



## FREDERICK COUNTY GOVERNMENT

### INTERAGENCY INTERNAL AUDIT AUTHORITY

Tricia Griffis, Director of Internal Audit

## Memorandum

**To:** Chief Thomas Coe, Director Division of Fire & Rescue Services  
Deputy Chief Kevin Fox, Director, Division of Volunteer Fire & Rescue Services

**From:** Tricia A. Griffis, CPA  


**Date:** July 15, 2020

**Subject:** DFRS Fleet Cost Comparison Special Project

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### Introduction and Summary

At the request of the Division of Fire and Rescue Services (DFRS) and the Division of Volunteer Fire and Rescue Services (VFRS) and as agreed by the Interagency Internal Audit Authority (IIAA), the Internal Audit Division (IAD) performed a non-attest special project. During this project the IAD reviewed and analyzed vehicle repair and maintenance third party charges to the Independent Hose Company (a Frederick County Volunteer Fire and Rescue Services entity) as compared to Frederick County Fleet invoicing for similar services. This project was conducted by the IAD to evaluate the cost from third party charges as compared to internally based services within the County. The procedures and work performed by the IAD constitutes a non-attest engagement and does not fall under all chapters and guidance of Government Auditing Standards (GAS), revision 2018 with the exception of chapters one through four.

It is management's responsibility to design and implement an adequate system of internal control and it is the IAD's responsibility to determine if management's system of internal control is functioning properly in relation to the objectives of the special project. It is also management's responsibility to decide if action should be taken in response to any reported recommendations, taking into consideration related costs and benefits. Management, therefore, assumes the risk of making the decision not to implement any reported recommendations.

### The objectives of the special project were as follows:

- To review vehicle repairs and maintenance invoices spent using County appropriations from the Independent Hose Company for parts and labor costs.
- To review the County Fleet Services Department FASTER system for comparable costs to sampled invoices from the Independent Hose Company fiscal year 2018 vehicle repairs and maintenance invoices using County appropriations.

- To determine if vehicle repairs and maintenance parts and labor is generally less in cost than utilizing third party services.

### **Background and Informational Summary**

Frederick County Government employees a Department of Fleet Services (Fleet Services) situated under the Division of Public Works. Fleet Services operates a heavy equipment and truck shop which performs general repairs and maintenance to the County owned DRFS apparatus and vehicles as well as some volunteer company owned apparatus and vehicles. Fleet Services has one Master Certified Emergency Vehicle Technician on staff and 11 total Emergency Vehicle Technician (EVT) certificates. Fleet Services is capable of performing the specialized repairs and maintenance on fire and rescue apparatus. Frederick County DFRS is comprised of both career personnel and volunteer personnel. Some stations, apparatus and vehicles within the county are volunteer company owned and are not County owned. When it comes to servicing vehicles and apparatus the County has requested that the Frederick City situated volunteer entities (stations 1, 2, 3 and 4) utilize Fleet Services as the County believes they are the best value in price, located close in proximity to the stations and highly qualified. Most volunteer companies utilize County appropriation funding for vehicle and apparatus repairs and maintenance, including station 1, Independent Hose Company. If Fleet Services is in fact the best value for services, then utilizing those services would save taxpayer funds.

Estimated sometime during 2012, the Independent Hose Company (a County Volunteer Fire and Rescue Services Corporation) requested to utilize third party servicers for their company owned vehicles and apparatus. They felt they could find better value and service by utilizing a third party organization for repairs and maintenance. Since that time, a study of comparable costs to Fleet Services has not been performed. The Independent Hose Company, is a Frederick City located company and therefore had originally been requested to utilized Fleet Services. This special project will review comparable invoicing from third party invoices to work orders under Fleet Services.

During the special project the IAD reviewed and analyzed the following data and supporting documentation:

- Through the County Finance Division the IAD obtained the electronic copies of the Independent Hose Company (the Company) fiscal year 2017 (FY17) and fiscal year 2018 (FY18) fire audits which includes a full general ledger along with each invoice which the Company expended during each fiscal year utilizing County appropriations.
- Annual vehicle repairs and maintenance invoices for FY17 and FY18 for the Company were pulled from the fire audit for review.
- Utilizing excel the IAD haphazardly sampled 22 invoices from FY18 for testing and comparison to Fleet records. The total population of invoices for FY18 on the county appropriation funds general ledger for the Company was 50 invoices (total testing percentage of 44% of invoices for the fiscal year). The total dollar value of parts tested within each invoice totaled \$25,579.27. The total dollar value of parts in the population was \$42,489.57 and the total dollar value of the invoices in total accumulated to \$69,278.24.

