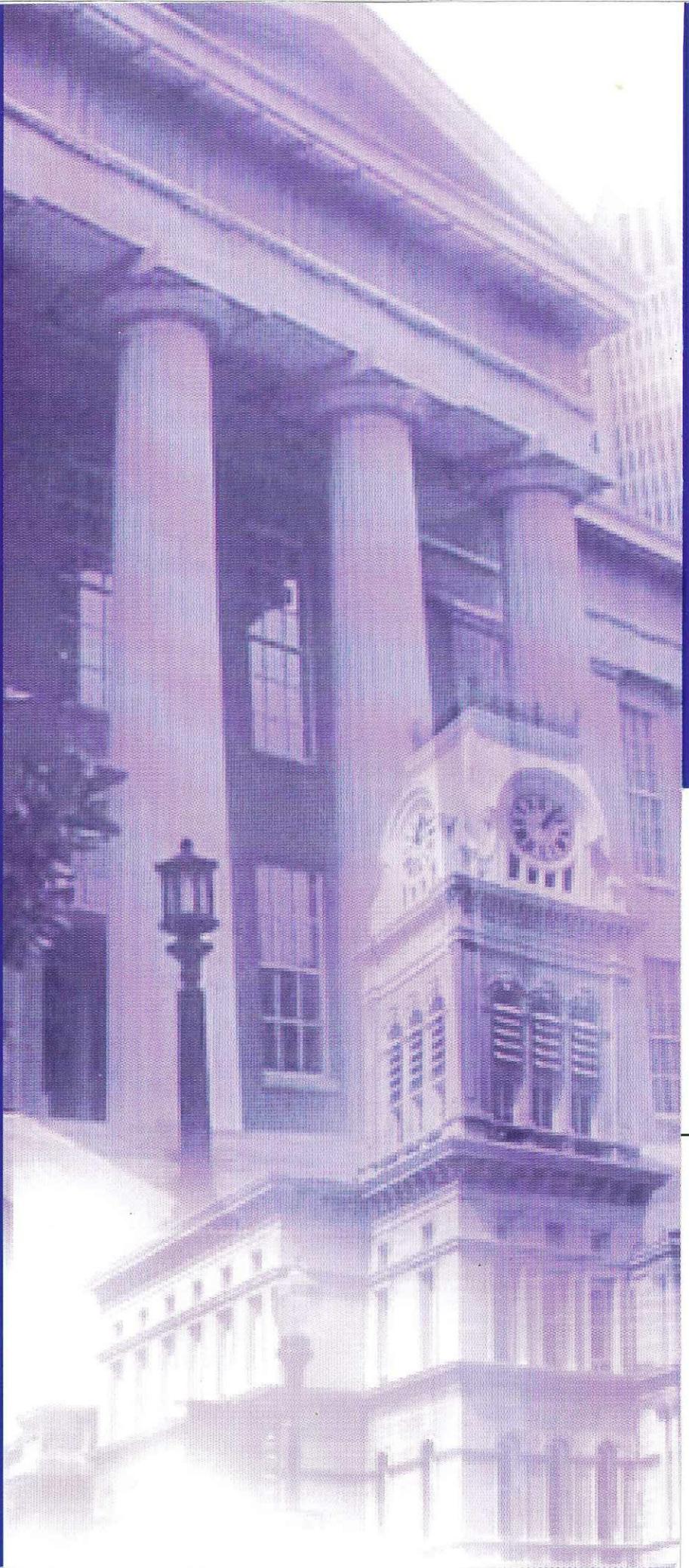




Greg Fischer
Mayor
Louisville Metro Council

The Office of Internal Audit provides independent, objective assurance and consulting services that adds value to and improves Louisville Metro Government.



