Pre-Event Workshop

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U.S. Department of Energy Federal Energy Management Program

Managing a Mixed Fleet: Agency Owned and GSA Fleet Leased

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Managing a Mixed Fleet

Managing a mixed fleet of vehicles presents a variety of differences within each of the following five categories:

- Acquisition
- Disposal
- Operation
- Maintenance
- Overhead (Management and Administration)

By understanding the differences within each category, agencies can better manage their fleets

Acquisition Activities

An effective fleet replacement program consists of three components:

- Optimal replacement cycle guidelines
- Replacement plans that calculate fleet-wide costs and future requirements
- Replacement budgeting and funding approaches that enable the timely replacement of vehicles

Acquisition: Replacement Cycles

GSA Fleet Leased

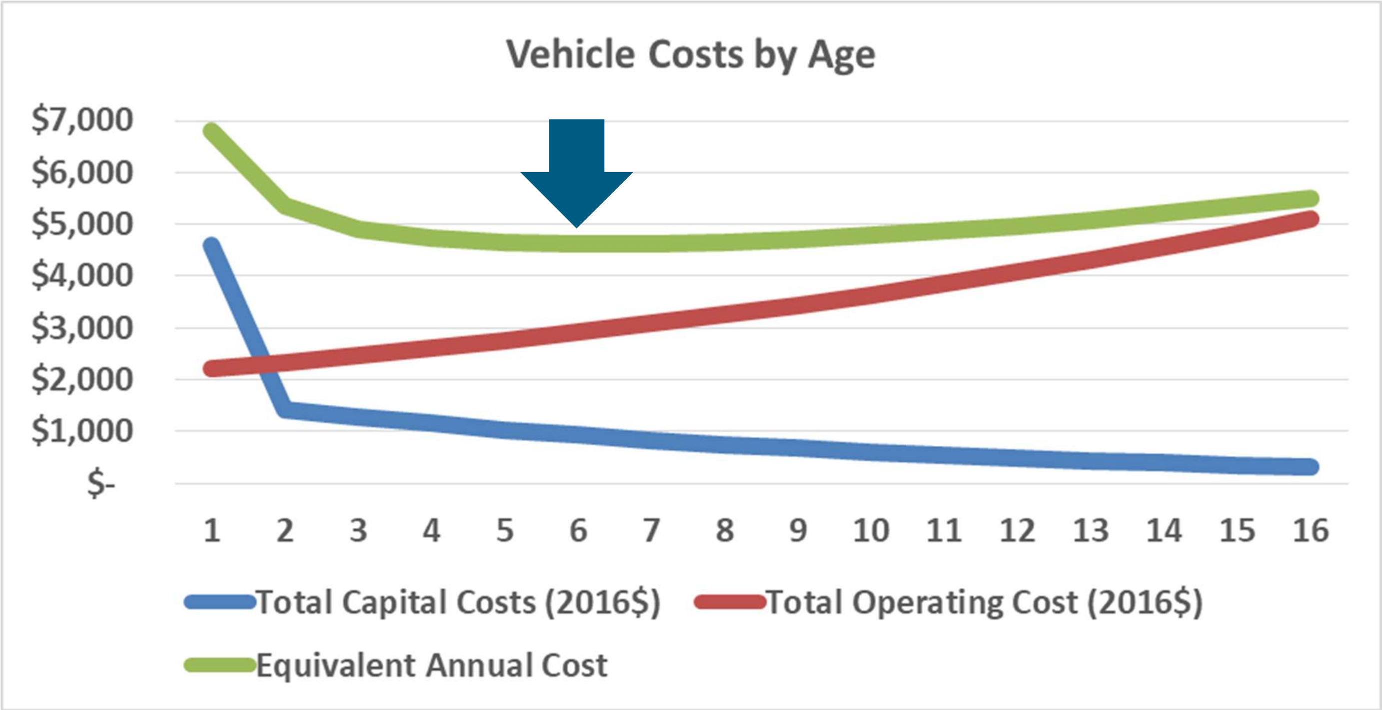
- GSA identifies optimal replacement cycles for each vehicle class based on class-wide utilization
- Tends to be advantageous for vehicles with higher utilization; monthly rates are aligned with quicker depreciation schedules

