

CITY AUDITOR'S OFFICE



AUDIT OF CITY VEHICLE REPLACEMENT PROGRAM

Report No. CAO 1702-0506-02

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CITY AUDITOR

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AUDIT OF CITY VEHICLE REPLACEMENT PROGRAM CAO 1702-0506-02

BACKGROUND

The City of Las Vegas has a fleet of over 1,200 units including approximately 200 pieces of equipment (e.g. compressor, mower) and 1,000 vehicles. The majority of the vehicles are light-duty units such as sedans, pickups, SUVs, and vans. The remaining vehicles are specialized units such as fire and rescue trucks, street sweepers, and boom trucks.

The Fleet Services Manager manages the replacement program for all city vehicles except for fire and rescue trucks.

OBJECTIVE

The objective of our audit was to determine whether adequate controls are in place to ensure city vehicles are replaced in a cost effective manner.

SCOPE AND METHODOLOGY

Our fieldwork was performed in accordance with generally accepted governmental auditing standards. Procedures included:

- Review of policy and procedures;
- Interview of personnel; and
- Analysis of financial and operational data.

The focus of our review was primarily on light-duty vehicles.

FINDINGS AND RECOMMENDATIONS

Our audit identified issues management should address related to vehicle replacement. These issues are summarized in the following sections. While other issues were identified and discussed with management, they were deemed less significant for reporting purposes.

1. INTERNAL SERVICE FUND

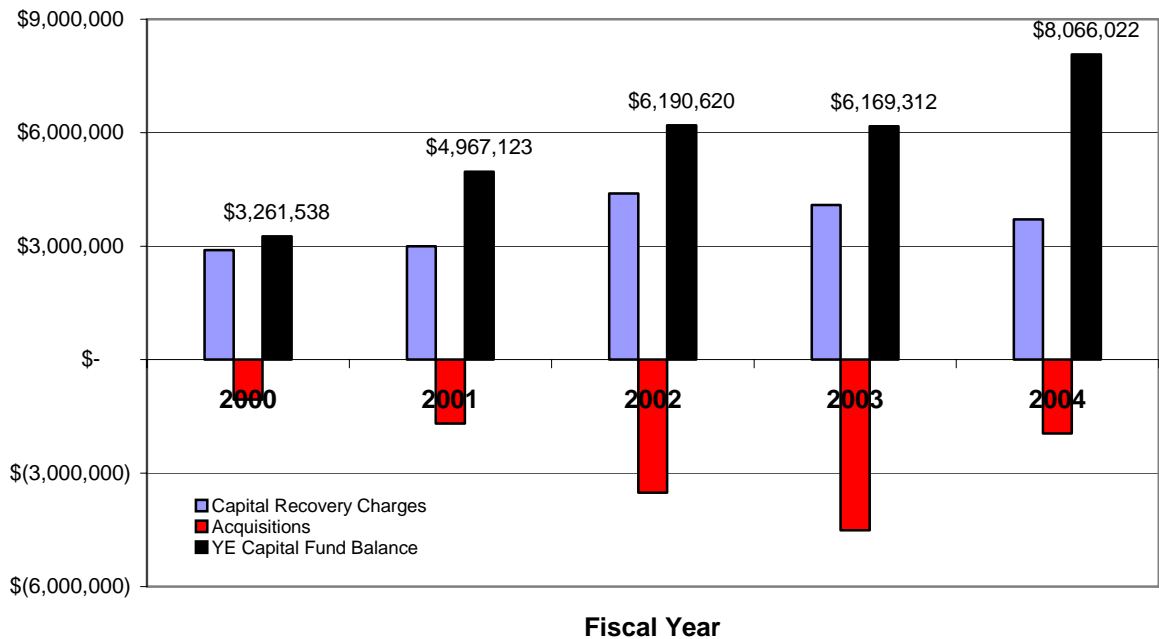
Criteria:

- Sufficient funds should be placed in reserve to purchase replacement vehicles at the end of their useful lives.

