



December 18, 2017

Bernard J. Allen Executive Director

David M. Silber, CFA, CAIA Chief Investment Officer

> Melody Johnson Deputy Director

Mr. Jim Owczarski City Clerk Room 205, City Hall

Dear Mr. Owczarski:

Please be advised that an Administration & Operations (A&O) Committee Meeting of the Annuity and Pension Board has been scheduled for <u>Thursday</u>, <u>December 21</u>, <u>2017 at 8:00 a.m.</u> in the Employes' Retirement System Conference Room at 789 N. Water Street, Suite 300. If a quorum of the Board is present, this meeting will convene as a Special Board Meeting. The agenda is as follows:

I. Experis Internal Audit Reports.

Please be advised that the Administration & Operations Committee may vote to convene in closed session on the following items (II. through VIII.), as provided in Section 19.85(1)(e), Wisconsin State Statutes, to deliberate or negotiate the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session. The Committee may then vote to reconvene in open session following the closed session.

- II. Approval of the Contract with Wells Fargo.
- III. Approval of the Contract with Ice Miller.
- IV. Approval of the Second Agreement to the Agreement with Conduent HR Consulting LLC.
- V. Approval of the Contract for Services with Experis U.S., Inc.
- VI. Approval of the Fourth Amendment with Superior Support Resources, Inc.
- VII. Approval of the Second Amendment with Midwest Fiber Networks, LLC.
- VIII. Approval of the Medical Council Physician Services Agreement.
- IX. IT Projects Portfolio.

BJA:jmw

X. Organizational/Personnel Update.

Singerely,

Bernard J. Allen

Executive Director

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<u>PLEASE NOTE</u> - Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aids. For additional information or to request this service, please call 414-286-3557.



### Employes' Retirement System of the City of Milwaukee:

Internal Audit Update

December 21, 2017



### **Executive Summary**

Since the "A&O Committee – Internal Audit Update," provided in May 18, 2017, Experis has completed the Information Technology General Controls Audit and the Accounting and Financial Reporting Audit. In addition, the Social Engineering Audit is underway and will be completed in early 2018.

#### Conclusion

The <u>Accounting and Financial Reporting Audit</u> identified two control issues; one related to the Accuracy of Key Financial Reporting Workbooks with a High risk rating and one related to the Accounting and Financial Reporting SPIs with a Medium risk rating. Management is currently engaged in addressing these risks.

The <u>Information Technology General Controls Audit</u> identified no control issues or areas of concern.

The detailed audit procedures, findings, and recommendations can be found in the full internal audit reports that were provided separately.

## Accounting and Financial Reporting Audit Summary of Results

Risk Severity: High Status: Corrective Actions to take place by Q4-2018

#### **Accuracy of Key Financial Reporting Workbooks**

The key Financial Reporting workbooks used in the preparation of the 2015 Financial Statements contained several spreadsheet errors, due to a lack of effective spreadsheet controls. These errors were ultimately reflected in the 2015 financial statements and impacted Plan Contributions and Deposits in Transit to the plan, but did not, individually or collectively, represent a material misstatement.

The spreadsheet errors resulted from the Pension Accountant's practice of 'hard coding' numbers into the workbook and not allowing the data to populate the financial statements through an automated process.

#### **Management Response**

A review of the primary spreadsheet that is used to create the financial papers is currently underway. This review is being conducted as part of an effort to cross-train new staff.

Some of the recommendations are already in place (such as cell protection, not keeping cells hidden, validation of control totals, versioning, password protection, and user documentation); other recommendations will be considered and implemented, if deemed useful, during the current review and transition.

## Accounting and Financial Reporting Audit Summary of Results

Risk Severity: Medium

Status: Corrective Actions to take place by Q3-2018

#### **Accounting and Financial Reporting Standard SPI's**

Several Standard Procedural Instructions (SPIs) for the Accounting and Financial Reporting process have not been updated for several years.

The purpose of SPIs is to provide a set of instructions and procedures for the organization in the event of employee turnover in the finance function. A failure to regularly update the SPIs of the Accounting and Finance function may jeopardize an organization's ability to perform its daily financial operations as well as prepare its financial statements in both an accurate and timely manner.

#### **Management Response**

There are two sets of SPIs that are in use. One set of procedures, which haven't changed since they were created, are still valid and in use. A second set of procedures reflecting the updated processes were updated by staff during the 2016-2017 period.

