



**OFFICE OF FINANCIAL AND PROGRAM AUDIT
SEPTEMBER 2022 QUARTERLY REPORT**

**BOARD OF SUPERVISORS
AUDITOR OF THE BOARD**

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Fairfax County
Office of Financial and Program Audit



Jim L. Shelton, Jr., MBA, CRP (Auditor of the Board)
Jim.Shelton@FairfaxCounty.gov

**Fairfax County
Office of Financial and Program Audit
Table of Contents**

REPORT ABSTRACT4

DIT FOLLOW UP EXTERNAL SYSTEM PROCURED BY AGENCIES (USING P-CARDS)5

MUTUAL AID AGREEMENT (MAA) POLICE AND FIRE & RESCUE SERVICE STUDY.....8

- MAA/EMS NON-COUNTY RESIDENT GROUND TRANSPORTS CLAIM BILLINGS ANALYSIS 12
- MAA/EMS NON-BILLED NON-COUNTY RESIDENT TRANSPORTS ANALYSIS 15
- EMS CONTRACTORS DATA ENTRY ERRORS ANALYSIS FOR NON-COUNTY RESIDENTS' TRANSPORTS 18
- MAA/EMS BILLING CONTRACTORS PROCESSING TIME ANALYSIS FOR NON-COUNTY RESIDENTS' TRANSPORT..... 20
- HELICOPTER LAW ENFORCEMENT TRIPS ANALYSIS 21
- HELICOPTER DIVISION NON-COUNTY RESIDENT MEDEVAC TRIPS 23

EMERGENCY MEDICAL SERVICES (EMS) 24

- EMS COUNTY RESIDENT GROUND TRANSPORT CLAIM BILLINGS ANALYSIS 28
- EMS NON-BILLED COUNTY RESIDENT TRANSPORTS ANALYSIS..... 30
- EMS CONTRACTORS DATA ENTRY ERRORS ANALYSIS FOR COUNTY RESIDENTS' TRANSPORTS.... 33
- EMS BILLING CONTRACTORS PROCESSING TIME ANALYSIS FOR COUNTY RESIDENTS' TRANSPORT 35
- EMS VEHICLE REPLACEMENT ANALYSIS 36
- HELICOPTER DIVISION COUNTY RESIDENT MEDEVAC TRANSPORTS..... 39

ADDENDUM 40

LIST OF ACRONYMS42

Fairfax County
Office of Financial and Program Audit
REPORT ABSTRACT

Working under the guidance and direction of the Audit Committee (AC), the Auditor of the Board provides an independent means for assessing management's compliance with policies, programs and resources authorized by the Board of Supervisors (BOS). Further to this process, efforts are made to gain reasonable assurance that management complies with all appropriate statutes, ordinances, and directives.

This agency plans, designs, and conducts studies, surveys, evaluations, and investigations of County agencies as assigned by the BOS or the AC. For each study conducted, the agency focuses primarily on the County's Corporate Stewardship vision elements. The agency does this by developing, whenever possible, information during the studies performed which are used to maximize County revenues or reduce County expenditures.

To assist the Office of Financial and Program Audit (OFPA) with executing the responsibilities under our charge, members of the Fairfax County BOS submit study recommendations of which the findings and management responses are included in published studies. This process is utilized to provide the constituents, BOS and management reasonable assurance that fiscal and physical controls exist within the County.

Additionally, this agency conducts follow-up work on prior period studies. As part of the post study work conducted, we review the agreed upon managements' action plans. To facilitate the process, we collaborate with management prior to completion of studies. Through this collaboration, timelines for the implementation of corrective action and status updates are documented for presentation at the upcoming AC Meetings.

The results of studies may not highlight all the risks/exposures, process gaps, revenue enhancements and/or expense reductions which could exist. Items reported are those which could be assessed within the scheduled timeframe, and overall organization's data-mining results. The execution of the OFPA's studies is facilitated through various processes such as sample selections whereby documents are selected, and support documentation is requested for compliance and other testing attributes. Our audit approach includes interviewing appropriate staff and substantive transaction testing. OFPA staff employs a holistic approach to assess agencies/departments whereby the review is performed utilizing a flow from origination to closeout for the areas under review.

There are several types of studies performed by OFPA, e.g., operational, financial, compliance, internal controls, etc. To that end, it is important to note; OFPA staff reserves the option to perform a holistic financial and analytical data-mining process on all data for the organization being reviewed where appropriate. This practice is most often employed to perform reviews for highly transactional studies.

DIT Follow up External System Procured by Agencies (Using P-Cards)

Gregory Scott (Director, DIT)
September 20, 2022

**Fairfax County
Office of Financial and Program Audit
Overview**

In the March 2022 Audit Committee quarterly report, OFPA identified several areas for enhancement in the oversight of external systems procured by the County's agencies with P-Cards. Some systems procured by these agencies have not been interfaced with FOCUS whereby manual journal entry uploads are required. Several systems are operating without disaster recovery modes, these items are operating without adequate data backup. The external system inventory file used for oversight has a considerable amount of missing information of which the onus is on the agency to provide to DIT to monitor these items.

- Active Critical Systems Not Interfaced to FOCUS

Management agrees with the recommendation. The FOCUS team will work with each respective agency to understand the 15 external system's financial functions.

- **Status:** The FOCUS team is working with each respective agency to understand the 15 external system's financial functions, confirm their current method to posting financial transactions to FOCUS (such as manual journal entry (JE) or the JE Upload tool) and determine the necessity and feasibility of creating an automated interface to FOCUS. Once information is gathered, the external system inventory will be updated, and the FOCUS team will coordinate with the respective agencies to plan and schedule the agreed upon interface builds. Review in progress; target due date is 10/31/22.

- Active Critical Systems w/o Disaster Recovery (DR) Mode

Management agrees with the recommendation. DIT will review and update the system inventory to reflect those systems that have disaster recovery in place.

- **Status:** Completed. Identified systems have an SLA in place for DR either on-premises or on cloud.

- External Systems w/FOCUS Functionalities

Management agrees with the recommendation. DIT and the FOCUS Team will liaise with the respective agencies to better understand the 6 systems core functionalities and whether those can be performed in FOCUS.

- **Status:** DIT and the FOCUS Team are working with the respective agencies to better understand the 6 systems core functionalities and whether those can be performed in FOCUS. On initial review, most of the 6 systems provide agency/industry specific functionality, such as healthcare management, that is not a function of FOCUS. Since these systems may also perform some financial subfunctions, we will discuss and determine if any additional interfacing is needed with FOCUS. Review in progress; target due date is 10/31/22.

- Active Systems w/Expired Vendor Dates and Costs

Management agrees with the recommendation. DIT is actively reviewing and updating contract expiration date.

- **Status:** Completed.

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Office of Financial and Program Audit**

- Incomplete External Systems Inventory Tracker Agency Reported
Management agrees with the recommendation. DIT will review and update the External Systems Inventory Tracker for completeness.

- **Status:** Instead of a moratorium on the procurement of systems with a Pcard, DPMM has implemented a multifaceted education and outreach effort to curtail the procurement of systems with the Pcard. Efforts include reminders during Pcard Program Manager meetings, additional stress placed on this topic in PCard training, and additional emphasis on the topic in an upcoming release of an updated Pcard Procurement Technical Bulletin. The first round of outreach has occurred and education and outreach will be ongoing to ensure that all stakeholders are trained and remain aware of the policy. This recommendation is complete. IT Purchases is reflected in the updated 70-07 IT Policy, which will be released shortly.

- External Systems procured by Agencies (using P-cards)
A moratorium on the procurement of systems with a Pcard would mandate a moratorium of the entire Pcard program, which is cost prohibitive.

- **Status:** Instead of a moratorium on the procurement of systems with a Pcard, DPMM has implemented a multifaceted education and outreach effort to curtail the procurement of systems with the Pcard. Efforts include reminders during Pcard Program Manager meetings, additional stress placed on this topic in PCard training, and additional emphasis on the topic in an upcoming release of an updated Pcard Procurement Technical Bulletin. The first round of outreach has occurred, and education and outreach will be ongoing to ensure that all stakeholders are trained and remain aware of the policy. This recommendation is complete. IT Purchases is reflected in the updated 70-07 IT Policy, which will be released shortly.

| Agency | System | Comments |
|-------------------------------|---|---|
| Health and Human Services | Health and Human Services Customer Relationship Management | CRM is not a function of FOCUS |
| Health and Human Services | Health and Human Services Customer Relationship Management Internal | CRM is not a function of FOCUS |
| Department of family services | Web Harmony | FOCUS currently interfaces to Harmony. Harmony provides healthcare specific functionality not available in FOCUS. In addition, many healthcare systems manage highly sensitive information that should not be tracked in FOCUS. |
| Community Services Board | Allscripts Payerpath | Provides healthcare specific functionality not available in FOCUS. In addition, many healthcare systems manage highly sensitive information that should not be tracked in FOCUS. The FOCUS team will reach out to agency to determine if any financial automated interfacing is needed. |
| Department of Finance | Laserfiche | Laserfiche is a document management system. FOCUS is not a document management system, but rather should integrate with a document management system as it does with OpenText for Vendor Invoice Management. The FOCUS team will work with the agency to understand their use of Laserfiche and if any documents should be connected to FOCUS in any way. |
| Department of Finance | Conservice | FOCUS currently interfaces to Conservice (2 interfaces: County and Housing). Conservice is a 3rd party utility management company that provides services and functionality not available in FOCUS. |

MUTUAL AID AGREEMENT (MAA)
POLICE AND FIRE & RESCUE SERVICE STUDY

OVERVIEW OF MUTUAL AID AGREEMENT

OVERVIEW AND UPDATES

The results of this study may not highlight all the risks/exposures, process gaps, revenue enhancements and/or expense reductions that could exist. Items reported are those which could be assessed within the scheduled timeframe, and overall organization's data-mining results. Office of Financial and Program Audit (OFPA's) studies are facilitated through several processes such as sample selections, compliance support documentation, and various testing approaches. There are several types of studies performed by OFPA, e.g.: performance, operational, financial, compliance, etc. To that end, it is important to note OFPA staff reserves the option to perform a holistic financial and analytical data-mining process on all data for the organization being reviewed where appropriate. This practice is most often employed to complete reviews for highly transactional studies.

We performed a review of the Northern Virginia Mutual Aid Agreement, through which Fairfax County cooperates with local law enforcement authorities during an emergency beyond the capacity of a signatory jurisdiction. Under this agreement, fire and rescue services (EMS and Helicopter transports) are provided in response to calls for surrounding jurisdictions. Other jurisdictions respond to calls in Fairfax County based on service needs or the closest available unit. The County participates in mutual response and automatic dispatch agreements with surrounding jurisdictions. The County owns and operates two Bell 429 helicopters to support law enforcement and Medevac trips. This study was performed to identify if opportunities exist for revenue enhancement or expenditure reduction.

Under the terms of the MAA, Helicopter Division provided a total of 429 trips to other jurisdictions in FY2021. Of these, only 10 were Medevac transports; the remaining 419 trips were conducted in support of law enforcement. Emergency Medical Services provided 56,703 transport services to non-County residents from FY2017-FY2021. Residents of other jurisdictions are billed for County EMS transports, provided that relevant billing information can be obtained from the patient.

We liaised with Helicopter Division and EMS staff throughout the review to align our understanding of the operations with actual practices.

MAA/EMS operates under Board of Supervisor settled policies, which provides approved operational guidance. With that, this Audit Committee approved study will, in several instances, present areas identified as **BOS Settled Policy Description/Discussion Items** as opposed to **Observations** and **Recommendations**.

