City of Milwaukee
Employes' Retirement System

Bernard J. Allen
Executive Director

David M. Silber, CFA, CAIA
Chief Investment Officer

Melody Johnson
Deputy Director

September 19, 2017   **REVISED**

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 **Thursday, September 21, 2017 at 9:00 a.m.** 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.   IT Projects Portfolio.

II.   Organizational/Personnel Update.

Sincerely,

Bernard J. Allen
Executive Director

BJA:jmw

NOTICE TO PUBLIC - Meetings of the City of Milwaukee Annuity and Pension Board are open to the public. Those in attendance wishing to address the Board on a specific agenda item may do so by registering in advance of the meeting with the Board Secretary.

PLEASE NOTE - 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.

Administration and Operations Committee

ERS IT Portfolio Report

September 21st 2017

- Information Technology Projects Summary

- Application Stats
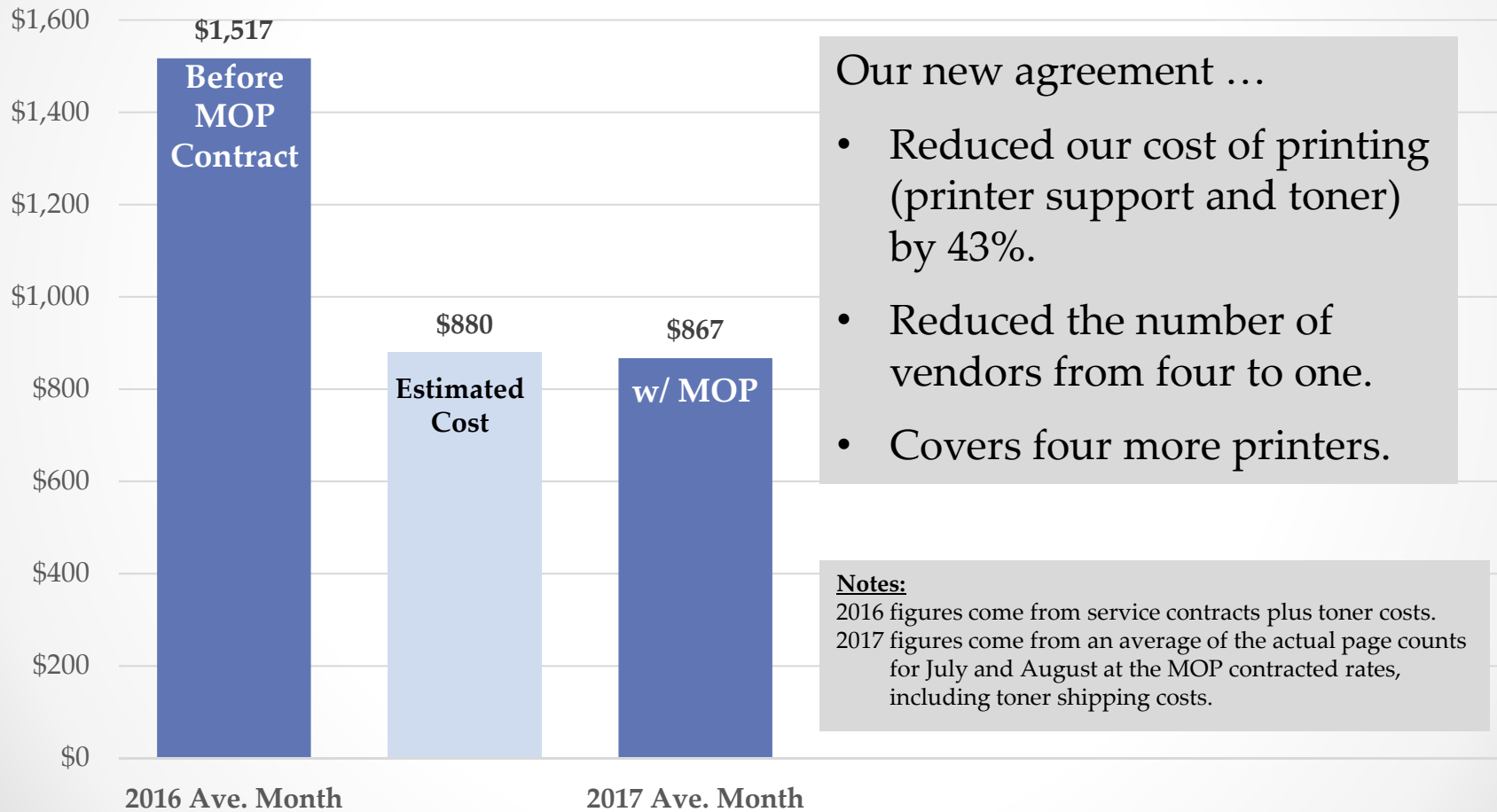
- What's Next

- IT Portfolio

Information Technology Projects Summary

- ERS-IT Reorganization Plan (In Progress)

- MERITS Optimization –Health Care Processing and Optional Service Credit (In Progress)

- Struts 2 Upgrade (In Progress)

- MERITS Optimization –BAA & PAP - Benefit Amount Adjustment, and Payroll Processing (Completed)

- Member Self Service enhancements- Allow Address changes via online feature (Completed)

- Network Firmware Upgrades (809,Femrite, RO Completed and 789 In Progress)

- 2016 IP Address Review and Cleanup (Completed)

- 2017 SQL Database Review and Cleanup (Completed)

- Business Continuity Test Planning (In Progress)

- ERS-IT Strategic Plan FY2018-2022 (In Progress)

Information Technology Projects Summary

- CMERS Website Upgrade (In Progress)

- Femrite 100Mbps Data Circuit Contract Swap to Save ~$56K Over 3 Years (Completed)

- SAN Upgrade Planning (In Progress)
