



ATTEST SERVICES



Frederick County Government Division of Fire and Rescue Services Volunteer Budget Matrix Funding Performance Audit

February 17, 2021

Report #21-01

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I. Executive Summary

Background

SC&H Attest Services, P.C., a wholly owned affiliate of SC&H Group, Inc. (SC&H) has been engaged by the Frederick County Government (FCG, the County) Interagency Internal Audit Authority (IIAA) to conduct a performance audit (audit) of the Frederick County Volunteer Fire and Rescue Association (FCVFRA) volunteer Companies' budget matrix funding calculations prepared by the Division of Fire and Rescue Services (DFRS). The audit was performed in two phases; a planning and risk assessment survey and a testing phase.

DFRS Funding Matrix History and Evolution

Prior to 2014, each FCVFRA Company (Company) obtained funding by submitting an itemized line item budget that was approved annually by the County. If a Company determined its spending was going to exceed 120% of the approved line item budget during the year, the Company was welcome to request additional funding from the County.

Each of the 30 Companies have unique factors that impact the cost to operate that Company. Notably, each Company is managed differently and has different call volumes and apparatus. To account for these unique Company attributes that may affect overall costs, the County determined that a formula driven model would provide the best method to distribute supplemental funds fairly across each Company. The County's goal through establishing the funding matrix was to provide a fair and formula driven methodology to distribute supplemental funds to each Company based on services offered and size of each facility. **The funding matrix is not intended to reimburse or provide the full cost of Company operations, rather it was intended to provide a transparent and straightforward methodology to distribute supplemental funds to each Company based on available County funds and historical Company budgets.**

The funding matrix implementation eliminated line item budgets, allowing Companies to spend their allocations as they deemed necessary (in accordance with the County Regulations). Additional funds are only available for emergency repairs which will be funded through the County's contingency fund if approved by the Budget Committee. Unspent appropriations are returned to DFRS and are reallocated to the contingency fund for emergencies. Annually, each Company is required to submit a report detailing how they spent appropriated County funds. Finance reviews each report to ensure all appropriated funds were spent on allowable expenditures.¹ County Funds cannot be used for the following activities:

1. Fundraising
2. Social events
3. Charitable donations
4. Holiday and other decorative items

The following list includes the types of expenditures that are approved for County appropriated funds:

1. Utilities (Heat (oil or gas), electric, telephone, water and sewer)
2. Office supplies
3. Dues and subscriptions
4. Postage and printing
5. Vehicle fuel (Does not apply to County-owned vehicles)
6. Fleet fuel

¹ The FCG County Regulations outlines all acceptable expenditures. Finance reviews the use of County funds for each Company against the allowable expenditure list to ensure the allocated funds were used properly. If Finance determines that an expenditure was not allowable, the Company is required to reimburse the County.

7. Radio repairs
8. Radio purchase (New or replacement: requires approval before purchase from a System Manager)
9. Building repairs
10. Building supplies
11. Laundry
12. Training (including textbooks)
13. Vehicle repairs (Does not apply to County-owned vehicles)
14. Vehicle supplies
15. Small tools
16. Food (Limited to special calls where staff is needed for extended periods of time or for special trainings and meetings)
17. Accounting fees (50% of total costs up to \$1,500)
18. Maintenance agreements including but not limited to:
 - a. Fire alarm systems to include fire extinguishers
 - b. Fire extinguishing systems
 - c. Key card/security
 - d. Computer/copier
 - e. Elevator
 - f. Heating/air conditioning
 - g. Pest control
 - h. Overhead garage doors
 - i. Trash
 - j. Fire hose testing
 - k. Amkus/Hurst rescue system
 - l. Telephone systems
19. Cell phones
20. Non-expendables
21. Computers (Must be purchased utilizing County contracts for computers and must be connected to the County network. Computers will become part of the County's Interagency Information Technologies Division (IIT) computer inventory records and will be audited.)
22. Appliance repair/replacement (Limited to residential appliances that are for operational use only)
23. Snow Removal (From apparatus bay aprons and volunteer response parking areas for critical operations only)

Calculation Process

The following is a summary of the overall funding matrix calculation process. Additional detailed process information is located in this report's *Detailed Observation* section.

Annually, DFRS provides funding support to the 30 FCVFRA Companies² (Companies). DFRS calculates funding appropriations using a funding matrix [adopted in fiscal year (FY) 15 by DFRS and the County's Finance Division (Finance), which is updated, reviewed, and approved annually by the FCVFRA Budget Committee (Budget Committee)]. Once approved, the County distributes the approved appropriation in four installments. The County disburses 25% on or about July 15th, 25% on or about August 15th, 25% on or about October 15th, and the final 25% on or about February 1st. The FY19 and FY20 approved appropriation to Companies were \$2,624,804 and \$2,758,050 respectively.

² Three of the 30 FCVFRA Companies are County owned.

