

***Performance Audit***

***EMS Reimbursable Expenditure Reporting  
By Volunteer Fire Departments***

***Durham County Audit Department***

***November 17, 2010***

# EXECUTIVE SUMMARY

October \_\_ 2010

Durham County

Internal Audit Department

(919) 560-0042



## ***Performance Audit: EMS Reimbursable Expenditure Reporting by Volunteer Fire Departments***

### ***Why We Did This Audit***

This audit was conducted to determine if the four VFDs with EMS operations appropriately accounted for the funds allocated to it by the County. Specific questions were:

- Is expenditure reporting accurate and reliable?
- Are expenditures related to EMS operations?

### ***What Is Recommended***

1. Restructure EMS contracts to correct the conflicting expenditure reimbursement clause and provide a detailed list of reimbursable expenses.
2. Provide guidance as necessary to assist VFD representatives to devise more reliable information gathering, storage, and expense reporting systems.
3. Encourage VFD representatives to report expenditures on the forms provided and in accordance with established instructions.
4. Require, in cooperation with the Fire Marshal, VFD's to comply with financial audit requirements as stated in the VFD contracts.

### ***What we found***

Expenditure reports provided by VFDs to the County's EMS Director were generally supported by expenditure documents. Also, expenditure documentation provided evidence that expenditures related to EMS activity. However, several enhancements are needed to improve oversight and strengthen the expenditure reporting process. Additionally, the VFDs need to conduct financial audits in accordance with contract provisions between them and the Fire Marshal in order for the County to have a clearer picture of the entity's financial position. Specifically we found that:

- Contracts between the VFDs and EMS Department are outdated,
- Expenditure reporting improvements are needed,
- Reporting was not standard among the various VFDs, and
- VFDs are not fully compliant with contractual requirements for annual financial audits.

For more information regarding this report, please contact Richard Edwards at 919.560.0042 or [rcedwards@durhamCountync.gov](mailto:rcedwards@durhamCountync.gov).

---

## ***EMS Directors Response to Audit Recommendations***

---

Recommendation 1: Restructure EMS contracts to correct the conflicting expenditure reimbursement clause and provide a detailed list of reimbursable expenses.

EMS Response: We will begin drafting revised contracts to provide the necessary guidance on expenditure reporting, including a detailed list of reimbursable expenses. Our target date for completing contract revisions is January 1, 2011.

Recommendation 2: Provide guidance as necessary to assist VFD representatives to devise more reliable information gathering, storage, and expense reporting systems.

EMS Response We will begin by October 20, 2010 to seek advice from the Finance Department regarding practices and procedures to gather, record, and store information. We will communicate the results to the VFDs by December 20, 2010.

Recommendation 3: Encourage VFD representatives to report expenditures on the forms provided and in accordance with established instructions.

EMS Response: We will hold discussions with the VFDs during the contracting phase to explain the reporting requirements and the use of various reporting tools as necessary. We anticipate completing this by January 1, 2011 when the revised contracts are executed. Discussions will continue as needed throughout the life of the contract and beyond.

Recommendation 4: Require, in corporation with the Fire Marshal, VFD's to comply with financial audit requirements as stated in the VFD contracts.

Fire Marshal Response: I will work with the Durham County Finance Department to ensure that the financial reporting provided to Durham County meets the intent of the fire contracts. I have meet with Susan Tezai, the Deputy Finance Director in her capacity as a CPA to ensure compliance with an annual audit requirement per her interpretation.



## COUNTY OF DURHAM

**RICHARD EDWARDS**  
Audit Director  
[rcedwards@durhamcountync.gov](mailto:rcedwards@durhamcountync.gov)

### Internal Audit Department

200 E. Main Street, 4<sup>th</sup> Floor  
Durham, NC 27701  
(919) 560-0042  
FAX: (919)560-0057

### AUDIT COMMITTEE

Michael Page  
William Pierce  
Ellen W. Reckhow  
Manuel L. Rojas  
Michael M. Ruffin  
Sid Stroupe

November 17, 2010

Michael M. Ruffin, County Manager:

This audit report of Emergency Medical Service (EMS) reimbursable expenditures at Volunteer Fire Departments (VFDs) was authorized in the fiscal year 2009 Internal Audit Department's Annual Audit Plan. The purpose of the audit was to determine if County funds provided to EMS operations at the VFDs are supported by documentation that relates to EMS activity.

