

Success Story

Buena Park Police Go Wireless with Mission Critical Network

The mmWave wireless network is supporting both video security cameras as well as connecting Code Blue call boxes for emergencies

Background

Buena Park is a mid-size city located in Orange County California. Within Buena Park lies the “Entertainment Zone,” an area that is home to Knott’s Berry Farm and other attractions that draw a large number of tourists every year. As such public safety and crime prevention are of critical importance to the city. For Buena Park this is addressed with public video security and readily available emergency call boxes, or “Code Blue’s”.

Challenge

The concept of expanding the existing video security network was straight forward. However actually putting the cameras where they were needed and still connecting them into the main video monitoring center at the police station was not a simple task. The cameras and Code Blue call boxes had to be spread out throughout the Entertainment Zone, typically where there was no copper or fiber available.

Both the camera network and the call boxes reliability and security where of paramount importance to the Buena Park Police. The solution had to support these two needs as well as provide flexibility in location and all according to budget. While in some places fiber was available, it was owned and operated by other entities, meaning the very mission critical traffic from the cameras and call boxes could not be guaranteed priority. This situation led Specialized Installations and the Buena Park Police Department to look into an alternate approach.



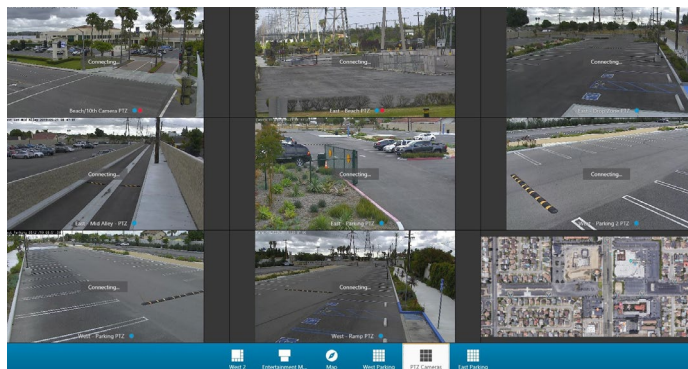
Solution

After careful review and consultation with Specialized Installations, an experienced integrator, mmWave in the 60GHz unlicensed band was chosen as the core technology in connecting the expanded video and Code Blue network.

Given the mission criticality of the applications Specialized Installations also wanted to ensure that the chosen solutions were carrier class and would support uptimes of 99.99%. Siklu has a long history of world class system deployments, over 85,000 units at this time, and failure rates measured in fractions of a percent. Siklu with a broad selection of 60GHz solutions, point to point (PtP) EtherHaul and point to multipoint (PtMP) MultiHaul products was chosen as the wireless system provider.

The Siklu network deployed consisted of three PtP links for backhaul to the Police Department plus two PtMP Base Units (BU's) connecting five Terminal Units at the locations of the video surveillance cameras and Code Blues. Using the built in PoE connectors to supply both power and connectivity a total seven Axis Q6000-E and Q6055-E PTZ cameras and seven Code Blue Emergency Phone Pedestals with IP5000 phones were deployed and connected.

Ultimately the video traffic transported to the Buena Park Police Department where an Axis Camera Station management system gathered and presented the video stream to police monitoring stations and a 75" media wall. The project commenced design and installation in December of 2018 and was operational by February 2019. Work continued through July of 2019, testing and connecting all cameras and call boxes.



Result

Since going live in February of 2019, there has been close to zero loss of connectivity on the network due to weather or other factors. As important if not more, the network gives easy access to Code Blue call boxes by pedestrians in the Entertainment Zone and at the same time delivering flawless video for the police in the Watch Command Center.

The video system is acting as a deterrent, reducing crime while at the same time allowing the police to keep an eye on bars, loitering, graffiti, vandalism and vehicle burglaries.

Going forward with the success of this initial network, the City of Buena Park Police department plans to extend the video surveillance / call box coverage using Siklu mmWave systems. The City of Buena Park itself is also looking to extend the use of mmWave for its own Public Works municipal network, in some instances saving over \$1400 month in leased line costs. Not only will the city save cash, but the wireless network will provide a robust increase in capacity, supporting connections of 1Gbps up to 10Gbps if needed.

“ This system has already proven it's value. A theft from a vehicle occurred in our Entertainment Zone. An alert Watch Commander was able to quickly review the system and provide responding units with a digital image of the perpetrator while the officers were responding to the call. This technology is a game-changer.

Gary Worrall
City Police Captain