in unrecoverable questioned costs.

The OIG calculated the unrecoverable cost through a random sample of 304 delivery facilities with 15 or more routes in the Capital Metro Area. After selecting the random sample, the OIG selected a random month within the quarter for each facility. For the Capital Metro Area, we reviewed the 4-month period of January through April 2007.

We identified 34,407 miles that were not supported. Based on these sample results, we believe the average unsupported delivery mileage overage is at least 240,608 miles per month at the 304 delivery units in the Capital Metro Area.

We extrapolated our test period finding to an 11-month period (we excluded December because of seasonal issues) and computed the cost per mile.

Unsupported miles per audit finding	Projected unsupported miles for audit universe	Extrapolated miles over 11-month period	Cost per mile¹¹	Unsupported questioned costs
34,407	240,608	2,646,687	\$.80	\$2,117,349

¹¹ The VMAS Fuel Report shows a cost per mile of 73 cents, which includes 24 cents per mile for fuel/oil. The OIG performed an analysis of fuel/oil and determined the cost to be .31 per mile. The OIG determined the cost per mile for this audit as follows: 73 cents/mile - 24 cents/mile for fuel (Postal Service figure) + 31 cents/mile for fuel (OIG figure) = 80 cents/mile.

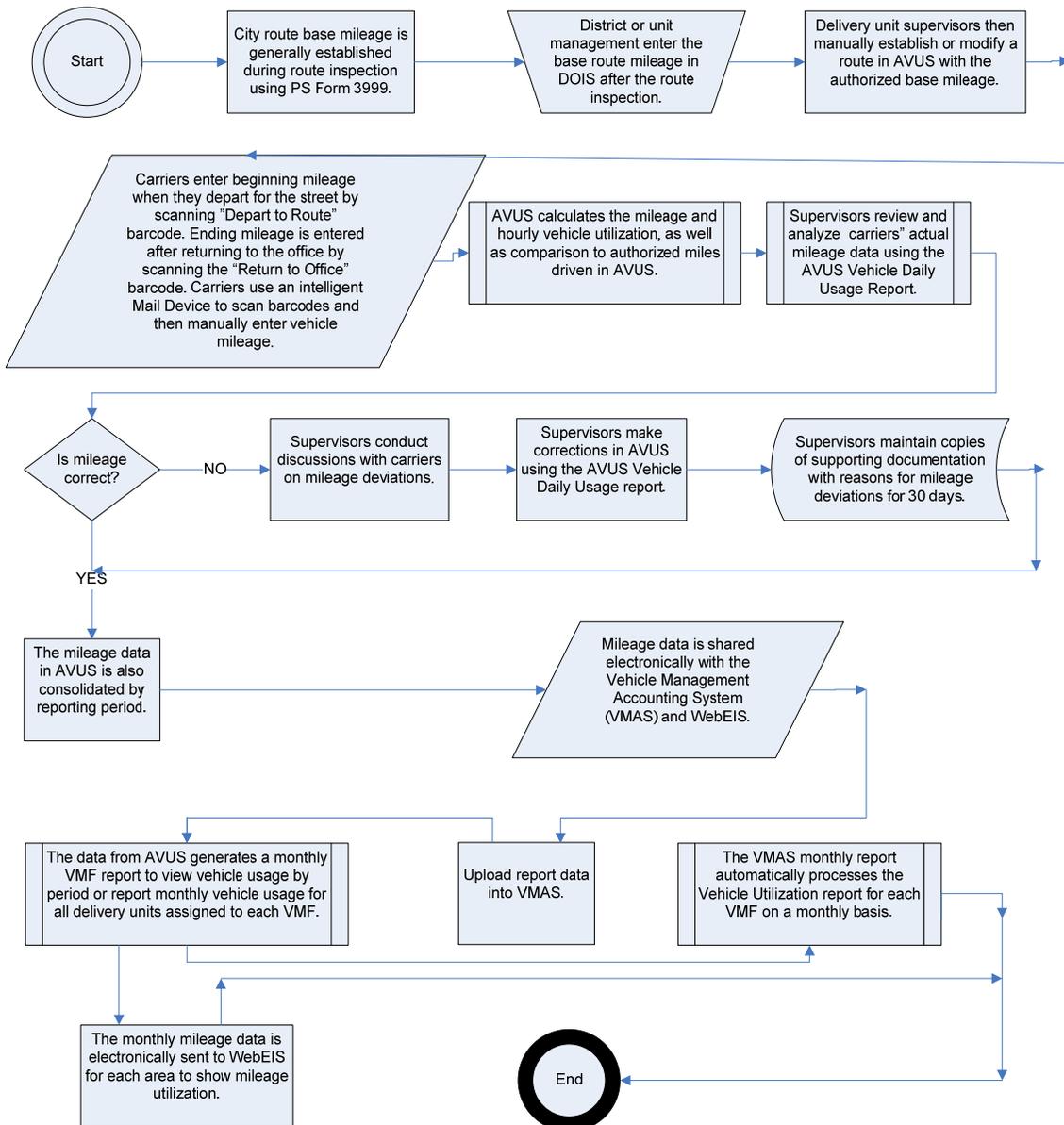
APPENDIX B

RANDOMLY SELECTED DISTRICTS AND DELIVERY UNITS

DISTRICTS	DELIVERY UNITS
Baltimore	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
Capital	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
Greater South Carolina	[REDACTED]
	[REDACTED]
Greensboro	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
Mid-Carolinas	[REDACTED]
	[REDACTED]
Northern Virginia	[REDACTED]
	[REDACTED]
Richmond	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]
	[REDACTED]

APPENDIX C

FLOW CHART –AVUS MILEAGE INFORMATION PROCESS



APPENDIX D

PRIOR AUDIT COVERAGE

Audit Report Title	Report Number	Issue Date	Unrecoverable Questioned Costs
<i>City Delivery Vehicle Mileage – Base Versus Actual – Southeast</i>	DR-AR-07-015	September 29, 2007	\$2,098,347
<i>City Delivery Vehicle Mileage – Base Versus Actual – Eastern Area</i>	DR-AR-07-014	September 26, 2007	\$832,800
<i>City Delivery Vehicle Mileage – Base Versus Actual – Southwest Area</i>	DR-AR-07-013	September 26, 2007	\$753,322
		Total	\$3,684,469

APPENDIX E

MANAGEMENT'S COMMENTS

VICE PRESIDENT
CAPITAL METRO AREA OPERATIONS



October 22, 2007

Kim H. Stroud
Director, Audit Reporting
1735 North Lynn Street
Arlington, VA 22209-2020

SUBJECT: Audit-City Delivery Vehicle Mileage - Base Versus Actual - Capital Metro Area –
(Project Number 07XG023DR000)