As a result of the audit, we discovered that for the most part, expenditures are documented and relate to EMS activity. However, we discovered several control weaknesses in financial recording and reporting processes that make it more difficult to analyze budget and expenditure information. Several recommendations were made to enhance controls in these areas. Our recommendations focus on providing clearer instructions on expenditure information gathering and reporting, including expanding contracts to include a detailed list of reimbursable expenditure items and encouraging compliance with their contractual requirement with the Fire Marshal's to conduct annual financial audits.

The County's EMS Director agrees with the recommendations and submitted an implementation plan to enhance controls. He has begun working with the Fire Marshal and the County's Finance Department to implement the report recommendations.

Richard Edwards

Audit Director

---

*EMS Reimbursable Expenditure Reporting By Volunteer Fire  
Departments*

---

***Table of contents***

*Introduction*..... 6

*Background* ..... 6

*Audit Objective* ..... 7

*Scope and Methodology*..... 7

*Findings and conclusions*..... 8

*Contract provisions for reimbursable expenses need revision* ..... 8

*Expenditure reporting improvements are needed* ..... 9

*Reporting was not standardized among the various VFDs* ..... 10

*Annual financial audits would strengthen controls*..... 11

*Recommendations*..... 12

  

*Appendices*

*Appendix 1 Audit Response – Mike Smith, EMS* ..... 14

*Appendix 2 Audit Response – Jeff Batten, Fire Marshal* ..... 16

## ***Introduction***

The EMS Department contractually requires VFDs to provide reimbursable expenditure reports quarterly. These reports are used in determining budget requirements for the next fiscal year. The EMS Director, concerned with accuracy and reliability of these reports, asked the Internal Auditor to perform an audit to provide him a greater level of assurance that County funds were being spent as intended.

This performance audit of Volunteer Fire Department EMS expenditures was conducted pursuant to the September 12, 2005, Audit Department Charter which established the Audit Oversight Committee and Audit Department and outlines the internal auditor's primary duties. The Audit Committee authorized this audit in July 2009.

A performance audit is an engagement that provides assurance or conclusions based on an evaluation of sufficient, appropriate evidence against stated criteria, such as specific requirements, measures, or defined business practices. Performance audits provide objective analysis so that management and those charged with governance and oversight can use the information to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.<sup>1</sup>

## ***Background***

North Carolina State Statutes dictate that EMS is a County responsibility. To fulfill this responsibility, the County has contracts with four Volunteer Fire Departments to provide EMS and ambulance service in their Volunteer Fire Districts (VFDs). The four are Bahama, Bethesda, Parkwood and Redwood. VFDs are non-profit entities that operate under a contract arrangement with the County's Fire Marshal. The Fire Marshal provides oversight of Fire Department operations. The EMS Director contracts with the VFDs to provide EMS services and provides oversight for the EMS operation.

The County's EMS Director considers these VFD units effective in reducing the cost of EMS services as well as providing timely medical service and delivery. In FY 2009, according to reports prepared by the VFDs, these departments made 9,258 runs and transported 5,447 patients. This amounted to approximately 31 percent of 30,235 runs and 28 percent of 19,136 patient transports in the County.

According to a County Deputy Manager, prior to the year 2000, the VFDs used their fire tax revenues to support EMS operations. This was determined to be an inappropriate use of fire tax funds. To correct this situation, the County began a program to reimburse VFDs for their EMS expenditures.

The County provides funds from the Health Trust Fund to support these EMS operations. This includes financial support for all expenditures except for overhead. Overhead is not supported because managers reasoned that an

---

<sup>1</sup> Comptroller General of the United States, *Government Auditing Standards*, Washington D.C: U.S. Governmental Accountability Office, 2007, p. 17

EMS operation at a VFD would not significantly impact overhead costs required to operate a VFD facility. In fiscal year 2009, the County provided EMS support of approximately \$ 1.4M to the VFDs. This amounted to approximately 19 percent of the County's EMS expenditures of \$7.5M.

