CITY AUDITOR'S OFFICE

Fleet Operations

August 7, 2020

AUDIT REPORT NO. 2008

CITY COUNCIL
Mayor W.J. "Jim" Lane
Suzanne Klapp
Virginia Korte
Kathy Littlefield
Linda Milhaven
Guy Phillips
Vice Mayor Solange Whitehead

August 7, 2020

Honorable Mayor and Members of the City Council:

Enclosed is the audit report for *Fleet Operations*, which was included on the Council-approved FY 2019/20 Audit Plan. This audit was conducted to assess management controls and cost-effectiveness of Fleet operations, such as planning, providing and charging fleet services.

The audit concluded that Fleet Management can improve its replacement rate methodology and the accuracy and consistency of its application. For example, using a published inflation rate for general purpose vehicles and discrete escalation rates for specialty vehicles would improve forecasting future replacement costs. As well, about 42% of replacement fees were not correctly or consistently calculated, including a programming error, timing errors and fee exclusions. Further, cost savings or avoidance may be achieved by reducing low-use vehicles and ensuring timely preventative maintenance.

If you need additional information or have any questions, please contact me at (480) 312-7867.

Sincerely,

Sharron Walker

Sharron E. Walker, CPA, CFE, CLEA
City Auditor

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AUDIT HIGHLIGHTS

Fleet Operations

August 7, 2020 Audit Report No. 2008

WHY WE DID THIS AUDIT

An audit of *Fleet Operations* was included on the City Council-approved fiscal year (FY) 2019/20 Audit Plan. The audit objective was to assess management controls and cost-effectiveness of Fleet operations, such as planning, providing and charging fleet services.

BACKGROUND

Fleet Management is responsible for purchasing and maintaining the City's fleet of more than 1,200 vehicles and related equipment. The varied fleet includes firetrucks, police cars, solid waste trucks, street sweepers, trolleys, forklifts, light-duty pickup trucks, sedans and other types.

Reporting to the Fleet Management Director, the Fleet Asset Manager oversees parts, vehicle acquisition and budget, and the Fleet Operations Manager oversees vehicle service and maintenance.

City departments with fleet equipment pay three rates:

1) Replacement fees based on the projected future replacement cost.
2) Maintenance & Operation fees based on prior year actual costs plus a markup.
3) Fuel fees, based on actual fuel costs plus markup.

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WHAT WE FOUND

Fleet Management can improve its replacement rate methodology and the accuracy and consistency of its application.

Specifically, Fleet Management should:

- Use published automobile inflation data to determine the cost escalation rate and determine discrete escalation rates for specialty vehicles.
- Include salvage value in calculating replacement fees.
- Systematically compare the length of actual vehicle and equipment use to their estimated useful lives.

Calculations of replacement fees are not applied correctly or consistently.

Over the past 6 years, replacement fees for 42% of the fleet were calculated incorrectly. Specifically, Fleet Management:

- Due to a programming error, overcharged $1.05 million in replacement fees over the past 6 fiscal years.
- Undercharged $1.1 million by not properly ending or starting replacement rates when some vehicles were taken out of or put into service.
- Overcharged $876,000 for exempt vehicles and undercharged $62,000 by excluding certain vehicles and equipment.

Cost savings or avoidance may be achieved by reducing low-use vehicles and ensuring timely preventative maintenance.

We found:

- Developing an effective motor pool could allow departments to reduce the number of low-use vehicles to create savings and be more efficient.
- Developing more effective preventative maintenance reminders may help avoid costly repairs or breakdowns.

WHAT WE RECOMMEND

We recommend the Fleet Management Director:

- Improve the replacement fee methodology.
- Correctly and consistently charge replacement fees.
- Work with departments to promote the use of motor pool vehicles and standardize communications about overdue preventative maintenance.

MANAGEMENT RESPONSE

The department agreed with the audit recommendations, proposing to implement improvements between June 30, 2021, and July 1, 2023.

BACKGROUND

Fleet Management is responsible for purchasing and maintaining more than 1,200 Fleet vehicles and equipment used throughout City operations. Valued at nearly $90 million, this varied fleet includes firetrucks, police cars, solid waste trucks, street sweepers, trolleys, forklifts, light-duty pickup trucks, sedans and other types.

Reporting to the Fleet Management Director, the Fleet Asset Manager oversees parts, vehicle acquisition and budget, and the Fleet Operations Manager oversees vehicle service and maintenance.

Fleet charges the departments using fleet vehicles and equipment three rates:

- *Replacement* – Projected future replacement cost of the vehicle divided by the projected lifespan of the vehicle.
- *Maintenance & Operation* – A rate based on prior year actual maintenance costs plus departmental overhead for each vehicle.
- *Fuel* – Actual fuel charges, based on fuel cost plus departmental overhead, applied when each vehicle uses a City fueling facility.

AR125, *Procurement of City Owned & Leased Motor Vehicles,* defines Fleet equipment as any city asset meeting one or more of the following criteria:

- Primary purpose is transportation.
- Non-stationary, mobile equipment that is towed by equipment otherwise defined as fleet equipment.
- Requires a mounted operator
- Has an internal combustion engine or alternative to an internal combustion engine with a power rating greater than seven horsepower.

To track the fleet inventory along with the original cost, maintenance and repairs, usage by vehicle miles, equipment hours or fuel, and life expectancy, Fleet Management uses FASTER, a specialized fleet information management system. FASTER interfaces with SmartStream, the City's financial system, which improves the efficiency of tracking parts orders, receipting inventory and paying vendors.

