



Greg Fischer
Mayor

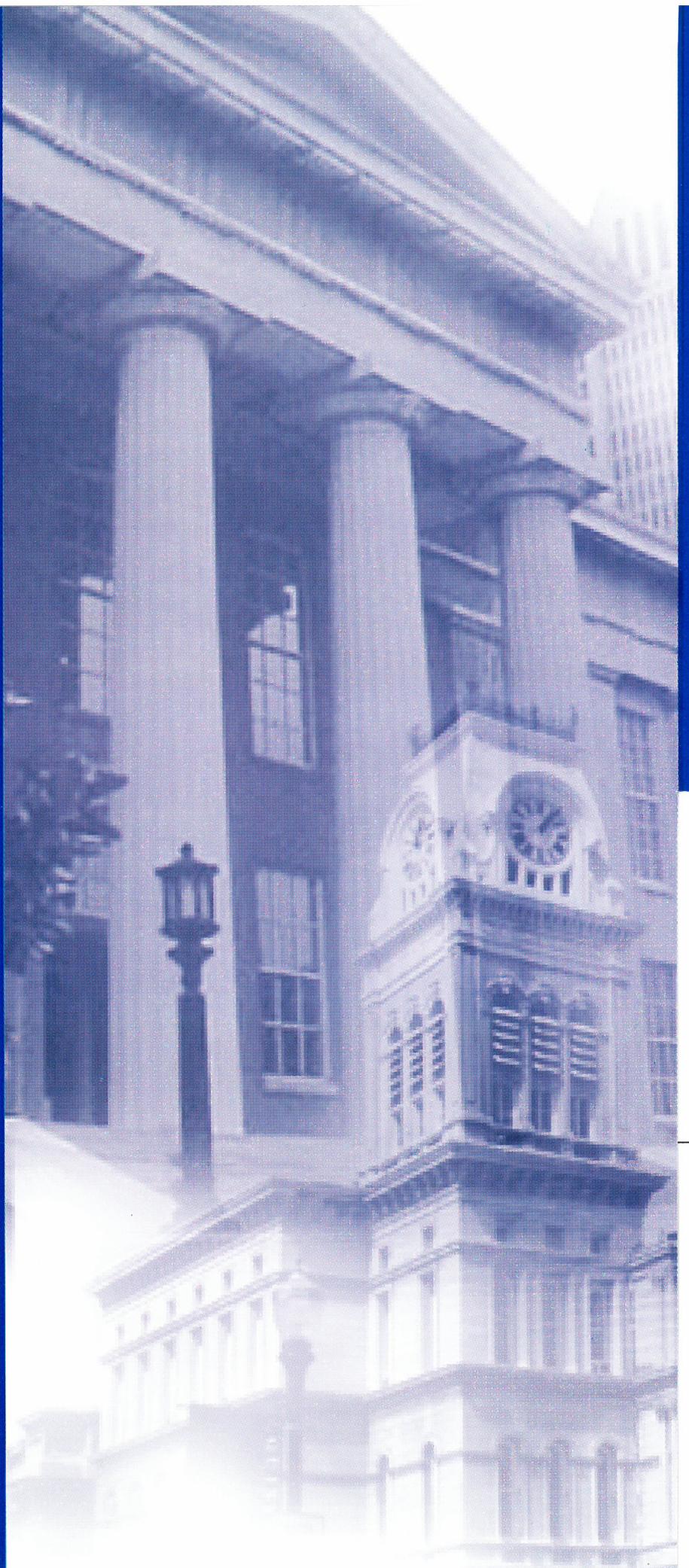
Louisville Metro Council

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

Louisville Fire Department

Capital Projects



Audit Report

Louisville Fire Department

Capital Projects

January 2014



Table of Contents

Executive Summary 2

Transmittal Letter 3

 Introduction..... 3

 Scope..... 4

 Opinion 4

 Corrective Action Plan..... 5

 Internal Control Rating 6

 Background..... 7

 Summary of Audit Results..... 7

Observations and Recommendations 9

 Scope and Methodology 9

 1) Firehouse Modernization..... 10

 2) Dive Rescue Response Vehicle 12

 3) Fire Equipment Replacement 14

 4) Port Security Grant 18

Executive Summary

PROJECT TITLE
Louisville Fire Department - 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. The review covered activity from project inception through March 31, 2013. 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
Needs Improvement
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 Fire Department capital projects. Examples of the issues include the following.</p> <ul style="list-style-type: none">• There were issues noted in determining the capital project expenditures' compliance with the contractual terms due to inadequate supporting documentation.• There were issues noted in which the vendor contracts were not executed in accordance with the Louisville Metro Government Purchasing Policy.



