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CLARK COUNTY
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Audit Services

Clark County Auditor's Office

Audit of Equipment (Fleet) Services Replacement Decision, Purchase, and Disposal Processes

Audit Services Report # 12-03

September 19, 2012



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EXECUTIVE SUMMARY

This is the first in a series of audits relating to the county's vehicle and equipment fleet. It focuses on the light vehicle fleet and three processes: the county's replacement decision process; the vehicle procurement process; and vehicle disposal at end of its useful life.

As of year-end 2011, there were 395 "light" vehicles managed by the county for internal operations; this includes 147 from the Sheriff's Office and 140 from Public Works. Twenty-six percent of the fleet (101 vehicles) was four wheel-drive (4x4) vehicles and seven percent (28 vehicles) were "rollover" or extended life vehicles.

The county's existing guidance for these processes lies within the "Vehicle/Equipment Acquisition, Retention and Replacement (Fleet Management) Policy (Draft #2)" developed in 2005 and updated in 2008 by the Fleet Management Review Board (FMRB). While it was discussed in workshop with the Board of County Commissioners in 2005, it was never widely circulated and has been largely unused as a management tool.

As a result the Fleet Management Policy is not well known, not consistently followed, and is generally not useful as a tool to manage the fleet. This has had a significant effect on decisions about how the fleet replacement decisions are managed.

Conclusions

We conclude that two of the three processes examined – *purchasing vehicles* and *disposing of vehicles* – are currently effective, generally maintain good controls, and are in compliance with existing policy. The one caveat is an issue in the disposal process with retaining "rollover" vehicles beyond the time specified in the policy – but that situation has improved greatly over time.

We conclude that the *replacement decision process* is incomplete and ineffective. Fleet Management generally follows past practices instead of the written policy, and the policy that does exist is incomplete. These issues have resulted in vehicles being replaced before they reach retirement age or meet mileage replacement standards. Some vehicles have been replaced more than six years before the end of their useful life.

Recommendations

While there are ten recommendations in the report, focusing on three key actions would provide the best immediate result:

- Update the Fleet Management Policy to reflect best practice replacement policies;
- Implement the policy as a management priority; and
- Provide active oversight for the implementation.

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Introduction

Planning, maintaining, and renewing light vehicle fleet for internal use is a function provided by many local governments. Moving employees to support the services provided in a cost effective and reliable manner is the primary purpose of maintaining a municipal fleet. With their fleet size, composition and utilization as the focus, many governments are finding ways to increase efficiency and provide improved service at a lower cost.

This report is the first in a series of audits relating to the county's vehicle and equipment fleet. It builds on the performance audit completed by the Auditor's Office in 2004, and includes a closer look at key processes and fleet management efforts since that audit. This report focuses on the light vehicle fleet and three specific processes: the county's vehicle replacement decision process; the vehicle procurement process; and the vehicle disposal process at end of useful life.

Fleet management is a function within Clark County's Public Works department. The processes of procurement and disposal are guided by general purchasing and disposal criteria. Replacement decisions are guided by an internal policy. This policy includes guidance for many aspects of fleet management to include proposed minimum use standards, vehicle types for specific functions, equipment rate calculations, defined life cycles for vehicles, and four-wheel drive (4x4) vehicle purchasing guidance. The internal policy remains a draft.

Objectives, Scope, and Methodology

The objective of this audit was to:

Assess the county's process for making the replacement decision, procurement and disposal of light fleet vehicles against existing guidance and best practices.

Our audit looked at management and cost data on the fleet focused primarily on 2011.

This audit defined the light fleet vehicles to include two wheel drive Sport Utility Vehicles (SUVs), 4x4s, and light trucks under a gross vehicle weight (GVW) of 8,500 pounds that are owned or operated by Clark County government. Some vehicles were not included in the scope of this work. Excluded vehicles included "heavy pickup" type trucks, heavy equipment, trailers, and certain law enforcement vehicles that are part of a task force and not maintained by fleet services.

We performed research into best practices and industry standards related to fleet

management. We reviewed policy and procedure documentation, discussed process with fleet management, and examined data related to vehicle replacement decisions, as well as purchase and disposal activities, to assess process against guidance (State and local) and best practice.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

See appendix B for additional details on the objectives, scope, and methodology for this audit.

Background

The Equipment Services Department's (also known as Fleet Maintenance) mission is "To provide and maintain vehicles and equipment for maximum operational efficiency and safe working condition, in a cost effective manner that meets the service needs of user departments at a cost equal to below *[sic]* other providers and insures the availability of vehicles and equipment to user departments."

Additionally, Fleet Maintenance purchases replacements for equipment that have reached the end of their useful life, and acquires new equipment as directed by customer departments. Maintenance and capital replacements are funded through equipment rental rates charged to user departments.

Clark County has one of the larger municipal light vehicle fleets in the state, with 395 vehicles of various types and uses. At 147 vehicles, Clark County Sheriff's Office represents slightly more than a third (37.2 percent) of the users. A nearly equal number (140 or 35.4 percent) are used by Public Works. All other county functions account for 110 vehicles or 27.3 percent of the fleet. Additional characteristics of the fleet are listed at the end of this section.

The fleet is managed from a single consolidated motor pool in Vancouver, Washington. Most maintenance is done at the consolidated facility, although minor maintenance is occasionally conducted at remote transportation sites, mostly on heavy equipment.

The county accounts for the purchase of fleet vehicles in the Equipment Rental and Revolving Fund (ER&R) as required by Washington State law. The purpose of the ER&R fund is to maintain and provide for the orderly acquisition, replacement and maintenance of vehicles for all county funds. To fund ER&R

