County of Riverside

INTERNAL AUDIT REPORT

County of Riverside Vehicle Fleet

Internal Audit Report 2008-017

July 2, 2009

Office of
Robert E. Byrd, CGFM
County Auditor-Controller

4080 Lemon Street
P.O. Box 1326
Riverside, CA 92502-1326

RIVERSIDE COUNTY
OFFICE OF THE
AUDITOR-CONTROLLER

County Administrative Center
4080 Lemon Street, 11th Floor
P.O. Box 1326
Riverside, CA 92502-1326
(951) 955-3800
Fax (951) 955-3802

COUNTY OF RIVERSIDE
AUDITOR-CONTROLLER

Robert E. Byrd, CGFM
AUDITOR-CONTROLLER

Bruce Kincaid, MBA
ASSISTANT
AUDITOR-CONTROLLER

July 2, 2009

Bill Luna, County Executive Officer
County of Riverside
County Administrative Center
4080 Lemon Street, 4th Floor
Riverside, CA 92501

Subject: **Internal Audit Report 2008-017: County of Riverside Vehicle Fleet**

Dear Mr. Luna:

We have completed an audit of the county's vehicle fleet. Our audit objectives are to provide management and the Board of Supervisors with an independent assessment of the adequacy and effectiveness of internal controls over the use of the county's vehicle fleet, and identify opportunities for improving efficiencies and saving costs. We performed the audit between September 2, 2008, and February 15, 2009, covering the period November 1, 2006, through October 31, 2008.

A separate report will be issued to department heads addressing matters specific to each of the following agencies/departments included in the detailed audit work: Code Enforcement, Child Support Services, Community Health, District Attorney, Economic Development, Facilities Management, Fleet Services, Public Social Services, and Regional Medical Center.

This countywide audit was initially undertaken to provide an independent assessment of county departments' compliance with the Board of Supervisors Policy D-10 (Overnight Retention of County Vehicles). As we recognized early in the audit process the effects that underutilized vehicles and overnight vehicle retention have on fleet costs, the need for fleet rightsizing surfaced. Thus, in conjunction with our review of the overnight vehicle use, we analyzed the fleet costs and mileage data to identify potential opportunities for improvements and fleet rightsizing. We excluded from the analysis the data from the Sheriff's, Fire, Transportation, and Waste Management departments due to the unique composition and use of their fleets. As such, the potential cost savings mentioned in this report were determined without these four departments.

We conducted our audit in accordance with the International Standards for the Professional Practice of Internal Auditing. These standards require that we plan and perform the audit to obtain reasonable assurance that our objective as described in the preceding paragraph is achieved. An audit includes examining, on a test basis, evidence about the adequacy and effectiveness of internal controls, compliance with applicable government codes and regulations, and performing such other procedures as we considered necessary in the circumstances. We believe the audit provides a reasonable basis for our conclusions.

Internal controls are designed to provide management reasonable assurance of achieving efficiency of operations, compliance with laws and regulations, and reliability of financial information. Management is responsible for establishing and maintaining adequate internal controls, our responsibility is to express an opinion on those controls based on our audit.

In our opinion, the countywide internal controls over vehicle fleet costs and utilization are not adequate to ensure compliance with established policies and to address possible occurrences of inefficient and inappropriate use of county vehicles and related resources.

Potential opportunities for reducing fleet costs by $2.3 million have been identified through this audit. We believe additional reductions in fleet costs can be achieved through the implementation of a vehicle allocation model, vehicle utilization standards, an improved data collection process, and effective enforcement of existing policies.

As requested, in accordance with the Board of Supervisors Resolution 83-338, management responded to each reported condition and recommendation contained in our report. The responses are included in the appropriate sections of this report, and a full copy of the reply is shown under Appendix A. In accordance with established practice, a follow-up audit will be performed within the following twelve months, to confirm whether reported conditions were corrected.

Robert E. Byrd, CGFM
County Auditor-Controller

By: Michael G. Alexander, MBA, CIA
Deputy Auditor-Controller

cc: Board of Supervisors
County Counsel
Grand Jury

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Executive Summary

Audit Objectives

Our objectives are to provide management and the Board of Supervisors with an independent assessment of the adequacy and effectiveness of internal controls over the use of the county's vehicle fleet, and identify opportunities for improving efficiencies and saving costs.

