City of Mission, TX
High-Performance Wireless Mesh Video Network Dramatically Improves City’s Public Safety

Located along the U.S./Mexico border, the City of Mission, Texas is one of the fastest growing metropolitan communities in the country. In recent years, the City has experienced tremendous growth in population, business development and its economy and is continually working to upgrade and fortify its neighborhoods, streets, parks, and traffic systems in efforts to maintain a healthy and thriving community.

City officials recognize that technology can play a key role in attracting new members to the community and helping to provide citizens with a better quality of life. Visionary security officials at the Mission Police Department (Mission PD) are now utilizing a wireless video surveillance infrastructure to dramatically improve public safety and provide the City’s 80,000 citizens with a greater sense of security.

Adding Eyes on the Streets without Increasing Manpower
A wireless video surveillance network linked to a central command center can improve public safety by providing more virtual eyes on the street and enable faster dispatch of public safety personnel where and when they are needed. Video surveillance acts as a cost-effective ‘force multiplier’ which is crucial for keeping city budgets on track while improving security for the city’s population.

Mission PD chose Firetide’s wireless infrastructure mesh network over a fiber-based solution because it provides the equivalent functionality and performance at a much lower cost. The wireless infrastructure also gives them the flexibility to move and place cameras wherever they are needed most.

“Wireless greatly speeds deployment and simplifies installation, allowing us to deploy many more cameras in strategic locations throughout the city than we could with a conventional wired surveillance network,” said Marin Garza Jr., Mission Police Department’s Chief of Police. “With Firetide we can now greatly improve police and emergency response times and cover a much wider area without putting additional extra officers on the street.”

Proven Wireless Video Network Demands Expansion
Since it was first deployed in 2009, the Firetide wireless mesh network has become invaluable and is an essential tool for the Mission PD. The wireless video network has been so successful in assisting law enforcement and keeping the community safe, that the Mission PD has allocated additional city and drug-seizure funds to expand the system in 2012.

Mission PD’s newly expanded wireless infrastructure mesh video network includes 33 outdoor HotPort 7020 mesh nodes and a combination of 23 high definition fixed, point-tilt-zoom and thermal imaging cameras from Sony and Axis Communications. The video cameras connect directly to the Firetide mesh nodes. The Firetide mesh nodes connect to each other wirelessly forming a resilient mesh network that operates around obstacles and creates redundant signal paths to guarantee camera connectivity even when problems occur. The video cameras are placed in high-crime areas, city parks, and on utility poles located at multiple traffic intersections throughout the city.
Results

Mission PD’s wireless video surveillance system has captured numerous armed robberies, acts of vandalism, and police pursuits and plays a key role in the arrest of criminals. The live video feeds are sent to a primary Mission PD viewing station where designated watch commanders, police officers, and 911 dispatchers can monitor cameras around the clock. Most of the success stories involve criminals being caught by police officers responding to alerts from 911 dispatchers viewing live video feeds. Many others were after-the-fact apprehensions resulting from reviewing video recordings stored on the system. In one example, a recording helped identify a suspect attempting to steal copper, wood, and construction materials from a new development inside the City.

“Within the first week of operation the newly expanded Firetide wireless video network was instrumental in identifying and arresting criminals in three separate felony offenses,” said Marin Garza Jr., Mission Police Department’s Chief of Police.

“The wireless mesh network gives us a clear visual advantage in areas that don’t have a continuous police presence.”

Mission PD’s ability to remotely see criminal activity as it is happening gives them a new technology weapon for fighting crime. The live, high-quality video feeds enables public safety command officials to quickly dispatch police and emergency response vehicles and inform officers of the situation at hand before they arrive on scene. This increases safety for these first responders and gives them time to prepare a strategic response that best fits each incident.

One of the key reasons Mission PD chose the Firetide system was its ability to handle live, high-bandwidth video from the cameras. The Mission PD required that the system be able to provide evidence-grade video that would be effective in identifying and convicting individuals in a court of law. The ability to use this evidence to quickly process individuals through the court system dramatically cuts down on taxpayer dollars.

The wireless infrastructure mesh video network was designed and deployed by Houston-based Teksys, Inc. Teksys chose to partner with Firetide for this deployment because Firetide has proven to deliver the industry’s best wireless mesh infrastructure for video surveillance.

“We have deployed more than 1,000 Firetide wireless mesh nodes for our customers over the past three years with excellent results,” said David Madrigal, president of Teksys Wireless Solutions. “The flexibility, performance, reliability, and advanced features of their infrastructure make it a perfect fit for the Mission PD as well as other public safety, municipal and industrial installations.”