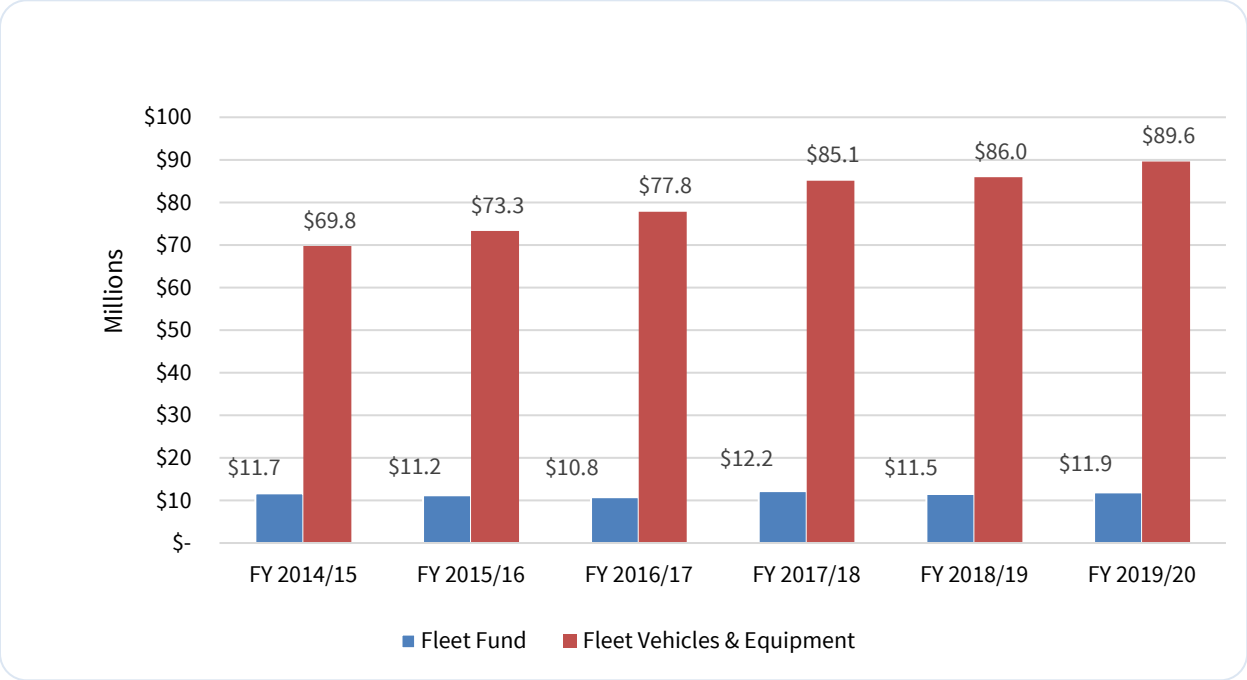
Departments that want replacement or upgraded vehicles submit their requests to Fleet Management for approval of the Fleet Asset Manager and the Fleet Management Director. To resolve any disputes about vehicle purchases, the requests may be escalated to the City Manager if necessary. Fleet reported that it uses state and regional vehicle contracts to obtain the best pricing. While vehicles generally take between 1 to 6 months to purchase, prepare and place in service, specialty vehicles such as firetrucks may take up to 18 months from the time of order.

Given the long lead time to purchase and prepare vehicles and departments' operational needs for vehicles, the Fleet service staff evaluates a vehicle's condition each time it comes in for service. Fleet indicated its preventative maintenance schedules are based on a combination of manufacturer recommendations and Fleet experience. Also, its maintenance decisions are based on the cost of maintenance and the amount of time the vehicle is expected to remain in service. Fleet prioritizes service for vehicles that are required to be in use daily, such as Fire and Police vehicles, or on a scheduled basis, such as Solid Waste vehicles.

Fleet Fund

The City's adopted financial policy 42, *Reserve Management*, provides that the Fleet Fund shall be maintained to ensure adequate funding for systematic replacement and operational needs. As shown in Figure 1, the Fleet Fund cash balance ranged from $12.2 million to $10.8 million. During this same period, fleet vehicles and equipment asset value steadily increased by almost $20 million, from nearly $70 million to about $90 million.

Figure 1. Fleet Fund Cash Compared to Vehicle and Equipment Value



SOURCE: Auditor analysis of SmartStream general ledger data.

OBJECTIVES, SCOPE, AND METHODOLOGY

An audit of *Fleet Operations* was included on the City Council-approved fiscal year 2019/20 Audit Plan. The audit objective was to assess management controls and cost-effectiveness of Fleet operations, such as planning, providing and charging fleet services.

To prepare for this audit, we reviewed related audit reports previously issued by this office including Audit No. 0407C *Fleet Asset Management*, Audit No. 0905 *City Fuel Usage,* Audit No. 1105 *Fleet Management Rates,* Audit No. 1305 *Fuel Costs and Controls* and Audit No. 1912 *Fleet Parts Operation*, as well as similar audit reports recently completed by other auditors. In addition, we reviewed Scottsdale Administrative Regulations including:

- AR 123 *Operation of City Owned & Leased Motor Vehicles*
- AR 124 *Take-Home Vehicles*
- AR 125 *Procurement of City Owned & Leased Motor Vehicles*

To gain an understanding of Fleet operations, we reviewed financial and related data available in the City's budget book and general ledger. We also reviewed Fleet Management department policies and procedures. To further understand policies, procedures and available data, we interviewed the Fleet Management Director, Fleet Asset Manager and Fleet Operations Manager. In addition, we interviewed Budget personnel in the City Treasurer's office.

To assess management controls and cost-effectiveness of Fleet operations, we:

- Reviewed a judgmentally selected sample of vehicles from different departments and of different classes to assess the justification of replacement vehicles purchased for the City's fleet.
- Analyzed FASTER reports to identify vehicles driven less than 5,000 and less than 12,000 miles per year.
- Assessed the accuracy and reasonableness of Fleet replacement rate methodology and its application, including the useful life, salvage value and cost escalation factors.
- Assessed Fleet's preventative maintenance, including management controls to achieve departmental compliance with preventative maintenance schedules and the related performance measure goal for timeliness.

Our audit found that Fleet Management can improve its replacement rate methodology and its accuracy; fleet equipment replacement fees are not applied correctly or consistently; and cost savings or avoidance may be achieved by reducing low-use vehicles and ensuring timely preventative maintenance.

