



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Julia H. Cooper

SUBJECT: SEE BELOW

DATE: July 25, 2022

Approved

Date

7/29/2022

SUBJECT: FIRST AMENDMENT TO THE AGREEMENT FOR INFORMATION TECHNOLOGY INFRASTRUCTURE REFRESH PROJECT WITH SHI INTERNATIONAL CORPORATION

RECOMMENDATION

Adopt a resolution authorizing the City Manager to:

- (a) Negotiate and execute the First Amendment to the Agreement for an Infrastructure Refresh Project with SHI International Corporation (Somerset, NJ) to add hardware, software, licensing, support, and associated professional services to the scope of work to complete disaster recovery and high availability functionality for the City's existing information technology infrastructure and deploy a similar hyper converged infrastructure for the Emergency Operations Center for an increase in compensation of \$687,329, inclusive of applicable sales tax, and a revised maximum compensation of \$3,164,381 for the initial five-year term ending December 31, 2023; and
- (b) Add \$200,000 in contingency for any additional unanticipated changes for the remainder of the initial term, subject to the appropriation of funds.

OUTCOME

Authorizing the City Manager to take this action will help ensure necessary updates are completed for the City of San José's (City) information technology infrastructure, ensure high availability and redundancy for City systems, provide scalability to accommodate emerging technology programs and future City requirements, and ensure emergency operations are unhindered in the event City systems cannot be accessed.

BACKGROUND

In January 2012, the Office of the City Auditor conducted an *Audit of Information Technology General Controls*.¹ The audit identified several weaknesses in the City's general information technology controls, including data security vulnerabilities, inconsistent and resource-intensive backup processes, lack of disaster recovery, and outdated computer systems. In 2017, City Council approved the 2017-2019 Innovation and Technology Strategic Plan² targeted to address these findings, as well as many other areas. In March 2018, the City conducted a Request for Proposal for an Information Technology Refresh Project, and based on the results of that Request for Proposal, recommended an award of contract to SHI International Corporation (SHI). City Council adopted a resolution authorizing the City Manager to negotiate and execute an agreement with SHI in December 2018.³

ANALYSIS

In October 2021, the Information Technology Department (ITD) assessed the City's hyperconverged infrastructure, an infrastructure that consolidates computer, storage, and networking resources into a unified system, which was installed through the agreement with SHI. ITD concluded the requirement to stand up a second datacenter to provide disaster recovery and high availability was not addressed in accordance with the agreement. Disaster recovery and high availability are necessary to ensure that (1) the City has a second datacenter to failover to in the event of a hardware failure in the primary data center, (2) allows for zero data loss in the event of a hardware failure, and (3) upgrades can be conducted as required without affecting City staff access and productivity.

After meeting with SHI, SHI agreed to meet its obligations under the agreement. However, ITD determined that since the original agreement was executed almost four years ago, modifications to the original datacenter configuration will allow ITD to more readily position the City for future expansions. These modifications require licensing and professional services at an additional cost of approximately \$198,000, but by making these changes now, the City will avoid more costly upgrades and replacements in the future.

Additionally, to ensure emergency services remain available should access to City network resources and services be disrupted at the Emergency Operations Center, this recommendation includes an increase in compensation to stand up a similar hyperconverged infrastructure at the Emergency Operations Center. This will allow the Emergency Operations Center to run in "island mode"; while in island mode, the Center will be able to run operations whether connected to the City network or not.

¹ 12-02 Audit of Information Technology General Controls: <https://www.sanjoseca.gov/Home/ShowDocument?id=33758>

² Innovation and Technology Strategic Plan:

http://sanjose.granicus.com/Viewer.php?view_id=&event_id=2677&meta_id=625589.

³ December 2018 Council Memo: <https://sanjose.legistar.com/View.ashx?M=F&ID=6826655&GUID=0AA53587-7766-465A-AF44-EB4958EFC7E6>

CONCLUSION

Approval of this recommendation will allow City staff to amend the current agreement to (1) improve City system and network reliability, accessibility, and resilience through establishing a second data center for disaster recovery and high availability, (2) establish a hyperconverged island environment at the Emergency Operations Center to allow unhindered emergency operations due to loss of access to the City's network and systems, and (3) provide for additional contingency to adapt to future unanticipated City and departmental needs.

EVALUATION AND FOLLOW-UP

This memorandum will not require any follow-up from staff.

CLIMATE SMART SAN JOSE

The recommendation in this memorandum aligns with one or more Climate Smart San José energy, water, or mobility goals.

PUBLIC OUTREACH

This item will be posted on the City's website for the August 9, 2022 City Council meeting.

COORDINATION

This memorandum has been coordinated with the Information Technology Department, the City Attorney's Office, and the City Manager's Budget Office.

COMMISSION RECOMMENDATION

No commission recommendation or input is associated with this action.

FISCAL/POLICY ALIGNMENT

This action is consistent with the City Council-approved budget strategy for the effective use of technology.

COST SUMMARY/IMPLICATIONS

The following outlines the elements of the First Amendment to the agreement:

	Current Agreement Not to Exceed	First Amendment Not to Exceed	Revised Not to Exceed
1. AMOUNT OF RECOMMENDATION		\$687,329	
2. COST ELEMENTS			
- Original Agreement	\$2,146,830		
- Change Order 1	9,000		
- Change Order 2	218,610		
- Change Order 3	102,612		
- First Amendment:			
• HCI Data Center High Availability		\$197,764	
• OEM HCI (including sales tax)		489,565	
TOTAL CONTRACTED	\$2,477,052	\$687,329	\$3,164,381
CONTINGENCY*	84,778**	200,000	284,778
TOTAL NOT TO EXCEED	\$2,561,830	\$887,329	\$3,449,159

*Subject to executed amendment or change order.

**A \$415,000 contingency was previously approved by City Council, but \$330,222 of those monies was used for Change Orders 1-3, leaving \$84,778 available contingency prior to this City Council action.

3. SOURCE OF FUNDING: 001- General Fund

4. FISCAL IMPACT: Subject to availability and approval of funding through the annual budget process. ITD will charge back departments that exceed their quota allocated by ITD.

BUDGET REFERENCE

The table below identifies the funds and appropriations proposed to fund the contract recommended as part of this memorandum.

Fund #	Appn #	Appn Name	Current Total Appn	Amt for Contract*	2022-2023 Adopted Operating Budget Page	Last Budget Action (Date, Ord. No.)
001	0432	Non-Personal / Equipment	\$12,237,560	\$687,329	583	06/21/2022, 30790

*Amt for Contract reflects funding for FY 2022-2023. Contingency is subject to the appropriation of funds.

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CEQA

Not a Project, File No. PP17-003, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment.

/s/

JULIA H. COOPER

Director of Finance

For program-related questions, please contact Ed Kim, Deputy Chief Information Office, at ed.kim@sanjoseca.gov. For procurement- or contract-related questions, please contact Jennifer Cheng, Deputy Director of Finance, at jennifer.cheng@sanjoseca.gov.