Agenda Item No: 15.B

STAFF REPORT

Report To: Board of Supervisors **Meeting Date:** March 17, 2022

Staff Contact: Darren Schulz, Public Works Director

Agenda Title: For Possible Action: Discussion and possible action regarding a proposed Carson City Fleet Vehicle and Equipment Replacement Policy ("Policy"). (Mike Shaffer, MShaffer@carson.org; Dan Stucky, DStucky@carson.org)

Staff Summary: Based on direction from the Board of Supervisors, staff has modified the City's fleet assessment and replacement criteria and developed the Policy with a ranking system for establishing the City's annual vehicle and equipment replacement list.

Agenda Action: Formal Action / Motion **Time Requested:** 15 minutes

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Proposed Motion
I move to approve and adopt the proposed Policy.

Board's Strategic Goal
Sustainable Infrastructure

Previous Action
N/A

Background/Issues & Analysis
At the April 15, 2021 Board of Supervisors ("Board") meeting, during discussion of the proposed Fiscal Year 2022 Capital Improvement Program, the Board directed staff to review the existing fleet assessment and replacement criteria and create a formal vehicle and equipment replacement policy for future discussion and adoption. Since this time, The Department of Public Works has reviewed the existing criteria, researched industry guidelines and best practices, and prepared the Policy, which sets forth a ranking system to produce a transparent and data-driven vehicle and equipment replacement list. The process and prioritization system described in the Policy is meant to be dynamic, allowing the Fleet Services Division of the Department of Public Works to update vehicles and equipment, add new vehicles and equipment and change point values assigned to these assets as conditions and available information changes.

Applicable Statute, Code, Policy, Rule or Regulation
Carson City Charter § 2.140

Financial Information
Is there a fiscal impact? No

If yes, account name/number: N/A

Is it currently budgeted? No

Explanation of Fiscal Impact: There is no direct fiscal impact with this item; however, if approved the Policy will help establish the criteria used to prioritize and develop vehicle and equipment replacement lists proposed under future Carson City Capital Improvement Programs.

Alternatives

Do not approve the policy and/or provide alternative direction.

Attachments:

CC-Vehicle and Equipment Replacement Policy.pdf

Board Action Taken:

Motion: _____ 1) _____ Aye/Nay

2) _____ _____

_____

_____

_____

_____

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_____

(Vote Recorded By)

CARSON CITY, NEVADA
Consolidated Municipality and State Capital
PUBLIC WORKS

POLICY AND PROCEDURE

Subject: Carson City Fleet Vehicle and Equipment Replacement Policy		
Effective Date:	**Revision Date:**	**Author(s):** M. Shaffer/D. Stucky
		Approved by: D. Schulz

1.0 PURPOSE:

The purpose of this policy is to provide Carson City's Fleet Services Division with a process for determining where vehicles and equipment rank within their lifecycle. This policy identifies a ranking system utilized to produce a final vehicle and equipment replacement list. The scorecard method described herein is dynamic and allows Fleet to update vehicles and equipment, add new vehicles and equipment, and change point values assigned to these assets as time and conditions change in real time.

The Fleet Supervisor is responsible for the operations of the Fleet Services Division and has the expertise to assess, troubleshoot, determine repair methodologies, and consult with City Department Heads on replacement options for the fleet. Although this policy provides a process and data-driven evaluation tool to prioritize a list of vehicles and equipment to replace, it also relies upon qualitative data provided by the experienced fleet maintenance staff who are best positioned to consider the reliability and condition of each vehicle under review.

Lastly, this is considered a living document that is planned to be modified and updated as needed to reflect changes in the City's organizational climate, the changing needs of our internal customers, and changes in the automotive and equipment industry.

2.0 ORGANIZATIONS AFFECTED:

This policy shall apply to all vehicles and equipment for every Department in Carson City.

Exemption: Fleet vehicle and equipment replacement criteria for buses, vans, and other vehicles/equipment included in the Jump Around Carson (JAC) transit fleet are governed by the Federal Transit Authority's (FTA) Useful Life Benchmark (ULB) methodology and not a part of this policy.

3.0 FLEET SERVICES MISSION STATEMENT:

To provide efficient and effective management, maintenance and repair of fleet assets, thereby providing customer departments with safe, reliable, economical, and environmentally sound transportation and related support services that are responsive to their needs and that preserve vehicle value and equipment investment.

