



MEASURE Z - DATACENTER/DISASTER RECOVERY CAPITAL IMPROVEMENT PROJECT

Innovation and Technology

City Council Meeting
November 17, 2020

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BACKGROUND

The City's datacenters are responsible for storage, processing, and the distribution of large amounts of Citywide data (e.g. via enterprise applications, billing and financial systems, permitting systems, and public safety systems).



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BACKGROUND (CONT.)

1. The City currently maintains a primary datacenter and a limited backup system failover disaster recovery site.
2. The existing datacenter lacks failover capabilities.
3. Internal and public facing service disruption may occur if City Hall's datacenter experiences an emergency.



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BACKGROUND (CONT.)

1. The City's central storage system and some servers are no longer supported by the manufacturer.
2. Expanding capacity and resolving these deficiencies requires upgrades to the primary data center equipment, including the recovery site, to improve the City's continuity of operations.



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BACKGROUND (CONT.)

1. The Budget Engagement Commission and the City Council allocated funding through Measure Z in 2017 to:
 - A. Address this critical infrastructure gap.
 - B. Maintain the City's digital infrastructure.
 - C. Improve resiliency to support City operations during emergencies.



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BENEFITS OF THE VXRAIL SERVER ARCHITECTURE

1. The purchase of the Dell VxRail server architecture bundles servers, storage, and virtual machine technologies into one package.
2. This creates the next generation of datacenter virtualization, called Hyperconverged Infrastructure.
3. Hyperconverged Infrastructure will provide cloud-like capabilities.



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BENEFITS OF HYPERCONVERGED INFRASTRUCTURE

1. Full utilization of the City's failover datacenter in case of a City Hall datacenter outage
2. Replace and consolidate older servers
3. Lower total cost of ownership
4. Improve cybersecurity
5. Provide a scalable datacenter infrastructure, software, and security to support future City and Public Utilities smart cities technology initiatives



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BENEFITS OF HYPERCONVERGED INFRASTRUCTURE

1. Replace central storage with faster distributed solid-state storage
2. Enable better organizational agility
3. Enable faster resource provisioning



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ENTERPRISE LICENSE AGREEMENT

1. Hardware purchase and Enterprise License Agreement includes twenty-four/seven technical support
2. Five-year warranty with next business day equipment replacement
3. Professional services for project implementation



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FISCAL IMPACT

1. The total fiscal impact over the five-year term is \$3,546,176.78.
2. The five-year Enterprise License Agreement is being paid in five-equal annual payments of \$239,437.56.
3. Future licensing costs totaling \$957,750.21 will be paid for by future Measure Z allocations for FY2021-2025.



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FISCAL IMPACT

1. Sufficient funds are available in:

Account	Account Number	Amount
Datacenter/Disaster Recovery Project	9914000-462308	\$1,046,541
IT-Administration Measure Z Technology Improvements	9914009-462308	\$1,862,955
	Total	\$2,909,496



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RECOMMENDATIONS

That the City Council:

1. Authorize the purchase of ten (10) VXRail servers and eight (8) infrastructure management servers from Dell, Inc., under the NASPO ValuePoint Cooperative Purchasing Agreement MNWNC-108, pursuant to Purchasing Resolution 23256, Section 602(e), in an amount not to exceed \$2,050,900;
2. Authorize the purchase of upgrades to five (5) existing VxRail servers from Dell, Inc., under NASPO ValuePoint Cooperative Purchasing Agreement MNWNC-108, pursuant to Purchasing Resolution 23256, Section 602(e), in an amount not to exceed \$298,089.01;
3. Approve an Enterprise License Agreement for VMWare Software from Dell, Inc., under NASPO ValuePoint Cooperative Purchasing Agreement MNWNC-108, pursuant to Purchasing Resolution 23256, Section 602(e), in an amount not to exceed \$1,197,187.77, for a five-year term;
4. Authorize the City Manager, or designee, to execute all documents pursuant to this purchase, including the final VMWare Professional Services Scope of Work, and to make minor non-substantive changes.



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