# **AUDIT REPORT**



# A Report to the Audit Committee

**Mayor** Karl Dean

**Deputy Mayor** Greg Hinote

#### **Audit Committee Members**

Robert Brannon
Jacobia Dowell
Steve Glover
Diane Neighbors
Brack Reed
Richard Riebeling

Audit of the Metropolitan Nashville Permitting and Licensing System Upgrade – Interim Report One

February 24, 2014

Metropolitan Nashville Office of Internal Audit

#### **EXECUTIVE SUMMARY**

February 24, 2014



### Why We Did This Audit

This system development life cycle audit is to ensure that controls over project management, business processes, data integrity and security are implemented before system go-live.

# What We Recommended

Project sponsor should seek to establish and strengthen the governance structure for the project.

# AUDIT OF THE METROPOLITAN NASHVILLE PERMITTING AND LICENSING SYSTEM UPGRADE - INTERIM REPORT ONE

#### **BACKGROUND**

The land management and permitting software known as KIVA is currently used by 24 agencies in the Metropolitan Nashville Government to provide Nashville citizens with services such as building permits applications, inspections, professional licensing, parcels and streets information lookup, and so forth. The system support contract expired on June 30, 2013. The fiscal year 2013 Capital Spending Plan allocated \$5 million dollars to upgrade this system.

#### **OBJECTIVES AND SCOPE**

The objectives of this system development life cycle audit are to determine if the project is implemented successfully by following best industry practices for information system project management.

This report covers the project governance practice at the time of the audit.

#### WHAT WE FOUND

A project steering committee had been formalized and a project charter approved, which addressed stakeholder responsibilities, change control structure, and acceptance criteria. Also, a formal communication plan has been approved by the steering committee.

## PROJECT STATUS AS OF JANUARY 31, 2014

December January 2014 2015

Budget: \$5 million Actual: \$890,971

July December April June October 2013 2013 2014 2014 2014 system go-live system baseline Project kick-off design finished and key user Reports finished import and Final data document configuration Land system test finished Data migration Interfaces / scale user finished, ful All testing delivered Work process

#### **PROJECT MILESTONES AND COSTS**

As of January 30, 2014, the project is progressing according to the schedule proposed by the awarded system integrator, Civic Engineering, with minor positive variances. Out of the \$5 million approved budget, \$891 thousand (18 percent) has been spent.

Expenditure Categories	ACCELA (Vendor)	Civic Engineering (Vendor)	Metro Nashville	Total
Computer Software	\$18,256	\$697,002	\$ 12,707	\$727,965
Computer Software (non-capital)			1,079	1,079
Computer Hardware			161,843	161,843
Other			84	84
Total	\$18,256	\$697,002	\$175,713	\$890,971

Source: Metropolitan Nashville EnterpriseOne financial system.

A summary of the established milestones and current status can be viewed in Appendix A.

#### **AUDIT OBSERVATION**

## **Observation A: Strengthen Project Governance**

A formal project governance structure should be established to define the project charter, stakeholder involvement and responsibilities, communication plan, risk assessment methodology, change control structure and quality control structure.

#### Action taken by Metropolitan Nashville management:

Before substantial project works being performed, a project steering committee was formalized. The steering committee approved the project charter and a communication plan. These two documents addressed stakeholder responsibilities, change control structure, acceptance criteria, and communication structure to be used during the lifetime of the project.

#### **GOVERNMENT AUDITING STANDARDS COMPLIANCE**

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our observations and conclusions based on our audit objectives.

#### **METHODOLOGY**

To accomplish our audit objectives, we performed the following steps:

- Interviewed key stakeholders of the project, such as the Code Department, Planning Department,
   Water Services, Public Works, and Assessor's Office.
- Attended business process modeling workshops.
- Reviewed and analyzed documentation for compliance with the guidelines of Project Management Body of Knowledge.
- Evaluated internal controls currently in place.
- Considered information technology risks.

#### **AUDIT TEAM**

Mark Swann, CPA, CIA, CISA, Metropolitan Auditor Qian Yuan, CISA, In-Charge Auditor

• June 2012: Metro Council approved five million (\$5,000,000) capital spending

July 2012: Initial Kiva replacement project kickoff
 October 2012: Departmental requirements finalized

• December 2012: Initial Accela response to upgrade request reviewed

Need • Metro Expenditure: \$1,078.55

• Vendor Expenditure: Invoiced: \$18,256 Paid: \$18,256
• Cumulative Expenditure: \$19,334.55 (0.39%)

April 2013: Request For Quote released
 Civils Engineering / Cit Model

• July 2013: Civic Engineering / CityWorks awarded

• Metro Expenditure: \$0

Procurement

• Vendor Expenditure: Invoiced: \$0 Paid: \$0

• Cumulative Expenditure: \$19,334.55 (0.39%)

October 2013: Project charter approval by Steering Committee
 December 2013: Department Workflow / Workshops completed
 January 2014: Implementation report document acceptance

• Metro Expenditure: \$174,634.21

Planning &

Design

Production

Maintenance

& Support

• Vendor Contract: \$635,000 Invoiced: \$599,383 Paid: \$599,383

• Cumulative Expenditure: \$890,971.26 (17.82%)

March 2014: Baseline PLL configuration acceptance - Beta version
 March 2014: Credit Card Interface acceptance - Beta version

• April 2014: Land System acceptance – Beta version

• April 2014: ArcGIS Desktop Extension acceptance – Beta version

• June 2014: Data Conversion acceptance (Test Pass)

• July 2014: All Interfaces completed
• July 2014: System Reports completed

Implementation • August 2014: E-Permits acceptance – Beta version

August 2014: Electronic Plans Review acceptance – Beta version
 October 2014: IVR Configuration acceptance – Beta version

• Metro Expenditure: \$0

• Vendor Contract: \$1,165,000 Invoiced: \$2,620 Paid: \$2,620

• February 2015: System Go-Live

• February 2016: Fully acceptance based on success criteria

• Metro Expenditure: \$0

• Vendor Contract: Invoiced: \$0 Paid: \$0

July 2013: Year 1 maintenance, update and support
 July 2014: Year 2 maintenance, update and support
 July 2015: Year 3 maintenance, update and support

July 2016: Year 4 maintenance, update and support
 July 2017: Year 5 maintenance, update and support

• Metro Expenditure: \$0

• Vendor Contract: \$849,272 Invoiced: \$95,000 Paid: \$95,000

On Time
On Budget