



Success Story

Hudson River Parks Video Security

No Fiber, No power, No problem

Introduction

When New York City is mentioned, almost immediately most people will think of the Manhattan sky line with its iconic Empire State Building. People think of New York City as the very definition of the urban environment. What many do not realize is that New York City has an extensive park system totaling over 28,000 acres of greenspace. On the west side of Manhattan lies the Hudson River Park, developed and managed by the Hudson River Park Trust (HRPT), a unique partnership between New York State and New York City.

Hudson River Park is the second largest park in Manhattan after Central Park. Stretching from 59th Street to the Financial Center downtown, this stretch of greenspace is approximately 4 miles long and has an area of 550 acres. Aside from public open space, Hudson River Park also includes sites like Chelsea Piers and the Intrepid Museum. There is much history at Hudson River Park, such as being the intended arrival location of the famous Titanic ship that never made it to New York City!

Challenge

HRPT wanted to add video security cameras throughout the 4-mile length of the park, including video security to multiple piers. In some cases, the piers stretch nearly 1,000 feet into the Hudson River. The challenge was providing connectivity for all of these camera locations throughout the park.

Given many of these cameras were out on the piers, this meant no wireline was available, and many times no power as well. Fiber was considered and the price tag was estimated to be \$30M – an amount that just was not feasible.

Multi Media Communications (MMC) stepped forward with an alternate approach – use Siklu gigabit mmWave wireless systems to connect each and every camera – over 100 cameras in total. MMC had experience with 5GHz wireless systems, but concerns over capacity and interference in this mission critical application had them looking for alternate wireless solutions. MMC worked with Alliance Communications who provided technical assistance with system solutions for the project.

Solution

The location of the cameras varied throughout Hudson River Park, with ten cameras here, one there, and so on. This meant that sometimes a point-to-point link was the right solution, and other times a point to multipoint systems was the right technology choice. The diversity of the network meant the solution provider had to be able to deliver on all the various radios needed based on location and capacity. Only Siklu, with the widest portfolio of mmWave radios on the market, could do the job. Siklu point to point (ptp) EtherHaul Hundred street level radios, EtherHaul Kilo series roof top radios and Siklu's ptmp MultiHaul, totaling 112 radios, were all used in the network with zero fiber or wireline connectivity.

Starting with the first installation in 2017, Multi Media Communications with the support of the Hudson River Park Trust, has been steadily adding and expanding this wireless video security network. Today over 100 M16 Mobotix cameras are delivering video streams to the Genetec VMS that HRPT monitors 24x7.

Many of the cameras are mounted on light poles, which sounds like easy access to power, with one caveat – during the day when the lights were off, there was no power to the cameras or radios. MMC reached out to Solis Energy which offers an extensive selection of battery and solar power backups. Over 40 locations use Solis Energy battery backup systems, powering cameras and Siklu radios during the day and re-charging at night.



Result

Today this extensive network is a shining example of blending the right components of a highly technical solution and delivering robust, mission critical performance. Because HRPT is able to have video surveillance on many more Park areas at a time than it could previously do with staff alone, the system has become an important part of the Park's security system.

The network continues to grow with a planned expansion to Pier 57. This location will deploy Siklu's newest mesh product line, MultiHaul TG based on the Terragraph technology and industry consortium launched by Facebook.

Said Chris Downey from the HRPT, "When MMC suggested using wireless for video security connectivity, we reminded them that this was a mission critical application, and that security cameras could not fail due to loss of wireless connectivity. Since that first radio was installed, the network has achieved almost 100% availability with utmost reliability. We are very satisfied with the performance, ease of deployment and cost savings we have seen with this solution."

Going forward, the HRPT sees the potential of the network's gigabit capacity as an opportunity to add more applications, such as connecting key card access systems throughout the Park's many locations. One thing is clear - with mmWave wireless solutions from Siklu, installed and supported by MMC, the Hudson River Park system is providing greater security for New Yorkers and tourists alike enjoying the Park's green spaces!

