

City of Prescott

Fleet Services Division

December 2016



Fleet Services Division

Mission Statement – Provide comprehensive fleet management programs that support City departments and functions in the delivery of municipal services by ensuring that City vehicles and equipment are available, dependable, and safe to operate.

Cost Recover – Internal charges to both General Fund and Enterprise Funds (26% General Fund; 74% Enterprise Funds)

Operating Budget = \$1.9 Million

Charges - \$95 / hour for mechanic labor
20% mark up on parts inventory
10% mark up on outside labor

Staffing - Five full-time mechanics; one supervisor; one parts specialist; one fleet manager. Total = 8 full time employees. Two part-time temporary mechanics.

Mechanic Productivity = 84%

Vehicle to mechanic ratio = 113:1 (Government industry standard = 48:1)

Fleet Makeup – 568 total assets (264 light; 17 medium; 103 heavy; 82 trailers; 51 other; 51 generators)

Fleet Management Services

Fleet asset maintenance

- All maintenance is managed by the Fleet Services Division.
- Departments assign Liaisons to monitor and schedule maintenance and repairs.
- Departments are responsible for ensuring timely maintenance is completed.
- Mechanical trouble or deficiencies are brought to the attention of the Fleet Manager.
- Requests for asset modifications need to be approved by the appropriate Department / Function Head and forwarded to the Fleet Manager.

Maintenance of fleet assets in the maintenance cycle is prioritized as follows:

Priority	Fleet Asset Function
1	Public Safety
2	Essential Services
3	Preventative maintenance (on time)
4	Unscheduled maintenance
5	Preventative maintenance (not on time)
6	Modifications

Fleet Management Services (cont.)

Fleet asset acquisition

- Act as the procuring agency for City fleet assets.
- New additions are requested through the budget process and funded in the requesting Department's budget.
- New additions or replacement fleet assets are evaluated to ensure they are appropriately sized for the intended work (i.e., undersized snow plowing trucks)

Asset acceptance and make-ready

- New assets are thoroughly inspected to verify that conformity to specifications and are free of defects.
- Discrepancies are noted and reported to the vendor, and resolved as quickly as possible.
- Asset is test driven and special equipment is tested by a trained operator.
- Unique City "vehicle number" is assigned, and asset is decaled with logo and Department / Division name.

Fleet Management Services (cont.)

Fleet asset disposal

- Assets that meet requirements for disposal are turned in to Fleet Services
- Asset is prepared for auction by removing all seal, decals, and equipment
- Fleet complies with Prescott City Charter and Prescott City Code for the sale, transfer or disposition of City property.
- Fleet Services oversees auction, ensuring a reasonable sales price.

Asset recordkeeping

- New assets are assigned a unique number and placed into the maintenance management system.
- Asset information is input including: VIN, license number, year, make, model, class, mileage, in-service date, purchase price, and warranty.
- All maintenance history is input for each asset.
- All maintenance costs are input and assigned to each asset.

Vehicle Replacement Process

Vehicle replacement fund

- Began in 2003. Originally all vehicles and equipment were replaced via the Fund. Divisions were charged based on the estimated vehicle replacement cost divided equally over the anticipated vehicle life time.

§ Example Vehicle - \$65,000 / 6 year life = \$10,833 per year paid in to the fund

- During FY09-13 recessionary period, City primarily replaced public safety vehicles. Non-public safety vehicles were repaired and returned to service.
- City resumed a more timely schedule in FY14. Vehicles began to be replaced on a priority basis beginning with those in the poorest condition, with highest maintenance cost and highest mileage.
- In FY14, Non-General Fund Departments began budgeting vehicles/equipment that were scheduled for replacement.

Vehicle Replacement Process (cont.)

- Fleet Services utilizes replacement guidelines to create an initial replacement list for review. The following are considered:
 - Age / mileage / hours
 - Maintenance history
 - Vehicle purpose/intended use
- Examples of replacement guidelines as adjusted in FY 16:
 - PD patrol vehicles – Old: 5 years / 100,000 miles New: 6 years/150,000 miles
 - Light duty fleet – Old: 5 years / 100,000 miles New: 10 years/100,000 miles/6,000 hrs
 - Solid Waste Vehicles – Old: 5 years / 2,000 hrs New: 7 years/5,000 hrs
- Items on the tentative replacement list are then reviewed individually with departments for replacement input.
- If replacement is necessary, specifications are determined based on operational use.

Vehicle Replacement Process (cont.)

