

CITY OF OAKLAND

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AGENDA REPORT

TO: DEANNA J. SANTANA
CITY ADMINISTRATOR

FROM: Vitaly B. Troyan, P.E.
Public Works Agency Director

SUBJECT: Infrastructure Report:
Vehicle and Equipment Fleet

DATE: August 22, 2012

City Administrator
Approval

Date

8/28/12

COUNCIL DISTRICT: City-Wide

RECOMMENDATION

This is an informational report on the state of the City's vehicle and equipment fleet.

EXECUTIVE SUMMARY

This report provides an overview of the City's automotive and equipment fleet, fleet reduction efforts, and vehicle/equipment additions and retirements for the FY 2011-12. There is also a discussion about the current age of the fleet and the capital requirements for its sustainment.

Currently, the City's fleet is comprised of 1,489 vehicles and pieces of equipment that have a total replacement value of approximately \$105 million. There has been a reduction of 341 units over the last 10 years including a reduction of 98 units in FY 2011-12.

Each vehicle type has an industry average age for retirement as published by the National Association of Fleet Administrators (NAFA). Assuming the average age of each type of vehicle should be half of its retirement age, our fleet should average 5.2 years old. In reality, our fleet averages 10.7 years old. Half of the vehicles in the fleet are over the average age of retirement as published by NAFA.

Most of the Equipment Services Division (ESD) activity is related to maintenance of the fleet. The Division achieved a 90% fleet availability rate for FY 2011-12.

The Equipment Fund is an Internal Service Fund (ISF) which accounts for services provided to users within the City to allocate the cost of resources consumed to the activities supported. The Equipment Fund balance is being restored from a one-time low of a negative \$16.4 million. The fund is ahead of schedule to be restored and staff projects it will have a zero balance by FY 2018-19. The fund balance was negative \$7.7 million as of June 30, 2012.

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Recent finding for vehicle and equipment replacement has been inadequate to ensure a cost-effective fleet. There is a \$25.9 million backlog of fleet replacement needs. In addition there is an average annual capital requirement of \$10.2 million to keep assets within their economic life. ESD is working with Treasury to identify funding options to replace equipment as it reaches its replacement age.

OUTCOME

This is an informational report and no action is required. This report is presented to appraise the Council as to the status of the City's fleet.

BACKGROUND/LEGISLATIVE HISTORY

The Public Works Agency (PWA) provided its last fleet status report to the Finance Committee on November 10, 2009. This was followed by a supplemental report on June 8, 2010.

ANALYSIS

This report provides an overview of the City's automotive and equipment fleet, fleet reduction efforts, and vehicle/equipment additions and retirements for FY 2011-12. There is also a discussion about the current age of the fleet and the capital requirements for its sustainment.

Equipment Services Division (ESD) Overview:

The ESD provides a full complement of equipment services, including vehicle and equipment maintenance and repair, governmental and environmental compliance, vehicle and equipment specification development, acquisition and disposal, repair part acquisition, motor pool services, fuel for City-owned vehicles and equipment, and specialized services such as automated vehicle locator, vehicle wash and outside vehicle/equipment rental.

The ESD completed FY 2011-12 with an adjusted operating budget of \$16.5 million and 50 funded full-time equivalent (FTE) staff positions assigned to the division. Most of the ESD activity is related to maintenance of the fleet. There are 37 technicians supported by four supervisors, three parts technicians and an equipment superintendent who oversees the maintenance activity. Staff accomplishes preventive maintenance and repairs even though productive hours have been constrained through frozen positions and furlough time. Staff achieved a 90% fleet availability rate for FY 2011-12.

Exhibit I illustrates the makeup of the City's fleet while *Exhibit II* provides the distribution by department.

