OUTDOOR WIRELESS: INCREASING MOBILE WORKERS' EFFECTIVENESS

Part 2 in a continuing series

This series explores the myriad services that local governments and public safety departments can offer over a wireless mesh network. Part 1 explored the role of outdoor wireless mesh networks in economic development.

Mobile workers — building inspectors, health inspectors, social workers, animal control workers, public works employees, and others — generally need to spend part of their shift driving to the office each morning to check the case management system and driving back in the evening to submit reports. In a recent **Larstan Business Reports** survey, 28 percent of agencies with mobile workers say that their mobile workers spend one to five hours weekly driving between the field and the office, 23 percent spend five hours or more, and 11 percent spend an astonishing 10 hours or more.

"Time spent driving to the network subtracts from time available to deliver citizen services," says Ed Cepulis, senior manager for state and local government industry solutions, Cisco Systems®. "It prolongs processes like building permit approvals. For public safety personnel, it takes critical resources off the street."

BRINGING THE PRECINCT TO THE LAW ENFORCEMENT VEHICLE

The benefits of outdoor wireless access are especially compelling for mobile workers in public safety agencies, who gain access to information, images, and video they need to make decisions that result in more informed actions and desired results. In municipalities with an outdoor wireless network, law enforcement officers can consult booking photos or restraining orders to make more timely, more informed decisions. SWAT teams en route to a hostage situation or firefighters en route to a blaze can consult building blueprints and hazardous materials databases to plan actions for best outcome.

Notably, the District of Columbia recently installed a wireless public safety voice and data communications program, in partnership with officials and field personnel of the District's Metropolitan Police and Fire and EMS departments. This public safety voice and broadband wireless network enhances real-time collaboration for first responders, throughout the nation's capital.

"A single investment in an outdoor mesh wireless network enables numerous practical applications for mobile workers and devices," explains Cepulis. "It's a way for local government and public safety to improve service effectiveness without increasing resource requirements."

EXTENDING THE NETWORK OUTSIDE OF THE BUILDING

Local governments can increase the productivity of mobile workers by bringing the necessary data and applications to the field. An outdoor wireless mesh network typically comprises wireless access points on street lamps or other city infrastructure, which enable mobile workers to securely connect to the agency network from wireless laptops or PDAs.

In Cleveland, Ohio, for example, city inspectors use outdoor wireless connectivity to more quickly create, issue, and track permits. City inspectors no longer need to spend time driving to the office to file paperwork. Instead, they drive up to one of the conveniently located Wi-Fi hot zones in strategic locations throughout the city and use their laptops to upload completed permit and inspection

forms, reschedule inspections, and download new assignments. The city has increased its service effectiveness without increasing headcount because inspectors can spend more time in the field.

EARLIER NOTIFICATION OF PROBLEMS

Public works personnel typically monitor devices such as utility meters and pollution sensors only as often as they can get to them. In the Larstan survey, 45 percent of the respondents said that within the last 12 months, the ability to find out earlier about an infrastructure condition such as a water leak would have prevented waste, loss, or inconvenience. An outdoor mesh wireless network meets the need, enabling remote monitoring and control of utility meters, pollution sensors, park gates, and other remote devices.

Wireless sensors for traffic, pollution, noise, and flood conditions provide continuous, accurate measurements, allowing city managers to take timely actions and publish up-to-date status alerts for citizens on the Web. “Early detection of significant water loss at government offices, residences, or businesses improves government service by avoiding unexpected high costs on monthly bills and conserving natural resources,” says Cepulis.

For more information about Cisco Outdoor Wireless Solutions, visit www.cisco.com/go/localgovoutdoorwireless.

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