



ARLINGTON COUNTY AUDITOR FLEET MANAGEMENT AUDIT REPORT 2021-02

SUMMARY

This executive report, or “letter report,” summarizes the findings and recommendations from the Arlington County Auditor’s audit of vehicle fleet management within Arlington County. The Equipment Bureau of the Department of Environmental Services (DES) provides fleet management for the County.

The audit resulted in four observations. First, the process for developing the rental book, which is the list of all County and Arlington Public Schools (APS) vehicles with their annual cost and maintenance cost, appears sound. Second, several improvements to the fleet utilization policy were made during the audit and will improve the efficient use and proper sizing of the fleet. Third, an analysis of FY 2018 maintenance work orders showed that timeliness was generally good but that there was room for improvement. Finally, the audit showed the safety processes with the Equipment Bureau were valuable, and that some improvements are needed to support incident prevention. Eight recommendations are provided alongside the four observation areas.

BACKGROUND

Vehicle fleet management in Arlington County includes services such as procurement of vehicles, repair and maintenance, repair parts inventory, and disposal. The Equipment Bureau’s fleet management is supported through the dedicated Automotive Equipment Fund. In FY 2022, the Automotive Equipment Fund budget was \$21,342,484.¹

The Equipment Bureau provides vehicle maintenance for 949 County vehicles, and 320 APS vehicles, as of August 16, 2021. Preventative maintenance is performed according to set schedule based on the type of vehicle, while maintenance is also performed for vehicles that may be damaged or otherwise functioning poorly. Equipment Bureau manages its maintenance schedule through the *Fleet Anywhere* (FA) system. FA identifies when vehicles are due for preventative maintenance. Due dates may be monthly, bi-monthly, quarterly, or semi-annually.

Most vehicles maintained by Equipment Bureau are *light fleet*, which are sedans, SUVs, vans, light trucks, and motorcycles. Most Police Department and Sheriff’s Office vehicles fall into the light fleet category, as does the County’s motor pool. As of August 16, 2021, 703 of the County vehicles and most of the 121 APS support (non-bus) vehicles are light fleet. Equipment Bureau also maintains *heavy fleet* vehicles, which are defined as any vehicle over 10,000 pounds of Gross Vehicle Weight Rating (GVWR).² Specifically, the Equipment Bureau

¹ FY 2022 Arlington County Adopted Budget, 476 (<https://budget.arlingtonva.us/wp-content/uploads/sites/18/2021/07/FY22A-Adopted-All-In-One-Budget-with-TOC-links.pdf>).

² GVWR is the maximum amount that a vehicle can safely weigh, including its payload.

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services heavy Fire Department apparatus, a wide variety of specialized heavy trucks, various heavy construction equipment, and the 199 vehicles in the APS bus fleet.

In addition to vehicle maintenance, Equipment Bureau works with County departments and APS regarding the condition of their fleet vehicles and potential updates to the fleet. Equipment Bureau leadership and the County's Department of Management and Finance (DMF) meet annually with departments regarding whether any replacement vehicles are needed, whether replacement should be deferred, and whether any additions to the fleet are needed from the department's perspective. Equipment Bureau works with DMF and the County Manager's Office to approve requested additions to the County fleet. For revisions or additions to the APS fleet, Equipment Bureau works with DMF and the APS Department of Facilities and Operations Management.

County departments and APS pay for their own fleet vehicles. These costs are set in the County's *rental book*. The rental book is the list of all vehicles with their annual replacement cost and maintenance cost. There are different vehicle classes, and the rental book incorporates the different vehicle values and maintenance costs into the rental book rates. The annual replacement cost is calculated by taking the vehicle's acquisition cost and dividing it by the vehicle's expected in-service life. For the light fleet vehicles, the expected in-service life ranges 3-10 years, with 90 percent of the vehicles expected to last at least 7 years. For heavy fleet vehicles, the expected in-service life could be up to 20 years, though most vehicles range from 8-10 years. A bus's expected in-service life is 15 years. Maintenance costs are calculated as a rolling four-year average of maintenance costs for each class divided by the total number of vehicles in a class.

Employee safety is a key value for both DES and the Equipment Bureau. Because the Equipment Bureau space includes a large vehicle maintenance area and materials required to work on large vehicles, the safety risk in this space is more significant than in a regular office environment. There are safety professionals within DES to help instruct DES employees, including those in the Equipment Bureau, on proper safety techniques and on maintaining a safe working space. Maintenance technicians are the first line of responsibility for safe working practices. Shop supervisors are responsible for regularly assessing the safety environment in the maintenance area and correcting deficiencies.