- The IAD obtained access to the Fleet's FASTER software program and obtained training on utilization of the program.
- The IAD searched the Fleet Services FASTER database for comparable services and work orders to match parts costing and labor rates.
- The IAD interviewed the Director of Fleet Services and the Fleet Service Manager who is Emergency Vehicle Technician (EVT) certified, specializing in emergency services vehicles, to determine the County labor costs and parts ordering and markup percentages.
- For services in which the IAD could not find comparable parts or labor the IAD requested that Fleet Services identify current parts costs.

## Observations and Recommendations

### Observation 1:

For FY17 and FY18, the Independent Hose Company invoices for vehicle and apparatus repairs and maintenance tied to the appropriations general ledger without exception. It was apparent that the County Finance Division vouches each invoice on an annual basis to Company appropriation general ledgers and trial balances. This is an added control by the County Finance Division verifying that County appropriation dollars are spent appropriately by each VFRS company.

### Recommendations:

1.1: IAD has no recommendations in the vouching of invoices for appropriations at this time.

### Observation 2:

Of the twenty-two invoices sampled for comparison the IAD found it very difficult to tie out costing as services, vehicles or apparatus types are not always exact. Due to the differences we focused comparing major parts from vendor invoices to Fleet Services work orders. We noted that the Fleet Services work orders were not clear in linking labor charge hours to service portions and parts, therefore we were not able to compare service hours and instead focused on major parts per invoice. Per Fleet Services, the reasoning for this is that the FASTER system in which Fleet utilizes is a fleet management software system and that vendors utilize invoicing systems. Fleet management systems focus on the needs of a fleet with the use of work orders and vendor invoicing systems have a more customer invoice and payment focus.

After searching major parts through the Fleet Services FASTER system and service work orders, data was gathered, sometimes averaged for parts costing. The IAD had to request Fleet Services to assist by looking up current pricing on some parts which we were unable to locate through past work orders. Of the twenty-two invoices tested, one invoice was not successfully tested to a comparable part. Over the twenty-one tested invoices the vendor invoices ranged about \$1,827 more in cost in total (an average of \$87 more in cost per invoice). Comparisons made were in general and may not have been

exact part to part due to the fact that the exact vehicle or equipment were not always repaired and part vendors may differ from the repair vendor and fleet.

Fleet Services employees a parts and inventory manager who searches for best value parts in servicing vehicles and apparatus. The County also falls under procurement and contracting laws and regulations for large contracts with vendors. The County passes a 20% markup on parts in which they service which is charged on each work order. The markup assists Fleet Services in their operations. The markup was included in our comparison.

Recommendations:

2.1: Fleet Services should consider looking into the FASTER system to see if work orders can be utilized in a manner similar to an invoicing structure which breaks down labor to parts and service. This would allow the County to compare labor time to outside vendors in the future for direct service needs. The IAD understands that the systems differ and that this recommendation may not be able to be fulfilled.

Fleet Response to Recommendation 2.1

Fleet Services considered recommendation 2.1 and determined that creating an invoicing structure will need to be delayed until the upgrade to the web version of FASTER is completed. After this upgrade is complete, Fleet Services will review to determine what report can be develop to allow for easier comparison of the detailed information collected by FASTER and the simplified invoice information. Fleet and Procurement are currently working to finalize an agreement with FASTER to begin the conversion to FASTER Web. We are expecting a 6 to 9 month process for completion once we start. The bulk of the project is expected to begin in July 2020.

2.2: Overall, the parts costs were lower when purchased through Fleet Services. This could be due to the use of County procurement and contracting laws and regulations for competitive bidding on pricing, a lower parts markup or general inventory management oversight in searching for value. In the past Fleet Services has also utilized the purchase of re-built parts in which the IAD could not tell from the testing if that was the case in any of the tested instances. The IAD recommends the Company utilize Fleet Services for savings on parts costs and protection of price gouging. The use of Fleet Services will also help alleviate the threat of kickbacks and other potential for fraudulent activity through collusion in selecting outside entities who do not utilize the same internal controls. The variance is not great, however over time can accumulate along with the risk associated with creating relationships with individuals without the use of a competitive bid environment.

