

STAFF REPORT 3/27/2024

To:Honorable Mayor and City Council MembersFROM:Jason Stevens, IT ManagerSUBJECT:Authorize the purchase of an Axis corporate yard video camera server for the
amount of \$30,344.60.

STAFF RECOMMENDATION:

Staff recommends that the City Council authorize the purchase of equipment and services to facilitate an upgrade and replacement to the cities private camera server and surveillance system in a phased approach from Computer Consultants estimate 6877, PO number 16990 for the amount of \$30,344.60.

BACKGROUND:

The City of Coachella's building structures currently have end of life and no longer supported stand-alone DVR/NVR (digital video recorder / network video recorder) camera systems at all of our primary facilities. While they are still functioning, there is not an ability to add additional cameras to locations where there is a current need to do so. Additionally, the recording times of these DVR's is generally no longer than 60 days. If a request for camera footage is made older than 60 days the IT department is not able to accommodate the request. The one exception to this is the City of Coachella Public Library which was installed more recently, however this unit also is no longer under support and also has the limitations of a stand-alone DVR/NVR recording times.

The primary need instigating this project is a need to add additional cameras at the Corporate Yard location in order to provide additional coverage of payment processing areas. It was attempted to add additional cameras which was not successful.

DISCUSSION/ANALYSIS:

With this need in mind, the IT department began an investigation and evaluation process in order to see what the best long-term approach and solution would be to address the immediate need of adding additional cameras to the Corporate Yard location but also to address the unsupported stand-alone state of other buildings and facilities. The first option was to simply replace the stand-alone DVR/NVR unit at the Corporate Yard location with a newer model and then add the additional cameras. The cost for a 16-channel system with cameras would be around \$4,000 not including installation. Staff does not recommend this solution as the warranty period and future supportability would remain in an insufficient level and the city would run into the same issues in the future repeating a similar solution. The performance of the cameras for this turnkey DVR/NVR solutions are also not at an adequate level as compared to more professional commercial grade solutions. These stand-alone DVR/NVR systems also have limited storage capabilities not allowing for longer period recording timeframes as other solutions.

The second option that was evaluated was transitioning to a fully cloud based camera system. Multiple vendors were contacted and one vendor responded and began engaging in demoing of their product and solutions which was Verkada. Multiple other cities in the valley are currently using Verkada as their city-wide camera solution. Multiple indoor and outdoor cameras were tested as well as their cloud platform. During the testing it was determined that Verkada only has a limited amount of physical camera solutions (6 at the time) and their performance especially under low light conditions was average to below average. Staff worked with Verkada support for beta firmware's in order to improve performance which was not effective in improving performance.

A benefit of a fully cloud based solution is there are no local servers or systems to host and support and all upgrades are handled by the cloud provider. Another benefit is AI based detection and security service features that are either currently offered or can be added to the platform in the future. A negative to a fully cloud based solution is the service and subscription costs are continual and perpetual and based on the amount of recording days video footage that should be retained. Another negative is that video footage cannot be easily archived back down on premise for a personally/city owned copy of the footage.

The city did receive an estimate from Verkada for a city-wide solution of 52 cameras and 90 days of cloud storage. The initial total projected cost was estimated at \$260,167.68 with yearly annual subscription costs at \$47,979.84. These costs are only to provide 90 days of recording footage. If a recording time frame of 6 months or 12 months is desired which can be accommodated, the costs of this project and annual subscription rates would triple if not more. Due to the average/below average performance of the cameras and costly annual subscription fees IT staff does not recommend this solution.

The third option is to deploy an on-premise local camera server that would serve the entire city and all locations. Multiple vendors were approached and one responded with an estimate for an Axis camera server solution. The vendor Computer Consultants is the cities currently contracted managed solution provider currently providing multiple IT services to the City of Coachella. A benefit of a local on-premise camera server is the city would not be limited by storage space (can be easily expanded) thus recording time will easily extend to 6 months if not a year. Usage of the system would not be subject to continual annual subscription charges. Additionally, Axis has hundreds of different camera models and solutions so the city would not be limited in the cameras scope and capabilities. In testing of different Axis camera models their performance are in the top tier especially in low light conditions as well as PTZ and specialized models. In discussions with Computer Consultants it was recommended to employ the heart or brains of the camera system that being the primary Axis camera server and then install the needed cameras at the Corporate Yard location initially. As need and budgets dictate additional locations can then have their cameras upgraded on a site by site phased approach making it more economical for the city to absorb and plan for. The estimate for the 96TB Axis camera server, three cameras and installation totals \$30,344.60.

ALTERNATIVES:

- 1. Elect to upgrade the DVR/NVR at Corporate Yard with a newer model and add cameras.
- 2. Elect to go with a cloud-based camera system such as Verkada or other.
- 3. Not authorize this upgrade at this time.

FISCAL IMPACT:

Should the City Council approve the staff recommended system the funds would be allocated from the General Fund Unreserved fund balance totaling \$30,344.60 to increase the budget in account 101-11-161-90-741-000