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| EMS Non-County Resident Billing Process: Benchmarking to Comparable Jurisdictions | | | | |
|--|---|--------------------------------|----------------------|---|
| Jurisdictions | Non-County Resident Billings | % of Collections* in FY2021 | Sent to Collections? | A/R Aging and Write-offs |
| Fairfax County | Non-Residents are billed. Outstanding bills are written off after 180 days. | 80% | No | Receivables are aged 180 days before being written off. |
| Loudoun County | Non-Residents are billed. Outstanding bills are written off after 120 days. | 74% | No | Receivables are aged 120 days before being written off. |
| Montgomery County | Data Not Available | 65% | No | Data Not Available |
| Prince William County | Non-Residents are billed. Outstanding bills are written off after 280 days. | 79% | No | Receivables are aged 280 days before being written off. |
| Arlington County | Non-Residents are billed. Outstanding bills are sent to collections after 150 days. | 65% | Yes | Receivables are aged 150 days before sending to collections. Bills are not written off. |
| City of Alexandria | <i>No Data Provided</i> | | | |
| Prince George's County | <i>No Data Provided</i> | | | |

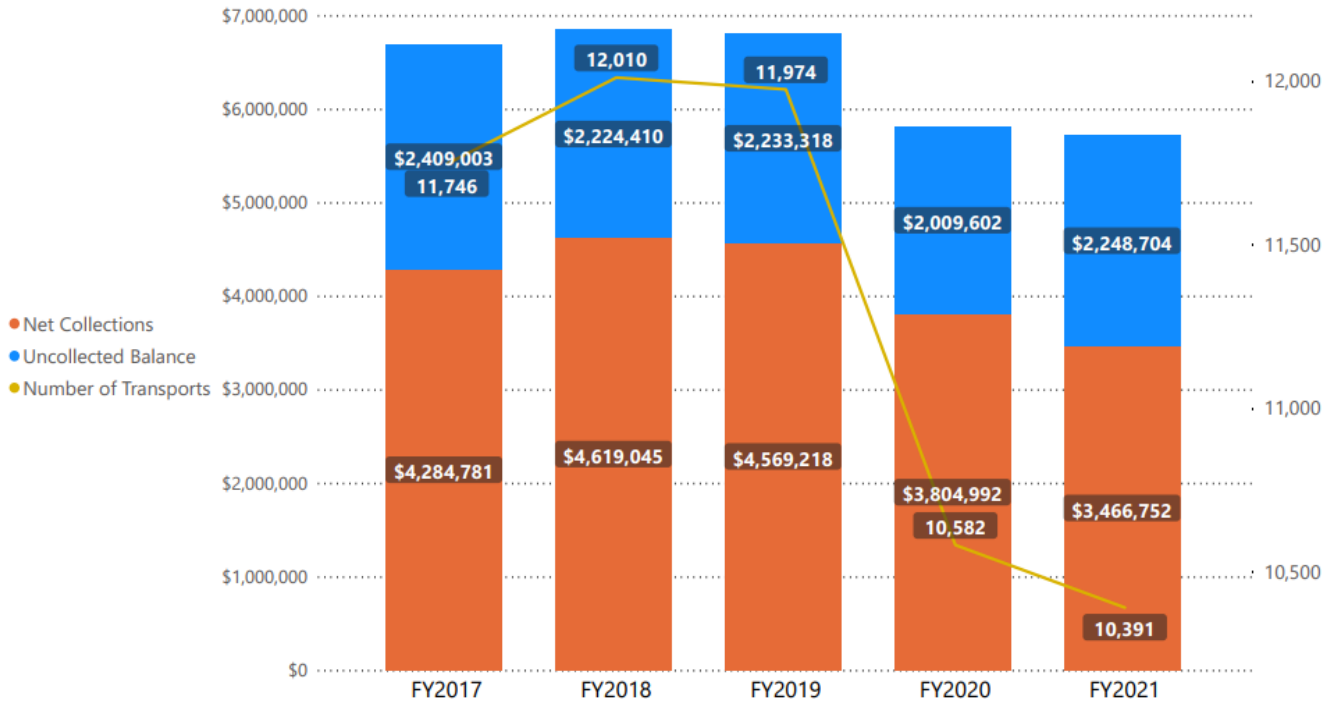
*Total County and Non-County Resident EMS Transports

| Benchmarking: EMS Transport Fees by Jurisdiction | | | | | | | |
|---|----------------|----------------|-------------------|-----------------------|------------------|--------------------|------------------------|
| Fee Description | Fairfax County | Loudoun County | Montgomery County | Prince William County | Arlington County | City of Alexandria | Prince George's County |
| Basic Life Support | \$500 | \$467 | \$400 | \$400 | \$500 | \$400 | \$500 |
| Advanced Life Support 1 | \$650 | \$660 | \$500 | \$500 | \$650 | \$500 | \$650 |
| Advanced Life Support 2 | \$800 | \$770 | \$700 | \$675 | \$850 | \$850 | \$750 |
| Transport Charge per Mile | \$12 | \$11 | \$8.50 | \$10 | \$12 | \$10 | \$5 |

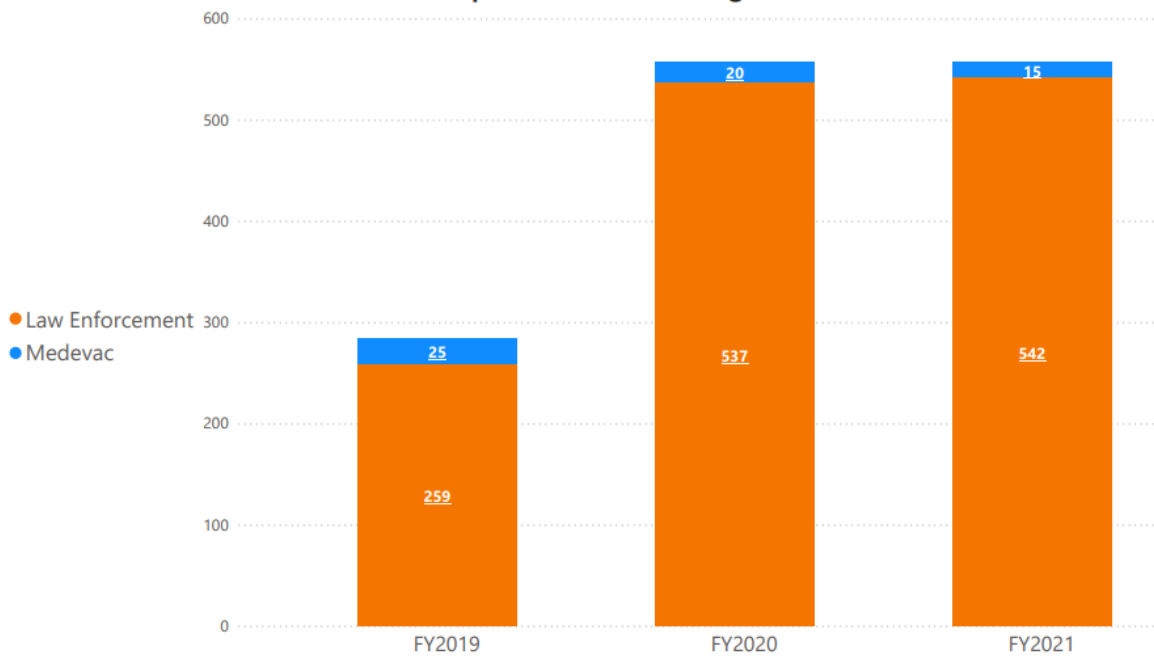
The graphs below indicate the summary data of MAA/EMS non-County resident collection and helicopter flight hours

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MAA/EMS Non-County Resident Billing Collections and Number of Transports



Helicopter Division Flight Hours



The following tables detail the BOS Settled Policy Description /Discussion Items, observations, and recommendations for this study along with management’s responses.

STUDY AREA 1

MAA/EMS NON-COUNTY RESIDENT GROUND TRANSPORTS CLAIM BILLINGS ANALYSIS

BOS Settled Policy Item Description

We reviewed the MAA/EMS Transport Claim Billings to identify areas to enhance revenue and/or offset the operating costs for these services. Partners (local jurisdictions) in the MAA benefit financially from some of the County’s practices. These practices also result in using the County’s general fund to support the costs of services to the partner jurisdictions. The results of our analysis revealed two areas whereby collections are decreased through “Discounts” and/or “Uncollected Balances.” There are two points of discussion we are raising in relation to these items:

- Write-off of claims aged past 180 days, and
- The lack of effort to participate in the collection of aged claims after 180 days.

As purported by EMS management, approval to discharge claim receivables after 180 days is in alignment with the direction of the Board of Supervisors. We could not locate documentation to support this assertion. The table and graph below detail the average annual discounts and uncollected monies (~\$3.5M or 46% of Gross Charges), and five-year discount and uncollected monies (~\$17.4M or 46% of Gross Charges) dollar magnitude of revenue that has been discharged. Given the consistency in this five-year trend, the monies will continue to be discharged resulting in the ongoing support of our MAA partners at the cost of the County’s general fund.

| MAA/EMS Transports to Other Jurisdictions vs. Transports Received, FY2019-FY2021 | | | |
|---|--|-------------------------------------|---------------|
| | Aid Received from Other Jurisdictions | Aid Given to Other Jurisdictions | Net |
| Number of Transports: | 24,949 | 34,731 | (9,782) |
| Gross Charges* | \$16,740,779 | \$23,304,501 | (\$6,563,722) |
| Net Charges** | \$14,021,338 | \$19,518,822 | (\$5,497,484) |

*Average Gross Charge of EMS Transport is \$671

**Average Net Charge of EMS Transport is \$562

We identified a rate of uncollected balance to net charges of **35%** from FY2019-FY2021. Thus, the estimated uncollected net charge available for potential recovery is \$5,497,484 * 35% = **\$1,924,119 over 3 years.**

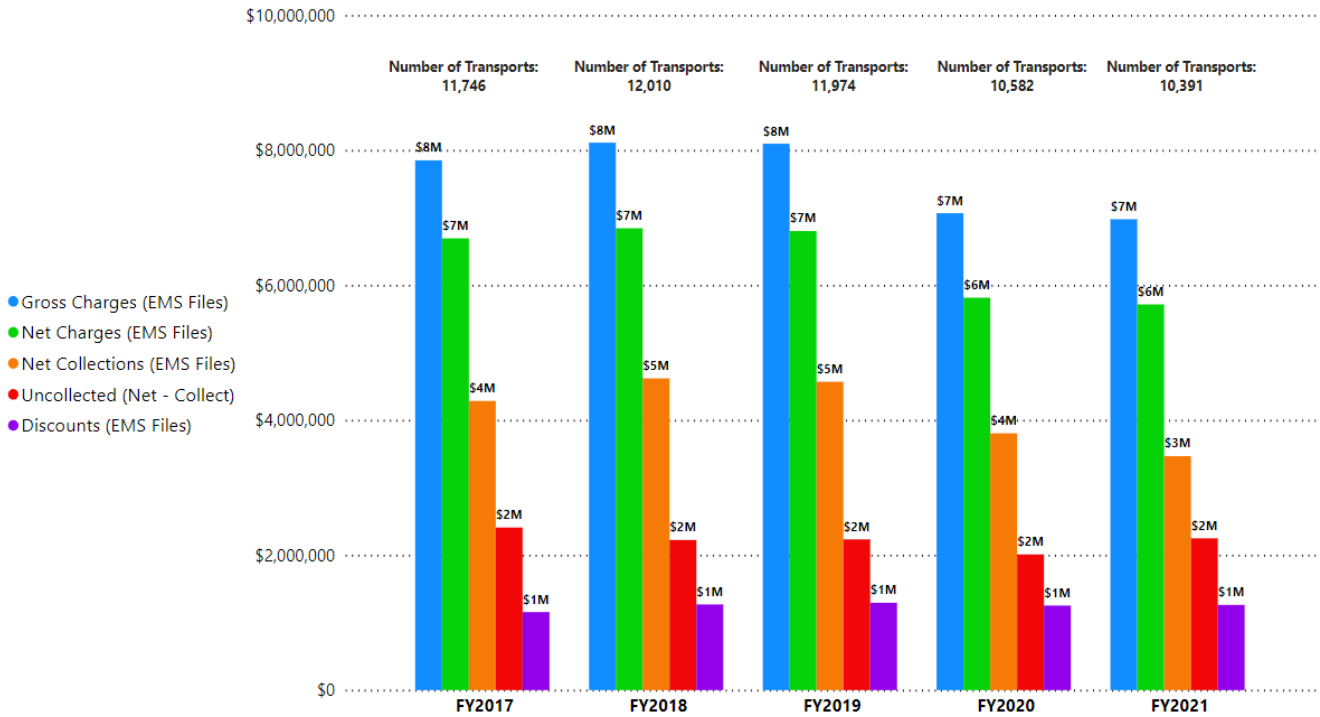
The table and graph below highlight further exposure from Non-County Resident EMS transports.