Exhibit I: Types of Equipment

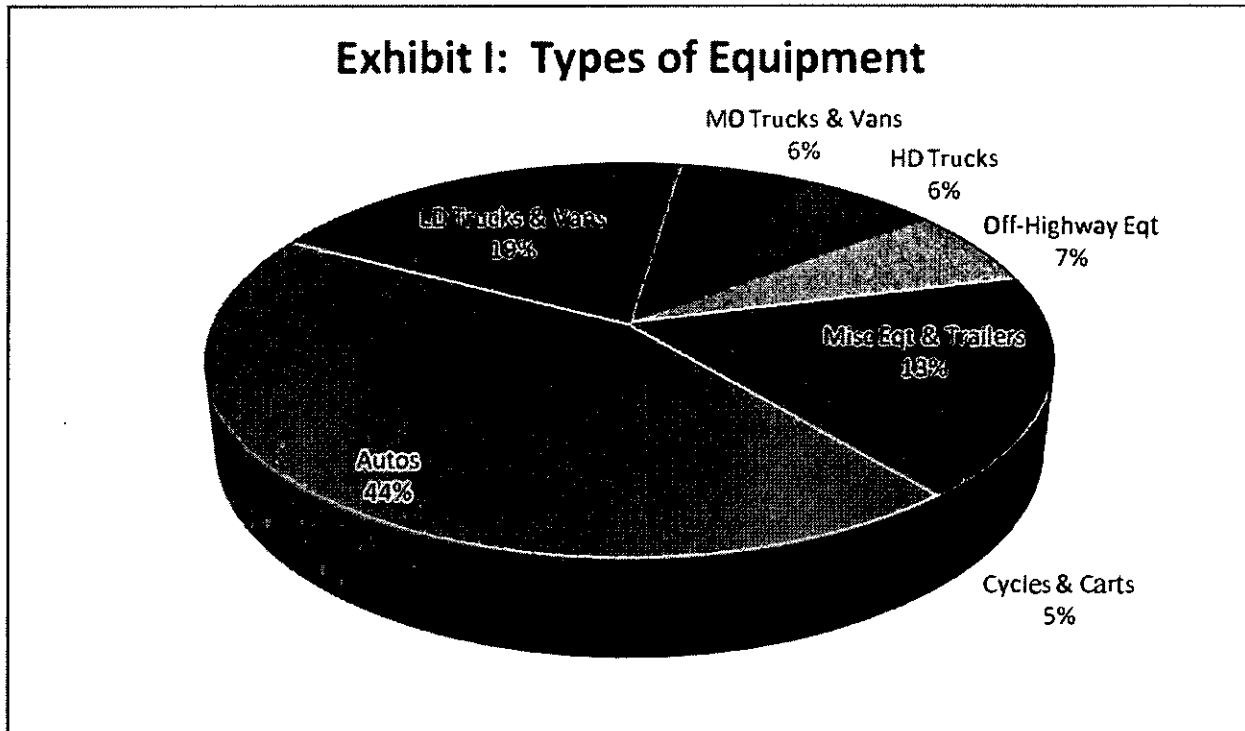


Exhibit II: Department of Assignment

	Police Dept	Fire Dept	Public Works	Other	Total
Autos	504	32	38	79	653
Light Duty Trucks & Vans	44	17	195	34	290
Medium Duty Trucks & Vans	13	8	75	1	97
Heavy Duty Trucks	2	51	30	3	86
Off-Highway Equipment	1	2	73	15	91
Misc Equipment & Trailers	11	26	152	7	196
Cycles & Carts	56	1	13	6	76
Total	631	137	576	145	1,489

The ESD is also responsible for working with City agencies/departments to assess annual vehicle and equipment needs as required by Administrative Instruction 4304 Fleet Utilization Policy.