Agency Owned

- Agencies should identify optimal replacement cycles for key classes of vehicles based on agency-specific utilization
- Tends to be advantageous for vehicles with lower utilization; GSA rates tend to be higher than depreciation on a longer lifecycle

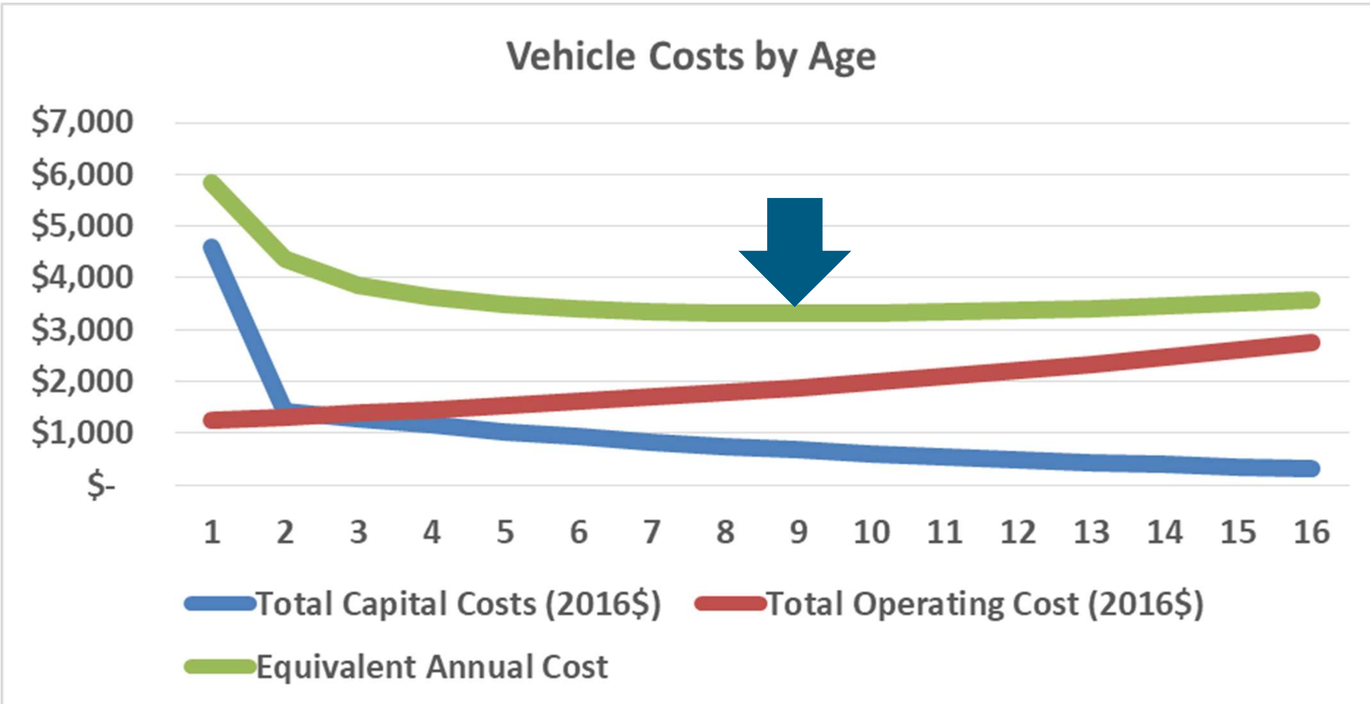
Effect of Utilization on Replacement Cycles

At 12,000 annual miles travelled, the optimal age for replacement is 6 years.



Effect of Utilization on Replacement Cycles

At 6,000 annual miles travelled, the optimal age for replacement is 9 years.