Equipment Bureau provides other services that were not covered in this audit. These include a fuel card program, as well as fueling stations and a vehicle wash for county and APS vehicles. Equipment Bureau also maintains storage of common vehicle parts and oversees an auction process for vehicle disposal. An audit of the fuel card program was performed by the County's internal audit function in 2018.³

The County Auditor is grateful to the DES and DMF management and staff who assisted this audit with their time and expertise.

OBSERVATIONS AND RECOMMENDATIONS

RENTAL BOOK PROCESS APPEARS SOUND—The rental book is the list of all County and APS vehicles with their annual replacement cost and maintenance cost. These costs are paid by departments into the Automotive Equipment Fund. The audit found that the processes for developing the rental book were sound, with one opportunity for improvement that should be considered.

³ <https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/6/2018/10/Arlington-County-Fuel-Card-Program-FINAL.pdf>

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Maintaining the rental book is a joint effort of the Equipment Bureau and DMF. During the audit, the County Auditor reviewed the rental book development process with DMF, DES, and Equipment Bureau management. In particular, the audit identified four key strengths of the rental book development and review process.

1. Collaboration between the DES, DMF, and Equipment Bureau during the annual rate-setting process appears to be regular and effective. This includes the use of DES staff to conduct quality control to ensure rates are based on correct costs. Further, a structure is in place that includes APS representatives for evaluations of the rental book rates for APS fleet.
2. The maintenance costs are limited to those of a particular class, meaning that departments who use only light fleet vehicles do not have to pay to cover part of the maintenance costs for heavy fleet vehicles. This helps ensure equity of costs among departments.
3. Equipment Bureau periodically revisits the in-service life for fleet vehicles and extends the in-service life of vehicles when warranted. This reduces the annual cost of fleet vehicles in the vehicle class that is extended.
4. The use of a narrow set of models and makes of vehicles makes it easier to stock replacement parts. This reduces the overhead of the Equipment Bureau as well as time needed for maintenance on vehicles and should help minimize repair times that feed in the overall maintenance costs in the rental book.

The audit identified one opportunity for improvement: directly charging departments for costs related to accidents. Accidents are calculated as part of the maintenance costs of the vehicle when calculating the rental book. Maintenance costs are calculated as a rolling four-year average of maintenance costs for each class divided by the total number of vehicles in a class. So the maintenance cost to repair damaged vehicles are distributed across multiple departments if they all have the same class of vehicle involved in an accident. It would be more equitable to have the departments whose drivers were in the accident pay the accident repair costs, since these costs are user based rather than being generally inherent in vehicle ownership. Charging departments directly for accident repair would also create an incentive for departments to prioritize driver safety even more highly. Consequently, DES should review the feasibility of charging departments directly for maintenance costs due to accidents, including quantifying the costs and benefits of directly charging departments for accident-related maintenance costs. Subsequently, DES should determine whether it will work with DMF to institute this practice as part of the maintenance cost development process.

Recommendation 1.1: DES should review the feasibility of charging departments directly for maintenance costs due to accidents, including quantifying the costs and benefits of directly charging departments for accident-related maintenance costs. Subsequently, DES should determine whether it will work with DMF to institute this practice as part of the maintenance cost development process.

FLEET UTILIZATION POLICY IMPROVEMENTS HAVE BEEN MADE—In July 2018, during the course of this audit, Arlington County issued the *Amended and Restated Fleet Utilization Policy* (Policy), which made several changes that addressed issues raised in a 2013 fleet rightsizing study performed by CST Fleet Services. These changes focused on the use of take-home vehicles, the development of a minimum use standard, and the prioritization of the County Motor Pool for routine business.

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The CST study made recommendations for improving the usage of take-home vehicles. Among the recommendations were to define a countywide policy for take home vehicle use, which previously had been managed by each department, to identify usage restrictions for take home vehicles, and to recognize the value of the take home vehicles to users and either charge users or treat the vehicles as a taxable fringe benefit. The 2018 Policy created countywide take home vehicle requirements. As an example, all take-home vehicle assignments to non-public safety employees, must be approved by the County Manager or designee. The Policy also limited take-home vehicles to employees who lived within 30 miles of the County line (40 miles for public safety employees) unless an exception is approved by the County Manager. Finally, the Policy provides notice that the assignment of a take home vehicle may result in a taxable fringe benefit to employees and illustrates through an attachment the tax responsibilities for the County and the employee.