The funding matrix is calculated using multiple criteria, which were determined by DFRS in an attempt to quantify the allowable expenditures at Companies. The criteria are used as inputs that feed the funding matrix formulas to generate the total appropriation for each Company. The criteria are split into two categories; 1) distributed appropriated funds and 2) County held appropriated funds. These County held appropriated funds are used direct County charges that are managed by the County. The total Company appropriation is the sum of the distributed appropriated funds less the sum of the County held appropriated funds. The list of criteria used to calculate the FY20 funding matrix is as follows:

Distributed Appropriations

Criteria	Description
Base Appropriation	Fixed dollar amount depending on the Company service offerings: <ol style="list-style-type: none"> 1. Fire and rescue: \$25,000 2. Fire only: \$20,000 3. Rescue only: \$15,000
Call Volume Allocation	Variable dollar amount determined by the annual call volume for each Company. Call volume is the number of fire or rescue calls that require a Company to dispatch units. DFRS established a call volume table that specifies call volume ranges to an appropriation amount.
Volunteer Staffing Incentive Allocation	Fixed predetermined percentage of call volume appropriations. <ol style="list-style-type: none"> 1. If the Company is staffed completely by volunteer fire fighters, the Company is allocated funds equal to 50% of their call volume allocation. 2. If the Company is partially staffed by volunteer fire fighters and career fire fighters are staffed at day-shift only, the Company is allocated funds equal to 25% of their call volume allocation.
Facility Square Footage Allocation	Fixed dollar amount (\$1.75) multiplied by the square footage of each Company facility. The square footage is determined annually via a third-party insurance appraisal report. ³
Apparatus Allocation	Variable dollar amount based on the percentage of call volume given to Companies if they independently own an engine (15%), tanker (10%), rescue squad (20%), and/or aerial (20%) apparatus. This allocation amount only counts toward one apparatus in each category. Additionally, Companies receive a fixed \$2,500 if they independently own a Brush and/or Advanced life support (ALS) medical vehicle apparatus.

County Held Appropriated Funds

Criteria	Description
Fleet Fuel Withholdings	If the Company obtains fuel from the County, a dollar amount is withheld. The amount withheld is estimated using prior year actuals.
Fleet Maintenance Charges Withholdings	If the Company is subject to one of the following, a dollar amount is withheld for maintenance costs. The amount is estimated using prior year actuals: <ol style="list-style-type: none"> 1. County owned equipment/apparatus are required to be maintained and serviced by the County's Fleet Services department.

³ Per the County regulations for the Receipt and Expenditure of State Senator William H. Amoss Funds & County Appropriations, County Funds cannot be used for fundraising or social related activities. DFRS independently calculates the square footage of each Company banquet space to deduct from the overall square footage determined by the third-party, and then applies the multiplier. DFRS determined that approximately 20% of the time, the banquet space is used for fire and rescue activities, therefore DFRS deducts 80% of the banquet space square footage from the total square footage.

Criteria	Description
	2. Determined by the County, the Company is instructed to utilize the County's Fleet Services department (Company 2, 3, and 4) to maintain and service Company owned equipment.
Vehicle Supplies Withholdings	Variable dollar amount withheld from each Company to cover the costs of vehicle supplies not related to maintenance (e.g., fire extinguisher, saw, nozzles).
Printing Withholdings	Variable dollar amount withheld from each Company to cover printer lease costs.
Other Withholdings	Variable dollar amount that is withheld from Companies to cover miscellaneous costs. The majority of companies do not have withholdings associated with this criterion. Only the three County owned stations have this withholding category. The amount is held by DFRS but available to the Company.

Objectives

The following objectives for the testing phase were provided by the FCG Director of Internal Audit and determined prior to the start of the audit. The objectives were approved by the IIAA.

- A. Evaluate the policies and procedures surrounding the funding matrix
- B. Evaluate the calculation of the matrix for each Company, determining its accuracy based on the policies and procedures over FY19 and FY20
- C. Determine if the calculation appears to favor some companies over others based on the matrix policies
- D. Determine if the county budgeted funds meets the needs of the final matrix funding for FY19 and FY20
- E. Determine if fleet charges utilized within the calculation appear to be appropriate
- F. Make recommendations for the betterment of the program which is cost effective to FCG and FCG taxpayers

Scope

The audit process was initiated in July 2020 and completed in October 2020. The audit focused on all Companies included within the matrix calculation during FY19 and FY20.

Methodology and Approach

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.

In order to obtain the necessary documentation to appropriately perform and conclude upon the objectives of this audit, SC&H conducted the following procedures.

Creation of Audit Program

Based on the understanding of the processes, SC&H developed an audit program to achieve the objectives. This program included detailed steps to address each objective with the goal of verifying the accuracy of the funding matrix and identifying opportunities for improvement.