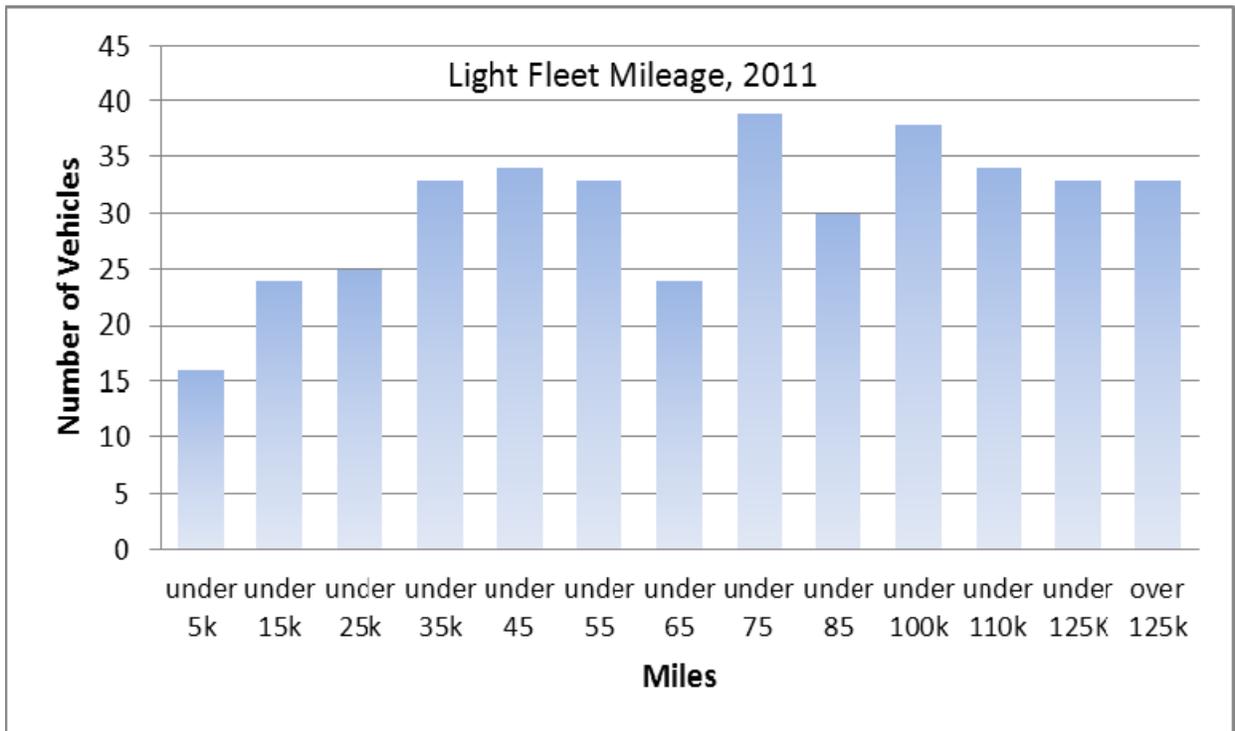
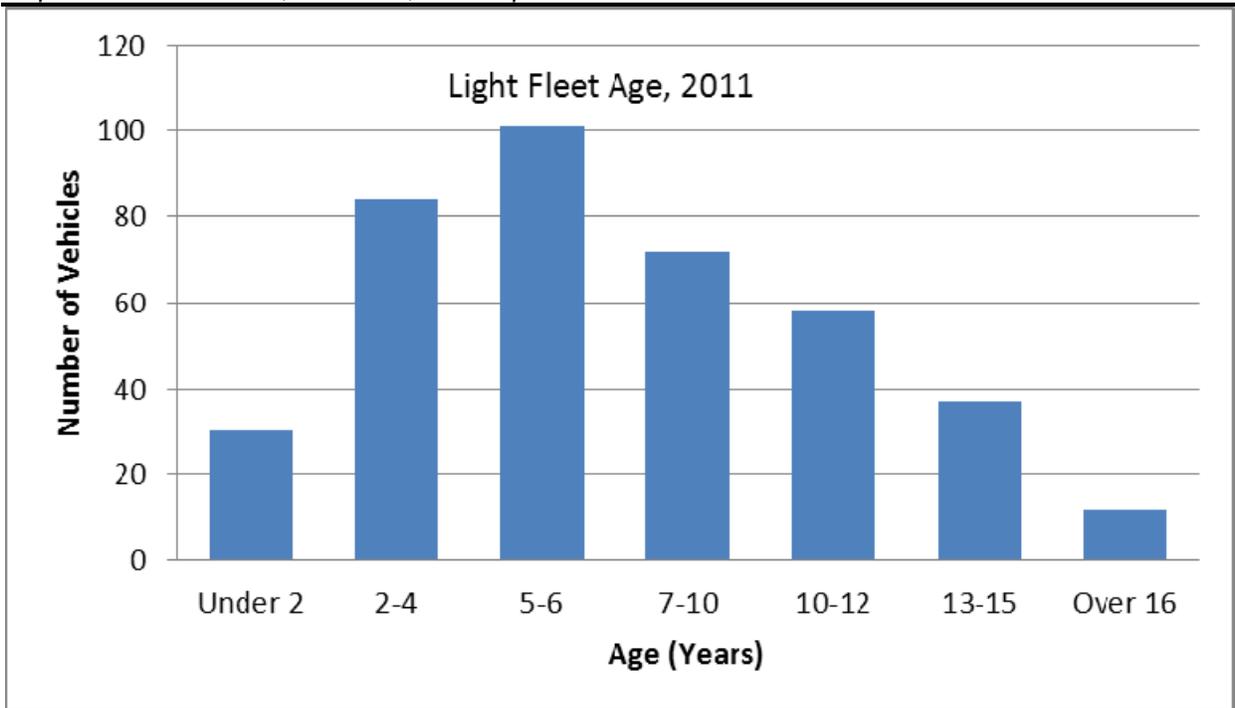
Public Works Equipment (Fleet) Services
Replacement Decisions, Purchase, and Disposal Processes

requires users to pay the full capital cost for a new vehicle when it is initially delivered, then make annual payments for the replacement cost at the end of the vehicle's useful life, usually ten years.

Equipment is rented from the fund; rates charged cover all costs of maintenance and repair, including material and supplies used in vehicle maintenance. Future replacement is also included in the rental rates.

Fleet Characteristics – Clark County, Washington 2011

Fleet Characteristics as of Dec 31, 2011		Light fleet changes over time		2003	2011
Sedans & SUVs	203	"Rollover" ¹ temporary vehicles		171	28
Sedans, Subcompact	0	Permanent vehicles (<i>supported by ER&R</i>)		<u>249</u>	<u>367</u>
Sedans, Compact (non-hybrid)	0	Total vehicles		420	395
Sedans, Compact (hybrid)	9				
Sedans, Medium	50	Total take home vehicles (all types)		*	143
Sedans, Large	92	Total 4x4s, all types (trucks + SUVs)		105	101
SUV, 2 wheel drive (w/ 2 hybrids)	18				
SUV, 4x4	34	Oldest vehicle (1989 Chevy C20 truck)			22 years
Light Pickups	80	Highest mileage (2003 Ford F450 2wd)			192,674
Pickup Trucks, 2WD	33	Vehicles identified for disposal in 2011			17
Pickup Trucks, 4x4	47				
Trucks	52	<i>/1 "Rollover" vehicles are those retained after reaching end of life and being replaced they continue to be used for other purposes instead of being sold.</i>			
Heavy Pickups 2WD	36				
Heavy Pickups, 4x4	16				
Vans	56	<i>Vehicles identified for disposal not included in fleet total</i>			
Vans 2WD	52				
Vans 4x4	4				
Other	4				
Total Light Fleet	395				



THE REPLACEMENT DECISION PROCESS

The decision process to replace or purchase vehicles is guided by both State laws and local requirements.

State Guidance

The State of Washington does not manage local government municipal fleets; although a number of their management practices are viewed as industry standards and best practices. Their replacement criteria, justification for 4x4 vehicles, and purchasing contracts are a few examples of state leadership in this area.

Local Guidance

The replacement decision process is guided by Clark County's (draft) Acquisition, Repair & Replacement Policy (Fleet Management Policy). The Fleet Management Policy was developed by the Fleet Management Review Board (FMRB) in response to a recommendation from the 2004 fleet performance audit. The Fleet Management Policy's stated purpose is to address acquisition, retention and replacement. It actually addresses only the *replacement decision* aspect of this process. It is silent on how to actually *procure* or *dispose* of the property.

The draft Fleet Management Policy represents a collection of documents developed at various times by the FMRB between 2005 and 2010. The policy was developed in draft form and discussed with the Board of County Commissioners (BOCC) in 2005. The Public Works Director considered that the policy was approved at the end of the work session. However, it was neither published nor widely disseminated as an integrated document. Changes made after 2005 were neither presented to the BOCC nor disseminated for action.