The CST study also recommended setting a minimum use policy for County vehicles. The study identified 4,000 miles per year as the threshold under which a vehicle had low utilization, and also recognized that the small size of Arlington County (26 square miles) may mean that some otherwise necessary vehicles may have low utilization. The 2018 Policy defined low utilization as 1,500 miles per year for two consecutive years and required that vehicles meeting this definition be reviewed to determine if the vehicles could be turned-in without impacting mission needs during the annual vehicle replacement reviews.

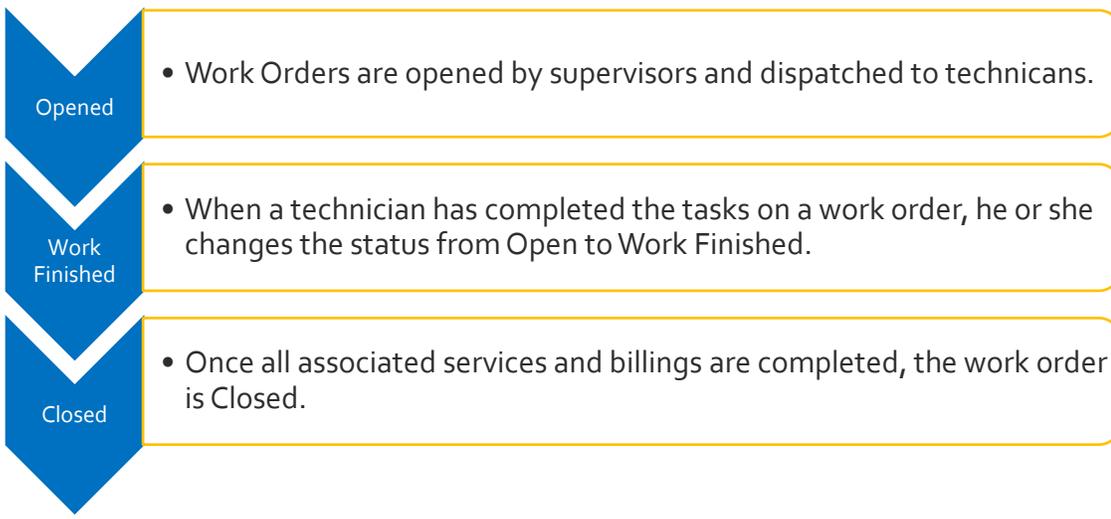
Finally, the 2013 CST study recommended expanding the use of the departmental and County motor pools. The 2018 Policy changes specified that the “County Motor Pool should be considered the primary source of vehicles for routine County business and its regular use is preferable to adding vehicles to the County fleet.” In addition, the Policy promulgated fleet management principles that discouraged increasing the number of County-owned vehicles and automotive equipment, required that vehicle need be re-evaluated prior to a vehicle being replaced, and preferred the replacement of vehicles with those of similar size and fuel efficiency.

The cumulative improvements made in the 2018 Policy represent a significant step forward for the County in managing fleet efficiency. However, one additional refinement appears valuable. The CST study identified 4,000 miles per year as the threshold under which a vehicle had low utilization. Now that additional data on low utilization has been gathered since the 2018 Fleet Utilization Policy was implemented, Equipment Bureau should assess the Policy’s threshold for low utilization to see if it has materially reduced the incidence of low-mileage vehicles in the County fleet, and to determine whether an increase in the low utilization threshold is needed.

Recommendation 2.1: Now that additional data on low utilization has been gathered since the 2018 Fleet Utilization Policy was implemented, Equipment Bureau should assess the Policy’s threshold for low utilization to see if it has materially reduced the incidence of low-mileage vehicles in the County fleet, and to determine whether an increase in the low utilization threshold is needed.

FLEET MAINTENANCE TIMELINESS ANALYSIS SHOWS THAT ADMINISTRATIVE COMPONENT OF WORK ORDER COMPLETION SHOULD BE IMPROVED—Fleet maintenance is a critical piece of the work performed by Equipment Bureau and completing maintenance in a timely way provides an important service to departments. Timely vehicle maintenance helps to ensure that departments are able to complete their work timely as well. Work orders are tracked within the Fleet Anywhere system, and the general workflow is shown in Figure 1.