Overview

The County maintains a fleet of 5,300 vehicles costing $43.7 million per year. This includes amortized vehicle acquisition costs, maintenance, and fuel.

Vehicle fleets are under intense scrutiny at virtually every government jurisdiction. Federal, state and local agencies are finding ways to control fleet costs. Most are targeting 10-15% reduction in costs by enforcing optimum use of vehicles and cutting the use of take-home vehicles. Here are a few recent examples of such actions:

- Knox County (Tennessee) is planning the use of Global Positioning System (GPS) on county vehicles to save 5-20% on cost, and reducing its fleet by 20% over two years.
- Sacramento County (California) eliminated all take-home vehicles except for specific job classifications, and began the automated monitoring of vehicle mileage.
- Manatee County (Florida) cut take-home vehicles by 77% saving the county $231,000.
- Dallas County (Texas) orders the mandatory installation of satellite navigation units in county take-home vehicles in exchange for allowing deputies to keep their take-home vehicles.
- Howard County (Maryland) reduced take-home vehicles from 207 to 88. Employees responding to after-hours emergencies less than three times a week are expected to turn in their take-home vehicles.
- Allen County and City of Fort Wayne (Indiana) cut nearly 100 take-home vehicles saving $400,000.
- Berkeley County (South Carolina) cut take-home vehicles from 77 to 40.
- Union County (North Carolina) eliminated more than 100 of the 251 take-home vehicles on its fleet.

- Anne Arundel County (Maryland) reduced take-home vehicles by 174 saving $600,000.
- City of Bridgeport (Connecticut) reduced the number of take-home vehicles by more than 43%.
- City of Buffalo (New York) reduced take-home vehicles by 41%.

Our recommendations are geared toward achieving efficiency in the use of vehicles through a systematic application of a vehicle allocation model based on a department's mission. These are consistent with the intent of the existing Policy D-10 (Overnight Retention of County Vehicles), but add more focus to enforcement. Furthermore, to set a sound foundation for managing the county's fleet, we recommend updating the current Policy D-2 (Use and Purchase of County Vehicles) to include establishment of vehicle utilization standards and the strengthening of monitoring process.

Conclusion

In our opinion, the countywide internal controls over vehicle fleet costs and utilization are not adequate to ensure compliance with established policies and to address possible occurrences of inefficient and inappropriate use of county vehicles and related resources.

Potential opportunities for reducing fleet costs by $2.3 million have been identified through this audit. We believe additional reductions in fleet costs can be achieved through the implementation of a vehicle allocation model, vehicle utilization standards, an improved data collection process, and effective enforcement of existing policies.

Audit Methodology

1. We requested all county departments provide us with a list of vehicles in their fleet and identify which vehicles they assigned to employees for overnight retention. At the same time, we requested a list from the Executive Office of vehicles and employees approved for overnight vehicle retention. Our purpose was to determine whether departments obtained authorizations for all vehicles retained overnight by their employees.

2. We selected eight county agency/departments and picked from their lists 453 vehicles not assigned to employees for overnight retention. We visited the lots designated by departments as vehicle locations at 6 p.m. and at 5 a.m., to verify vehicles were parked where designated.

3. We analyzed the fleet costs and mileage data from the Fleet Services Fleet Focus FA system to determine vehicle and fuel utilization of 1,939 passenger-type vehicles for a period of two years. (The data from Sheriff's, Waste Management, Transportation, and Fire departments were not included in our scope.)

4. We researched various fleet management publications and fleet research studies conducted by other government agencies.

5. We acquired an understanding of Policy D-10 (Overnight Retention of County Vehicles), Policy D-2 (Use and Purchase of County Vehicles), County of Riverside Automotive Fleet Policy and Regulations, and applicable ordinances, codes, regulations and department policies.

Findings and Recommendations

Finding 1

Overnight vehicle retention policy is not consistently enforced.

Potential Cost Savings: $931,000.

There are 881 take-home vehicles based on a county Executive Office tally in March 2009. These vehicles were driven a total of 22,460,229 miles during a two-year period ending October 31, 2008. Fuel, maintenance, and leasing costs for these vehicles during that period totaled $12.3 million, an average cost of $0.55 per mile driven.

