



Midpeninsula Regional  
Open Space District

R-18-68  
Meeting 18-27  
June 27, 2018

## AGENDA ITEM 5

### AGENDA ITEM

Authorization to Purchase Proposed Capital Equipment for Fiscal Year 2018–19

### GENERAL MANAGER'S RECOMMENDATIONS *dear*

1. Authorize the General Manager to execute a purchase contract with the California Department of General Services and associated contract dealers for five patrol vehicles, three maintenance vehicles, and one administrative office departmental vehicle for a total cost not-to-exceed \$545,000.
2. Authorize the General Manager to execute a purchase contract with the California Department of General Services and associated contract dealers for two excavators, two transport trailers, and one tractor, for a total cost not-to-exceed \$350,000.

### SUMMARY

Annually, the District purchases vehicles and machinery to provide transportation and required equipment for administrative, maintenance, patrol, and for capital projects. These vehicles and machinery are purchased through an existing contract with the California Department of General Services (DGS), which provides significant cost savings. All of the vehicles proposed for purchase for FY2018–19 are either replacement vehicles or additional vehicles needed to serve increased staffing and project demands. The cost of vehicles and equipment for Fiscal Year 2018–19 (FY2018–19) is not-to-exceed \$895,000.

### DISCUSSION

Annually, the District purchases vehicles and machinery to provide transportation and required equipment for administrative, maintenance, patrol, and for capital projects including MAA and non-MAA capital projects. These vehicles and machinery are purchased through an existing contract with DGS, which provides significant cost savings. All of the vehicles proposed for purchase for FY2018–19 either replace current vehicles that need to be retired (See Attachment 1) or are additional vehicles needed to serve increased staffing and project demands.

As additional and replacement vehicles are purchased, they are evaluated to reduce fuel consumption. Examples of vehicles purchased in that effort are 1) plug-in hybrids for the administrative office, 2) smaller Ford F150 trucks for seasonal ranger aides, and 3) smaller Ford F150s (without fire pumpers) to replace some large F350s (with fire pumpers) in the ranger pool.

In addition, diesel trucks have been replaced to meet new emissions guidelines. The District is also investigating the use of alternate fuel sources, such as renewable diesel.

The additional vehicles and equipment proposed for FY2018–19 are needed to support additional staffing for FY2018–19 as well as improving efficiency and reducing long term costs for the special project crews created over the last two years. The increase in capital projects and the crews that perform the work created more demand and conflicts for the use of existing equipment. Examples of the ongoing and future capital projects that utilize vehicles and equipment include the El Corte de Madera Preserve Oljon Trail, La Honda Creek Preserve phase II trails, Bear Creek Redwoods Preserve phase I and II trails, and Sierra Azul Preserve Hendry's Creek restoration work.

When there is an ongoing need for specialized maintenance vehicles and heavy equipment, purchasing, as opposed to renting, allows crews (special projects and general maintenance) to improve the scheduling and transportation of equipment for projects. Relying on a rental company's stock of vehicles and equipment can compromise efficiency and quality, in addition to risking project delays, while waiting for vehicle/equipment availability. Additionally, rental costs for short-term rentals are very high, as is the transportation cost per hour of use. Given the ongoing need for the proposed equipment and vehicles for MAA, capital, or general maintenance projects, it is more cost-effective to purchase these vehicles/equipment in the long run. Rentals remain efficient for short term needs of readily available equipment.

If the vehicles and equipment are not available through the DGS contracts, staff will attempt to purchase using contracts from other approved cooperative purchasing agreements. If no contracts are available that meet District needs, staff will return to the Board for authorization to solicit bids directly from the manufacturer(s).

Further details on the current fleet and proposed fleet can be found in Attachment 2.

### **Vehicles**

The following vehicles are proposed for purchase:

- Replacement: Four patrol vehicles and one maintenance vehicle have reached the end of their useful life. These end-of-life vehicles will be sold at public auction and will be replaced with new vehicles.
- Additional: One patrol vehicle assigned to the Foothills Field Office (FFO) will be added to the fleet to support the increase in staff and additional territory requiring coverage.
- Additional: One maintenance vehicle assigned to FFO, a small/mid-sized dump truck, will be purchased to support moving materials into areas of the preserves that large dump trucks cannot access.
- Additional: One maintenance vehicle assigned to the Skyline Field Office (SFO), a flatbed dump truck, will be purchased to support hauling large quantities or large-size materials for construction and maintenance tasks in addition to towing smaller

equipment. There has been more demand for this size and style of truck to support MAA projects, and currently the District has only one.