Execution of Audit Program

SC&H executed the audit program by completing the following tasks:

Objective Area	Attribute Tested	Test Type	Test Description
Funding Matrix Policies and Procedures	DFRS Funding Matrix Policy for FY19 and FY20	Inspection	Obtained the DFRS funding matrix policies for FY19 and FY20, and reviewed for appropriateness compared to the funding matrices.
Funding Matrix Calculations	DFRS Funding Matrix for FY19 and FY20	Inspection	Obtained the raw data sources for all fields populated within the DFRS matrix to reconcile the completeness and accuracy of the FY19 and FY20 appropriations.
Matrix Calculations Appropriateness	DFRS Funding Matrix for FY19 and FY20	Inquiry	Selected a sample of seven Companies and held process understanding meetings to determine if the calculation appears to favor certain Companies over others based on the matrix documentation.
Matrix Calculations Appropriateness	DFRS Funding Matrix for FY19 and FY20	Data Analytics	Assessed the adequacy of County budgeted funds based on: <ol style="list-style-type: none"> 1. Inquiry procedures performed during Company meetings. 2. Reviewed information from Finance detailing unused funds returned to the County in FY19 and FY20. 3. Reviewing information from DFRS summarizing the companies which required additional funding support from the emergency/contingency fund.
Matrix Calculations Appropriateness	DFRS Funding Matrix for FY19 and FY20	Data Analytics	Utilized the procedures performed in evaluating the matrix funding calculations to determine if the following withholdings appear appropriate: <ol style="list-style-type: none"> 1. Fleet maintenance withholdings 2. Fleet fuel withholdings 3. Fleet vehicle supplies withholdings
Matrix Calculations Appropriateness	DFRS Funding Matrix for FY19 and FY20	Data Analytics	Aggregated the results and reportable findings from the audit program

Summary of Work

After reviewing the processes in place and evaluating the funding matrix, SC&H concludes improvement opportunities exist to mitigate associated risks.

The following section provides detailed observations and recommendations.

We appreciate the assistance and cooperation of Finance, DFRS, and FCFRA Companies, who provided assistance in the performance of this audit. Please contact us if you have any questions or comments regarding any of the information contained in the performance audit report.

SC&H Attest Services, P.C.

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Sparks, Maryland

February 17, 2021

II. Detailed Observations and Recommendations

SC&H identified four observations related to the DFRS Funding Matrix processes. The observations focus on opportunities for alternative approaches and considerations to assist with achieving the desired funding support for each Company, and mitigating overall process risks. Further, the recommendations are intended to offer options for improving the tabulation accuracy and reducing administrative burden.

Observation 1

Criteria included in the funding matrix may not consider or allocate available supplemental funding based on need.

Observation Detail

The funding matrix criteria used to calculate annual appropriations is based on a linear model that assumes the composition of each Company is similar in size (e.g., total number of personnel) and duties performed.

Findings

Currently, the funding matrix criteria does not consider multiple unique factors that may impact the cost of operations at various Companies. These factors may have an impact on the adequacy of appropriations provided by the County. Specifically, the following were noted based on discussions with a sample of seven Companies.⁴

Facility Characteristics

The funding matrix currently allocates a square footage multiplier for the size of each facility. However, the matrix does not account for:

1. The number of fire fighters assigned to each Company: Companies with more staff versus others may have higher maintenance costs that are not reflected within the square footage multiplier.
2. The age of the facility: The costs associated with maintaining an older facility may be greater than the costs for maintaining a newer facility (e.g., energy efficiencies).

Based on the current criteria, a Company with significantly more staff and an older facility will receive the same square footage multiplier as a Company with similar square footage but has less staff and a newer facility. The cost differences associated to operate these two different companies is not currently reflected within the matrix.

Call Volume

The call volume appropriation is distributed based on the number of calls each Company responds to, regardless of the number of vehicles that are required to respond to the call. The current criteria do not account for the number of vehicles that respond to the call. If a Company sends multiple pieces of equipment, the Company only receives credit for one call.

Apparatus Type

Companies that own their apparatus are given additional funding equal to a percentage of their overall call volume. This additional funding recognizes that company financed and owned apparatus reduces the County capital outlay for apparatus. However, the funding received may not accurately reflect the actual cost to use or equip the apparatus. For example, apparatus that are eligible for extra funding may not be dispatched at the same rate as other apparatus. This may result in companies receiving funding for

⁴ The observation is a result of limited inquiry procedures with Company personnel. Detailed evaluation procedures may be necessary to confirm the observation's specifics and quantify its impact.

apparatus that may not reflect frequency of usage.

Additionally, not all apparatus types are included within the matrix for additional appropriations. Based on Company discussions, other apparatus types (e.g., such as boats or utility vehicles) are dispatched to respond to calls, but are not eligible for extra funding.

Apparatus Age

The age of a Company's apparatus is not strategically considered when allocating funds. Companies with aging apparatus may have to spend more money to maintain their equipment than other companies with newer fleet.

Risks

1. The funding matrix does not consider unique costs, resulting in insufficient funding.
2. The funding matrix criteria (base allocation, call volume, apparatus incentive, etc.) does not adequately represent the true cost of operations, resulting in inaccurate or insufficient Company funding.

