OFFICE OF THE
City Auditor

Continuous Monitoring 2006

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THE CITY OF
Edmonton

The Office of the City Auditor conducted
this project in accordance with the
*International Standards for the
Professional Practice of Internal Auditing*

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1. Introduction

Historically, the Office of the City Auditor (OCA) has tested controls on a retrospective and cyclical basis, often many months after business activities have occurred. The testing procedures were often based on a sampling approach and included activities such as reviews of policies, procedures, approvals, and reconciliations. This approach only affords internal auditors a narrow scope of evaluation of past rather than current activities. Continuous monitoring is a method used to automatically perform control and risk assessments on a more frequent basis. Technology is the key that has enabled such an approach. Continuous monitoring changes the audit approach from periodic reviews of a sample of transactions to ongoing audit testing of 100 percent of transactions.

Continuous monitoring can become an integral part of modern auditing at many levels. It should also be closely tied to management activities such as performance monitoring, benchmarking, and enterprise risk management. By using continuous monitoring, we are able to perform control and risk assessments in real time or near real time. We can analyze key business systems for both anomalies at the transaction level and for indications of control system deficiencies and emerging risks. Finally, continuous auditing allows us to integrate the analysis results into all aspects of the audit process, from the development and maintenance of the annual audit plan to the conduct and follow-up of specific audits.

Since the beginning of 2005, the OCA has developed three continuous monitoring applications. The first application monitors low-value purchase orders for compliance with City purchasing guidelines and policies. The second application involves monitoring journal vouchers, which are used by accountants to make adjustments to the City's main financial accounting system. The third application compares records contained in the City's Human Resources System (PeopleSoft) to records stored by the City's Health and Dental Plan provider (Blue Cross).

2. Continuous Monitoring Applications

2.1. Application No. 1: Journal Voucher Monitoring

Journal vouchers are used by accountants to make adjustments to the City's main financial accounting system. On a monthly basis, we select journal vouchers which exceed a certain dollar limit and/or contain descriptions that are of interest to the City Auditor and/or External Auditor.

2.1.1. Objective

On a monthly basis, monitor and identify Journal Vouchers that:

- Exceed $1,000,000
- Are posted to the accounting records on a non-business day
- Do not contain any item description
- Contain specific words in the journal voucher description field

In addition, the City's External Auditor relies on our journal voucher review, resulting in a work and expense saving for the City.

2.1.2. Scope and Methodology

Our Journal Voucher continuous monitoring application identifies all journal vouchers that meet the above criteria. We review all identified exceptions, select 20 items, then forward those items to the Finance Branch. Finance Branch then requests supporting documents from the business areas. Finance Branch reviews the supporting documents according to standard sampling procedures and summarizes its observations. Finance Branch's follow-up procedures include verification of the following items:

- A journal voucher form exists and is complete
- The journal voucher is approved by the preparer's supervisor or an appropriate designate
- Adequate backup documentation exists to support the journal voucher
- Adequate documentation exists in the City's financial system
- General Ledger coding is correct
- The use of a journal voucher was reasonable given the nature of the transaction
- The journal voucher was not used to circumvent internal controls

The OCA then reviews the follow-up work performed by Finance. At year-end the external auditors review both the follow-up work performed by Corporate Finance and the review work performed by the OCA.

2.1.3.   Observations and Analysis

During 2006 the City created 13,260 Journal Vouchers. Using the criteria described above, the OCA selected 234 journal vouchers for review and follow-up. Of the 234 selected, 130 (55%) did not meet all of the criteria above.

Finance Branch has recognized the need for a more formalized procedure for making entries to the accounting system. A new Journal Voucher Procedure to be included in the Accounting Procedure Manual is currently in draft form.

Recommendation 1	Management Response and Action Plan
The OCA recommends that Finance Branch finalize and implement the proposed new Journal Voucher Entry Procedure. The Procedure must address the approval and documentation requirements for journal vouchers.	**Accepted** Comments: A procedure has been drafted and reviewed within areas of the Finance Branch in 2006. A revised journal voucher template was piloted during the 2006 year end by Corporate Accounting staff. A number of areas where additional consideration needs to be given were identified and revisions are being considered, for review with the various stakeholders. The procedure will then be updated and provided to the Finance Management Team and Finance Branch Manager for approval in 2007. In the interim, a summary of the errors identified in the testing will be shared with the respective areas in order that basic changes to process can be initiated. Responsible Party: Corporate Accounting and Reporting will coordinate activities required to finalize and implement the Journal Voucher Entry Procedure.

2.2. Application No. 2: Low-Value Purchases Monitoring

The City currently requires that all departments use the purchase requisition process to purchase goods and services in excess of $5,000. The requisition process has built-in controls to prevent unauthorized purchases. In addition to the dollar limit restriction, certain types of purchases (e.g., computers, furniture, chemicals, and printing), regardless of value, must also use the requisition process. For qualifying purchases less than $5000, goods and services can be ordered by issuing what is called an 'L-order.'