Condition:

- The City's Automotive Operations Internal Service Fund is made up of two separate funds. The capital fund includes capital recovery charges, proceeds from sale of assets, and acquisitions. The operating fund includes repair and maintenance charges and operating costs of the city garages.
- City departments pay a capital recovery charge for each vehicle. The annual capital recovery charge is calculated based on the vehicle's acquisition cost divided by its estimated useful life along with a five percent annual increment for inflation.
- Over the past five years, Fleet Services has collected a total of \$18.1 million through capital recovery charges but has only spent \$12.8 million on vehicle acquisitions. Consequently, the capital fund balance has increased to approximately \$8.1 million as of June 30, 2004.

Vehicle Capital Replacement Fund



Audit of City Vehicle Replacement Program

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- As many vehicles have been held onto rather than being replaced, we estimate that it would cost the City approximately \$15.9 million to replace all the vehicles that have been kept beyond their projected useful life. Therefore, the capital fund is currently deficient by approximately \$7.8 million.
- In 2004, the City Council approved transferring \$0.5 million and \$1.5 million into the Vehicle Capital fund for FY2005 and FY2006, respectively.
- In addition to the capital recovery charges, City departments are also required to pay a repair and maintenance recovery charge for each vehicle to cover Fleet Services' annual operating expenses of approximately \$6.3 million.
- Our review indicates that the operating fund balance has increased from \$427,000 in FY2000 to \$3.1 million in FY2004. This amount may be excessive for an Internal Service Fund since the fund balance would typically not exceed more than two months of the operational needs.

Cause:

- The current capital recovery charge-back program was established years after many vehicles in the fleet had already been purchased.

Effect:

- Insufficient capital funds to purchase new replacement vehicles when vehicles in the current fleet reach the end of their projected useful lives.

Recommendations:

1. Fleet Services should consult with Finance and Business Services to develop a funding plan to ensure adequate capital funds are available for future vehicle replacement. Additional funding could be obtained through an infusion from other city funds or an increase in capital recovery charges.
2. Fleet Services should consult with Finance and Business Services to determine the appropriate fund balance to maintain in its operating fund.

2. PROJECTED VEHICLE USEFUL LIVES

Criteria:

- A vehicle's projected useful life should reflect the optimized economic use of the vehicle.

Condition:

- Fleet Services uses the estimated useful life of a vehicle to calculate its capital recovery charges as well as to plan for future replacement.
- The Fleet Services Manager determines the projected useful life of each vehicle based on industry standards and the general requirements of the user departments.
- Based on Fleet Services' estimates, the average useful life of the current fleet is 7.96 years, ranging from three years for a City Marshal vehicle to eight years for a pickup and ten years for a dump truck.
- Our review indicates that similar types of vehicles are often assigned the same useful life. For example, most pickup trucks are assigned a useful life of eight years. However, actual usage varies significantly among the same type of vehicles.
- We sampled 514 vehicles and analyzed their average annual mileage in comparison with their assigned useful lives.
- For the 454 vehicles with an assigned useful life of eight years, we found that the annual average usage is 7,922 miles and the estimated total mileage would be 63,378 miles at the end of their projected useful life.
- Our analysis indicates that the usage of these vehicles ranged from an average of 477 miles to 22,538 miles per year.
- If the City was to replace all these vehicles after eight years of service, the total mileage for one of these vehicles could be as low as 3,816 miles or as high as 180,304 miles.
- The results of our analysis are summarized below:

Assigned Useful Life (years)	Average Annual Mileage	Estimated Total Mileage at End of Useful Life	Projected Mileage of Lowest Usage Vehicle at End of Useful Life	Projected Mileage of Highest Usage Vehicle at End of Useful Life	Number of Vehicles
3	15,487	46,461	$3,318 \times 3 = 9,954$	$28,431 \times 3 = 85,293$	25
7	7,941	55,587	$357 \times 7 = 2,499$	$11,720 \times 7 = 82,040$	35
8	7,922	63,376	$477 \times 8 = 3,816$	$22,538 \times 8 = 180,304$	454

- Based on our analysis, the projected useful lives assigned by the Fleet Services Manager may not reflect the history of the vehicles being replaced.

Cause:

- Using a standardized useful life for similar types of vehicles is easier to manage for budgeting purposes.

Effect:

- Not having an accurate projected useful life for each vehicle can have a negative impact on vehicle replacement planning.