Departments acknowledged authorizing an additional 174 take-home vehicles, bringing the total take-home vehicles to 1,055. The commuting cost associated with the 1,055 take-home vehicles is $4.7 million per year, based on 36 miles daily round-trip commute[1] and $0.55 vehicle operating cost per mile. The average annual commuting cost per vehicle is $4,435.

Each take-home vehicle was driven an average of 12,747 miles per year. Based on 36 miles daily average round-trip commute and 224 business days per year, the assumed portion that each take-home vehicle was used for personal commuting to and from work is 8,064 miles or 63% of total miles driven. In other words, a take-home vehicle's replacement interval is shortened by 63% due to personal commuting.

In a surprise Internal Audit survey, 129 of 453 vehicles were not found in their designated overnight parking locations, suggesting the possibility that more vehicles are being taken home.

Likewise, motor pool rental vehicles were being held for several days or weeks indicating the possibility that some of the rental vehicles are being taken home as well.

Policy D-10 (Overnight Retention of County Vehicles) was last revised on July 1, 2003. As stated on the Form 11, the revisions to the policy were intended to improve the consistency and application of the policy and to add greater specificity to the terms and conditions that justify authorizing overnight vehicle retention. However, the policy was not enforced to the letter and spirit resulting in more take-home vehicles being authorized than necessary. We noted:

- One department was granted take-home vehicle authorizations for 26 employees although the employees had zero emergency calls in the preceding 12-month period. This department has 88 other employees who are provided take-home vehicles although they responded to fewer than 12 calls in the preceding year. The policy explicitly states that the overnight retention of vehicles shall only be authorized for individuals whose assigned job duties routinely place them on call continuously, 24 hours a day, 7 days a week, year-round (24x7). Responding to fewer than 12 calls in 365 days does not seem to be a routine duty.

- One department was authorized to designate 365 vehicles as rotational take-home vehicles and to assign the vehicles to specific employees. The normal process requires the Executive Office to review and approve every employee request individually.

- Administrative managers in certain departments received the benefit of take-home vehicles, whereas employees in similar positions with other departments did not. The differing standards for assigning vehicles for overnight retention potentially create compensation inequities between county departments.

One of every five vehicles the county owns is designated as a take-home vehicle. The actual number of take-home vehicles that the county may eliminate depends on the consistency of enforcing Policy D-10. Other counties have successfully reduced take-home vehicles by 20-77%. We believe the County of Riverside may be able to eliminate take-home vehicles by at least 20%. A 20% reduction in take-home vehicles, which is equivalent to 210 vehicles, will save the county $931,000.

[1] Riverside County May 2007 Commuter Survey.

Recommendation 1 **Update the current Policy D-10 (Overnight Retention of County Vehicles).**

The updated policy should provide the guideline for establishing a baseline for vehicle allocation through a detailed study of associating vehicles and tasks. This concept is consistent with the intent of the current Policy D-10.

The highpoints to successfully implement a vehicle allocation are as follows:

1. Classify tasks and vehicle needs of each agency, department, or function.
   - Classify tasks to facilitate screening vehicle needs.
   - Classify vehicle needs according to criticality.

2. Classify vehicles.

- Use NAFA (National Association of Fleet Administrators) classifications to facilitate benchmarking and comparisons with other agencies.
- Consider adding classification for alternative-fuel vehicles such as hybrids.

3. Associate tasks and vehicles.
   - Match task with vehicle.
   - Consider all transportation alternatives including the use of private vehicle reimbursement and vehicle allowance.

4. Allocate vehicles for each unit, function, department or agency based on tasks.
   - Rationalize the size and mix of fleet.

We recommend the use of a web-based process for pre-screening the requests for overnight vehicle retention. This web application may be designed to allow users to answer a few questions such as vehicle purpose, estimated mileage use, type of task, frequency of use, etc. to obtain an evaluation of their qualifications for a vehicle assignment. This will minimize bias since requests are evaluated systematically based on predetermined criteria. These are the criteria, as discussed above, established through the use of a vehicle allocation model. The requests, as the policy requires, will be renewed annually using the same process.