4.0 OBJECTIVES:

The objective of the vehicle replacement program is to promote an orderly system to plan, budget, prioritize, and cost effectively retire, reassign, and replace a standardized vehicle and heavy equipment fleet.

5.0 VEHICLE CLASSES:

For the purposes of developing vehicle class lifecycles, the City's fleet has been grouped into twenty-two (22) distinct vehicle classes. Each vehicle class is described below:

Sheriff's Department

- **SO1-Sedan, SUV, Truck (Patrol)**
  - Use: Heavy/Severe to accommodate the daily operations of the Sheriff's Department patrol unit, including hard acceleration/braking, high-speed driving, and excessive engine idling (12-16 hours per day), thus resulting in significant wear on the unit's drive train and suspension. Additionally, vehicles include significant technology/emergency equipment upfits to provide a "mobile office" environment, including platforms to support mobile data terminals, in-car video cameras, emergency lighting systems, radios, and additional emergency equipment.
  - First Responder: Yes
  - Response: In and Out of City

- **SO2-Sedan, SUV, Truck (Detective, Supervisor, and Management)**
  - Use: Moderate (occasionally Heavy/Severe). Vehicles include moderate technology/emergency equipment upfits to provide a "mobile office" environment, including platforms to support mobile data terminals, in-car video cameras, emergency lighting systems, radios, and additional emergency equipment. At approximately the 10-year mark, technology of vehicle starts to become obsolete and does not support current requirements for law enforcement vehicles.
  - First Responder: Yes
  - Response: In and Out of City, Occasional Out of State

- **SO3-Motorcycles (Patrol)**
  - Use: Heavy/Severe to accommodate the daily operations of the Sheriff's Department patrol unit, including hard acceleration/braking and high-speed driving.
  - First Responder: Yes
  - Response: In and Out of City

- **SO4-Off-Road/Specialty Vehicles**
  - Use: Low usage, but typically used in first responder capacity when in-use. Off-Road/Specialty vehicles, such as the Mobile Command Center, SWAT vehicles, DUI trailer, armored car, all-terrain vehicles (ATVs), etc. typically purchased with grant funding or through donation. These vehicles typically include significant technology/ emergency equipment upfits to provide a "mobile office" environment, including platforms to support mobile data terminals, in-car video cameras, emergency lighting systems, radios, and additional emergency equipment. Product technology and support changes very rapidly for vehicles in this industry, therefore component life for these types of vehicles is short.

- First Responder: Yes
- Response: In and Out of City

Fire Department

- **FD1-Pumper Trucks**
  - Use: Heavy/Severe to accommodate the daily operations of the Fire Department's front line emergency response operations, including hard acceleration/braking, high engine RPMs due to pump operations, and high-speed driving, thus resulting in significant wear on the unit's drive train and suspension. After meeting useful life thresholds for age or mileage/hours (approximately the 10-year mark), product support and reliability start to diminish, however there is opportunity to move vehicle to a backup status. After approximately 5 additional years in backup status, product support is obsolete and water system replacement is required, thus unit replacement is required.
  - First Responder: Yes
  - Response: In and Out of City, Out of State

- **FD2-Wildland Trucks and Patrols**
  - Use: Moderate due to seasonal operations and off-road application.
  - First Responder: Yes
  - Response: In and Out of City, Out of State

- **FD3-Ambulances**
  - Use: Heavy/Severe to accommodate the daily operations of the Fire Department's front line emergency response operations, including hard acceleration/braking and high-speed driving, thus resulting in significant wear on the unit's drive train and suspension. After meeting useful life thresholds for age or mileage/hours (approximately the 10-year mark), product support and reliability start to diminish, and medical equipment and technology capabilities become outdated. There is opportunity to move vehicle to a backup status for an additional 5 years before unit replacement is required. Additionally, there may be an option to refurbish vehicle/equipment if deemed prudent and cost effective by the Fleet Supervisor.
  - First Responder: Yes
  - Response: In and Out of City, Out of State

- **FD4-Technical Operation Vehicles**
  - Use: Moderate due to their technical assignments for incident management and support. Technical Operation vehicles, such as Air and Light, Hazmat, Technical Rescue, Command Center, and Water Tender, typically reach useful life at approximately 20-years, as product support diminishes and technology/equipment becomes outdated.
  - First Responder: Yes
  - Response: In and Out of City