Recommendation 1.1

DFRS should consider implementing an annual process to meet with Companies and solicit feedback on potential unique costs and challenges. DFRS should then evaluate the criteria used for the matrix and determine if updates to the matrix are warranted.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation. This will take place after the end of the fiscal year and their reports have been submitted and finalized through the County Comprehensive Annual Financial Report (CAFR), which is typically January to February. The Deputy Chief of Administration will work with the Volunteer Chief to organize meetings. Meetings will be best facilitated by the FCFRA Budget Committee and minutes will be requested to be taken. .

Finance concurs with the recommendation and agrees with DFRS regarding timing, however, noting that the audits do not normally take place until after the CAFR is complete which is typically January to February.

Recommendation 1.2

DFRS should consider implementing policy language that details the use and appropriation received by Companies related to aging apparatus, facilities, and Company staffing size. Considerations within this policy may include establishing an aging schedule for apparatus and facilities that increases funding or withholdings with the age. Within the aging apparatus schedule, DFRS should consider implementing an age cap. Further, considerations should be made related to Company staffing size. For additional recommendation options, see recommendation 3.2.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation. This will be included in the Matrix calculations for the FY23 Budget. This will also be included in the policy that will be drafted prior to the FY23 Budget.

Finance concurs with the recommendation. The final schedule should take into consideration limiting funding availability for apparatus that is far beyond its useful life and costing more than appropriate to maintain.

Recommendation 1.3

DFRS should consider including an inflation factor to be incorporated into the funding matrix.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation. An inflation factor similar to what DPW uses on CIP Projects. This would have to take effect with the FY23 Budget process.

Finance concurs with this recommendation.

Recommendation 1.4

DFRS should consider implementing a hybrid matrix model that accounts for fixed and unique costs to each Company. For example, a historical average of known costs to each company, such as utility expenses, can be taken and included as a criterion to accurately supplement the cost of facility utility expenses for each Company. Additionally, unique costs, such as apparatus age, apparatus usage, and number of personnel, can be added and adjusted accordingly based on a percentage calculation to reflect the unique variables of each company. DFRS should consider adjusting the current call volume matrix criteria to consider the number of actual apparatus (included in the matrix) that respond to each call. DFRS has the capability to track the number of apparatus that respond to each call, which may serve as a more accurate indicator for the actual costs associated with responding to calls.

Management's Action Plan and Implementation Date

DFRS does not totally agree with this recommendation. If a hybrid model is developed that would have different calculation for each company, then what would be the purpose of a formula driven Matrix? If each company has a different calculation, wouldn't it be better to have a line item budget submitted by each company requesting their need, vs developing a formula trying to identify their need?

DFRS agrees, the calculation for the call volume, using the actual calls each piece of apparatus responds to would more accurately reflect the total cost. The amount paid for each unit response would need to be evaluated and adjusted accordingly. Currently for every 250 calls, the call volume increment increases by \$5,000. The volunteer fire companies will need to be forthcoming in providing the information about their finances and demonstrate where they are falling short. The DFRS Fiscal Manager has been tasked with this recommendation already and will work with the FCVFRA Budget Committee.

Finance agrees with the response provided by DFRS.

Observation 2

The County has not formally defined or documented the intended or desired level of total supplemental funding based on available County funds.

Observation Detail

As stated in the report's *Background* section, the funding matrix is calculated using multiple criteria, which were determined by DFRS in an attempt to provide supplemental funding driven by size, call volume, and types of services offered. The criteria are used as inputs that feed the funding matrix formulas to generate the total appropriation for each Company.

Findings

The funding matrix was not created based on actual Company cost data, rather it was created to provide supplemental funds based on available County funds. Each appropriation criterion is not directly linked to a category of cost for a specific Company. The following table provides a year over year matrix comparison of allowance and withholding criteria changes between FY15 and FY21. Each allowance amount is not a verifiable calculation as there is no quantitative data to support or justify the supplemental allowance. However, these allowances were determined, and the matrix was created, by the County as a means for providing a fair and formula driven methodology to distribute available supplemental funds to each Company based on services offered and size of each facility.