- Additional: One administrative office (AO) department truck will support transporting project managers and staff in Engineering and Construction to project sites.

### **Equipment** (See Attachment 3)

The following equipment are proposed for purchase:

- Replacement: Equipment Transport Trailer 40,000 Gross Vehicle Weight Rating (GVWR) assigned to FFO – This is to replace a current trailer that only has a 24,000lbs GVWR and is never used for transporting larger equipment due to its low carrying capacity and limited maneuverability. This trailer will be sold at auction. The replacement trailer will have a 40,000 GVWR capacity. It will be assigned to the South Area and used by special projects and general maintenance crews for transporting equipment to various project sites.
- Additional: Equipment Transport Trailer 60,000 GVWR assigned to SFO – A large flatbed trailer will expand crew's capability to transport the largest equipment that the District rents. Primarily, the John Deere 135 excavator, which weighs about 35,000 pounds, is at the upper limit for crew's capability to transport. Trailers are difficult, if not impossible, to rent.
- Additional: Landscape Tractor assigned to FFO – Special Projects and maintenance crews have competing needs for the current landscape tractor at Foothills Field Office. Purchasing a second unit will allow both crews to be more efficient and give more flexibility for scheduling and completing project work.
- Additional: Mid-size Excavator assigned to SFO – The mid-size excavator will expand the capabilities of handling various projects like trail tread maintenance, post hole drilling, culvert installation, debris clearing, and other tasks. The District currently owns very small excavators (Cat 301.8) for trail work and a large excavator (John Deere 85) for roadwork—this unit would be intermediate between these two for mid-size jobs and is easier to transport. The mid-size excavator comes with a set of specific attachments that can be very difficult to locate and rent for short term or episodically.
- Additional: Mini Excavator assigned to FFO – This excavator will be used to clear paths and dig new trails to open more of Bear Creek Redwoods. It will also be used to excavate and eliminate an existing portion of the old trail. Crews anticipate that a significant portion of construction years 2019 and 2020 will be dedicated to these activities.

The table below contains the breakdown of estimated costs by vehicle/equipment. Costs include tools and equipment needed to outfit the vehicles installed by the manufacturers, which can vary depending upon the function of each vehicle.

Vehicle/Equipment Description	Additional or Replacement	Cost	Quantity	Total
<b>Vehicles</b>				
Patrol Vehicle: Ford F350, F150 pickup or similar	Replacement	\$53,000	4	\$212,000
Maintenance Vehicle: Dodge Quad Cab pickup or similar	Replacement	\$50,000	1	\$50,000
Patrol Vehicle: Ford F350, F150 pickup or similar	Additional	\$53,000	1	\$53,000
Maintenance Vehicle: Ford F550 Dump Truck	Additional	\$100,000	1	\$100,000
Maintenance Vehicle: Ford F550 Flatbed	Additional	\$85,000	1	\$85,000
Administrative Vehicle: Toyota 4 Runner or similar	Additional	\$45,000	1	\$45,000
<b>Vehicle Total</b>				<b>\$545,000</b>
<b>Equipment</b>				
Maintenance Equipment: Equipment Transport Trailer (40,000 GVWR)	Replacement	\$60,000	1	\$60,000
Maintenance Equipment: Equipment Transport Trailer (60,000 GVWR)	Additional	\$67,000	1	\$67,000
Maintenance Equipment: Landscape Tractor	Additional	\$80,000	1	\$80,000
Maintenance Equipment: Mid-size Excavator	Additional	\$95,000	1	\$95,000
Maintenance Equipment: Mini Excavator	Additional	\$48,000	1	\$48,000
<b>Equipment Total</b>				<b>\$350,000</b>
<b>Grand Total</b>				<b>\$895,000</b>

### FISCAL IMPACT

The FY2018–19 District Budget includes \$545,000 for District Vehicles and \$350,000 for Field Equipment. There is sufficient funding in the capital budget of the General Fund to cover the recommended purchase contracts.

	FY2018–19
<b>District Vehicle Budget</b>	\$592,500
Spent to date (as of 6/27/18):	\$0
Encumbrances:	\$0
[Recommended Action – Costs]	\$545,000

<b>Budget Remaining (Proposed):</b>	\$47,500
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The remaining \$47,500 will be used to cover the cost of a vehicle on backlog from FY2017–18, which was previously approved by the Board in June 2017 (R-17-83).