A review of all financial reporting SPIs will be conducted and a review date added to the SPIs to indicate that such a review occurred. Further, on an on-going basis, all SPIs for the reporting area will be reviewed during the internal control review process.

### 2017 Audit Plan Status

**Total Budgeted Cost:** 

\$157,730

| 2017 Audit/Initiative                  | Hours<br>Budget | Actual<br>Hours* | Actual<br>Cost* | Target<br>Start Date | Status/Comments                          |
|--|-----------------|------------------|-----------------|----------------------|--|
| Ethics & Governance                    | 50              | 45               | \$ 5,310        | Complete             | Presented 5/18/17                        |
| Benefit Calculation                    | 100             | 99               | \$ 11,682       | Complete             | Presented 5/18/17                        |
| Membership & Enrollment                | 80              | 75               | \$ 8,850        | Complete             | Presented 5/18/17                        |
| Finance & Accounting                   | 100             | 100              | \$ 11,800       | Complete             | Presented 12/21/17                       |
| HR / Payroll                           | 45              | 40               | \$ 4,720        | Complete             | Presented 5/18/17                        |
| Benefit Administration                 | 120             | 115              | \$ 13,570       | Complete             | Presented 5/18/17                        |
| Network Vulnerability                  | 140             | -                |                 | Q1 2018              | Delayed until 2018                       |
| IT Technology                          | 90              | 93               | \$ 13,764       | Complete             | Presented 12/21/17                       |
| Social Engineering                     | 60              | 28               | \$ 4,760        | Q4 2017              | In Progress:<br>Completion in early 2018 |
| 2017 Risk Assessment Update            | 70              | 70               | \$ 11,240       | Complete             | Presented 5/18/17                        |
| Management Requests / Special Projects | 80              | -                | -               | Various              |  |
| Engagement Management                  | 130             | 82               | \$ 13,260       | Ongoing              | Administration and meetings              |
| Total Budgeted Hours:                  | 1,065           | 747              | \$ 98,956       |                      |  |



# City of Milwaukee – Employes' Retirement System (ERS)

# Accounting and Financial Reporting Audit Report

**DECEMBER 2017** 

**EXPERIS** 

RISK ADVISORY SERVICES
WISCONSIN OFFICE

#### **TABLE OF CONTENTS**

| EXECUTIVE SUMMARY                                     | 3 |
|---|---|
| BACKGROUND  |   |
| AUDIT SCOPE AND OBJECTIVES                            | 3 |
| PROCEDURES PERFORMED                                  | 4 |
| OVERALL ASSESSMENT                                    | 4 |
| OBSERVATIONS, RECOMMENDATIONS & MANAGEMENT'S RESPONSE |   |

#### **EXECUTIVE SUMMARY**

#### **BACKGROUND**

At the direction of the Administration and Operations Committee, the Accounting and Financial Reporting Audit was performed during the period August 23 – September 30, 2017. The City of Milwaukee Employes' Retirement System (ERS) has the responsibility for administering retirement, separation, survivor and disability benefits for its members' constituency, which is comprised of employees and retirees of the City of Milwaukee and its related agencies.

ERS uses AccPac as its general ledger application to compile financial information from several sources. AccPac interfaces with MERITS, its pension administration system, to capture agency contribution and member benefit payment data. ERS uses complex spreadsheets to download and reconcile all investment information to complete the financial statements on an annual basis.

#### **AUDIT SCOPE AND OBJECTIVES**

The objective of the Accounting and Financial Reporting audit encompassed the review of processes and controls related to the following:

- Completeness and accuracy of recorded journal entries and financial reporting
- Design and operating effectiveness of financial reporting controls, including but not limited to account reconciliations, journal entry reviews, segregation of duties, and restricted access to accounting software and complex accounting spreadsheets

Various audit techniques were used to assess and examine the effectiveness of the ERS internal control environment. Audit techniques included conducting interviews with ERS personnel, observation of performance of required procedures and controls, and examination of related documentation.

#### **PROCEDURES PERFORMED**

The following procedures were performed during the internal audit. All transactions tested occurred during the period of January 2016 through August 2017.