- **FD5-Sedan, SUV, Truck (Administration, Training, Fire Prevention)**
  - Use: Moderate (occasionally Heavy/Severe). Vehicles include moderate technology/emergency equipment upfits. At approximately the 10-year mark,

technology/equipment of vehicle starts to become obsolete and does not support current requirements for emergency responder vehicles.
  - First Responder: Yes
  - Response: In and Out of City, Out of State

- **FD6-Aerial Trucks**
  - Use: Moderate usage, but serves the Fire Department's front line emergency response operations when in use, including hard acceleration and braking, thus resulting in significant wear on the unit's drive train and suspension. After meeting useful life thresholds for age or mileage/hours (approximately the 15-year mark), product support and reliability start to diminish, however there is opportunity to move vehicle to a backup status. After approximately 5 additional years in backup status, technology/equipment of vehicle starts to become obsolete and does not support current requirements for emergency responder vehicles.
  - First Responder: Yes
  - Response: In and Out of City, Out of State

Public Works Department

- **PW1-Sedan, SUV, Truck (Administration, Pool Vehicles ≤ 0.50 Ton)**
  - Use: Moderate (occasionally Heavy/Severe). Occasionally used for towing/hauling or in a first responder capacity. Vehicles include minor technology upfits. At approximately the 10-year mark, product support starts to diminish and the technology/equipment of vehicle starts to become is outdated.
  - First Responder: Yes
  - Response: In and Out of City

- **PW2-Utility Trucks, Crew Trucks, Dump Trucks, Garbage Trucks (0.75 Ton - 2 Ton)**
  - Use: Heavy (occasionally Severe). Daily use includes towing, hauling, off-road, incident response, and snow removal. When approaching the useful life thresholds for age or mileage/hours, these vehicles typically show excessive interior, exterior and drive train wear. Manufacturer product support for vehicle starts to diminish at approximately 10 years.
  - First Responder: Yes
  - Response: In City

- **PW3-Dump Trucks, Utility Trucks, Water Trucks, Semi-Trucks, and Garbage Trucks (2.50 Ton to 20 Ton)**
  - Use: Heavy/Severe to accommodate the daily operations of the Public Works Department. Daily use includes heavy hauling, towing, off-road, and snow removal duties. The majority of these vehicles are used for multiple operational tasks. During snow removal operations, vehicles experience heavy use with engines running continually for 24 hours a day. When approaching the useful life thresholds for age or mileage/hours, these vehicles typically show excessive interior, exterior and drive train wear. Manufacturer product support and equipment reliability for vehicle starts to diminish at approximately 15 years. Additionally, there may be an option to refurbish vehicle/equipment if deemed prudent and cost effective by the Fleet Supervisor.

- First Responder: Yes, Occasionally
- Response: In City

- **PW4-Sweepers**
  - Use: Heavy/Severe. Vehicles run for 8 to 10 hours per day, 5 days per week. This equipment has rapid degradation due to harsh operating conditions. At approximately the 5-year mark, start to experience machine hydraulics failing in succession and main chassis components failing from corrosion.
  - First Responder: Yes
  - Response: In City

- **PW5-Vacuum Trucks, Sewer Rodders, Vacuum Trailers**
  - Use: Heavy/Severe. Equipment reliability is paramount due to possibility of these machines responding to emergency situations 24 hours a day. Operating conditions are harsh due to abrasion and corrosion characteristics of the material/ environment that the vehicle operates in. At approximately the 12-year mark, the vehicle starts to experience large components failing in succession and reduced product support.
  - First Responder: Yes, Occasionally
  - Response: In City

- **PW6- Heavy Equipment**
  - Use: Moderate to Heavy/Severe. Includes mobile on- and off-road equipment that is used to dig, load, process, place, and grade materials; as well as carry large loads over a short distance. Operating conditions are often harsh due to characteristics of the material/ environment that the heavy equipment operates in. Additionally, there may be an option to refurbish vehicle/equipment if deemed prudent and cost effective by the Fleet Supervisor.
  - First Responder: Yes, Occasionally
  - Response: In City

All Other (Non-First Responder Vehicles and Equipment)

- **G1-Sedan, SUV, Truck (Administration, Pool Vehicles ≤ 0.50 Ton)**
  - Use: Moderate. Occasionally used for towing/hauling. At approximately the 10-year mark, product support starts to diminish and the technology/equipment of vehicle starts to become outdated.
  - First Responder: No
  - Response: In City