Figure 1: Equipment Bureau Work Order Flow



Source: DES

As illustrated in Figure 1 above, work orders are **Opened** by the supervisors and dispatched to technicians. When a technician has completed the tasks on a work order, that person changes the status on the work order from Open to **Work Finished** and returns the work order and the vehicle keys to the supervisor office. The supervisor is responsible for reviewing the labor hours entered by the technician and ensuring that all of the parts approved for the work order are billed out and the invoice has been received. In addition, when possible the supervisor tries to schedule outside contracted work at the same time as the appointment for the preventive maintenance visit in order to limit the number of visits to the Equipment Bureau. This could include body shop work, dealers for warranty work, radio shop for communication related services, or windshield specialists. Once all associated services and billings are completed, the work order is **Closed**. According to DES, the policy to not move a work order to **Closed** until all invoices have been received helps to track what invoices are outstanding and ensures all costs are captured. So a work order could be in **Work Finished** status but not able to be **Closed** completely due to delays in receiving invoices from vendors or outside contracted work.

Ideally, work orders can be completed by the technician within one day, and many were in FY 2018. For example, the majority of light fleet and bus work orders in FY 2018 were moved to Work Finished status within one day. However, one day turnarounds are not always possible due to factors including parts availability, daily fluctuations in staff availability, and the scope of needed repairs. The Equipment Bureau did not have documented performance goals regarding average turnaround time for FY 2018, but a review of other fleet management performance measures suggests that a five-day turnaround time is a reasonable expectation. An analysis of all work orders opened in FY 2018 for light fleet, heavy fleet, and buses shows that the majority of work orders for all three groups reached Work Finished status within five days. Specifically, work orders were marked as Work Finished within five days for:

- 1,364 of 1,519 light fleet vehicle work orders (89.8 percent)
- 519 of 677 heavy fleet vehicle work orders (76.7 percent)
- 1,302 of 1,476 bus work orders (88 percent)

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While the vast majority of work orders were Work Finished in five days, in some cases work orders lingered for weeks without being moved to Work Finished status.

- 84 of the 1,519 light fleet work orders took at least ten days to Work Finish, and 34 of these work orders took over 30 days to Work Finish.
- 84 of the 677 heavy fleet work orders took at least ten days to Work Finish, and 35 of these work orders took over 30 days to Work Finish. The heavy fleet work orders are explained somewhat by the increased need to special order parts.
- 80 of the 1,476 bus work orders took at least ten days to complete, but only 4 of these work orders took over 30 days to Work Finish.

In addition to identifying some need for improvement in completing work, the work order analysis showed that Closing work orders took significantly longer to complete. For example, while 1,364 of 1,519 light fleet vehicle work orders (89.8 percent) were Work Finished in five days, only 1,110 work orders were Closed in five days. This is largely because only 155 of the 1,519 work orders were Closed in less than one day, even though 1,187 work orders were Work Finished in a one-day period. Closing work orders is a function of Equipment Bureau staff and may not impede vehicles from being returned to the departments. However, closing work orders enables the work order to be finalized in the system and shows that proper supervisory review has occurred.

To address work order completion and closing in future years, Equipment Bureau should develop and codify metrics for timely maintenance of light fleet, heavy fleet, and buses. Equipment Bureau should ensure these metrics include both “Work Finish” and “Closing” work orders. Finally, the Equipment Bureau should ensure that its Bureau Chief and direct reports have access to current work order performance in comparison to these standards to facilitate regular, ongoing management review and, as needed, correction.

Recommendation 3.1: Equipment Bureau should develop and codify metrics for timely maintenance of light fleet, heavy fleet, and buses. Equipment Bureau should ensure these metrics include both “Work Finish” and “Closing” work orders.

Recommendation 3.2: The Equipment Bureau should ensure that its Bureau Chief and direct reports have access to current work order performance in comparison to these standards to facilitate regular, ongoing management review and, as needed, correction.

DES SAFETY PROCESSES ARE VALUABLE, AND SOME IMPROVEMENTS ARE NEEDED TO SUPPORT INCIDENT PREVENTION

—DES has safety staff that provide support to the department and Equipment Bureau in particular. These staff are experienced safety professionals who provide safety training and guidance and help to develop a safety-focused mentality in DES staff. DES has a Goal Zero program that values worker safety and targets no lost time incidents. The program and policies have been in place since 2013.

