

Agenda Item No: 5.d

Meeting Date: February 7, 2022

# SAN RAFAEL CITY COUNCIL AGENDA REPORT

**Department: Public Works** 

Prepared by: Bill Guerin,

**Director of Public Works** 

**City Manager Approval:** 

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TOPIC: FY 2021-22 VEHICLE REPLACEMENT

SUBJECT: RESOLUTION AUTHORIZING THE CITY MANAGER TO PURCHASE FIVE (5)

PATROL CARS FOR THE POLICE DEPARTMENT AND TWO (2) PARKING ENFORCEMENT VEHICLES FOR THE PARKING SERVICES DEPARTMENT IN A

**TOTAL AMOUNT NOT TO EXCEED \$476,805** 

## **RECOMMENDATION:**

Adopt the resolution authorizing the City Manager to purchase five (5) patrol cars for the Police Department and two (2) parking enforcement vehicles for the Parking Services department in a total amount not to exceed \$476,805.

## **BACKGROUND:**

#### Police Department Marked Replacement Overview

This fiscal year (2021/2022) San Rafael Police Department (SRPD) has requested the replacement of five Ford Utility Interceptor Marked Patrol Cars. This follows the purchase/replacement of six patrol cars in FY 2020-21 and three in FY 2019-20. The total marked patrol car fleet consists of 19 vehicles. With the replacement of the five requested vehicles, approximately 70% of the marked patrol car fleet will be within two years old with only five vehicles needing replacement in FY 2022-23. This would also bring the marked fleet to approximately 70% hybrid power. Please note that the six new patrol cars purchased in FY 2020-21 have yet to be placed into service due to supply chain shortages of upfitting equipment. It is possible we will see these supply shortages into 2022 and placing vehicle and equipment orders as soon as possible will ensure the new patrol vehicles are in service before the older vehicles go beyond their service life.

#### ANALYSIS:

Figure 1 lists the vehicles PD has requested to be replaced. It is important to note that the mileages may be between 10,000 to 20,000 miles higher when replaced with a new vehicle due to the lead time. The City's Fleet Policy and Procedures document places a 5-year amortization schedule on marked patrol cars. This repays the vehicle replacement fund over five years the full cost of the vehicle plus an inflation

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**Council Meeting:** 

**Disposition:** 

factor. Though not intended to be used a strict replacement schedule, this 5-year timeline has coincided with the vehicles recommended service life. Each vehicle has or will exceed this recommended 5-year schedule at the time of replacement.

Figure 1. Vehicles to Be Replaced

Vehicle Number	Model Year	Current Mileage	Miles Driven in FY 20/21	Years in Service
242	2017	93,590	15,063	5
223	2015	101,215	6,661	7
232	2015	100,919	5,360	7
222	2015	85,888	5,079	7
238	2017	108,072	20,405	5

Figure 2 shows the fiscal year 20/21 fuel and maintenance costs for each vehicle as well as a total operating cost per mile. The bottom row shows the average of the five vehicles.

Figure 2. Vehicle Operating Cost Data

Vehicle Number	Miles Driven in FY 20/21	Fuel Costs (\$3.08/gal average)	Maintenance Costs	Total Operating Cost Per Mile
242	15,063	\$7,477	\$4,484	\$0.79
223	6,661	\$2,062	\$2,575	\$0.69
232	5,360	\$2,250	\$4,189	\$1.20
222	5,079	\$1,043	\$5,960	\$1.37
238	20,405	\$7,210	\$5,540	\$0.62
Average	10,513	\$4,009	\$4,549	\$0.81

Figures 3, 4, and 5 compare the five vehicles in Figure 2 with two of the 2020 hybrid patrol cars that are currently in service. These charts are based on FY 20/21 miles and costs. As the charts will show, the new hybrid patrol cars save the city on average, \$1,820/year in fuel costs per vehicle and reduce carbon dioxide emissions by 11,076 lbs./year per vehicle. Maintenance costs and downtime are also drastically reduced due to increased reliability of newer vehicles and new car warranties that pay for some maintenance costs. This reduces the cost per mile to operate by approximately 60%.