The Fleet Management Policy is, however, the single most comprehensive resource to address acquisition, replacement decisions and disposal of vehicles, and has been identified as such by the Public Works Director. Within this document are a variety of chapters, exhibits, and enclosures that address different aspects of fleet management:

- 1) Vehicle / Equipment Acquisition, Retention and Replacement Policy (2005)
- 2) Acquisition of Four Wheel Drive Vehicle Policy (2005)
- 3) Rollover Vehicle /Equipment Replacement Recommendations (2008)
- 4) Proposed Minimum Vehicle Usage Standards (2008)

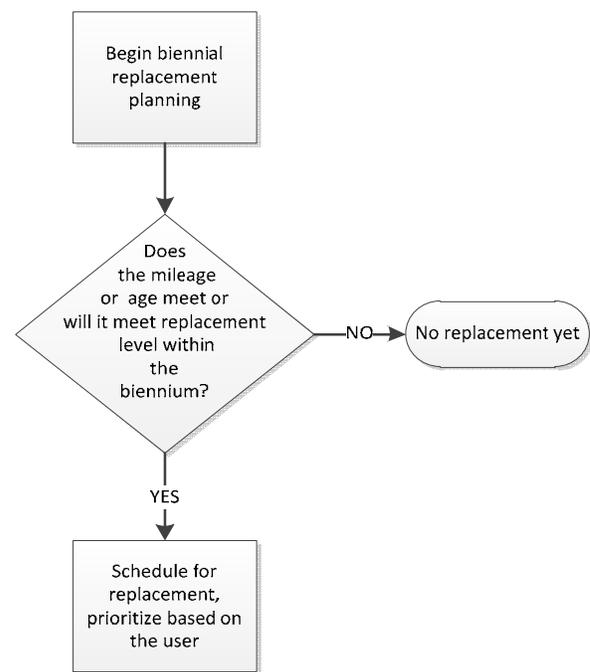
- 5) Clark County Management Fleet Review Board Standard Vehicle Applications (2008)
- 6) Clark County Division of Public Works Equipment Services Division Vehicles and Equipment Life Cycles (2008)
- 7) ER&R Policies – funding acquisitions and disposals (2010)

After completing their major work in 2008, the FMRB became inactive in 2009 when the previous fleet manager retired. The FMRB appears to no longer formally exist; it does not meet, or communicate as an organization. No minutes or reports have been published since 2009. The FMRB has not participated as a group in oversight or management of the fleet for over three years.

Current Replacement Decision Process

The actual replacement decision process used through the 2011- 2012 budget cycle consisted of five steps. It was applied by the Maintenance Supervisor and was informed by data from the FASTER fleet management system. The process was, in order:

- I. Determine if the vehicle expected to achieve its replacement mileage or age (either one) within the next biennium.
- II. Identify which vehicles in this list are likely to need replacement first.
- III. Verify if there are unlisted vehicles that need replacement for other reasons (wrecks, high maintenance cost, poor match to requirement). Based on staff judgment, prioritize replacement of the vehicles which meet any of the above criteria.
- IV. Prioritize replacements based on who the customer is, how critical replacement appears to be, and availability of funds.



Process prior to 2012

This system is predictive, recommending replacement before vehicles meet replacement criteria. Replacing vehicles before meeting the criteria was the

County's standard practice at the time of the audit, and is not consistent with best fleet practices.

There have been issues with the data in Fleet Management's system. The 2004 audit noted that data was incomplete and among other concerns mileage information on 67 vehicles was not available. This has been fixed, and accurate mileage information is now available on vehicles, but there are a few remaining data issues to resolve. Issues within the scope of this audit are:

- ✓ Vehicle descriptions. Only 45 percent of the 4x4 vehicles are described as such in the description field. This should be corrected so the field consistently does or does not include this data.
- ✓ Setup of replacement criteria. FASTER is set up with replacement mileage and age criteria that do not match the Fleet Management Policy. As a result, the FASTER system's recommendations are incorrect and should not be used for decision making until the criteria have been corrected.

In 2012, the Fleet Manager identified that vehicle ages and mileage requirements programmed into the FASTER system from 2005 through 2011 did not match the Fleet Management Policy. Therefore, replacement decisions made prior to the 2013 budget cycle were based in part on faulty prioritization recommendations by the fleet management system. According to the Fleet Manager, this data error is being corrected.

A detailed flowchart of the new process used in 2012 to develop the 2013-2014 budget is available in Appendix C.

Progress Following Industry Standards or Best Practices

Since 2004, the County has adopted many improved and best practices for fleet management. Fleet Management has made excellent progress reducing the number of vehicles retained after their replacements have been put into service ("rollover vehicles").

One area that can use continued effort is the Fleet Management Policy. There was limited guidance provided to staff and users for the vehicle replacement decision

**INDUSTRY STANDARDS
APPROACH**

- COMMON REPLACEMENT CYCLES USED BY PEER ORGANIZATIONS
- SHOULD INCLUDE BOTH TIME AND USE
- TIME CYCLES SHOULD MATCH DEPRECIATION OR FINANCING SCHEDULE

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process in the policy. Best practices for fleet management, however, are numerous and readily available. According to Mercury Consulting Company,¹ key best practices include following a strategic long term fleet management model; including specific replacement criteria that addresses mileage, cost, use, and fit; and identifying tools to improve economy and efficiency of fleet operations.

Identify a Management Strategy to Follow

It is important to develop a long range strategy that is properly funded to allow the county to replace vehicles when needed, yet is flexible enough to support not replacing vehicles when they are no longer needed. Within this plan, it is essential to develop defensible replacement criteria to guide the selection of vehicles for replacement. There are two distinctively different strategies discussed as best practices that make sense financially and operationally for making equipment replacement decisions.

Strategy 1: Short term ownership or replacement at maximum resale value. In this model, the fleet is replaced at three to five years of age while it retains a high resale value. Repair requirements are very light, consisting mostly of preventative maintenance work, vehicles are always recent models, and the size of the mechanical repair staff is small. There is very little replacement of major components, which can be outsourced if needed. Short term ownership is most effective for vehicles that do not receive extensive modifications or installation of special equipment that is expensive and requires long term ownership to recover the cost. This model is commonly used in business and for non-law enforcement vehicles. ER&R payments will be over a very short time, and can be expensive in this model.

Strategy 2: Long term ownership or replacement at end of useful life. This is the model most often used by municipal governments. Vehicles are kept between ten and fifteen years. Industry standard would be to sell vehicles when they have reached the end of their lives based on achieving multiple criteria such as years and mileage. This approach requires increasingly more complex repairs and a greater level of maintenance, which results in a larger repair staff. While this approach will result in older vehicles in the fleet, an effective maintenance program can result in very low life cycle costs and relatively low ER&R payments over the life of the vehicle.

Clark County's Fleet Management Policy does not identify a fleet management strategy that defines how they will manage the fleet over the long term. The

¹ "Fleet Replacement Best Practices" presentation at the 2007 Rocky Mountain Fleet Management Association, "Fleet Management Conference"

strategy in use appears to be a variation of long term ownership. Vehicles are generally scheduled for replacement before meeting any criteria; they are *projected* for replacement in the upcoming biennium based on *expected* mileage or age at time of purchase, whichever comes first. Exceptionally high maintenance cost is occasionally the reason for replacement, but it is not a defined reason within the Fleet Management Policy.

Replacement Criteria and End of Life

Regardless of which strategic fleet management method is chosen, it is important to determine when the “end of useful life” occurs. This can be done by conducting individual life cycle analysis for each vehicle and replacing it when value will be highest. It can also be done by relying on industry standards developed over time.

The industry standard for effective fleet management is to use fleet replacement standards of high performing peers that are defined by multiple criteria (age, mileage, hours, and maintenance repair costs per mile).

The “industry standards” approach is depicted in the slide at the right. The standard applies multiple replacement criteria, most commonly age (in years) and mileage. A third criterion identified by Mercury Consultants and used by leaders in this approach is maintenance cost per mile. Using this approach, it is important that the programmed replacement schedules in years are adjusted to match the ER&R payment schedule.