DFRS Response to Recommendation 2.2

DFRS concurs that the procurement controls are in place at Fleet Services to prevent price gouging and fraudulent activities in the purchase of parts.

Observation 3:

It was very difficult to compare down time on vehicles and apparatus while being repaired or maintained as services and vehicles were not always the same. Vendor invoices were clear on vehicle or apparatus down time per service being performed where the Fleet Services work orders were not as clear for vehicle and apparatus down time per service work being performed.

Recommendations:

3.1: The IAD recommends that Fleet Services break out their work order invoicing to provide time on labor and parts services split, if they can. The IAD understands that the work order system under FASTER does not track the information like a vendor invoicing system. It was apparent that the work orders lumped the labor servicing together making it difficult to decipher the time and dates included and therefore overall downtime or downtime per service item. Per Fleet Services, they do try to record downtime within the system however, it does not always happen timely. The IAD recommends that Fleet Services create policies and procedures for staff to follow to record downtime so that future data can be collected.

Fleet Response to Recommendation 3.1:

In an effort to establish greater consistency in the work order process, Fleet created a written procedure detailing the steps in the work order process and providing clearer guidance to staff so work orders will be managed more consistently. The procedure is in review and will be implemented upon completion. We expect to have a completed written procedure for completing and changing work order status by June 15, 2020.

Observation 4:

The IAD learned that the labor costs under Fleet Services is \$75 per hour. During FY18, the Company mainly utilized an outside vendor which charged an \$85 per hour labor rate.

As noted in Observation 3, the IAD was unable to identify service down time in the comparison between Fleet Services and the outside vendor. Therefore the hourly rate is lower with Fleet Services, however the amount of time for services held by Fleet Services was not tested and compared for each service sampled.

Recommendations:

4.1: The IAD would recommend the Company use Fleet Services for vehicle and apparatus repairs and maintenance as they charge a lower labor rate than what was found in the tested invoices. The lower rate provides a better value to the Company, given that vehicle and apparatus downtime is comparable. The downtime was not able to be tested during this review. Due to the inability to complete full testing comparing the hourly labor rate to downtime, the IAD recommends the Company either utilize Fleet Services or take on procurement measures on an annual basis to ensure the best value for services, see Recommendation 4.2.

DFRS Response to Recommendation 4.1

DFRS concurs with the recommendation made by the IAD.

4.2: If the Company determines they should utilize outside vendors, they should perform a competitive bid process or obtain 3 or more quotes to allow vendors to compete for labor rates and obtain the best possible value. This system should be used annually to every other year. Selecting through a competitive bid or quote system every few years for a general technician keeps the prices at lower than market and keeps the open ability for fraud, waste and abuse under kickbacks or other arrangements with taxpayer funds (County appropriations are tax payer funds) at a minimum. If the Company chooses to utilize this action, they should seek rates as close to, at or below \$75 per hour.

The IAD recommends that all VFRS companies not utilizing Fleet Services apply this recommendation.

DFRS Response to Recommendation 4.2

DFRS concurs with the recommendations by the IAD.

Observation 5:

Fleet Services employees EVT certified mechanics. The IAD reviewed the website of the outside vendor utilized, it is not clear that they employ EVT certified technicians. The website states that they are Waterous and Hale certified. EVT certifications are a requirement through the National Fire Protection Association (NFPA) standards. DRFS follows NFPA standards as they relate to apparatus maintenance, otherwise DFRS policy and procedure is followed.

It was noted that DFRS annually inspects vehicles and apparatus for updated Department of Transportation (DOT) inspection stickers during the annual accreditation process. Therefore, DFRS is involved with understanding the status of each Company DOT inspection annually.