Figure 3. Cost Per Mile Comparison (in service vehicles)

Vehicle (FY 20/21)	Average Miles Driven (FY 20/21)	Average Fuel Costs (FY 20/21- \$3.08/gal average)	Average Maintenance Costs (FY 20/21)	Average Operation Cost Per Mile (FY 20/21)
Average of Vehicles Listed in Figures 1&2 (5)	10,513	\$4,009	\$4,549	\$0.81

In-Service 2020 Hybrid	19,364	\$4,715.89	\$1,892.93	\$0.34
Patrol Cars (2)				

Figure 4 – MPG Comparison (in service vehicle)

Vehicle	Average Gal. Fuel Used (FY 20/21)	Average Miles Driven (FY 20/21)	Average Mile per Gallon
2020 Hybrid (2)	1,531	19,364	12.64
Non-Hybrid (5)	1,349	10,513	7.79
		MPG Increase	4.62

Figure 5 – Emissions and Fuel Costs reduction (in service vehicles)

Yearly Emissions Reduced Per Vehicle	11,076 lbs. of Carbon Dioxide
(12k miles/year average)	
Yearly Fuel Costs Saved Per Vehicle	\$1,820
(12k miles/year average @ \$3.08/Gal)	

## Parking Services Enforcement Vehicle Replacement

This fiscal year (FY 2021-22), Parking Services has requested two of their parking enforcement vehicles be replaced due to ongoing mechanical problems associated with their age. The current Parking Services fleet consists of 10 vehicles with four of those vehicles being a specialized three wheeled, single seat enforcement buggy. These are chosen for their small size, tight turning radius and ability to access the outside of both sides of the vehicle. Currently, Parking Services has one EV parking buggy (2015) and two gas powered buggies (2007) in service.

The two gas powered buggies will be replaced by EV versions the City has purchased and used in the past. The buggy comes with a one-year manufacturer's warranty.

Figure 6 – Parking Buggy Data (in service vehicles)

Vehicle	Miles Driven (FY 20/21)	Fuel Cost (FY 20/21- \$3.08/gal average)	Maintenance Cost (FY 20/21)	Cost per Mile (FY 20/21)
#215-15 GO4 EV (2015)	8,700	\$0.00	\$1,372	\$0.15
#215 GO4 Gas (2007)	20,582	\$1,147	\$2,571	\$0.18
#216 GO4 Gas (2007)	21,007	\$730	\$1,775	\$0.11

Figure 6 above, shows the FY 2020-21 operating cost data of the enforcement buggy fleet. As shown above the cost per mile to operate between the EV buggy and gas-powered buggy is inconsistent due to

the large difference in miles driven by the two. If we use the projected mileage the new replacement EVs will be driven per fiscal year, the cost per mile to operate drops significantly. Figure 7 below, represents this.

Figure 7 - Replacement EV Projections

Vehicle	Miles Drive (per year	Fuel Cost (Per year)	Maintenance Cost (Per year)	Cost per Mile (Per year)
New EV Buggy	20,000	\$0.00	\$1,400.00	\$0.07

The change to EV buggies from gas powered would also eliminate approximately 600 gallons of gasoline being used per year by the two buggies, equivalent to a 11,415 lbs. reduction of Carbon Dioxide emissions.

#### **FISCAL IMPACT:**

The five vehicles requested will be replaced with the 2022 Ford Police Utility Interceptor Hybrid. The City currently has three of these hybrid patrol cars in service with six additional cars in the process of being placed into service. The data in the sections above show the increases in efficiency and reduced costs to operate the City has seen with the hybrid patrol cars.

The total replacement cost for the five police vehicles is \$375,862. A contingency amount is included for any unforeseen costs. The vehicles will be purchased from the California Department of General Services vehicle purchasing contract.

The total replacement costs for the two Parking Services EV buggies totals \$100,943. A contingency amount is included for unforeseen costs. The buggies will be purchased from the Sourcewell cooperative purchasing agreement, assuring the City is receiving the lowest cost per vehicle possible.

There are sufficient funds available in the Vehicle Replacement Fund (#600) for the proposed vehicle purchases. The purchase of five Ford Hybrid Patrol Vehicles and two Parking Services Enforcement Vehicles totals to \$476,805.

All City departments pay into the Vehicle Replacement Fund each year as an internal service charge. The amount they pay is based on the number and dollar value of vehicles/equipment the Department utilizes and amortized over the anticipated useful life.

#### **OPTIONS:**

The City Council has the following options to consider on this matter:

- 1. Approve the resolution authorizing the City Manager to purchase five patrol cars for the Police Department and two parking enforcement vehicles for the Parking Services department in a total amount not to exceed \$476,805.
- 2. Direct the Department of Public Works to modify the proposed order of seven vehicles to be purchased.
- 3. Direct the Department of Public Works to withhold the purchase of the seven vehicles.

