



Office of the City Manager

CONSENT CALENDAR  
July 28, 2020

To: Honorable Mayor and Members of the City Council  
 From: Dee Williams-Ridley, City Manager  
 Submitted by: Savita Chaudhary, Director, Department of Information Technology  
 Subject: Contract: ePlus for Cohesity Backup Solution and Hosted Cloud Storage

RECOMMENDATION

Adopt a Resolution authorizing the City Manager to enter into a Contract with ePlus for the Cohesity backup solution and hosted cloud storage, for a total contract amount not to exceed \$608,400 for the term September 1, 2020 through August 31, 2025.

FISCAL IMPACTS OF RECOMMENDATION

One-time funding for the implementation and ongoing funding for the software maintenance, support, and hosted cloud storage is available in the Department of Information Technology's Fiscal Year (FY) 2021-2025 Cost Allocation Fund as outlined below. Spending in future fiscal years is subject to Council approval of the proposed citywide budget and annual appropriation ordinances.

**Cost Summary:**

\$225,200	Total FY 2021: Software Maintenance and Professional Services
\$273,200	Total FY 2022: Software Maintenance
\$110,000	Total FY 2024: Software Maintenance
<b>\$608,400</b>	<b>Grand Total FY 2021-2025: Software Maintenance and Professional Services</b>

**Cost Breakdown by Fiscal Year:**

	FY 2021: Software Maintenance
\$215,200	Budget Code: 680-35-363-384-0000-000-472-613130 (IT Cost Allocation, Network Operations, Software Maintenance)
	FY 2021: Professional Services
\$10,000	Budget Code: 680-35-363-384-0000-000-472-612990- (IT Cost Allocation, Network Operations, Professional Services)
<b>\$225,200</b>	<b>Total FY 2021: Software Maintenance and Professional Services</b>

FY 2022-FY 2025: Software Maintenance  
 \$273,200 Budget Code: 680-35-363-384-0000-000-472-613130  
 (IT Cost Allocation, Network Operations, Software Maintenance)

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**\$273,200 Total FY 2022: Software Maintenance**

FY 2024-FY 2025: Software Maintenance  
 \$110,000 Budget Code: 680-35-363-384-0000-000-472-613130  
 (IT Cost Allocation, Network Operations, Software Maintenance)

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**\$110,000 Total FY 2024: Software Maintenance**

CURRENT SITUATION AND ITS EFFECTS

The City’s current data backup solution has been in place since 2013 and provides data backups, redundancy, and encryption for approximately 18 terabytes (TB) of data to support the City's file, email, website, and database servers. At the time it was put in place, it was a leap in technology, as it replaced a legacy tape-based backup solution, and offered secure, cloud-based backups that met all of the security and privacy standards of both the Health Insurance Portability and Accountability Act (HIPAA) and the Department of Justice (DOJ).

In the recent years, the City has implemented, or is in the process of implementing, a large number of technology initiatives, including the FUNDS\$ replacement project, migrating the City’s email solution to the Office 365 cloud, and implementing a new virtual server infrastructure to support the growing needs of the City.

The new Cohesity backup solution offers a modern, scalable backup solution geared towards supporting modern technology and future needs for the City. The Cohesity solution can scan the City’s new virtual server technology for Ransomware, and detect Ransomware in backups, as well as, backup and recover from Office 365 email and OneDrive data.

The new Cohesity backup solution offers following advantages:

- Performs snapshot backups of entire virtual servers instead of just being able to back up the data on the servers. This feature will provide the City a new capability of full virtual server recovery in a disaster recovery scenario.
- Provides a global search feature to allow staff to search through backups for keywords and file names to ensure fast and efficient recovery of lost data, and to improve regulatory compliance performance.
- In addition, all newly created virtual servers will be automatically backup up at the time of creation, thus replacing the manual process in the old backup solution.

In addition to Cloud Storage there is an additional local backup appliance for the Cohesity solution which is designed with redundancy in mind, so that no single server or drive failure will cause the solution to stop any backups or recoveries from completing which has been an issue with the current solution.

The Backup replacement solution meets the City's Strategic goal of providing state-of-the-art, well-maintained infrastructure, amenities, and facilities.

### BACKGROUND

Prior to 2013, the Department of Information Technology used a tape-based back-up solution since such was the industry standard. In June 2013, the Department of Information Technology implemented the current backup solution, which provided both local and cloud-based storage for all City file servers, application servers, database servers, and email.

