



## MEMORANDUM

To: John Baumgartner, City Manager  
From: Yvonne Calderon, Fleet Manager  
Date: 11/14/2017  
Re: Fleet Replacement Criteria

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Please allow this memorandum to serve as an in-depth overview of Capital Replacement. The Fleet Department uses a five (5) step process as a guideline for determining the optimal life cycle of an asset. The life cycle of vehicles and equipment includes various aspects from acquisition to disposal, maintenance, operations, training and improvements. The aim of life cycle costing is to minimize the total cost of ownership.

The objective is to ensure sufficient funding for the replacement of worn out or obsolete fleet equipment, minimize costs and provide effective, dependable equipment properly designed to furnish required services.

### **Step 1 – Establish Scores for Fleet**

Vehicle and equipment will be replaced based on the following criteria:

- Age and usage (mileage/hours) as outlined in the Vehicle Replacement Schedule
- Current condition
- Application/use of vehicle
- Major repair/maintenance cost
- Lubricant oil analysis
- Vehicle specific special inspections
- Budget and financing availability
- Obsolescence or special conditions

A combination of the above listed criteria will be used by the city's fleet management department, with input from the vehicle users, and Directors, to evaluate vehicles and equipment. This criteria is used to determine whether vehicle/equipment replacement should be considered, or if the vehicle/equipment should be used in its current or another capacity.

## Fleet Evaluation

### a. Sedans, SUV and Pickup Truck Evaluations.

Sedans, SUV and pickup trucks shall be evaluated by using five measures: age, mileage, type of service, general overall condition and maintenance repair costs. Each vehicle will be scored as follows to determine which units are ***eligible for replacement consideration***.

Factor	Points	Description
<b>Age</b>	1	Each year of chronological age
<b>Mileage/Hours</b>	1	Each 10,000 miles or 250 hours of usage
<b>Type of Service</b>	1	Standard sedans, SUVs, pickup trucks
	2	Standard vehicle with occasional off-road use
	3	Any vehicle that pulls trailers, hauls heavy load and/or has continued off road usage
	4	Any vehicles in high water incidents
	5	Police and/or Public Safety Units
<b>Condition</b>	1	No visual damage or rust, good drive train
	2	Minor imperfections in body and paint, interior fair (no rips, tears, burns) good drive train
	3	Noticeable imperfections in body and paint surface, minor rust, minor damage for add on equipment, worn interior (one or more rips, tears, burns) and weak or noisy drive train
	4	Previous accident damage, poor paint and body conditions, rust (holes), bad interior (rips, tears, cracked dash) major damage for add on equipment and drive train component bad.
	5	Previous accident damage, poor paint and body condition, rust (holes), bad interior (rips, tears, cracked dash) drive train is damaged or inoperative, major maintenance repairs.
<b>M&amp;R Costs Accident Repair Not included</b>	1	Maintenance costs are less than or equal to 20% of replacement cost
	2	Maintenance costs are 21–40% of replacement cost
	3	Maintenance costs are 41-60% of replacement cost
	4	Maintenance costs are 61-80% of replacement cost
	5	Maintenance costs are greater than or equal to 81% of replacement cost

### b. Heavy Equipment and Vehicles Over 1 Ton

Heavy equipment and vehicles overs 1 shall be evaluated by using five measures: age, mileage, type of service, general overall condition and maintenance repair costs. Each vehicle will be scored as follows to determine which units are ***eligible for replacement consideration***.

Factor	Points	Description
<b>Age</b>	1	Each year of chronological age
<b>Mileage/Hours</b>	1	Each 10,000 miles or 250 hours of usage
<b>Type of Service</b>	1	Standard duties as equipped
	2	Standard duties when used with attachments
	3	Heavy construction work
	4	Extreme duties in harmful atmosphere (dust, salt, water, waste solids)
<b>Condition</b>	1	Good body, fully functional
	2	Fair body, functional
	3	Minor body damage, weak operating system
	4	Severe damage, weak operating system
	5	Extreme damage, either internal or external
<b>M&amp;R Costs Accident Repair Not included</b>	1	Maintenance costs are less than or equal to 20% of replacement cost
	2	Maintenance costs are 21–40% of replacement cost
	3	Maintenance costs are 41-60% of replacement cost
	4	Maintenance costs are 61-80% of replacement cost
	5	Maintenance costs are greater than or equal to 81% of replacement cost

## POINT RANGES FOR REPLACEMENT CONSIDERATION

Score	Condition
Less than 10 points	Excellent
11 – 23 points	Continue in service
24 – 29 points	Qualifies for replacement review
30 or above	Needs immediate review

### **Step Two – Calculate Maintenance Cost versus Depreciation**

Vehicles and equipment meeting the required scoring conditions above shall then have the following calculated:

1. Anticipated service life years versus actual service life
2. Total mileage or hours
3. Purchase cost of existing and new equipment
4. Return on investment - auction sale estimated proceeds
5. Net cost of new unit
6. Depreciation schedule of new vehicle
7. Average maintenance costs of unit for the preceding three (3) years

The funding break will indicate if the unit is costing the city more money than depreciating a new vehicle.

### **Step Three – Review and Test Drive**

After the completion of the maintenance and depreciation schedule, the list is sent to the Director of Public Works for review.

Over the past few years, the Director has chosen to test drive some of the units that might be on the cusp of funding break amounts.

Gabriel Menendez, test drove vehicles and equipment during this FY2018 capital replacement schedule.

### **Step Four – Department Head and Director's Approval**

The final inventory replacement list for each department was submitted to department heads and directors to approve and submit necessary specifications for replacement units.

The original capital replacement list for vehicles and equipment after scoring were both reduced after further evaluating:

	<b><u>Original</u></b>	<b><u>Reduced</u></b>
<b>Vehicles</b>	<b>34</b>	<b>24</b>
<b>Equipment</b>	<b>12</b>	<b>7</b>

### **Step Five – Budget Approval**

The approved FY2018 budget includes funding in the amount of \$2,577,700 for the replacement of vehicles and equipment.

The Capital Replacement Fund, to include the replacement vehicles and equipment list, were presented at a City Council Work Session on July 18, 2017.