- **G2-Utility Trucks, Crew Trucks, Dump Trucks, Garbage Trucks (0.75 Ton - 2 Ton)**
  - Use: Moderate to Heavy. Daily use includes towing, hauling, off-road, and snow removal. When approaching the useful life thresholds for age or mileage/hours, these vehicles typically show excessive interior, exterior and drive train wear. Manufacturer product support for vehicle starts to diminish at approximately 10 years.
  - First Responder: No
  - Response: In City

- **G3-Dump Trucks, Utility Trucks, Water Trucks, Semi-Trucks, and Garbage Trucks (2.50 Ton to 20 Ton)**
  - Use: Moderate to Heavy. Daily use includes heavy hauling, towing, and off-road duties. The majority of these vehicles are used for multiple operational tasks. Manufacturer product support and equipment reliability for vehicle starts to diminish at approximately 15 years. Additionally, there may be an option to refurbish vehicle/equipment if deemed prudent and cost effective by the Fleet Supervisor.
  - First Responder: No
  - Response: In City

- **G4- Heavy Equipment**
  - Use: Moderate to Heavy/Severe. Includes mobile on- and off-road equipment that is used to dig, load, process, place, and grade materials; as well as carry large loads over a short distance. Additionally, there may be an option to refurbish vehicle/equipment if deemed prudent and cost effective by the Fleet Supervisor.
  - First Responder: No
  - Response: In City

- **G5-Trailers**
  - Use: Moderate. Include licensed, motor-less tow behind units that are used to move equipment, other vehicles and materials to support daily operations of the Municipality. Various Components degrade due to time and weather conditions. At approximately 25 years, the body and frame experience heavy fatigue and manufacturer product support is typically discontinued.
  - First Responder: No
  - Response: In City (Occasional Out of City for Sheriff's Department and Fire Department trailers)

6.0 PARAMETER GUIDELINES FOR VEHICLE CLASS LIFECYCLE:

The Parameter Guidelines for Vehicle Class Lifecycle are used to determine all vehicles and equipment that meet parameters set forth for either age or mileage/hours. The parameters are generally used to forecast replacement funding requirements and long-term capital improvement plan, as well as to trigger the examination of specific units for potential replacement. The general guidelines described below are categorized based on type of vehicle/equipment, as well as by type and intensity of use, which can vary greatly amongst Departments and even Department Divisions. Fleet assets that fall within the listed vehicle categories below and meet the applicable age or mileage/hours threshold, whichever comes first, are eligible for replacement.

Table 1: PARAMETER GUIDELINES FOR VEHICLE CLASS LIFECYCLE

Vehicle Class	Vehicle Type (User)	Threshold	
		Age (Years)	Mileage/ (*Hours*)
Sheriff's Department			
SO1	Sedan, SUV, Truck (Patrol)	5	120,000 *(10,000)*
SO2	Sedan, SUV, Truck (Detective, Supervisor, and Management)	10	120,000
SO3	Motorcycles (Patrol)	10	100,000
SO4	Off-Road/Specialty Vehicles	10	*(1,000)*
Fire Department			
FD1	Pumper Trucks	10	120,000 *(10,000)*
FD2	Wildland Trucks and Patrols	15	70,000 *(7,000)*
FD3	Ambulances	5	100,000 *(8,000)*
FD4	Technical Operation Vehicles	20	100,000 *(10,000)*
FD5	Sedan, SUV, Truck (Administration, Training, Fire Prevention)	10	120,000
FD6	Aerial Trucks	15	100,000 *(10,000)*
Public Works			
PW1	Sedan, SUV, Truck (Administration, Pool Vehicles ≤ 0.50 Ton)	10	120,000
PW2	Utility Trucks, Crew Trucks, Dump Trucks, Garbage Trucks (0.75 Ton - 2 Ton)	10	120,000
PW3	Dump Trucks, Utility Trucks, Water Trucks, Semi-Trucks, and Garbage Trucks (2.50 Ton to 20 Ton)	15	150,000 *(15,000)*
PW4	Sweepers	7	*(8,000)*
PW5	Vacuum Trucks, Sewer Rodders, Vacuum Trailers	12	*(8,000)*
PW6	Heavy Equipment:		
	Loaders (Replaced or Refurbished)	15	*(10,000)*
	Backhoes	15	*(10,000)*
	Dozers (Replaced or Refurbished)	12	*(10,000)*
	Compactors (Replaced or Refurbished)	12	*(10,000)*
	Excavators (Replaced or Refurbished)	12	*(10,000)*
	Tippers	20	*(15,000)*
	Vibratory Rollers	15	*(8,000)*
	Skid Steers	15	*(10,000)*
	General Implement Tractors	15	*(10,000)*