Capital Metro Area agrees with the findings and the importance of accurate data in the Automated Vehicle Utilization System (AVUS) and the unsupported costs associated with not monitoring city delivery mileage. This office has taken the following actions in regard to the findings and recommendations of the audit:

Recommendation #1: Provide increased oversight by monitoring mileage information for accuracy.

Response: The Capital Metro Area has issued written instructions to all District Managers to ensure proper maintenance of Delivery Operations Information System (DOIS) and AVUS database systems. Postmasters are to ensure that mileage is updated and reviewed on a regular basis. Random daily reviews will be performed by the District AVUS coordinator. Managers/supervisors will submit monthly AVUS Vehicle Summary Report to the District AVUS coordinator. Quarterly written certification will be required of DOIS versus AVUS data by the District AVUS coordinator.

Recommendation #2: Inform all delivery unit supervisors how to update the AVUS with route changes made in the DOIS and provide training as necessary.

Response: District Managers will ensure that all supervisors with vehicle responsibility will be trained on AVUS. The training will stress the relationship between AVUS and DOIS, the employee responsibility, and management's responsibility. They will also ensure that supervisors have access to EDW and know how to view data in the new Delivery Data Mart folder. Training will be completed as soon as possible.

Recommendation #3: Re-emphasize to unit supervisors that route mileage information is a priority and they must update in a timely manner and correct errors.

Response: A policy letter will be issued by the District Managers emphasizing the importance of route mileage information and the requirement to update and correct errors on a daily basis.

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Requirement #4: Direct supervisors to (a) review, analyze and correct errors daily; (b) document reasons for actual mileage exceeding authorized; and (c) maintain supporting documentation for 30 days.

Response: District Managers will ensure that managers/supervisors are required to: (a) review, analyze, and correct AVUS data on a daily basis; (b) document mileage variances exceeding authorized mileage on PS form 1813; and (c) maintain supporting documentation (PS form 3996, PS form 1813) for a minimum of 30 days.

If you have any questions, please call Joseph A. Martin, Manager, Delivery Programs Support, Capital Metro Area at 301-548-1418.


Jerry D. Lane

cc: Joseph A. Martin Sr., Manager Delivery Programs Support
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Larry Schaffer, Vehicle Maintenance Programs Analyst
Willie Lewis, Operations Programs Analyst
District Managers, Capital Metro Area