INTRODUCTION

In accordance with Boise Municipal Code Title 1, Chapter 9; and in response to the established work plan approved by members of the City Council, the Office of Internal Audit undertook a review relative to PeopleSoft Financials user access rights and the assignment of roles within that application. Oversight for this activity is currently shared between the City’s Accounting Division of Finance and Administration and Information Technology Departments. Ultimately, ownership and justification for user access and role assignment lies at the various departmental (divisional) levels across the City.

In conducting the review, Internal Audit partnered with the City’s Information Technology Department in assessing the present internal control environment surrounding the City’s principal financial application. In doing so, the engagement proved to be a “win-win” for both departments by providing desired feedback in the area of application controls. This report communicates the results of that work.
Review Objectives

The overall purpose of the review was to gain a reasonable degree of assurance that the control environment surrounding the granting of user access privileges and assigned roles within the PeopleSoft Financials application was functioning adequately. Optimally, the control environment should also ensure that the access privileges and the assigned roles granted to a particular user are properly aligned with the current job position responsibilities for that individual. The review objectives were as follows:

- Document the present internal control environment related to granting users access to PeopleSoft Financials. Document any forms, approval processes, and associated document retention procedures that currently exist.

- Determine whether the requisite forms, procedures, and / or processes are being completed correctly, including any necessary approvals. Assess whether those forms were being processed timely in order to add, modify, or deactivate users.

- On a sample basis, determine whether roles have been correctly established within the application for both new users, and for changes to existing user profiles.

- Perform an analytical review by department (division) across the City, assessing whether user roles and rights within the application are appropriately aligned with the respective job classifications for each user in question within the context of his/her departmental responsibilities.

BACKGROUND

The City utilizes a document that must be completed at the departmental (divisional) level before a user is allowed access to PeopleSoft Financials, or assigned any roles within it. This document is titled “PeopleSoft Access Control Form,” hereinafter simply referred to as the “Form.” This Form serves as a principal preventative control mechanism whereby a department (division) can request: 1) user access to (or deactivation from) the City’s financial application, and 2) that a user be enabled with certain “roles” within the application. Roles (or rights) within the application allow users the ability to perform specific functions while accessing specific pages within the application. As an example, a user that has been granted the role for PO Entry, has access to all pages within the application that are related to entering and initial processing of a purchase order. A two-tiered review process has been established whereby each Form is routed first to the City’s Controller for review and approval. The Form is then forwarded on to the City’s Information Technology department for further review before access and / or role assignment within the application is granted.
SCOPE AND METHODOLOGIES

Internal Audit employed various testing methodologies which included: staff interviews, a review of associated documentation, and examination of data within and from the PeopleSoft Financials Test database as of November 10, 2008. In order to maintain efficiency, and gain a reasonable degree of assurance with respect to current operations, Internal Audit established the scope for the review to include all current and terminated employees who utilized the application during fiscal years 2007 and 2008. The methods employed, and the evidentiary materials developed, were deemed adequate to support the conclusions contained within this report.

EVALUATION AND COMMENTS

The policies and procedures of the City’s Internal Audit Department specify that each report of audit or review express an opinion as to the adequacy, effectiveness, and efficiency of the systems of control and the quality of ongoing operations. Based on the evidence gathered, it appears that the administrative controls and processes surrounding the granting of user access rights and assigned roles within the PeopleSoft Financials application are functioning in a “Low Satisfactory” manner. Indications are that an important feedback loop is missing from the overall process whereby existing users and assigned roles are reviewed on a periodic basis. The evaluation scale utilized by Internal Audit in assigning a grade to each completed audit or review defines a “Low Satisfactory” level of performance as:

“…Reportable issues exist within the audited area, and are encountered frequently enough to lose the appearance of “isolated.” Systems of internal control appear to be marginally adequate at best. Management oversight is not always effective to ensure the quality of operations. …”

Generally, Internal Audit found the current process by which users are granted access to the application, including the assignment of roles, to be receiving a substantial amount of management oversight. The City’s IT Department maintains a dedicated staff of Customer Service Specialists, who utilize fairly robust control procedures to log, process, and archive the Forms that are forwarded from City Accounting. Internal Audit tested these processes and controls, finding them to be functioning reasonably well. City Accounting also appears to be performing their “gate keeping” function in a satisfactory manner; reviewing each Form for completeness and necessity. It appears that the systems and procedures in both areas are functioning as intended.