OFFICE OF INTERNAL AUDIT
LOUISVILLE, KENTUCKY

GREG FISCHER
MAYOR

INGRAM QUICK, CHIEF AUDIT EXECUTIVE

JIM KING
PRESIDENT METRO COUNCIL

Transmittal Letter

January 24, 2014

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

Subject: Audit of the Louisville Fire Department - Capital Projects

Introduction

An audit of the Louisville Fire Department (LFD) 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 made over 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 LFD 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 funding appropriated for each is noted.

- Firehouse Modernization, \$9,470,732
- Dive Rescue Response Vehicle, \$600,100
- Fire Equipment Replacement, \$7,509,783
- Port Security Grant, \$1,110,593

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, 2013.

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 are 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 LFD 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 issues were noted with the expenditure activity for the four projects reviewed.
 - *Compliance Issues.* There were instances in which project expenditures were not procured in accordance with the Louisville Metro Government Policy.

- *Documentation Issues.* There were a number cases in which it could not be determined if project expenditures were in compliance with contractual terms due to the lack of supporting documentation.

Corrective Action Plan

Representatives from the LFD 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 LFD to ensure the actions taken are effective to address the issues noted.

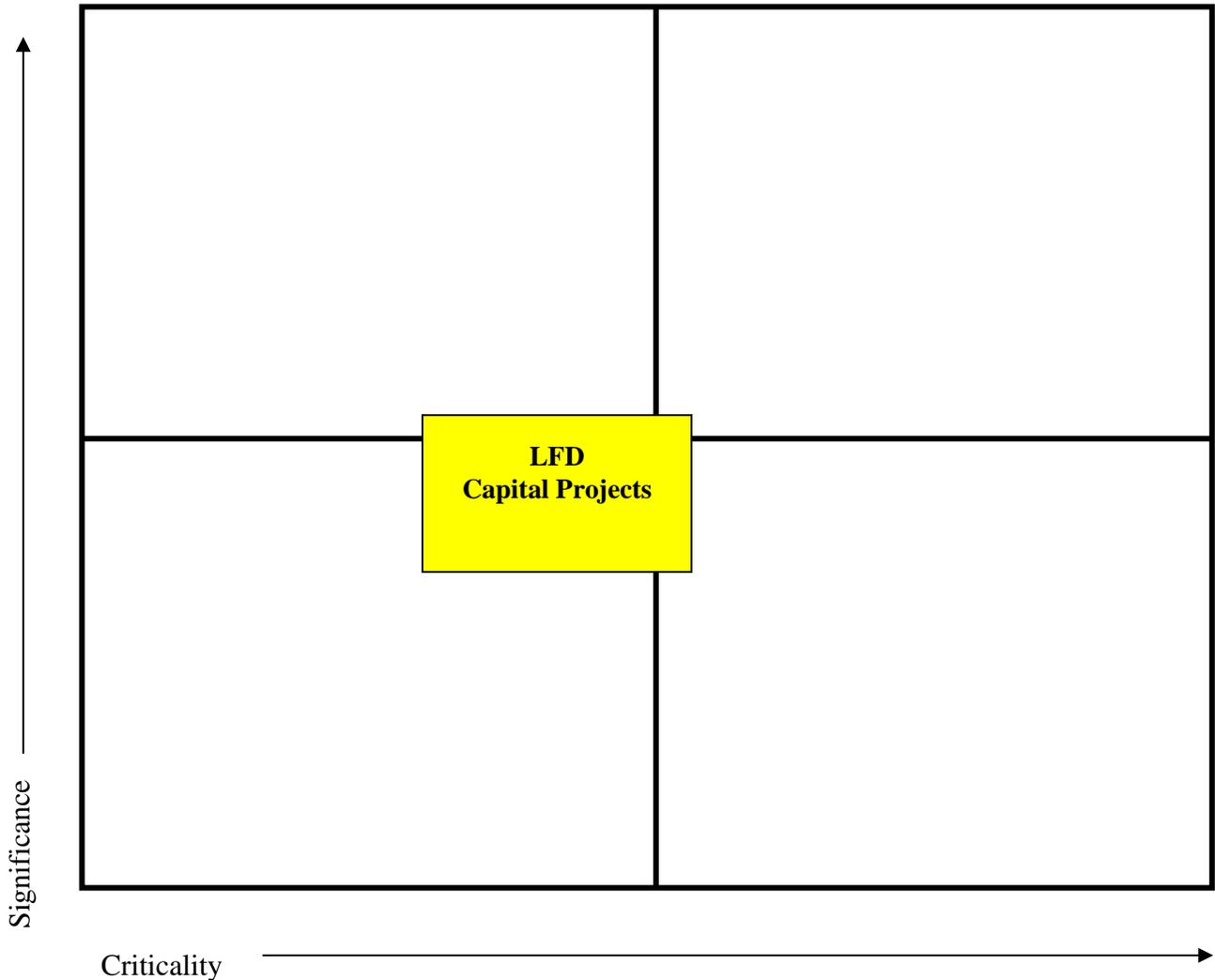
Sincerely,



Ingram Quick, CIA, CFE
Chief Audit Executive

cc: Louisville Metro Council President
Louisville Metro Council Government Accountability and Ethics Committee
Louisville Fire Chief
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 Fire Department (LFD).

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, 2013, LFD had a total of 8 active capital projects with expenditures totaling approximately \$18,254,898.

The administration of capital projects often involves resources from multiple Metro departments, such as the Department of Public Works' Project Management Division and the Purchasing Division of Office of Management and Budget. These other departments have critical roles such as evaluating bids, negotiating contracts and managing projects.