- Reviewed upload of MERITS information extract and financial closing procedures in detail.
- Verified depreciation schedules are calculated properly.
- Confirmed annual budget is reviewed by Senior Management and approved by the Board of Directors.
- Verified a sample of 25 payments due to the City of Milwaukee were made accurately and timely.
- Reviewed a sample of 25 invoice batches to ensure they were reviewed and approved by key personnel prior to submitting to the City of Milwaukee for payment.
- Tested three months of account reconciliations and related journal entries. Agreed the balances to the general ledger and verified the reconciliations and journal entries were reviewed.
- Reviewed system user access lists for the accounting systems for reasonableness.
- Tested controls over key financial spreadsheets for accuracy and verified ending balances used for reporting purposes agreed to the general ledger.

#### **OVERALL ASSESSMENT**

ERS management has implemented a solid internal control environment for its Accounting and Financial Reporting process. Based on the results of our review, we identified two internal control deficiencies.

- Key financial reporting workbooks maintained by the Pension Accountant were found to have financial errors within them. These errors created inaccuracies within the 2015 financial statements. These errors, individually or collectively, did not represent a material misstatement in the 2015 Financial Statements.
- Several Accounting and Financial Reporting Standard Procedural Instructions (SPIs) were found to be out of date and inaccurate.

Audits are only one part of a comprehensive risk management and control program. Recommendations are provided with the objective to assist the Board, Audit Committee and management in the effort to eliminate, reduce or mitigate overall risks. The procedures performed, findings, and recommendations, including management's written response, are included in the next sections of the report.

#### **OBSERVATIONS, RECOMMENDATIONS & MANAGEMENT'S RESPONSE**

#### 1. Accuracy of Key Financial Reporting Workbooks

Risk Severity High

The key Financial Reporting workbooks used in the preparation of the 2015 Financial Statements contained several spreadsheet errors, due to a lack of effective spreadsheet controls. These errors were ultimately reflected in the 2015 financial statements and impacted Plan Contributions and Deposits in Transit to the plan, but did not, individually or collectively, represent a material misstatement.

The spreadsheet errors resulted from the Pension Accountant's practice of 'hard coding' numbers into the workbook and not allowing the data to populate the financial statements through an automated process.

#### Recommendation:

Implement the following enhancements to the spreadsheet controls, and department procedures to ensure the accuracty of financial reporting.

#### **Spreadsheet Control Enhancements:**

**Cell Protection:** All formula cells, unused blank cells, and critical input cells that are not routinely updated during the workbook processing must remain locked until a change is required. Color code input cells and formulas for easy identification.

**Hard-Coding:** Avoid using hard-coded numbers in formulas (e.g. "(A1-B3)/9"). This can pose a problem when updating the spreadsheet because the spreadsheet owner has to ensure all relevant cells are updated each month. It is recommended that the formula reference a single cell.

**Calculator:** Similar to avoiding hard-coded numbers in formulas, avoid using Excel as a calculator tape (e.g. "100000+50000+250000"). In addition to the issues noted above, using Excel in this manner often hides critical and occasionally, erroneous data from a reviewer so that errors may not be detected. It is recommended that cells frequently needing summation be done in an obvious manner on the spreadsheet.

**Hidden Cells**: It is recommended that rows and columns remain visible. Hiding rows and columns, especially those referenced by formulas in visible cells, can preclude necessary updates to data resulting in formula output errors.

**Control Totals:** Control totals and check figures should be used to ensure completeness and accuracy of the input data and corresponding output values.

City of Milwaukee Employes' Retirement System Accounting and Financial Reporting Audit December 2017

**External Referencing**: A spreadsheet linked to an external source (database, different workbook, etc.) has a significant risk of error resulting from a change to the source data. The risk is exponential when the external source is maintained by a different owner. It is recommended that all spreadsheets that reference external sheets be maintained by the same owner. More stringent controls can be implemented as needed.

**Testing:** Spreadsheets should be tested, with user acceptance testing performed by someone other than the developer. The testing should be scripted and formally documented with Pass/Fail ratings of each test performed, and retained as part of the workbook documentation. Applications should be tested and the results verified against quantifiable data before deployment into the production environment.

**Change Documentation:** All changes should be documented in a manner that allows a third party to understand: 1) What was changed; 2) Who made the changes; 3) Who tested the changes; 4) How the changes were tested; 5) The effect of the change; 6) When the change was made.

**Versioning:** Only one version of the file should be available for use. Prior versions of all files should be archived for audit purposes.