What Internal Audit found to be missing in the overall process that initiates at the departmental (divisional) level was a high-level review procedure that analyzed current application users and assigned roles. This “feedback” control transcends the entire business process. The present internal control processes utilized by both City Accounting
and IT, although robust, have been instituted fairly recently; being implemented within the last two fiscal years. The resident legacy errors that were discovered within the application most likely would not have would not have been identified, without the existence of such a “feedback” control that periodically analyzes all application users and their assigned roles for reasonableness, except by happenstance.

Results of Work Performed

Internal Audit tested a large portion of the Forms that were submitted from departments (divisions) to Accounting/IT during the two prior fiscal years. These forms were tested for completion accuracy, necessary approvals, and processing timeliness. The results of that work indicated fairly low error rates in form completion, with users being generally activated (or deactivated) timely. Each Form averaged just over four (4) days to process.

As part of the testing, Internal Audit selected two independent random samples. One sample was used to determine: 1) whether the requested additions, deletions, or changes to user profiles were effectuated correctly within the application and 2) whether an appropriate buyer or approving manager was correctly assigned to those users who had been granted certain Purchasing module roles within the application. The second sample was used to determine whether the assigned roles for each user were consistent with that individual’s job position classification within the City.

In rounding out the review, Internal Audit selected user ID’s for terminated employees who had left the City to determine whether they were being timely removed as users, buyers, and approving managers. A high-level analytical review by department was performed in order to verify whether role assignments were being adequately segregated, given the individual departmental (divisional) resource constraints.
REPORT OF REVIEW
PRESENTED TO:
THE CITY COUNCIL
CITY OF BOISE, IDAHO

FINDINGS AND RECOMMENDATIONS
While conducting a review of PeopleSoft Financials with respect to data integrity and the assignment of roles to users within that application, Internal Audit noted certain areas in which the control environment could be strengthened. Segregating duties for some departments and divisions within the Purchasing module and the integrity of certain data elements within the application would benefit from additional management attention. The three findings listed below, if acted upon, will assist management in strengthening PeopleSoft Financials application controls.

Review Finding 1: Internal Audit discovered instances where segregation of duties, role assignment, and data integrity within the application was less than optimal.

- Six (6) instances were noted where a particular user had been assigned all three Purchasing roles: Department PO Entry, PO Buyer, and PO Approving Manager. Four (4) of these users had themselves listed as their own, or one of their own, approving managers.
- Fifty-four (54) users (out of 177) were enabled with the PO Buyer role having either: 1) themselves listed as their own, or one of their own, approving managers or 2) a terminated employee who has since left the City listed as their, or one of their, approving managers. Segregation of duties is inadequate in the first situation whereas data integrity within the application is compromised in the second.
- Sixty-three (63) instances were noted where users that had been assigned the Purchase Order Entry role had rights to the "Full Authority for All Buyers" functionality. This procurement setup allows a user to approve a PO from any City buyer. This functionality is generally reserved for only City Purchasing Division employees.
- Two instances were noted in which a user’s assigned role within the application did not appear to align appropriately with their current job responsibilities. One user appeared to be inappropriately assigned the GL Administrator role whereas another user was assigned the AP Administrator role incorrectly.

Recommendation
Internal Audit recommends that given the pervasive nature of this finding, the City’s Accounting Division and Information Technology Department collaborate on how best to implement changes to user roles and approving manager assignments before departments and divisions are impacted. Management should identify those instances where a departmental buyer and approving manager are “one and the same”; segregating those duties where it is feasible to do so. Internal Audit further recommends that management
consider instituting a control procedure whereby departmental buyers and approving managers are compared on a periodic basis, no less than annually.

Management Responses

IT Department Response: The Applications Services Division should be able to generate reports that will facilitate this review. Application Services Division personnel and DFA personnel should review these reports, documenting the changes that need to be made. Those changes should then be given to the IT Help Desk for processing and application update. Once the changes are made, the documentation should be filed with the Account Requests for historic purposes. The ITLT team should work with DFA Leadership to establish a review schedule. I recommend quarterly, as waiting for an annual review could overwhelm the Help Desk with too many changes at once.