2.2.1. Objective

On a quarterly basis, monitor and identify all purchases made with an L-order that:

- Exceed $5000
- Are for items considered to be "Restricted Items" and therefore in violation of City Purchasing guidelines
- Identify potential "split purchases," which occur when a buyer intentionally splits the purchase into units less than $5,000 in order to circumvent the L-order single transaction limit

2.2.2. Scope and Methodology

On a quarterly basis, our L-order continuous monitoring application identifies all L-orders that appear to be exceptions to the approved process. All items selected are then forwarded to the Finance Branch, which forwards the exceptions to its accountants in the respective business areas for investigation, resolution, and reporting. We monitor significant violations of purchasing policies on an on-going basis and make recommendations as appropriate. In addition to our regular reviews, the external auditors periodically review the follow-up work and documentation provided by departmental finance personnel.

2.2.3. Observations and Analysis

During 2006, the City issued 24,965 L-orders. From these, we identified the following exceptions:

- 44 of the 52 L-orders that exceeded $5,000 violated the L-order purchasing guidelines
- 103 (6.8%) of the1,519 L-orders that appeared to be for the purchase of 'restricted items' as defined in the L-order purchasing guidelines violated the purchasing guidelines
- None of the 121 L-orders that appeared to be split orders were in fact order splitting

Recommendation 2	Management Response and Action Plan
The OCA recommends that Materials Management reinforce appropriate use of L-orders to all employees who create purchase orders, including additional guidance for determining restricted items and consequences for continued guideline violations.	**Accepted** Comments: L-order exception reporting and non-compliance management will become the responsibility of the Director, Materials Management. Planned Implementation: In order to implement the OCA recommendation relating to appropriate use of L-orders, Materials Management will proceed with the following actions no later than June 2007: 1) Issue a memorandum to all existing SAP L-order create users to reinforce the appropriate use guidelines as well as to remind them of restricted items that are not to be purchased using L-orders. 2) Ensure that SAP MM training for new SAP users stresses L-order appropriate use guidelines and restrictions. 3) Monitor L-order usage and manage non-compliance with guidelines through education and escalation of incidences of significant non-compliance to individual's supervisor/manager and terminating SAP PO create privileges in cases if necessary at the discretion of the Director, Materials Management. Responsible Party: Director, Materials Management

2.3.   Application No. 3: Blue Cross Data Validation

Blue Cross is the City's health and dental plan provider. We compare name, address, birthday, union affiliation and Blue Cross benefit eligibility for both employees and dependants contained in the City's Human Resources system with information stored by Blue Cross to ensure completeness and accuracy. Differences between the two systems constantly arise because of address changes, adding and deletion of dependants, name changes, employment changes, etc. Also, the City recently upgraded its Human Resources system software and introduced a new corporate-wide Health Spending Account benefit. These two developments could result in additional inconsistencies between the two systems. This type of monitoring and comparison also helps to satisfy some of the requirements under privacy legislation, which requires organizations to actively monitor personal information for accuracy and completeness.

2.3.1.   Objective

On a semi-annual basis, monitor and identify exceptions in employee and dependant personal information between the City's Human Resources system and data managed by Blue Cross, the City's main Health Care Provider. Both parties follow up any differences noted between the two systems and make appropriate corrections.

In addition, use the data interrogation and validation to help the City meet some of the requirements of the Freedom of Information and Protection of Privacy Act.

2.3.2.   Scope and Methodology

Our Blue Cross Data Validation continuous monitoring application identifies, on a semi-annual basis, inconsistencies between the City's Human Resources system and data managed by Blue Cross. The City currently has approximately 26,000 people (employees, former employees and dependants) stored in its Human Resources system. Key information is compared to information stored by Blue Cross to ensure completeness and accuracy. All differences identified are given to the Human Resources benefits area for remediation. The Human Resources benefits area and Blue Cross then collaborate to ensure accuracy and completeness.

2.3.3.   Observations and Analysis

The January 2006 validation application identified 1,229 differences and the June 2006 application identified 764 differences between the City's data and data stored by Blue Cross. It is important to note that the majority of the differences resulted from different computer recording conventions used by each system. For example, the name O'Conner contained in the City's PeopleSoft system was recorded as O Conner in the Blue Cross system. These differences are not indicative of any large systemic problems. Each difference was investigated and corrected by either the City or Blue Cross as applicable.

3. Conclusion

Implementation of these three continuous monitoring applications has provided us with an opportunity to provide leading edge, real-time information to the affected business areas to assist them with their management responsibilities. The OCA will continue to work with various business units to continue using current applications and develop new ones as required.

We would like to thank the Finance and Human Resources Branches for their assistance and support as we developed these applications and for following up on the items selected for review.