We conducted this performance audit in accordance with generally accepted government auditing standards. 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 objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Audit work took place from March 2020 to July 2020.

FINDINGS AND ANALYSIS

1. **Fleet Management can improve its replacement rate methodology and the accuracy and consistency of its application.**

   Fleet Management does not use published inflation rates or actual useful lives in its replacement rate calculations to recover the projected cost of future fleet vehicle or equipment replacements. As well, vehicle auction revenues are not used to reduce vehicle replacement costs.

   A. Fleet Management does not use published automobile inflation data to determine the cost escalation rate to use in its annual replacement rate calculation.

      1. The City's Administrative Regulation (AR) 125, *Procurement of City Owned & Leased Motor Vehicles,* requires the Fleet Management department to establish "user rates for each asset based on generally accepted future value calculations."

         Fleet uses an "escalation" rate to represent the expected annual rate of cost increases. Since FY2016/17, Fleet Management has used a single escalation rate for the entire fleet. The Fleet Director indicated the escalation rate was based on vehicle replacements made within the 18 months prior to rate determination, but the rate could not be recalculated.

         Fleet's escalation rate ranged from 1.46% to 3.03% over the past 4 years. However, according to the U.S. Bureau of Labor Statistics' (BLS) monthly index for the new vehicle cost, the price change from 2010 through 2019 averaged 0.54% per year.

         While providing an objective measure to estimate the future expected replacement costs for passenger cars and light trucks, this BLS category does not encompass heavy-duty trucks or specialty equipment the City owns. Costs of certain specialty vehicles can increase at an even higher rate. According to information provided by Fleet Management, the actual replacement costs of 12 new firetrucks placed into service since 2014 were underestimated by an average of 13%. The use of a fleetwide escalation rate resulted in the Fire Department being undercharged more than $4.3 million for these vehicles, with the resulting shortfall covered by rates charged across the entire fleet.

         If Fleet Management had used this BLS rate to estimate the future replacement costs for FY2014/15 through FY2019/20, total replacement fees for passenger cars and light trucks would have been lower by nearly $1.2 million each year on average. Further, applying discrete escalation rates for specialty vehicle types, such as an average 5.5% escalation rate for firetrucks, would allocate replacement costs to the department using the vehicle rather than the costs being subsidized by other areas.

      2. Although higher than recent vehicle price inflation, the single escalation rate that Fleet uses is not representative of expected price increases when a group of vehicles will be replaced with a more expensive model.

         For example, beginning seven years ago, the Police Department began replacing its patrol cruisers with SUVs. The average replacement SUV costs $20,000 more than the average patrol cruiser it is replacing. This average 8% annual increase is about 5 percentage points higher than the most recent escalation factor being applied.

If Fleet Management had used the applicable higher escalation rates for the cruisers over the past 6 fiscal years, an additional $570,000 would have been recognized in the cost of providing patrol vehicles and charged to the Police Department. Instead, this higher cost has been spread across all departments that use fleet vehicles.

3. Fleet Management also adjusts the escalation rate to fully fund current year acquisitions from current year replacement revenues.

   Excluding capital projects funding, over the past 6 fiscal years, the Fleet Fund has had cash reserves averaging $11.5 million and its June 30, 2020, balance is $11.9 million. [1] In May 2020, Fleet transferred $2.1 million to its capital projects funds, which then totaled approximately $3.8 million at June 30.

Fleet Fund (excluding Capital)	**2015**	**2016**	**2017**	**2018**	**2019**	**2020** [1]
Cash at June 30 (in millions)	$11.7	$11.2	$10.8	$12.2	$11.5	$11.9

   Vehicle acquisitions during this time averaged $7.9 million per year.

   The Fleet Director stated that vehicle acquisitions have been restricted to being funded by the annual replacement fees. However, the Budget Director explained that cash reserves could be spent if justified, but Fleet Management has rarely requested additional spending authority.

   The Fleet Director indicated that after Audit 1105, *Fleet Management Rates*, he worked with the former City Treasurer to develop the recommended financial policy guidance. The City Council-adopted financial policy states the Fleet Fund reserves should be "maintained to ensure adequate funding for systematic replacement and operational needs." While not formalized, the two departments reportedly agreed to a cash balance of one year's vehicle replacement funding plus three months of operating costs. However, this approach results in much higher Fleet charges to departments than would be calculated with a more conservative 3- or 6-months reserve.

   In April 2020, due to FY 2020/21 budget reductions, the City Manager directed Fleet Management to reduce replacement rates and defer some acquisitions for the upcoming fiscal year. This resulted in a $4.1 million reduction in replacement fees and a $3.5 million deferral in vehicle and equipment acquisitions. The Budget Director anticipates reducing the Fleet Fund cash to a target range of $5 million to $6 million.

B. Fleet Management does not consider salvage value in the calculation of replacement fees, although it receives approximately $650,000 per year, averaging about 12% of the original vehicle costs, from auctioned vehicles.

   After vehicles have been replaced and are considered surplus, the Fleet Management department sends them to the Warehouse for disposal through public auction. Over the past six fiscal years, vehicle auction proceeds deposited to the Fleet Fund totaled $3.9 million. Fleet

[1] The FY 2019/20 cash balance is through the third accounting close on August 3, 2020 and subject to revision.

Management uses these sales proceeds to offset its administrative costs rather than to offset other departments' vehicle replacement costs.

As illustrated by the examples in Table 1, some fleet vehicles and equipment sales return a significant portion of the original cost. Overall, 25% of the auctioned surplus fleet items realized proceeds of more than 25% of their original acquisition cost.