Division of Finance and Administration Response: The reports IT will generate will help to identify areas to be examined for validity by the Controller. Due to department size and needs, some of these instances may be a necessary business practice, but the numbers seem excessive. All adjustments needed will be documented and submitted to IT on the PeopleSoft Financials Access Request Form. The 1st review will result in more adjustments than future reviews should. Many of the current instances noted in the finding seem to be from before IT and DFA worked together to improve the PeopleSoft Financials Access forms and approval process. A quarterly review as suggested by IT would be preferable. Based on an assessment of reports currently available, IT estimations and current workload priorities, the City’s Accounting Division estimates completing the corrective action plan by March 31, 2009.

Review Finding 2: Internal Audit identified one area within the City (Police) in which additional segregation of duties related to the assignment of user roles may be warranted.

The Police department appears to have three individuals mirrored with identical role assignments. The roles are as follows: Commitment Control, Accounts Payable Entry, GL JV Entry, Purchase Order Entry, Purchase Order Buyer, and Purchase Order Manager (approver). Mirroring users, although aiding departmental throughput, often increases the risk associated with not appropriately segregating incompatible duties.

Recommendation

Internal Audit recommends that management review the present role assignments with representatives from this department; determining the optimal setup for all users that balances adequate segregation of duties with that department’s resource constraints.
Management Responses

IT Department Response: The Applications Services Division should be able to generate reports that will facilitate this review. Application Services Division personnel and DFA personnel should review these reports and should recommend role changes to City Department Management. Once the changes are agreed upon, DFA/City Managers should document the changes that need to be made. Those changes should then be given to the IT Help Desk for processing and application update. Once the changes are made, the documentation should be filed with the Account Requests for historic purposes.

Division of Finance and Administration Response: The reports IT will generate will help to identify areas to be examined for validity by the Controller. Due to department size and needs, some of these instances may be a necessary business practice, but the numbers seem excessive. All adjustments needed will be documented and submitted to IT on the PeopleSoft Financials Access Request Form. The 1st review will result in more adjustments than future reviews should. Many of the current instances noted in the finding seem to be from before IT and DFA worked together to improve the PeopleSoft Financials Access forms and approval process. A quarterly review as suggested by IT would be preferable. Based on an assessment of reports currently available, IT estimations and current workload priorities, the City’s Accounting Division estimates completing the corrective action plan by March 31, 2009.

Review Finding 3: Internal Audit noted eight (8) instances where a user ID was active within PeopleSoft Financials, although the user had since terminated employment with the City.

Internal Audit would like to note that compensating controls exist that preclude a terminated employee from utilizing the application. Both physical security (building access) and network access controls exist to prohibit an individual from accessing computer applications after employment is terminated. However, from a data integrity standpoint, all user ID’s of terminated employees should be locked within the application to ensure denial of access.

Recommendation

Internal Audit recommends that management deactivate the remaining user ID’s associated with terminated employees on the production side of the application. Internal Audit further recommends that the City’s Information Technology Department consider instituting a control procedure whereby active User ID’s are compared against a listing of current employees on a periodic basis, no less than annually.
Management Responses

IT Department Response: The frequency of errors does not appear to be excessive considering IT had just recently implemented the process to ensure that our department is notified when an individual ends employment with the City.

The Applications Services Division should be able to generate reports that will facilitate this review. Application Services Division personnel and HR personnel should review these reports and should document the changes that need to be made. Those changes should then be given to the IT Help Desk for processing and application update. Once the changes are made, the documentation should be filed with the Account Requests for historic purposes. The ITLT team should work with DFA Leadership to establish a review schedule. I recommend quarterly as waiting for an annual review could overwhelm the Help Desk with too many changes at once.

Division of Finance and Administration Response: The reports IT will generate will facilitate identifying terminated employees who still have a valid PeopleSoft account. When these are identified, the PeopleSoft Financials Access Request Form will be submitted to IT to remove the access. Ideally, this should be taken care of at the time of termination, but items do get overlooked. A quarterly review would be appropriate to keep this current.
Concluding Comments
Internal Audit would like to take this opportunity to express its gratitude to members of the City’s Accounting Division of Finance and Administration and Information Technology Departments for their assistance in the completion of this project. The establishment of a monitoring process whereby management is appraised on a recurrent basis of existing users and their assigned roles will significantly enhance the control environment within the City’s principal financial application.

MANAGEMENT PARTICIPANTS
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