	FY2018–19
<b>District Machinery (Equipment) Budget</b>	\$350,000
Spent to date (as of 6/27/18):	\$0
Encumbrances:	\$0
[Recommended Action – Costs]	\$350,000
<b>Budget Remaining (Proposed):</b>	\$0

### Three-year Capital Budget

	FY2017–18	FY2018–19	FY2019–20
Vehicles	\$740,000	\$592,500	\$692,000
Machinery	\$330,000	\$350,000	\$310,000
<b>Total</b>	<b>\$1,022,500</b>	<b>\$942,500</b>	<b>\$1,002,000</b>

### BOARD COMMITTEE REVIEW

There was no Committee review for this agenda item.

### PUBLIC NOTICE

Public notice was provided as required by the Brown Act. No additional notice is required.

### CEQA COMPLIANCE

No environmental review is required as the recommended action is not a project under the California Environmental Quality Act (CEQA).

### NEXT STEPS

If approved by the Board, staff will prepare purchase orders for the vehicles and equipment utilizing the State of California Department of General Services contracts or other approved cooperative procurement contract.

#### Attachments

1. Fleet Replacement Guidelines
2. District Vehicle Fleet Report
3. Equipment Images

Responsible Department Head:  
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Prepared by:  
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Fleet Replacement Guidelines

May 24, 2017

The following serves as general guidelines for replacing vehicles and equipment based on usage, operating costs, and downtime. Adjustments in time or miles will be made to replacement criteria for individual units as conditions warrant.

PATROL (CODE 3) VEHICLES 7–10 years and/or 80–90,000 miles

MAINTENANCE TRUCKS 10–15 years and/or 85–100,000 miles

ADMIN VEHICLES 20 years and/or 100,000 miles

EQUIPMENT TRANSPORT TRAILERS 15–20 years

TRACTORS/EXCAVATORS 15 Years and 5,000 hours

FIRE APPARATUS  
Slip-On Pumper Units 15 years



## District Vehicle Fleet Report

June 12, 2018

The District maintains an inventory of 86 vehicles of various models and types based on the needs of different departments and job functions. Our fleet replacement guidelines, last updated August 21, 2012, establish that we replace emergency vehicles between 80–90,000 miles and 7–10 years; replace maintenance vehicles between 85–100,000 miles and 10–15 years; and replace administrative vehicles at 100,000 miles and 20 years. Adjustments to the criteria for individual unit replacement are made depending on condition, operating costs, and down time.

The type of field vehicle purchased and the assignment are made based on department and position needs. The typical field vehicle is a four-wheel drive truck or sports utility vehicle. Field vehicles are assigned to supervisors/managers; all other trucks are shared vehicles. The exception is resident patrol staff and some resident maintenance staff, who are assigned vehicles to take home for call-out availability.

The type of administrative office (AO) vehicles purchased is usually a compact SUV or similar sedan, including hybrid and plug-in vehicles. Some AO vehicles need to be four-wheel drive to enable staff to drive off-road in preserves. Additionally, some of the SUVs need to have higher seating capacity for carpooling large groups. All AO vehicles are shared, with the exception of one vehicle each being assigned to Visitor Services and Land & Facilities Services Managers, and one to each department: Engineering & Construction, Real Property, and Natural Resources. These vehicles are assigned to staff and departments due to their routine trips into the field to review projects and to meet with contractors, consultants, and other staff.

### ***Breakdown of fleet vehicles:***

#### **PATROL EMERGENCY VEHICLES**

*Emergency vehicles replaced at 80–90,000 miles and/or 7–10 years*

##### **FY17–18**

- **(31)** vehicles total, 35 staff 33 FTE
  - **(8)** SUVs (*Ford Expedition typical*)
    - Assigned to Visitor Services Manager (1 staff, 1 vehicle), Area Superintendents (2 staff, 2 vehicles), Patrol Supervisors (5 staff, 5 vehicles)
  - **(19)** One ton trucks outfitted with 125 gallon slip on fire pumpers (*Ford F350 typical*)
    - Resident rangers are assigned their own vehicle for afterhours call-out availability (7 staff, 7 vehicles)
    - Trucks assigned to field office pools (12 vehicles)
  - **(4)** Half ton trucks (*Ford F150 typical*)
    - Trucks assigned to field office pools and Seasonal Rangers