Recommendations:

1. The Fleet Services Manager should assign each vehicle's projected useful life based on the history of the vehicle being replaced and the projected annual usage.
2. The Fleet Services Manager should consider rotating low-use and high-use vehicles among staff/departments to balance and optimize the use of all vehicles in the fleet.

3. FLEET UTILIZATION AND SIZE

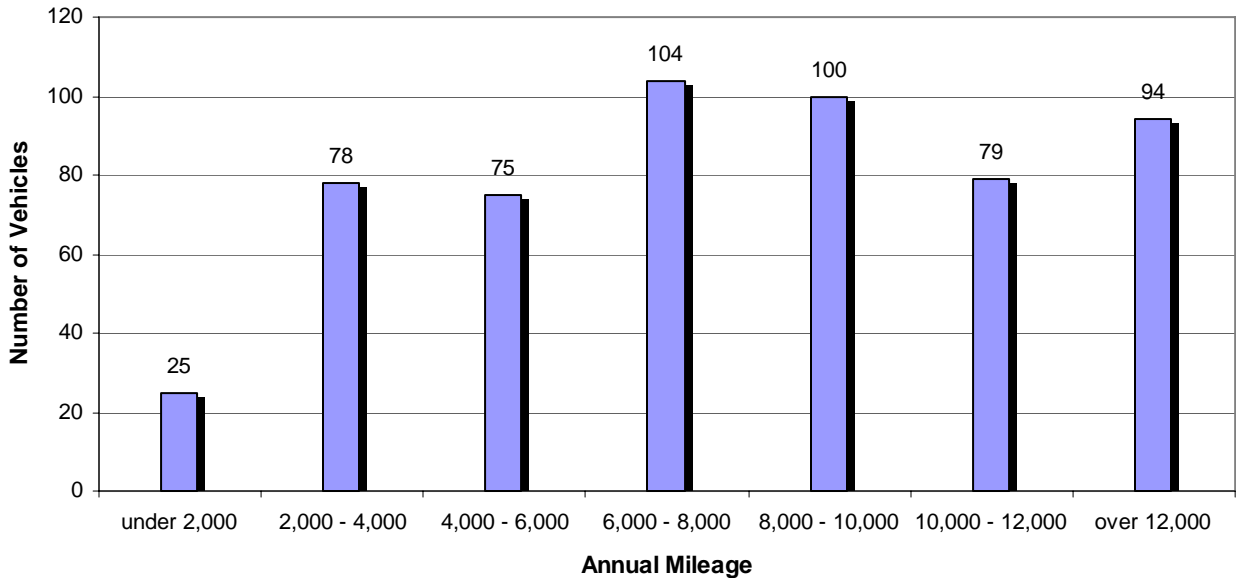
Criteria:

- An optimized fleet size should meet the organization's needs in a cost efficient manner.

Condition:

- Approximately half of the units in the current fleet are classified as equipment (e.g. compressor, mower) or specialized units used in specific operations (e.g. fire engines, street sweepers).
- The remainder of the fleet can be classified as light-duty vehicles including sedans, SUVs, vans and pickup trucks.
- We obtained actual mileage and estimated useful life information on 555 light-duty vehicles to evaluate the levels of usage.
- On average, these light-duty vehicles are driven 8,309 miles per year and their average projected useful life is 7.65 years. The average total mileage of these vehicles at the time of disposal would be 63,564 miles, which appears to be low.

- Based on our utilization analysis of 555 light-duty vehicles, 25 vehicles are being used on average less than 2,000 miles per year and 78 vehicles are being used on average between 2000 miles and 4,000 miles per year. The annual mileage ranges of the remaining light-duty vehicles are presented below.



- The City may have more vehicles than its operational needs.

Cause:

- Lack of scrutiny of light-duty low usage vehicles.

Effect:

- Inefficient use of city assets.

Recommendation:

1. The Fleet Services Manager should seek approval from the City Manager's Office to create a Vehicle Advisory Committee to oversee the vehicle replacement program. This Committee should perform the following functions:
 - Establish criteria and policy;
 - Scrutinize low usage vehicles; and
 - Evaluate alternative arrangements such as rotating high and low usage vehicles, sharing of vehicles, establishing pool vehicles and increasing use of mileage reimbursement.