#### RECOMMENDED ACTION:

Adopt Resolution and authorize the City Manager to purchase the proposed five patrol cars for the Police Department and two parking enforcement vehicles.

# **ATTACHMENTS:**

- 1. Resolution
- 2. Fleet Management Policy and Procedures

#### **RESOLUTION NO.**

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL
AUTHORIZING THE CITY MANAGER TO PURCHASE FIVE (5) PATROL CARS FOR
THE POLICE DEPARTMENT AND TWO (2) PARKING ENFORCEMENT VEHICLES
FOR THE PARKING SERVICES DEPARTMENT IN A TOTAL AMOUNT NOT TO
EXCEED \$476,805

**WHEREAS**, San Rafael's various departments operate a fleet of 204 street-legal vehicles and the Department of Public Works maintains 66 heavy equipment vehicles; and

**WHEREAS**, the management and replacement of the City's fleet of vehicles and equipment is governed by the guidelines set forth in San Rafael's Fleet Management Policies and Procedures document issued September 6, 2012; and

**WHEREAS**, the Police Department and Parking Services Department have requested replacement of five patrol cars and two parking enforcement vehicles for the respective departments; and

**WHEREAS**, the City has the ability to competitively procure the equipment needed to fit the departments' and community's needs; and

**WHEREAS,** \$476,805 shall be appropriated in the Vehicle Replacement Fund (#600) to support this purchase; and

**NOW, THEREFORE BE IT RESOLVED** that the City Council of the City of San Rafael authorizes the City Manager to execute the purchase of five patrol cars for the Police Department and two parking enforcement vehicles for the Parking Services department, in accordance with the guidelines set forth in San Rafael's Fleet Management Policies and Procedures, issued on September 6, 2012, in a total amount not to exceed \$476,805.

I, LINDSAY LARA, Clerk of the City of San Rafael, hereby certify that the foregoing Resolution was duly and regularly introduced and adopted at a regular meeting of the City Council of said City held on Monday, the 7<sup>th</sup> day of February 2022 by the following vote, to wit:

AYES: COUNCILMEMBERS: NOES: COUNCILMEMBERS: ABSENT: COUNCILMEMBERS:

LINDSAY LARA, City Clerk



# CITY OF SAN RAFAEL POLICIES AND PROCEDURES

Policy No.	
Subject:	Fleet Management Policy
Resolution No.	
Issue Date:	September 6, 2012
Revision Date:	
Prepared By	Richard Landis
Approved By:	nuncampelle

# FLEET MANAGEMENT POLICY AND PROCEDURES

**PURPOSE**: The City of San Rafael establishes this policy to govern the management of the City's vehicle fleet.

**SCOPE**: The acquisition, outfitting and replacement of all City vehicles.

**DEFINITIONS:** "City vehicle" shall include all automobiles, trucks, motorcycles, or any other equipment registered with the Department of Motor Vehicles and owned, leased, or rented by the City. "Fleet Manager" shall be the Director of Public Works or his/her designee.

## POLICY:

**General Provisions** 

## Fleet Manager

The role of the Fleet Manager is to advise the City Manager and City Council on matters relating to the City's vehicle fleet. The Fleet Manager shall communicate with all department directors regarding vehicle needs and submit timely reports to the City Manager. The Fleet Manager is committed to the following principles:

- 1. The size and nature of the City's fleet is governed primarily by need and function, i.e., the number of vehicles should be no greater than what is necessary to provide public services in an efficient manner. Each vehicle within the fleet should be minimally specified to fulfill its intended function, providing operators with a comfortable and modestly-appointed vehicle with which to deliver services in a cost-effective manner.
- 2. Vehicles should be selected with a strong preference for fuel efficiency and hybrid and alternative fuel technology. The City will strive to reduce the negative impact of its fleet upon the environment by reducing greenhouse gas emissions.
- 3. Vehicles with the lowest long-term maintenance and repair costs and occupant safety are preferable.

## Department Budgeting for Additional Vehicle Acquisition

Before a department determines the need to add a vehicle to its inventory, it shall first check with the Fleet Manager and the Finance Department to determine whether an existing vehicle is available elsewhere in the fleet that may meet the department's needs. If none is available, the requesting

department shall submit a vehicle addition request to the Fleet Manager with the following information:

- · The purpose for which the vehicle is needed
- The type of vehicle requested and the total estimated purchase price
- The estimated total cost of any special auxiliary equipment or equipment packages above what
  might be considered standard equipment. The cost of adding a new vehicle to the fleet shall be
  paid by the requesting department. Internal service charges to that department's budget shall be
  established at the time of vehicle purchase to ensure adequate future funding for the vehicle's
  eventual replacement.