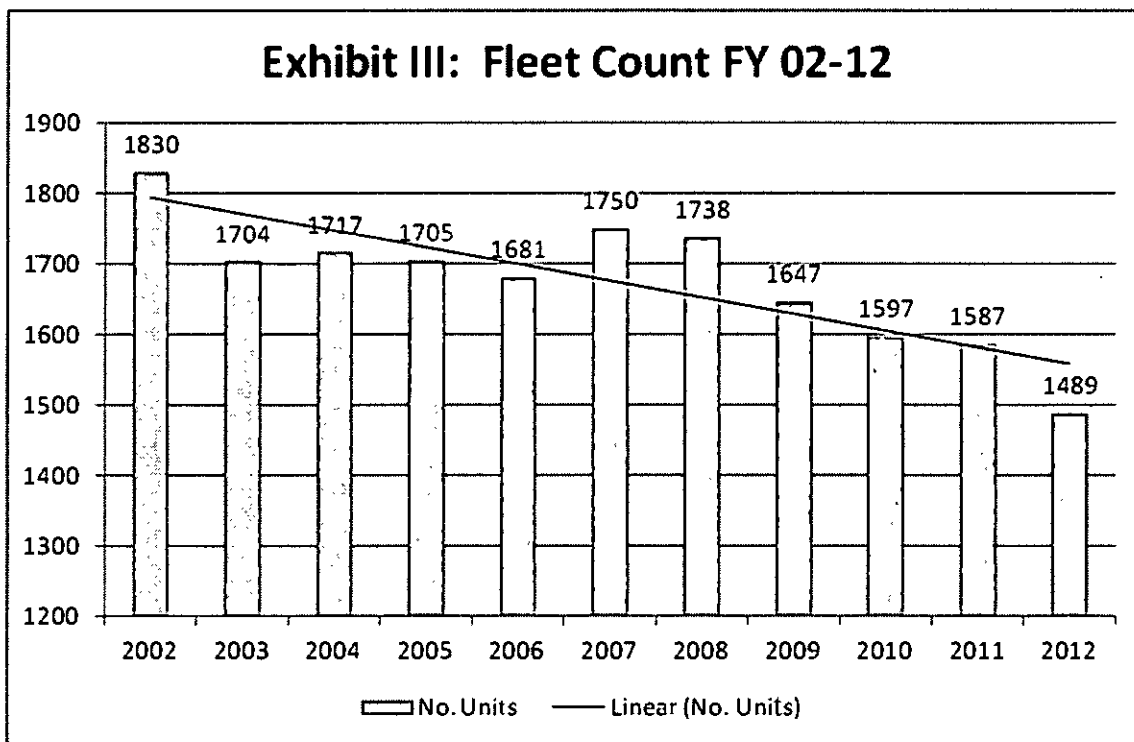
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The ESD adds value in the fleet acquisition process through the following activities:

- Identifying vehicle reduction opportunities;
- Establishing and applying fleet standards;
- Developing technical specifications;
- Employing cooperative purchasing agreements;
- Complying with environmental regulations; and
- Achieving green fleet goals.

Exhibit III displays the downward trend in fleet size over the last 10 years.

Exhibit III: Fleet Count FY 02-12



Fleet Funding

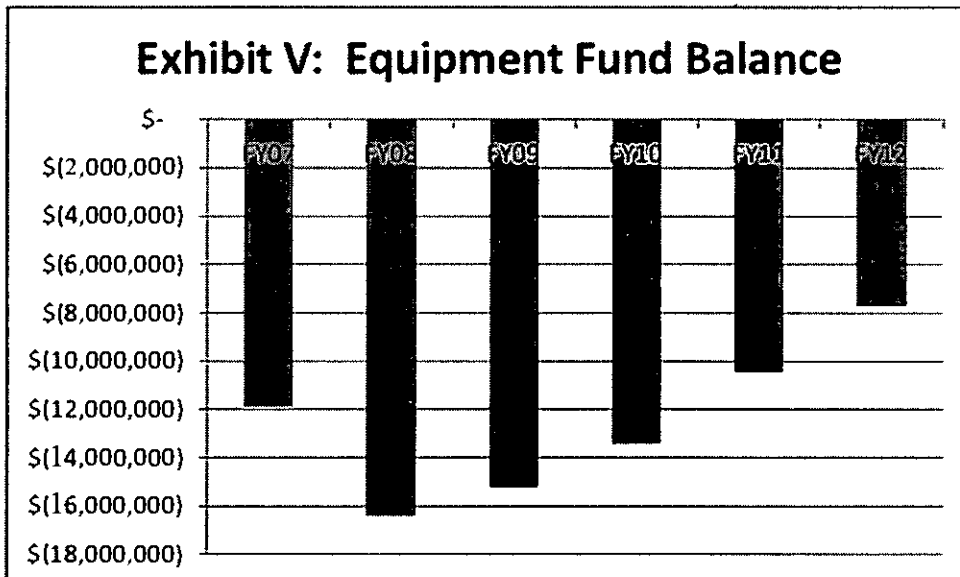
The Equipment Fund is an Internal Service Fund (ISF). An ISF accounts for services provided by a unit within an organization to other users within the same organization, thereby allocating cost of resources consumed to the activities supported. Revenues generated from charges to users are intended to be enough to cover the actual costs of services provided.

The Equipment Fund is currently collecting revenue for administration, maintenance and repairs, fuel and motor pool in addition to eliminating the negative fund balance. A rough breakdown of revenue activities is shown in *Exhibit IV*. The restoration plan calls for the fund balance to be restored in FY 2018-19. A history of the Equipment Fund balance is shown in *Exhibit V*.