**Password Protection:** Password protect all critical spreadsheets, such as the Financial Reporting workbooks.

**User Documentation:** The function and use of the spreadsheet should be documented in detail for backup purposes and succession planning.

#### Procedural Enhancements:

Following the completion of the financial statements, the financial statements should be reviewed by someone not involved in financial statement preparation process. This review process should require the reviewer to agree supporting financial documentation to the completed financial statements.

**Management Response:** A review of the primary spreadsheet that is used to create the financial papers is currently underway. This review is being conducted as part of an effort to cross-train new staff.

Some of the recommendations are already in place (such as cell protection, not keeping cells hidden, validation of control totals, versioning, password protection, and user documentation); other recommendations will be considered and implemented, if deemed useful, during the current review and transition.

**Implementation Date:** Q4, 2018

#### 2. Accounting and Financial Reporting Standard SPI's

| Risk Severity | Medium |
|---------------|--------|
|---------------|--------|

Several Standard Procedural Instructions (SPIs) for the Accounting and Financial Reporting process have not been updated for several years.

The purpose of SPIs is to provide a set of instructions and procedures for the organization in the event of employee turnover in the finance function. A failure to regularly update the SPIs of the Accounting and Finance function may jeopardize an organization's ability to perform its daily financial operations as well as prepare its financial statements in both an accurate and timely manner.

#### **Recommendation:**

Regularly review the SPIs of the finance function as part of the organization's regular governance process. As part of this review, a non-financial professional should take part in the process in order to insure that the process could be replicated by an individual not otherwise familiar with the process.

**Management Response:** There are two sets of SPIs that are in use. One set of procedures, which haven't changed since they were created, are still valid and in use. A second set of procedures reflecting the updated processes were updated by staff during the 2016-2017 period.

A review of all financial reporting SPIs will be conducted and a review date added to the SPIs to indicate that such a review occurred. Further, on an on-going basis, all SPIs for the reporting area will be reviewed during the internal control review process.

Implementation Date: Q3, 2018



# City of Milwaukee Employes' Retirement Services

### Information Technology General Controls (ITGC) Audit

**JUNE 20, 2017** 

EXPERIS FINANCE
RISK ADVISORY SERVICES
WISCONSIN OFFICE

#### **TABLE OF CONTENTS**

| EXECUTIVE SUMMARY        | 3 |
|--------------------------|---|
| Background               | 3 |
| Audit Objectives & Scope |   |
| Overall Assessment       | 4 |
| PROCEDURES PERFORMED     | 5 |

#### **EXECUTIVE SUMMARY**

#### Background

At the direction of the Administration and Operations Committee, the IT General Controls (ITGC) Audit was completed May 15, 2017 – June 01, 2017. An ITGC review attempts to gain an overall impression of the controls that are present in the environment surrounding the information systems. An ITGC audit reviews controls over the Information Technology environment, computer operations, access to programs and data, and program changes.

#### **Audit Objectives & Scope**

The objectives of the audit were to determine the level of controls within the environment surrounding information systems including:

- Logical Access Security Controls are defined and operating effectively
- Change management controls are defined and used consistently
- Data Center and Network Operations controls are defined and used effectively
- Controls have been designed in the IT environment for network security

The general controls encompass the entire ERS environment and MERITS, the primary application. Although other applications exist, testing is deemed reliable as long as the overlaying general controls are applied and functioning properly. Therefore, the scope was determined to be Windows Active Directory and MERITS logical application access.

The audit scope included the design and operating effectiveness testing of:

- Logical Access Security (Windows Active Directory (AD) and MERITS application user access)
  - Access / Authentication Security
  - Privileged Users
  - Default User IDs
  - Generic User IDs
  - Periodic review of User IDs
  - Remote Access
- Change Management
  - System/database changes
  - Emergency changes
  - SDLC changes
- Data Center & Network Operations
  - Monitoring
  - Logging
  - Emergency procedures
  - Environmental controls
  - Access (physical and logical)

ERS IT General Controls Audit June 2017

Controls have been designed in the IT environment for:

- Network Diagrams
- Monitoring and Logging
- Patch Management
- Malicious Software Management
- Router Management
- Firewall Management
- IDS/IPS Management
- Wireless Management
- Incident Response
- Facility Physical Security
- Environmental Management (UPS, Generator, HVAC)
- Encryption
- Information Security Program
- Risk Assessment
- Configuration Management

Various audit techniques were utilized to assess and examine the effectiveness of the ERS IT control environment. Audit techniques included conducting interviews with ERS personnel, evaluating completeness of policies and procedures, and reviewing other pertinent reports and supporting documentation. See the Procedures Performed section of this report for detailed testing performed.

