



BREAKING THE SHACKLES OF INMATE TRANSPORT COSTS



Crawford County Ohio's 4.9 GHz Motorola wireless broadband system delivers reliable public safety connectivity – including enhanced video arraignment capabilities – saving thousands of dollars per month.

SITUATION

Crawford County was experiencing significant interference problems with its original 2.4 GHz unlicensed wireless network.

When Crawford County installed a 2.4 GHz wireless network solution connecting its county courthouse with the Sheriff's Department over five years ago, it experienced few interference issues. As use of the 2.4 spectrum in the area expanded, however, the county began to experience considerable interference problems. One of the most costly was the fact that remote, video-based municipal court hearings could lose connectivity or suffer video quality issues mid-proceeding. This caused scheduling problems and increased personnel and transport costs associated with physically bringing inmates to the courthouse from the jail.

SOLUTION

A Motorola point-to-point wireless broadband system using licensed 4.9 GHz public safety spectrum.

At a recent Wireless Internet Service Providers Association (WISPA) convention, WaveLinc, a WISP and Motorola

partner, offered to install the PTP 49200 for the public safety department of its local community, Bucyrus, in Crawford County, Ohio.

RESULT

Interference-resistant high-speed connectivity for data transfer and video-based arraignments and other hearings.

Installation was completed in one day. While the main purpose of the new link is to provide reliable, secure high-speed data transfer, the solution also provides more reliable video conferencing via a wireless broadband connection between the county courthouse and the sheriff's office and jail. Video hearings are now reducing the number of prisoner transports to and from municipal court hearings, allowing the county to enhance community safety while saving crucial dollars in terms of personnel and vehicles necessary for individual inmate transport.

CUSTOMER PROFILE

Customer

- Crawford County, Ohio

Industry

- Public Safety

Motorola Solution

- Motorola 4.9 GHz PTP 49200 system

Solution Features

- High-speed data transfer of up to 20 Mbps aggregate over licensed 4.9 GHz spectrum
- Interference-tolerant service that delivers high-quality live video images
- Free system planning and installation provided by WaveLinc

Benefits

- High-performance data transfer to county's main server
- Security of licensed 4.9 GHz public safety frequency band
- Scalability to provide for future expansion of system

VIDEO HEARINGS FREE SHERIFF'S PERSONNEL FROM INMATE TRANSPORT DUTIES

Like virtually every local government, Crawford County, Ohio, is faced with the need to contain costs in lean economic times. The county had for a number of years utilized wireless technology to help increase efficiencies and reduce costs, but their 2.4 GHz network had been experiencing serious performance challenges.

INTERFERENCE ISSUES

"With our old 2.4 system, the main problem was interference," says Jake Zinser, probation officer and IT manager for the municipal court. In essence, the county was a victim of its own growth. "As the area grew in population," continues Zinser, "the unlicensed 2.4 GHz spectrum experienced a surge in usage, often causing interference which became a significant issue for us."

As an active community resident – and volunteer fire fighter – Kurt Fankhauser, owner of WaveLinc, a local Wireless Internet Service Provider (WISP), was well aware of the issues Crawford County was having with its 2.4 GHz network. "My friends at the county courthouse made me aware of the interference issues," Fankhauser says. "One prime example was in their remote video arraignment program." Adds Zinser, "We had run into issues, prior to the new Motorola equipment, where we would have interruption of service and we had to shut the video hearings down. Some days we had so much interference we couldn't even run the video equipment on the 2.4 GHz." Inmates then had to be physically transported from the jail to the courthouse, increasing costs and decreasing deputy productivity.

MOTOROLA WIRELESS NETWORK SOLUTION

At a WISPA conference, Fankhauser saw the opportunity to create a wireless system for Crawford County as a solution to its wireless performance issues. "Looking toward the future," says Zinser, "we felt more comfortable with the 4.9 GHz licensed public safety equipment."

Installation of the point-to-point 4.9 GHz system was fast and easy. The link was established by installing one Motorola PTP 49200 on a tower alongside the Sheriff's office and another in the clock tower of the county courthouse, a distance of about two miles. Performance has been excellent, with the system providing up to 20 Mbps

aggregate throughput over licensed 4.9 GHz spectrum. The system also provides interference-resistant service that delivers the high quality video images critical in video arraignments.

COST SAVINGS

The municipal court is the main user of video hearings, with live video feeds transmitted from a small courtroom located at the jail to the municipal court at the courthouse. "Our municipal court judge handles the vast majority of arraignments, hearing all misdemeanor cases involving adults 18 and over," explains Zinser. "These include theft, domestic violence, DUI and other traffic charges; we also use the system for some felonies. Video hearings include arraignments, bond hearings and certain pre-trial and preliminary hearings."

Why are video arraignment capabilities so important to the county? "Before video," says Zinser, "we had to transport all prisoners to and from the court for every arraignment, every pre-trial, every preliminary hearing." It's a matter of security – having inmates leave the jail – and cost – both in manpower and transport expenses. A typical prisoner transport involves one officer and one car for what may turn out to be a whole day, and high security must be maintained for community safety. Every transport is costly both in terms of dollars and officer productivity. "Bottom line," concludes Zinser, "the video system saves the county a ton of money."

FUTURE PLANS

In the future, the county is considering other uses for the network such as a VoIP phone system and large-scale file transfer capabilities. For the moment, however, the video arraignment process is running smoothly and interference-free, enhancing security and reducing transport costs.



COMMUNITY-CONSCIOUS WIRELESS PROVIDER

WaveLinc is a six-year-old locally owned wireless service provider with more than 400 residential and business customers and a strong connection to the community. Owner Kurt Fankhauser not only provides the area with high-speed broadband connectivity, he is a resident and is active as a volunteer fire fighter. WaveLinc is also a strong supporter of county activities, for example, providing free WiFi connectivity for attendees and exhibitors at the County Fair.

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