



APPLICATION NOTE – Urban Area Security

CITY DEPLOYS FLIR VIDEO SYSTEM FOR SAFETY

Lawrence, Massachusetts deploys integrated video system as part of Safe City Initiative

SUMMARY

Situated north of Boston, the city of Lawrence is a densely populated area of over 79,000 residents. It's known for being a manufacturing hub. When looking to address crime, the community found themselves lacking surveillance capabilities. As a result, government officials saw a critical need to deploy a wide-spread, situational awareness system. Familiar with the Urban Area Security Initiative Homeland Security District in Boston and FLIR Systems' instrumental role, the city of Lawrence was interested in what FLIR could offer.

To install and integrate a new video system, Lawrence administrators turned to LAN-TEL Communications, Inc. Founded in 1992, LAN-TEL is one of the premier cabling, security, and IT infrastructure installation and integration companies in New England. Having worked with FLIR for over 15 years, LAN-TEL worked to design a customized FLIR system for the city of Lawrence.

DESIGNING A SAFE CITY SOLUTION

To provide a holistic view of the city, LAN-TEL designed a comprehensive video system that utilized FLIR Quasar 1080p IR PTZ cameras, FLIR Ariel Full HD Mini Dome cameras and FLIR Quasar 4 x 2K Panoramic cameras all tied together through FLIR United VMS.

In order to take on such a massive project, the deployment was broken down into phases. In April of 2018, the Lawrence City Council approved the first 75 cameras, which were then installed in July of 2018. A year later, in April of 2019, the remaining 65 cameras were approved and installed during the summer of 2019.

INSTALLATION AND DEPLOYMENT

LAN-TEL's talented technician team installed FLIR Quasar and Ariel cameras outfitted with built-in analytics at major thoroughfares and high-crime areas throughout Lawrence. FLIR's panoramic 180-degree multi-imager cameras provide wide area surveillance of city intersections, major roads, parking lots, and bus depots, while fixed high-definition mini-dome cameras enable live streaming of these areas. FLIR's pan-tilt-zoom cameras provide "eyes" to local law enforcement, allowing for efficient monitoring of expansive open areas.

To manage such an extensive system, the city of Lawrence needed a central operations hub to house monitoring equipment and an enterprise level video management system to support the new video surveillance network. LAN-TEL transformed the Lawrence Police Department into a functional FLIR command center, installing a video wall display for recording and live streaming, while FLIR's Latitude video management software allows for in-depth forensic video review and analysis. The system provides local police with vital information, notifying authorities when someone is in an area they should not be, whether that be a public park after hours or a critical infrastructure site.



The FLIR Quasar 1080p IR PTZ allows operators to zoom into areas of interest, while the FLIR Quasar 4 x 2K Panoramic camera provides wide-area coverage to monitor the traffic intersection.



Together, the FLIR Quasar 1080p IR PTZ and the FLIR Quasar 4 x 2K Panoramic cameras provide complete surveillance coverage of an area.



The FLIR Command Center provides Lawrence police officers with greater situational awareness of incidents occurring throughout the city. Police receive important notifications when individuals enter unauthorized areas, allowing officers to respond accordingly.



Additionally, FLIR USS server storage units and USS client work-stations were also deployed. The system operates over a multi-server head end architecture. Because of FLIR's fail over services, the system can tolerate server failures and still enable mission critical systems to remain operational.

Like many municipalities, the city of Lawrence had a limited budget when deploying their new city surveillance system. To cut down on cabling installation costs, LAN-TEL utilized dedicated wireless technologies to seamlessly transport data from the endpoints to the back-end, allowing the city to better use their budgets on camera coverage as opposed to infrastructure.

Another key part of the FLIR video system is its integration with the city police dispatch center's Computer-Aided Dispatch system (CAD), used to facilitate improved incident response and communications in the field.

TECHNOLOGY BENEFITS

The city surveillance solution was nearly an instant success, and has been used on homicide cases, missing persons cases, larceny, motor vehicle accidents and the recovery of firearms. By providing real-time intelligence, the cameras have greatly enhanced the dispatchers' ability to appropriately allocate resources to calls as they come in. The solution has also given local law enforcement the ability to better forensically piece together a case, making it simple to identify suspects and submit a case for prosecution with ample video evidence.

"The reality is, fighting crime today is a multi-faceted approach," said city of Lawrence Mayor Dan Rivera in an interview with CBS Boston in April 2019. "This is just another step to modernize crime fighting in the city of Lawrence."

"These cameras are enabling crucial intelligence in realtime," said John Grennon, director of business development at LAN-TEL. "This technology is amplifying public safety by notifying the dispatch center of a disturbance immediately. They also assist in piecing together incidents that may have happened days, or even weeks ago, without needing to rely on faulty witness memories."

One unexpected benefit the system has provided is the pressure it removes from the community. The constant recorded footage provides Lawrence Police with clear, actionable evidence without citizens placing themselves in potential conflict to act as a witness, and officers having to rely on human memory alone.

A LASTING IMPACT

Since its deployment, the FLIR city surveillance system has directly contributed to dozens of arrests in the city of Lawrence. With cameras covering the city's busiest areas and FLIR's United VMS aiding in efficient monitoring, crime in Lawrence has seen a decline.

"Just a couple of weeks ago, we had a bank robbery in which the individual eventually discarded his clothing," said Police Chief Roy Vasque during an interview with WCVB Channel 5, an ABC affiliate in Boston, in April 2019. "We were able to backtrack the suspects movements using the city cameras and some private cameras to find out his identity."

"It's no surprise that FLIR is protecting most of the eastern coast of Massachusetts," Grennon said. "FLIR's technology is tried, tested and true. The thermal imaging is state-of-the-art, and their recording capabilities are second to none, combine this with their superior customer support, and it explains why no one can surpass what they have to offer. We are a proud FLIR partner."



The FLIR Ariel Full HD Mini-Dome camera delivers high-resolution, clear video, even in high-motion or lowlight scenes.