Office of Internal Audit

Emergency Medical Services

Capital Projects

Audit Report

Emergency Medical Services

Capital Projects

January 2013



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Executive Summary

PROJECT TITLE	
Louisville Metro Emergency Medical Services - Capital Projects	
OBJECTIVE AND SCOPE	
<p>The objective was to obtain assurance that operational risks are adequately mitigated through the internal control structure. The primary focus was the assessment of expenditure compliance with applicable contracts and to ensure the intended use of funds were in accordance with the capital appropriation. This was a scheduled audit.</p> <p>This was a compliance review based on project expenditures during the life of the project. Review covered activity from project inception through March 31, 2012. The details of the scope and methodology of the review are addressed in the Observations and Recommendations section of this report.</p>	
INTERNAL CONTROL ASSESSMENT	SECTION
Needs Improvement	Capital Projects
RESULTS	
<p>Expenditure activity for the four projects reviewed was in compliance with the intended use of the appropriation. Opportunities exist for improving the internal control structure for the administration of Louisville Metro Emergency Medical Services capital projects. Examples of the issues include the following.</p> <ul style="list-style-type: none"> • There were cases where the capital project expenditure was not in compliance with the contractual terms. The vendor's invoice included goods / services that were not included in the contract's price sheet. • There were cases in which the contract was not effective at the time of the purchase. • There were issues noted in determining the capital project expenditures' compliance with the contractual terms due to the invoices' inadequate supporting documentation. 	



OFFICE OF INTERNAL AUDIT
LOUISVILLE, KENTUCKY

GREG FISCHER
MAYOR

INGRAM QUICK, CHIEF AUDIT EXECUTIVE

JIM KING
PRESIDENT METRO COUNCIL

Transmittal Letter

January 9, 2013

The Honorable Greg Fischer
Mayor of Louisville Metro
Louisville Metro Hall
Louisville, KY 40202

Subject: Audit of the Louisville Metro Emergency Medical Services - Capital Projects

Introduction

An audit of the Louisville Metro Emergency Medical Services (EMS) capital projects was performed. The objective was assessing compliance with the intended use of the appropriation and contractual terms with suppliers. The focus was expenditures for the life of the project. A total of four capital projects were selected for review.

The audit was conducted in accordance with Government Auditing Standards issued by the Comptroller General of the United States and with the International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors.

As a part of the review, the internal control structure was evaluated. The objective of internal control is to provide reasonable, but not absolute, assurance regarding the achievement of objectives in the following categories:

- Achievement of business objectives and goals
- Effectiveness and efficiency of operations
- Reliability of financial reporting
- Compliance with applicable laws and regulations
- Safeguarding of assets

There are inherent limitations in any system of internal control. Errors may result from misunderstanding of instructions, mistakes of judgment, carelessness, or other personnel factors. Some controls may be circumvented by collusion. Similarly, management may circumvent control procedures by administrative oversight.

Scope

The expenditures for selected EMS capital projects were reviewed. The objective was assessing compliance with the intended use of the appropriations and contractual terms with suppliers. The following four projects were included in the review. The total amount of capital funds appropriated for each is noted.

- Buffer Zone Program Project, \$176,448
- Data Collection System, \$468,617
- EZ-IO, \$51,450
- Life Pak, \$2,264,000

Detailed policies and procedures were not considered within the scope of the review, nor was the bid and award process for supplier contracts. The review period covered project inception through March 31, 2012.

An understanding of the capital projects reviewed was obtained through interviews of key personnel. This included obtaining an understanding of project objectives, goals and expenditure activity. Documentation reviewed included Louisville Metro Ordinances, capital budgets, financial system records, contracts, invoices and other supporting documentation.

A sample of expenditures from each of the four projects was reviewed. The activity was verified to the intended purpose of the appropriation and to the contractual terms for the supplier. In addition, a sample of items procured for the capital projects was verified through visual inspections. The details of the scope and methodology of the review will be addressed in the Observations and Recommendations section of this report. The audit would not identify all issues because it was based on selective review of procedures and data.

Opinion

It is our opinion that the internal control structure for EMS capital projects needs improvement. The internal control rating is on page 6 of this report. This rating quantifies the opinion regarding the internal controls. Specific compliance results include the following.

- **Appropriation.** Expenditure activity for the four projects reviewed was in compliance with the intended use of the appropriation. No recommendations were necessary.
- **Contractual.** Contractual compliance issues were noted with the expenditure activity for three of the four projects reviewed.
 - *Compliance Issues.* There were ten cases in which the project expenditure was not in compliance with the contractual terms.

- *Documentation Issues.* There were five cases in which it could not be determined if the project expenditure was in compliance due to a lack of supporting documentation.

Corrective Action Plan

Representatives from EMS have reviewed the results and are committed to addressing the issues noted. Corrective action plans are included in this report in the Observations and Recommendations section. We will continue to work with the Library to ensure the actions taken are effective to address the issues noted.