- An asset being replaced is reviewed to see if it can be re-purposed within the City.
- If not suitable for re-purposing within the City-wide fleet, the replaced vehicle/equipment is sent to surplus auction.
- Departments are asked to look at options for not replacing the vehicle
 - Can an asset be borrowed or shared?
 - Should Fleet Services rent rarely utilized equipment for occasional use?
 - Is the vehicle being utilized properly or do the specifications meet the job needs?
- In order to budget a consistent replacement cost, planned replacement of 1/6 of fleet assets is needed.
- Now using Life Cycle Cost Analysis to determine if repairs to equipment are warranted.

Life Cycle Cost Analysis

- Analysis is performed to determine whether an asset has reached its useful life based on maintenance costs vs. depreciated value.
- Analysis will help to provide a cost analysis when assets require large repairs that may cost more than the asset value.
- Fleet Manager will contact department liaison to make recommendations when vehicle repairs will exceed the vehicles value, and life cycle.

CITY OF PRESCOTT ARIZONA **Annual Lifecycle Cost Tool for Fleet Managers**

INPUTS

Interest: 6% (Interest Costs for Capital Expenditures)
 Inflation Rate: 5% (Inflation rate for adjusting life-cycle maintenance and operating costs)
 Depreciation Year 1: 30% (Rate of vehicle depreciation in the first year of ownership)
 Depreciation Year 2+: 20% (Rate of vehicle depreciation in subsequent years of ownership)

Vehicle Purchase Cost: \$ 112,000 (Purchase Cost of Vehicle)

Year	1	2	3	4	5	6	7	8	9	10
Actual Maintenance Costs	\$ 778	\$ 5,288	\$ 3,529	\$ 2,000	\$ 177	\$ -	\$ -	\$ 21,829	\$ 5,402	\$ 22,000
Estimated Operating Costs (Fuel, Insurance, etc)	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200

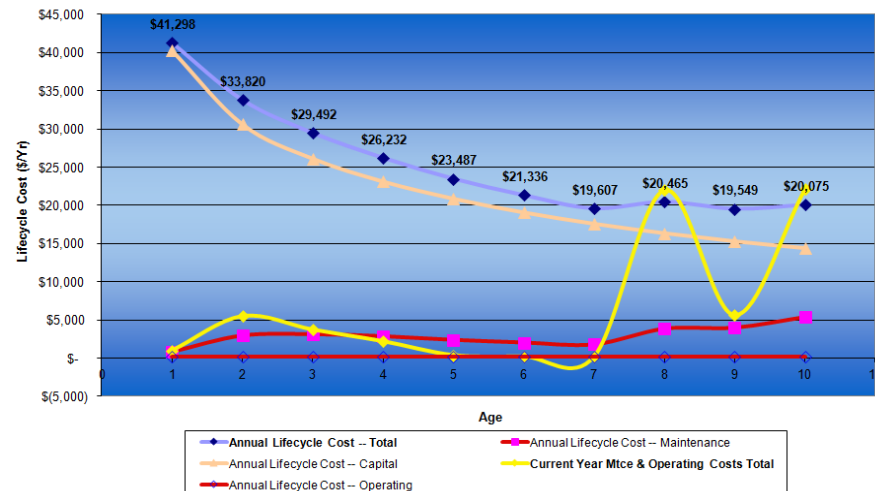
OUTPUTS

Year	1	2	3	4	5	6	7	8	9	10
Current Year Mtce & Operating Costs Total	\$ 978	\$ 5,488	\$ 3,729	\$ 2,200	\$ 377	\$ 200	\$ 200	\$ 22,029	\$ 5,602	\$ 22,200
Purchase Cost	\$ 112,000	\$ 112,000	\$ 112,000	\$ 112,000	\$ 112,000	\$ 112,000	\$ 112,000	\$ 112,000	\$ 112,000	\$ 112,000
Residual (% of Purchase Price)	70%	56%	45%	36%	29%	23%	18%	15%	12%	9%
Current Resale Value	\$ 78,400	\$ 62,720	\$ 50,176	\$ 40,141	\$ 32,113	\$ 25,680	\$ 20,552	\$ 16,442	\$ 13,153	\$ 10,523
Life to Date -- Maintenance (Future Value)	\$ 778	\$ 6,106	\$ 9,939	\$ 12,435	\$ 13,234	\$ 13,895	\$ 14,590	\$ 37,149	\$ 44,408	\$ 68,628
Life to Date -- Operating (Future Value)	\$ 200	\$ 410	\$ 631	\$ 882	\$ 1,105	\$ 1,360	\$ 1,623	\$ 1,910	\$ 2,205	\$ 2,516
Annual Lifecycle Cost -- Maintenance	\$ 778	\$ 2,978	\$ 3,153	\$ 2,885	\$ 2,365	\$ 2,043	\$ 1,792	\$ 3,890	\$ 4,027	\$ 5,456
Annual Lifecycle Cost -- Operating	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200
Annual Lifecycle Cost -- Capital	\$ 40,320	\$ 30,842	\$ 26,140	\$ 23,146	\$ 20,892	\$ 19,094	\$ 17,616	\$ 16,375	\$ 15,322	\$ 14,419
Annual Lifecycle Cost -- Total	\$ 41,298	\$ 33,820	\$ 29,492	\$ 26,232	\$ 23,487	\$ 21,338	\$ 19,607	\$ 20,465	\$ 19,549	\$ 20,075
Optimum Replacement Point									X	
Current Maintenance and Operating Costs exceed Annual Lifecycle Cost								X		X