Matrix Category	Criteria Chart	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Allowances	Fire/Rescue Base Appropriation	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00
	Fire Only Base Appropriation	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00
	EMS Only Base Appropriation	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
	VOLUNTEER STAFFING INCENTIVE	\$20,000.00	N/A	N/A	N/A	50%	50%	50%
	1/2 VOL. STAFFING INCENTIVE	\$10,000.00	N/A	N/A	N/A	25%	25%	25%
	SQ FT Multiplier	1.00	1.00	1.00	1.25	1.50	1.75	1.75
	Call Volume Appropriation	Included						
	CO. ENG	10%	10%	10%	10%	15%	15%	15%
	CO. TANKER	10%	10%	10%	10%	10%	10%	10%
	CO. SQUAD	20%	20%	20%	20%	20%	20%	20%
	CO. AERIAL	20%	20%	20%	20%	20%	20%	20%
	BRUSH	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	Boat Allowance	N/A						
	ALS Support	N/A	N/A	N/A	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	Adjustment to Equal FY2014 Base Budget	N/A	Included	Included	Included	Included	Included	Included
Withholdings	Item Withheld - Fleet Fuel	N/A	Included	Included	Included	Included	Included	Included
	Item Withheld - Vehicle Supplies	N/A	Included	Included	Included	Included	Included	Included
	Item Withheld - Fleet Charges	N/A	Included	Included	Included	Included	Included	Included
	Building Supply Items	N/A	Included	Included	N/A	N/A	N/A	N/A
	Printing (53203)	N/A	N/A	N/A	Included	Included	Included	Included
	Other Line Items Withheld -	N/A	N/A	N/A	Included	Included	Included	Included

The following provides three detailed examples of unsupported allowances provided above to offer additional context related to the finding.

1. Example 1, base appropriations: A Company that provides EMS services receives \$15,000, Fire related services receives \$20,000, or a combination of Fire and EMS services receives \$25,000. There is no documentation maintained by DFRS to support that the appropriation amount provided is reflective of the County's desired supplemental allowance support related to the costs associated with the type of service provided.
2. Example 2, square footage: The square footage multiplier in FY15 was \$1.00 and in FY20 was \$1.75. There is no documentation maintained by DFRS to support that the multiplier used each fiscal year is reflective the County's desired supplemental allowance support related to the utility and building costs which can vary by Company.

3. Example 3, call volume appropriation: The call volume scale which correlates the number of calls to the pre-determined appropriation amount is not supported by quantitative data to justify the call volume to dollar amount ratio that the County is willing to provide supplemental funds.

Risks

Inputs used in the funding matrix may not result in the County's desired level of supportive funding, resulting in over or under funded Companies.

Recommendation 2.1

DFRS should determine if the cost of conducting a periodic formal cost of service analysis would benefit the County in determining direct calculations that would improve the accuracy of calculating and achieving the desired supplemental funding level for each Company. A cost of service review could assist DFRS in documenting the current costs to operate Companies. Once true costs are known, DFRS can further identify factors that increase costs, and determine if criteria should be adjusted or considered based on results. Additionally, once a cost of service analysis is completed, the County may be able to define a desired level/percentage of supplemental funding.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation. Volunteer companies will need to be forthcoming with their finances to know what the true cost is. This will be beneficial in developing various funding increments. This will have to be done after the end of the fiscal year and after their reports are submitted as noted in our response to recommendation 1.1. This will be for the FY23 Matrix. DFRS will take the lead on this recommendation with the assistance of the FCVFRB Budget Committee. DRFRS has already tasked the DFRS Fiscal Manager to begin developing a plan on how best to proceed.

Finance agrees with the recommendation, however, not all volunteer companies will be forthcoming with their finances. This could present a challenge for determining actual cost.

Recommendation 2.2

The County's intent is to provide support and supplemental funding to Companies and not to provide full cost to operate funding. Due to the potential difference in each Company's management of services, the intent of the recommendation is not to suggest that the County and DFRS return to a line item budget approach. For the supplemental funding levels available and provided by the County, DFRS should consider linking each supplemental matrix allowance category to a County approved cost category (per County Regulations). If matrix criteria cannot be linked to a Company's cost, DFRS should research the criteria and its intended purpose to determine if the criteria are appropriate. Assigning each matrix criterion to an identified cost may allow DFRS to more accurately budget, monitor, and update the funding matrix.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation. This is informally done now, just not identified by a policy or procedure. As with the other recommendations, the volunteer companies need to be forthcoming with their financial information to get an accurate picture. This will have to occur after the end of the fiscal year and after their reports are submitted as noted in management's response to recommendation 1.1. DFRS will take the lead on this recommendation with the assistance of the FCVFRB Budget Committee. DRFRS has already tasked the DFRS Fiscal Manager to begin developing a plan on how best to proceed.

Finance concurs with the recommendation and the response by DFRS noting that the annual reports are not audited until after the preparation of the CAFR.

Observation 3

The FY19 and FY20 funding matrix appropriations were not consistently or accurately calculated for all Companies.

Observation Detail

Funding matrix withholdings (e.g., fleet fuel, fleet maintenance, vehicle supplies, printing, and other items) are estimated based on each Company's prior year actuals and DFRS judgement. The Deputy Chief of Administrative Services reviews prior year actuals and makes additional considerations (e.g., knowledge of Company fleet) that may impact the withhold amount. However, there is no standardized methodology that is consistently applied to each Company to withhold funds. There are significant challenges to determine the appropriations based upon prior year actuals, when those actuals can and sometimes do have significant fluctuations due to one-time events and costs.