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 LFD 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 LFD on December 19, 2013. An exit conference was held at the LFD Headquarters (1135 W. Jefferson Street) on January 13, 2014. Attending were Chief Gregory Frederick, Assistant Chief Charles Adkisson, Executive Assistant Chief Doug Recktenwald, and Assistant Chief Michael Ford representing LFD and Ingram Quick, Mayria Porter and Patrick Crawford representing Internal Audit. Final audit results were discussed.

The views of LFD officials were received on January 22, 2014 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 Office of Internal Audit extended the timeframe for response from LFD. The response was provided within the agreed upon timeframe.

Observations and Recommendations

Scope and Methodology

The expenditures for selected Louisville Fire Department capital projects were reviewed. The objective was assessing compliance with the intended use of the appropriation and contractual terms with suppliers. The review included expenditures over 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 LFD 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, 2013.

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

- Firehouse Modernization, \$9,125,699
- Dive Rescue Response Vehicle, \$600,100
- Fire Equipment Replacement, \$7,325,988
- Port Security Grant, \$897,053

The total expenditures for these projects were \$17,948,840 or 68% 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 LFD 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) Firehouse Modernization
- 2) Dive Rescue Response Vehicle
- 3) Fire Equipment Replacement
- 4) Port Security Grant

Details of these begin on the following page.

1) Firehouse Modernization

Project Summary

Funds were appropriated to this project to modernize the Louisville Fire Department (LFD) in order to improve response times and enhance services. The project intended to replace three of the city's oldest fire stations and 17 of LFD's fire trucks. The project also included refurbishment of the existing fire stations, and upgrades to data monitoring to guide deployment decisions.

Authorizing Legislation and Agency Receipts

Louisville Metro Ordinance #112, Series 2006
Louisville Metro Ordinance #126, Series 2007
Louisville Metro Ordinance #111, Series 2008
Resolution #211, Series 2009
Agency Receipts #2009-49
Agency Receipts #2009-37

Authorized Appropriation

\$9,470,732

Observations

There were issues noted with the administration of the Firehouse Modernization 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 in determining the capital project expenditures' compliance with the contractual terms due to inadequate supporting documentation. Inadequate supporting documentation impairs the ability to verify that goods and services were procured in accordance to the contractual terms and price agreement.