Exhibit IV: Internal Services Cost Recovery

Service Provided	Cost Recovery Method	Approximate Annual Revenue
Fleet administration, routine maintenance and debt service	Monthly rental rates per unit based on labor effort	\$13.9M
Damage repairs and user-requested modifications	Hourly shop labor rate and markup on parts and sublet work	\$0.8M
Fuel	Cost per gallon plus percentage markup	\$2.0M
Motor pool	Time and mileage rates	\$0.2M

Exhibit V: Equipment Fund Balance



In FY 2011-12, the Public Works Agency developed a vehicle and equipment rates standard, which specifies the method and frequency for recalculating the monthly rental rates charged to using departments. New rates using this standard were put into effect on February 1, resulting in annualized cost savings of \$1.2 million to the GPF. The rates will be recalculated again in December and put into effect at the start of FY 2013-14. The rates do not include replacement costs.

Asset Management

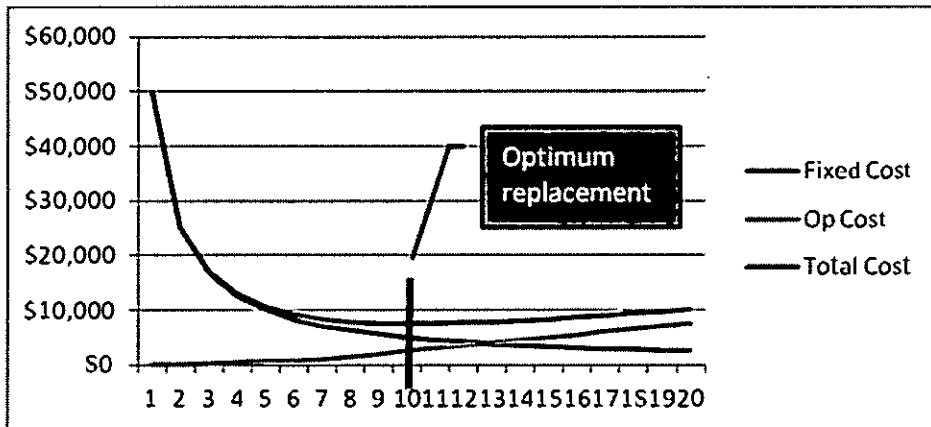
During FY 2011-12 vehicles and equipment items were cycled into and out of the fleet as shown in *Exhibit VI*. There were 30 items added to the fleet and 128 removed from service in FY 2011-12. The majority of items were added to Sewer Maintenance to ensure compliance with the Environmental Protection Agency Stipulated Order and were funded out of the Sewer Fund 3100.

Exhibit VI: Vehicles and Equipment In and Out of the Fleet

Type	Quantity Placed in Service	Quantity Removed from Service
Administrative vehicles		22
Boats		2
Fire marked sedans		2
Fire marked SUV	1	2
Heavy rescue truck	1	1
Mechanical street sweeper		3
Off-highway equipment		11
Parking enforcement vehicles		7
Police covert vehicle	1	
Police marked sedan	8	25
Police marked SUV	4	
Police unmarked sedan		3
Police unmarked SUV	2	
Trailer-mounted flusher	1	
Compact pickup truck	3	
Sewer CCTV van	1	
Police pickup truck	1	
Aerial work platform truck	2	3
Sewer flusher truck	2	3
Sewer power rodder truck	2	1
Traffic line painter truck	1	
Trailers, other		4
Trucks and vans, other		39
TOTALS	30	128

As assets age, their fixed cost is reduced while their operational costs increase. For each type of equipment, there is a point where the total costs rise and the equipment has reached its economic life. Keeping the equipment in service after that point has a greater annualized cost than replacing it with a new asset. The process of determining the economic life of assets is known as lifecycle cost analysis. *Exhibit VII* is a graph of a typical lifecycle analysis result showing the ideal point for a unit's replacement.