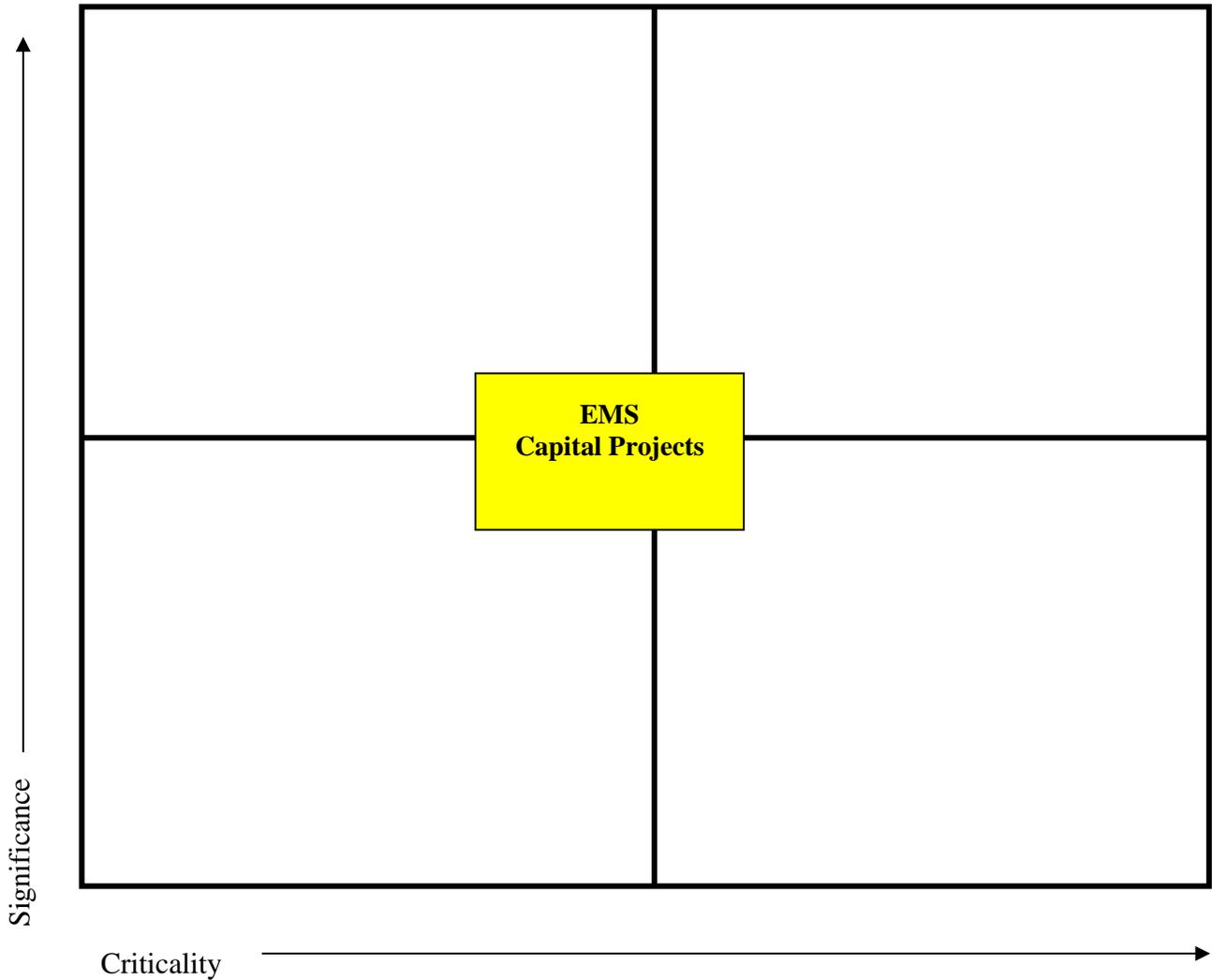
Sincerely,



Ingram Quick, CIA, CFE
Chief Audit Executive

cc: Louisville Metro Council Government Accountability and Ethics Committee
Director of the Louisville Metro EMS
Louisville Metro External Auditors

Internal Control Rating



<u>Legend</u>			
<u>Criteria Issues</u>	<u>Satisfactory</u>	<u>Needs Improvement</u>	<u>Inadequate</u>
	Not likely to impact operations.	Impact on operations likely contained.	Impact on operations likely widespread or compounding.
<i>Controls</i>	Effective.	Opportunity exists to improve effectiveness.	Do not exist or are not reliable.
<i>Policy Compliance</i>	Non-compliance issues are minor.	Non-compliance issues may be systemic.	Non-compliance issues are pervasive, significant, or have severe consequences.
<i>Image</i>	No, or low, level of risk.	Potential for damage.	Severe risk of damage.
<i>Corrective Action</i>	May be necessary.	Prompt.	Immediate.