# Vehicle Acquisition

All departments shall submit vehicle purchase requests to the Fleet Manager. The Fleet Manager will consider requests, consult with the Finance Department to ensure that there are sufficient funds for the new vehicle request, and review vehicle specifications for conformance with the provisions and intent of the Fleet Policles and Procedures. All vehicle purchases shall be administered by the Fleet Manager and shall comply with bidding procedures, when applicable, to ensure competitive pricing. Invoices for new vehicle purchases and equipment installation shall be administered by the Fleet Manager with pre-approved departmental account codes established to meet the invoice totals.

## Vehicle Replacement Funding

Funding for vehicle acquisition and supplemental equipment shall be established through monthly internal service charges to the department operating the vehicle, over the projected useable life of that vehicle. An annual inflation factor is applied to the department's internal service charge to account for anticipated increases in future vehicle costs.

# Vehicle Replacement Schedule

City vehicles are eligible for replacement on the basis of the following established useable life recommendations:

Vehicle Description	Useable Life
Sedans, SUV's, vans, light and medium duty trucks (up to 8,600 gross vehicle weight)	10 years
Heavy duty trucks (over 8,600 gross vehicle weight)	15 years
Police patrol/traffic vehicles	5 years
Police unmarked vehicles	8 years
Police motorcycles	4 years
Parking enforcement buggies	5 years
Fire command vehicles	7 years
Fire pumper engines	15 years
Fire ladder trucks	20 years
Ambulances	5 years

Off-road maintenance and construction equipment shall be replaced when economically or operationally justified. When a vehicle in this group approaches the end of its anticipated life cycle, a cost/benefit analysis shall be performed to justify vehicle replacement.

These useable life standards are for vehicle replacement financial estimating purposes only. When a vehicle reaches the end of its established useable life and the department operating the vehicle requests replacement, each vehicle shall be assessed by the Fleet Manager and Vehicle Maintenance Division to determine if replacement is justified, given general vehicle condition, mileage, maintenance and repair history, safety considerations, etc. Extension of the useable life of any vehicle shall be at the discretion of the Fleet Manager and the requesting department. Likewise, a department may request a vehicle replacement prior to the end of its established useable life. The Fleet Manager shall review all such requests in consultation with the Finance Department and Vehicle Maintenance Division. Requests for early replacement shall be accompanied by a thorough justification, including objective criteria supporting the request. The cost of early replacement, if any, shall be borne by the requesting department.

If a department determines that an assigned vehicle is no longer needed, the vehicle shall be returned to the Vehicle Maintenance Division for re-allocation within the fleet or disposition as surplus.

# **Disposition of Surplus Vehicles**

All vehicles accepted by the Vehicle Maintenance Division for replacement or permanent elimination from the fleet shall be consigned to public auction with the City's designated auction service. Departments shall deliver vehicles being replaced to the Vehicle Maintenance Division prior to accepting the new replacement vehicle.

## Maintenance and Repair of Vehicles

Preventive and Routine Maintenance and Repairs

The Vehicle Maintenance Division shall notify departments of upcoming scheduled maintenance for vehicles operated by that department and will schedule the date and anticipated duration of the scheduled maintenance. If possible, the department operating the vehicle shall deliver it to the Vehicle Maintenance Division. If necessary, Vehicle Maintenance will pick up the vehicle at its customary parking location and return it when scheduled maintenance is complete.

## Unscheduled Repairs

In the event a vehicle requires immediate or unscheduled repair during normal work hours, operators should call the Vehicle Maintenance Division (458-5345), or take the vehicle to the Public Works facility at 111 Morphew Street for assessment. If the vehicle cannot be operated or is unsafe to operate, the driver should call the Vehicle Maintenance Division for road service, towing, or advice. After normal working hours, vehicle operators should call the non-emergency Police Department dispatch number (485-3000) for towing or road assistance. Vehicle operators must notify their supervisors, as well as the Fleet Maintenance Division, in the event of a vehicle failure.

## Reimbursement for Personal Expense for City Vehicle Repair

Certain emergencies may occur during non-working hours that can be easily remedied at a service station (for example, a flat tire or radiator hose). Department Directors whose employees routinely work outside of normal working hours shall develop appropriate policies governing the authority of vehicle operators to affect emergency repairs during non-working hours with the intended goal of delivering uninterrupted public service. These departmental policies shall be forwarded to the Fleet Manager for reference.