

Success Story

Ponca City, Oklahoma

Building a mobile community that's reliable, safer and more productive



Customer Highlights

Challenges

- Reliable private wireless communications coverage citywide (30 square miles)
- With 75% of city staff working in the field, a wireless network would improve their productivity
- Capacity and QoS to support multiple municipal and public Internet access

Solution

- A highly reliable private wireless broadband network citywide that can easily be expanded (coverage and capacity) as desired over time
- Multi-use network securely supports data and voice (VoIP) municipal applications and public internet access

Results

- Public Internet access: more than 11,00 clients transferring over 935 Gigabytes per day or over 28 terabytes a month
- Municipal departments have experienced improved worker safety and efficiencies, reduced paperwork, and improved communications
- Municipal departments sharing the network include police, fire and emergency services, parks and recreation, public works, and energy

Systems and Services

- Tropos
 - 490 Tropos 5320 Mesh Routers
 - Tropos Control wireless network management system
- Honeywell Building Solutions
 - Tropos network system design, system integration, installation, and services

Honeywell helped create a city-wide wireless network for Ponca City, Oklahoma. The infrastructure project, funded through a cooperation of city departments, was built on a successful pilot program conducted in several residential and business areas. It has helped the city improve public safety and increase efficiencies for its departments, in addition to providing businesses and citizens with highspeed Internet access.

“Our goal is to be one of the most mobile communities in America, and this is a significant step in that direction,” said Homer Nicholson, mayor of Ponca City. “Seventy-five percent of the city staff perform duties outside an office. So this network is an important productivity tool for our employees. And the enhanced communications mean improved safety and service for our residents, and reduced costs for the city.”

Honeywell implemented a broadband mesh network – comprised of more than 490 wireless nodes and gateways from Tropos – these nodes and gateways will provide coverage for approximately 30 square miles of Ponca City. The mesh network offers the city reliability and redundancy through its “self-healing” capabilities; meaning if one radio node becomes unavailable, the network automatically routes wireless signals to a different node, ensuring uninterrupted service.

Nearly every city department, including police, fire and emergency, parks and recreation, public works, and energy, has applications that leverage the network. City workers have gained remote access to programs, files and information which helped the city improve safety and security, expedite reporting, reduce paperwork and improve communications.

For example, the city has installed wireless video cameras in police vehicles so precinct dispatchers and supervisors can monitor activities during traffic stops, and quickly deploy additional officers and resources if necessary. Ponca City is the first city in the nation to provide this added level of monitoring and protection for its force. Police officers can also instantly connect to online databases when making a routine traffic stop to check for outstanding warrants or whether the vehicle is stolen – further increasing officer and public safety.

“We had been exploring various wireless options for more than five years,” said Craige Baird, technology services director for Ponca City. “When Honeywell combined its installation and service expertise with the Tropos technology, we knew this was the right solution. It met all our requirements for public safety, as well as the rest of our departments.”

Other uses for the broadband networking: Emergency responders can send vital information from the ambulance to the emergency room so doctors can begin advising on trauma care and better prepare for patients to arrive. And building inspectors can quickly access records and input data into their laptops while working in the field to generate permits without traveling back to the office – reducing fuel costs and increasing site inspections per day.

The network also extends the city's existing Voice-over-Internet Protocol (VoIP) phone system. As a result, city staff will be able to use IP-based phones in areas where cell phone coverage is poor. In addition, the city is offering residents and businesses in the coverage area free high-speed Internet access, which has not been available in many parts of the city even as a paid service.

“The applications for this network are nearly limitless,” said Gary Martin, city manager for Ponca City. “This project will improve our ability to better serve the community. It gives us an advantage as we attract new business to the area, boosting our economic development efforts.”

“Using innovative technology to create safer, more secure and productive environments is a cornerstone of our work,” said Paul Orzeske, president of Honeywell Building Solutions. “Having city-wide wireless broadband puts Ponca City in a select league, making the city a better place for people to live and do business, and creating a foundation for a more connected future.”

This project builds on Honeywell's recent utility-metering and energy-efficiency program for Ponca City, which is expected to reduce energy use by 10 percent, increase water revenue and save the municipality an estimated \$1.3 million in annual operating costs.

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