

IMPROVING EMERGENCY COMMUNICATIONS

BACKGROUND

As of 2010, the Tempe Police Department has more than 330 sworn police officers in patrol, investigations and support areas and approximately 150 civilian staff serving a jail, identification unit, communications and records groups and numerous other support units and positions. The Tempe Police Department serves the local community and additionally an influx of more than 50,000 college students and thousands of people who study and work in Tempe

THE CHALLENGE

The Tempe Police Department relied on a land mobile radio system for all their communications. Although this provided reliable voice communications, it severely limited the police force's mobile data capabilities.

To obtain information about vehicles or suspects, officers in the field needed to radio a dispatcher and wait for a response -- a process that was time-consuming, inefficient, and labor intensive. Officers could communicate with one another using a basic, analog text function on their laptops, but were discouraged from doing so because it tied up network resources and cluttered the screens of all officers on duty.

Tempe began searching for a new mobile communications solution that would enable them to provide officers with greater access to information in the field, and deploy state of the art applications such as dispatch, electronic ticketing and other systems in their fleet. Security, reliability, and manageability were paramount. They also were looking for a solution that offered the flexibility to allow the Department to communicate using a variety of wireless networks, including commercial 3G, station-based Wi-Fi and, when available, the city-wide municipal wireless network.

Initially, Tempe performed a trial with a "mobile VPN" product running on laptops. This solution performed poorly during the trial and failed to meet the city's standards. Increased mobile PC support became a significant concern as Tempe's IT staff would be responsible for communications integrity and lacked the tools to effectively manage this extension of their IT network.

THE SOLUTION

Tempe's search for a new communications solution, spearheaded by Dave Heck, CIO for the City, led them to In Motion Technology, a leader in mobile networking technologies. In Motion Technology's solutions have been deployed by hundreds of transportation, public safety, utility, municipal, and healthcare organizations worldwide.

In Motion Technology's comprehensive hardware and software system is designed to enable IT staff to interact with and manage vehicles as mobile branch offices. The onBoard™ Mobile Gateway turns each vehicle into a secure, high-performance mobile hotspot, enabling a variety of wired and wireless devices in and around the vehicle to connect reliably and securely. The Gateway connects to any available commercial cellular, Wi-Fi, and 4.9GHz network and is forward compatible with future technologies including 700 MHz, 3.5G, 4G and a variety of other wireless networks -- and seamlessly switches between networks -- to create a secure, broadband pipeline of information to and from the vehicle.



QUICK FACTS

Officers: 330

Calls: 115,000

Department Operating Budget: \$66.8 million

Jurisdiction: 42 sq. miles

Serving: 170,000 people

"Today our law enforcement officers spend less time behind a desk and more time in the community, protecting the public" Hugh Hallman, Mayor of the City of Tempe.



In Motion Technology's onBoard™ Mobility Manager provides organizations with the tools IT staff need to simply and effectively operate mission critical data communications and software applications in vehicle environment where "coming over to take a look" isn't possible. Simple to deploy and easy to use, the Mobility Manager continuously collects and analyzes information from Gateway-equipped vehicles to provide IT staff, fleet managers and other headquarters personnel with a dashboard of information from the field. The Mobility Manager works with standard web-browsers and displays detailed information about vehicles, networks and devices on three-dimensional maps, and sends email alerts based on pre-set thresholds.

Tempe initiated a trial by installing Gateways in 4 patrol cars. Results were evident right away. Officers conducting the trial in the field were able to file reports, send emails and access data with the ease and simplicity as if they were in the station. And because the Gateway provides wireless coverage in and around the vehicle, officers had the flexibility to remove their laptops from the vehicle and stay connected.

"Our officers were very enthusiastic," said Dave Heck. "After a week of trials, it was clear that the overall reliability of the In Motion Technology system could transform our communications and operations."

Tempe deployed onBoard Mobile Gateways throughout its police fleet. *"We had Gateways up and running in 180 vehicles in less than three weeks, without any problems," according to Heck.*

THE RESULTS: IMPROVED STREET PRESENCE, ENHANCED PUBLIC SAFETY

With In Motion Technology, Tempe officers have reliable access to information about suspects, vehicles and property instantaneously. Because In Motion Technology's onBoard Mobile Gateway securely extends the headquarters network to the vehicle, the right tool for the job can be used with no software or hardware modifications.

Using standard, off the shelf devices such as Panasonic Toughbooks in and around patrol vehicles, officers can download mug shots, view databases of "most wanted" criminals, and access other crime fighting resources that were only available at the station. This level of knowledge helps protect communities by enabling officers to make better decisions based on real-time information from their vehicles. Dave Heck's IT staff now has the tools to be confident that the right information is getting to the right officer at the right time.

In Motion Technology also enables officers to file reports and perform other administrative tasks from their vehicles, without returning to the station, which increases their presence in the community.

Today, Tempe officials also credit In Motion Technology for enhancing their crime fighting efforts. Tempe officers spend less time in the station, and more time in the community, on the beat, protecting the public.

In the future, the extensible nature of the onBoard Mobile Gateway "vehicle area network" will enable the Police Department to deploy the latest surveillance technology, electronic ticketing, automated license plate recognition and a variety of other applications quickly and easily with no additional cost for communications, security, or management technology. The Gateway enables voice, data and video to be streamed live from the field to operations command, enhancing incident scene coordination and officer safety and effectiveness. City of Tempe officials are looking to deploy In Motion Technology solutions in other city fleets to improve operations and reduce costs.

INCREASING POLICE PRESENCE AND REDUCING CRIME

In Motion Technology enables officers to file reports and perform other administrative functions from their patrol cars. This means officers spend less time behind the desk, and more time on the beat and in the community. "Police presence" is widely considered one of the most effective tools to prevent crime.

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