Findings

For the FY19 and FY20 funding matrices, SC&H reviewed both the allowances and the withholdings amount allocated to each Company. The review noted that supporting documentation for apparatus inventory and volunteer staffing by Company are cumulative and manually maintained. The information used for these criteria are not captured in a system used by DFRS. Further, versions of the documents used for these criteria at the time of populating the funding matrix are not retained. Specifically, our review of the FY19 and FY20 funding matrices noted the following:

FY19 Funding Matrix Allowance Findings:

1. Adjustment to equal FY14 funding: Company 4 received an adjustment increase of \$27,950 to increase their pre-withholding allowance budget from \$73,400 to \$101,350. Their FY14 budget was \$96,350. The amount adjusted resulted in \$5,000 of overfunding.
2. Square footage allowance: Company 17's gross square footage per the funding matrix is 23,136. Per the third-party insurance appraisal, the gross square footage is 25,030. The net square footage in the funding matrix is recorded as 19,536, after a 3,600 square foot deduction for banquet space. The net impact to the square footage allowance as a result of the variance (1,894 square feet) is that Company 17 received \$2,841 less than the eligible amount.

FY20 Funding Matrix Allowance Findings:

1. Adjustment to equal FY14 funding: Company 4 received an adjustment increase of \$22,950 to increase their pre-withholding allowance budget from \$79,800 to \$102,750. The FY14 budget was \$96,350. The amount adjusted resulted in \$6,400 of overfunding.
2. Square footage allowance: Company 17's gross square footage per the funding matrix is 23,136. Per the third party insurance appraisal, the gross square footage is 25,030. The net square footage in the funding matrix is recorded as 19,536, after a 3,600 square foot deduction for banquet space. The net impact to the square footage allowance as a result of the variance (1,894 square feet) is that Company 17 received \$2,841 less than the eligible amount.

The withholdings amount for FY19 was compared to FY18 actuals for each Company. Based on the review, there does not appear to be standardized, consistent, or repeatable methodology applied to each Company. Specifically, the review identified the following.

FY19 Funding Matrix Withholding Findings:

1. Fleet maintenance withholdings: 18 of the 30 Companies had fleet maintenance withholdings, of which:
 - a. Four experienced an increase of \$3,478 to \$8,078.
 - b. 10 experienced a decrease of \$2,381 to \$27,555.
2. Fleet fuel withholdings: 16 of the 30 Companies had fuel withholdings, of which:

- a. Four experienced an increase of \$448 to \$1,458.
- b. 10 experienced a decrease of \$127 to \$4,962.
- 3. Vehicle supply withholdings: 30 Companies had vehicle supply withholdings, of which:
 - a. 26 experienced an increase of \$93 to \$2,393.
 - b. Three experienced a decrease of \$202 to \$1,544.
- 4. Printing withholdings: Six Companies had printing cost withholdings which experienced an increase of \$364 to \$1,505.

FY20 Funding Matrix Withholding Findings:

- 1. Fleet maintenance withholdings: 18 of the 30 Companies had fleet maintenance withholdings, of which:
 - a. 11 experienced an increase of \$1,055 to \$27,519.
 - b. Six experienced a decrease of \$2,157 to \$43,550.
- 2. Fleet fuel withholdings: 16 of the 30 Companies had fuel withholdings, of which:
 - a. Seven experienced an increase of \$909 to \$4,160.
 - b. Five experienced a decrease of \$119 to \$1,981.
- 3. Vehicle supply withholdings: 30 Companies had vehicle supply withholdings, of which:
 - a. 19 experienced an increase of \$142 to \$1,558.
 - b. Five experienced a decrease of \$113 to \$1,337.
- 4. Printing withholdings: Six Companies had printing cost withholdings which experienced an increase of \$84 to \$1,966.

Risks

- 1. Withholdings are applied judgmentally, resulting in unfair or inaccurate funding.
- 2. Lack of detailed matrix compilation review, resulting in over or under funding.

Recommendation 3.1

DFRS management should consider implementing a process to retain a copy of each supporting document used to populate a given fiscal year's funding matrix. Further, documenting and retaining a funding analysis explanation document allows for future reference and transparency on decisions made regarding withholdings and criteria.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation. DFRS will take responsibility for this recommendation and work for completion during the FY23 budget process.

Finance concurs with the recommendation.

Recommendation 3.2

For each withholding category within the funding matrix, DFRS should consider establishing a process to assess the average maintenance cost for eligible equipment based on a defined historical period and similar equipment/age. Once the multi-year baseline has been established, DFRS should consider developing a corresponding apparatus usage table that scales the withholding amount up to the calculated limit for that apparatus type. DFRS should consider implementing a +/- standardized percentage to quantitatively and systematically withhold funds from each Company. If DFRS determines that the withholding amount should be outside of the +/- percentage range, there should be documented justification to explain why a different withholding is necessary for the respective Company.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation and will take the lead for completion. This would have to be completed after the end of the fiscal year and would not apply until the FY23 Budget.

Finance concurs with the recommendation.

