



City of Galveston

DEPARTMENT OF INFORMATION TECHNOLOGY

STAFF REPORT

March 28, 2019

To: Brian Maxwell, City Manager
Honorable Mayor and City Council

From: Hope Dean, Executive Director & Chief Information Technology Officer

RE: Staff recommends entering into a contract with Centre Technologies in the amount of two hundred sixty thousand eight hundred fifty two dollars and two cents (\$260,852.02) for consulting services for the build out of an off-site disaster recovery solution, including the purchase of additional hardware and software utilizing the Texas Department of Information Resources (DIR) intergovernmental contract purchasing program under contract numbers DIR-TSO-3334, DIR-TSO-3926, and DIR-TSO-3763.

BACKGROUND

The Information Technology Department is charged with providing a modern, progressive, and stable computing environment for the City's computing and electronic needs. Achieving this on a restricted budget and remaining fiscally responsible requires careful planning, time for implementation, and communication between the user community and the systems personnel.

In late 2017/early 2018, the City completed implementation of a new Dell Compellent Storage Area Network array (SAN), replacing older less powerful SAN equipment, at the City's primary data center located in the Criminal Justice Center at 601 54th Street. This environment provides data and application services to all City Departments including email, file storage, application presentation, public safety, and phone system services. This virtualized server environment ensures the City is utilizing current technology, and has virtually eliminated physical server installations resulting in a cost savings and increased efficiency by reduced power consumption, reduced hardware replacement costs, and more efficient system administration.

CURRENT SITUATION

1. The City has a contract with American National Insurance Company for space at its state of art data center located in League City. However, to make use of the data center for recovery purposes, the City must provide its own infrastructure.



2. With the upgrade of the SAN technology, the current virtualized server environment at the Justice Center is sufficient to provide requisite service to the City; however, recovery options are limited due to all associated hardware being located in a single physical location, which creates significant risk to the City. The 2017 project was not only intended to modernize the storage array equipment at the City's primary data center, it was also intended to serve as the first phase of a long term goal to create an off-site disaster recovery solution using the older SAN technology that will provide redundancy of the City's data and applications by replicating data between sites.
3. The project was designed to utilize a data storage model that would support the proposed implementation by including a dedicated storage device for the off-site disaster recovery location. This storage model, will provide server and data replication between sites, and create a recovery path in the case of a disaster affecting the primary data center.
4. Cost included in this purchase include the replacement of two servers in the production environment. Servers that are removed from production will be re-purposed for the build out of recovery data center.
5. The City has been utilizing Centre Technologies for strategic support of the City's IT environment and limited staff augmentation since the 2017 project began. Centre Technologies has proven to be an effective and efficient IT strategic partner for the City following successful re-design and implementation of the primary data center infrastructure project and have been instrumental in working with the City's IT infrastructure team on the design of the off-site disaster recovery project plan.
6. Although the City will be primarily utilizing older SAN technology previously removed from production, additional equipment and software are required to support the build out of the disaster recovery data center. Equipment for the project will be purchased through Centre Technologies, identified as a Women owned Historically Under-utilized Business (HUB), utilizing the Department of Information Resources (DIR) purchasing cooperatives DIR-TSO-3334, DIR-TSO-3926, and DIR-TSO-3763, respectively. Cost of the equipment and services included in the purchase is:

Description	Cost
Consulting Services	\$ 48,000.00
Hardware, includes 5 yrs. maintenance and support for computing power	\$ 79,086.01
Software Licenses, including 3 yrs. maintenance and support	\$ 133,408.87
Shipping and Handling	\$ 357.14
Total	\$ 260,852.02

ISSUES

1. The City currently lacks an off-site disaster recovery solution capable of supporting operations in the event the current data center is incapacitated. By replacing the production SAN arrays with new higher performance arrays, the City is now capable of leveraging the older SAN technology and server computing power at the off-site disaster recovery data center.
2. Although the City is leveraging its capabilities through the utilization of its existing SAN technology for the build out of the disaster recovery data center, additional equipment and software are necessary to support full operational capabilities.
3. Current staff are tasked with operational support of all city systems and absent significant training lack sufficient knowledge and experience to complete the build out of the disaster recovery data center. The use of consulting services with specific experience ensures the timely and effective implementation of this solution.

ALTERNATIVES

1. Approve the Consultant Services Agreement with Centre Technologies for the build out of a secondary data center for disaster recovery purposes;
2. Do not approve the Consultant Services Agreement and purchase of additional hardware and software for the secondary data center which leaves the City exposed to unnecessary operational risks or
3. Continue using the tape back-up solution currently in place, which only supports data recovery, not operational capabilities. This greatly limits the City's ability to recover from a disaster as it doesn't include the necessary hardware needed to run the City's applications.

RECOMMENDATION

It is recommended the City Council approve and authorize the City Manager to execute an agreement with Centre Technologies for the purchase of additional hardware, software and consulting service to build out a secondary off-site disaster recovery solution.

FISCAL IMPACT REPORT

Requested by:	Hope Dean Chief Information Technology Officer
Funding Source:	Technology Improvement Fund & IT Operating Budget
Costs of implementation:	\$260,852.02