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Office of Financial and Program Audit**

| MAA/EMS Non-County Residents* Ground Transports Claim Billings Analysis | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|
| Number of Transports | 11,746 | 12,010 | 11,974 | 10,582 | 10,391 | 56,703 |
| Financial Activity | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | Total |
| Gross Charges (EMS Files) | \$7,849,934 | \$8,112,502 | \$8,096,631 | \$7,067,041 | \$6,977,505 | \$38,103,613 |
| Discounts (EMS Files) | (\$1,156,149) | (\$1,269,047) | (\$1,294,095) | (\$1,252,447) | (\$1,262,048) | (\$6,233,787) |
| Net Charges (EMS Files) | \$6,693,785 | \$6,843,455 | \$6,802,536 | \$5,814,594 | \$5,715,457 | \$31,869,826 |
| Net Collections (EMS Files) | \$4,284,781 | \$4,619,045 | \$4,569,218 | \$3,804,992 | \$3,466,752 | \$20,744,789 |
| Uncollected Balance (Net - Collect) | \$2,409,003 | \$2,224,410 | \$2,233,318 | \$2,009,602 | \$2,248,704 | \$11,125,037 |
| Discounts / Gross Charges | 15% | 16% | 16% | 18% | 18% | 16% |
| Net Collections / Net Charges | 64% | 67% | 67% | 65% | 61% | 65% |
| Uncollected Balance / Net Charges | 36% | 33% | 33% | 35% | 39% | 35% |

*Based on Patient Resident Status

MAA EMS Non-County Residents Ground Transports Claim Billing Analysis



BOS Settled Policy Item Discussion

Given the Board of Supervisors' settled policies under which these EMS services are provided, OFPA is not recommending a remedy to recover the financial exposure reported in this study. This data provided is presented for advisory purposes.

With that, I respectfully mention (*without recommendation*) that the extension of collection times and efforts through our contracted collection vendor Nationwide Credit Corporation (NCC) could extend the recognition of partner jurisdictions' ground transport receivables on our books and may reduce some of the revenue leakages.

STUDY AREA 2

Fairfax County
Office of Financial and Program Audit

MAA/EMS NON-BILLED NON-COUNTY RESIDENT TRANSPORTS ANALYSIS

Observation

We reviewed EMS transports to non-residents of the County that were never billed due to unidentifiable patient information. EMS management asserts these non-billed transports were a combination of Patient Identifiable Information (PII) that could not be obtained, or the patient did not meet medical necessity for transport, or worker’s compensation, or other reasons not specified. In these instances, the patient cannot be billed for the transport.

OFPA identified **12,087** such transports from FY2017-FY2021. The gross charges for these transports were **~\$7.9 million**; all of these charges were uncollected. Inova Fairfax Hospital processed **4,081** transports from FY2017-FY2021 that were never billed because medical staff did not obtain PII from the patient. The gross charges for these transports were **~\$2.7 million**. The top 5 hospitals by incident count (Inova Fairfax Hospital, Reston Hospital Center, Inova Alexandria Hospital, Mount Vernon Hospital, and Inova Fair Oaks Hospital) combined for **9,569** transports and **~\$6.3 million** in gross charges.

The tables below detail the financial exposures resulting from these transports.

| MAA/EMS Non-County Residents* Non-Billed Ground Transports | | |
|---|-----------------------|---------------|
| Fiscal Year | Amount (\$) | Count |
| FY2017 | \$1,778,469.60 | 2,738 |
| FY2018 | \$1,664,369.20 | 2,529 |
| FY2019 | \$1,534,412.00 | 2,306 |
| FY2020 | \$1,409,698.40 | 2,164 |
| FY2021 | \$1,551,745.20 | 2,350 |
| Total | \$7,938,694.40 | 12,087 |

**Footnote: Based on patient's resident status*

**Fairfax County
Office of Financial and Program Audit**

| MAA/EMS Non-County Residents* Ground Transports w/o Billings Due to Unidentifiable Patient Information or Other Designations as Asserted by EMS | | |
|---|-----------------------|---------------|
| Hospital | Total (FY2017-FY2021) | |
| | Amount (\$) | Count |
| INOVA FAIRFAX HOSPITAL | \$2,739,968.00 | 4,081 |
| RESTON HOSPITAL CENTER | \$1,238,352.40 | 1,888 |
| INOVA ALEXANDRIA HOSPITAL | \$802,095.60 | 1,243 |
| MOUNT VERNON HOSPITAL | \$775,939.20 | 1,221 |
| INOVA FAIR OAKS HOSPITAL | \$735,752.80 | 1,136 |
| VIRGINIA HOSPITAL CENTER | \$697,242.00 | 1,055 |
| SPRINGFIELD HEALTHPLEX | \$323,245.60 | 525 |
| INOVA LORTON HEALTHPLEX | \$232,421.20 | 378 |
| STONE SPRING EMERGENCY CTR | \$87,406.00 | 126 |
| FAIRFAX EMERGENCY CARE CTR | \$52,374.40 | 82 |
| SENTARA NORTHERN VA MED CTR | \$50,056.40 | 73 |
| PRINCE WILLIAM HOSPITAL | \$40,064.80 | 50 |
| LOUDOUN HOSPITAL CENTER | \$34,958.80 | 47 |
| FORT BELVOIR COMM HOSPITAL | \$27,682.40 | 40 |
| GEORGE WASHINGTON UNIV HOSP | \$17,756.40 | 25 |
| WASHINGTON HOSPITAL CTR | \$19,689.60 | 25 |
| CAREFLIGHT | \$9,052.40 | 14 |
| RESTON EMERGENCY CARE CTR | \$8,148.40 | 14 |
| CHILDRENS NATIONAL MEDICAL | \$9,518.40 | 12 |
| DEWITT ARMY HOSPITAL | \$4,110.00 | 7 |
| FORT WASHINGTON UNIV HOSP | \$5,008.40 | 7 |
| GEORGETOWN HOSPITAL | \$4,766.40 | 6 |
| INOVA HEALTHPLEX ASHBURN | \$4,172.40 | 6 |
| S MARYLAND MED CENTER | \$4,380.00 | 6 |
| SUBURBAN HOSPITAL | \$2,987.60 | 4 |
| UNITED HOSPITAL CTR SE | \$1,790.40 | 3 |
| FREEFORM | \$1,655.20 | 2 |
| PRINCE GEORGES HOSP CTR | \$1,160.80 | 2 |
| VETERANS AFFAIRS MED CTR | \$1,790.80 | 2 |
| WALTER REED ARMY MED CTR | \$1,582.00 | 2 |
| HAYMARKET MEDICAL CENTER | \$539.60 | 1 |
| HEATHCOTE HEALTH CENTER | \$825.20 | 1 |
| HOWARD UNIV HOSPITAL | \$761.60 | 1 |
| SHADY GROVE ADVENTIST HOSPITAL | \$839.60 | 1 |
| SIBLEY HOSPITAL | \$599.60 | 1 |
| Grand Total | \$7,938,694.40 | 12,087 |

*Footnote: Based on patient's resident status

**Fairfax County
Office of Financial and Program Audit**

Recommendation

Purported by EMS management, hospitals provide PII to EMS management to facilitate the billing process.

We recommend staff develop a process to analyze the gaps between patient intake, discharge, and collection of PII. The results of these analyses should be used to identify the root causes for the PII collection failures.

OFPA Data Scientists data-mined the records to identify and rank the providers that are contributing to this revenue leakage. We further recommend the staff start the analysis by focusing on the top 5 service providers.

Action Plan

| Point of Contact | Target Implementation Date | Email Address |
|--|----------------------------|--|
| Daniel Shaw (Assistant Fire Chief) | 10/31/2022 | Dan.Shaw@fairfaxcounty.gov |
| Mark Kordalski (Deputy Fire Chief) | | Mark.Kordalski@fairfaxcounty.gov |
| Chinaka Barbour (Fiscal Services Division Director) | | Chinaka.Barbour@fairfaxcounty.gov |
| Arsenio DeGuzman (Program Manager, EMS Billing/Accounting) | | Arsenio.Deguzman@fairfaxcounty.gov |

MANAGEMENT RESPONSE:

12,087 out of 56,703 (or 21.3%) of non-resident transports were deemed unbillable during the claim submission process. EMS transports are sometimes unbillable due to missing or incomplete data. FRD will commence tracking errors and identifying root causes through these existing processes:

- Review of the billing vendor’s daily client receipts to reconcile missing data.
- Program Manager’s review of unbilled transports using bi-weekly lists, which will be reconciled to monthly patient records for transports not deemed a medical necessity.
- Reconciliation of all monthly/quarterly transactions, audits and KPI analysis.
- Semi-monthly review of contract performance meetings with billing vendor, Client Manager and Executive Director to resolve outstanding issues.
- Annual vendor reviews/evaluations to set contracted rates based on average net collections.

STUDY AREA 3
EMS CONTRACTORS DATA ENTRY ERRORS ANALYSIS
FOR NON-COUNTY RESIDENTS' TRANSPORTS

Observation

We reviewed EMS transport data for non-residents to identify errors in billings. OFPA analysis revealed four types of data entry errors for these transports: duplicate line-items incorrect mileage charges, incorrect transport mileage, and discounts exceeding gross charges.

- 17 duplicate transports from FY2017-FY2021. These line-items share identical unique identifiers but have different gross charges recorded. As purported by EMS management, duplicate line-items reflect billing adjustments that were made to earlier transports.
- 539 transports from FY2017-FY2021 where the mileage charge was calculated incorrectly. Mileage incurred for EMS transports is charged at \$12/mile. For these transports, the mileage charge was lower than \$12/mile.
- 2 transports from FY2017-FY2021 where the transport mileage was recorded incorrectly. The mileage for these transports were recorded as 93.7 and 90.9 miles from pick-up to drop-off.
- 7 transports from FY2017-FY2021 where the discounts exceed the gross charge of the bill.

565 transports from FY2017-FY2021 were recorded incorrectly. **~74%** of these errors occurred in FY2018; as purported by EMS management, these transports were coded incorrectly by the billing vendor in 2017 due to staffing changes.