#### **Overall Assessment**

ERS management has implemented controls to manage the overall risks in the IT environment. Based on the results of our review, **no internal control deficiencies** were noted.

#### **PROCEDURES PERFORMED**

Processes and items audited or reviewed within IT included the following, but were not limited to:

- Reviewed network diagrams for layered protection of the network.
- Reviewed monitoring procedures to determine if they exist and were followed for servers, VM's, interface connections and other network devices.
- Reviewed a sample of 10 of the 75 infrastructure changes, reviewed 25 out of the 162 non-infrastructure changes; system/database changes, emergency changes and SDLC changes for adherence to the Change and Patch Management procedures to determine if changes were occurring as management intended.
- Reviewed anti-virus policy to determine if one exists and reviewed a report of current signature files to determine anti-virus software is current on user's desktops.
- Inquired if firewall review procedures exist and whether a firewall review was performed.
- Reviewed incident response and intrusion detection procedures. Inquired whether any incidents occurred and were documented as required.
- Reviewed wireless security policy and configuration procedures to determine if they exist and if procedures enforce policy requirements.
- Reviewed user access provisioning procedures to determine whether access was granted after management's approval and removed timely when a business need no longer existed. Tested 4 terminated, and 2 retired employees to verify access removal in a timely manner.
- Reviewed user access review procedures for the network and application to determine if reviews are being completed and documented as required by procedures.
- Reviewed data backup procedures and backup job monitoring procedures to determine they existed and followed existing procedures.
- Reviewed job monitoring procedures to determine if they existed and followed existing procedures
- Reviewed data center room physical security and environmental controls to determine whether access to the data center is controlled and that the data center is protected from environmental risks.
- Compared the Password Policy requirements to the password configuration in Group Policy to assess whether the policy settings were configured as management intended.



# Administration and Operations Committee ERS IT Portfolio Report

December 21st 2017

#### Agenda

- Information Technology Projects Summary
- Application Stats
- What's Next
- IT Portfolio

### Information Technology Projects Summary

- New IT positions progressing (Jobs posted)
- ERS Network Re-Architecture (In Progress)
- Struts 2 Upgrade (In Progress)
- Femrite Internet Cutover (In progress)
- Experis Social Engineering Audit (in progress)
- What's Up Gold Application Upgrade
- IT contract amendments (in progress)
- Optimization

## **Application Stats**

| Category  | High Priority | Low Priority | Total |
|---|---------------|--------------|-------|
| Current Inventory                                   | 8             | 1            | 9     |
| PIR   | 3             | 0            | 3     |
| CCR   | 5             | 1            | 5     |
| Pending/Hold  | 0             | 1            | 1     |
| Deployed(Awaiting Next stage) /Ready for Production | 0             | 0            | 0     |
| Net Current Inventory                               | 8             | 0            | 8     |

### What's Next...

- Continue to work on personnel issues for new IT positions and IT reclassifications
- Review year end IT statistics, Metrics, and financial rollovers w/CFO for 2018
- Continue Network Upgrade project
- Complete Social Engineering Audit
- Femrite Internet (100Meg) cutover (Close or extend existing contracts, provide notifications, and schedule/complete necessary cutovers).
- POC Skype for Business
- Hard Drive encryption for laptops
- Optimization