Background

Capital projects are authorized by ordinances approved by Metro Council. The projects involve activities related to acquiring, constructing, maintaining, repairing or improving the Louisville Metro Emergency Medical Services system.

Capital projects may be authorized as part of the annual budgetary process or appropriated at any time during the fiscal year. Each capital project has a specific description that summarizes the scope of work to be performed. Overall project scope cannot be significantly changed without the approval of Metro Council. Projects may also be funded through the issuance of bonds. Bond legislation details the intended use of funds and is approved by ordinance enacted by Metro Council.

As of March 31, 2012, EMS had a total of 7 active capital projects with expenditures totaling approximately \$2,463,000.

This was a scheduled audit.

Summary of Audit Results

I. Current Audit Results

See Observations and Recommendations section of this report.

II. Prior Audit Issues

The Office of Internal Audit has not performed any previous reviews of appropriations for EMS capital projects.

III. Statement of Auditing Standards

The audit was performed in accordance with Government Auditing Standards issued by the Comptroller General of the United States and with the International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors.

IV. Statement of Internal Control

An understanding of the internal control structure was obtained in order to support the final opinion.

V. Statement of Irregularities, Illegal Acts, and Other Noncompliance

The review did not disclose any instances of irregularities, any indications of illegal acts, and nothing was detected during the review that would indicate evidence of such. Any significant instances of noncompliance with laws and regulations are reported in the Observations and Recommendations section of this report.

VI. Views of Responsible Officials / Action Plan

A draft report was issued to EMS on December 7, 2012. An exit conference was not held. Final audit results were not discussed.

The views of EMS officials were received on January 7, 2013 and are included as corrective action plans in the Observations and Recommendations section of the report. The plans indicate a commitment to addressing the issues noted.

LMCO §30.36(B) requires Louisville Metro Agencies to respond to draft audit reports in a timely manner. It specifically states that

“The response must be forwarded to the Office of Internal Audit within 15 days of the exit conference, or no longer than 30 days of receipt of the draft report.”

The EMS response was provided within this required timeframe.

Observations and Recommendations

Scope and Methodology

The expenditures for selected Emergency Medical Services (EMS) capital projects were reviewed. The objective was assessing compliance with the intended use of the appropriation and contractual terms with suppliers. The focus was the expenditures for the life of the project. Detailed policies and procedures were not considered within the scope of the review, nor was the bid and award process for contracts.

The population of EMS capital projects was compiled from various sources. This included reviews of annual capital budget documents and Metro's financial system. The review period covered project inception through March 31, 2012.

Four capital projects were selected for review. The project name, and total amount of expenditures during the review period, is as follows.

- Buffer Zone Program Project, \$176,448
- Data Collection System, \$468,617
- EZ-IO, \$51,450
- Life Pak, \$1,261,940

The total expenditures for these projects were \$1,958,455, or 80% of the total capital project expenditures for the audit period.

An understanding of the capital projects reviewed was obtained through interviews of key personnel. This included obtaining an understanding of capital project objectives, goals and expenditure activity. Documentation reviewed included Louisville Metro Ordinances, capital budgets, financial system records, contracts, invoices and other supporting documentation.

A sample of expenditures from each of the four projects was reviewed. The activity was verified to the contractual terms for the supplier, as well as the intended purpose of the appropriation. In addition, a sample of items procured for the capital projects was judgmentally selected and physically verified through visual inspections. The review would not reveal all issues because it was based on selective review of data.

Observations

Some issues were noted with the administration of EMS capital projects. As a result, the effectiveness of the internal control structure is impaired and needs improvement. Results, along with opportunities noted to strengthen the controls, are as follows.

#1 – Buffer Zone Program Project

#2 – Data Collection System

#3 – EZ-IO

#4 – Life Pak

Details of these begin on the following page.