Figure 1: SAMPLE REPLACEMENT STANDARDS FOR LIGHT VEHICLES

Name	Replacement Standards (years / miles)
City of Portland, OR	8/9 years <u>or</u> 100,000 max of 15 years
City of Palo Alto, CA	5/7 years/70,000 most cars 4 years/85,000 Fire and Police
City of Charlotte/ Mecklenburg Co., NC	10 years <u>or</u> 100,000 Average turnover = 7 years
Clark County, WA (unpublished)	15 years / 150,000 10 years / 125,000 (patrol)
King Co. , WA	100,000 miles most vehicles 110,000 Pursuit and SUVs
Pierce Co. , WA	7 years <u>or</u> 100,000 most vehicles 6 years <u>or</u> 125,000 Sheriff
Sacramento Co. , CA	12 years <u>or</u> 120,000 most cars 10 years <u>or</u> 100,000 for patrol
Thurston Co. , WA	Evaluated after 5 years 100,000 miles <u>or</u> high repair cost
Washington Co. , OR	12 years <u>or</u> 125,000 most cars 5 years <u>or</u> 100,000 patrol

**When replacement standards are presented as X years or Y miles. Replacement occurs when any one condition is met.*

There is a wide variety in how municipalities approach vehicle replacement standards as shown in figure 1. Clark County’s Fleet Management Policy identifies a *general light vehicle* useful life of 15 years and 150,000 miles; however the policy does not state how to apply the standard, if it is “whichever criteria is met first” or “when both criteria are met.” As a result, the county has chosen to apply the former interpretation – “whichever criteria are met first.”

The Clark County mileage criteria for *law enforcement patrol vehicles* was extended by 25,000 miles to 125,000 miles in 2009, matched to an age criteria of ten years.

If the standards identified by Clark County were interpreted to mean “when both criteria are met.” then the standards would be consistent with age and mileage standards adopted by the top two municipalities in the survey – but that is not the current interpretation.

Members of the group (*Figure 1*) also acknowledged during our contact with them that adding a maintenance cost per mile component to the existing replacement standards would improve it; adding a maintenance cost criteria to existing mileage and age criterion, and requiring all of them to be met before replacement would move this from an industry standard approach to a best practice.

The effect of not following existing replacement standards is significant. Not requiring multiple replacement criteria to be met reduces the effective life of vehicles and incurs additional costs over time.

Effects of Current Policy & Process

We looked at a total of 24 light vehicles that were replaced in 2011. Of this group,

Total vehicles removed from service	24
Vehicles that were wrecked (totaled)	<u>- 6</u>
Vehicles actually disposed of in 2011	18
<u>Used vehicle “scrapped” from health department</u>	<u>- 1</u>
Vehicles disposed	17

We analyzed the 17 vehicles that were disposed of in 2011 to determine if the replacement decisions made regarding these vehicles reflected the policy and procedures in the Fleet Management Policy. At the least, all 17 vehicles should have met one criteria, either mileage or age.

We found vehicles replaced when they were projected to meet (not when they meet) standards. Seven of the 17 vehicles met neither criterion. Only three vehicles met both of the criteria.

The Cost of Early Replacement

Based on existing standards and criteria, at least 12 of the seventeen vehicles replaced in 2011 could have been used for two more years before replacement. We calculated the fiscal impact to the county had the 12 vehicles been replaced two years later.

The amount that could have been deferred, represented by the replacement cost of 12 vehicles, was significant. In 2011, this cost of replacement was \$370,632.

1) Replacement vehicle (average purchase price of those sold in 2011)	\$25,746
2) ER&R capital payments (10% of vehicle replacement cost), per year	<u>\$2,570</u>
3) Total first year cost, per vehicle Year 1 >>>>>	\$ 28,316
4) Per year, per vehicle, after first year Years 2-10 >>>	\$2,570

Early spending avoided if replacement of 12 vehicles was deferred for 2 years: **\$370,632**

FINDING 1: Vehicle Replacement Mileage and Age Standards Are Not Being Followed

Purchasing Process Recommendations

- ⇒ 1) **We recommend** Fleet Management adopt a long term ownership strategy with goals that identify the fleet management approach they plan to use. This plan should identify any focus or transition needed, such as to smaller vehicles with better MPG, reducing the number of 4x4 vehicles, increasing hybrid vehicles, or other overarching goals for the fleet program.

- ⇒ 2) **We recommend** the county update the Fleet Management Policy to resolve inconsistencies, areas that are unclear, and to align practice with best practices:

- a. Resolve inconsistencies between stated age and mileage standards in the policy and current practice. Standards should be at least 120,000 miles and 12 years for non-emergency response vehicles.
- b. Identify a specific maintenance cost per mile standard as one of the replacement decision criteria
- c. Align the defined age lifetime with the ER&R payment schedule. It is inconsistent to have an ER&R payback age (10 years) that is different from its actual projected life (15 years for non-emergency vehicles). We recommend 12 years be adopted as the standard, and it be reevaluated after four to six years of use.
- d. Improve clarity and emphasize a focus on purchase of more efficient and appropriately sized vehicles.



- 3) **We recommend** that the Fleet Manager discuss this policy and the needed updates with the Board of County Commissioners (BOCC) in work session. Upon completion, seek to have the BOCC formally approve a staff report that implements the policy during Consent.

Making Purchase Decisions Based On “Fit”

Most of our work on the purchase decision process was focused on when to replace the vehicle, but equally important is the other part of the decision: is the vehicle being replaced with the most appropriate size, type and configuration – or should it be replaced at all?

The replacement decision needs to answer two questions:

- ✓ Is this vehicle in need of replacement because it is near end of useful life?
- ✓ Is this the right “fit” – or is replacing this vehicle with the same size and configuration the most cost effective and efficient way to provide service?

The existing Fleet Management Policy focuses on the first question and how to determine end of life and utilization levels; it provides limited guidance on answering the second question, mostly in the form of a chart with the standard vehicles existing customers can expect as replacements. This chart is based on the vehicles assigned in 2008, and is generally a continuation of what they had assigned. There is no evidence to indicate an objective and reproducible process was used to make the FMRB’s list of recommended vehicles.

In 2007, the University of Nebraska conducted a selection process to identify the best combination of “fit” and fuel efficiency to update their fleet. This study and approach was identified as an industry best practice. Many organizations use a

similar approach today. The objective approach is most effective when vehicles are viewed primarily as tools for providing service, and least effective when vehicles are seen as rewards or symbols of achievement by staff using them.

Hybrid, compact, subcompact, and high mileage per gallon (MPG) vehicles are not identified in the County's policy or elsewhere as a priority to improve fleet efficiency. The subject was not documented by the FMRB as an issue during any meetings. There is no written guidance to help decide the appropriate size vehicle for the distances driven, number of passengers, or type of driving conditions.

After an initial purchase of Toyota Prius vehicles in 2001, four more compact hybrid vehicles were added to the fleet from 2002-2004. Since 2004, no other hybrids, compacts, subcompacts or high MPG vehicles were added to the fleet until 2011. In 2011, two hybrid SUVs were added to the fleet. There is no evidence the county has added any subcompact sedans to the fleet in the last decade.

Since the county does not purchase or use compact or subcompact conventional vehicles, it is difficult to identify the specific savings that would be realized by using a fleet that consists of an appropriate mix of smaller, more efficient vehicles. Recent fleet experience shows that good quality compacts can have low cost per mile (life cycle) costs and provide better overall value to the fleet for many customers.²

FINDING 2: Replacement Decisions Do Not Follow Best Practices and Result In Early Vehicle Purchases

Purchasing Process Recommendations



4) We recommend the County adopt a requirement that equipment be evaluated against at least three end-of-life criteria and meet two of them before replacement. These criteria should be clearly identified within the Fleet Management Policy.



5) We recommend the Fleet Manager add consideration of use, size, type, and configuration into replacement decision criteria. Part of the decision

² Fleet Central Life Cycle Cost Analyzer, powered by Vincentric http://www.fleet-central.com/t_occ_prs.cfm Sample compact cars average about \$.32 /mile to operate (Ford Focus, Chevy Cruze, Honda Civic) while mid-size cars (Malibu, Ford Fusion, Charger) average about \$.39 / mile.

process should be to determine if the utilization warrants replacement or not. This consideration process should include decision matrices with objective criteria for compact sedan, small SUV, and light pickup trucks as the base vehicles to replace our existing fleet when they need replacement.