OFPA reviewed the contract between the County and Change Healthcare, LLC and found no performance measures pertaining to billing accuracy.

**Fairfax County
Office of Financial and Program Audit**

Recommendation

Based on our review of the contract, no performance measures for this contractor could be identified. In the absence of performance measures, we recommend that staff liaise with Change Healthcare to develop a process to track errors and identify root causes.

This information should be used to implement processes to reduce errors and staff rework. Rework by staff comes at a financial cost and additional labor hours.

Action Plan

| Point of Contact | Target Implementation Date | Email Address |
|--|----------------------------|--|
| Daniel Shaw (Assistant Fire Chief) | 10/31/2022 | Dan.Shaw@fairfaxcounty.gov |
| Mark Kordalski (Deputy Fire Chief) | | Mark.Kordalski@fairfaxcounty.gov |
| Chinaka Barbour (Fiscal Services Division Director) | | Chinaka.Barbour@fairfaxcounty.gov |
| Arsenio DeGuzman (Program Manager, EMS Billing/Accounting) | | Arsenio.Deguzman@fairfaxcounty.gov |

MANAGEMENT RESPONSE:

565 out of 56,703 (or 0.9%) of data entry errors for non-County resident transports. These data were generated from a multi-source summary report.

These errors reflect incorrect matching of billing or payment adjustments which were corrected during the billing cycle.

FRD will reinforce the daily billing information collection and contract monitoring activities to ensure errors are minimized to the greatest extent possible.

STUDY AREA 4

MAA/EMS BILLING CONTRACTORS PROCESSING TIME ANALYSIS
FOR NON-COUNTY RESIDENTS' TRANSPORT

Observation

We reviewed the processing time for EMS transport bills issued to non-residents. FCFRD contracts with a third-party vendor to process EMS bills: Med3000 from FY2017-FY2019, and Change Healthcare LLC from FY2020-FY2021. For claims with adequate billing information, ~80% of bills were processed between 0-30 days after transport. Less than 1% of transports were processed over 180 days after transport.

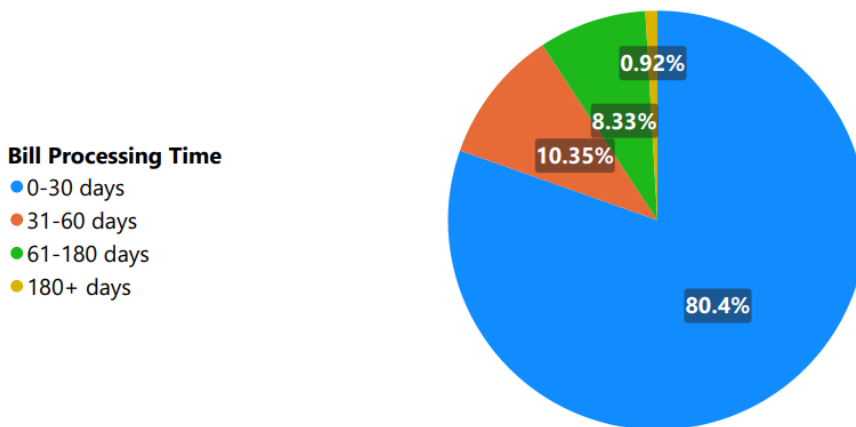
As purported by EMS management, there are situations for which bill processing time can be significantly delayed; examples of these include patients involved in traffic accidents or legal settlements.

The table and graph below detail the bill processing time for claims with adequate billing information.

| MAA/EMS Billing Contractors Non-County Resident Transport Processing Time* (Med3000 FY17-FY19/Change Healthcare FY20-FY21) Contractor Billing Between FY17-FY21 | | |
|---|--------|------------|
| Bill Processing Time | Counts | Percentage |
| 0-30 days | 34,203 | 80.4% |
| 31-60 days | 4,403 | 10.4% |
| 61-180 days | 3,543 | 8.3% |
| 180+ days | 392 | 0.9% |

**For claims with adequate billing information*

MAA/EMS Non-County Residents Bill Processing Time*, FY2017-FY2021



**For claims with adequate billing information*

Conclusion

OFPA finds this process acceptable. **We Pass Further Audit Work (PFAW).**

STUDY AREA 5

HELICOPTER LAW ENFORCEMENT TRIPS ANALYSIS

BOS Settled Policy Item Description

The Fairfax County Police Department (FPCD) Helicopter Division operates 2 helicopters for law enforcement support and Medevac trips. As part of the County’s participation in the MAA, the Helicopter Division supports law enforcement endeavors in other jurisdictions. The MAA does not provide the option to bill other jurisdictions for Helicopter Division law enforcement trips made to partnering jurisdictions.

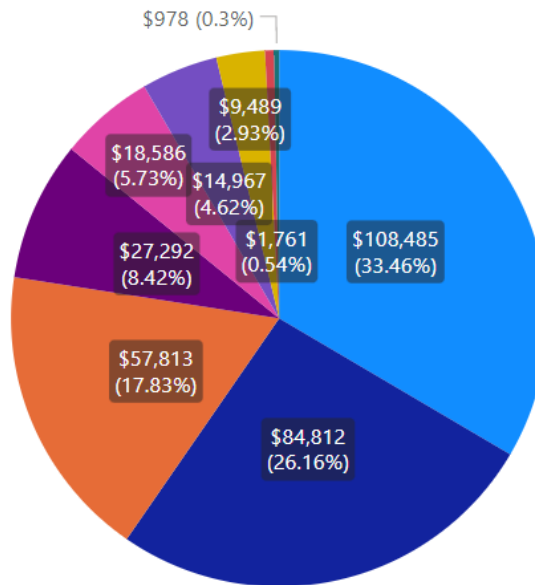
Costs associated with Helicopter Division law enforcement trips within the County are considered operating expenses supported by the County’s general fund. Although the MAA does not presently include language to facilitate billing partnering jurisdictions for law enforcement trips outside the County, the expenses incurred from these trips can be considered potential billable revenue.

The tables and graph below detail the financial exposure associated with Helicopter Division law enforcement trips both within and outside of the County. This exposure was calculated using an estimate for Helicopter operating costs per flight hour provided to OFPA by the Helicopter Division.

Helicopter Division Law Enforcement Trips - Potential Billable Revenue, FY2019-FY2021

Jurisdictions

| | |
|-------------------------|---------------------|
| ● Prince William | Flight Hours: 110.9 |
| ● Virginia State Police | Flight Hours: 86.7 |
| ● Other | Flight Hours: 59.1 |
| ● Alexandria | Flight Hours: 27.9 |
| ● Loudoun | Flight Hours: 19 |
| ● Arlington | Flight Hours: 15.3 |
| ● Fairfax City | Flight Hours: 9.7 |
| ● Warrenton | Flight Hours: 1.8 |
| ● Fauquier | Flight Hours: 1 |



**Fairfax County
Office of Financial and Program Audit**

| Potential Billable Revenue (Helicopter Law Enforcement Trips) Other Jurisdictions ¹ | | | | | | | | |
|--|--------------|----------------------------|--------------|----------------------------|--------------|----------------------------|----------------------|----------------------------------|
| Fiscal Year | FY2019 | | FY2020 | | FY2021 | | FY2019-FY2021 Totals | |
| Jurisdictions | Flight Hours | Potential Billable Revenue | Flight Hours | Potential Billable Revenue | Flight Hours | Potential Billable Revenue | Total Flight Hours | Total Potential Billable Revenue |
| Alexandria | 1.3 | \$1,272 | 3.6 | \$3,522 | 23 | \$22,499 | 27.9 | \$27,292 |
| Arlington | 1.6 | \$1,565 | 6.9 | \$6,750 | 6.8 | \$6,652 | 15.3 | \$14,967 |
| Fairfax City | 1.5 | \$1,467 | 7 | \$6,848 | 1.2 | \$1,174 | 9.7 | \$9,489 |
| Fauquier | 0 | \$0 | 0 | \$0 | 1 | \$978 | 1 | \$978 |
| Loudoun | 1.5 | \$1,467 | 6.1 | \$5,967 | 11.4 | \$11,152 | 19 | \$18,586 |
| Other | 2.6 | \$2,543 | 33.2 | \$32,477 | 23.3 | \$22,793 | 59.1 | \$57,813 |
| Prince William | 9.8 | \$9,587 | 74.2 | \$72,584 | 26.9 | \$26,314 | 110.9 | \$108,485 |
| Virginia State Police | 6.8 | \$6,652 | 54.3 | \$53,117 | 25.6 | \$25,042 | 86.7 | \$84,812 |
| Warrenton | 0 | \$0 | 0 | \$0 | 1.8 | \$1,761 | 1.8 | \$1,761 |
| Total | 25.1 | \$24,553 | 185.3 | \$181,264 | 121 | \$118,365 | 331.4 | \$324,182 |

Footnote (1):Data compilation based on jurisdiction request

| Operating Expense (Helicopter Law Enforcement Trips) Fairfax County ¹ | | | | | | | | |
|--|--------------|-------------------|--------------|-------------------|--------------|-------------------|----------------------|-------------------------|
| Fiscal Year | FY2019 | | FY2020 | | FY2021 | | FY2019-FY2021 Totals | |
| Jurisdictions | Flight Hours | Operating Expense | Flight Hours | Operating Expense | Flight Hours | Operating Expense | Total Flight Hours | Total Operating Expense |
| Fair Oaks | 29.2 | \$28,564 | 25.9 | \$25,336 | 26.5 | \$25,923 | 81.6 | \$79,823 |
| Fairfax Countywide | 3.4 | \$3,326 | 4.4 | \$4,304 | 74.1 | \$72,486 | 81.9 | \$80,116 |
| Falls Church | 0 | \$0 | 0 | \$0 | 0.3 | \$293 | 0.3 | \$293 |
| Franconia | 37.8 | \$36,977 | 43 | \$42,063 | 67.3 | \$65,834 | 148.1 | \$144,874 |
| Herndon | 1.4 | \$1,370 | 5.7 | \$5,576 | 3.7 | \$3,619 | 10.8 | \$10,565 |
| Mason | 38.4 | \$37,564 | 47 | \$45,976 | 30.3 | \$29,640 | 115.7 | \$113,180 |
| McLean | 6.9 | \$6,750 | 45.1 | \$44,118 | 53.4 | \$52,237 | 105.4 | \$103,104 |
| Mount Vernon | 24.5 | \$23,966 | 70.4 | \$68,867 | 52.9 | \$51,748 | 147.8 | \$144,581 |
| Reston | 16.8 | \$16,434 | 30.1 | \$29,444 | 40.8 | \$39,911 | 87.7 | \$85,790 |
| Springfield | 0 | \$0 | 0 | \$0 | 0 | \$0 | 0.0 | \$0 |
| Sully | 37 | \$36,194 | 28.9 | \$28,271 | 31.5 | \$30,814 | 97.4 | \$95,279 |
| Vienna | 0 | \$0 | 1.7 | \$1,663 | 0 | \$0 | 1.7 | \$1,663 |
| West Springfield | 38.7 | \$37,857 | 49.7 | \$48,618 | 40.4 | \$39,520 | 128.8 | \$125,995 |
| Total | 234.1 | \$229,001 | 351.9 | \$344,236 | 421.2 | \$412,026 | 1,007.2 | \$985,263 |

Footnote (1):Data compilation based on jurisdiction request

BOS Settled Policy Item Discussion

The MAA details how law enforcement trips for partnering jurisdictions are provided, and how costs are paid. There is no billing option for partnering jurisdictions under this agreement. Costs associated with these services are operating costs supported by the County's general fund.