Lifecycle Cost Diagram

- Optimum Economic Life is when Total Annual Lifecycle Cost is minimized
- If Current Year Maintenance & Operating Costs exceed total lifecycle costs, replacement should be considered



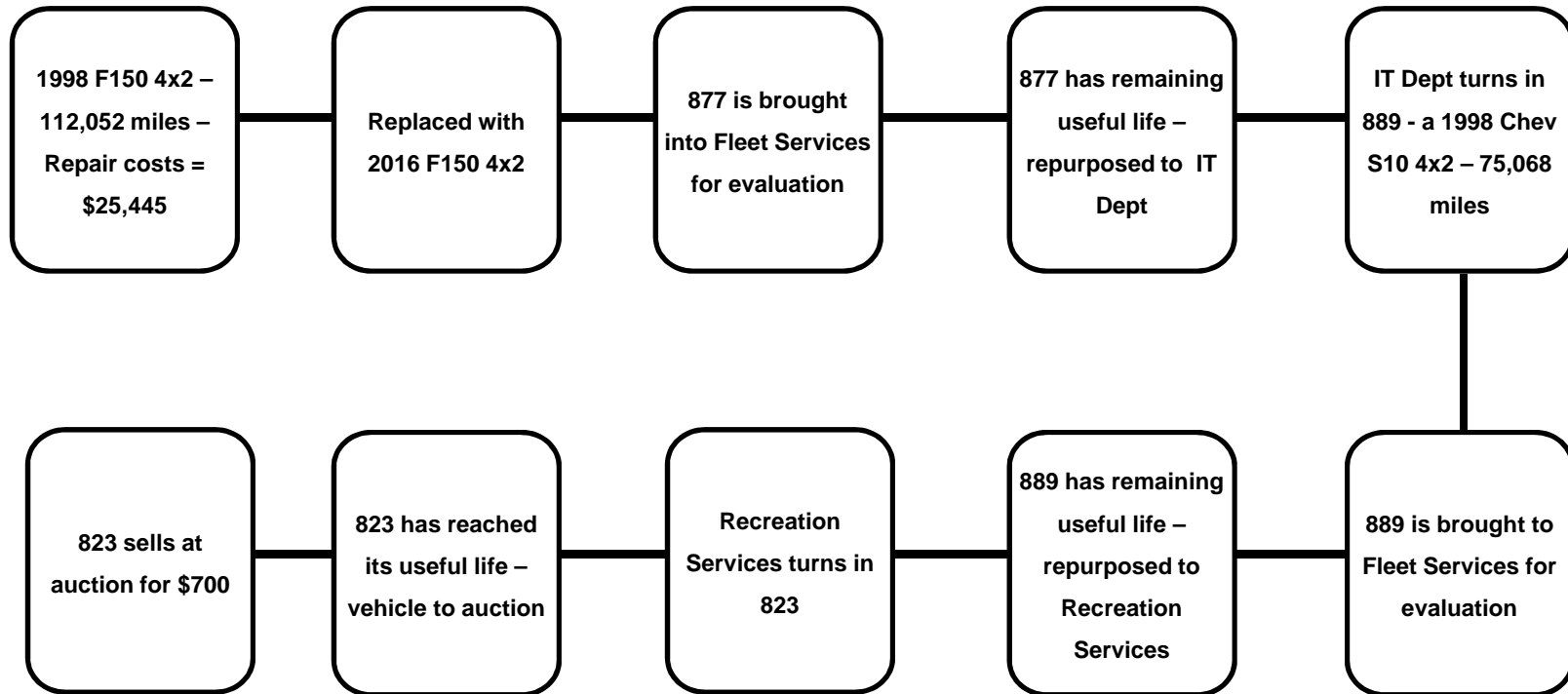
Recommended Vehicle Replacements

Based on FY 2017 Review

Original Replacement Year	Asset	Department/Division	Year	Description	Budget Est.
FY15	813	PW - Wastewater Treatment	2002	F450 4X2 Svc Tk w/ Crane body	\$ 160,000.00
FY17	838	PW - Engineering Admin	1996	Dodge 1/2-ton truck 4x2	\$ 23,000.00
FY17	877	F&FS - Streets	1997	Dodge Ram 1500 4x4	\$ 30,000.00
FY17	880	F&FS - Streets	1997	Caterpillar 938G Loader	\$ 219,000.00
FY16	926	F&FS - Streets	2002	Volvo 10-ton dump truck	\$ 185,000.00
FY17	976	PW - Transportation Svcs	2001	Ford F350 1-ton truck	\$ 45,000.00
FY17	978	Public Works - Construction Svcs	2001	Dodge 1/2-ton truck 4x4	\$ 23,000.00
FY17	980	Public Works - Construction Svcs	2001	Dodge 1/2-ton truck 4x4	\$ 23,000.00
FY15	1009	PW - Water Distribution	2002	F450 4X2 Service Truck	\$ 62,000.00
FY16	1033	PW - Wastewater Collections	2003	Chevy 3/4-ton truck 4x4 w/svc body	\$ 45,000.00
FY16	1073	PW - Water Production	2004	Ford 1-ton trk dual rear wh w/svc body	\$ 45,000.00
FY17	1095	Airport Admin	2004	John Deere Tractor	\$ 125,000.00
FY17	1096	F&FS- Solid Waste Residential	TBD	Side loader	\$ 278,000.00
FY17	1101	PW - Metering Svcs	2005	Ford F150 1/2-ton truck	\$ 23,000.00
FY17	1109	F&FS - Streets	2005	Ford F-350 4x4	\$ 60,000.00
FY17	1112	F&FS - Streets	2005	Ford F-350 4x4 Crew/Dump	\$ 60,000.00
FY17	1134	F&FS - Streets	2005	Ford F-350 4x4/Dump Upgrade	\$ 92,000.00
FY17	1135	PW - Water Production	2005	Chevy K3500	\$ 45,000.00
FY17	1193	PW - Metering Svcs	2007	Ford F150 1/2-ton truck	\$ 23,000.00
FY17	1231	F&FS - Streets	2008	Ford F350 1-ton truck	\$ 92,000.00
FY17	1238	PD - Patrol	TBD	Ford Expedition	\$ 65,000.00
FY17	1330	PD - Patrol	2008	Ford Crown Vic	\$ 65,000.00
FY17	1335	F&FS- Solid Waste Residential	2008	Autocar sideloader	\$ 122,400.00