- 6) **We recommend** that the light fleet be downsized to smaller and higher MPG conventional and hybrid vehicles; ***the standard vehicle for Clark County employee use should be a compact or subcompact car,*** whichever has the lowest life cycle cost. Variations from this vehicle configuration should be in writing.

Prior Audit Recommendations

The Auditor's Office first evaluated fleet operations with a performance audit in 2004. The audit made recommendations to use industry best practices that would improve both operational efficiency and fleet utilization.

There are two specific recommendations from the 2004 audit that are relevant to the vehicle replacement decision process. Both had been implemented in 2005, but have not continued successfully to the present.

- **In 2004 the audit recommended** that the county adopt a county-wide fleet management policy and standards. There were no mileage standards and the recommendation was to establish a minimum mileage standard consistent with other counties or National Fleet Management Association recommendations.
Current Status: Policy and standards were written in 2005, shared with the Board of County Commissioners, and updated in 2008 - but were never formally adopted and are not being used. Mileage standards adopted are not being followed in practice, leading to early replacement of vehicles.
- **In 2004 the audit recommended** that written justification be required for four wheel drive vehicles where budget justification is not required.
Current Status: The 2005 policy required the FMRB's approval for specific vehicles such as four wheel drive. Written justification requests were initiated and are in use today, although routing is by email or paper to the Fleet Manager, who coordinates the response with the Public Works Director. The FMRB is no longer a participant.



- 7) **We continue to recommend** requests for 4x4 and any exceptional use vehicles are in writing and reviewed by an oversight organization.

- **In 2004 the audit** noted that data was incomplete and that they could not obtain mileage information on 67 vehicles.

Current Status: Accurate mileage information is available on all vehicles, but there are a few remaining issues to resolve. Issues within the scope of this audit are:

- ✓ Vehicle descriptions. This should be corrected so the field consistently does or does not include this data.
- ✓ Setup of replacement criteria. FASTER is set up with replacement mileage and age criteria that do not match the Fleet Management Policy. As a result, its prioritization recommendations are incorrect and should not be used for decision making until the criteria have been correctly entered.



- 8) We recommend** Fleet Management verify and correct known user data and settings issues in the FASTER system.

Conclusions

The Fleet Management Policy is not being used to make replacement decisions. It has been effective as a guide to reduce the rollover fleet, but has been ineffective in reducing the total number of 4x4 vehicles in use or in controlling the fleet size.

- ✓ The fleet is being replaced before meeting the criteria identified in the draft Fleet Management Policy, and the policy needs clarification so it can be fully implemented.
- ✓ Vehicles are replaced when they are projected to meet the criteria within two years, not after they meet the criteria.
- ✓ Most actual criteria being used to manage replacement are lower than the Fleet Management Policy. The CCSO Emergency Response vehicle mileage replacement criteria are higher than the policy.
- ✓ Maintenance cost per mile is not an identified criterion, although it appears to be informally applied.

As a result of limitations of the existing Fleet Management Policy, and errors within the FASTER system, the fleet is being replaced earlier than its actual end of useful life. Replacement vehicles purchased are often not the most efficient match of capabilities for the requirement.

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THE PURCHASING PROCESS

The process for purchasing fleet vehicles is guided by both State laws and local requirements.

State Guidance

The Revised Code of Washington (RCW) requires that a competitive bidding process be used on all equipment over \$5,000 in value, which includes all light motor vehicles. [RCW 36.32.245].

To meet the bid requirement, municipalities are allowed to “piggyback” on other government competitively-bid contracts; use of state contracts has consistently provided the best combination of value and convenience. Occasionally there is a requirement for a vehicle not covered under either contract. If this is the case, a separate purchasing process must be followed. This was done in 2011 for Animal Control.

Using a state contract to purchase vehicles is identified by the State of Washington’s Enterprise Services as a best practice.

Local Guidance

There is no local purchasing policy that focuses specifically on vehicle purchases. In general, purchasing policy P-140 parallels RCW 36.32.3245 and addresses competitive bidding or piggybacking on other contracts for purchases with values from \$5,000 to \$25,000, and P-020 defines the formal bid process. Purchasing off the state contract meets all requirements of both policies.

The Purchasing Process

The vehicle ordering process for Fleet managed vehicles has not changed significantly for at least eight years. There have been computer system upgrades and minor changes within Purchasing’s internal control process, but the core process remains consistent.

The process starts with a customer request to purchase a new vehicle or to upgrade an existing one. In both cases, the final decision is made by the Fleet Manager except in unusual cases where he believes the request should be disapproved; in those cases, it is reviewed by the Public Works Director as the final authority.

After the Fleet Manager receives and approves the request for a new vehicle or replacement of an existing one, the customer (or the Fleet Manager) confirms with the Budget Office through the Oracle financial system that they have both sufficient funds and authority to expend the funds to purchase a vehicle.

Once the budget confirmation has occurred, the Fleet Manager's office orders the vehicle through either the Washington or Oregon state contract office using their online system, then initiates a purchase order (PO) locally and adds a copy of the order documentation from the State site. The PO is forwarded to Purchasing for validation, where they verify the order has been initiated with the state agency appropriately. The vehicle is delivered to the customer's location when it is available.

There are controls in place to ensure purchases are properly approved before being made.

According to the County's ER&R policy, "any purchase must be approved by the budget office before ordering." This is done by approving either specific vehicles or by establishing placeholders for undetermined vehicles in the budget.

Controls Have Been Strengthened

Purchasing added the requirement to include a copy of the state contract order to the file in 2008 after they processed an inadvertent duplicate order. Prior to that time, vehicle purchases did not require Purchasing to validate orders using local records as the source.

However, in one instance Purchasing processed a three-vehicle order request without verifying the existing order status on their local system. This resulted in three extra vehicles being procured. The error was not discovered until the vehicles were delivered and could not be returned. They were integrated within the fleet over time.

The changes to this procedure should provide adequate control over the process.

FINDING 3: Vehicle Purchasing Complies With Existing Policy

Purchasing Process Recommendation

⇒ No recommendation.

Conclusion

We found the purchasing process to be in compliance with existing policies.

THE DISPOSAL PROCESS

The process for disposal of fleet vehicles is guided by both State laws and local procedures.

State Guidance

RCW provides reasonable latitude to municipalities regarding disposal of property and equipment so long as it is done publically with appropriate notice.

- ✓ There are many safeguards in place to ensure publicly owned property (including equipment and vehicles) is properly disposed of in a transparent manner that is open to the public.
- ✓ RCW states how the public is to be notified of items' availability for sale, when advertising must be done, and the media in which notification must be completed.

Local Guidance

Local guidance on the disposal process is minimal; The ER&R policy focus is mainly on how to calculate payments and dispersal of funds received after disposal. It defines the period of funding the replacement as ten years. The Fleet Management Policy identifies that all vehicles and equipment will be assigned a useful life cycle, and will be replaced with the funds accumulated in ER&R payments over its life. The policy also states that vehicles will be removed from service and disposed of through trade-in, auction, or sale to another fleet.

The Disposal Process

The vehicle disposal process begins when a replacement has been ordered and the delivery date has been identified. The Fleet Shop Manager coordinates with the owner to determine if they have any temporary operational reason to retain the vehicle after the new one arrives. If such a reason exists – or if the Fleet Shop Manager has one identified from another user – a waiver is requested of the Fleet Manager and it is placed in a temporary use or “rollover” status for no more than four months before going to auction.