Vehicle Class	Vehicle Type (User)	Threshold	
		Age (Years)	Mileage/ (*Hours*)
All Other (Non-First Responder Vehicles and Equipment)			
G1	Sedan, SUV, Truck (Administration, Pool Vehicles ≤ 0.50 Ton)	15	120,000
G2	Utility Trucks, Crew Trucks, Dump Trucks, Garbage Trucks (0.75 Ton - 2 Ton)	15	120,000
G3	Dump Trucks, Utility Trucks, Water Trucks, Semi-Trucks, and Garbage Trucks (2.50 Ton to 20 Ton)	20	150,000 *(15,000)*
G4	Heavy Equipment:		
	Loaders (Replaced or Refurbished)	20	*(10,000)*
	Backhoes	20	*(10,000)*
	Excavators (Replaced or Refurbished)	20	*(10,000)*
	Vibratory Rollers	20	*(8,000)*
	Skid Steers	20	*(10,000)*
	General Implement Tractors	20	*(10,000)*
G5	Trailers	25	

Note: All other vehicles not listed in above table and designated as first responder vehicles should follow Public Works' fleet guidelines (PW1-PW6) depending on vehicle type.

7.0 EVALUATION CRITERIA AND GUIDELINES FOR SCORING:

In an effort to incorporate what are generally agreed upon best practices for municipal fleet management into a relatively basic model, evaluation criteria were designed to consider a number of factors, in addition to age and mileage/hours, to prioritize fleet replacement based on both data and the expertise and opinions of the City's Fleet Supervisor and Fleet Services Technicians. While not conclusive, it is intended to help make an informed decision as to when it is prudent to replace a specific vehicle in the fleet. The evaluation tool will need to be updated annually in conjunction with the capital improvement program to capture the most recent assessment of each vehicle's cost, condition, and performance. The eight (8) model parameters include: Age, Mileage/Hours, Utilization Requirements, Operational Status, Obsolescence, Maintenance and Repair Costs, and Condition.

The following sections describe the content and rationale for each of the parameters included in the evaluation criteria.

1. AGE

Many municipal fleet managers use age as one of the single-most important criteria for determining the replacement schedule for a vehicle. This is partly because it is easily determined and removes the guesswork out of what might fail on the vehicle, thereby jeopardizing reliability. However, two vehicles of the same age could have experienced significantly different life histories that could result in a drastically different plan for their ultimate retirement. As such, age is not a stand-alone benchmark in this model, but weighted appropriately along with several other parameters.

2. MILEAGE/HOURS

An indicator of the degree of usage is often a more significant parameter than age as it indicates relative wear and tear on the power train as well as the electrical, mechanical and hydraulic systems on the vehicle. In some cases, more constant usage can be more beneficial to a vehicle than incidental use throughout the year, as moving parts are continuously lubricated. In other cases, such as on construction sites, the increased usage in a rough environment puts a much greater strain on all the vehicle components.

Some equipment do not transit on public streets under their own power, but are mostly used for site specific work. Examples of these vehicles are backhoes, front end loaders, forklifts, and brush chippers. The better measure of use for these type vehicles are the hours they have been operating.

3. UTILIZATION REQUIREMENTS

The utilization of equipment parameter considers the nature of work and how critical the vehicle may be for first responder, emergency response, or other public safety operations. In the event that a vehicle, under evaluation for replacement, should fail to operate, assessing the nature of the work to which it is dedicated will help to determine the amount of risk a municipality could accept when determining whether to replace it or extend its service for another year.

4. OPERATIONAL STATUS

The operational status parameter considers the following: (1) What alternatives may exist if/when a vehicle becomes inoperable and (2) How often a vehicle is used and the impacts/consequences to the City or Department should the vehicle fail unexpectedly.