The City's current backup solution has outgrown the scalability and flexibility required to meet the City's current and future backup demands. Some of the challenges with the current system are:

- **Manual processes and non-granular backups:** With the increase in data and systems, staff are spending an increasing and an unscalable amount of time simply setting up and running the backups. In addition, the backups themselves are not granular and are not searchable so they require an inordinate amount of time in a data recovery situation and do not meet current data leak incident legal and regulation timelines
- **Increased backup errors and troubleshooting:** Staff are spending increasing amounts of time troubleshooting failed backups, re-running backups due to backup errors, and recovering backup data on a solution that is not meeting the current needs of the City. In addition, the City has implemented a new virtual server technology, and while the current solution can perform basic data backups on the new virtual environment, more modern backup solutions can leverage this new technology to perform backups and recoveries more automatically and faster, while utilizing disk space more efficiently,
- **Hardware Failures:** The City's current backup solution has had two major hardware failures since 2013, resulting in the vendor needing to replace the on-site backup appliance twice, which was covered as part of the maintenance agreement, but resulted in a significant amount of staff time in both instances, and left the City vulnerable for several days without a backup solution in place. In one instance additional cost was incurred to replace one of the failed devices.

Renewal costs for the current system began escalating (starting in May 2018) and given the growing obsolete functionality of the current solutions' manual processes and non-granular backups, Department of Information Technology staff initially created an internal process improvement effort we called "Backup Better." After initially addressing issues that could be addressed leveraging to the maximum extent the current solution, the team reported out to the Director (November 2019) that the any additional improvements would need to take into consideration replacing the Barracuda backup with a more modern and virtual systems-accommodating technical solution set. Given the recent instability of the current backup solution, the City began to look at alternative backup solutions, rather than continuing with the current solution.

In February 2020, the City issued Request for Proposal 20-11386-C for a new backup solution and received four (4) qualifying responses. The RFP review committee evaluated each proposal and determined that the proposal from ePlus for the Cohesity Backup Solution with hosted Cloud Storage best met the City's operational, technological, and fiscal requirements.

#### ENVIRONMENTAL SUSTAINABILITY

The Cohesity backup solution provides the same environmental sustainability benefits as the solution it is replacing, which (a) eliminated the need for approximately 350 magnetic tape cartridges each year (who's manufacturing and recycling were not environmentally friendly to the standard that meet the City's Green IT goals), also (b) eliminated the need to transport backup tapes to and from offsite storage (saving transportation costs and reducing greenhouse gas emissions).

#### RATIONALE FOR RECOMMENDATION

The City has been going through large number of technology initiatives such as (a) FUNDS\$ replacement in progress, (b) moving email to the Office 365 cloud, (c) upgrading server and storage infrastructure. Additionally, the City had outgrown its current backup system, (which has not kept up with advances in technology) and needs a solution that can grow and scale to meet the current and future needs of the City. The staff determined that the current solution is inefficient, outdated, and does not scale to meet future needs. As a result, the City decided to release an RFP to find a new backup system replacement solution.

After a competitive bid process (Request for Proposal 20-11386-C) staff is recommending that the Cohesity backup solution provided by ePlus is the best solution, factoring in the City's current and future needs (technical and operational), costs, and vendor references. Cohesity sells their solution through resellers such as ePlus, and ePlus is the reseller that proposed this solution.

Cohesity was founded in 2013, and since then has won several prestigious industry awards, most recently being awarded the 2020 Gartner Peer insights Customer Choice Award for data center backup and recovery products, for the third year in a row.

Additionally, the City of Pleasanton and County of Ventura both highly recommend Cohesity for its technical prowess as well as cost as compared to other solutions.

#### ALTERNATIVE ACTIONS CONSIDERED

The City considered continuing with its current backup solution, and due to the instability of the solution, coupled with the growing and changing needs of the City, finally led the City to look at alternative backup solutions, rather than continuing with the current solution.

The recommended solution was selected after an RFP process.

#### CONTACT PERSON

Savita Chaudhary, Director, Department of Information Technology, 981-6541

Attachments:

1: Resolution

RESOLUTION NO. ##,###-N.S.

CONTRACT: EPLUS FOR COHESITY BACKUP SOLUTION AND HOSTED CLOUD STORAGE

WHEREAS, in February 2020, The City of Berkeley issued RFP No. 20-11386-C for a Backup System Replacement and received four (4) qualifying vendor responses; and

WHEREAS, the RFP review committee evaluated each proposal and determined that the proposal from ePlus for the Cohesity Backup Solution with hosted Cloud Storage best met the City's operational, technological, and fiscal requirements; and

WHEREAS, the Cohesity backup solution offers a modern, scalable backup solution geared towards supporting modern technology and future needs for the City; and

WHEREAS, with the FUNDS\$ Replacement Project and the large number of technology initiatives in progress, there is an increased need for data backup; and

WHEREAS, one-time funding for the implementation and ongoing funding for the software maintenance, support, and hosted cloud storage is available in the Department of Information Technology's Fiscal Year (FY) 2021-2025 Cost Allocation Fund, and spending in future fiscal years is subject to Council approval of the proposed citywide budget and annual appropriation ordinances.

NOW THEREFORE BE IT RESOLVED by the Council of the City of Berkeley that the City Manager is authorized to enter into a contract and amendments with ePlus for a Cohesity Backup Solution with Hosted Cloud Storage, for a total contract amount not to exceed \$608,400 for the 5-year term from September 1, 2020 through August 31, 2025.