Specific to fleet management, the DES safety staff assess vehicles that are coming into the fleet for safety attributes, equipment, and technology such as backup alarms, cameras, DriveCam units for driver behavioral improvement, and GPS units. In addition, vehicles are assessed for safety features of specialized equipment including liftgates, outriggers, leaf suction equipment, and heavy equipment controls. As part of the evaluation,

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they look at the purpose of and operating conditions for the vehicle, and the vehicle specifications to see if it has adequate safety attributes. Safety staff also conduct periodic safety walk-throughs at Equipment Bureau. These walk-throughs are designed to identify areas of concern and teaching points for Equipment Bureau staff. Equipment Bureau supervisors are required to conduct regular safety inspections, and DES safety staff provide periodic guidance to supervisors about effective safety inspection practices. DES safety staff also provide periodic safety talks for Equipment Bureau staff.

Worker's Compensation Claims—During the audit, the County's Office of Risk Management provided data regarding worker's compensation claims for Equipment Bureau staff from FY 2013-2017. There were 44 incidents reported to Risk Management relating to 27 Equipment Bureau employees during that period. Not all the incidents created a worker's compensation claim. Thirteen were for records only. The annual number of incidents was very consistent: 8 (2013), 9 (2014), 8 (2015), 9 (2016), 10 (2017). The majority of the incidents fell into the following categories: being struck by or colliding with an object (10); material handling (9); slips, trips and falls (8); and accidents involving tools (7). Out of the 44 incidents through FY 2017 there were 31 total claims, of which 28 were approved. The total dollar value paid out for approved claims was \$187,655. However, more recent incident data at the Equipment Bureau reflects a general downward trend: 4 (2018), 6 (2019), 3 (2020), 2 (2021) where the total dollar value paid was \$17,234.

Near-Miss Reporting System—One aspect of a safety program that helps to address safety concerns before they result in worker's compensation incidents is a near-miss reporting system. Near-miss reporting systems allow employees to report situations where a safety incident almost occurred. A near-miss system can capture incidents as minor as a near-slip and fall or as major as vehicle not properly aligned on a lift. The major advantage of near miss reporting system is that it provides an opportunity to identify safety concerns and potentially problematic trends before they create a reportable incident. Reportable incidents could result in a worker's compensation claims or an investigation by the state or federal Occupational Health and Safety administrations.

DES has a near-miss reporting system for the department as a whole and this system is available for use by Equipment Bureau employees as well. However, during the audit it was not clear that the near-miss system in place for DES was being used effectively in the Equipment Bureau. For example, none of the audit interviews identified the existence of a near miss reporting system, and one individual specifically stated that there was not a near-miss system in the maintenance shop. The Equipment Bureau should continue to work with the DES Safety team to remind Equipment Bureau staff about the existence of the DES near miss reporting tool, periodically train staff on the near-miss reporting system, and develop ways to encourage the use of the near-miss reporting system.

Supervisor Safety Inspections—A sample of 29 supervisor safety inspection records from July-November 2018 suggested wide variety in the quality of inspections. The safety inspection records were drawn from inspections that should be performed weekly by supervisors of the various Equipment Bureau sections (e.g., light fleet, buses). The safety inspections are documented on paper rather than in an electronic system, which limits the ability of Equipment Bureau supervisors and DES safety staff to quickly assess whether there are either consistent safety concerns or good practices to model. Further, electronic documentation of safety inspections allows for supervisors to pull forward past safety deficiencies to identify more clearly the need for a follow-up in the current inspection. The Equipment Bureau should identify ways to improve the tracking of past safety inspection findings for both supervisors and management by considering options including an electronic system for conducting and storing safety inspections.

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In addition, some safety inspection records were well-documented and showed that supervisors were attentive to detail in the inspections. Other inspection records had perfunctory information and left most of the fields blank. While blank fields may mean that no safety problems were observed, better documentation of this fact provides affirmation for management and DES safety staff that supervisors are attentive to safety concerns. The Equipment Bureau should reinforce the need for detail in documenting safety inspections to allow for better tracking of either ongoing concerns or good safety practices. Finally, the safety inspection records included in the sample indicated that some supervisors were not performing inspections weekly as expected. While the sample may have omitted some inspection records from the time period under review, it is important to ensure that the habit of regular inspections is engrained in both supervisors and staff as a component of a strong safety culture. The Equipment Bureau should ensure that weekly supervisor inspections are occurring.

Recommendation 4.1: The Equipment Bureau should continue to work with the DES Safety team to remind Equipment Bureau staff about the existence of the DES near miss reporting tool, periodically train staff on the near-miss reporting system, and develop ways to encourage the use of the near-miss reporting system.

Recommendation 4.2: The Equipment Bureau should identify ways to improve the tracking of past safety inspection findings for both supervisors and management by considering options including an electronic system for conducting and storing safety inspections.