  Met with storage vendors (Dell EMC, NetApp, HPE, IBM) to review RFQs and designs for the ERS storage area network (SAN) upgrade project.

- Altiris Upgrade - Asset Management Software (In Progress)
  Training Scheduled

- Implementation of Milwaukee Office Products Software for Printer maintenance and Toner Support (Completed)

Monthly Cost of Printing
with Milwaukee Office Products (MOP)

Our new agreement …

- Reduced our cost of printing (printer support and toner) by 43%.

- Reduced the number of vendors from four to one.

- Covers four more printers.

Notes:
2016 figures come from service contracts plus toner costs.
2017 figures come from an average of the actual page counts for July and August at the MOP contracted rates, including toner shipping costs.

$1,517 — Before MOP Contract

$880 — Estimated Cost

$867 — w/ MOP

2016 Ave. Month

2017 Ave. Month

Application Stats

Category	High Priority	Low Priority	Total
Current Inventory	6	5	11
PIR	4	2	6
CCR	2	3	5
Pending/Hold	0	1	1
Deployed(Awaiting Next stage) /Ready for Production	1	0	1
Net Current Inventory	5	4	9

Optimization Stats

Funcational Area	Lines of Code		Reduction	%
	Before	After		
W&C (Wage and Contribution)	78219	45201	33,018	42.21%
MAM (Member Account Maintenance)	161010	106692	54,318	33.74%
GBE (Generate Benefits Estimate)	109345	78219	31,126	28.47%
RAP(Retirement Application Processing)	83059	52654	30,405	36.61%
E&D (Enrollment & Demographics)	112206	64981	47,225	42.09%
REF (Refunds)	45355	33696	11,659	25.71%
BAA (Benefit Adjustments)	109,144	69,336	39,808	36.47%
PAP (Payroll Processing)	132,683	83,555	49,128	37.03%
Total Lines of Code	831,021	534,334	296,687	35.70%

Benefits:
- Improved readability and understandability of the complex code
- Ease of on-boarding of a new developer resource
- Minimizes preparation efforts for future application upgrades (Java 1.8, Websphere application server 9 and SQL Server 2016)
- Improved response time to end users (on-line & batch)