We respectfully mention (*without recommendation*) the consideration of staff to liaise with OCA, Department of Finance and FCPD Finance Department could be useful in evaluating billing functions to identify billing opportunities.

This process would assist the County in recovering costs and reducing the use of the County's general fund to support other jurisdictions.

**Fairfax County
Office of Financial and Program Audit**

STUDY AREA 6

HELICOPTER DIVISION NON-COUNTY RESIDENT MEDEVAC TRIPS

BOS Settled Policy Item Description

OFPA reviewed the Helicopter Division Medevac trips made in support of FCFRD's EMS services when air support is necessary.

There were **33.3** flight hours for Medevac trips to non-County Residents between FY2019-FY2021. Only **9.9%** of non-County Resident flight hours were associated with Medevac trips.

The Helicopter Division does not bill for Medevac transports. Purported by FCPD Helicopter Division management, "the County does not have the 14 CFR Part 135 Air Carrier and Operator Certification which is needed to bill for these transports." We've reviewed this assertion with the FCPD Helicopter Division; they concur with our conclusion. Additionally, the related BOS approved MAA precludes the County from billing for these services.

| Uncollectable Revenue (Helicopter Medevac Trips) Other Jurisdictions ¹ | | | | | | | | |
|---|--------------|-----------------------|--------------|-----------------------|--------------|-----------------------|----------------------|-----------------------------|
| Fiscal Year | FY2019 | | FY2020 | | FY2021 | | FY2019-FY2021 Totals | |
| Jurisdictions | Flight Hours | Uncollectable Revenue | Flight Hours | Uncollectable Revenue | Flight Hours | Uncollectable Revenue | Total Flight Hours | Total Uncollectable Revenue |
| Annandale | 0.7 | \$685 | 0 | \$0 | 0 | \$0 | 0.7 | \$685 |
| Bealton | 0 | \$0 | 0 | \$0 | 0.7 | \$685 | 0.7 | \$685 |
| Centreville | 1.1 | \$1,076 | 0 | \$0 | 0 | \$0 | 1.1 | \$1,076 |
| Clifton | 0 | \$0 | 0.7 | \$685 | 0.7 | \$685 | 1.4 | \$1,370 |
| Dale City | 0 | \$0 | 0 | \$0 | 0.5 | \$489 | 0.5 | \$489 |
| Dulles | 1.5 | \$1,467 | 0 | \$0 | 0 | \$0 | 1.5 | \$1,467 |
| Dumfries | 0 | \$0 | 0.5 | \$489 | 0.5 | \$489 | 1 | \$978 |
| Fairfax | 2.1 | \$2,054 | 0 | \$0 | 0.7 | \$685 | 2.8 | \$2,739 |
| Fairfax Station | 0 | \$0 | 0 | \$0 | 0.7 | \$685 | 0.7 | \$685 |
| Fort Belvoir | 0 | \$0 | 0.7 | \$685 | 0 | \$0 | 0.7 | \$685 |
| Gainesville | 0.5 | \$489 | 0 | \$0 | 0 | \$0 | 0.5 | \$489 |
| Great Falls | 0.6 | \$587 | 0 | \$0 | 0 | \$0 | 0.6 | \$587 |
| Lake Ridge | 0 | \$0 | 0.5 | \$489 | 0 | \$0 | 0.5 | \$489 |
| Lorton | 0.6 | \$587 | 0.8 | \$783 | 1.7 | \$1,663 | 3.1 | \$3,032 |
| Manassas | 0.7 | \$685 | 0.5 | \$489 | 2.7 | \$2,641 | 3.9 | \$3,815 |
| Manassas Park | 0 | \$0 | 0.7 | \$685 | 0 | \$0 | 0.7 | \$685 |
| Manassas | 0 | \$0 | 0 | \$0 | 0.4 | \$391 | 0.4 | \$391 |
| Nokesville | 0 | \$0 | 0.6 | \$587 | 0.6 | \$587 | 1.2 | \$1,174 |
| Prince William | 0.6 | \$587 | 0 | \$0 | 0 | \$0 | 0.6 | \$587 |
| Reston | 0 | \$0 | 0 | \$0 | 0.6 | \$587 | 0.6 | \$587 |
| Sterling | 0.7 | \$685 | 1.2 | \$1,174 | 0 | \$0 | 1.9 | \$1,859 |
| The Plains | 0.4 | \$391 | 0 | \$0 | 0.8 | \$783 | 1.2 | \$1,174 |
| Warrenton | 1.5 | \$1,467 | 0.8 | \$783 | 0 | \$0 | 2.3 | \$2,250 |
| Woodbridge | 2 | \$1,956 | 0.7 | \$685 | 2 | \$1,956 | 4.7 | \$4,598 |
| Total | 13 | \$12,717 | 7.7 | \$7,532 | 12.6 | \$12,326 | 33.3 | \$32,575 |

Footnote (1): Data compilation based on patient residency

BOS Settled Policy Discussion Item

OFPA finds incorporating Medevac billing to be cost prohibitive.
We Pass Further Audit Work (PFAW)

EMERGENCY MEDICAL SERVICES (EMS) STUDY

OVERVIEW OF EMERGENCY MEDICAL SERVICES

OVERVIEW AND UPDATES

The results of this study may not highlight all the risks/exposures, process gaps, revenue enhancements and/or expense reductions which could exist. Items reported are those which could be assessed within the scheduled timeframe, and overall organization's data-mining results. Office of Financial and Program Audit (OFPA's) studies are facilitated through several processes such as: sample selections, compliance support documentation and various testing approaches. There are several types of studies performed by OFPA, e.g.: performance, operational, financial, compliance, etc. To that end, it is important to note OFPA staff reserves the option to perform a holistic financial and analytical data-mining process on all data for the organization being reviewed where appropriate. This practice is most often employed to perform reviews for highly transactional studies.

This study included a review of operations, cost and vehicle fleet replacement by the County's Fire and Rescue Department (FCFRD). EMS staff provides emergency transport services to individuals in need. Transport services are categorized into three areas with fees: Basic Life Support (BLS) - \$500 fee, Advanced Life Support Level 1 (ALS1) - \$650 fee, and Advanced Life Support 2 (ALS2) - \$800 fee. Additionally, a \$12 per mile fee is charged for miles incurred from pick-up location to hospital. These fees remain unchanged since June 2008. Total EMS expenditures in FY2017 – FY2021 ranged between ~\$65.9M - ~\$73.4M. Total EMS revenues in FY17 – FY21 ranged between ~\$19.6M - ~\$21.3M.

Emergency Medical Services provided a total of 208,838 ground transports to County residents from FY2017-FY2021. The FCPD Helicopter Division provided a total of 44 Medevac transports to County residents in support of EMS operations from FY2019-FY2021.

Fairfax County Fire and Rescue Department is committed to a “service first” philosophy; through this mission, we liaised with EMS and Helicopter Division staff to align our understanding of the operations with actual practices.

EMS operates under Board of Supervisor settled policies, which provides approved operational guidance. With that, this Audit Committee approved study, will in several instances, present areas identified as **BOS Settled Policy Description/Discussion Items** as opposed to **Observations** and **Recommendations**.

The following tables detail the benchmarking of the County's EMS fee rates with other comparable jurisdictions as well as summary data for County resident billings and collections.

**Fairfax County
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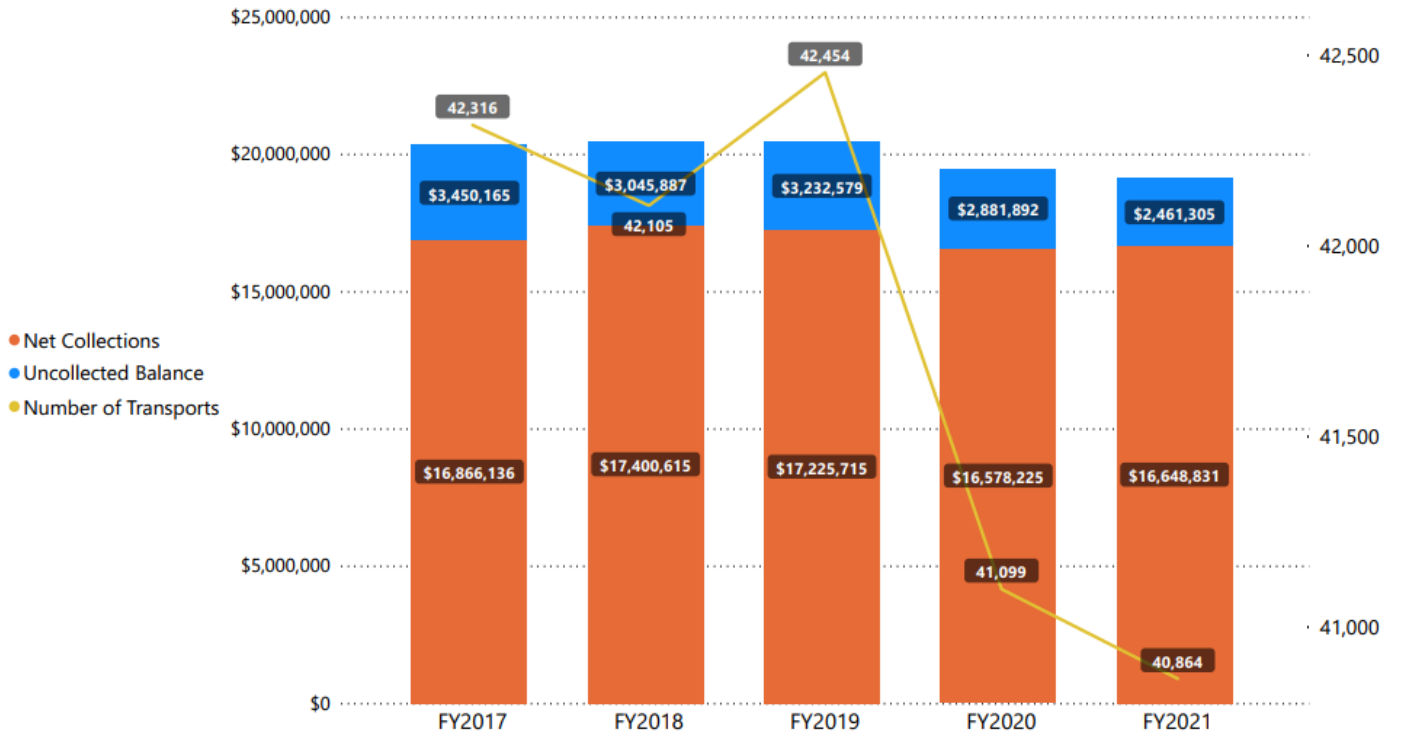
| Benchmarking: EMS Transport Fees by Jurisdiction | | | | | | | |
|---|----------------|----------------|-------------------|-----------------------|------------------|--------------------|------------------------|
| Fee Description | Fairfax County | Loudoun County | Montgomery County | Prince William County | Arlington County | City of Alexandria | Prince George's County |
| Basic Life Support | \$500 | \$467 | \$400 | \$400 | \$500 | \$400 | \$500 |
| Advanced Life Support 1 | \$650 | \$660 | \$500 | \$500 | \$650 | \$500 | \$650 |
| Advanced Life Support 2 | \$800 | \$770 | \$700 | \$675 | \$850 | \$850 | \$750 |
| Transport Charge per Mile | \$12 | \$11 | \$8.50 | \$10 | \$12 | \$10 | \$5 |

| EMS Non-County Resident Billing Process: Benchmarking to Comparable Jurisdictions | | | | |
|--|---|--------------------------------|----------------------|---|
| Jurisdictions | Non-County Resident Billings | % of Collections* in FY2021 | Sent to Collections? | A/R Aging and Write-offs |
| Fairfax County | Non-Residents are billed. Outstanding bills are written off after 180 days. | 80% | No | Receivables are aged 180 days before being written off. |
| Loudoun County | Non-Residents are billed. Outstanding bills are written off after 120 days. | 74% | No | Receivables are aged 120 days before being written off. |
| Montgomery County | Data Not Available | 65% | No | Data Not Available |
| Prince William County | Non-Residents are billed. Outstanding bills are written off after 280 days. | 79% | No | Receivables are aged 280 days before being written off. |
| Arlington County | Non-Residents are billed. Outstanding bills are sent to collections after 150 days. | 65% | Yes | Receivables are aged 150 days before sending to collections. Bills are not written off. |
| City of Alexandria | <i>No Data Provided</i> | | | |
| Prince George's County | <i>No Data Provided</i> | | | |

*Total County and Non-County Resident EMS Transports

**Fairfax County
Office of Financial and Program Audit**

EMS County Resident Billing Collections and Number of Transports



The following tables detail the BOS Settled Policy Description/Discussion Items, observations and recommendations for this study along with management’s responses.

