



● ITSP Quarterly Report - Written Report (period ending Jun 2014)

This report provides a quarterly update on progress to implement Metropolitan’s Information Technology Strategic Plan (ITSP) and on information technology (IT) activities for the period ending June 30, 2014. The ITSP provides a roadmap to guide the investment and deployment of information technology at Metropolitan over the next three to five years. The plan was refreshed in 2010 and is currently being updated based on changing business needs and technologies. The goal of the plan is to leverage information technology investments to increase long-term reliability, while improving Metropolitan’s overall efficiency and effectiveness. Oversight of IT investments is provided by the IT Guidance Committee consisting of senior management and the Capital Investment Plan (CIP) Evaluation Team as part of the CIP planning process.

There were a number of important milestones achieved during the period that are summarized in this report. Selected accomplishments include: completion of configuration and testing of the database environment in support of the new Itanium UNIX Server Project; conducted a comprehensive assessment of IT infrastructure components (e.g. network routers, switches and uninterruptible power supplies) that are reaching end-of-life; continued development of Metropolitan’s SCADA cyber security enhancements and Laboratory Information Management System Upgrade; and continued updating of the Information Technology Strategic Plan.

Key milestones for the upcoming quarter ending September 30, 2014 include: obtaining Board approval and authorization for the final design phase and pilot of the Wadsworth Pumping Plant Control and Protection System Upgrade; begin user acceptance testing of the Account Payable imaging project; continuing to work collaboratively with IT Strategic Plan’s consultant to develop the assessment report; and continuing the implementation of the PeopleSoft and Communication Infrastructure Reliability projects.

Purpose

Administrative Code 2700; Article 2 Quarterly Reports; Section 2720 General Manager’s Quarterly Reports; (e) To the Organization, Personnel and Technology Committee, the status of all information technology projects throughout the organization.

Attachments

Attached are highlights of progress and major milestones reached on IT projects / initiatives during the period of April 1, 2014 through June 30, 2014. The projects are categorized by business driver as follows:



| IT STRATEGIC PLAN | |
|---------------------------------------|--|
| Enhanced Reliability | – Enhance system reliability |
| Improved Water Quality | – Ensure water quality excellence |
| Enhanced Cyber Security | – Effectively manage and safeguard assets |
| Productivity / Cost Efficiency | – Improve process efficiency and effectiveness |

Enhanced Reliability:

Through 4th Quarter

FY Budget: \$10.15 M FY Expended: \$5.34 M

Key Accomplishments Included:

Enterprise UNIX Server Upgrade

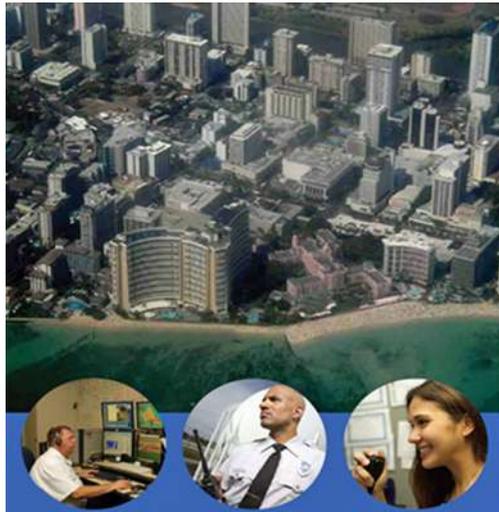
UNIX servers located in Metropolitan’s Data Center house the Districts enterprise application such as the Financial and Human Resource Management systems. These servers support key enterprise business applications (e.g. Oracle and PeopleSoft).

- As part of the project plan, staff continued to build out the new Itanium UNIX servers. Staff worked collaboratively with consultant to configure, test, and validate the system. To date, upwards of 30 servers (physical and virtual) have been built. In addition, staff began moving selected development and staging Oracle databases to the new UNIX server for testing.
- In May, IT staff also briefed the IT Guidance Committee on the current application and database migration strategy. Upon completion, the UNIX Server Upgrade will enhance reliability and performance as the existing units are reaching the end of their normal expected life.

Emergency Radio Communication System Project

Support Metropolitan's emergency response plan by upgrading the two-way radio communication system used for operational and emergency response communications. The system is critical to providing emergency and day-to-day communications, workplace safety, and site security throughout the conveyance and distribution system.

