



September 26, 2007

ELLIS A. BURGOYNE  
VICE PRESIDENT, SOUTHWEST AREA OPERATIONS

SUBJECT: Audit Report – City Delivery Vehicle Mileage – Base Versus Actual –  
Southwest Area (Report Number DR-AR-07-013)

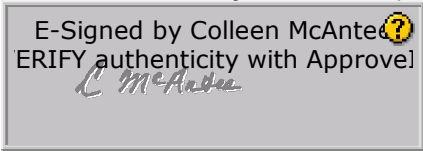
This report presents the results of our audit of the City Delivery Vehicle Mileage – Base Versus Actual – in the Southwest Area (Project Number 06XG044DR000). This is the first in a series of reports on City Delivery Vehicle Mileage issued under the Value Proposition Agreement between the Vice President, 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 Southwest 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 Southwest Area. Specifically, AVUS route base mileage information did not agree with the authorized route base mileage in the Delivery Operations Information System for 30 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 \$753,322 in unrecoverable questioned costs in our *Semiannual Report to Congress*.

Management agreed with the findings, recommendations, and monetary benefits. 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  
for Mission Operations

#### Attachments

cc: Patrick R. Donahoe  
William P. Galligan  
Kathy Ainsworth  
James Kiser  
Wayne C. Corey  
Carl T. January  
David L. Barthel  
Greg A. Gamble  
Julie A. Gosdin  
Ennis W. Waldemayer, Jr.  
Linda J. Welch  
Katherine S. Banks

## INTRODUCTION

---

### Background

The U.S. Postal Service has over 216,000 postal-owned vehicles that carriers use to deliver over 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.<sup>1</sup> 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 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 Usage 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 with the Vehicle Management Accounting System (VMAS) and Web-Enabled Enterprise Information System (WebEIS). Vehicle

---

<sup>1</sup> The Postal Service released Web AVUS and DOIS nationally in 2002 (AVUS was DOS-based prior to 2002).

maintenance facilities use VMAS reports to monitor vehicle usage. The monthly mileage data is electronically sent to WebEIS<sup>2</sup> for each area to show mileage utilization. (See flowchart in Appendix C.)

The base route mileage information in the 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 Arkansas, Dallas, Fort Worth, Houston, Oklahoma, and Rio Grande Districts in the Southwest Area.

We selected 16 delivery facilities from the universe of 341 delivery facilities with 15 or more routes in the Southwest Area. (See Appendix B.) We selected a random 3-month period (September through November 2006<sup>3</sup>) 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

---

<sup>2</sup> 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.

<sup>3</sup> AVUS only retains data in the server for approximately 3 months.

information recorded in AVUS to DOIS.<sup>4</sup> To evaluate variances between the authorized base mileage and actual mileage recorded, we evaluated variances of four to 19 miles occurring 12 times or more within a month.<sup>5</sup> 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,<sup>6</sup> or other appropriate documentation explained or supported mileage variances.

We conducted this performance audit from August 2006 through September 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 June 18, 2007, and included their comments where appropriate.

---

**Prior Audit Coverage**

We did not identify any prior audits or reviews related to the objective of this review. The OIG is in the process of conducting a series of audits on this subject.

---

<sup>4</sup> 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 OIG selected the route data for review. OIG made adjustments to the authorized base mileages for these routes where appropriate during our audit.

<sup>5</sup> Because of the complexity of the auxiliary assistance issue, we did not evaluate auxiliary assistance mileage in this audit. These mileages are discussed in this report because of the significant impact they have on mileage variance.

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

## AUDIT RESULTS

### City Delivery Mileage Information

Management can improve the accuracy of city delivery route mileage information in the Southwest Area. Specifically, AVUS route base mileage for 30 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 22,500 miles. While the majority of the 22,500 miles we questioned were supported, there was no evidence to support about 30 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 Southwest 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 479 routes reviewed in the 16 delivery units, 145 (30 percent) did not agree with DOIS as shown in Table 1. Although most differences were generally only one or two miles, five 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
Arkansas	2	50	50	0	0
Dallas	3	83	78	5	6
Fort Worth	3	73	60	13	18
Houston	1	20	20	0	0
Oklahoma	1	27	25	2	7
Rio Grande	6	226	101	125	55
<b>TOTAL</b>	<b>16</b>	<b>479</b>	<b>334</b>	<b>145</b>	<b>30</b>