**Fairfax County
Office of Financial and Program Audit**

STUDY AREA 1

EMS COUNTY RESIDENT GROUND TRANSPORT CLAIM BILLINGS ANALYSIS

BOS Settled Policy Item Description

We reviewed the EMS Transport Claim Billings to identify areas to enhance revenue and/or offset the operating cost for these services. Some of the County's financial practices have resulted in the use of the County's general fund to support EMS services to constituents. The cost of EMS services provided to the County's constituents are partially offset by insurance companies' coverage. The results of our analysis revealed two areas whereby collections are decreased through "Discounts" and/or "Uncollected Balances." There are three points of discussion we are raising in relation to these items:

- Claim balance discharge not covered by the insurance companies,
- Discharge of the full claims not covered by insurance companies and not billed to constituents, and
- The lack of effort to participate in the collection of aged claims.

As purported by EMS management, approval to discharge the claim receivables is in alignment with the direction of the BOS. The following statement from a May 2004 Public Hearing Notice was provided by EMS management to support the above assertion "*It should be noted that ability to pay would not in any circumstances preclude medically-required transports nor would residents unable to pay be subjected to extraordinary collection efforts.*" While this statement refers specifically to "extraordinary collections efforts," it is unclear if this statement is designed to mean EMS staff should *forgo customary collection efforts.*

The table and graph below detail the average annual discounts and uncollected monies (~\$11.6M or 41% of Gross Charges), and five-year discount and uncollected monies (~\$58.2M or 41% of Gross Charges) dollar magnitude of revenue that has been discharged. Given consistency in these trends, the monies will continue to be discharged resulting in the ongoing support for these services through the County's general fund.

These data are further highlighted in the table and graph below.

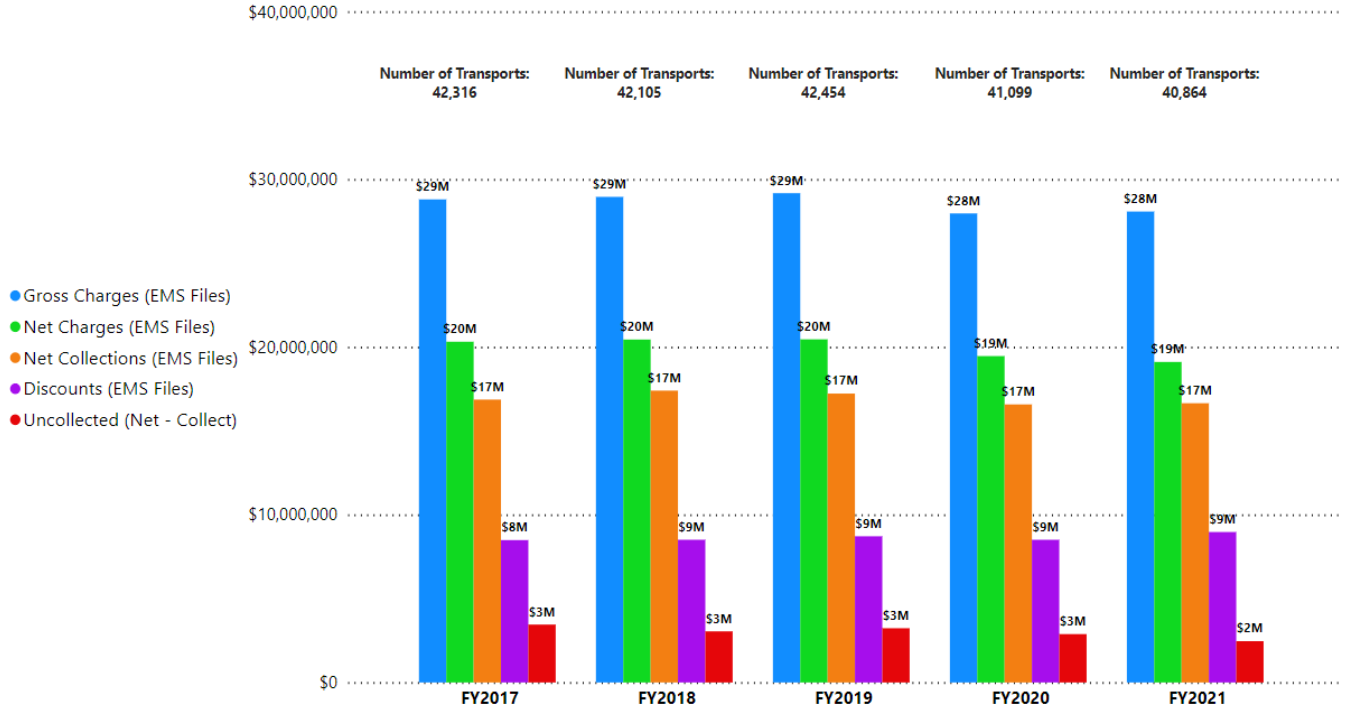
| EMS County Residents Ground Transport* Claim Billings Analysis | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|----------------|
| Number of Transports | 42,316 | 42,105 | 42,454 | 41,099 | 40,864 | 208,838 |
| Financial Activity | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | Total |
| Gross Charges (EMS Files) | \$28,802,948 | \$28,953,864 | \$29,173,942 | \$27,966,805 | \$28,079,550 | \$142,977,110 |
| Discounts (EMS Files) | (\$8,486,647) | (\$8,507,362) | (\$8,715,648) | (\$8,506,688) | (\$8,969,413) | (\$43,185,759) |
| Net Charges (EMS Files) | \$20,316,301 | \$20,446,502 | \$20,458,294 | \$19,460,117 | \$19,110,137 | \$99,791,351 |
| Net Collections (EMS Files) | \$16,866,136 | \$17,400,615 | \$17,225,715 | \$16,578,225 | \$16,648,831 | \$84,719,523 |
| Uncollected Balance (Net - Collect) | \$3,450,165 | \$3,045,887 | \$3,232,579 | \$2,881,892 | \$2,461,305 | \$15,071,829 |
| Discounts / Gross Charges | 29% | 29% | 30% | 30% | 32% | 30% |
| Net Collections / Net Charges | 83% | 85% | 84% | 85% | 87% | 85% |
| Uncollected Balance / Net Charges | 17% | 15% | 16% | 15% | 13% | 15% |

*Footnote: Based on patient's resident status

**Fairfax County
Office of Financial and Program Audit**

This information is being presented as context to the discussion above. Some alternative financial practices could be employed to enhance revenue and provide cost mitigation (relief to the general fund) to provide these services to our constituents should any consideration be deemed appropriate.

EMS County Residents Ground Transports Claims Billing Analysis



BOS Settled Policy Item Discussion

Given the Board of Supervisors' settled policies under which these EMS services are provided, OFPA is not recommending a remedy to the financial exposure reported in this study. The data provided is presented for advisory purposes.

While keeping in view our constituents' contribution to the general fund through various levied taxes, I respectfully mention (*without recommendation*) the consideration of a modified billing mechanism for receivables currently abated through our write-off process. This could also be facilitated through added efforts from our contracted collections vendor NCC. These considerations could reduce some of the claims' revenue leakage.

STUDY AREA 2

EMS NON-BILLED COUNTY RESIDENT TRANSPORTS ANALYSIS

Observation

We reviewed EMS transports to County residents that were never billed due to unidentifiable patient information. For these transports, neither the receiving hospital nor EMS staff obtained Personal Identifiable Information (PII) from the patient. In these instances, the patient cannot be billed for the transport. As purported by EMS management, examples of instances where medical staff were unable to obtain relevant billing information include transports from homeless shelters, or if the patient was in custody at the time of the transport.

OFPA analysis identified **22,431** such transports from FY2017-FY2021. The gross charges for these transports were **~\$14 million**; all of these charges were uncollected. Inova Fairfax Hospital processed **8,130** transports from FY2017-FY2021 that were never billed because medical staff did not obtain PII from the patient. The gross charges for these transports were **~\$5.2 million**.

The tables below detail the financial exposure resulting from these transports.

| EMS County Residents Unpaid / Written off / Unresolved Bills | | |
|---|---------------------|---------------|
| Financial Year | Amount (\$) | Count |
| FY2017 | \$3,067,428 | 4,981 |
| FY2018 | \$3,038,640 | 4,939 |
| FY2019 | \$2,859,476 | 4,634 |
| FY2020 | \$2,696,898 | 4,120 |
| FY2021 | \$2,355,195 | 3,757 |
| Total | \$14,017,638 | 22,431 |

Fairfax County
Office of Financial and Program Audit

**EMS County Residents* Ground Transports w/o Billings
Due to Unidentifiable Patient Information
or Other Designations as Asserted by EMS**

| Hospital | Total (FY2017-FY2021) | |
|-----------------------------|------------------------|---------------|
| | Amount (\$) | Count |
| INOVA FAIRFAX HOSPITAL | \$5,215,462.80 | 8,130 |
| MOUNT VERNON HOSPITAL | \$2,219,138.00 | 3,690 |
| RESTON HOSPITAL CENTER | \$1,955,421.60 | 3,166 |
| INOVA FAIR OAKS HOSPITAL | \$1,671,110.80 | 2,635 |
| INOVA ALEXANDRIA HOSPITAL | \$1,144,410.40 | 1,906 |
| SPRINGFIELD HEALTHPLEX | \$566,023.60 | 937 |
| VIRGINIA HOSPITAL CENTER | \$579,498.00 | 931 |
| INOVA LORTON HEALTHPLEX | \$279,702.00 | 461 |
| FORT BELVOIR COMM HOSPITAL | \$85,158.00 | 132 |
| FAIRFAX EMERGENCY CARE CTR | \$78,039.20 | 129 |
| STONE SPRING EMERGENCY CTR | \$71,728.40 | 104 |
| WASHINGTON HOSPITAL CTR | \$27,584.00 | 31 |
| SENTARA NORTHERN VA MED CTR | \$18,200.00 | 28 |
| RESTON EMERGENCY CARE CTR | \$15,289.60 | 26 |
| CHILDRENS NATIONAL MEDICAL | \$16,688.80 | 23 |
| DEWITT ARMY HOSPITAL | \$11,144.00 | 18 |
| PRINCE WILLIAM HOSPITAL | \$12,393.60 | 16 |
| GEORGE WASHINGTON UNIVERS | \$12,120.80 | 16 |
| LOUDOUN HOSPITAL CENTER | \$10,842.80 | 13 |
| SIBLEY HOSPITAL | \$7,402.40 | 11 |
| GEORGETOWN HOSPITAL | \$5,888.80 | 8 |
| CAREFLIGHT | \$4,779.20 | 8 |
| FREEFORM | \$5,170.40 | 7 |
| INOVA HEALTHPLEX ASHBURN | \$2,546.40 | 3 |
| VETERANS AFFAIRS MED CTR | \$1,894.00 | 2 |
| Grand Total | \$14,017,637.60 | 22,431 |

**Footnote: Based on patient's resident status*

**Fairfax County
Office of Financial and Program Audit**

Recommendation

Purported by EMS management, hospitals provide Patient Identifiable Information (PII) to EMS management to facilitate the billing process.