**MANAGEMENT RESPONSES
TO
AUDIT OF CITY VEHICLE REPLACEMENT PROGRAM**

1. INTERNAL SERVICE FUND

Recommendation 1.1: Fleet Services should consult with Finance and Business Services to develop a funding plan to ensure adequate capital funds are available for vehicle replacement in the future. Additional funding could be obtained through infusion from other funds or increase in capital recovery charges.

Management Plan of Action: Funding was increased by an operating transfer in for both the FY05 and FY06 fiscal years. Vehicle replacements for the FY06 fiscal year will be analyzed to determine if the current capital recovery rate is adequate or if a rate adjustment is necessary.

Discussions are already underway with Finance to explore a variety of options. Increasing the adjusted Capital Recovery rate from the current 5% to 15% for a period of three-five years is one; another is to increase the maintenance point assessments across the entire fleet as a separate Capital Reserve surcharge until we have achieved 100% of the estimated replacement fund balance needed and another is to ascertain other funding sources that may be tapped for a fund transfer.

Timetable: As this is a Policy change, it will require CMO approval and Department Director buy in. An estimate time line for full implementation is January 3, 2006.

Recommendation 1.2: Fleet Services should consult with Finance and Business Services to determine the appropriate fund balance to maintain in its operating fund.

Management Plan of Action: A budget reserve of \$2.0 million (approx 4 months operating expenses) is considered an acceptable upper level threshold. Reasoning is based on the assumption that, as an Internal Service Fund, we would be totally self reliant financially for any and all anticipated and future planned capital projects. An example of this could be a cost share for a portion of a planned Corporate yard in the Centennial Parkway area within the next five years. Additionally, this reserve could provide the basis of cost-share with probable and likely federal grants in support of the City's alternatively fueled vehicle (AFV) and fueling infrastructure programs. Any funds that exceed that \$2.0 million threshold, unless superseded by a future policy change, could be transferred to the Vehicle Procurement account to offset any budgeted shortfalls or rebated back to the users.

Timetable: October 1, 2005

2. PROJECTED VEHICLE USEFUL LIVES

Recommendation 2.1: The Fleet Services Manager should assign each vehicle's projected useful life based on the history of the vehicle being replaced and the projected annual usage.

Management Plan of Action: Fleet Management and Finance will establish criteria for the assignment of useful life. At a minimum, the process will address historical trending, projected use, and governmental accounting guidelines.

As we discussed, the use of a fleet specific Fleet Management software program, as opposed to the City's current Hansen Program, would make this an easier task to accomplish. Indeed, the consultant that was hired by the Auditing department was surprised that we use the Hansen program and advocated a canned fleet management program to replace it. Estimated cost of this type of program is \$100,000. There are sufficient reserves in the Divisional operating budget to cover this expense. In the absence of this type of program, an internal review of vehicles and equipment's useful lives, though cumbersome under Hansen, would be utilized.

Timetable: Full implementation by June 1, 2006 if a new Fleet Management Program is approved. If not approved, use of the Hansen program by November 1, 2005.

Recommendation 2.2: The Fleet Services Manager should consider rotating low-use and high-use vehicles among staff/departments to balance and optimize the use of all vehicles in the fleet.

Management Plan of Action: Dovetails with item 2.1 above. A fleet specific software program will make this a doable task in a timely fashion. The Vehicle Advisory Committee (more fully discussed in recommendation 3.1 below) would be charged with making recommendations to allocate the City's vehicular fleet, that is not assigned to specific individuals, to maximize their usefulness. This committee should have the authority to direct changes to the fleet configuration where resistance is encountered and, quite frankly, expected.

Timetable: January 3, 2006

3. FLEET UTILIZATION AND SIZE

Recommendation 3.1: The Fleet Services Manager should seek approval from the City Manager's Office to create a vehicle advisory committee to oversee the vehicle replacement program. This Committee should perform the following functions:

- Establish criteria and policy;
- Scrutinize low usage vehicles; and
- Evaluate alternative arrangements such as rotating high and low usage vehicles, sharing of vehicles, establishing pool vehicles and increasing use of mileage reimbursement.

Management Plan of Action: A committee comprised of Department representatives to evaluate fleet utilization and replacement criteria will be recommended. Policy formulation to be submitted to the CMO and Director of Field Operations for approval.

Timetable: January 3, 2006