To obtain EMS funding, each VFD submits an annual operating budget request to the County's EMS Director. The EMS Director forwards his recommendation to the Board of County Commissioners for approval. Funds are disbursed to the VFDs quarterly. The EMS Director, through the VFD contracts, requires them to provide a detailed quarterly summary of their EMS expenses.

With one exception, Parkwood, the County provides all EMS related funding. Parkwood, unlike the other VFDs, have an agreement whereby they conduct their own billing and collection processes for EMS services they provide. They depend upon the County to supplement the difference between their uncollected amount and their total EMS expenses.

### ***Audit Objective***

This audit was conducted to determine if the four VFDs were appropriately accounting for the funds allocated to it by the County. Specific audit objective questions were:

1. Is expenditure reporting accurate and reliable?
2. Are expenditures related to EMS operations?

### ***Scope and Methodology***

Fieldwork was conducted May 19, through September 10, 2010. We reviewed expenditure information for FY 2009 and the first three quarters of FY 2010. We based our conclusions upon FY 2009 data because it was the last full year of information available. However, we observed similar activity in FY 2010 as we did in FY 2009. We specifically conducted the following steps:

- Discussed expenditure reporting processes with VFD representatives,
- Reconciled expenditure support documents provided by VFD personnel to expenditure reports provided to the County,
- Discussed financial reporting requirements with Finance Department representatives,
- Reviewed contracts between EMS and the VFDs, and
- Reviewed GAO and other best practices.

## ***Findings and conclusions***

EMS expenditure reports provided by VFDs, although not without error, were generally supported by expenditure documents and the expenditures were for goods and services related to EMS activity. However, several enhancements are needed to improve oversight and strengthen the expenditure reporting process. Additionally, the VFDs need to better comply with their contract with the County Fire Marshal's to conduct annual financial audits. We found that:

- Contracts between the VFDs and EMS are outdated and do not address all expenditures it deems reimbursable,
- Expenditure reporting improvements are needed,
- Reporting was not standard among the various VFDs, and
- VFDs are not fully compliant with contractual requirements for annual financial audits.

### ***Contract provisions for reimbursable expenses need revision***

EMS contracts with the VFDs are outdated and do not provide clarity regarding reimbursable expenditures and expenditure reporting. The current contract was prepared in 2005 and was extended each year without significant changes to its structure. Under contract agreement terms the contract would be reviewed annually and automatically renewed unless specifically modified or terminated.

Our review of the contracts identified that a contract paragraph clause relating to allowable expenditures included contradictory clauses. One clause provided instructions to provide an itemized expense report on a form attached to the contract. The referenced form allowed for 25 reimbursable expenditure categories including salaries, fuel, insurance, and maintenance. However, another clause in the paragraph restricted expenditures to three items; capital expenditures, glove expense,<sup>2</sup> and vehicle replacement.

The result is that as currently written the contract is conflicting regarding expenditure items it will provide reimbursement for. It appears that County and VFD personnel understand what expenses are to be reported as reimbursable, including the glove expense; however, the contract clause needs revision and as well as the contract needs greater specificity in communicating what expenses it will reimburse. Contract with greater specificity provides a better control mechanism.

The EMS Director said the reason the contracts have not been restructured is because he has been coping with changes such as less budget and more requirements which has not permitted a lot of time to consider control issues. The Director said in the course of running the department, he is enhancing controls as he becomes aware of issues and risks. He said his reason for

---

<sup>2</sup> Glove expenses are not a line item on the expenditure report form; however, glove expense has been interpreted and understood to represent expenditures for medical supplies such as bandages and gauze.



requesting this audit was to acquire additional information into control weaknesses.

### ***Expenditure reporting improvements are needed***

Documentation to reconcile reimbursable expenditures was available for most of the VFD's fiscal year 2009 reimbursable expenditures and expenses were related to EMS activity. However, over-reporting (expenses without documentation) and under-reporting (unreported, documented expenses) for specific line item expenditures were widespread. Although such errors were widespread they did materially affect the bottom line of the expenditure reports. Additionally, we do not believe fraud or abuse was an issue. Based upon our analysis, we believe their line item results indicate a need for enhanced record keeping and recording methods.