- In May, staff obtained board authorization and appropriation of funds to initiate design, procurement, and deployment of the new Emergency Radio Communications System which will cover Metropolitan’s entire service area. The key objectives for this project include enhancing coverage, capacity, and improving usability. For example, the new system provides end-to-end coverage of Metropolitan’s service area; increases communication capacity; and improves usability with features such as underground communication (e.g. plant tunnel).
- Per the Board’s authority, staff completed negotiations and executed agreements with the Prime Consultant and Owner’s Engineer Agreement in June.

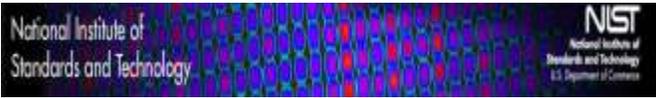


Other Key Activities and Accomplishments

- Completed a comprehensive assessment and inventory of key IT infrastructure components (e.g. network routers, switches and uninterruptible power supplies) that are reaching end-of-life. The effort involved Union Station Headquarters Building, field, desert and remote sites spanning over 70 locations. This information is needed to prepare the scope of work for an upcoming IT Network Reliability Upgrade Project to replace end-of-life equipment, critical to ensuring the reliability of Metropolitan's IT infrastructure.
- As part of on-going Disaster Recovery preparedness, staff conducted IT Disaster Recovery exercises involving critical applications used by Water System Operations, Finance, Water Quality, Legal and Human Resources. The exercises provided live simulation of staff accessing critical applications via servers/databases located at Metropolitan's remote disaster recovery facility. The tests were successfully completed and met all the objectives of the exercises including hands-on training, validation of recovery procedures, and identifying opportunities for enhancements to the IT Disaster Recovery Plan and Procedures Guide.
- Completed replacement of cafeteria audio equipment by replacing end-of-life hardware that was no longer operational. As part of the upgrade, obsolete audio equipment including control system, audio mixer, microphone and related equipment were replaced. This upgrade ensures a functional and reliable audio system for the cafeteria to support various events hosted at Metropolitan's Union Station Headquarters building.

The fourth quarter variance between budgeted and expended dollars is lower than planned due to projects being deferred, in part, to allow additional time to investigate alternative approaches and other cost-effective options.



| <p style="text-align: center;">Enhanced Cyber Security:</p> | <p style="text-align: center;">Through 4th Quarter FY Budget: \$0.59 M FY Expended: \$0.46 M</p> |
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| <p>Key Accomplishments Included:</p> <p>Metropolitan’s Supervisory Control and Data Acquisition (SCADA) system is used to monitor and control water system processes such as water conveyance, distribution, and treatment, as well as provide the source of data for operational business processes such as regulatory compliance, chemical inventories, and process efficiencies.</p> <ul style="list-style-type: none"> ▪ During this period, IT and Water System Operations staff initiated the configuration of new servers. The new servers will be used to more effectively manage applications, security, and patch management of SCADA server hardware, software and clients (users). <p>Other Key Activities and Accomplishments</p> <p>IT Staff continued to monitor and participate in local and national efforts aimed at enhancing security capability for the water sector. During the period, key activities included:</p> <ul style="list-style-type: none"> ▪ Continued to use the National Institute Standards and Technology (NIST) Cybersecurity Framework to assess Metropolitan’s cyber security posture. NIST is a Cybersecurity Framework in response to a Presidential Executive Order 13636 Improving Critical Infrastructure Cybersecurity. ▪ Participated in security forums aimed at enhancing cyber security capabilities by sharing information, solutions and strategies among IT professionals. In May, IT staffs were key note speakers at various events including: Santa Clarita Water District for BAYWORK Control Talk, and the ISACA/ISSA Security Conference in Denver, Colorado. ▪ Continued best practice and to promote cyber security awareness. The Information Security Team continued to publish monthly cyber security tips on Metropolitan’s internal website and provided security orientation for all new hires on the operating policy of Metropolitan. <p>Expenditures in the Enhanced Cyber Security category were within plan for the fiscal year. All projects are projected to complete within Board approved budgets.</p> | <div style="text-align: center;">  </div> <div style="text-align: center; margin-top: 20px;">  </div> <div style="text-align: center; margin-top: 20px;">  </div> |

