| Multnomah County | | | | |
|--------------------------|----------------------------|----------------------|------------|-----------|
| Program #78318 - IT Cy | ber Security | | | 6/19/2017 |
| Department: | County Assets | Program Contact: | Bob Leek | |
| Program Offer Type: | Existing Operating Program | Program Offer Stage: | As Adopted | |
| Related Programs: | | | | |
| Brogrom Characteristic | a. One Time Only Request | | | |

Program Characteristics: One-Time-Only Request

Executive Summary

This Program Offer requests the carryover of funds to continue a number of the County's multi-year cybersecurity program that is currently in process. The efforts include the replacement of the County's legacy firewall platform (the primary network defense system that protects the County from external cyber threats); replacement of the end of life email security monitoring service; development of a County security awareness training program; and implementing tools dedicated to the management of data and systems in the cloud.

Program Summary

Several efforts were initiated in FY 2016. The firewall analysis and re-architecture plan was completed. Vendor product demos, proof of concepts, and final product selection was completed. An accompanying log management and analysis tool will be selected and procured by end of FY 2017. Procurement of the enterprise firewall platform is in process and implementation will be completed by end of FY 2018. The data center fabric redesign, purchase and implementation portion of the project will begin in FY 2018 and will carry over to FY 2019.

Security improvement work and vulnerability remediation for a critical business system was completed in FY 2016. The email security monitoring project was also implemented and completed in FY 2016.

Efforts planned for FY 2017 include expanding our security awareness training program for the County staff, procuring and implementing tools dedicated to the management and monitoring of our systems in the "cloud" and in our physical data center and the purchase and implementation of a tool that can assist in assessing the risks and responsibilities associated with incidents that may be data breaches. In 2016, Multnomah County saw a 50% increase in the number of compliance incidents that involved inadvertent or unauthorized exposure of protected information.

County staff are both our front line of defense as well as the last mile in our protection strategy. The security awareness program is a resource that assist in the education of our staff on not only what they can do to recognize malicious activity but also how to detect and resist attacks.

Over the past few years, County IT has made a strategic decision to embrace a "cloud-first" strategy. As we move data between systems internally and externally, we need to be able to identify and classify data hosted in these environments, then monitor to identify malicious activity or anomalous behavior and provide scale-able protections for those activities. We will be selecting and implementing tools that can assist in the monitoring.

| Performance Measures | | | | | | | | |
|----------------------|--|----------------|-------------------|------------------|---------------|--|--|--|
| Measure Type | Primary Measure | FY16 Actual | FY17 Purchased | FY17 Estimate | FY18 Offer | | | |
| Output | % of project completion for firewall and data center fabric redesign | N/A | 75% | 25% | 75% | | | |
| Outcome | Next generation firewall in production | N/A | 75% | 25% | 100% | | | |

Performance Measures Descriptions

PM #1 Output - This measure is designed to ensure a secure, redundant firewall system is fully implemented and operational.

PM #2 Outcome - This measure is designed to ensure the firewall system addresses the security and operational needs of the county.

Revenue/Expense Detail

| | Proposed General Fund | Proposed Other Funds | Proposed General Fund | Proposed Other Funds |
|---------------------------|--------------------------|-------------------------|--------------------------|-------------------------|
| Program Expenses | 2017 | 2017 | 2018 | 2018 |
| Contractual Services | \$0 | \$1,091,197 | \$0 | \$791,669 |
| Materials & Supplies | \$0 | \$175,413 | \$0 | \$0 |
| Total GF/non-GF | \$0 | \$1,266,610 | \$0 | \$791,669 |
| Program Total: | \$1,26 | 6,610 | \$791 | ,669 |
| Program FTE | 0.00 | 0.00 | 0.00 | 0.00 |
| Program Revenues | | | | |
| Financing Sources | \$0 | \$1,266,610 | \$0 | \$0 |
| Beginning Working Capital | \$0 | \$0 | \$0 | \$791,669 |
| | | | | |

This program will carryover unspent one time only revenues into FY 2018 as beginning working capital through project completion.

Significant Program Changes

Last Year this program was: FY 2017: 78318 IT Cyber Security

The ongoing nature of changes in the threats to our cybersecurity capabilities require identifying those threats and establishing mitigation plans related to those vulnerabilities. The initial work identified for FY 2016 is under way, and new items have been identified and addressed with in FY 2017. Continued diligence and planning are expected as an ongoing component of this program offer. Requesting FY 2017 carryover to continue the project completions in FY 2018.