

NETWORK UPGRADE

March 5, 2018



Recommended Action:

- Adopt a Resolution approving an agreement with Development Group, Inc. for the purchase and implementation of information technology related to a network upgrade in an amount not to exceed \$512,127.54, authorizing the City Manager to execute the agreement, authorizing change orders up to 10% of the original contract amount, and amending the Information Services Fund FY 2017-18 budget by \$153,805

Background

- Many changes have occurred in the information technology division of the City over the last year or so including:
 - The City entered into an agreement with Portola Systems, Inc. for technology support services directly related to the City Hall Addition and Alteration Project
 - The seasoned Coordinator vacated her position in August
 - The City hired Laura Tredinnick as the Interim Information Systems Manager to assess the overall performance of the division and prepare a report with her findings and recommendations to improve services
 - The City upgraded the Coordinator position to a Manager position with increased technical skills
 - Hired Adam McKenna in December as the IT Manager
 - Just one month ago, the Council authorized upgrading the current Technician to a Specialist and authorized hiring an additional Specialist for which the recruitment is in process.

Background, contd.

- The City's actions since August moved the City in a direction to rely less on outside consultants for the day to day operations
- Since coming on board Mr. McKenna has reviewed the City's network infrastructure and found aged network infrastructure still in service beyond its useful life and at risk of failing. While some of the infrastructure was scheduled for replacement with the City Hall Addition and Alteration Project, staff is finding it important to look at the overall network and execute a more comprehensive plan
- Also, some of the equipment originally proposed for the City Hall Addition and Alteration Project would require continued outside consultant support to maintain, and therefore the City decided to terminate the agreement with Portola Systems, Inc. and enter into an agreement with Development Group, Inc. for the remaining work required to bring the City Hall network infrastructure ready for the March transition to VOIP

STATE OF THE NETWORK / NETWORK UPGRADE

Adam McKenna – Information Technology Manager

What is a network?

A network is made up of interconnected network equipment, specific hardware and software, and is the method of providing connectivity/communications between technology devices and other computing systems. Communication occurs through digitized signals sent over the network to facilitate data transmission and resource-sharing among a wide range of users and systems

Examples of what our network does:

- Provides access to programs and applications such as our financial software or permitting system
- Allows for various forms of communications such as email and voice (phone) calls to traverse our network
- Allows for research and information gathering/sharing
- Delivers critical services such as phones, credit card processing, printing, data storage, and backups, to computers and staff

The State of our Network

- Approximately 40 critical network devices, 75% of which are older than 7 years; 50% are over 12 years old
- IT has very limited visibility into the state of the network, making support difficult and planning impossible
- No strategic design/configuration changes to leverage modern networking needs in over 10 years
- Network security needs to be taken into consideration, this plan allows the City to adapt to best practices in real time as improvements are made

IT Recommendation

- We recommend updating our network equipment and design out of operational necessity

Business Objectives

- Minimize the overall cost and dependency
- Sustained and managed by current/planned IT department staffing
- Offer only proven, tested solutions that meet City's operational objectives

Reasons Why

- IT gains visibility and fact based data
- Minimize number of applications that must be maintained
- Simplify network management / maximize staffing resources
- Stabilize network

Bid Process

- Requested proposals from multiple vendors (3)
- DGI was the only vendor to successfully provide a proposal meeting the needs of the city
- DGI's proposal utilizes CMAS (California Multiple Awards Schedules) to ensure that every product has already been through a standardized bidding process

Recommended Proposal

- **Specific to City Hall:**
 - Critical network hardware, software and services for City Hall data center.*
- **City-wide:**
 - Replacement/upgrade of all city-wide wired networking equipment
 - In-door wireless network infrastructure for all sites
 - Design and implementation Services
- **Network management platforms:**
 - Includes the equivalent of 14 independent network management tools
 - Reduces additional hardware, software, and maintenance
- All above items include ten years licensing and support
- Removes the need for an estimated \$80,000 annually of vendor based network support services
- **Proposal also includes:**
 - Enterprise Device/Mobile Device Management for five years
 - Specialized security software for 3/5 year terms

* excludes data center servers, storage, and software, not related to a wired network upgrade

Options

Data Center and site based wired network and in-door wireless

Options à	Cisco Meraki Option "A"	Cisco Non-Meraki (existing platform) "B"	Do Nothing "C"
Recommendation	Recommended Option	Alternate Option	Not recommended
Term	10 Years	Up to 10 years	Continuous (10 yrs)
Hardware	\$512,000	\$300,000 including additional on-prem server needs	\$300,000 continuously spent over 10 years
Software		\$200,000	X
Additional Manufacturer HW/SW Licensing or Support Agreements	included for 10 years, includes automatic and free security and feature upgrades	\$30,000 x 10 yrs = \$300,000	\$22,000 purchased yearly for 10 yrs = \$220,000
Vendor Support or Additional Personal -> Network Engineer	\$10,000-20,000 per year x 10 = \$100,000 - \$200,000	\$170,000 salary (including benefits costs) x 10 yrs = \$1,700,000	\$130,000 per year x 10 = \$1,300,000 plus project \$\$\$ to maintain
Impact on City	Significant Positive	Positive	Negative
Natural/Disaster Planning	Designed with multiple contingencies	Designed with multiple contingencies	Has minimal contingencies

Impact

Meraki Option:

- Allows IT to become proactive and strategic
- IT has visibility and facts
- Minimize support
- Simplify network management
- Stabilize network
- Minimize potential for down time

Do Nothing Option:

- Expect increased staff down time
- Spend more money with no strategy
- Less supportable, less securable, and greater frustration

Total Cost of Ownership

Options à	Cisco Meraki Option "A"	Cisco Non-Meraki (existing platform) "B"	Do Nothing "C"
Recommendation	Recommended Option	Alternate Option	Not recommended
Term	10 Years	Up to 10 years	Continuous (10 yrs)
Total Cost of Ownership	\$ 712,000	\$ 2,500,000	\$ 1,820,000
		X 3.51	X 2.56

The total proposal cost is \$512,127.54

CLOSING STATEMENTS

Heather Ippoliti – Assistant City Manager

FISCAL IMPACT:

- The Cisco Capital Program offers a 36 month financing program without interest:
 - Year 1 \$153,638.26
 - Year 2 \$153,638.26
 - Year 3 \$204,851.02

The contract will be funded through the Information Services Fund. The Information Services Fund is an internal service fund, funded with service fees from all users. As proposed, the estimated June 30, 2018 ending working capital will be reduced by \$153,638.26 to \$612,201

While Development Group, Inc. is confident with their proposal, staff is requesting a contingency of 10% of the original contract value to cover the unknown found during the upgrade that will require additional components or time

Recommended Action:

Adopt a Resolution approving an agreement with Development Group, Inc. for the purchase and implementation of information technology related to a network upgrade in an amount not to exceed \$512,127.54, authorizing the City Manager to execute the agreement, authorizing change orders up to 10% of the original contract amount, and amending the Information Services Fund FY 2017-18 budget by \$153,805

QUESTIONS?