Source: AVUS and DOIS Reports

Unit supervisors at three of the delivery units reviewed stated they were unaware they had the capability to update AVUS base data on their routes. Another unit supervisor stated his unit did not always update authorized base mileage due to personnel being unavailable for extended periods and he did not assign backup staff to perform the duties. In general, unit management indicated that updating and correcting data in AVUS was not always a high priority because supervisors were 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 critical to ensuring that carriers are maintaining the authorized line of travel on routes, so that mail is delivered 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 22,500 in mileage variances. Although supervisors were able to provide evidence to support the majority of the 22,500 questioned mileage variances,<sup>7</sup> there was no evidence available to support 6,832 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
Arkansas	2	4,452	1,895	43
Dallas	3	2,975	1,944	65
Fort Worth	3	2,070	856	41
Houston	1	1,383	171	12
Oklahoma	1	1,194	382	32
Rio Grande	6	10,426	1,584	15
<b>TOTAL</b>	<b>16</b>	<b>22,500</b>	<b>6,832</b>	<b>30%</b>

Source: AVUS and DOIS Reports

Supervisors did not consistently monitor carriers' AVUS Vehicle Daily Usage Report to review, analyze, and then 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 398 days of route mileage data reviewed, we identified 107 days with mileage variances due to data errors or omissions. (See Table 3.)

<sup>7</sup> See audit comment on page 6 for an explanation of the majority of the questioned mileage variances.

TABLE 3 DAILY ERRORS IN AVUS <sup>8</sup>			
DISTRICT	TOTAL NUMBER OF REVIEW DAYS	ERROR DAYS	PERCENTAGE
Arkansas	50	14	22
Dallas	75	33	35
Fort Worth	74	18	7
Houston	25	2	0
Oklahoma	25	2	4
Rio Grande	149	38	26
<b>TOTAL</b>	<b>398</b>	<b>107</b>	<b>27</b>

SOURCE: AVUS Vehicle Daily Usage Report

For example, in the Dallas District, 33 of 75 delivery days in the review period had AVUS mileage errors. The supervisors should have detected and corrected all of these errors. In the Rio Grande District, the [REDACTED] Post Office accounted for 22 of the 38 total errors identified for the days reviewed. Most of these errors related to incorrect odometer recordings, negative actual mileage, or missing odometer readings<sup>9</sup> 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.

Based on our sample results, we projected the Southwest Area incurred unrecoverable questioned costs of approximately \$753,322 over an 11-month period. (See Appendix A.) The OIG will report the \$753,322 in unrecoverable questioned costs in our *Semiannual Report to Congress*.

---

Audit Comment

Based on OIG's analysis, the majority of the variance between the authorized and actual miles recorded was for auxiliary assistance.<sup>10</sup> In the 16 units reviewed, auxiliary assistance miles represented approximately 60 percent of the 22,500 questioned miles. Because of the complexity of the auxiliary assistance issue, we did not evaluate auxiliary assistance mileage in this audit. Auxiliary assistance mileage is noted in

---

<sup>8</sup> Errors for this analysis are defined 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.

<sup>9</sup> Postal Operations Handbook 701, *Fleet Management*, dated March 1991, with Postal Bulletin revisions through March 31, 2005, states that mileage should be recorded in tenths of a mile. OIG identified some unit personnel that rounded up or down the tenths of the mile on the odometer and others ignored the tenths of a mile. We plan to address this issue in the national capping report to Postal Service Headquarters.

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



this report because of its significant impact on mileage variances and as information for management to review.

---

**Recommendations**

We recommend the Vice President, Southwest 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 (a) review, analyze, and correct errors daily; (b) document reasons for actual mileage exceeding authorized mileage; and (c) maintain supporting documentation for 30 days.

---

**Management's  
Comments**

Management agreed with our findings, recommendations, and the \$753,322 in unrecoverable questioned costs. In their September 10, 2007, response, management stated that by September 14, 2007, the district managers would ensure that regular reviews are conducted with the top opportunity offices and tracked accordingly. In addition, management indicated districts will provide training to delivery supervisors on updating route changes for AVUS and DOIS by the end of Quarter 1 of FY 2008, and issue AVUS Standard Operating Procedures that will emphasize route mileage accuracy and timely correction of all errors no later than October 1, 2007. Further, management stated districts will coordinate training for all delivery supervisors on the requirements for reviewing, analyzing, and correcting errors on a daily basis; documenting mileage overruns/discrepancies and maintaining documentation for 30 days; and taking corrective action when deemed necessary. We have included management's comments, in their entirety, in Appendix D.