Table 1. Examples of Significant Fleet Auction Proceeds

Description (Department)	Cost	Acquisition Date	Disposal Date	Auction Proceeds	% of Cost
1996 Cat 120H Grader (Street Operations)	$67,243	9/26/2008	2/5/2016	$49,600	74%
1997 Case 580L Backhoe (Water Services)	$41,600	7/14/1997	7/31/2019	$22,600	54%
1996 Kubota Utility Tractor (Parks & Recreation)	$17,852	11/8/1996	9/30/2014	$9,590	54%
2007 Ford F150 (Development Services)	$14,050	2/1/2007	5/18/2018	$7,500	53%
2007 Peterbilt Front Loader (Solid Waste)	$203,393	12/10/2006	4/2/2015	$72,100	35%
2008 Tymco Street Sweeper (Street Operations)	$161,807	3/2/2009	3/5/2015	$62,200	38%

SOURCE: Auditor analysis of Fleet data from FASTER, with auction proceeds reconciled to the SmartStream general ledger.

Including the estimated salvage value in the replacement fee calculation would result in fairer replacement fees for the departments using fleet vehicles.

C. Fleet Management does not systematically review the length of actual vehicle and equipment use compared to the estimated useful lives that serves as the basis for the replacement fee calculation. Also, the department continues charging replacement fees for vehicles and equipment items that remain in service longer than the estimated useful life. As a result, over the past 6 fiscal years, Fleet charged departments about $10.6 million in replacement fees after these items' projected replacement costs had been fully recovered.

1. Fleet's policy is to assign the same useful life to all vehicles in the vehicle class.

   However, 64% of the fleet vehicles and equipment were in classes with as many as 8 different useful lives. Table 2 on page 10 provides a few examples of the differing useful lives Fleet has assigned to vehicles within the same vehicle classes.

(continued on next page)

Table 2. Examples of Different Useful Lives Within Vehicle Classes

Description	Division	Department	In-service Date	Useful Life in Years
Class: 8501- 10,000 GVW* Pickups One-Ton Regular Cab				
2018 Chevrolet 2500	Public Works	Facilities Management	5/9/2018	10
2018 Chevrolet 2500	Public Works	Street Operations	6/26/2018	12
Class: 10, 001- 14,000 GVW Pickups Super-Duty w/Service Body Regular Cab				
2018 Ford F350	Public Works	Facilities Management	5/3/2018	10
2018 Ford F350	Public Works	Facilities Management	6/7/2018	12.5
Class: 16,001-19,500 GVW Straight Trucks General Purpose Utility Bed				
2018 Ford F450	Public Safety	Police Investigative Services	2/11/2016	12
2018 Ford F550	Public Safety	Police Investigative Services	6/6/2018	10
Class: 8501-10,000 GVW Van Cargo Standard Van				
2016 Ford Transit 350C	Public Works	Street Operations	5/4/2018	12
2018 Ford Transit 150C	Public Works	Street Operations	7/2/2018	8

* GVW represents Gross Vehicle Weight.

SOURCE: Auditor analysis of Fleet data from FASTER.

These useful life differences mean that Fleet is charging different replacement fees for similar vehicles. Without a specific reasoning for a varying useful life, such as intensity of planned uses, the varying replacement rates are not equitable.

2. In addition, over the past 6 fiscal years, Fleet Management charged $10.6 million in replacement fees for fleet equipment in service after the useful life was reached. Based on the replacement fee calculation, the projected vehicle or equipment replacement cost has been funded over its useful life. Continuing to charge replacement fees after the recovery point unfairly penalizes a department for continuing to use the same vehicle or equipment.

   Table 3 on page 11 lists examples where Fleet collected replacement fees in excess of a vehicle or equipment's estimated replacement cost.

(continued on next page)

Table 3. Examples of Excess Replacement Fees

Description (Department)	Original Cost	Estimated Replacement Cost	Replacement Fees Collected [1]	% of Replacement Cost [1]	Additional Years of Fees
2007 Dodge Magnum (Police Operational Support)	$24,848	$26,847	$29,490	110%	7
2013 Ford F150 (Water Resources Technology & Admin)	$27,589	$37,199	$75,472	203%	0
2013 Ford F150 (Police Uniformed Services)	$30,467	$31,723	$63,131	199%	0
2014 Ford F150 (Police Uniformed Services)	$31,181	$32,885	$80,667	245%	0
2014 Ford F150 (Police Uniformed Services)	$31,181	$32,885	$65,026	198%	0
2015 Chevrolet Silverado (Police Uniformed Services)	$35,080	$36,997	$54,817	148%	0
2015 Chevrolet Silverado (Police Uniformed Services)	$35,080	$36,997	$54,817	148%	0
1994 Otta Tug (Solid Waste)	$33,900	$57,716	$64,674	112%	14
1997 Madvac Sweeper (Parks & Recreation)	$31,898	$38,428	$37,443	97%	16
2006 Ford Crown Victoria (Police Uniformed Services)	$25,636	$28,171	$25,837	92%	8
2007 Sterling Condor (Solid Waste)	$219,099	$239,605	$224,807	94%	6

[1] These amounts are based on fees collected from July 1, 2014 through March 31, 2020. Additional fees would have also been collected for older vehicles in prior years.

SOURCE: Auditor analysis of Fleet data from FASTER and reconciled to the SmartStream general ledger.

The Fleet Director explained that they review the useful life if they notice a significant difference in the item's actual usage, higher than expected repair costs or a change in equipment reliability. However, Fleet Management has not performed a systematic review to compare the estimated useful life to the actual use of all fleet items.

Based on actual years in service, 24% of the fleet equipment had significant differences between equipment usage to years of service useful lives. These vehicles and equipment items have been kept in service for years longer than the expected replacement date because of lower than expected usage, as shown in Table 4 on page 12.

(continued on next page)

Table 4. Examples of Significant Variances in Estimated and Actual Useful Lives

Description (Department)	Estimated Useful Life	Actual Years in Service	% of Useful Life	% of Usage Life [1]	Average Replacement Charges
1999 Chevrolet Tahoe (Police Investigative Services)	6	15	250%	112%	$6,014
2014 Ford F150 (Police Uniformed Services)	2	4	200%	100%	$16,256
2001 Ford Crown Victoria (Police Investigative Services)	6	13	217%	138%	$6,276
2002 Ford Crown Victoria (Police Investigative Services)	6	12	200%	141%	$5,517
2001 Peterbilt 320 (Solid Waste)	6	15	250%	103%	$23,557
1994 Peterbilt 320 (WestWorld)	10	25	250%	123%	$11,441

[1] Usage Life for most vehicles is determined by miles, but for some fleet equipment, such as backhoes, it is measured in machine hours.