Acquisition: Replacement Plans

GSA Fleet Leased

- GSA forecasts replacement funding requirements (and rates) based on replacement cycles, asset ages, accumulated mileage, and replacement vehicle costs

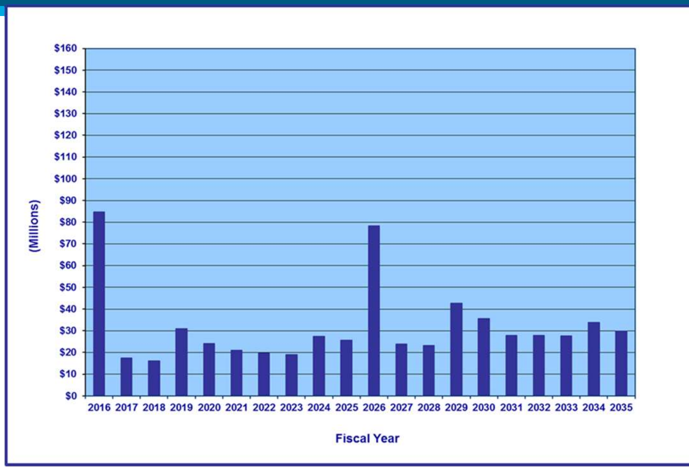
- Consistent replacement tends to smooth out delivery, which keeps the supply chain of vehicles aligned with agencies' capacity to validate requirements and process acquisitions and disposals

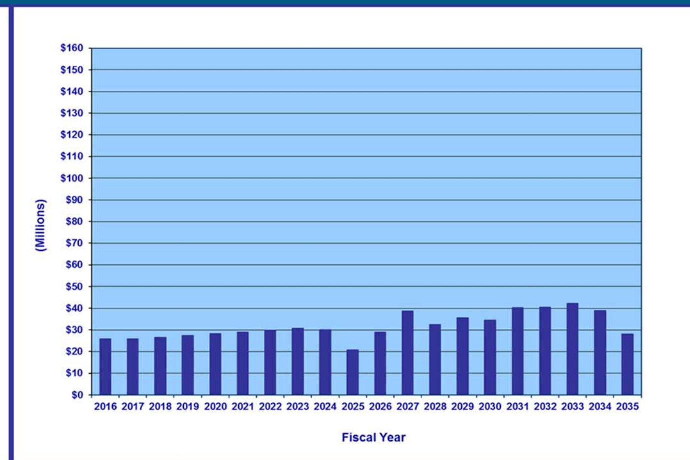
Agency Owned

- Agencies should mirror this process to determine annual funding requirements, but often don't have the systems or processes in place to forecast efficiently/accurately

- Agencies tend to accumulate backlogs of vehicles in need of replacement, which is often best addressed over multiple years

Effect of Funding on Replacement Backlog

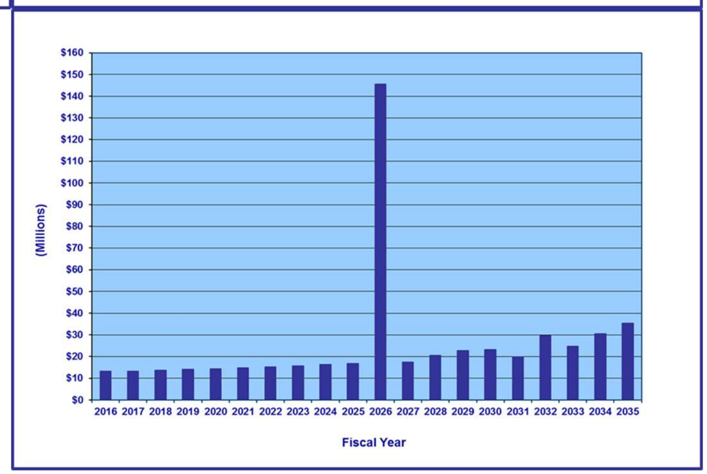




Each graph shows a projection of annual fleet replacement funding

Clockwise from top left, the three scenarios shown are the:

- Baseline Plan - $84.6M
- Smoothed Plan - $25.8M
- Status Quo Plan - $13.2M



Acquisition: Budgeting and Funding Approaches

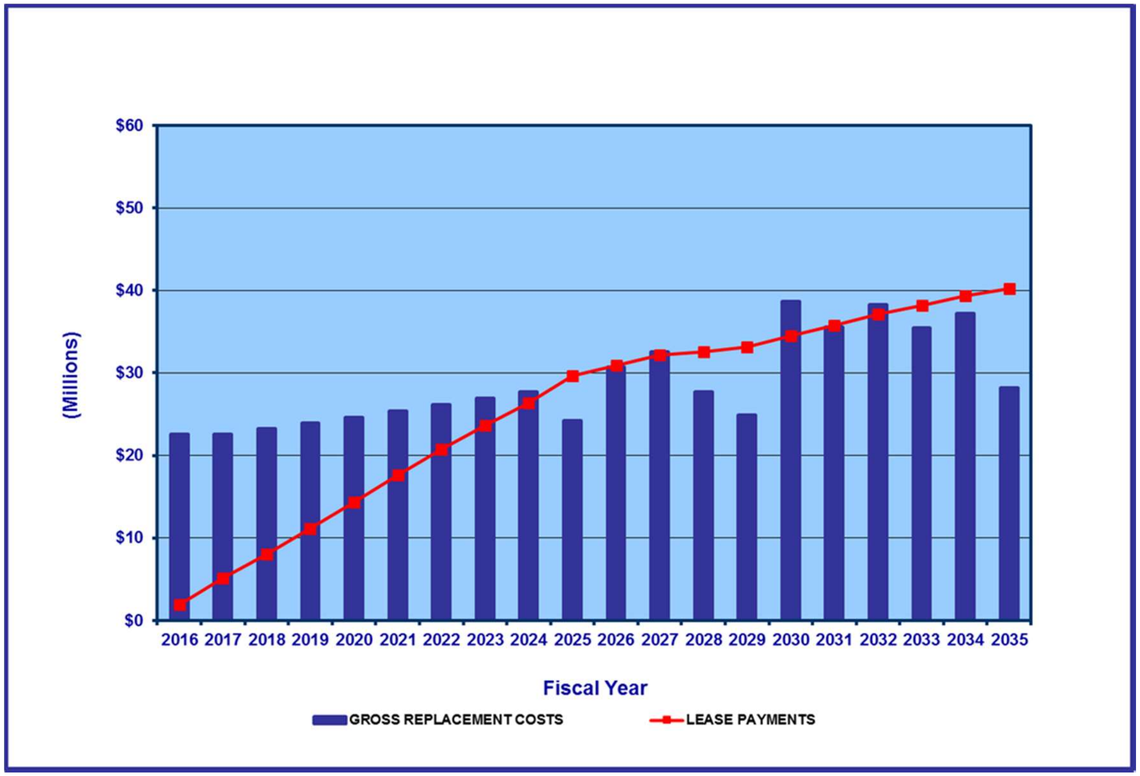
GSA Fleet Leased

- Fleet replacement fund is replenished by monthly rates
- Replacement funds are safeguarded from competing interests
- GSA provides a predictable rate model that facilitates budgeting
- Acquisition costs are spread out
- Repair cost increases push GSA to replace vehicles on time

Agency Owned

- Replacement is typically funded by end of year or operational funds
- Fleet replacement funds compete against other agency priorities
- Agency replacement funding requests tend to be inconsistent from year to year
- Acquisition costs are front-loaded
- Capital costs push agency to defer replacements

Purchase versus Leasing Approach



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Acquisition: Other Considerations

GSA Fleet Leased

- Some vehicle/equipment types unavailable for lease
- Vehicles can be delivered with some basic types of up-fitting packages
- GSA can “assume” ownership of existing vehicles, whereby agencies start making payments on vehicles that they previously purchased

Agency Owned

- Agencies can source vehicles through GSA AutoChoice, or as last resort, through contracting
- Vehicles typically up-fit by agency, which can result in long lead times and lack of standardization
- The agency avoids having to fully fund replacements by transferring the residual value to GSA

Disposal

GSA Fleet Leased

- GSA retains vehicle remarketing proceeds for reuse
- Agency up-fitting can result in an end-of-life expense to compensate for damage

Agency Owned

- Agencies can use Exchange/Sale Authority to reuse proceeds
- Agency can sell vehicle without removing up-fitted equipment