If there is no need for the vehicle to be retained, a work order is opened to begin the decommissioning process. Reusable accessories or equipment are identified to be transferred to the new vehicle. If there were any assemblies removed to put it into operation (rear seats, consoles, etc.) they are retrieved from the warehouse and reinstalled. Once preparation is complete, the vehicle is sent to auction and the disposal process is complete for Fleet. For a flowchart of the auction and post auction process, see appendix C. We found this process to be well documented, logically organized, and followed closely by the staff.

FINDING 4: Vehicle Disposal Complies With Existing Policy

Disposal Process Recommendations

⇒ No recommendations.

Rollover Vehicles

In the 2004 audit we noted that 41 percent of the fleet was vehicles that had been replaced for their primary purpose, but were retained for continued use by County departments. These departments only pay operating and actual maintenance costs until they are ultimately disposed of through auction. These are known as “rollover vehicles.” Limited use of rollover or retained vehicles to meet short term needs can be useful; however, caution is needed retaining extra vehicles. The use of such vehicles over a long term creates a secondary “shadow” fleet outside the management / budget process that will tend to subvert long term fleet management goals.

As a result of the 2004 audit, efforts were made to minimize the use of these vehicles. Since 2004, rollover vehicles have been reduced to from 171 to 28 vehicles, or about seven percent of the fleet; for this progress the fleet management is to be commended.

The 2005 Fleet Management Policy states that retaining rollover vehicles is “no longer allowed” as of 2008. Despite this, there is still a fleet of 28 rollover vehicles, which is not consistent with the policy. An additional variation from the policy is in how many vehicles are targeted to be retained, and how long they are kept. The longest retained vehicles in use now are 15 years of age.

The policy does allow for retention of some vehicles with the approval of the FMRB; however, we found no evidence to show that this approval was ever requested or received of the FMRB for any of the 28 vehicles currently in rollover status.

FINDING 5: Rollover Fleet Has Been Reduced

Disposal Process Recommendations (continued)

- ⇒ 9) **We recommend** the rollover fleet goals within the Fleet Management Policy be revisited to ensure only the minimum numbers of appropriate vehicles are temporarily retained to meet the county's needs.

- ⇒ 10) **We recommend** the rollover fleet size and composition by age and types continue to be managed actively, to meet any adjusted criteria established in the Fleet Management Policy and that the FMRB or another form of oversight to assist in the process should be considered.

Conclusion

We found the disposal process generally in compliance with existing policies. Controls currently in place over the process are generally effective. The exception is retention of rollover vehicles, where Fleet management has reduced the fleet significantly but still have 28 vehicles retained beyond four months without FMRB approval. The FMRB appears to be inactive since 2009.

Vehicles disposed of in 2011 at auction recovered close to the Kelly Blue Book estimates for vehicles of their age and condition. The process demonstrated good controls.

Summary

While there are ten recommendations in the report, focusing on three key actions would give the quickest return on effort:

- Update the Fleet Management Policy to reflect best practice replacement policies;
- Implement the policy as a management priority; and
- Provide active oversight for the implementation.

Appendix A: Objectives, Scope, and Methodology

The objective of this audit was to:

“Assess the county’s process for making the replacement decision, procurement and disposal of light fleet vehicles against existing guidance and best practices. “

Scope and Methodology

We assessed the county’s processes for purchase and replacement decision, procurement, and disposal of light vehicles against existing guidance and industry best practices. To accomplish the audit, we compiled the applicable state and local guidance as well as industry standards and best practices. We then compared current operations against these standards and identified any differences and made recommendations where appropriate.

We chose to discuss the three areas of the audit in the following order based on the complexity of the issues and number of recommendations in each area.

The **decision process** to buy or replace vehicles; this was focused on the process defined by the county to determine how and when to replace vehicles. We used 2010 and 2011 data to compare the stated processes with what was actually done.

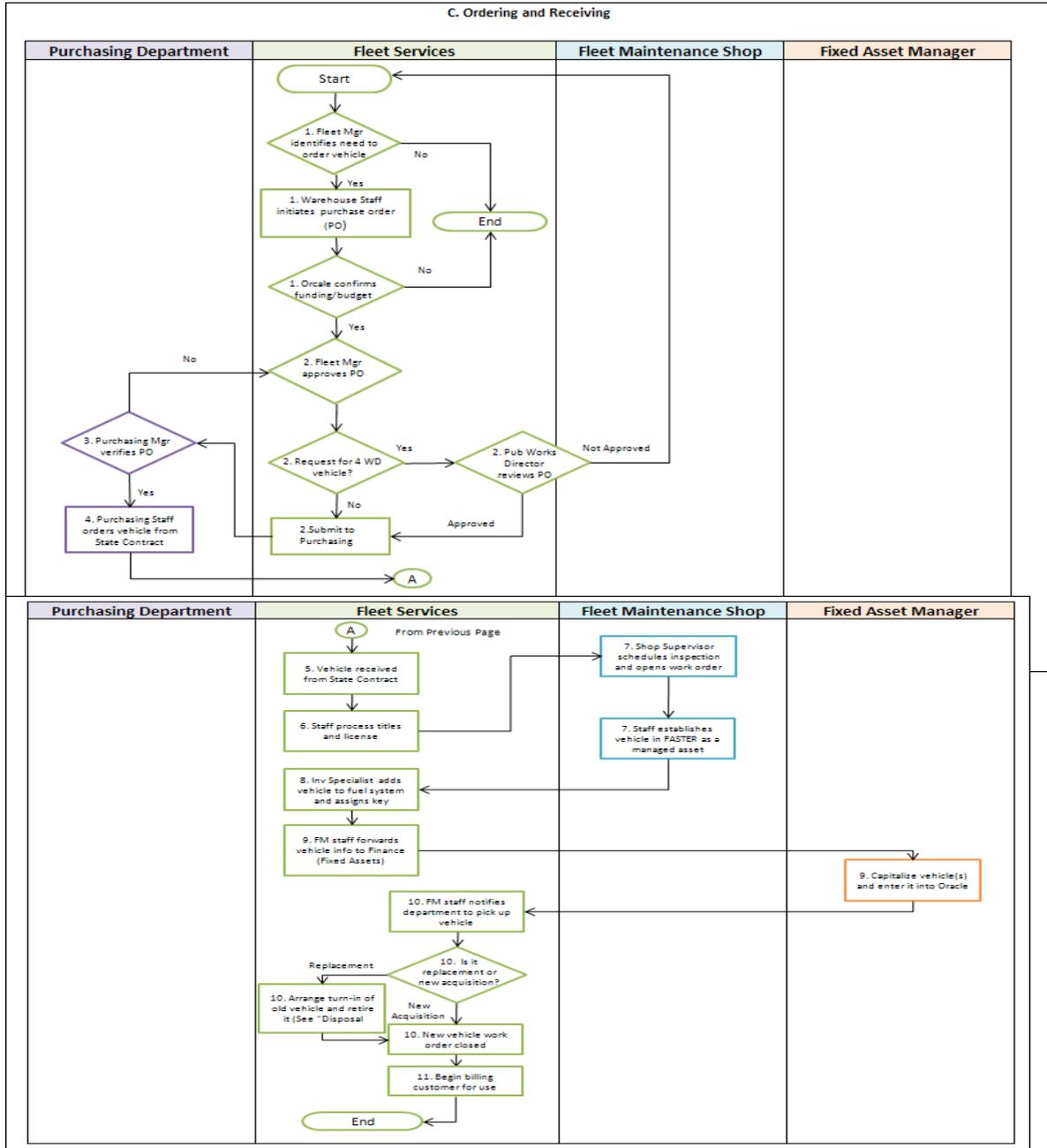
The **purchasing process** after the decision to buy has been made; this was focused on the guiding policies and internal process to order and receive vehicles after approval to order it. We used 2010 and 2011 data to compare the stated processes with what was actually done.