SOURCE: Auditor analysis of Fleet data from FASTER as of May 2020.

Comparing actual use experience with estimated useful lives can help ensure replacement rates are fair and equitable for each department.

Recommendations:

The Fleet Management Director should:

A. Use a published inflation index, such as Bureau of Labor Statistics price change data, to estimate the future expected replacement cost for each class of vehicle and determine discrete escalation rates for specialty vehicles.

B. Use historical vehicle auction proceeds to estimate vehicles' salvage values in the replacement fee calculations.

C. Regularly compare estimated useful lives with the length of actual usage experience and adjust vehicles useful lives as appropriate. Further, discontinue charging vehicle replacement fees after the projected replacement cost has been funded.

2. Calculations of fleet equipment replacement fees are not applied correctly or consistently.

Fleet Management operates as an internal service fund, allocating its costs to fleet users. A key principle for internal service funds is applying a cost allocation methodology that charges fees equitably based on use or other causal factors. However, during the past 6 fiscal years, just over half of replacement fees were calculated properly. Another 42% contained errors and about 5% of vehicles or equipment were considered exempt from replacement rates.

Replacement Rate Test Results	Count	% of Total
Correct	977	53%
Considered Exempt	85	5%
Incorrectly Calculated	575	32%
Incorrectly Charged	10	1%
Improperly Excluded	62	3%
Timing Errors	119	6%
	1,828	100%

A. Due to a programming error, Fleet Management overcharged $1.05 million in fleet equipment replacement fees over the past 6 fiscal years.

During the audit, we determined that 32% of replacement rates were incorrectly calculated. The calculation errors ranged from $17, which was 1.3% of the related replacement fee, to $8,490 (22.9% of the related fee) and affected nearly every department's rates.

In total, Fleet charged departments $1.05 million more over the 6 years than if the rates had been properly calculated. As shown in Table 5, the Solid Waste Fund paid just over half of this total, with almost one-third paid from the General Fund. The Water and Transportation Funds each accounted for about 6%.

After auditors informed them of the calculation error, Fleet Management reported fixing the underlying programming error.

Table 5. Distribution of Rate Calculation Overcharges

Departments	Fund	Overcharge Amount	% of Total
Solid Waste	Solid Waste	$585,500	55%
Police	General	$220,600	21%
Fire	General	$55,700	5%
Other departments (12)	General	$68,200	6%
Water departments (5)	Water/Water Reclamation	$62,900	6%
Street Operations and Transportation	Transportation	$59,000	6%
Fleet Management	Fleet	$3,600	1%
	Total	**$1,055,500**	**100%**

SOURCE: Auditor analysis of replacement fees assessed by Fleet Management

B. Fleet Management did not properly end or start fleet equipment replacement rates for 119 of the 1,828 fleet equipment items in service between July 2014 and June 2020. As a result, Fleet did not recover a net of $1.1 million over the past 6 fiscal years.

As part of the annual budget process, Fleet uses the current list of fleet vehicles and equipment about 7 to 8 months before the upcoming fiscal year to determine replacement fees to be budgeted. However, Fleet's vehicle and equipment lists used did not include all items in service at the time and included some items that had been taken out of service.

To simplify the budgeting process, the replacement fees are charged based on this list even if a vehicle or equipment item is taken out of service before or during the following fiscal year. Similarly, replacement fees for any new vehicle put into service during this period are not charged until the subsequent fiscal year.

However, as shown in Table 6, Fleet Management continued to charge replacement fees for some vehicles or equipment after it was taken out of service and did not charge replacement fees for others after it was put into service. The missed fees totaled about $1.4 million and the overcharged fees totaled nearly $270,000.

Table 6. Examples of Replacement Fees Not Consistent with Years In Service

Description (Department)	Cost	In-Service Date	Fees Started	Years of Missed Fees [1]	Estimated Missed Fees
2002 ALF Custom Ladder (Fire Department)	$446,915	5/22/2002	7/1/2005	4	$264,383
2011 International (Police Uniformed Services)	$160,736	6/28/2011	7/1/2018	4	$80,592
1994 Peterbilt (WestWorld)	$93,153	7/26/1994	7/1/2017	3	$35,694
2014 John Deere Loader (Street Operations)	$285,121	6/1/2015	7/1/2018	2	$70,510
2015 Chevrolet Malibu (Police Investigative Services)	$21,499	7/23/2015	7/1/2018	2	$6,059
2017 Ford F550 (Water Resources Technology & Admin)	$63,912	11/13/2017	7/1/2019	1	$6,338
2015 Chevrolet Tahoe (Police Uniformed Services)	$43,890	11/10/2015	7/1/2017	1	$5,483
2014 Freightliner (Water Reclamation)	$360,048	7/1/2014	7/1/2016	1	$46,277
		Out-of-Service Date	**Fees Stopped**	**Years of Excess Fees [a]**	**Estimated Excess Fees**
1999 Trucut Mower (Parks & Recreation)	$1,190	7/5/2013	6/30/2015	1	$380
2007 Ford Crown Victoria (Police Uniformed Services)	$25,636	7/21/2014	6/30/2016	1	$5,722
2001 Ford F450 (Parks & Recreation)	$23,766	8/20/2015	6/30/2017	1	$2,617

[1] Missed and Excess Fees are summarized only for the period of July 1, 2014 through June 30, 2020.

SOURCE: Auditor analysis of replacement fees assessed by Fleet Management.

These timing errors primarily affected the City's General Fund, undercharged a net $667,000; the Solid Waste Fund, undercharged by $223,000; and the Transportation Fund undercharged by $111,000.

C. Fleet Management excluded certain vehicles or equipment when calculating and charging replacement fees.

1. Without City management or budget concurrence, the Fleet Management department excluded 22 of its own 24 vehicles and equipment items from the FY2019/20 replacement fees.