5. OBSOLESCENCE

The obsolescence parameter considers the evolution of technology and repair part availability. As technology continues to evolve, improvements in the safety, functionality, and comfort will typically accompany newer models of the same vehicle. In some cases, while the vehicle could continue to be operated, there are key improvements in the vehicle technology that favor replacement sooner than later. Especially in public safety vehicles, such as a fire truck or ambulance, while a vehicle could remain in service for several additional years, the advanced technological improvements in the newer vehicles mandate replacement to ensure the safety of the crew or public health of the patient. Additionally, in the public works or parks maintenance vehicles, redesign of equipment in recent years has allowed the merging of tasks to be accomplished with one piece of equipment instead of two or three. This consolidation of functions can result in significant savings due to reduction in the fleet size, and may warrant vehicle replacement on the earlier side of the analysis.

Over time, a specific vehicle model undergoes redesign and its repair parts are no longer manufactured and are phased out of the supply system. Once the limited stock is consumed, a vehicle deficiency may only be repaired by finding a similar vehicle in a scrap yard, unless the part can be fabricated in the shop. If these options are not possible, it could render a vehicle unusable for its intended purpose.

6. MAINTENANCE AND REPAIR COSTS

Evaluating the cost to maintain and repair a vehicle over the most recent three years, helps to project these costs into the future and determine a simplified annualized cost-to-own ratio. For the current vehicle, the projected costs to own the vehicle for the next year are the sum of the estimated maintenance and repair costs plus the loss in value (depreciation), while the annual cost to own a new vehicle is the total cost of a new replacement vehicle divided by the life expectancy. Annualized, if it is less expensive to own and operate the current vehicle, then the ratio of the two values will be less than 1. In comparing and prioritizing vehicles in the model, it would be more economically prudent to consider replacing a vehicle with a higher or increasing ratio.

7. RELIABILITY

Once a task has been scheduled, having the resources available is an important management concern; and that includes having a vehicle reliable for operation. Historical records provide an insight into the amount of times a vehicle was in the shop for repair or maintenance, which helps determine its reliability and subsequently influences the replacement decision.

8. CONDITION

Probably one of the more important factors in determining whether a vehicle should be retained or replaced, is its condition. Condition is pervasive in determining a vehicle's disposition as it is also a factor in its reliability, operations, and return on investment. The probability of whether a vehicle will fail in its intended purpose is inexorably tied to its condition. A wide variety of factors impact a vehicle's condition, the most familiar including age and mileage/hours operated, which are covered under separate parameters. However, there are factors that can prolong a vehicle's service. This factor relies upon the expertise and inspections of our Fleet Services Technicians, Foreman, and Fleet Supervisor to evaluate and report upon the body condition, degree of corrosion, interior condition, accident and maintenance history, and anticipated repairs for a given vehicle. Additionally, the Fleet Services staff may choose to perform an oil analysis, often times completed during routine maintenance, or other advanced diagnostics to obtain further information about the condition of the vehicle/equipment. This information may be used by the Fleet Supervisor, along with repair/maintenance costs trends and other factors, to determine whether an alternative option (repower, refurbishment, etc.) rather than replacement may be viable.

Table 2 below describes the point assignments for each of the parameters included in the evaluation criteria.

Table 2: FLEET REPLACEMENT SCORING GUIDELINES AND POINT SYSTEM

Parameter	Points	Assessment Criteria
Age (Max- 10 Points)	10	> 3 years past respective threshold listed in **Table 1**
	5	1 - 3 years past respective threshold listed in **Table 1**
	0	< 1 year past respective threshold listed in **Table 1**
Mileage/Hours (Max- 10 Points)	10	> 20% above respective threshold listed in **Table 1**
	5	+/- 20% of respective threshold listed in **Table 1**
	0	> 20% below respective threshold listed in **Table 1**
Utilization Requirements (Max- 10 Points)	10	First Responders (Sheriff's Department and Fire Department ONLY)
	5	First Responders (Other Departments)
	0	Non-First Responders
Operational Status (Max- 10 Points)	10	No dependable alternative vehicle/equipment and/or vehicle/ equipment relied upon daily for 6+ months per year
	5	Vehicle/equipment could be contracted out or borrowed from another county/city and/or vehicle/equipment relied upon seasonally (< 6 months per year)
	0	Alternative vehicle/equipment readily available at City and vehicle/equipment used randomly/infrequently as needed
Obsolescence (Max- 10 Points)	10	Newer models combine multiple tasks in one vehicle and/or repair parts no longer available
	5	Significant improvements in efficiency/safety/technology and/or limited parts or only by special order
	0	Small or negligible improvements in efficiency/safety/technology and parts are readily available
Maintenance and Repair Costs (Max- 10 Points)	10	(Annual Maintenance and Repair Costs + Depreciation)/(New Purchase Cost/Life Expectancy) > 0.7
	5	(Annual Maintenance and Repair Costs + Depreciation)/(New Purchase Cost/Life Expectancy) = 0.5 – 0.7
	0	(Annual Maintenance and Repair Costs + Depreciation)/(New Purchase Cost/Life Expectancy) < 0.5
Reliability (Max- 10 Points)	10	Number of Work Orders > 6 per year
	5	Number of Work Orders: 3 – 6 per year
	0	Number of Work Orders < 3 per year
Condition (Max- 10 Points)	10	Poor
	5	Fair
	0	Good