---

**Evaluation of  
Management's  
Comments**

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

## APPENDIX A

### CALCULATION OF COST SAVINGS IN THE SOUTHWEST AREA

The OIG identified \$753,322 in unrecoverable questioned costs.

The OIG calculated the unrecoverable cost through a random sample of 341 delivery facilities with 15 or more routes in the Southwest Area. After selecting the random sample, a random month within the quarter was selected for each facility. For the Southwest Area, we reviewed the 3-month period September through November 2006.

We identified 6,832 miles that were not supported. Based on these sample results, we believe the average unsupported delivery mileage overages are at least 85,605 miles per month at the 341 delivery units in the Southwest 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.

<b>Unsupported miles per audit finding</b>	<b>Projected unsupported miles for audit universe</b>	<b>Extrapolated miles over 11-month period</b>	<b>Cost per mile<sup>11</sup></b>	<b>Unsupported questioned costs</b>
6,832	85,605	941,655	\$0.80	\$753,322

<sup>11</sup> The Vehicle Maintenance Accounting System Fuel Report shows a cost per mile of 73 cents, which includes 24 cents costs per mile for fuel/oil. OIG performed an analysis of fuel/oil and determined the cost to be 31 cents per mile. 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**

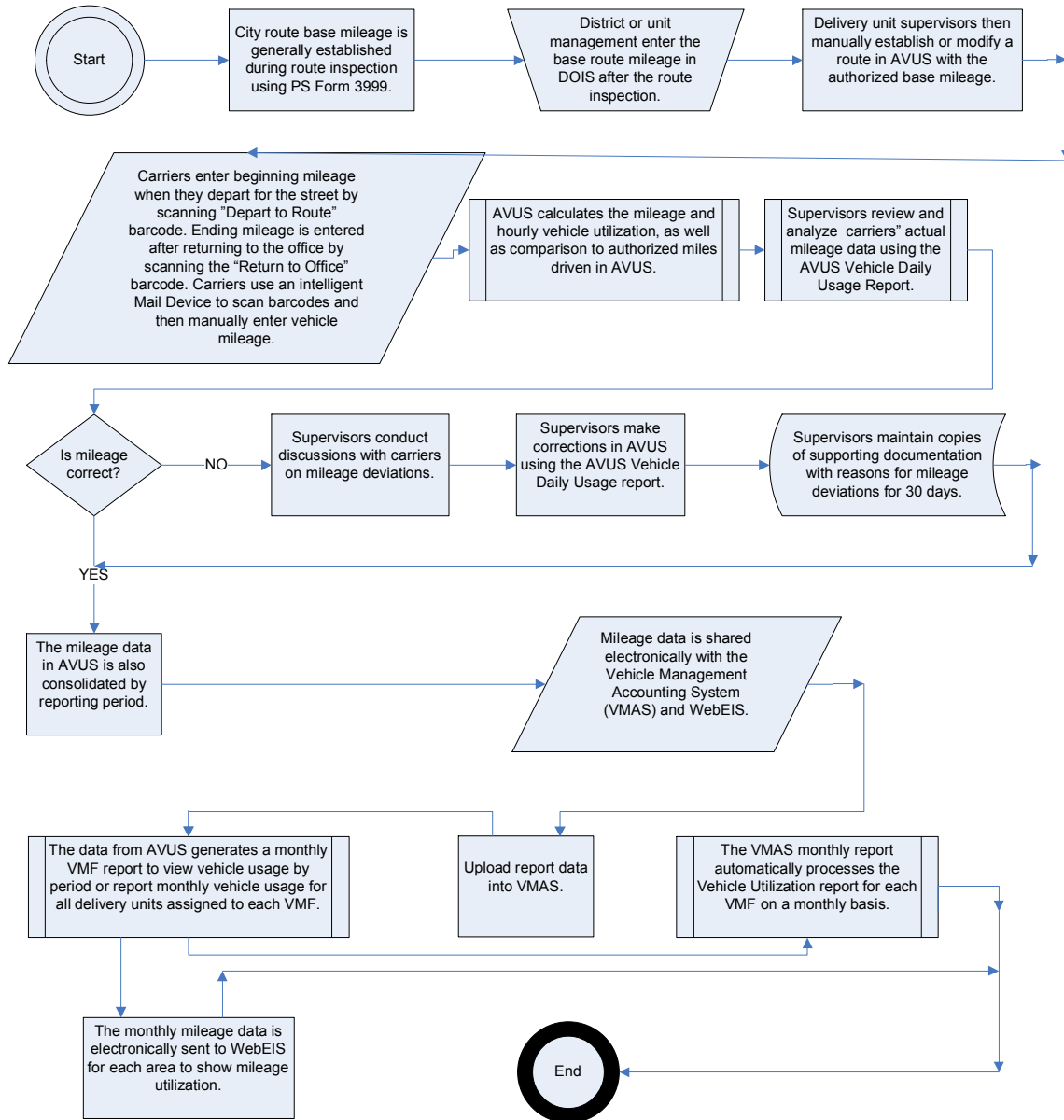
**RANDOMLY SELECTED DISTRICTS AND DELIVERY UNITS**