#1 – Buffer Zone Program Project

Project Summary

This project was incorporated in an issue of appropriations of a federal grant from the Department of Homeland Security funds. The Buffer Zone Program project provided funding for the purchase of radios for emergency response personnel. The radios are compatible with other emergency response personnel per the Department of Homeland Security's initiative to link communications of first responders.

Authorizing Legislation

Louisville Metro Ordinance #126, Series 2007

Authorized Appropriation

\$176,448

Observations

Some issues were noted with the administration of the Buffer Zone Program Project capital project. Specifics include the following.

- **Appropriation.** No issues were noted. The expenditures reviewed were in compliance with the intended use of the appropriation.
- **Contractual.** There was an issue noted with the capital project expenditure's compliance with the contractual terms.
 - There were three cases where the capital projects expenditure was not in compliance with the contractual terms and pricing. The contract price sheet listed prices and products available for purchase. The vendor's invoice included goods that were not included in the contract price sheet. In addition, products that could be verified to the price sheet were invoiced at a rate higher than listed on the price sheet. The total amount of the expenditures associated with these issues was approximately \$47,997.
 - There was one case where the capital projects expenditure was not in compliance with the contractual terms. The vendor's invoice included goods that were not included in the contract's price sheet. The contract listed a specific brand of radio and radio accessories. However, the prices and goods listed on the expenditure documentation did not agree with the prices and goods on the contractual agreement. The total amount of expenditures associated with this issue was approximately \$80,613.
- **Visual Inspection.** The items selected for inspection were located and no issues were noted.

Recommendations

Appropriate personnel should take corrective action to address the issues noted. Specific recommendations include the following.

- ✓ Appropriate personnel should review all supporting documentation to ensure the project expenditure is in compliance with contractual terms prior to the approval of payment. The documentation should be explicit as to the services / work performed or goods provided. Sufficient documentation should be provided to allow a reasonable person to independently verify the expenditure agrees to the contractual terms. This should be able to be accomplished solely by reviewing the supporting documents; it should not require additional information from the department. If the invoice and supporting documentation do not clearly provide this level of detail, additional explanation should be provided.

EMS Corrective Action Plan

- Buffer Zone Program Project: Procedures are in place and have been reviewed with appropriate staff to ensure purchase order requests are reviewed and in compliance with the contract before being issued. Contracts terms are reviewed again when an invoice is received to ensure the correct price is charged and appropriate backup documentation is included detailing purchase / services received.

#2 – Data Collection System

Project Summary

This project was incorporated in an issue of appropriations of Capital Cumulative Reserve Funds. The Data Collection System capital project funded the purchase of hardware, software and training for a new data collection system used by EMS personnel.

Authorizing Legislation

Louisville Metro Ordinance #112, Series 2007

Authorized Appropriation

\$468,617

Observations

Some issues were noted with the administration of the Data Collection System capital project. Specifics include the following.

- **Appropriation.** No issues were noted. The expenditures reviewed were in compliance with the intended use of the appropriation.
- **Contractual.** There were issues noted in determining the capital project expenditures' compliance with the contractual terms due to the invoices inadequate supporting documentation. The lack of adequate support documentation disables the verification of compliance to contractual terms and price agreement.
 - In two cases it could not be determined if the expenditure was in compliance with contractual terms due to the lack of detail on the invoice. The invoice listed a lump sum amount for installation and materials; however, the contract's price list includes a unit price for each item description and a standard rate for each vehicle installed. The documentation did not include the unit prices for each item or the number of vehicles installed, so the amount charged could not be verified. The total amount of expenditures associated with these issues was approximately \$25,100.
 - There were three cases in which the contract states that the price of the goods / services will be a fixed percentage price reduction discounted from the manufacturer's list price at the time of purchase. The manufacturer's list price at the time of purchase was not documented. This made it difficult to determine if the price for the goods / services was in accordance with contractual terms. The total amount of expenditures associated with these issues was approximately \$12,023.
 - There were two cases in which the contract was not effective at the time the expenditure was incurred. An extension of the contract could not be located in the supplier's Purchasing file. The total amount of expenditures associated with these issues was approximately \$22,434.
- **Visual Inspection.** The items selected for inspection were located and no issues were noted.