Operation

GSA Fleet Leased

- GSA provides a fleet card to pay for fuel
- GSA bills for fuel as part of the mileage rate
- GSA tracks mileage and has validation routines to prevent inaccurate mileage readings from remaining in vehicle records
- Relies on proximity of and fuel types available at retail fuel stations

Agency Owned

- Agencies provide a fleet card or provide access to federal fuel sites
- Agencies pay for actual fuel consumed
- Mileage readings typically based on fleet card or fuel site transactions; agencies typically need to improve mileage screening processes
- Allows larger agency fleets to reduce costs by collocating fuel sites with fleets; allows selection of alternative fuels

Maintenance

GSA Fleet Leased

- GSA provides a fleet card to pay for maintenance
- Maintenance downtime can be high in some high-demand/low-supply markets
- Fleet proximity to GSA-authorized maintenance and repair locations can have a large influence on soft costs (transport time)
- GSA schedules preventive maintenance

Agency Owned

- Agencies provide fleet card or provide access to a maintenance and repair facility
- Agencies can reduce downtime by controlling and prioritizing maintenance and repair
- Agencies can reduce transport and labor costs by locating maintenance facilities near fleets
- Agencies schedule and manage preventive maintenance

Overhead (Management and Administration)

GSA Fleet Leased

- Includes access to a suite of fleet management information systems/modules
- GSA's fleet management framework is proven, with economies of scale derived from a large quantity of assets under management

Agency Owned

- Agencies can use FedFMS, in-house systems, or COTS solutions to manage fleet data
  - For in-house and COTS systems, the agency must be capable of performing vehicle level data reporting in FAST
- Agencies should invest in software, personnel, shop equipment, facilities, parts inventory, and infrastructure in order to effectively manage their fleets

Comparing Lifecycle Costs

Assuming leasing and owning are both feasible, how do you compare costs?

- Estimate capital costs
  - Acquisition, residual value, up-fitting, remarketing
- Estimate operating costs
  - Fuel consumption, maintenance
- Estimate overhead costs
  - Software, utilities, personnel
- Compare costs over owned lifecycle
  - Keep in mind the front-loaded costs of owned vehicles

Lease versus Buy Parameters

1. Select Class		
	Equipment Code (from tab)	4150
	Description	Standard Pickup, Regular Cab
2. Enter Data		
	Purchase Price of Vehicle	$ 18,909
	Estimated Upfitting Cost	
	Average Annual Miles (estimated)	4,881
	Estimated Owned Replacement Cycle (months)	122
	Combined Miles Per Gallon (MPG)	14
	Total Number of Agency Fleet Vehicles	9,020
	Estimated GSA End-of-Life Chargeback	$ -
	Commercial Lease Rate	
	Commercial Lease Term (months)	
3. Adjust Defaults		
	VEUs	1.2
	Residual Value	$ 2,123
	Fuel Cost per Gallon	$ 2.59
	GSA Monthly Rate	$ 162
	GSA Mileage Rate	$ 0.20
	Optional Equipment GSA Monthly Rate	$ -
	Optional Equipment GSA Mileage Rate	$ -

Lease versus Buy Results

What	Owned		GSA Lease	
Net Capital Cost (Purchase Price plus Upfitting less Resale value)	$	17,317	$	19,764
Maintenance and Repair (M&R)	$	5,687		
Maintenance/Fuel			$	9,677
Fuel	$	9,850		
Chargeback			$	-
Management and Operational Overhead	$	3,158	$	316
Total Cost Over Life Cycle of Owned Vehicle	$	36,011	$	29,756

What about commercial leasing?

- While the “lease/own” analysis process is similar to comparing GSA Fleet to Agency Owned, commercial leasing virtually always turns out to be more expensive
  - Commercial entities must also make a profit
  - Very few commercial entities have the same buying power as GSA

Conclusion

- Consider ALL factors and costs when comparing leasing to owning
- Conduct detailed analysis of lease/buy options
- Higher annual mileage vehicles and large blocks of new vehicles generally favor GSA leasing
- Lower annual mileage vehicles with longer lifecycles generally favor owning

Questions?

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