##### **FY18–19**

- **(32)** vehicles total (one additional vehicle), 36 staff 34 FTE
  - **(8)** SUVs (*Ford Expedition typical*)
    - Assigned to Visitor Services Manager (1 staff, 1 vehicle), Area Superintendents (2 staff, 2 vehicles), Patrol Supervisors (5 staff, 5 vehicles)
  - **(17)** One ton trucks outfitted with 125 gallon slip on fire pumpers (*Ford F350 typical*)
    - Resident rangers are assigned their own vehicle for afterhours call-out availability (7 staff, 7 vehicles)
    - Trucks assigned to field office pools (13 vehicles)
  - **(8)** Light truck (*Ford F150/Chevrolet Colorado typical*)
    - Trucks assigned to field office pools and Seasonal Rangers

## MAINTENANCE VEHICLES

*Maintenance vehicles replaced at 85–100,000 miles and/or 10–15 years*

### FY17–18

- **(42)** vehicles total, 56 staff 47.5 FTE
  - **(10)** Trucks w/four-wheel drive (*Ford F150 or Toyota Tacoma typical*)
    - Assigned to Area Managers (2 staff, 2 vehicles), Maintenance Supervisors (6 staff, 6 vehicles), Facilities Maintenance Supervisor and Facilities Maintenance Specialist (2 staff, 1 vehicle), Capital Projects Manager (1 staff, 1 vehicle)
  - **(6)** Commercial trucks (not assigned to staff) (*Peterbuilt or International typical*)
    - Vehicles are two (2) water trucks and four (4) large dump trucks for various projects and transporting large equipment
  - **(26)** Service Trucks (26 vehicles, 28 permanent staff and 17 seasonal staff)
    - (10) Specialty four-wheel drive trucks (*Ford F550 typical*). Four (4) trucks are flat bed with dump capabilities, one (1) is a one-yard dump bed truck and five (5) are service body vehicles set up for Equipment Mechanic/Operator use
    - (16) Standard four-wheel drive trucks (*Ford F350 typical*). Trucks are configured for different needs; most have utility bodies for project work and transporting staff. Some are configured for specialty use, such as spray rigs

### FY18–19

- **(44)** vehicles total (2 additional vehicles), 57 staff 48.5 FTE
  - **(10)** Trucks w/four-wheel drive (*Ford F150 or Toyota Tacoma typical*)
    - Assigned to Area Managers (2 staff, 2 vehicles), Maintenance Supervisors (6 staff, 6 vehicles), Facilities Maintenance Supervisor and Facilities Maintenance Specialist (2 staff, 1 vehicle), Capital Projects Manager (1 staff, 1 vehicle)
  - **(6)** Commercial trucks (not assigned to staff) (*Peterbuilt or International typical*)
    - Vehicles are two (2) water trucks and four (4) large dump trucks for various projects and transporting large equipment
  - **(28)** Service Trucks (28 vehicles, 30 permanent staff and 17 seasonal staff)
    - (12) Specialty four-wheel drive trucks (*Ford F550 typical*). Five (5) trucks are flat bed with dump capabilities, two (2) are one-yard dump bed trucks, and five (5) are service body vehicles set up for Equipment Mechanic/Operator use
    - (16) Standard four-wheel drive trucks (*Ford F350 typical*). Trucks are configured for different needs; most have utility bodies for project work and transporting staff. Some are configured for specialty use, such as spray rigs

## ADMINISTRATION VEHICLES

*Administration vehicles replaced at 100,000 and/or 20 years*

### FY17–18

- **(13)** vehicles total, 98 staff 92.25 FTE

- **(7)** Vehicles shared by all administration staff, available for reservation via internal Outlook calendar
  - Two (2) hybrid cars (*Toyota Prius typical*), two (2) hybrid SUVs (*Ford Escape typical*), three (3) SUVs with four-wheel drive (*Ford Explorer/Toyota 4Runner typical*)
- **(4)** Trucks with four-wheel drive (*Ford F150 typical*)
  - One (1) vehicle assigned to Engineering & Construction Department, one (1) assigned to Natural Resources Department, two (2) assigned to Volunteer Program Leads
- **(2)** SUVs with four-wheel drive (*Jeep Wranglers*)
  - One (1) assigned to Land & Facilities Manager and one (1) to Real Property Department