## Glossary of Terms

#### Applications/Acronyms Definitions:

- Perforce: Primary application the development team uses to make code changes to MERITS. It provides the
  environments for testing, development and CCR/PIR deployments.
- AccPac: Accounting software that supports the general ledger.
- Attiris: Asset management software the technical team uses to inventory and support all IT assets. This application
  manages updates to computers, imaging, and software distribution from a centralized console.
- Websphere Application Server (WAS): The application server that we use to connect Web site users to Member Self Service and other MERITS related web services.
- JAYA: The programming language that MERITS was developed in and is running.
- PIR: Problem Incident Report- A person reports a bug with the application and requests priority resolution.
- CCR: Change Contro Request- A person request a new feature, change or enhancement to MERITS.
- Retirement Application Processing (RAP): Functional module in Merits that processes retirement applications through workflow.
- Merits Program Lifecycle Management (MPLM): Process to upgrade, patch and keep current all of the MERITS related subsystems and ERS business applications.
- Storage Area Network (SAN): Primary storage technology used to centrally store all ERS data and manages Disaster Recovery.
- Disaster Recovery Plan (DRP): The technical planning, design and testing of all IT systems and staff to ensure that all technical systems can run at the off site location in Madison, WI called Fermite. IT staff does semi annually testing to ensure all applications and IT services are up and running within the designated service level objectives.
- Recovery Time Objective/Recovery Point Objective (RTO/RPO): These are I.T. service leve goals for the amount of time it takes to cutover I.T. services to the Femrite location and the point in time (per the last backup) where we recover at. Currently at 24 hours recovery time and 8 hours for any loss of data. I.T. currently exceeds this expectation based off the last 2 tests.
- business Continuity Plan (BCP): The process that ensure the ERS can continue running its services and daily operations at the Remote Office in the event that the primary location is not accessible. We engage ERS business users to physically work at the Remote office location and document the results on a reoccurring basis.
- Remote Office (RO): Backup Remote work facility located at TPP 1085C W. Park Place. It is connected to both the 789 N. Water Street facility and the Femrite Data Center in Madison, and users can physically work there and connect to any needed data center.
- MERITS Optimization: Project approved in 2012 to go through all 17 application modules in MERITS and clean up code, ensure best practices are implemented, SQL stored procedures for faster performance, reporting and user experience. It is the clean up of any non ERS related code that may have been carried over from the original jClarety (HP software) implementation.
- ARIS: Web based software used for mapping legal opinions to MERITS workflow processes and procedures.

#### Portfolio as of December 1, 2017

| Project Health |         | Project Priority | Complexity (S / M / L) | Project Name                 | - J    | Description   | Strategic Goal: G1 - G7 | Status | External Vendor Required: Y/N | Actual Start Date | Target Completion Date | Estimates (Hours) | Actuals (Hours) | Hours Variance = Estimates -<br>Actuals | Hardware/Software & External<br>Labor Budget (\$) | Actual Spent-to-Date on<br>Hardware /Software & External<br>Labor (\$) | Estimate to Completion (ETC)<br>(of Hardware/ Software &<br>External Labor Costs) |
|----------------|---------|------------------|------------------------|------------------------------|--------|---|-------------------------|--------|-------------------------------|-------------------|------------------------|-------------------|-----------------|---|---|--|---|
| G              |         | 1                | _                      |                              | Reid   | Testing staff's resistance to phishing.   | G2                      |        | Υ                             | 12/1/17           | 12/31/17               | 60                | 0               | 60                                      | \$9,600   | \$0  | \$9,600   |
| G              | 12%     | 2                | Н                      | 2018 Network Re-Architecture |        | Create a more resilient network with all gear under support.                                  | G7                      | IP     | Υ                             | 10/11/17          | 7/31/18                | 642               | 168             | 474                                     | \$381,618   | \$446,832  | (\$65,214)  |
| G              | 0%      | 3                | М                      | 100 Meg Femrite Cutover @    |        | Switching ISP provider to Spectrum.   | G7                      | IP     | Υ                             | 12/1/17           | 1/31/18                | 40                | 0               | 40                                      | \$250   | \$0  | \$250   |
| G              | 64%     |                  |                        |                              |        | Software tracks our IT assets   | G6                      |        | Υ                             | 6/6/17            | 2/9/18                 | 657               | 132             | 525                                     | \$4,500   | \$4,500  | \$0   |
| G              | 42%     | 5                | L                      |                              | Manchu | Software development upgrade all functional areas but MAM.                                    | G7                      | -      | Υ                             | 10/17/16          | 8/15/19                | 11,438            |                 | 7,594                                   | \$730,290   | \$184,621  | \$545,670   |
| G              | 65%     | 6                | L                      | OSC Optimization             | Manchu | MERITS optimization & clean-up of<br>Optional Service Credit                                  | G7                      | IP     | N                             | 5/4/17            | 4/12/18                | 1,331             | 848             | 483                                     | N/A   | N/A  | N/A   |
| G              | 15%     | 7                | L                      | CAD/CAR/GL Optimization      |        | MERITS optimization & clean-up of Cash<br>Dispersements, Cash Receipts, and<br>General Ledger | G7                      | IP     | N                             | 10/6/17           | 12/27/18               | 1,738             | 217             | 1,521                                   | N/A   | N/A  | N/A   |
| G              | 0%      | 8                |                        | <b>G</b> ,                   | John   | Investigate our video conferencing options  | G7                      | IP     | N                             | 12/1/17           | 2/15/18                | 80                | 0               | 80                                      | \$2,000   | \$0  | \$0   |
| G              | 75%     | 9                | L                      | IT Strategic Planning @      | Reid   | Create a 5 year plan for IT   | G1                      | ОН     | N                             | 5/15/17           | 8/31/17                | 100               | 8               | 92                                      | N/A   | N/A  | N/A   |
| G              | 10%     | 10               | Н                      | SAN Upgrade & Replacement    | Raynal | Replace end-of-life storage arrays and increase capacities.                                   | G7                      | С      | Υ                             | 5/19/17           | 6/4/21                 | 342               | 108             | 234                                     | \$720,609   | \$0  | \$720,609   |
|                | Green = | On <sup>-</sup>  | Targe                  | et - No Significant Issues   |        |   | -                       | NS     | = No                          | t Started         | ОН                     | = On Hol          | d               | @ = Activ                               | ity (no charte                                    | er)  |   |

