500 West Big Beaver
Troy, MI 48084
troymi.gov

Date: March 15, 2021

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager
            Robert C. Maleszyk, Chief Financial Officer
            Lisa Burnham, Controller
            Gert Paraskevin, Information Technology Director
            Emily Frontera, Purchasing Manager

Subject: Standard Purchasing Resolution 4: Sourcewell Purchasing Cooperative – Purchase of
            HP Servers

History

The City has been utilizing a virtual environment to host the various servers required to offer application and storage resources to assist staff in performing their duties. There are currently two physical servers in City Hall which host 52 virtual servers. These are balanced between the two, but when we conduct maintenance or should one server fail, through features of VMWare our virtualization software, all 52 virtual servers are moved to one host server. This causes an over allocation of resources and results in slower response during that time.

This scenario could be avoided by adding a third server. It would also provide additional memory and CPU resources to existing servers and for future expansion.

Plans for expansion include the following:

1. Virtualizing the services offered by the two physical servers in the Library that support workstations utilized by the public. The servers were purchased in 2013 and are now approaching 8 years of age. Rather than replace we will virtualize.
2. In a separate memo City Management is recommending upgrading our telephone system to a virtual environment. This will be an addition of 7 virtual servers.

The City's current Disaster Recovery/Test environment is housed at the Troy School District Service Center. It is a VMWare virtual environment hosted on a DELL server that was purchased in 2014. It is now approaching 7 years of age.

Our standard refresh for servers is approximately every 7 years. Newer products contain improvements that make them faster, more reliable, and more efficient. In addition, maintenance costs begin to increase after 5 years. We purchased the maximum 5-year maintenance at a discounted rate, but as the server ages and becomes obsolete maintenance increases.

It is proposed that the City purchase 2 new servers, one to augment the current production VMWare environment in City Hall and the other as a replacement for the Disaster Recovery/Test environment. The additional server would also require licensing for VMWare, Windows Server and Veeam backup.

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Purchasing

- Pricing to purchase two (2) new Hewlett Packard DL360 servers, maintenance and software has been secured from *CDW-G of Chicago, IL* based on Sourcewell's Cooperative Purchasing Contract #081419-CDW for technology goods and services as outlined in Appendix A.
- City Council authorized participation in the Cooperative Purchasing Program on November 9, 2020 (Resolution #2020-11-165-J-8).

Financial

Funds are available in the Information Technology Capital Budget under Project #2021C0066-Replace Test/DR Server and Project #2021C0127-Library Server Replacement. Expenditures will be charged to account number 636.228.7980.020.

Recommendation

City Management requests authorization to purchase two (2) new Hewlett Packard DL360 servers including hardware, five (5) years of maintenance and software, from *CDW-G of Chicago, IL* as outlined in Appendix A through the Sourcewell Purchasing Contact #081419-CDW for an estimated total cost of $65,081.77.

Appendix A

Hewlett Packard Sourcewell Server and Software Pricing

Items/description	Price
Disaster Recovery/Test Server:	
HP DL360 Gen10 with 512GB Memory and 14.4 TB storage	$ 21,899.64
Maintenance (5 years)	$3,860.00
City Hall VMWare Environment Additional Server	
HP DL360 Gen10 with 512GB Memory	$18,175.25
Maintenance (5 years)	$3,860.00
VMWare	7,600.36
Microsoft Windows Server Datacenter	8,627.52
Veeam Backup	1,059.00
Total cost for 2 servers including software and maintenance	**$ 65,081.77**