We reviewed and reconciled expenditure information such as receipts, invoices, payroll, and other records to within less than 1 percentage (0.94 %) point of the reimbursement report amounts. The combined expenditure amount for the four VFDs was \$2,539,591 and we reconciled \$2,515,806 of that amount, a variance of \$23,785.

The results of the expenditure reconciliation are in the table below. This table does not attempt to itemize the variances but only explain the primary reasons for variances.

### ***Fiscal Year 2009 Expenditure Reconciliation Results***

Station	Expenses Reported	Reconciled Amount	Variance	% Diff.	Primary Reason For Variance
Bahama	\$130,332	\$128,466	\$1,866	1.43	Several items made up this variance including a \$4,185 FY 2010 training expense reported in FY 2009. Unreported expenses offset this amount. For example, underreporting for salary, maintenance, fuel, and office supply expenses largely offset this error.
Bethesda <sup>3</sup>	\$304,246	\$283,197	\$21,049	6.92	Wage and benefit data used to calculate salary expenses differed from salary and wage figures provided by our finance department payroll unit although SAP was reportedly the source of both sets of data.
Parkwood	\$1,906,815	\$1,906,265	\$550	0.03	Several expenses were unreported while several were undocumented. For example, education expenses of \$1,014 were undocumented while a \$1,189 insurance premium payment was unreported.
Redwood	\$198,198	\$197,878	\$320	0.16	Several expenses were undocumented; the larger being a \$1,844 estimated fuel expenditure. Although undocumented, the estimate appeared to be reasonable and was included in the reconciled amount.
<b>Totals</b>	<b>\$2,539,591</b>	<b>\$2,515,806</b>	<b>23,785</b>	<b>0.94</b>	

**Source:** Internal Audit Department

Although we reconciled most expenditure items, we identified potential areas for which enhancements are needed to improve expenditure recording

<sup>3</sup> Bethesda provides estimated expenses that are subsequently reconciled however, reconciled reports are not provided to the EMS Department.

practices. For example, we found expenditures reported on the wrong line and numerous instances of over and under-reporting. One over-reporting variance we identified was \$21,049 at Bethesda VFD.<sup>4</sup>

We made several unsuccessful attempts to determine the cause of Bethesda's variance, which was primarily related to salary expense computations. We calculated salary expenses using actual payroll data provided by the County's Payroll Division in the Finance Department. Bethesda also used Finance Department data provided to them by the Fire Marshal's office. However for reasons we could not determine we were unable to produce comparable results.

Although the recording errors did not materially affect overall expenditure reporting, such errors negatively impact the ability to analyze expenditure information. The following exhibit demonstrates the prevalence of reporting errors.

### ***Reporting discrepancies***

Department	# reporting Lines	# lines with errors	% errors	\$ Range of over-reporting	\$ Range of under-reporting
Bahama	10	7	70%	\$44 - \$4,185	\$32 - \$1,256
Bethesda	7	5	72%	\$7 - \$21,518	\$0 - \$329
Parkwood	23	14	61%	\$3 - \$855	\$0.37 - \$1,189
Redwood	14	3	22%	\$103 - \$1844	\$0 -

**Source:** Internal Auditors

Recording errors of this magnitude undermines the reliability of the report. If the information is to be useful for analysis and decision making, the reliability should be improved. We do not believe the errors were made because of lack of effort on the part of VFD administrators, but more because of the manual nature of the systems they employ. Going forward, VFD administrators need to be encouraged and motivated to be more diligent in conducting their financial recording and reporting processes. We recommend that the EMS Director provide additional instructions regarding data acceptable for calculating expenditures including salary, and should promote standardized procedures for all the VFDs. Representatives at Bethesda and the other VFDs said they would follow any additional expenditure reporting instructions they are provided.