We recommend staff develop a process to analyze the gaps between patient intake, discharge, and collection of PII. The results of these analyses should be used to identify the root causes for the PII collection failures.

OFPA Data Scientists data-mined the records to identify and rank the providers that are contributing to this revenue leakage. We further recommend the staff start the analysis by focusing on the top 5 service providers.

Action Plan

| Point of Contact | Target Implementation Date | Email Address |
|--|----------------------------|--|
| Daniel Shaw (Assistant Fire Chief) | 10/31/2022 | Dan.Shaw@fairfaxcounty.gov |
| Mark Kordalski (Deputy Fire Chief) | | Mark.Kordalski@fairfaxcounty.gov |
| Chinaka Barbour (Fiscal Services Division Director) | | Chinaka.Barbour@fairfaxcounty.gov |
| Arsenio DeGuzman (Program Manager, EMS Billing/Accounting) | | Arsenio.Deguzman@fairfaxcounty.gov |

MANAGEMENT RESPONSE:

The billing information collection and contract monitoring activities in place are the same for both County residents and non-residents with only one exception on the payment receiving end. The sole exception is when County residents provide insurance information, FRD accepts whatever the patient's insurance pays as payment in full and waives any remaining out-of-pocket co-payment or deductible requirements. Consequently, FRD's response to this recommendation is the same as in slide 12 above.

22,431 of 208,838 (or 10.7%) of County resident incidents that were deemed unbillable during the coding and claim submission process.

FRD will immediately reinforce the daily billing information collection and contract monitoring activities already in place to further ensure errors are minimized to the greatest extent possible.

STUDY AREA 3
EMS CONTRACTORS DATA ENTRY ERRORS ANALYSIS
FOR COUNTY RESIDENTS' TRANSPORTS

Observation

We reviewed EMS transport data for County residents to identify errors in billings. OFPA analysis revealed four types of billing errors for these transports: duplicate line-items, incorrect mileage charges, incorrect transport mileage, and discounts exceeding gross charges.

We identified 82 duplicate transports from FY2017-FY2021. These line-items share identical unique identifiers but have different gross charges recorded. As purported by EMS management, duplicate line-items reflect billing adjustments that were made to earlier transports.

- 1,783 transports from FY2017-FY2021 where the mileage charge was calculated incorrectly. Mileage incurred for EMS transports is charged at \$12/mile. For these transports, the mileage charge was lower than \$12/mile.
- 31 transports from FY2017-FY2021 where the transport mileage was recorded incorrectly.
- 25 transports from FY2017-FY2021 where the discounts exceed the gross charge of the bill.

~62% of 1,921 total errors occurred in FY2018 (staffing changes at billing vendor); as purported by EMS management, these transports were coded incorrectly by the billing vendor in 2017 due to staffing changes.

OFPA reviewed the contract between the County and Change Healthcare, LLC and found no performance measures pertaining to billing accuracy.

**Fairfax County
Office of Financial and Program Audit**

Recommendation

Based on our review of the contract, no performance measures for this contractor could be identified. In the absence of performance measures, we recommend that staff liaise with Change Healthcare to develop a process to track errors and identify root causes.

This information should be used to implement processes to reduce errors and staff rework. Rework by staff comes at a financial cost and additional labor hours.

Action Plan

| Point of Contact | Target Implementation Date | Email Address |
|--|----------------------------|--|
| Daniel Shaw (Assistant Fire Chief) | 10/31/2022 | Dan.Shaw@fairfaxcounty.gov |
| Mark Kordalski (Deputy Fire Chief) | | Mark.Kordalski@fairfaxcounty.gov |
| Chinaka Barbour (Fiscal Services Division Director) | | Chinaka.Barbour@fairfaxcounty.gov |
| Arsenio DeGuzman (Program Manager, EMS Billing/Accounting) | | Arsenio.Deguzman@fairfaxcounty.gov |

MANAGEMENT RESPONSE:

The billing information collection and contract monitoring activities in place are the same for both County residents and non-residents with only one exception on the payment receiving end. The sole exception is when County residents provide insurance information, FRD accepts whatever the patient's insurance pays as payment in full and waives any remaining out-of-pocket co-payment or deductible requirements. Consequently, FRD's response to this recommendation is the same as in slide 17 above.

1,921 out of 208,838 (or 0.9%) of data entry errors for County resident transports which exit in a multi-source summary report.

FRD will reinforce the existing daily billing information collection and contract monitoring activities to further ensure errors are minimized to the greatest extent possible.

STUDY AREA 4
EMS BILLING CONTRACTORS PROCESSING TIME ANALYSIS
FOR COUNTY RESIDENTS' TRANSPORT

Observation

We reviewed the processing time for EMS transport bills issued to County residents. FCFRD contracts with a third-party vendor to process EMS bills: Med3000 from FY2017-FY2019, and Change Healthcare LLC from FY2020-FY2021. For claims with adequate billing information, ~86% of bills were processed between 0-30 days after transport. Less than 1% of bills were processed over 180 days after transport.

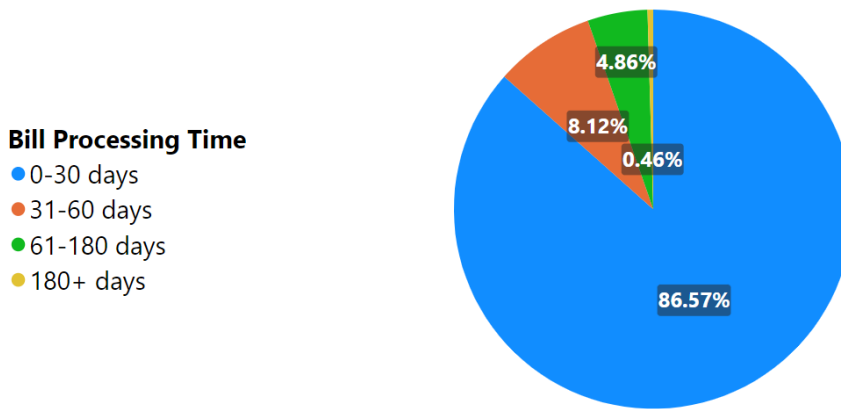
As purported by EMS management, there are situations for which bill processing time can be significantly delayed; examples of these include patients involved in traffic accidents or legal settlements

The table and graph below detail the bill processing time for claims with adequate billing information.

| EMS Billing Contractors County Residents Processing Time* (Med3000 FY17-FY19/Change Healthcare FY20-FY21), Contractor Billing Between FY17-FY21 | | |
|---|---------|------------|
| Bill Processing Time | Counts | Percentage |
| 0-30 days | 158,382 | 86.6% |
| 31-60 days | 14,853 | 8.1% |
| 61-180 days | 8,884 | 4.9% |
| 180+ days | 843 | 0.5% |

**For claims with adequate billing information*

EMS County Residents Bill Processing Time*, FY2017-FY2021



**For claims with adequate billing information*

Conclusion

OFPA finds this process acceptable. **We Pass Further Audit Work (PFAW).**

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**STUDY AREA 5
EMS VEHICLE REPLACEMENT ANALYSIS**

Observation

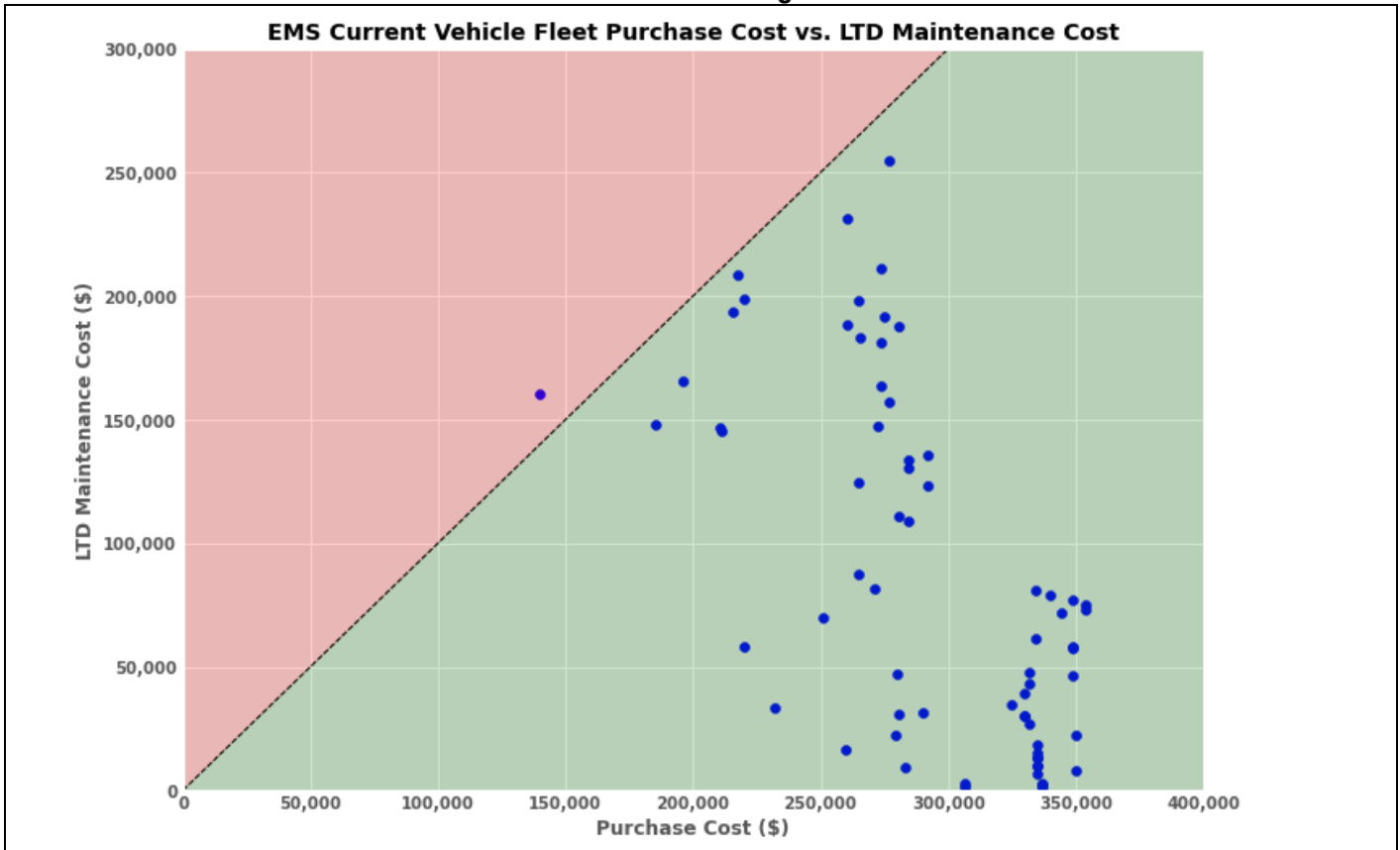
We reviewed the EMS vehicle fleet to identify rolling stock exceeding useful life, mileage, or other criteria. Vehicles that meet these criteria should be replaced to avoid excessive maintenance costs. As purported by EMS management, EMS transport units have a 10-year life cycle—5 years in front line service and 5 years in reserve fleet service. There is no minimum mileage requirement for a vehicle’s retirement from the fleet.