Yellow = On Watch List – Issues Being Addressed

Red = Project cannot move forward as planned without management attention or approval.

| Completed Projects & Tasks in Last 12 Months | Finished Hours / \$ Spent                   |
|--|---|
| IT Network Vulnerability Audit @ (Reid)      | 10/20/2016 140 hrs (Expiris Only)/ \$23,100 |
| IT Disaster Recovery Test @ (Dugan / Rogers) | 10/21/2016 111 hrs / N/A                    |
| Physical Inventory @ (Rogers)                | 12/20/2016 10 hrs / \$265                   |
| FileNet P8 Patching @ (Manchu)               | 1/7/2017 87 hrs / \$13,330                  |
| MAM Struts 2 Upgrade (Manchu)                | 1/25/2017 967 hrs / \$33,294                |
| 2017 Desktop Rotation (Powell)               | 5/8/2017 269 hrs / \$39,520                 |
| Member Education Videos [POC] (Zaffiro)      | 5/19/2017 67 hrs / \$1,889                  |
| Websphere Server Patching @ (Manchu)         | 5/26/2017   81 hrs / \$8,762                |
| VMware vSphere Upgrade @ (Raynal)            | 6/15/2017   73 hrs / N/A                    |

| _  |               |               |                         |
|----|---------------|---------------|-------------------------|
| NS | = Not Started | OH = On Hold  | @ = Activity (no charte |
| ΙP | = In Process  | C = Cancelled |                         |

|  | <u>Finished</u> | Hours / \$ Spent      |
|--|-----------------|-----------------------|
| IT General Controls Audit @ (Reid)                   | 6/20/2017       | 39 hrs / \$13,320     |
| Printer Maint. Contract @ (Zaffiro)                  | 6/21/2017       | 64.5 hrs / N/A        |
| BAA / PAP Optimization (Manchu)                      | 7/7/2017        | 3,129 hrs / N/A       |
| DR Test (IT Only) @ (Dugan)                          | 7/11/2017       | 67.5 hrs / N/A        |
| Install Print Monitoring Software @ (Xiong/Zaffiro)  | 9/21/2017       | 57.7 hrs / N/A        |
| Upgrade Network Infrastructure Firmware @ (Benedict) | 9/22/2017       | 48 hrs / N/A          |
| BCP Test @ (Siddiqui)                                | 9/28/2017       | 17 hrs / N/A          |
| HCP Optimization (Manchu)                            | 10/2/2017       | 958.3 hrs / N/A       |
| CMERS.com Upgrade & Redesign                         | 11/13/2017      | 149.75 hrs / \$18,600 |

## Organizational/Personnel Update

Administration and Operations Committee Thursday, December 21, 2017

- ERS is working with DER to fill the following vacancies:
   Pension Accounting Manager, Chief Financial Officer, ERS
   Software Developer and Database Administrator.
- The City Service Commission and the Finance & Personnel Committee approved reclassification of two IT management positions this month: ERS Applications Development Manager and ERS Systems Manager.
- DER is working with ERS to reclassify the Pension Accounting Specialist position.