Uniform procedures should be required throughout all departments. These procedures should include the maintenance of vehicle logs, monitoring of daily activity and overnight parking, monitoring and reporting of vehicle usages, reviewing Fleet Services' monthly billing statements, etc.

Also, for taxation purposes, a process for reporting overnight retention of vehicles to Payroll should be implemented. This includes vehicles assigned to employees as part of compensation or fringe benefit.

Management Reply

Concur. The Executive Office concurs with this recommendation. Policy D-10 has been revised and will become effective upon approval of the Board of Supervisors. The revised policy will be placed on the July 14, 2009 agenda for approval by the Board of Supervisors. While there are no direct costs for implementing this recommendation, it should be noted that there may be costs related to vehicles returned to Fleet Services as a result of the policy changes.

Finding 2 **County fleet is underutilized.**

Potential Cost Savings: $1,388,000.

The county owns one passenger-type vehicle for every four county employees. Based on Fleet Services' estimate, passenger-type vehicles have to be driven an average of 7,200 miles per year to break-even on cost.

There are no established vehicle utilization standards. The county has 4,751 passenger-type vehicles. We reviewed 1,939 of these vehicles and found 672 (35%) were utilized below the minimum miles required to break-even on cost. Based on this, the county is not recouping $708,000 of fixed costs expended on these 672 vehicles.[2]

There were 326 rental vehicles in the fleet during the two-year audit period. Of the 168 vehicles we reviewed, 63 vehicles (37%) were utilized below the minimum miles required to break-even on cost. Based on this, the county is not recouping $89,000 of fixed costs expended on these 168 vehicles.[2]

The use of private vehicles exacerbates fleet underutilization. Private mileage reimbursements averaged $2,591,000 per year, equivalent to approximately 5.2 million miles per year. This is twice as much as the miles billed for motor pool rental vehicles. Four departments account for 69% of private miles reimbursements. These departments are also owners of the larger vehicle fleets, and underutilized vehicles. Channeling private vehicle usage to county-owned vehicles will reduce private mileage reimbursements. We believe a 30%, or 1,555,000 miles, reduction in private mileage reimbursements could be reasonably achieved by establishing clear guidelines between the use of private vehicles, motor pool rentals and leased vehicles. This potentially could generate a net cost[3] reduction of $591,000.

As background, the new federal government minimum utilization standard is 12,000 miles per year for sedans and station wagons, and 10,000 miles per year for light trucks. In March 2009, Sacramento County (California) established a 7,500 miles per year minimum utilization standard for department-assigned vehicles (in addition to eliminating all take-home vehicles except for those obligated by written agreements and specific job classifications).

[2] Based on average fixed cost per mile of $0.38.

[3] Net cost of $0.38 per mile (private mileage rate of $0.55, less variable vehicle cost of $0.17).

Recommendation 2 **Update the current Policy D-2 (Use and Purchase of County Vehicles).**

One of the end-products of this effort should be a clearly understood, widely-distributed statement of policy establishing the direction of county fleet management.

Below are excerpts from the UC Davis AHMCT study (underscoring provided for emphasis):

"Here are samples of federal statements of policy that illustrate what is needed:

From a policy statement adopted by the U.S. Department of General Services (GSA) as part of a VAM (Vehicle Allocation Methodology) study that was completed in 2006:

The most efficient and economical means of transportation will be used when the transport of people and/or materials, tools, etc., is essential to the performance of official government business. The policy of GSA is to base the assessment of efficiency and economy on a "Total Cost" approach that includes employee productivity, administrative process cost, and safety as well as transportation costs. User groups shall limit the provision of government owned or leased vehicles to the minimum number of appropriate vehicles required to fulfill the organization's mission after consideration of all alternative transportation methods."

"GSA shall maintain a "Zero Growth Policy." This policy states that (following establishment of a fleet Table of Allowance, or TOA) the overall size of the fleet shall not exceed established limits of the TOA unless approved by Agency Director."