<b><i>DISTRICTS</i></b>	
<b><i>Arkansas</i></b>	
<b><i>Dallas</i></b>	
<b><i>Fort Worth</i></b>	
<b><i>Houston</i></b>	
<b><i>Oklahoma</i></b>	
<b><i>Louisiana</i></b>	<b><i>Excluded From Sample Universe<sup>12</sup></i></b>
<b><i>New Mexico</i></b>	<b><i>None Selected</i></b>
<b><i>Rio Grande</i></b>	

<sup>12</sup> The Vice President, Southwest Area, asked the OIG to exclude the Louisiana District from the sample universe due to the Hurricane Katrina rebuilding effort.

## APPENDIX C

### FLOW CHART –AVUS MILEAGE INFORMATION PROCESS



## APPENDIX D MANAGEMENT'S COMMENTS

ELLIS A. BURGOYNE  
VICE PRESIDENT, SOUTHWEST AREA OPERATIONS



September 10, 2007

Colleen A. McAntee  
Deputy Assistant Inspector General  
For Missions Operations  
Office of Inspector General  
United States Postal Service  
1735 North Lynn Street  
Arlington, VA 22209-2020

SUBJECT: Draft Management Advisory-City Delivery Vehicle Mileage Base versus  
Actual-Southwest Area (Report # DR-AR-07-DRAFT)

Having reviewed the above referenced report to improve City Delivery Route Mileage Information in the Southwest Area, we are in concurrence with all four (4) recommendations that the Vice President, Southwest Area Operations direct District Managers to:

### **RECOMMENDATION 1:**

Provide increased oversight by monitoring mileage information for accuracy.

### **RESPONSE:**

We agree there are mileage deviations on a daily basis that need to be addressed. The District Managers will ensure that regular reviews are conducted with the top opportunity offices and also tracked accordingly. The Districts target date to be in compliance is September 14, 2007.

### **RECOMMENDATION 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.

### **RESPONSE:**

We agree with the recommendation that training is needed and Districts will provide said training to delivery supervisors utilizing the AVUS User Guide as well as DOIS. The target date for training completion will be the end of QTR 1 FY 08.

PO BOX 224748  
DALLAS TX 75222-4748  
214-819-8650  
FAX: 214-905-9227

- 2 -

**RECOMMENDATION 3:**

Re-emphasize to unit supervisors that route mileage information is a priority and they must update it timely as well as errors.

**RESPONSE:**

Each district will be required to issue an AVUS SOP that will emphasize route mileage accuracy and timely correction of all errors, no later than October 1, 2007. The Area will have a copy on file for review

**RECOMMENDATION 4:**

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

**RESPONSE:**

The Districts will coordinate training for all delivery supervisors on the requirements of reviewing, analyzing and correcting errors on a daily basis, documenting mileage overruns/discrepancies, maintaining documentation for thirty (30) days and taking corrective action when deemed necessary.

**MONETARY IMPACT:**

We agree with the methodology used in determining the \$753,322 in unrecoverable questioned cost.

**FOIA STATEMENT:**

Information contained in this report was reviewed for exemptions to the Freedom of Information Act (FOIA) policy; no exemptions were noted.

  
Ellis A. Burgoyne

cc: James Kiser  
Wayne C. Corey  
Carl T. January  
David L. Barthel  
Greg A. Gamble  
Julie Gosdin  
Jeff Taylor  
Linda J. Welch  
Katherine S. Banks