Recommendations

Appropriate personnel should take corrective action to address the issues noted. Specific recommendations include the following.

- ✓ Appropriate personnel should carefully review invoices for accuracy, appropriateness, and agreement to contractual terms and price agreements prior to the approval of payment.
- ✓ Appropriate personnel should review all supporting documentation to ensure the project expenditure is in compliance with contractual terms prior to the approval of payment. The documentation should be explicit as to the services / work performed or goods provided. Sufficient documentation should be provided to allow a reasonable person to independently verify the expenditure agrees to the contractual terms. This should be able to be accomplished solely by reviewing the supporting documents; it should not require additional information from the department. If the invoice and supporting documentation do not clearly provide this level of detail, additional explanation should be provided.
- ✓ There should be an effective contract in place with the supplier subsequent to the procurement of a good / service. Documentation of any extensions of the contract should be properly maintained in the supplier's purchasing file.

EMS Corrective Action Plan

- Data Collection System Project: Procedures are in place and have been reviewed with appropriate staff to ensure purchase order requests are reviewed and in compliance with the contract before being issued. Contracts terms are reviewed again when an invoice is received to ensure the correct price is charged and appropriate backup documentation is included detailing purchase / services received.

LMEMS reviews contract effective dates in Metro Government's LeAP accounting system. When the purchase order requests were issued in this instance, the contracts were effective. The documentation for the contract cited is handled by Metro Purchasing; LMEMS does not have control over this responsibility. However, LMEMS will ensure appropriate documentation is submitted to Purchasing.

#3 – EZ-IO

Project Summary

This project was incorporated in an issue of appropriations of Capital Cumulative Reserve Funds. The project provides funding for the purchase of EZ-IO vascular circulation devices. The purchase upgrades the defibrillators used by EMS from monophasic to the American Heart Association recommended biphasic.

Authorizing Legislation

Louisville Metro Ordinance #111, Series 2008

Louisville Metro Ordinance #59, Series 2009

Authorized Appropriation

\$51,450

Observations

- **Appropriation.** No issues were noted. The expenditures reviewed were in compliance with the intended use of the appropriation.
- **Contractual.** No issues were noted. The capital project expenditures reviewed were in compliance with the contractual price agreement.
- **Visual Inspection.** The items selected for inspection were located and no issues were noted.

Recommendations

No recommendations necessary.

#4 – Life Pak

Project Summary

This project was incorporated in an issue of appropriations of Capital Cumulative Reserve Funds, Federal and State funds. The project provided funding to upgrade Life Pak defibrillators from monophasic to the American Heart Association recommended biphasic.

Authorizing Legislation

Louisville Metro Ordinance #111, Series 2008
Louisville Metro Ordinance #90, Series 2009
Louisville Metro Ordinance #118, Series 2010

Authorized Appropriation

\$2,264,000

Observations

Some issues were noted with the administration of the Life Pak capital project. Specifics include the following.

- **Appropriation.** No issues were noted. The expenditures reviewed were in compliance with the intended use of the appropriation.
- **Contractual.** There were issues noted with the capital project expenditures' compliance with the contractual price agreement.
 - There were four cases where the capital project expenditures were not in compliance with the contractual price agreement. The contract price sheet listed prices and products available for purchase. The vendor's invoice included goods that were not included in the contract price sheet. In addition, products that could be verified to the price sheet were invoiced at a rate higher than listed on the price sheet. The total amount of the expenditures associated with these issues was approximately \$11,092.
- **Visual Inspection.** The items selected for inspection were located and no issues were noted.

Recommendations

Appropriate personnel should take corrective action to address the issues noted. Specific recommendations include the following.

- ✓ Appropriate personnel should carefully review invoices for accuracy, appropriateness, and agreement to contractual terms and price agreements prior to the approval of payment.

EMS Corrective Action Plan

- Life Pak Project: Procedures are in place and have been reviewed with appropriate staff to ensure purchase order requests are reviewed and in compliance with the contract before being issued. Contracts terms are reviewed again when an invoice is received to ensure the correct price is charged and appropriate backup documentation is included detailing purchase / services received.



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Name of Report Emergency Medical Services – Capital Projects

How do you rate this report?			
	Beneficial	Somewhat Helpful	Needs Improvement
Background Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of Writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potential Impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Suggestions, comments, ideas, thoughts: _____

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