Recommendation 4.3: The Equipment Bureau should reinforce the need for detail in documenting safety inspections to allow for better tracking of either ongoing concerns or good safety practices.

Recommendation 4.4: The Equipment Bureau should ensure that weekly supervisor inspections are occurring.

OBJECTIVES, SCOPE AND METHODOLOGY

The initial audit objective was to assess the effectiveness of the County's fleet management operations. After the planning phase of the audit was complete, fieldwork audit objectives were developed. The fieldwork audit objectives were to:

- Assess whether the processes of evaluating fleet efficiency are effective to set the right size for the fleet
- Assess whether Equipment Bureau is providing timely vehicle maintenance
- Assess whether processes for ensuring Equipment Bureau shop safety are effective

The audit scope was information material to the audit objectives that was current during fieldwork, such as FY 2018 maintenance timeliness information, with updates provided as appropriate to capture changes material to the audit objectives during the technical review phase of the audit.

The audit used various methodologies to conduct the audit. During the audit, the County Auditor obtained information through interviews of DES and Equipment Bureau management. Further, the County Auditor conducted interviews with other County officials primarily during the audit's planning phase. The County Auditor also interviewed and gathered data from an APS official located in the Facilities and Operations Management Department regarding the APS fleet and APS' interaction with Equipment Bureau. In addition, the County Auditor gathered various DES and Equipment Bureau documents and data, including FY 2018 maintenance work order

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information, samples of safety inspections, and updates to fleet management policies that occurred during the audit fieldwork. The County Auditor reviewed an outside contractor's 2013 fleet rightsizing study of Arlington County and followed up with County staff on the findings of the study. Finally, the County Auditor observed the use of Fleet Anywhere by Equipment Bureau staff, and conducted a management-led walkthrough of the Equipment Bureau facility including the maintenance area.

ABOUT US

Compliance Statement

The County Auditor conducted this performance audit in accordance with generally accepted government auditing standards, except for a peer review. 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.

Authority

The County Auditor is appointed by the Arlington County Board under the authority of § 15.2-709.2 of the Code of Virginia, 1950, as amended. The County Auditor originally initiated this audit as part of the FY 2018 Annual Audit Work Plan approved by County Board on June 20, 2017. The audit was subsequently reauthorized as a carryover audit in subsequent Audit Work Plans.

County Auditor

Chris Horton, Ph.D., CIA, CGAP, CRMA, CCSA, County Auditor

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William (Bill) Wiggins, Community Member
Mark Schwartz, County Manager
Maria Meredith, Director, Department of Management and Finance

MANAGEMENT RESPONSE

As is required in audits conducted in compliance with generally accepted government auditing standards, this audit contains a response to the recommendations from the Department of Environmental Services (DES). This response is contained on the following pages.

For each recommendation, the response shows if DES management agrees with the recommendation, and if so, outlines the responsible party and action plan for implementation. DES agreed with six of the eight recommendations, partially agreed with one recommendation (2.1), and disagreed with one recommendation (1.1).

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DEPARTMENT OF ENVIRONMENTAL SERVICES

DIRECTOR'S OFFICE

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November 22, 2021

Chris Horton, Ph.D., CIA, CGAP
County Auditor
2100 E Clarendon Blvd, Suite 300
Arlington VA, 22201

Dear Dr. Horton,

We want to thank you for your review, observations, and recommendations of the DES Equipment Bureau and vehicle fleet. We agree with the majority of your recommendations. Our continued focus on improving safety is demonstrated by a 2019 award the department received from the Chesapeake Region Safety Council for "Most Improved." The Equipment Bureau's incident improvements were a major part of that achievement and have continued to improve since then as illustrated in the report. In addition, in 2019 the Equipment Bureau received an unannounced random inspection from the Virginia Occupational Safety and Health Program (VOSH). The results of that inspection were only two "other than serious" violations that were abated on the spot and resulted in zero penalties. This is also a great positive indicator on the safety performance of the bureau.

Many of the action plans to respond to your recommendations are already underway and we look forward to continuing to improve upon our culture and focus on safety.

Sincerely,

A handwritten signature in cursive script that reads "Greg Emanuel".

Greg Emanuel

DES Department Director

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Recommendation 1.1: DES should review the feasibility of charging departments directly for maintenance costs due to accidents, including quantifying the costs and benefits of directly charging departments for accident-related maintenance costs. Subsequently, DES should determine whether it will work with DMF to institute this practice as part of the maintenance cost development process.