Exhibit VII: Lifecycle Cost Analysis Illustration

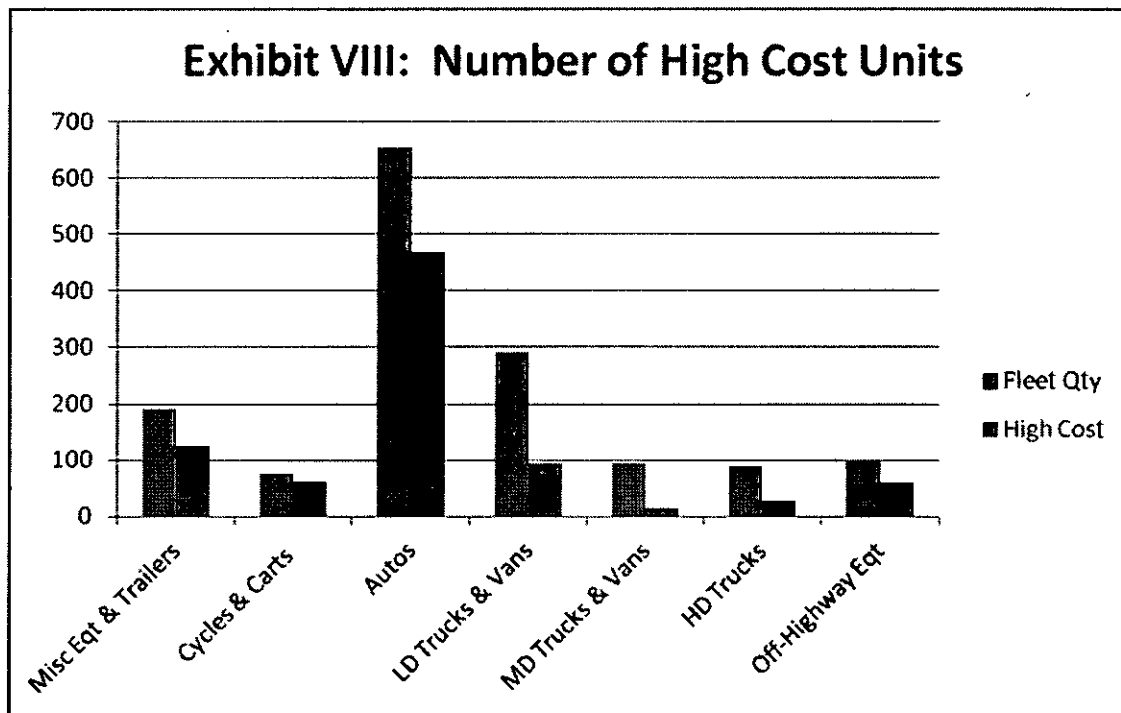


In an effort to identify potential savings in fleet costs, ESD compared the age of each vehicle and equipment item in the fleet to the average life of similar assets as reported by the National Association of Fleet Administrators (NAFA). It was found that 55% of the City's fleet exceeded the average holding period published by NAFA. Classes of vehicles with a high number of aged units were selected for detailed lifecycle cost analysis which confirmed the optimum replacement point for those groups. These analyses used actual City of Oakland data for each vehicle in the class to determine operational costs.

The vehicles and equipment aged beyond their economic life are resulting in costs greater than if they had been replaced at the optimum point. The large number of over-age units, as illustrated in *Exhibit VIII*, is having a significant impact on fleet costs. These costs reflect direct maintenance expenses plus the cost of extra vehicles to make up for the downtime while repairs are carried out. An ideal resolution would be immediate replacement of some high cost vehicles, a reduction in the total number of vehicles and an ongoing replacement plan to keep assets within their economic life.

Many vehicles are driven short distances to job sites and parked while work is done. Frequently, the vehicle is used as a mobile office, a workshop, a storage for materials, or for power to operate tools.