The **disposal process** after the decision to replace has been made; this was focused on the guiding policies and internal process for what happens to the vehicle being replaced after the replacement vehicle arrives on site. We used 2010 and 2011 data to compare the stated processes with what was actually done.

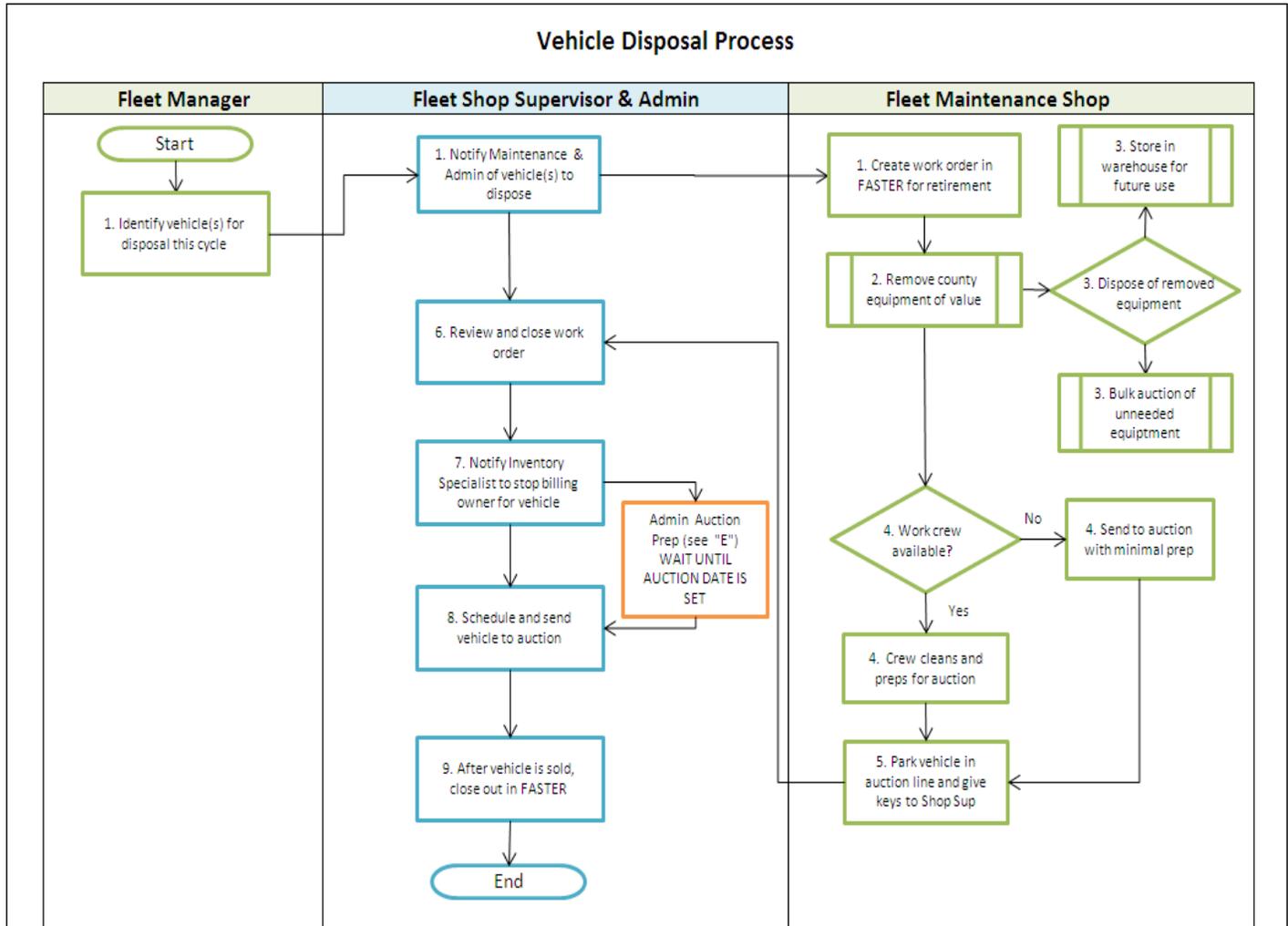
We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix B: Process Flowcharts