**FY18–19**

- **(14)** vehicles total (1 additional vehicle), 101 staff 95.25 FTE
  - **(7)** Vehicles shared by all administration staff, available for reservation via internal Outlook calendar
    - Two (2) hybrid cars (*Toyota Prius typical*), two (2) hybrid SUVs (*Ford Escape typical*), three (3) SUVs with four-wheel drive (*Ford Explorer/Toyota 4Runner typical*)
  - **(5)** Trucks with four-wheel drive (*Ford F150 typical*)
    - Two (2) vehicles assigned to Engineering & Construction Department, one (1) assigned to Natural Resources Department, two (2) assigned to Volunteer Program Leads
  - **(2)** SUVs with four-wheel drive (*Jeep Wranglers*)
    - One (1) assigned to Land & Facilities Manager and one (1) to Real Property Department

**Employee-to-Vehicle Ratio Tables**

Current Fiscal Year 2017–2018

Employee Category	Number of Employees*	Number of Transport Vehicles	Number of Commercial Vehicles
Ranger	35	31	0
Maintenance	56	36	6
Administrative	94	13	0
<b>Total</b>	<b>185</b>	<b>80</b>	<b>6</b>

Proposed for Fiscal Year 2018–2019

Employee Category	Number of Employees*	Number of Transport Vehicles	Number of Commercial Vehicles	Replacement Transport Vehicles**	Additional Transport Vehicles**	Additional Commercial Vehicles**
Ranger	36	32	0	4	1	0
Maintenance	57	38	6	1	2	0
Administrative	98	14	0	0	1	0
<b>Total</b>	<b>191</b>	<b>84</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>0</b>

\*Reflects actual on-duty employees; not FTE

\*\*These vehicles are accounted for in the Number of Transport Vehicles and Number of Commercial Vehicles totals

## Fleet Program Evaluation

The current guidelines are working effectively to provide the vehicles necessary for the administrative and field need for vehicles. As the District grows, we are making efforts to reduce the ratio of staff to vehicles. The need for vehicles for administrative staff is relatively light. However, field staff need to move from the field offices into preserves every day. Patrol staff perform solo patrols, so generally all on-duty Visitor Services field staff need a vehicle. The Visitor Services Department is continuing the transition from trucks assigned to each ranger to a shared fleet of trucks. The Land and Facilities Services Department field staff perform work in crews ranging from one individual to an entire crew. This necessitates a shared fleet. There are also specialty vehicles, such as the commercial trucks, that require a commercial driver's license to operate, so they generally do not contribute to transportation of staff into the field.

As new and replacement vehicles are purchased they are evaluated to reduce fuel consumption. . Examples of vehicles purchased in that effort are 1) plug-in hybrids for the administrative office, 2) smaller Ford F150 trucks for seasonal ranger aides, and 3) smaller Ford F150s (without fire pumpers) to replace some large F350s (with fire pumpers) ranger pool. In addition, diesel trucks have been replaced to meet new emissions guidelines. The District is also investigating the use of alternate fuel sources, such as renewable diesel.

Several additional measures may be evaluated in the future. A future evaluation of the Fire Program may recommend removing pumpers from most patrol trucks and purchasing more effective patrol rigs for fire suppression. Electric vehicles, from standard sedans to electric motorcycles and ATVs, have been evaluated and as their technology improves, we will likely recommend electric vehicle purchases in the future. The need for four-wheel drive and specialty vehicles limits the ability to green the fleet until technology catches up to those types of vehicles, but we will continue to include fuel economy in evaluating purchases.

In addition to reducing fuel consumption, the fleet is also evaluated for reducing expenditures and utilizing the life of vehicles up to the point where the maintenance cost, safety issues, fuel consumption, and reliability issues make the sale of old vehicles and the purchase of new vehicles cost effective. Currently we rely on the approved replacement guidelines, but we evaluate individual vehicles for use beyond the mileage and age guidelines. In particular, retired Visitor Services SUVs are evaluated for use at the administrative office when four-wheel drive vehicles are needed. Currently one retired patrol vehicle, a Ford Expedition, is being used in this capacity. As the longevity of vehicles improves, particularly in the administrative vehicle fleet, mileage and age guidelines can be adjusted if vehicles are lasting longer.

## Equipment Images

Mid-size Excavator



Mini Excavator



Equipment Trailer Example



Landscape Tractor

