Memorandum

CITY OF DALLAS
(Report No. A15-004)

DATE: January 16, 2015

TO: Honorable Mayor and Members of the City Council

SUBJECT: Audit of Payroll Processes related to City of Dallas' Retirement Programs [1]

The City of Dallas' (City) process for accumulating and transferring pension data to the Employees' Retirement Fund of the City of Dallas (ERF) and the Dallas Police and Fire Pension System (DPFP) is accomplished with minimal errors. There are, however, opportunities for improvement that would provide additional assurance to the ERF and DPFP regarding data completeness and accuracy. Specifically:

- Developing a data interface[2] design document for ERF and DPFP

- Modifying the data interface design

- Reviewing File Transfer Protocol (FTP) user security access regularly

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[1] This performance audit was conducted under the authority of the City Charter, Chapter IX, Section 3 and in accordance with the Fiscal Year 2014 Audit Plan approved by the City Council. The audit objective was to evaluate the City processes for accumulating and transferring employee payroll information to the appropriate pension funds. The audit scope was from October 2012 to September 2014; however, certain other matters, procedures, and transactions occurring outside that period may have been reviewed to understand and verify information related to the audit period. This performance audit was conducted 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 upon our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We interviewed appropriate personnel, reviewed documents as provided by management, tested pension data files, and reviewed security permissions.

[2] The City exports detailed employee pension data from the City's payroll application and places the files on a FTP server. The ERF and DPFP import these files manually to account for employee contributions to the ERF and DPFP. For this report, this process is referred as an interface.

These improvements would also increase efficiency by: (1) minimizing the number of meetings between the City and the pension funds to discuss and resolve errors in the pension data; and, (2) reducing the need for the City, ERF, and DPFP to research and take corrective actions.

Data Interface Design Document Is Not Developed

The City does not have a data interface design document that includes appropriate specifications, based upon the ERF and DPFP business requirements, including:

- Validations and edits

- Ownership of the interface process

- Error correction and communication methods

Without appropriate specifications, neither the City nor ERF / DPFP can ensure that the pension data sent by the City and received by ERF and DPFP is complete and accurate.

According to Federal Information Systems Control Audit Manual (FISCAM), a documented data interface design should be developed for each application with appropriate detailed specifications and ownership for interface processing.

Objectives of Interface Controls

The objectives of interface controls are to:

- Implement an effective interface strategy and design

- Implement effective interface processing procedures, including:

  o Interfaces are processed completely, accurately, and only once in the period

  o Interface errors are rejected, isolated, and corrected in a timely manner

  o Access to interface data and processes are properly restricted. Data is reliable and obtained only from authorized sources.

Source: *Federal Information System Control Auditing Manual,* page 430

Current Data Interface Design May Require Modification

The City has not evaluated the completeness and accuracy of the ERF and DPFP pension data interface design. As a result, the pension data interface design does not include certain validation checks to ensure pension data is transferred completely and does not capture certain manual payroll adjustments to ensure the pension data is accurate.

Data Interface Designs Do Not Include Consistent Validation and Edit Checks

The DPFP and ERF data interface designs do not include consistent validation and edit checks. Validation and edit checks substantiate the pension data was transferred completely and accurately. Specifically:

- The DPFP data interface design does not include descriptive header or trailer rows, record counts, dollar values, or hash totals[3].

- The ERF data interface design does not include descriptive header information.

Although auditor testing showed pension data was complete for six of six files tested (three for ERF and three for DPFP), inconsistency in validation and edit checks provide limited completeness assurance. According to FISCAM, a positive acknowledgement scheme would provide additional completeness assurance. (i.e., a "handshake" between the systems so that files are not skipped or lost). When an automated handshake is not feasible, as in the current process, additional completeness assurance can be achieved through embedding edit and validation checks in the data files.

Data Interface Design Does Not Capture Manual Payroll Adjustments

The data interface designs for ERF and DPFP do not capture certain manual payroll adjustments. As a result, dollar amounts in the pension data do not always match the electronic funds transfer amounts. Specifically, the data interface design does not capture manual payroll adjustments, such as:

- Payroll adjustments for pension contribution amounts that do not change gross pay (zero dollar gross pay). For the three periods tested, the variance between the $5.3 million in ERF pension contribution data and the electronic funds transfer amounts was $603 or 0.01 percent.

- Reversal of employees' pension contribution amounts for various reasons. For the three periods tested, the variance between the $3.3 million DPFP pension contribution data and the electronic funds transfer amounts was $302 or 0.01 percent.

According to management, a contributing factor might be application upgrades to the City's payroll application and the ERF and DPFP pension applications and subsequent modifications to the data interface design. The FISCAM guidelines state the interfaced

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[3] Sum of actual or arbitrarily assigned numerical values computed as a verification device.

data should be reconciled between the source (City) and target (ERF and DPFP) to ensure that the pension data transferred is complete and accurate.

File Transfer Protocol Server Access Is Not Appropriately Restricted

Access to the FTP server where the pension data is stored is not appropriately restricted. The current access on the FTP server is set at the minimum group level, which allows ERF, DPFP, and City users with access to the FTP server to access all the folders and the contents within. As a result, pension data can be obtained by other users with access to the FTP server. According to management, the pension data is encrypted and if obtained, cannot be read by other individuals; however, management has not recently verified whether the encryption is working as intended. Per FISCAM, data should be properly secured from unauthorized access and/or modification.