What's Next…

- Continue All "In Progress" Items on Pages 3 & 4

- Purchase Storage Area Network Array (SAN) for 789

- Test a Controlled Patch Deployment Methodology for Desktops using Altiris

- Complete Network Gear Firmware Upgrades for 789

- Execute Business Continuity Test on 09/26/2017

- Work with DER on IT Study to Begin Insourcing Contract Positions

- Laptop Asset Management Program (LAMP)

- Social Engineering Audit and Network Vulnerability Audit

- Network Re-Design Proposed Diagram

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.
  - **Altiris:** 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.
  - **JAVA:** 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 Control 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 Femrite. 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 level 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 10850 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 September 1, 2017

Project Health	% Complete	Project Priority	Complexity (S / M / L)	Project Name	Project Mgr	Description	Strategic Goal: G1 - G7	Status	External Vendor Required: Y/N	Actual Start Date	Target Completion Date	Estimates (Hours)	Actuals (Hours)	Hours Variance = Estimates - Actuals	Hardware/Software & External Labor Budget ($)	Actual Spent-to-Date on Hardware /Software & External Labor ($)	Estimate to Completion (ETC) (of Hardware/ Software & External Labor Costs)
G	10%	1	L	SAN Upgrade & Replacement	Raynal	Design and analysis phase	G7	IP	Y	5/19/17	TBD	TBD	48	TBD	TBD	TBD	TBD
G	20%	2	M	Upgrade Network Infrastructure Firmware/OS @	Benedict	Investigate possible firmware/OS upgrades	G6	IP	N	8/8/17	10/1/17	90	13	77	N/A	N/A	N/A
G	22%	3	M	CMERS.com Upgrade & Redesign	Zaffiro	Move to Titan 6.9, Responsive Design, and an Intranet	G4	IP	Y	6/1/17	10/27/17	146	61	85	$22,080	$22,080	$0
G	5%	4	M	BCP Test	Siddiqui	Remote Office Disaster Recovery	G3	NS	N	9/26/17	9/26/17	TBD	TBD	TBD	N/A	N/A	N/A
G	30%	5	L	Struts 2 Upgrade (functional areas besides MAM)	Manchu	Software development upgrade all other functional areas	G7	IP	Y	10/17/16	8/15/19	11,438	2,760	8,678	$730,290	$139,795	$590,496
G	81%	6	L	HCP Optimization	Manchu	Evaluate, assess and implement MERITS Optimization and Clean-up	G7	IP	N	10/26/16	9/22/17	1,406	868	538	N/A	N/A	N/A
G	34%	7	L	OSC Optimization	Manchu	MERITS optimization & clean-up of Optional Service Credit	G7	IP	N	5/4/17	4/12/18	1,331	478	853	N/A	N/A	N/A
G	10%	8	M	IT Strategic Planning @	Reid	Create a 5 year plan for IT	G1	OH	N	5/15/17	8/31/17	100	8	93	N/A	N/A	N/A
G	10%	9	M	Altiris Upgrade	Raynal	Software tracks our IT assets	G6	IP	Y	6/6/17	2/9/18	657	52	605	$4,500	$4,500	$0

Green = On Target - No Significant Issues
Yellow = On Watch List – Issues Being Addressed
Red = Project cannot move forward as planned without management attention or approval.

NS	= Not Started	OH = On Hold
IP	= In Process	C = Complete

@ = Activity (no charter)

Special Note: Struts 2 Upgrade costs are part of the 3-year HP maintenance contract.

Completed Projects & Tasks in Last 12 Months	Finished	Hours / $ Spent
Windows 2012 Server Upgrade @ (Raynal)	9/21/2016	876 hrs / $8,434
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

	Finished	Hours / $ Spent
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
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)		57.7 hrs / N/A

Organizational/Personnel Update

Administration and Operations Committee
Thursday, September 21, 2017

- ERS Reclasses and Reorgs still in progress.

- ERS is working with DER to fill the following vacancies: Records Technician II, Pension Accounting Manager, and Chief Financial Officer.

- ERS is working with DER to reclassify two IT positions, a Pension Accounting Specialist position and a Disability Manager position.

- Proposed IT Reorganization is pending DER classification study.

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