Recommendations:

5.1: The IAD recommends that when or if utilizing an outside vendor that the Company obtain the vendors EVT certification status. If a long standing relationship with an outside vendor is formed the Company should obtain the EVT certification status of the outside vendor at least on an annual basis. Even though the Company may own the vehicle or apparatus, it is still insured by the County. The County follows NFPA standards for apparatus maintenance to reduce risk in overall risk management and insurance funding. Ensuring that vehicles the County insures or assists in maintaining helps streamline that risk.

The IAD recommends that all VFRS companies not utilizing Fleet Services apply this recommendation.

DFRS Response to Recommendation 5.1

DFRS concurs with the recommendations by the IAD. There should be a master file kept of EVT Certifications of repair facilities working on any Frederick County Fire & Rescue apparatus and ambulances.

5.2: The IAD recommends utilizing Fleet Services for all Frederick City Company vehicle and apparatus repairs in order to streamline the maintenance and tracking of maintenance for the protection of the County volunteers and career personnel. Fleet Services tracks maintenance time schedules and calls vehicles or apparatus in. The tracking system through the FASTER software allows Fleet Services to have an eye out for needs on vehicles and apparatus and ensure they are being maintained to the County standards. It is understood that Fleet Services does not have the capacity to maintain all Company repairs and maintenance, however potentially could maintain the Frederick City Companies. With Company vehicles and apparatus utilizing Fleet Services there would be a budget and matrix funding implication that would have to be researched in how to best bill for services. If DFRS chooses to enforce Frederick City Companies to utilize Fleet Services, the IAD will assist in researching billing and budget implications.

The IAD recommends this action for the Frederick City VFRS companies only (stations 1, 2, 3 and 4).

DFRS Response to Recommendation 5.2

DFRS concurs that Fleet Services does not have the capacity to handle the repairs of all fire apparatus for the County's Fire Service.

Observation 6:

Fleet Services location is downtown Frederick off Rosemont Avenue, the Company is located off Rosemont Avenue, less than 1 mile from Fleet Services. The outside vendor utilized during testing is located in Hagerstown, Maryland about 20 miles from the station.

The County Fleet Services runs on call 24 hours a day, 7 days a week. The County Emergency Communication Center connects to on call Fleet Services personnel who respond quickly, allowing Fleet Services to service vehicle or apparatus needs immediately if necessary. Fleet Services 24 hour service is not all encompassing and is somewhat limited to shop and staffing ability. It was not clear during testing that the outside vendor utilized has an on call 24/7 system.

Recommendations:

6.1: The IAD recommends the Company utilize Fleet Services for close proximity in location reducing mileage spent on vehicles and apparatus to get repairs and/or maintenance.

The IAD would recommend this action across all VFRS companies, however, it does not appear that Fleet Services has the capacity to carry that burden at this time. The IAD also realizes that this recommendation is of cost/benefit and that not all VFRS

companies are in close proximity to Fleet Services. In those instances other recommendations such as costs need to be analyzed on a case by case situation to determine the most cost effective use of an outside vendor based on location and mileage run. Some vendors are able to provide in station repairs at low or no extra cost, which may benefit the Companies greatly. Companies and DFRS should watch for these opportunities when reviewing procurement measures as recommended in Recommendation 4.2.

*DFRS Response to Recommendation 6.1*

DFRS concurs with the recommendation made by the IAD.

6.2: The IAD recommends the Company utilize Fleet Services for the benefit of 24/7 repairs and ability to mobilize units more urgently by way of an on call shop. The IAD realizes that in most cases a reserve unit is used while a unit is in for repairs/maintenance and that urgency is not always necessary. However, the ability is there as a benefit at no additional labor rate cost. The Company should explore their options during procurement measures taken in Recommendation 4.2 to ensure they are getting the best valued services with limited vehicle and apparatus out of service times.

*DFRS Response to Recommendation 6.2*

DFRS concurs with the recommendation made by the IAD.

## **Conclusion**

During the analysis it was a pleasure to work with county Fleet Services, Finance Division, DFRS and VRFS personnel and the IAD sincerely appreciates their full cooperation and assistance with the support and information required to perform the necessary work. The work performed under this special project was not performed in accordance with chapters 5 through 9 of Generally Accepted Government Auditing Standards and is considered a non-attest service.

Please let the Director of the IAD, Tricia A. Griffis, CPA, know if you have any questions or concerns as it relates to this special project. The IAD staff will be happy to assist in any way that we can.

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