We recommend the following:

I. We recommend the Director of the Department of Communication and Information Services (CIS), in consultation with ERF and DPFP, develop a data interface design document, specific to ERF and DPFP, including validation and edits, ownership of interface processes, and responsibilities for error correction and communication methods.

II. We recommend the Director of Human Resources (HR) and the City Controller work with the Director of CIS, in consultation with ERF and DPFP, to: (1) evaluate and document whether modifications to the current data interface design would improve pension data completeness and accuracy and increase efficiency; and, (2) implement modifications resulting from the evaluation.

III. We recommend the Director of CIS grant access to the File Transfer Protocol server at an individual user level to ensure that only authorized personnel are accessing the folders and contents within.

IV. We recommend the Director of CIS periodically review user access and permissions for the File Transfer Protocol server to ensure access is limited to appropriate users.

Please see Attachment I for management's response to the recommendations.

We would like to acknowledge management's cooperation during this audit. If you have any questions or need additional information, please contact me at 214-670-3222 or Carol Smith, First Assistant City Auditor, at 214-670-4517.

Sincerely,
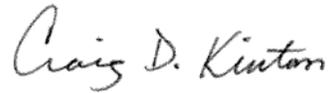
Craig D. Kinton
City Auditor

Attachment

C: A.C. Gonzalez, City Manager
Jeanne Chipperfield, Chief Financial Officer
Jill A. Jordan, P.E., Assistant City Manager
Molly Carroll, Director – Department of Human Resources
William Finch, Director – Department of Communication and Information Services
Edward Scott, City Controller

Attachment I

Management's Response to the Report

Memorandum

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JAN 0 7 2015

City Auditor's
Office

CITY OF DALLAS

DATE:

TO: Craig D. Kinton, City Auditor

SUBJECT: Response to Audit Report:
Audit of Payroll Processes related to City of Dallas' Retirement Programs

Our responses to the audit report recommendations are as follows:

Recommendation I

We recommend the Director of the Department of Communication and Information Services (CIS), in consultation with ERF and DPFP, develop a data interface design document, specific to ERF and DPFP, including validation and edits, ownership of interface processes, and responsibilities for error correction and communication methods.

Management Response / Corrective Action Plan

Agree ☒   Disagree ☐

Upon receipt of ERF and DPDF data design documents and upon concurrence with ERF and DPDF as to the changes needed in the City's data extract specifications, CIS will develop a data interface design document for the City's data extract file.

Implementation Date
September 30, 2015

Responsible Manager
Sr. IT Manager, Business Technology Services

Recommendation III

We recommend the Director of CIS grant access to the File Transfer Protocol server at an individual user level to ensure that only authorized personnel are accessing the folders and contents within.

Management Response / Corrective Action Plan

Agree ☒   Disagree ☐

CIS will review and grant access to folders at an individual user level.

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"Dallas, the City that Works: Diverse, Vibrant, and Progressive."

Implementation Date
September 30, 2015

Responsible Manager
Sr. IT Manager, Security

Recommendation IV

We recommend the Director of CIS periodically review user access and permissions for the File Transfer Protocol server to ensure access is limited to appropriate users.

Management Response / Corrective Action Plan

Agree ☒   Disagree ☐

CIS will develop and implement a monitoring plan that provides for periodic review of user access.

Implementation Date
September 30, 2015

Responsible Manager
Sr. IT Manager, Security

Sincerely,
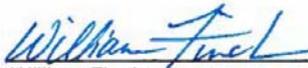
William Finch
Department of Communication and
Information Services
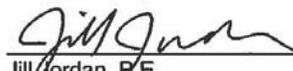
Jill Jordan, P.E.
Assistant City Manager

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City Auditor's Office

Memorandum

CITY OF DALLAS

DATE: December 17, 2014

TO: Craig D. Kinton, City Auditor

SUBJECT: Response to Audit Report:
Audit of Payroll Processes related to City of Dallas' Retirement Programs

Our responses to the audit report recommendations are as follows:

Recommendation II

We recommend the Director of Human Resources (HR) and the City Controller work with the Director of CIS, in consultation with ERF and DPFP, to: (1) evaluate and document whether modifications to the current data interface design would improve pension data completeness and accuracy and increase efficiency; and, (2) implement modifications resulting from the evaluation.

Management Response / Corrective Action Plan

Agree ☒   Disagree ☐

The directors of HR and the City Controller's Office will work with the Director of CIS, in consultation with ERF and DPFP, to evaluate and document if modifications to the current interface will improve completeness, accuracy and efficiency. If modifications are approved by ERF/DPFP, we will work with the Director of CIS to ensure implementation of the modifications. If ERF and/or DPFP fail to approve changes in accordance with CIS requirements, the City will develop exception reports to assist ERF and DPFP in analyzing variances.

Implementation Date
September 30, 2015

Responsible Manager
CCO Assistant Director
HR Payroll Manager

Sincerely,

Molly Carroll
Department of Human Resources

A.C. Gonzalez
City Manager

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"Dallas, the City that Works: Diverse, Vibrant, and Progressive."

Edward Scott
City Controller

Jeanne Chipperfield
Chief Financial Officer

C:

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