FY17	1336	F&FS- Solid Waste Residential	2008	Autocar sideloader	\$ 122,400.00
FY17	1350	PD - Patrol	2011	Chevy Tahoe	\$ 65,000.00
FY17	1381	F&FS - Solid Waste Trf Station	2011	Caterpillar tool carrier/loader	\$ 220,000.00
					\$ 2,317,800.00

- Consider annual Council approval of replacement schedule to increase staff efficiencies.

Replacement Example



Rightsizing the Fleet

Fleet size and composition is important.

- Ensuring an acceptable level of asset availability and service delivery
- Controlling fleet and service delivery costs
- Maintaining uniform levels of asset usage and reducing their life cycle costs

Rightsizing is more difficult for some types of asset users than for others.

- Predictable use – Refuse trucks, meter reading, street sweeping.
- Semi-predictable use – Law enforcement, construction, snow plowing.
- Unpredictable use – Fire fighting, disaster/emergency response, admin travel.

Who determines the size and makeup of the Fleet?

- Fleet users – Based on the needs of each function
- Upper management – Determine the best equipment for tasks
- Finance officials – Budgeting replacements, depreciation, and funding
- Elected officials – Determine the services that are provided to the citizens

Future Management Processes

- Fleet Services will be developing a 10-year replacement schedule to use for future replacements
- Fleet Services has drafted a Fleet Management Policy – establishes the Fleet Asset Review Board (FARB)
- Fleet Services is reviewing GPS systems for City-wide use to track mileage, utilization, fuel consumption, and vehicle maintenance
- FARB to review all Departments at least once every five years for fleet rightsizing
- Standardization of Equipment – In order to maintain costs, lower inventory levels, and ensure cross training for mechanics fleet services will be working with Departments to purchase vehicles and equipment of like make, models, and brands
- Obtain Government Fleet Management Alliance certification