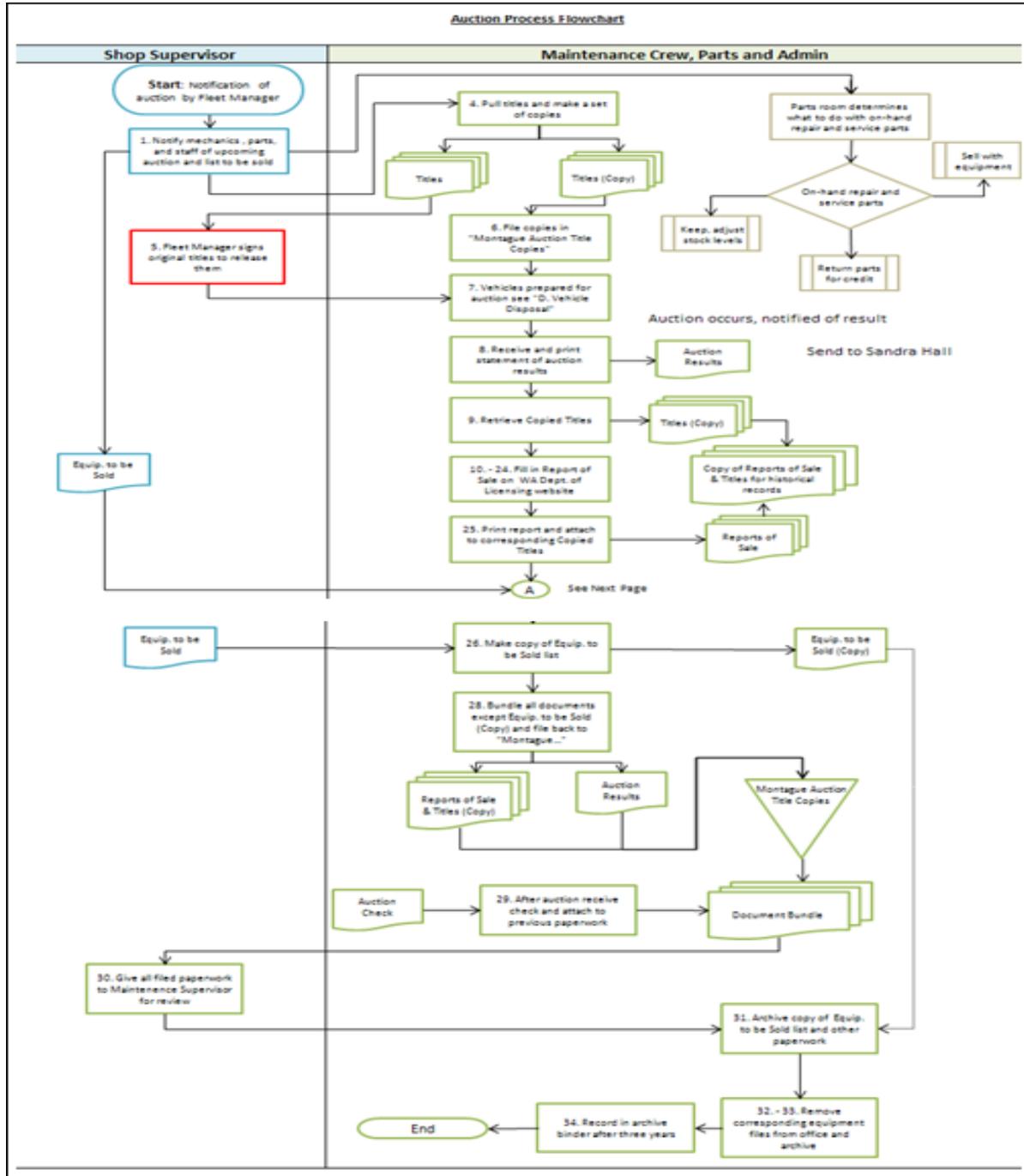
Purchase



Disposal



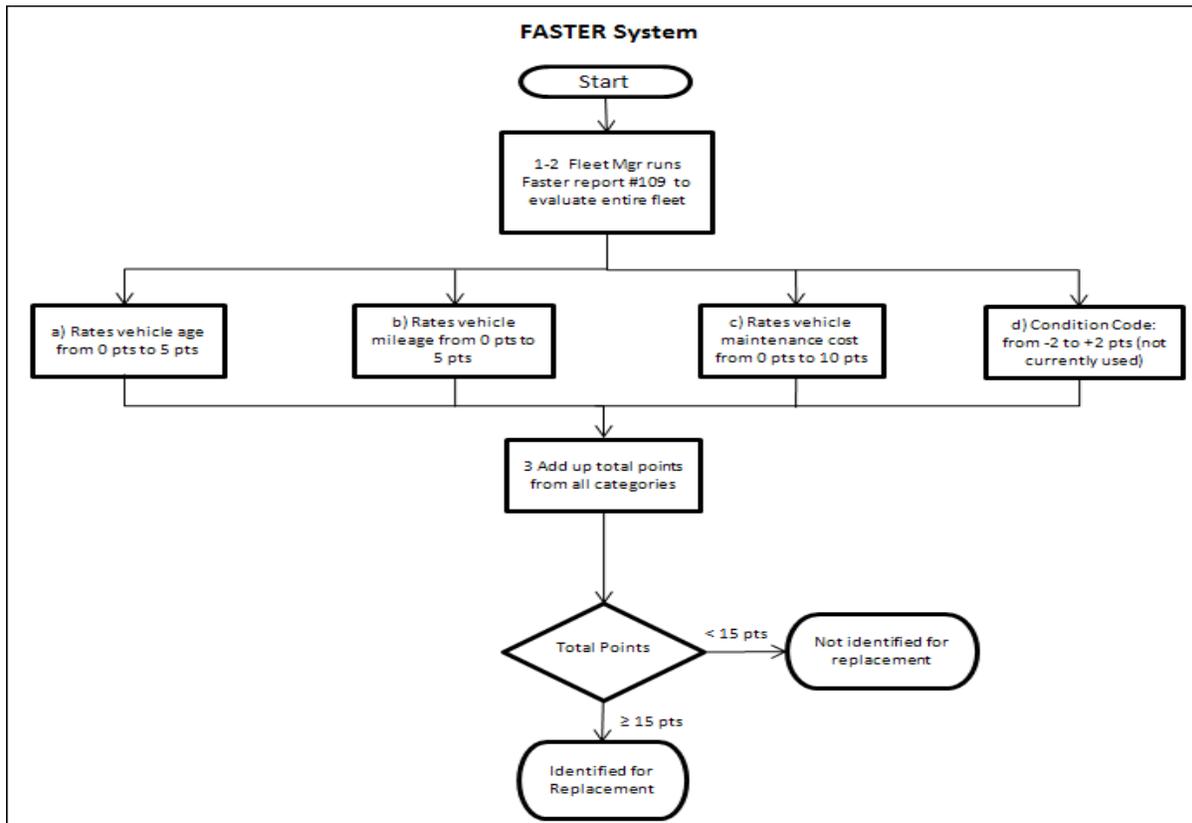
Auction



Appendix C: Decision Process for 2013

New replacement decision system: 2012 for the 2013-2014 Budget

a. The new system implemented in 2012 for the 2013-2014 budget is a process internal to the fleet maintenance computer program (FASTER), and achieves comparison of multiple factors, weighing each one as the manager desires. (Below)



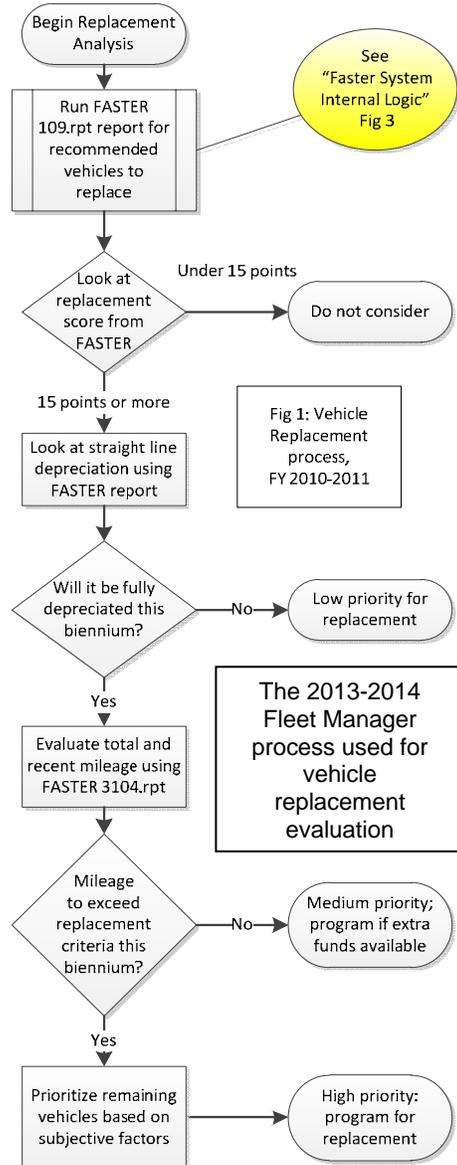
- 1) A point system is assigned to each variable based on how close it is to the maximum value for each area.
 - a. Age 1 to 5; (5 = end of programmed life)
 - b. Mileage 1 to 5; (5 = replacement mileage)
 - c. Maintenance cost 1 to 10; (5 = maintenance cost = capitalized value)
 - d. General condition, -2 to +2. (= needs replacement most)

Note 1: Currently the "General Condition" variable is not used for decisions. The Fleet Manager is determining the best way to implement this variable since it is not entirely objective, but allows a subjective evaluation to enter the equation.

Note 2: Currently, the FASTER system only recommends replacement of all vehicles with 15 points or more; it does not rank order them based on their score over 15 points, significantly reducing its utility as a management tool.

b. Building on the FASTER system's internal capabilities, the new decision process is shown in the figure to the right.

c. The new process uses the objective, weighted output from the FASTER replacement report, and then the result is compared to aging reports, recent maintenance and applies subjective factors related to customers as the final step.



Changes since the 2004 audit

a. **The informal replacement policy** that existed in 2004 was to replace vehicles when either the mileage or times of ownership targets were met, whichever occurred first. Multiple criteria have slowly been integrated in to the process informally. While it has taken eight years, the improved multiple criteria requirement is being used for 2013-2014 acquisitions.

b. **Extensive use of rollover vehicles.** Vehicles intended for retirement were allowed to be used for extended times, years sometimes, with only minimal payments for actual repairs and fuel. These vehicles are called "rollover" vehicles and they were part of the focus of the 2004 audit and consisted of 171 vehicles in 2004. [R12] There was some evidence that vehicles were being retired early to provide

better quality “rollover” vehicles for some uses. Rollovers have been aggressively targeted for disposal and the current fleet has approximately 28 rollover vehicles, most of which are restricted to use for 90 days or less before being disposed of through normal channels.

- c. **There was no replacement policy** as to the mileage, time or other standards for replacement in 2003. A policy exists now, albeit in draft form.

Appendix D: Management Comments

No written comments were provided by Public Works management or by Fleet Services. Exit conferences were held with management to discuss the draft report, and department comments have been addressed in this final report.

Management expressed agreement with all facts and analysis.