Agree/Disagree	Responsible Individual	Action Plan and Expected Date of Completion
Disagree	N/A	<p>This will disproportionately impact smaller departments with vehicles. In contrast, a large department can absorb unbudgeted accident costs. In addition, most employees are a few steps removed from the financials and budget process. As such, we believe this won't have as much impact on safety behavior as do the other mechanisms of accountability that are already in place. These mechanisms include the monthly Vehicle Incident Review Committee meetings and the County Driver Policy, which includes a point system that can ultimately result in demotion or dismissal from County service.</p> <p>In addition, due to the nature of their mission and the many miles that their officers travel, the Police Department typically experiences the highest volumes of annual accidents/incidents. Their vehicles have specific class codes that result in their accident-related expenses being charged to their department.</p> <p>Given the smaller budgets of some departments, accounting for accident repairs by vehicle class along with repairs and maintenance insulates smaller departments from potential budget issues. This averaging of like-vehicle costs is one of the fundamental principles of equipment funds.</p>

Recommendation 2.1: Now that additional data on low utilization has been gathered since the 2018 Fleet Utilization Policy was implemented, Equipment Bureau should assess the Policy's threshold for low utilization to see if it has materially reduced the incidence of low-mileage vehicles in the County fleet, and to determine whether an increase in the low utilization threshold is needed.

Agree/Disagree	Responsible Individual	Action Plan and Expected Date of Completion (Month/Year)
Partially Agree	Chris Allison	<p>We agree that the threshold for low utilization should not be a static identifier. However, we are still trying to understand our fleet needs in relation to changing staffing metrics as we slowly come out of the pandemic. In addition, the 2020 and 2021 mileage data will not be useful in assessing mileage thresholds since the Pandemic impacted vehicle utilization. We will reassess the low utilization threshold, no earlier than 2024, to allow enough time for normalized data to be analyzed post-pandemic.</p> <p>We will continue to utilize the 1500-mile threshold for the immediate future and make associated assessments as we</p>

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		discuss low mileage vehicles with respective department management. We will continue to examine low mileage vehicles in March of every year in preparation for the annual Equipment Replacement Meetings in May.
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Recommendation 3.1: Equipment Bureau should develop and codify metrics for timely maintenance of light fleet, heavy fleet, and buses. Equipment Bureau should ensure these metrics include both “Work Finish” and “Closing” work orders.

Agree/Disagree	Responsible Individual	Action Plan and Expected Date of Completion (Month/Year)
Agree	Chris Allison (Bureau Chief / Al Williams (Shop Superintendent) / Ronald Bright (Equipment Stores Manager)	<p>As mentioned in this report, the Equipment Bureau services over 1200 vehicles with multiple product lines made by various manufacturers. In fact, our fleet is made up of over 20 different vehicle manufacturers with many more body, chassis and drivetrain configurations. Unlike many Municipal fleets, the Equipment Bureau services vehicles for Police, Fire, Schools, snow and leaf collection operations, and the multiple remaining vehicle classes operated in the County. This extensive product line provides many challenges not found in a fleet represented by one manufacturer or of a fleet consisting solely of simple passenger vehicles. One such challenge is a single metric that provides meaningful and representative data.</p> <p>Working with programmers for our data management software group (Fleet Anywhere), we are requesting a modification to the default report to provide a custom “Work Finish” metric which, if we are able, will help us track the timeliness of our vehicle servicing. Although our goal is to provide same-day service for all of our vehicles, we will use the 5-day completion metric as our tracking point. Unfortunately, the normal difficulties in parts procurement and timely invoicing from multiple vendors are now being exacerbated by the delays we are seeing from pandemic related supply chain challenges. We are therefore moving to a weekly shop superintendent review (Friday) of any work order that has been open for more than 1 week. The Equipment Stores manager will be brought into the discussion to see if he can resolve any parts ordering delays experienced by his staff.</p> <p>The weekly review will also include a review of work orders for vehicles that have already been returned to our customers but that are in a work finished rather than closed status. This can be looked at as the administrative side of completing the service on a vehicle. Delays for parts and the associated invoices for Fire apparatus, emergency add-ons for Police Interceptors and even the many and varied parts for our seasonal Leaf Truck operation are examples of delays that can take months. Many of these parts requests are actually manufactured upon request as opposed to being filled from a stocked warehouse, and invoicing isn’t always quick to follow.</p>