### ***Reporting was not standardized among the various VFDs***

As can be seen in the above exhibit, reporting among the various VFDs is not standard. The operations are basically the same at all the VFDs, however, reporting varies. For example, Bethesda reports its expenditures on seven lines while Parkwood uses 23 lines. While both are capturing their expenditures, the categories of expenditures are broadened when reporting

---

<sup>4</sup> Bethesda's variance was based upon the expenditure report provided to the EMS Director. Bethesda subsequently reconciled its expenses and provided revised salary expenditure amounts. The variance for the latest information amounted to \$10,986. We did not use that variance in this audit report because the reconciled expenditure report was not provided to the EMS Director.

on fewer lines. This can have the effect of analysis being less reliable without more extensive exploration of the items contained within the lines. Also, Bethesda provides end-of-year estimates for its expense report while others provide a more up-to-date expenditure report. Bethesda later reconciles its expenditures, however, the reconciled report is not provided to the County's EMS Department for review and analysis.

If reports are to be useful as a management tool, there needs to be a level of standardization among them. Having VFDs provide reports in a more standardized manner would provide the reviewer the opportunity to review all reports more comparatively. Representatives from each of the VFDs indicated a willingness to report expenditures consistent with the financial reporting needs of the County as well as with the needs of the EMS department. VFD representatives also said they report in a manner they think is satisfactory to EMS and have been doing it that way because they have not been instructed otherwise.

### ***Annual financial audits would strengthen controls***

Audits provide managers and others the opportunity to see the cash activity (e.g., inflows and outflows for operating, investing and financing activities) that occurred during the year. The Fire Marshal's contract with the VFD's requires an annual audit of the entity by a certified public accounting firm in conformity with Generally Accepted Government Auditing Standards. Considering the reporting weaknesses identified above, annual financial audits would provide a greater level of report reliability than currently exists.

An audit of financial statements is a review of a legal entity's financial statements that results in the publication of an independent opinion on whether or not those financial statements are relevant, accurate, complete, and fairly presented in all material aspects. In fiscal year 2009, three of the VFDs provided financial information from a certified accounting firm; however, only one of them met the criteria for an audit by including an opinion statement. Of the other two submissions, one was a "review" and one was a "compilation," neither of which provides assurance to the report user that the financial statements are fair representations of the financial condition of the entity.

We believe a financial audit meeting the criteria in the Fire Marshal's contract with the VFD will provide a greater level of assurance regarding the reliability of data presented by the VFDs. An audit normally requires testing of the financial statements before an opinion is rendered whereby a compilation or a report does not. Thus, we believe added reliability in regards to EMS expenditures would follow.

Each VFD's Chief expressed willingness to provide audits although they were concerned about the costs. The County's Fire Marshal, likewise, is willing to encourage VFDs to provide an audit and has met the Finance Department regarding how to proceed. The Fire Marshal has also discussed the audit situation with VFD representatives.

We agree that audits are costly and can be a financial strain on lesser capitalized entities. To remedy this situation, the Fire Marshal and the Finance Department may want to consider alternatives such as requiring audits every other year or every three years after they gain a level of confidence in the entity's financial operations.

## ***Recommendations***

To obtain more assurance that expenditure reporting is reasonably accurate and reliable, we recommend that the EMS Director implement recommendations one through three. We recommend that the Fire Marshal implement recommendation four. It is our opinion that over time implementation of these recommendations will provide an avenue for enhanced cooperation between EMS and VFDs to produce more accurate and reliable reports. Thus, the recommendations are:

1. Restructure contracts to correct the conflicting expenditure reimbursement clause and provide a detailed list of reimbursable expenses.
2. Provide guidance as required to assist VFD representatives to devise more reliable information gathering, storage, and expense reporting systems.
3. Encourage VFD representatives to report expenditures on the forms provided and in accordance with established instructions.
4. Require, in cooperation with the Fire Marshal, VFD's to comply with financial audit requirements as stated in the VFD contracts.