- There was one instance in which it could not be determined if an expenditure was in compliance with contractual terms due to the lack of detail on the invoice. The contractual terms stipulated an hourly rate for services based on the title of the individual performing the services. While the hourly rate listed on the invoice did agree to the contract, it could not be determined if the individual performing the service had the appropriate title. Adequate supporting documentation was not obtained, before processing payment for the expenditure.

Visual Inspection. The items selected for inspection were located and no issues were noted. The following are images of the items reviewed.



Firehouse at 501 Ashland Ave

Recommendations

Appropriate personnel should consider corrective actions 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.

Louisville Fire Department's Corrective Action Plan

Due to the involvement of multiple agencies in three major construction projects the Division of Fire had a number of issues in the accounting and reconciliation processes during the projects; this was the result of the Project management falling under the purview of Public Works and Assets, while the Capital accounts were placed within the Division of Fire's budget. In the future the Division of Fire will establish a more effective coordination with other agencies involved in similar projects and ensure that accurate accounting is reconciled at more frequent intervals.

It should be noted that changes in the financial processing structure being moved to the Office of Management and Budget (OMB) and a new invoicing system that requires agency approval for payment should provide for a greater accountability for capital projects. The Division of Fire will ensure that personnel are properly trained in the required financial processes and comply with purchasing policies.

2) Dive Rescue Response Vehicle

Project Summary

This project allowed Louisville Fire Department to purchase a new dive rescue response vehicle which is essential for dive operations.

Authorizing Legislation

Louisville Metro Ordinance #118, Series 2010

Authorized Appropriation

\$600,100

Observations

There were no issues noted with the administration of the Dive Rescue Response Vehicle 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 no issues noted in the capital project expenditures' compliance with the contractual price agreement.

Visual Inspection. The items selected for inspection were located and no issues were noted. The following are images of the items reviewed.



Dive Rescue Response Vehicle

Louisville Fire Department's Corrective Action Plan

As there were no issues noted with this project, it will serve as an example of the appropriate process for purchasing heavy apparatus in the future.

3) Fire Equipment Replacement

Project Summary

This project provides funding support to Louisville Fire Department for the purchase of replacement vehicles and related equipment.

Authorizing Legislation

Louisville Metro Ordinance #187, Series 2004
Louisville Metro Ordinance #4, Series 2006
Louisville Metro Ordinance #207, Series 2007
Louisville Metro Ordinance #111, Series 2008
Louisville Metro Ordinance #96, Series 2009
Louisville Metro Ordinance #61, Series 2011
Louisville Metro Ordinance #85, Series 2012
Louisville Metro Ordinance #141, Series 2011

Authorized Appropriation

\$7,509,783

Observations

There were issues noted with the administration of the Fire Equipment Replacement 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. There were also instances in which the related contracts were not in accordance with Louisville Metro Government Purchasing Policy.

- There were four issues noted in determining the capital project expenditures' compliance with the contractual terms due to inadequate supporting documentation. Adequate supporting documentation was not obtained, before processing payment for the expenditure. Inadequate supporting documentation impairs the ability to verify that the goods and services were procured in accordance to the contractual terms and price agreement.
 - There were three instances in which the invoice noted a lump sum amount for the expenditures. However, the corresponding contracts included an itemized price listing for capital project expenditures. Without further detail regarding the itemized price for expenditures included on the invoice, it could not be determined if the expenditures were in accordance with the contract.
 - There was one instance in which the contract specified that pricing should be a 5% or 10% markup against dealer cost based on the type of items purchased. The invoice or an alternative source of supporting documentation

did not include information regarding the dealer cost of expenditures. As a result, it could not be determined if the price quote or the invoiced price are in accordance with terms of the contract.