   The Fleet Director indicated since Fleet Management costs are allocated to the other departments through Fleet's overhead rates, he decided it was unnecessary to charge these fees to his department. This resulted in Fleet not paying approximately $62,000 in replacement fees and understates the costs of operating this department.

   Further, the Fleet Director also purchased two additional vehicles, totaling $49,000, from the Fleet Fund for his department's use.

2. Some City departments have requested and gotten certain fleet equipment excluded from replacement fees.

   Although there is not a written policy, Fleet Management generally did not charge replacement fees for certain fleet vehicles and equipment items that it considered exempt. As a general practice, Fleet considered vehicles and equipment purchased by grant funds, seized by the Police department, or permanently attached to another fleet equipment item as exempt. While not charging replacement fees for 85 "exempt" items, Fleet charged replacement fees for 10 similarly funded items, including three pickup trucks, one SUV, four street sweepers, a police tactical operations vehicle, and an aviation shuttle. Over the 6-year period, these replacement fees totaled about $972,000 with about 72% charged to the Transportation Fund.

   Further, while the Fleet Director stated that departments do not get to choose whether an item is included in the fleet replacement program, notes in the FASTER system indicated 17 vehicles or equipment items were apparently excluded upon department request.

   Based on Fleet Management records, 11 of these 17 vehicle or equipment items appear to have been donated to the City. However, there is not a management-approved policy to exclude donated fleet items. Three other items were charged replacement fees for some portion of the 6-year period.

   For these 17 excluded fleet items, an estimated $96,100 in replacement fees would have been charged, mostly to the General Fund.

3. Fleet does not have a written policy addressing redeployed vehicles and has been inconsistently charging departments replacement fees for them.

   Occasionally, replaced fleet vehicles or equipment items are still in adequate condition to be usable in a lower- or special-use capacity. Fleet sometimes redeploys a vehicle to a second department, generally to replace an older or more worn vehicle. At other times, a department retains it as a back-up or a training vehicle.

However, Fleet sometimes charged replacement fees for these redeployed vehicles, charged fees for a portion of the redeployed period or did not charge fees at all. Table 7 shows examples of redeployed vehicles and fees.

Table 7. Examples of Inconsistent Redeployed Fleet Replacement Fees

Description (Department)	Cost	Replacement Date	Redeployed Years	Fees Charged	Fees Not Charged
2002 Alf Eagle Pumper (Fire Department)	$325,443	8/11/2017	1	$32,278	
2002 Alf Eagle Pumper (Fire Department)	$325,874	9/1/2017	2	$69,691	
2006 BMW PD Motorcycle (Police Uniformed Services)	$23,069	9/13/2013	4	$16,050	$3,989
2001 Ford Expedition (Police Uniformed Services)	$29,738	6/12/2014	4	$5,535	$15,845
2005 Ford F150 (Fleet Management)	$14,446	2/22/2017	2		$3,090
2000 Jeep Wrangler (Fleet Management)	$25,350	4/7/2010	6		$19,496

SOURCE: Auditor analysis of FASTER data and Fleet Management spreadsheets reconciled to SmartStream general ledger.

Redeploying vehicles or equipment to lower-intensity or alternate uses is a cost-effective use of City assets. However, charging replacement fees does not seem necessary for a vehicle whose replacement cost has already been fully recouped.

As summarized in Table 8 on page 17, the various errors partly offset, netting to $763,400 overcharged for replacement fees over the 6 fiscal years. While the General Fund was undercharged overall during this period, the Transportation and Solid Waste Funds were overcharged.

(continued on next page)

Table 8. Summary of Errors Noted by Fund

Error Type	Total	General Fund	Transp. Fund	Solid Waste Fund	Water Funds	Other Funds [1]
	Over / (Under) Charged					
Programming Error	$1,055,500	$344,500	$59,000	$585,500	$62,900	$3,600
Timing Errors	($1,106,000)	($667,000)	($111,000)	($223,000)	($97,000)	($8,000)
Fleet Vehicles Excluded	($62,000)					($62,000)
"Exempt" Vehicles Charged	$972,000	$271,000	$698,000			$3,000
Requested "Exemptions"	($96,100)	($76,900)	($17,400)		($1,800)	
Total	**$763,400**	**($128,400)**	**$628,600**	**$362,500**	**($35,900)**	**($63,400)**

[1] Other funds include Fleet, Section 8 Housing and Aviation Funds.

SOURCE: Auditor summary of errors in Fleet's application of replacement fees.

Recommendations:

The Fleet Management Director should:

A. Ensure that the programming is correctly calculating the replacement fees for all fleet equipment.

B. Ensure that fleet equipment is properly presented on the annual listing used to calculate replacement fees.

C. Develop policies and procedures with criteria to exempt fleet vehicles from the replacement program and documentation for the exemptions. Also, modify and consistently use a rate calculation methodology to equitably charge replacement fees to all remaining fleet equipment.

3. Cost savings or avoidance may be achieved by reducing low-use vehicles and ensuring timely preventative maintenance.

Developing an effective motor pool could allow departments to share vehicles, create savings and be more efficient. As well, better ensuring timely preventative maintenance can help avoid costly vehicle repairs or breakdowns.

A. As summarized in Table 9 on page 18, departments paid fleet charges totaling nearly $808,000 in FY 2019/20 for 242 trucks and sedans that were driven fewer than 5,000 miles each.

