



MEMORANDUM

To: John Baumgartner, City Manager
From: Yvonne Calderon, Fleet Manager
Date: 11/29/2018
Re: Fleet Equipment Replacement Criteria

Determining the optimal life cycle of an asset is a key goal for fleet management. The life cycle includes everything 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 replacement of worn out or obsolete fleet equipment, minimize costs and provide effective, dependable equipment properly designed to furnish required services.

The following guidelines are used to administer and account for the city of League City's fleet equipment replacement.

Step 1 – Establish Scores for Fleet

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 users, to evaluate vehicles and equipment to determine whether replacement should be considered or if vehicle/equipment should be used in its current or another capacity.

Fleet Evaluation

- a. **Heavy Equipment and Vehicles Over 1 Ton**
Heavy equipment and vehicles over 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
Age	1	Each year of chronological age
Mileage/Hours	1	Each 10,000 miles or 250 hours of usage
Type of Service	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)
Condition	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
M&R Costs Accident Repair Not included	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 – Calculated 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 indicates whether the existing unit will cost more to keep in fleet than depreciating new equipment.

Step Three – Review and Possible Test Drive

After the completion of the maintenance and depreciation schedule, the list is then 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.

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 equipment was reduced after further evaluations:

	Original	Final
Equipment	32	2

Step Five – Budget Approval

The approved FY2019 budget includes funding in the amount of \$1,058,000 for the replacement of equipment.

If you need additional information regarding the replacement planning process, please let me know.