**Appendix 1**



**COUNTY OF DURHAM**  
**Emergency Medical Services**  
**MEMORANDUM**



**TO:** Richard Edwards,  
Internal Auditor

**FROM:** Mike Smith, EMS System Director

**DATE:** October 15, 2010

**RE:** County Volunteer Fire Department Audit

I have reviewed your report in reference to the results of the County audits performed at each of the four Durham County Fire/EMS Departments and Parkwood and wanted to let you know that I agree with your findings and have begun to address the findings in a new updated contract to provide EMS within the County. I do agree that all four departments must follow the same format and procedures so as to be consistent with all normal and usual accounting practices. I also agree that the Parkwood issue has to be addressed from both the fire and EMS side as to the use of the procurement cards and their not reconciling their charges each month. What was discovered in the audit is not a good practice and must be addressed to mandate this practice discontinue and monthly reconciliation has to occur. Jeff and I have talked about the issues from both the fire and EMS side and both of us are going to provide language in the contracts that will be consistent from both sides and require what is needed to comply. We will be asking for input from both Audit and Finance to assure we have covered everything that the County and EMS and Fire needs from their expense and revenue reports.

As to the specific recommendations, our action plans are provided below:

Recommendation 1: Restructure contracts to correct the conflicting expenditure reimbursement clause and provide a detailed list of reimbursable expenses.

Response: We will begin drafting revised contracts to provide the necessary guidance on expenditure reporting, including a detailed list of reimbursable expenses. Our target date for completing contract revisions is January 1, 2011

Recommendation 2: Provide guidance as required to assist VFD representatives to devise more reliable information gathering, storage, and expense reporting systems.

Response: We will begin by October 20, 2010 to seek advice from the Finance Department regarding practices and procedures to gather record and store information. We will communicate the results to the VFDs by December 20, 2010.

Recommendation 3: Encourage VFD representatives to report expenditures on the forms provided and in accordance with established instructions.

Response: We will hold discussions with VFDs during the contracting phase to explain the reporting requirements and the use of various reporting tools as necessary. We anticipate completing this process by January 1, 2011 when the revised contracts are executed. Discussions will continue as needed throughout the life of the contract and beyond.

Recommendation 4: Require VFD's to comply with financial audit requirements as stated in the VFD contracts.

Response: We support the Fire Marshal's efforts to encourage financial audits.

Thank you and Brian for performing these audits and assuring the citizens of Durham County can be confident their contributions toward fire and EMS are being spent wisely and legally.

A handwritten signature in black ink that reads "Michael W. Smith". The signature is written in a cursive style with a large, looped initial "M".

Mike Smith  
System Director

## Appendix 2

### Audit Response – Jeff Batten, Fire Marshal



**COUNTY OF DURHAM**  
Office Of The Fire Marshal  
Division Of Emergency Management

Jeffrey L. Batten  
Fire Marshal / Emergency Management Director

October 15, 2010

Mr. Richard Edwards, Internal Audit Director  
County of Durham  
200 East Main Street  
Durham NC 27701

Dear Mr. Edwards:

SUBJECT: Performance Audit – Volunteer Fire Departments EMS Expenditure Reporting

Per your request, I have reviewed the above-mentioned document. I feel it appropriate that my comments only address recommendation number 4 on page 2, "Require in cooperation with the Fire Marshal, VFDs to comply with financial audit requirements as stated in the VFD contracts."

In response, I will work with the Durham County Finance Department to ensure that the financial reporting provided to Durham County by the volunteer fire departments meets the intent of the fire contracts that Durham County has with the service provider. I have already met several times with Susan Tezai, Deputy Finance Director for Durham County for guidance in her capacity as a CPA, to ensure compliance with an annual audit requirement per her interpretation. This audit is required for financial reporting per the Financial Accounting Standards Board (FASB), Accounting Standards Codification (ASC), Topic 958, "Not-for-Profit Entities, Subtopic 205, Presentation of Financial Statements."

In response to page 8 of your report, several section, "VFDs do not comply with annual financial audit contract requirements: As stated above, I will work to ensure compliance. I also agree with the statement by fire department representatives, that they have turned in annual financial information. However, it is in different formats with different levels of information provided. I also agree that until this audit, no one has advised them that this information is inadequate. Again, this office will require financial reports in a standard format that meets the intent of applicable financial reporting standards.

Should you require further information, please feel free to contact me.

Sincerely,

Jeffrey L. Batten  
Durham County Fire Marshal/  
Emergency Management Director

2422 Broad Street • Durham • NC 27704 • Phone: (919) 560-0660 • Fax: (919) 560-0670  
"The Fire Service is a Proud and Serious Profession. Help Us – Help You."