"An optimal vehicle allocation results not from a formula per se, but from a methodology which provides agency fleet managers with a standard way to document the objective criteria of a vehicle fleet for a specific or generic (where there a common characteristics) office/facility, program, occupational group, or other entity within an agency. Objective criteria would include, but not necessarily be limited to: number of vehicle users to include, where applicable, user/vehicle ratios; per vehicle mileage; trips per vehicle; mission; terrain; climate; and fleet condition and down-time. The input for the methodology typically is obtained by surveys and/or in-person interviews of stakeholders."

"See "Federal Fleet Management", "GSA FMR Bulletin B-9", and "GSA Guide to Fleet Management.""

The updated policy should address vehicle utilization standards for every vehicle classification, including a time frame for correcting vehicle underutilization. The updated policy should also include guidelines for the best use of private vehicles, motor pool rentals, or leased vehicles, including vehicle classification, and for monitoring compliance by the departments.

Effective monitoring of mileage readings is crucial to ensure policies are adhered to. The mileage data is currently collected from a combination of sources: fueling stations, maintenance shop work orders, rental receipts, and department mileage reports. These all require manual entries into Fleet Focus FA system which can lead to significant errors. A study by the UC Davis Advance Highway Maintenance and Construction Technology (AHMCT) Research Center found that manually collected vehicle data are unreliable for decision-making.

The use of new technology for collecting vehicle data should be considered, such as On-Board Vehicle Diagnostic (OVD) II port and GPS navigation systems. The OVD II computers are already installed on all light duty vehicles manufactured after 1996, and the J1708 and J1939 (jBus) ports found on heavy duty trucks. These ports provide the mileage, vehicle identification number, hours of use, and trouble codes for purposes of repair and maintenance. San Diego County (California) is using the OVD II ports for data collection. Knox County (Tennessee) and Dallas County (Texas) are using GPS navigation systems in monitoring their vehicles. Sacramento County (California) was scheduled to start an automated monitoring of its vehicle mileages by March 2009.

Management Reply

Concur. The Executive Office concurs with this recommendation. Board Policy D-2 will be updated to reflect the county's general vehicle use policy. The revised policy will also clarify Fleet Services' role in establishing fleet management models and enforcing vehicle utilization standards. The revised policy will be placed on the agenda by October 20, 2009 for approval by the Board of Supervisors.

MEMORANDUM

EXECUTIVE OFFICE, COUNTY OF RIVERSIDE

Bill Luna
County Executive Officer

Jay E. Orr
Assistant County Executive Officer

TO: Auditor – Controller, Audits and Specialized Accounting

FROM: Bill Luna, County Executive Officer

DATE: June 30, 2009

RE: Reply to Draft Audit Report 2008-017: County of Riverside Vehicle Fleet

Thank you for this opportunity to respond to the draft audit report on the county's vehicle fleet. The audit provided information useful to the management of vehicle costs. Below are my responses to the recommendations

Recommendation Number 1 :

Update the current Policy D-10 (Overnight Retention of County Vehicles)

a. **Management position concerning the recommendation:**

__XX__ Concur ________ Disagree

b. **Comments:**

The Executive Office concurs with this recommendation. Board Policy D-10 has been revised and will become effective upon approval by the Board of Supervisors.

c. **Actual/estimated Date of Corrective Action: July 14, 2009**

The revised policy will be placed on the July 14, 2009 agenda for approval by the Board of Supervisors.

d. **Estimated cost to implement recommendation (if material)**

$_0_ While there are no direct costs for implementing this recommendation, it should be noted that there may be costs related to vehicles returned to Fleet Services as a result of the policy changes.

Recommendation Number 2 :

Update the current Policy D -2 (Use and Purchase of County Vehicles)

a. **Management position concerning the recommendation:**

__XX__ Concur ________ Disagree

b. **Comments:**

The Executive Office concurs with this recommendation. Board Policy D-2 will be updated to reflect the county's general vehicle use policy. The revised policy will also clarify Fleet Services' role in establishing fleet management models and enforcing vehicle utilization standards.

c. **Actual/estimated Date of Corrective Action: October 14, 2009**

The revised policy will be placed on the agenda by October 20, 2009 for approval by the Board of Supervisors.

d. **Estimated cost to implement recommendation (if material)**

$_0_

Robert T. Andersen Administrative Center
4080 Lemon Street • 4th Floor • Riverside, California 92501 • (951) 955-1110 • Fax (951) 955-1105