Recommendation 3.3

The County should consider evaluating the benefits of adjusting the current withholding methodology used when creating the funding matrix. Once evaluated, the County may choose to implement changes. Methodologies include:

1. Removing the withholding categories from the funding matrix and having the County/DFRS directly take on these costs for County owned apparatus (within the department budget). DFRS may then consider adjusting allowance amounts within the funding matrix accordingly, based on budgetary supplemental funding decisions by the County. This structure may allow the County to reduce administrative time/effort and create efficiencies in calculating the overall withholdings each year, or:
2. For the maintenance and fuel withholding categories within the funding matrix, DFRS may consider establishing a process to assess the three-year average of associated costs for each apparatus type that takes into account an age inflation factor. The age inflation factor should have an age cap for vehicles over a certain age, or:
3. To account for maintenance and fuel withholdings within the matrix, DFRS may consider calculating a three-year historical average of apparatus usage for each company to develop allocation percentages that reflect the true usage of each Company's apparatus. Currently, only certain types of apparatus are eligible for extra allocation and the determined allocation is based off a flat percentage of call volume.

Management's Action Plan and Implementation Date

Recommendation 3.3 does not have a clear recommendation. The items listed are suggestions of various ways to calculate the withholding. These suggestions have been considered previously by DFRS. An analysis will need to be completed to identify which suggestion would work best. DFRS will take responsibility for development a spreadsheet identifying the categories and cost for withholding. The DFRS Fiscal Manager has already been tasked with this work.

Suggestion 3, the intent of this extra allocation was to provide a funding incentive when volunteer companies own their own apparatus.

Finance agrees with the response provided by DFRS.

Recommendation 3.4

DFRS should consider reviewing the County's standard operating procedures document titled "Volunteer Corporation Consolidation Incentive Funding". The purpose of the review should be to ensure the language detailing how the first two years of a consolidation/merger between two companies will be calculated and treated is clear and reflects the calculation intended by the County.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation and has tasked the DFRS Fiscal Manager to begin working on this. This will be in place prior to the FY23 budget since FY22 is well under way.

Finance concurs with the recommendation.

Observation 4

While supplemental funds and criteria are documented in the annual FCVFRA budget matrix, there is no formal documentation or policy to outline how the funding matrix will be adjusted or evaluated for inflation or an annual adjustment based on budget availability and determination from DFRS.

Observation Detail

As stated in the report's *Background* section, the funding matrix is calculated using multiple criteria, which were determined by DFRS to provide the most accurate and fair distribution of available supplemental funds to each Company. Each fiscal year, DFRS updates an informal funding matrix justification document, which outlines the criteria used to calculate the annual appropriation and serves as a supplement to that year's funding matrix. This document guides Company leadership through the calculation methodology.

Annually, the Budget Committee⁵ meets to review and approve the funding matrix budget. The review is focused on the appropriation results rather than the detailed/itemized data inputs into the calculation. It was noted that the funding matrix is formally approved within the Budget Committee's meeting minutes.

Findings

Findings were identified during both funding matrix and funding matrix justification document review procedures, which collectively support the observation. The following provides detail for each document's findings.

Funding Matrix Findings

DFRS does not retain documentation supporting how and why the funding matrix criteria is recommended to be changed or adjusted for a given fiscal year. Additionally, DFRS was unable to provide documentation evidencing a detailed review to evaluate criteria that would be included, adjusted, or removed.

Review procedures included comparing/trending FY15 through FY21 year-over-year funding matrix criteria. Based on the review, the following changes were made to the funding matrix with no documentation to evidence justification, review, or approval.

Volunteer Staffing Incentive

1. FY15: Companies received a flat fee of \$20,000 or \$10,000 if the Company was fully staffed by volunteer or partially staffed by volunteers, respectively.
2. FY16-FY18: Companies did not receive any appropriation incentive for full or partially staffed volunteers.
3. FY19-FY20: Companies received an appropriation equal to 50% or 25% of their call volume if the Company was fully staffed by volunteer or partially staffed by volunteers, respectively.

Square Footage Multiplier

1. FY15-FY17: Companies received \$1.00 per sq. ft.
2. FY18: Companies received \$1.25 per sq. ft.
3. FY19: Companies received \$1.50 per sq. ft.
4. FY20-FY21: Companies received \$1.75 per sq. ft.

Engine Apparatus

1. FY15-FY18: Companies received an appropriation equal to 10% of their call volume.

⁵ The FCVFRA Budget Committee is made up of Company representatives. Six of the 30 Companies are represented, which include one representative from each battalion and a Fire Rescue Association Executive Committee member. The DFRS Deputy Chief of Administrative Services is also on the Funding Committee, but does not have voting rights.

2. FY19-FY21: Companies received an appropriation equal to 15% of their call volume.

Fleet Withholdings (Fuel, Maintenance, Supplies, Printing, and Other)

1. FY15: The Fleet withholdings criteria was not included within the funding matrix.
2. FY16-FY21: The Fleet withholdings criteria was added to the funding matrix.