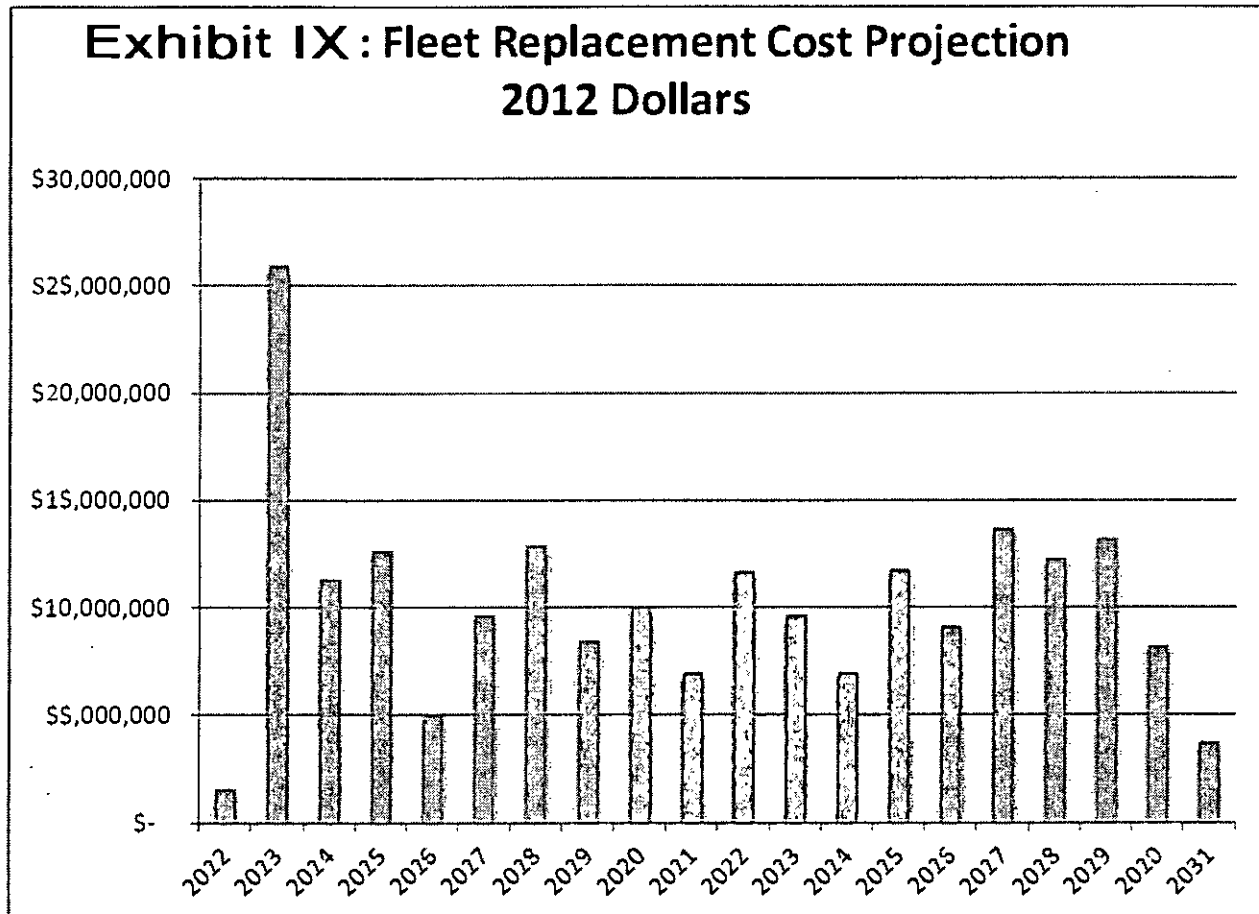
Exhibit VIII: Number of High Cost Units



As mentioned earlier, the fleet has a current replacement value of \$105 million. If each item were to be replaced at a reasonable interval for its type, there is an average annual capital funding requirement for \$10.2 million in current dollars. Due to the high number of vehicles currently overdue for replacement, immediate funding needs are high with normal cyclical patterns afterward. *Exhibit IX* provides an estimated 20-year capital forecast using current year dollars.

Recent funding for vehicle and equipment replacement has been inadequate to ensure a cost-effective fleet. ESD is working with Treasury and the Budget Office to identify funding options to meet this significant ongoing capital requirement.

Exhibit IX: Fleet Replacement Cost Projection – 2012 Dollars



PUBLIC OUTREACH/INTEREST

This item did not require any additional public outreach other than the required posting on the City's website.

COORDINATION

Information that is the basis of this report has been coordinated with the City Budget Office. Equipment Services regularly discusses with user department the type and number of vehicles needed for their activities and the cost of operating and maintaining the equipment.

COST SUMMARY/IMPLICATIONS

None. This report is submitted for information only.

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SUSTAINABLE OPPORTUNITIES


Economic: Sound management of the City's fleet reduces overall costs and increases available funding for direct services to citizens. The vehicle and equipment rate structure allocates costs of fleet services to supported activities in proportion to resources consumed. This helps to show the true costs of those activities.

Environmental: Regular replacement of fleet assets deploys up-to-date technologies that reduce fuel consumption and emissions.

Social Equity: There are no known impacts in this area.

For questions regarding this report, please contact Ken Bailey, Equipment Services Manager, at (510) 615-5487.

Respectfully submitted,



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