8.0 PROCEDURE:

Fleet staff will use the method detailed below to evaluate the appropriate time vehicles and/or equipment should be replaced.

VEHICLES AND EQUIPMENT INVENTORY (STEP 1)

1. Identify all vehicles and equipment within Fleet's operation.
2. Each vehicle and equipment will be categorized by Vehicle Class then placed into Vehicle/Equipment Schedule. The following parameters shall be added for each vehicle and equipment: Age, Mileage/Hours, Utilization Requirements, Operational Status, Obsolescence, Maintenance and Repair Costs, Reliability and Condition. The schedule will be updated annually and will be used as the basis for planning for the replacement of vehicles and equipment through the operating and capital budgets.

VEHICLES AND EQUIPMENT ELIGIBLE FOR REPLACEMENT (STEP 2)

1. Once all vehicles and equipment are placed into the Vehicle/Equipment Inventory Schedule, the Parameter Guidelines for Vehicle Class Lifecycle are used to determine all vehicles and equipment that meet parameters set forth for either Age or Mileage/Hours. These Guidelines are noted in **Table 1**.
2. Any vehicles and equipment that do not meet the parameters noted in **Table 1** should not be eligible for replacement and not evaluated or scored further.

VEHICLES AND EQUIPMENT ELIGIBLE FOR REPLACEMENT (STEP 3)

1. Score vehicles/equipment eligible for replacement based on point value and scoring methodology presented in **Table 2**.
2. The points identified under each parameter in the Vehicle/Equipment Schedule are then summed to tally total points for each vehicle and equipment. The expected output of this entire review process is to aid in the decision of which vehicles and equipment should be replaced first. The scoring method shows priority. These priority vehicles and equipment can then be incorporated into the annual capital improvement program. Should multiple vehicles that fall within the lifecycle policy need to be replaced, but there is a lack of available funds, the Fleet Supervisor will make a recommendation to the Public Works Director for vehicle replacement priority used to develop the final replacement list proposed as part of the capital improvement program. For transparency purposes, any vehicles or equipment that were received through donation or grant funding should be specifically noted in the proposed replacement list.

Vehicles and equipment that do not meet the qualifications for replacement shall be extended each year until the qualifications are met. Vehicles and equipment that continuously incur excessive maintenance cost and downtime, before reaching the end of their vehicle class lifecycle, may be considered and prioritized for replacement, ahead of schedule, at the Fleet Supervisor's discretion.

9.0 RECYCLED VEHICLES/EQUIPMENT:

The vehicle and equipment fleet is sized to meet the current needs of the Municipality. Fleet vehicles and heavy equipment will not be reassigned unless it is used to replace units currently assigned to other Departments or Divisions. In those instances, the older units will be

disposed, therefore not increasing the overall size of the fleet. Annually, before Operating and Capital Budgets are prepared, the Fleet Supervisor and Public Works Director or designee will meet with various City Department Heads to review the vehicle and equipment replacement schedule, and plan for the reassignment or disposal of vehicles and equipment that have reached their age and mileage/hours thresholds and scheduled for replacement within the next budget cycle. Although the majority of vehicles selected for replacement will be sent to the public auction, the Fleet Services Division will review and strategically search for all opportunities to reassign vehicles in the most cost-effective manner. In some cases, it may be reassigned to other Departments with "low usage" requirements or to the loaner pool.

10.0 CHANGES TO THIS POLICY:

Any amendments or modifications to this policy shall be made like revisions to other, similar policies and consistent with the City's policy on Administrative Policies and Procedures, which includes consultation with the heads of affected City Departments regarding proposed changes and final approval from the City Manager for any proposed changes. This policy, and any future revisions to this policy, need only be distributed to the heads of affected City Departments.