(continued on next page)

Table 9. Vehicles Driven Fewer than 5,000 Miles Annually, by Division

	FY 2009/10		FY2019/20	
Division / Office	Count	Replacement Charges	Count	Replacement Charges
Administrative Services	2	$12,118	1	$3,222
City Clerk	1	$2,490	-	-
Community Services	31	$133,761	42	$139,964
Community & Economic Development	18 [a]	$67,435	17 [a]	$38,756
Finance & Accounting	4	$23,056	-	-
Information Technology	6	$13,581	9	$25,782
Public Safety – Fire	6	$25,721	9	$37,508
Public Safety - Police	62	$296,081	65	$214,958
Public Works	35 [b]	$113,377	49 [b]	$152,421
Water Resources			48 [b]	$188,783
Risk Management	-	-	1	$3,013
Section 8 Housing	1	$4,777	1	$3,457
Total	**166**	**$692,397**	**242**	**$807,864**

[a] In FY 2009/10, the Community & Economic Development division included Economic Vitality and Planning, Neighborhood & Transportation departments. In FY 2019/20, Planning & Economic Development includes the same departments except Transportation, which is now within Public Works. However, Transportation had no low-use vehicles.

[b] In FY 2009/10, the Public Works and Water Resources departments, were combined within one division. In FY 2019/20, Public Works and Water are separate divisions.

Analysis included general purpose vehicles, such as light trucks and sedans, and excluded specialty vehicles, such as firetrucks and street sweepers. FY 2019/20 only includes vehicles placed in-service prior to July 2019.

SOURCE: Auditor analysis of Audit 1105, *Fleet Management Rates,* and the FY2019/20 vehicle listing provided by Fleet department.

The Fleet Director stated they established a benchmark of 5,000 or fewer miles per year to identify underused vehicles or equipment for further review. However, the review does not appear to be effective as low-use vehicles are a continuing issue. For example, the City Auditor's Audit 1105, *Fleet Management Rates*, identified 166 vehicles driven fewer than 5,000 miles in fiscal year 2009/10. Additionally, the City Manager's Fleet Efficiency Workgroup identified 127 vehicles driven fewer than 5,000 miles in 2017.

- The Public Works and Water Resources divisions have had the largest increase in low-use vehicles since the 2010 audit, going from a total of 35 vehicles in FY 2009/10 to 97 in FY

2019/20, an increase of more than 177%. In fiscal year 2019/20, the divisions paid more than $340,000 in fleet replacement charges for the 97 low-use vehicles.

- In 2012, Fleet started a motor pool for shared vehicle usage, which currently consists of 10 pickup trucks, 2 vans and 3 sedans. However, Fleet has not developed a method to charge the vehicle use to various departments so has not promoted its use, and the motor pool vehicles are also driven fewer than 5,000 miles per year, on average.

An effective motor pool could help reduce the number of low-use City vehicles and the fleet expense for departments with limited vehicle needs.

For example, Information Technology (IT) has 5 vans used by the help desk, desktop technical support, and network operations. From FY 2014/15 to FY 2018/19, the vans have been driven 3,300 miles per year each, on average. Public Safety Radio also has a Ford F150 pickup truck and a Ford F350 truck driven approximately 4,500 miles per year, on average. Despite this, IT added a new Ford F150 pickup truck for the Data Center Resiliency Plan in 2017. Through FY 2018/19, this truck was driven fewer than 3,800 miles per year. Also, in FY 2017/18, IT Web and Design Services replaced a 1998 Ford E350 van with a 2017 Dodge Grand Caravan minivan. From FY 2014/15 through FY 2017/18, the 1998 Ford van had been driven 742 miles per year on average; the replacement Dodge minivan has averaged 1,800 miles per year in its first two years of use. In FY 2019/20, the IT department paid nearly $26,000 in fleet charges for these 9 low-use vehicles.

If the IT department used motor pool vehicles and Fleet charged the City mileage reimbursement rate of $0.58 per mile for their use, the IT department would have saved approximately $14,000 in FY 2019/20.

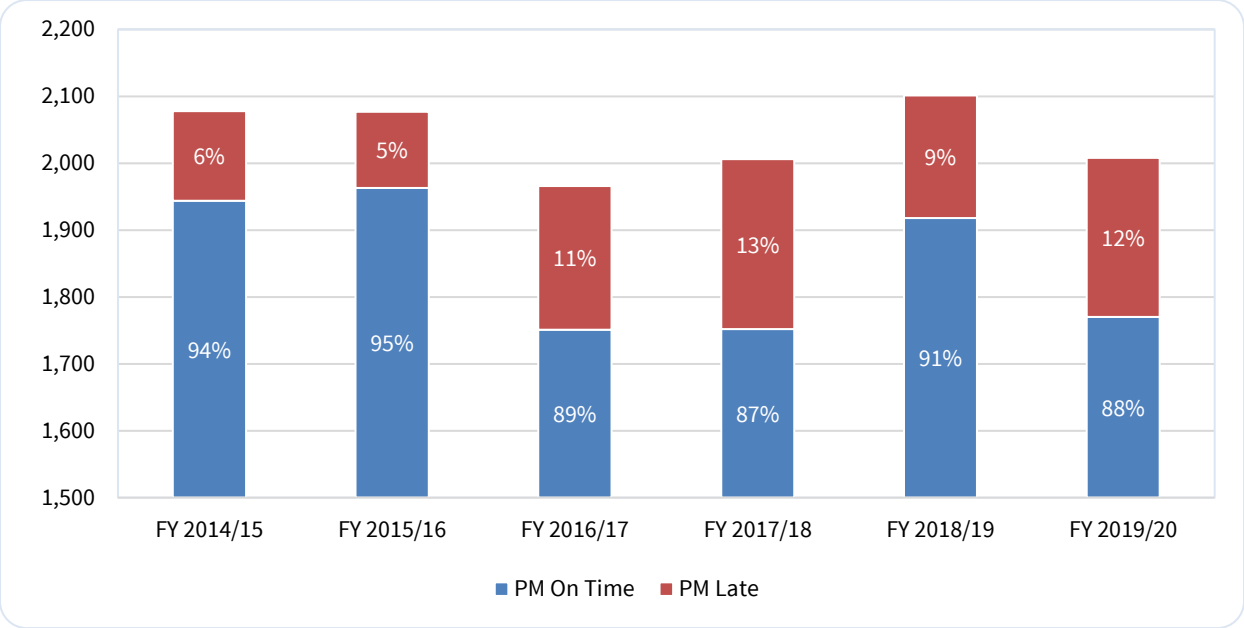
B. Developing more effective preventative maintenance reminders may help avoid costs of repairs or breakdowns.