OFPA analysis identified **8** vehicles in service for over 10 years, beyond the lifespan for EMS transport units. Of these, 1 vehicle incurred a maintenance cost (~\$160k) exceeding its purchase price (~\$140k).

The table and graph below detail the replacement analysis performed by OFPA.

| EMS Fleet Maintenance v. Purchase Price Analysis <i>EMS Replacement Criteria is 10-Year Life Cycle- 8 Identified</i> | | | | | | | |
|--|------------|----------------|--------------|--------------|--------------|-------------|------------------|
| Vehicle ID | Model Year | Purchase Price | Parts Exp. | Labor Exp. | Total Maint. | Maint./Pur. | Years In Service |
| V070 | 2003 | \$140,000.00 | \$56,666.33 | \$84,361.32 | \$160,066.22 | 114.33% | 18 |
| V802 | 2006 | \$196,175.00 | \$65,492.52 | \$79,733.90 | \$165,698.69 | 84.46% | 16 |
| V382 | 2007 | \$210,231.85 | \$66,971.90 | \$73,586.77 | \$146,729.90 | 69.79% | 15 |
| V504 | 2009 | \$215,809.00 | \$85,852.76 | \$86,783.62 | \$193,505.72 | 89.67% | 13 |
| V383 | 2011 | \$277,000.00 | \$77,000.17 | \$71,976.45 | \$157,095.61 | 56.71% | 11 |
| V805 | 2011 | \$260,548.00 | \$120,762.05 | \$101,830.22 | \$231,606.97 | 88.89% | 11 |
| V231 | 2012 | \$260,548.00 | \$102,084.44 | \$80,487.74 | \$188,303.36 | 72.27% | 11 |
| V804 | 2012 | \$277,000.00 | \$120,462.48 | \$97,285.65 | \$254,578.48 | 91.91% | 11 |

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Recommendation

We recommend staff review vehicles which exceed replacement criteria. These vehicles should be brought into consideration for updating the fleet.

General Services Administration/Office of Inspector General minimum fleet replacement standards' guidance for:

- Non-Diesel Ambulances – **7 years or 70,000 miles.**
- Diesel Ambulances – **7 years or 100,000 miles.**

While the years-in-service requirements exist; given the criticality of the functions provided by our fleet, we also recommend the consideration of employing mileage replacement standards.

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Action Plan

| Point of Contact | Target Implementation Date | Email Address |
|---|----------------------------|--|
| Daniel Shaw (Assistant Fire Chief) George Robbins (Fire Battalion Chief) Chinaka Barbour (Fiscal Services Division Director) | 10/31/2022 | Dan.Shaw@fairfaxcounty.gov George.Robbins@fairfaxcounty.gov Chinaka.Barbour@fairfaxcounty.gov |

MANAGEMENT RESPONSE:

The vehicles included in slide 51 are volunteer owned and do not maintain the same replacement standard as County-owned vehicles

FRD will continue to evaluate the current replacement plan with Department of Management and Budget and Department of Vehicle Services.

The current replacement plan of 10 years includes 5 years in front line service and 5 years in reserve status. While a mileage standard for vehicle replacement does not exist, we will work with leadership on the recommendation.

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STUDY AREA 6

HELICOPTER DIVISION COUNTY RESIDENT MEDEVAC TRANSPORTS

Observation

OFPA reviewed the Helicopter Division Medevac trips made in support of FCFRD's EMS services when air support is necessary.

There were **27** flight hours of Medevac trips within the County between FY2019-FY2021. Only **2.6%** of County Resident flight hours were associated with Medevac trips.

The Helicopter Division does not bill for Medevac transports. Purported by FCPD Helicopter Division management, "the County does not have the 14 CFR Part 135 Air Carrier and Operator Certification which is needed to bill for these transports." We've reviewed this assertion with the FCPD Helicopter Division; they concur with our conclusion.

| Operating Expense (Helicopter Medevac Trips) Fairfax County ¹ | | | | | | | | |
|--|--------------|-------------------|--------------|-------------------|--------------|-------------------|----------------------|-------------------------|
| Fiscal Year | FY2019 | | FY2020 | | FY2021 | | FY2019-FY2021 Totals | |
| Jurisdictions | Flight Hours | Operating Expense | Flight Hours | Operating Expense | Flight Hours | Operating Expense | Total Flight Hours | Total Operating Expense |
| Alexandria | 2.9 | \$2,837 | 0.7 | \$685 | 0 | \$0 | 3.6 | \$3,522 |
| Annandale | 0.7 | \$685 | 1.8 | \$1,761 | 0 | \$0 | 2.5 | \$2,446 |
| Burke | 0 | \$0 | 0.8 | \$783 | 0 | \$0 | 0.8 | \$783 |
| Centreville | 2.6 | \$2,543 | 1.5 | \$1,467 | 0 | \$0 | 4.1 | \$4,011 |
| Chantilly | 0 | \$0 | 1 | \$978 | 0 | \$0 | 1 | \$978 |
| Clifton | 0.7 | \$685 | 0.3 | \$293 | 0 | \$0 | 1 | \$978 |
| Fairfax | 1.4 | \$1,370 | 2 | \$1,956 | 1 | \$978 | 4.4 | \$4,304 |
| Fairfax Station | 1.4 | \$1,370 | 0 | \$0 | 0 | \$0 | 1.4 | \$1,370 |
| Falls Church | 0.6 | \$587 | 0 | \$0 | 0 | \$0 | 0.6 | \$587 |
| Great Falls | 0 | \$0 | 0 | \$0 | 0.6 | \$587 | 0.6 | \$587 |
| Herndon | 1.2 | \$1,174 | 1.5 | \$1,467 | 0 | \$0 | 2.7 | \$2,641 |
| Lorton | 0 | \$0 | 0 | \$0 | 0.3 | \$293 | 0.3 | \$293 |
| McLean | 0 | \$0 | 0.7 | \$685 | 0 | \$0 | 0.7 | \$685 |
| Oakton | 0 | \$0 | 0.8 | \$783 | 0 | \$0 | 0.8 | \$783 |
| Reston | 0.7 | \$685 | 0 | \$0 | 0 | \$0 | 0.7 | \$685 |
| Springfield | 0 | \$0 | 1 | \$978 | 0.8 | \$783 | 1.8 | \$1,761 |
| Woodbridge | 0 | \$0 | 0.6 | \$587 | 0 | \$0 | 0.6 | \$587 |
| Total | 12.2 | \$11,934 | 12.7 | \$12,423 | 2.7 | \$2,641 | \$28 | \$26,999 |

Footnote (1): Data compilation based on patient residency

Conclusion

OFPA finds incorporating Medevac billing to be cost prohibitive.
We Pass Further Audit Work (PFAW)

Fairfax County
Office of Financial and Program Audit

ADDENDUM SHEET

OFPA (September 2022 /Agency Report and/or Debriefing)

9/20/2022

The table below lists discussions from the Audit Committee.

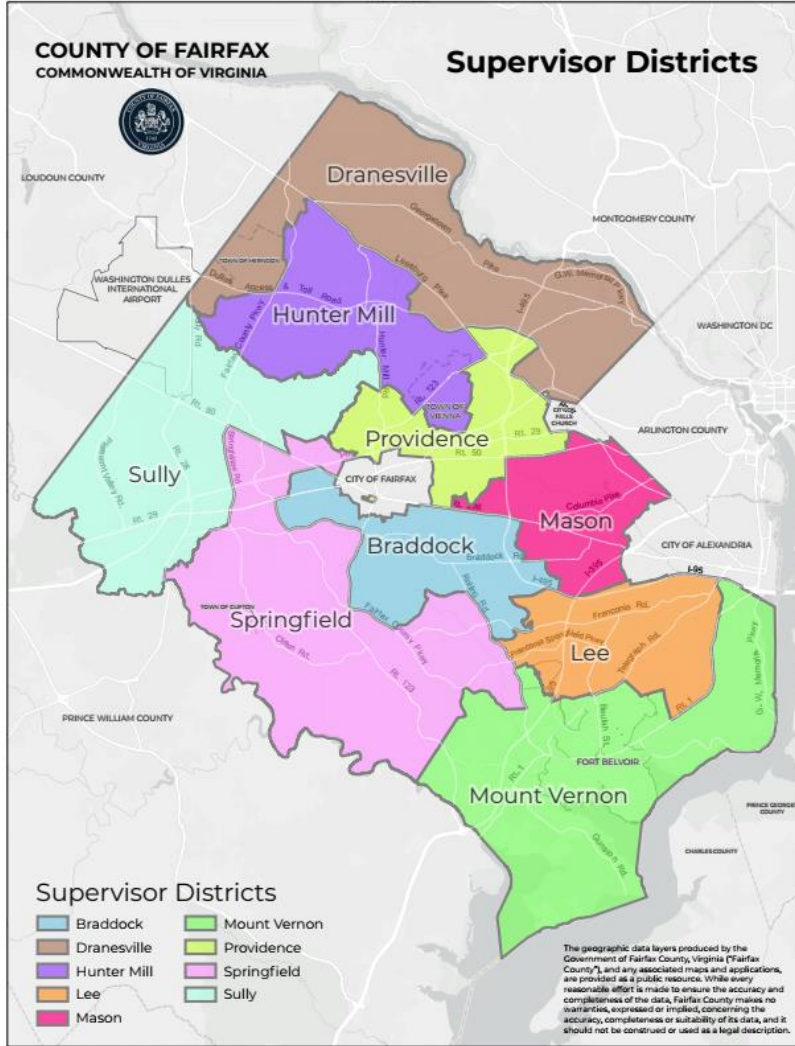
| <i>Location in Report</i> | <i>Comments</i> |
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**Fairfax County
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LIST OF ACRONYMS

| | |
|-------|---|
| AC | Audit Committee |
| ALS | Advanced Life Support |
| BLS | Basic Life Support |
| BOS | Board of Supervisors |
| CFR | Code of Federal Regulations |
| DIT | Department of Information Technology |
| DOF | Department of Finance |
| DR | Disaster Recovery |
| EHLF | Emergency Helicopter Landing Facility |
| EMS | Emergency Medical Service |
| FAA | Federal Aviation Administration |
| FATO | Final Approach and Takeoff |
| FCFRD | Fairfax County Fire and Rescue Department |
| FCPD | Fairfax County Police Department |
| FOCUS | Fairfax County Unified System |
| HPZ | Heliport Protection Zone |
| LLC | Limited Liability Company |
| MAA | Mutual Aid Agreement |
| NCC | Nationwide Credit Corporation |
| OCA | Office of County Attorney |
| OFPA | Office of Financial and Program Audit |
| PFAW | Pass Further Audit Work |
| PII | Patient Identifiable Information |
| TDPC | Touchdown/Positioning Circle |
| TLOF | Touchdown and Liftoff Area |

**Fairfax County
Office of Financial and Program Audit**



**FAIRFAX COUNTY BOARD OF SUPERVISORS
AUDITOR OF THE BOARD**
www.fairfaxcounty.gov/boardauditor
Office of the Financial and Program Audit
12000 Government Center Parkway, Suite 233
Fairfax, Virginia 22035