



Office of the Comptroller

January 24, 2012

W. Martin Morics, C.P.A.
Comptroller

Michael J. Daun
Deputy Comptroller

John M. Egan, C.P.A.
Special Deputy Comptroller

Craig D. Kammholz
Special Deputy Comptroller

To the Honorable Common Council
City of Milwaukee

RE: City Clerk License System Audit

Dear Council Members: transmittal

As a component of the Comptroller's comprehensive information systems audit work plan, the City Clerk License System Audit was conducted from June 2011 to November 2011 and involved the review of various Information Technology and financial controls in regards to the LIRA system and the Clerk's use of this system. The application audit consisted of the comprehensive review of the License Information Reporting and Administration System (LIRA).

The LIRA Application was fully implemented in the fourth quarter of 2010. This audit was conducted to evaluate whether the implementation of the new licensing application, The License Information Reporting and Administration System (LIRA), was successful and the controls within LIRA adhere to IS security and financial control best practices.

The City Clerk's Office acquired an existing Licensing Management application originally developed by a private company called Strategen for the State of Wisconsin. The original application was called ICE and needed significant customization and modification to be of appropriate use for the City Clerk. The Clerk's IS Manager worked closely with Strategen (whom the City retained to customize the original application) to complete the LIRA system on time and according to the existing business process requirements.

The Clerk's LIRA application was audited based on an Information Systems General Computer Controls framework as published by the Information Systems Audit and Control Association. The audit plan consisted of five assessment domains including; change management, logical security, security administration, application controls and financial controls. Each assessment domain was made up of several common controls, which totaled 14 individual controls.

Throughout the audit, it became clear that the customization and eventual implementation of this system was done very carefully and with IS security control in mind. The audit found no significant exceptions in the area of change management since the City Clerk meticulously records every change request, test and approval within their ticketing system. There were also no significant exceptions in the area of Logical Security. All users in the LIRA application are uniquely identified and administrative super user access is appropriate. Strong password rules are in place by way of strong operating system password requirements. The Clerk is also leveraging existing ITMD information resources by hosting the LIRA system in the ITMD datacenter and using ITMD personnel to promote changes into the production environment per segregation of duties best practices.

No significant exceptions were discovered during the testing of LIRA application controls which are responsible for eliminating as much human error as possible. The application consistently performs as designed and makes an excellent license application, workflow approval and payment notification system. Aycha Sirvanci, the Comptroller's Lead Financial Auditor also did not note any significant exceptions in the review of LIRA financial controls as they apply to cash handling, as all cash is currently being received by the Treasurer's Office.

After the completion of the audit, it was revealed that only 2 of the 14 controls had notable exceptions. Both controls were in the assessment domain of Security Administration. Through inquiry of Clerk management, it was revealed that periodic LIRA user access and log reviews are not taking place and that no formal user access request form with prerequisite management approval is being used when granting new user access. These two controls are traditional governance controls that are often overlooked when a large implementation is taking place. It is important to have these controls in place to provide ongoing security governance over the use of the LIRA system.

Conclusion

The LIRA system is well implemented and has a high level of compliance with IT general control best practices. The only exceptions discovered throughout the audit are in the areas of Application security Governance and the remediation of these issues could be quick, simple and with minimal cost. The Clerk's management responses to the two exceptions are included below.

1. Periodic LIRA user access reviews and periodic LIRA transactional log file reviews should be completed.

Recommendation: City Clerk management should perform LIRA user access reviews at least once a year. The review should include an analysis of possible terminated employees with active access to the system and whether existing users access right are commensurate with their current job duties. The user profiles should be printed reviewed. When the review is complete the packet should be dated and signed by the reviewer and retained for audit purposes.

The LIRA transactional logs should be reviewed by Clerk management at least once a month for any suspicious or inappropriate activity. Since these logs can be very long, it is not recommended to print them. The Clerk's office can simply create an excel document where they track dates that a review occurred and the reviewer can record their initials for every log reviewed. This document should be regularly maintained and be available for future audit purposes.

City Clerk's Management Response: "We agree with this recommendation as it relates to our users and transactions conducted in LIRA. In anticipation of this recommendation, two reports have been developed to assist in this review. The *LIRA User Security Report* allows for ease of reviewing those who have access to the City Clerk License System called LIRA (License Information Reporting and Administration System) and the type of permissions each user has been assigned. The *LIRA User Audit Report* provides for review of users' actions in LIRA.

We will institute a biannual review of the users' access to the system and retain the review for audit purposes. Additionally, we will audit a sample of transactions completed in LIRA on a monthly basis and record which records were reviewed and retain this information for further audit purposes."

2. There is no formal users access request process in place for the LIRA application.

Recommendation: The City Clerk's office should consider creating and implementing a "user access change form." This form would be filled out by the user's manager when requesting new access, changing existing access, or removing access for a given LIRA user. The form should have a place for both manager approval and IS manager approval. No access change should be allowed without the completion of this form. All forms should be regularly maintained and be available for future audit purposes.

City Clerk's Management Response: "We agree with this recommendation as it relates to how our users are given access. We will create an approval process that requires a request from the user's manager and approval of new users by both the License Division Manager and a City Clerk's Office network administrator. Requests and approvals will be retained for future audit purposes."

All City Clerk employees who participated in this audit should be commended for their availability and cooperation throughout the City Clerk License System Audit process. The Comptroller thanks all parties involved in this audit for their enthusiastic cooperation with the auditor.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael J. Duan". The signature is fluid and cursive, with a large initial "M" and a long, sweeping underline.

Michael J. Duan
Deputy Comptroller

CC: City Clerk

Attachment: City Clerk's Response



Office of the City Clerk
License Division

Ronald D. Leonhardt
City Clerk

Rebecca N. Grill
License Division Manager

January 11, 2012

Michael Daun
Deputy Comptroller
200 E. Wells Street, Room 404
Milwaukee, WI 53202

Re: City Clerk License System Audit

Mr. Daun:

This is the written response to the Audit of the City Clerk License System completed in December 2011. Below are the specific responses to the two (2) recommendations cited in the audit.

Recommendation 1:

Periodic LIRA user access reviews and periodic LIRA transactional log file reviews should be completed.

We agree with this recommendation as it relates to our users and transactions conducted in LIRA. In anticipation of this recommendation, two reports have been developed to assist in this review. The *LIRA User Security Report* allows for ease of reviewing those who have access to the City Clerk License System called LIRA (License Information Reporting and Administration System) and the type of permissions each user has been assigned. The *LIRA User Audit Report* provides for review of users' actions in LIRA.

We will institute a biannual review of the users' access to the system and retain the review for audit purposes. Additionally, we will audit a sample of transactions completed in LIRA on a monthly basis and record which records were reviewed and retain this information for further audit purposes.

Recommendation 2:

Create User Access Change Form.

We agree with this recommendation as it relates to how our users are given access. We will create an approval process that requires a request from the user's manager and approval of new users by both the License Division Manager and a City Clerk's Office network administrator. Requests and approvals will be retained for future audit purposes.

Sincerely,

Ronald D. Leonhardt
City Clerk

Rebecca N. Grill
License Division Manager