| <p style="text-align: center;">Improved Water Quality:</p> | <p style="text-align: center;">Through 4th Quarter FY Budget: \$0.0 M FY Expended: \$0.0 M</p> |
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| <p>Key Accomplishments Included:</p> <p>Laboratory Information Management System (LIMS) Upgrade</p> <p>The LIMS application contains Metropolitan’s water quality State compliance data and is the data-of-record. LIMS manages water quality samples and results for water quality compliance, operational monitoring, and research programs. The upgrade was required because the previous version was at the end of its support lifecycle and it’s not compatible with current operating system.</p> <ul style="list-style-type: none"> ▪ During the period, IT staff continued pre-production testing in preparation for deployment. Once the system is fully tested, IT staff working with Water Quality will initiate rollout of the upgraded LIMS system. ▪ The successful upgrade of LIMS will ensure critical vendor support (maintenance), enhance reliability (software currency), improve user interface (ease of use), and provide for the latest security features. <p>On-going Water Quality Programming Support</p> <ul style="list-style-type: none"> ▪ IT staff provided on-going support to important Water Quality software applications used to collect data, support testing and monitoring, and generate compliance reporting. These included: <ul style="list-style-type: none"> ▪ Ad-hoc Reporting - produces reports on SCADA data points extracted in data mart. ▪ Water Quality Monitoring and Rapid Event Detection - detects critical deviations from standard chemicals presence in Metropolitan’s distribution system. ▪ Interim Enhanced Surface Water Treatment Rule - supports monitoring and control of microbial pathogens in drinking water. Collect and provide data for risks analyses. <p>No capital dollars were budgeted in the Water Quality category for this fiscal year. All activities in this category reflect work being done as part of the fiscal year 2013-2014 O&M budget.</p> |    |

| <p>Productivity / Cost Efficiency:</p> | <p style="text-align: center;">Through 4th Quarter FY Budget: \$1.32 M FY Expended: \$1.27 M</p> |
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| <p>Key Accomplishments Included:</p> <p>Personal Computer Replacement Program (PCRP)</p> <p>Key PCRP benefits included: enhanced reliability by replacing end-of-life workstations and laptop computers; increased security by upgrading computer operating system to a newer version; and improved organizational effectiveness by deploying the latest technologies and office productivity tools.</p> <ul style="list-style-type: none"> ▪ During the last quarter of FY 2013-2014, the Audit Department substantially completed an audit of the PCRP. The audit report is in the final stages and staff has responded to requests for information from the Audit Department. ▪ The project will be closed upon completion of the audit, and scheduled to be completed next period. <p>Oracle Accounts Payable Automation System Project</p> <p>The implementation of the Accounts Payable Automation System will enhance the processing of invoices by Metropolitan’s Accounts Payable staff. Once fully deployed, the new system will increase workforce productivity and improve the timely payment of vendor invoices. Additionally, invoices will be scanned and stored electronically. Hardcopies will no longer need to be physically stored.</p> <ul style="list-style-type: none"> ▪ During this period, staff completed initial set-up of development and testing environments, configured the system, and demonstrated the use of the new Accounts Payable Automation System to key stakeholders. The demonstration allowed for user feedback and configuration changes to improve usability. ▪ Testing is scheduled to continue thru next period with the anticipation of deployment in the second quarter of next fiscal year. <p>Other Key Activities and Accomplishments</p> <ul style="list-style-type: none"> ▪ PeopleSoft has been the system used by Metropolitan to manage all Human Resources-related information, including payroll, benefits and employee information. As part of the development phase, consultants reviewed and made recommendations for configurations to the Benefits Administration and Payroll modules, to be implemented as part of the project. Staff continues to test the new version of the software. | <div style="text-align: center;">  </div> <div style="text-align: center; margin-top: 20px;">  </div> <div style="text-align: center; margin-top: 20px;">  </div> |

Board Report (ITSP Quarterly Report - Written Report (period ending Jun 2014))

- Metropolitan continued its effort to update its Information Technology Strategic Plan (ITSP). The purpose of the ITSP is to provide a roadmap to guide the investment and deployment of information technology at Metropolitan over the next three to five years. The plan is updated periodically based on changing business needs and technology advancements. During this period, IT staff and consultant continued the efforts to update Metropolitan's existing IT Strategic Plan with key activities including substantially completing interviews with Metropolitan's senior management as part of data collection. For the next period, staff will begin scheduling interviews with selected member agencies and Directors and continue to work collaboratively with consultant to develop a draft assessment report.
- Working with Business Technology Group - Business Outreach Section, staff from Information Technology Section presented "IPADS: TAKING IT FROM A TOY TO A TOOL" as part of the H₂O TechTalk series. The presentation was well attended and attendees learned about the latest tips and tricks, ways to leverage the iPad as a tool and showed the usage of different applications to enhance productivity.

Expenditures for the Productivity / Cost Efficiency category were within plan for the fiscal year. All projects within this category are projected to complete within Board approved budgets.