- There were two instances in which capital project expenditures were not procured in accordance with Louisville Metro Government Purchasing Policy.
 - There was one instance in which expenditures were purchased without a valid contract. The expenditures were made in an effort to repair a severely damaged fire apparatus. The repairs had to be made by a specially authorized contractor. According to Louisville Metro Government Purchasing Policy, these expenditures in the amount of \$100,000 should have been associated with a sole sourcing contract as there was only one specially authorized contractor that could perform the repairs.
 - There was one instance in which expenditures were purchased at the contracted rate. However, the invoice included additional items purchased as add-ons for which there should have been an amendment to the contract. LFD and the Purchasing Division of Office of Management and Budget could not provide documented evidence that the contract had been amended to include the add-ons.

Visual Inspection. The items selected for inspection were located and no issues were noted. The following are images of the items reviewed.



1986 Seagrave Aerial Ladder Truck



Zodiac SRMN 550



Ford Expedition



50' White Fire Hose 1.75"

Recommendations

Appropriate LFD personnel should consider corrective actions to address the issues noted. Specifics 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.
- ✓ In the event that goods and services are procured under unusual circumstances (i.e. an insurance claim), the appropriate personnel should consult with the Purchasing Division of Office of Management and Budget for clarification of specific policies that may or may not be applicable.
- ✓ Any negotiations agreed upon by parties subsequent to the bid award should be thoroughly documented and provided to the Purchasing Division of the Office of Management and Budget. Purchasing serves as the custodian for Louisville Metro contracts and therefore their files should contain adequate support documentation to record the purpose and authorization of all purchase orders.
- ✓ Appropriate personnel should review the Louisville Metro Government Purchasing Policy prior to procurement of goods and services in an effort to ensure compliance with the aforementioned policies.

Louisville Fire Department's Corrective Action Plan

During the design/build process for a heavy fire apparatus there are three occurrences where the bid specifications are reviewed to ensure compliance; a pre-construction conference, an in-process inspection, and a final inspection when construction is complete before acceptance and delivery. During these reviews some modifications are

required in order to ensure the apparatus conforms to operational efficiency, performance and safety standards.

Going forward, after each review process, the Division of Fire will provide change orders to reflect any modifications in order to maintain an accurate accounting of the purchase. When processing invoices for payment, the Division of Fire will ensure that itemized purchases are listed and accurate; a visual inspection of all items will be conducted for compliance and transparency to ensure continuity and conformity.

The Division will continue to work with our assigned Fiscal Administrator and Purchasing Department to ensure compliance with policy.

4) Port Security Grant

Project Summary

The Port Security Grant supports maritime transportation infrastructure security activities and critical infrastructure against risks associated with potential terrorist attacks.

Authorizing Legislation and Agency Receipts

Resolution #207, Series 2010

Resolution #70, Series 2011

Agency Receipts #2012-45

Ordinance #119, Series 2012

Authorized Appropriation

\$1,110,593

Observations

There were issues noted with the administration of the Port Security Grant 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 instance in which the related contract and corresponding expenditures were not in accordance with the Louisville Metro Government Purchasing Policy.

- There was one issue noted in which goods were purchased that were not included in the contract. Although, Louisville Metro Government had a valid contract with the vendor at the time of the purchase, the expenditures purchased were not included in the itemized listing of goods authorized for purchase per the terms of the contract. Louisville Metro Government Purchasing Policy requires an amendment to the existing contract or a new contract for add-ons.

Visual Inspection. The items selected for inspection were located and no issues were noted. The following are images of the items reviewed.



Scott EZ Radiocom II Communication Device



Dive Control System Console



Multi Terrain Vehicle

Recommendations

Appropriate personnel should consider corrective actions 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.

Louisville Fire Department's Corrective Action Plan

This issue involves purchasing a similar equipment model from an authorized dealer through an approved contract; the equipment was more suitable for the use by the Division but was not a specifically listed model within the contract.

The Division of Fire will work closely with Purchasing and our assigned Fiscal Administrator to ensure that items purchased are specifically listed in an approved contract or other authorized means of procurement. This should include the required process of amending contracts to reflect additional models of equipment that may be purchased through an existing vendor contract. When developing purchasing contracts, the Division of Fire should ensure that consideration is given to various types of equipment which may conform to operations and safety, including options for purchasing similar equipment models.

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