Fleet policies recognize that a timely preventative maintenance program protects City vehicles and equipment from costly repairs. Additionally, AR 123, *Operation of City Owned and Leased Motor Vehicles*, requires Fleet to "establish preventative maintenance (PM) schedules in accordance with manufacturers' recommendations" and "distribute to departmental liaisons a weekly PM list of due or projected to be due within two weeks."

In fiscal year 2018/19, Fleet implemented a performance goal of improving preventative maintenance compliance to a fleetwide average of at least 90%. As illustrated in Figure 2 on page 20, based on Fleet's data, 94% to 95% of scheduled PMs were completed timely in FY 2014/15 and FY 2015/16. But from FY 2016/17 through FY 2019/20, timely completion of scheduled PMs has declined to between 87% and 91%.

(continued on next page)

Figure 2. Preventative Maintenance Timeliness



SOURCE: Auditor analysis of FASTER Fleet Management data using PowerBI reports

According to the Fleet Operations Manager, achieving a 90% rate of on-time PMs is a fleet management industry best practice, and with improved department responsiveness and by attracting and retaining qualified staff, Fleet can eventually achieve between 98% and 100% compliance.

A few city departments have historically failed to bring their vehicles in for timely preventative maintenance, as shown in Table 10.

Table 10. Departments with Least Timely Preventative Maintenance

	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Fire	92%	89%	63%	66%	70%	70%
Solid Waste	85%	86%	72%	68%	81%	65%
Street Operations	88%	93%	83%	91%	87%	86%

SOURCE: Auditor analysis of Fleet Preventative Maintenance Compliance Reports.

Currently, Fleet sends automated emails to the departmental Fleet liaisons weekly, listing vehicles scheduled for PMs in the next two weeks. The email also lists the department's overdue

vehicles highlighted in red. Fleet explained that Fleet Technicians also make calls and send emails to individual department Fleet liaisons when vehicle PMs are overdue.

However, because these calls and emails are not tracked, there is no assurance that all the applicable departments were contacted. Also, there is not currently a specific process for escalating the overdue preventative maintenance issues within the departments if the vehicle is not brought in after an extended period of time.

Recommendations:

The Fleet Management Director should:

A. Establish a method to charge departments for motor pool use, such as a per-mile rate. Then work with departments with low-use vehicles to promote the use of motor pool vehicles for overall City savings.

B. Develop a standardized process for communicating with departments about overdue preventative maintenance, including specific time frames for reminder messages, tracking emails and calls, and escalation to higher management levels when appropriate.

MANAGEMENT ACTION PLAN

1. Fleet Management can improve its replacement rate methodology and the accuracy and consistency of its application.

Recommendations:

The Fleet Management Director should:

A. Use a published inflation index, such as Bureau of Labor Statistics price change data, to estimate the future expected replacement cost for each class of vehicle and determine discrete escalation rates for specialty vehicles.

B. Use historical vehicle auction proceeds to estimate vehicles' salvage values in the replacement fee calculations.

C. Regularly compare estimated useful lives with the length of actual usage experience and adjust vehicles useful lives as appropriate. Further, discontinue charging vehicle replacement fees after the projected replacement cost has been funded.

MANAGEMENT RESPONSE: Agree

PROPOSED RESOLUTION:

Fleet will consult with Budget and Accounting to establish the intent and proper calculations of fleet acquisition rates and the application of the salvage proceeds.

RESPONSIBLE PARTY: Budget, Accounting, Public Works Department Director - Fleet

COMPLETED BY: 6/30/2021

2. Calculations of fleet equipment replacement fees are not applied correctly or consistently.

Recommendations:

The Fleet Management Director should:

A. Ensure that the programming is correctly calculating the replacement fees for all fleet equipment.

B. Ensure that fleet equipment is properly presented on the annual listing used to calculate replacement fees.

C. Develop policies and procedures with criteria to exempt fleet vehicles from the replacement program and documentation for the exemptions. Also, modify and consistently use a rate calculation methodology to equitably charge replacement fees to all remaining fleet equipment.

MANAGEMENT RESPONSE: Agree

PROPOSED RESOLUTION:

A. A logic error in the SQL query has been found and repaired as a result of the audit process.

B. Fleet will work with Budget and Accounting on establishing the intent and timing of asset recognition in the rates.

C. Fleet will develop policies and procedures regarding exemption from acquisition rates. As previously stated, a cooperative effort between Budget, Accounting and Fleet will determine the intent and methodology of fleet rates.

RESPONSIBLE PARTY: Budget, Accounting, Public Works Department Director - Fleet

COMPLETED BY: 6/30/2021

3. Cost savings or avoidance may be achieved by reducing low-use vehicles and ensuring timely preventative maintenance.

Recommendations:

The Fleet Management Director should:

A. Establish a method to charge departments for motor pool use, such as a per-mile rate. Then work with departments with low-use vehicles to promote the use of motor pool vehicles for overall City savings.

B. Develop a standardized process for communicating with departments about overdue preventative maintenance, including specific time frames for reminder messages, tracking emails and calls, and escalation to higher management levels when appropriate.

MANAGEMENT RESPONSE: Agree

PROPOSED RESOLUTION:

A. The Public Works Executive Director will work with the executive team favoring pooled equipment over assigned equipment for low use assets. Fleet will continue working with IT on a more robust motor pool application that includes use charge capabilities. Additionally, commercial motor pool software will be explored as part of the Fleet Management Software (FMS) proposed in fiscal year 2022/23.

B. Fleet will include preventative maintenance notifications and escalated notifications in the bid specification of the request for proposal for a new FMS included in Fleet's five-year plan in fiscal year 2022/23.

RESPONSIBLE PARTY: Public Works Executive Director, IT, Purchasing, Public Works Department Director - Fleet, Fleet Technology Coordinator

COMPLETED BY: 7/1/2023

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