Funding Matrix Justification Document Findings

The funding matrix justification document does not include all criteria that applies to the funding matrix. Additionally, the criteria in the funding matrix justification document does not always reflect what was used and calculated in the funding matrix.

Review procedures included comparing the FY19 and FY20 funding matrix justification documents to their respective funding matrices. In each fiscal year, missing or inconsistent criteria were identified. Specifically, the following identified.

FY19 Funding Matrix Justification Document Non-Reconcilable Criteria

1. The funding matrix justification document does not include the following criteria to support the funding matrix.
 - a. ALS medical vehicles: Companies with ALS medical vehicles were given \$2,500 additional funding, as the maintenance and fuel costs for these vehicles is not charged out. The additional funding recognizes the additional costs of housing these vehicles.
 - b. Adjustment to equal FY14 funding: If a Company's appropriation funding matrix calculation resulted in less funding than FY14 funding (line item-based budget), the Company would receive additional funding accounting for the difference between the FY19 calculation and FY14 funding.
 - c. Withheld funds: All Companies had a portion of their calculated appropriated funds withheld by DFRS to pay for estimated County costs that would be incurred during the fiscal year. Withheld funds included County fuel, County fleet maintenance, County fleet supplies, printing costs, and other items.
2. The funding matrix justification document does not accurately reflect the following methodology used within the funding matrix.
 - a. Apparatus incentive: The engine apparatus multiplier used in the funding matrix is 15%. However, the apparatus incentive listed in the justification document should either be 10% or 20%. Further, each apparatus is not clearly associated with a given percentage.
 - b. Volunteer incentive: The volunteer incentive used in the funding matrix is calculated as a percentage of call volume (50% for having volunteer staffing and 25% for having day shift staffing). However, the funding matrix justification document states the volunteer incentive is a flat rate (\$20,000 for 24/7 staff and \$10,000 for evening/weekend staff).

FY20 Funding Matrix Justification Document Non-Reconcilable Criteria

1. The funding matrix justification document does not include the following criteria to support the funding matrix.
 - a. ALS medical vehicles: Companies with ALS medical vehicles were given \$2,500 additional funding.
 - b. Adjustment to equal FY14 funding: If a Company's appropriation funding matrix calculation resulted in less funding than FY14 funding (line item-based budget), the Company would receive additional funding accounting for the difference between the FY20 calculation and FY14 funding.
 - c. Withheld funds: All Companies had a portion of their calculated appropriated funds withheld by DFRS to pay for estimated County costs that would be incurred during the fiscal year. Withheld funds included County fuel, County fleet maintenance, County fleet

supplies, printing costs, and other items.

2. The funding matrix justification document does not accurately reflect the following methodology used within the funding matrix.
 - a. Apparatus Incentive: The engine apparatus multiplier used in the funding matrix is 15%; however, the apparatus incentive listed in the justification document should either be 10% or 20%. Further, each apparatus is not clearly associated with a given percentage.
3. The call volume scale/table skips a range of calls. The call volume range of 4,501 to 4,550 was not captured in the table. However, this did not impact the accuracy of the calculation.

Risks

1. Funding matrix methodology documents may not be complete or accurate, resulting in an inconsistent or inaccurate calculation model.
2. The funding matrix may not be formally reviewed by a second independent employee to ensure completeness and accuracy of all inputs that feed the matrix formulas, resulting in inaccurate funding.
3. Funding matrix criteria and budget decisions may not be effectively communicated to Companies, resulting in lack of transparency related to annual budget methodology decisions.

Recommendation 4.1

DFRS should consider establishing comprehensive funding matrix procedures and policies associated with creating, reviewing, updating, and approving the funding matrix each fiscal year. The documentation related to the procedures should clearly indicate how the funding matrix criteria was adjusted based on budget decisions, inflation, and/or available County funds. The procedures should include a process to perform a formal annual review of the funding matrix justification document to ensure it completely and accurately reflects 1) all criteria decisions and 2) details used and approved criteria to calculate the funding matrix. If criteria are missing or inaccurate in the justification documentation based on the review, DFRS should make the appropriate updates to ensure the document aligns with the funding matrix prior to distribution of appropriations. This will allow for transparency of the calculations and adjustments made to the Companies.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation. Implementation Date, March 31, 2021.

Finance concurs with the recommendation as well as the March 31, 2021 date suggested by DFRS.

Recommendation 4.2

DFRS should implement a process to formally and independently review and approve the funding matrix and funding matrix justification documents for completeness and accuracy by a governing body, such as the Budget Committee. Formalized review and approval should be detailed, evidenced, and retained. Further, any changes to criteria for a given fiscal year should be documented, explained/justified, supported, and approved.

Management's Action Plan and Implementation Date

DFRS agrees with this recommendation. Implementation Date, March 31, 2021

Finance concurs with the recommendation as well as the March 31, 2021 date suggested by DFRS.