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		<p>This makes having a standard metric that is easily tracked, difficult. Our mission is to close the more usual work order scenarios in an efficient manner and to work with vendors to improve their invoicing processes.</p> <p>We have asked Fleet Anywhere to research their ability and associated cost to create a custom report to track the time between the Work Finished date and the Work Closed date with the same 5-day metric. Progress and success on this custom report will be communicated to Dr. Horton. Even if this second report is not possible, due to cost or technical limitations, we will continue to review open work orders weekly to help supervisors overcome roadblocks in completing them (i.e. invoicing challenges, etc).</p> <p>These weekly reviews will be completed by the superintendent with individual section supervisors working from the actual open or work finished work orders in question.</p> <p>Expected Completion is March 2022.</p>
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Recommendation 3.2: The Equipment Bureau should ensure that its Bureau Chief and direct reports have access to current work order performance in comparison to these standards to facilitate regular, ongoing management review and, as needed, correction.

Agree/Disagree	Responsible Individual	Action Plan and Expected Date of Completion (Month/Year)
Agree	Al Williams (Shop Superintendent) / Chris Allison (Bureau Chief)	<p>The Shop Superintendent will review his most recent work order completion metrics with his supervisors at the start of each weekly review of open work orders. The metrics and any challenges will be reviewed with the Bureau Chief by the following Monday morning.</p> <p>Expected completion is January 2022.</p>

Recommendation 4.1: The Equipment Bureau should continue to work with the DES Safety team to remind Equipment Bureau staff about the existence of the DES near miss reporting tool, periodically train staff on the near-miss reporting system, and develop ways to encourage the use of the near-miss reporting system.

Agree/Disagree	Responsible Individual	Action Plan and Expected Date of Completion (Month/Year)
Agree	Al William (Shop Superintendent) / Chris Allison (Bureau Chief)	<p>The encouragement and formal review of near miss reporting will be accomplished through bureau wide training by the DES Safety team.</p> <p>In addition, a section on “near miss” reporting will be incorporated into the more detailed and structured weekly</p>

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		<p>Safety Inspections as a way to remind supervisors to encourage staff to report near misses. See recommendation 4.3 below.</p> <p>Employees continue to have multiple options available to them for reporting near misses. It is always better to document near misses immediately at the supervisor level for timely proactive behavioral change. The Equipment Bureau utilizes a paper form for this purpose. However, the online DES near-miss reporting system also exists for situations where employees may not feel comfortable going to their supervisor. Lastly, the employees who have not documented near misses previously, will also now have the opportunity to discuss safety issues, near misses or any other issues during the weekly safety inspections.</p> <p>Expected completion is January 2022.</p>
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Recommendation 4.2: The Equipment Bureau should identify ways to improve the tracking of past safety inspection findings for both supervisors and management by considering options including an electronic system for conducting and storing safety inspections.

Agree/Disagree	Responsible Individual	Action Plan and Expected Date of Completion (Month/Year)
Agree	Al Williams (Shop Superintendent) / Chris Allison (Bureau Chief)	<p>DES is developing an app-based form that supervisors will use, accessible on their phones or a tablet, to document Safety Inspections as they walk through the shop on safety walks. The form will collect more detailed and structured safety data. All the data collected will be kept on SharePoint for historical tracking and real time review. The data will be reviewed weekly between the Shop Superintendent and his supervisors (see recommendation 4.3 below), with the Bureau Chief and at our quarterly Safety Committee Meeting, attended by Al Williams (shop Superintendent), Safety Specialist, and a representative from Stores and 3 representatives from the mechanic position class.</p> <p>Expected completion is January 2022.</p>

Recommendation 4.3: The Equipment Bureau should reinforce the need for detail in documenting safety inspections to allow for better tracking of either ongoing concerns or good safety practices.

Agree/Disagree	Responsible Individual	Action Plan and Expected Date of Completion (Month/Year)
Agree	Al Williams (Shop Superintendent)	The DES Safety Team will develop a more detailed and targeted App based form that will be completed weekly by the Shop Superintendent, to be initially scheduled each Friday,

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		<p>working directly with his supervisors, to document weekly safety walks.</p> <p>The form will also include a section reminding supervisors to review any near misses mentioned by staff.</p> <p>Expected completion is January 2022.</p>
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Recommendation 4.4: The Equipment Bureau should ensure that weekly supervisor inspections are occurring.

Agree/Disagree	Responsible Individual	Action Plan and Expected Date of Completion (Month/Year)
Agree	Al Williams (Shop Superintendent)	<p>See recommendation 4.2. Safety Inspections will occur every Friday. Compliance will be assured with a review at the quarterly Safety Committee Meetings.</p> <p>Expected completion is January 2022.</p>