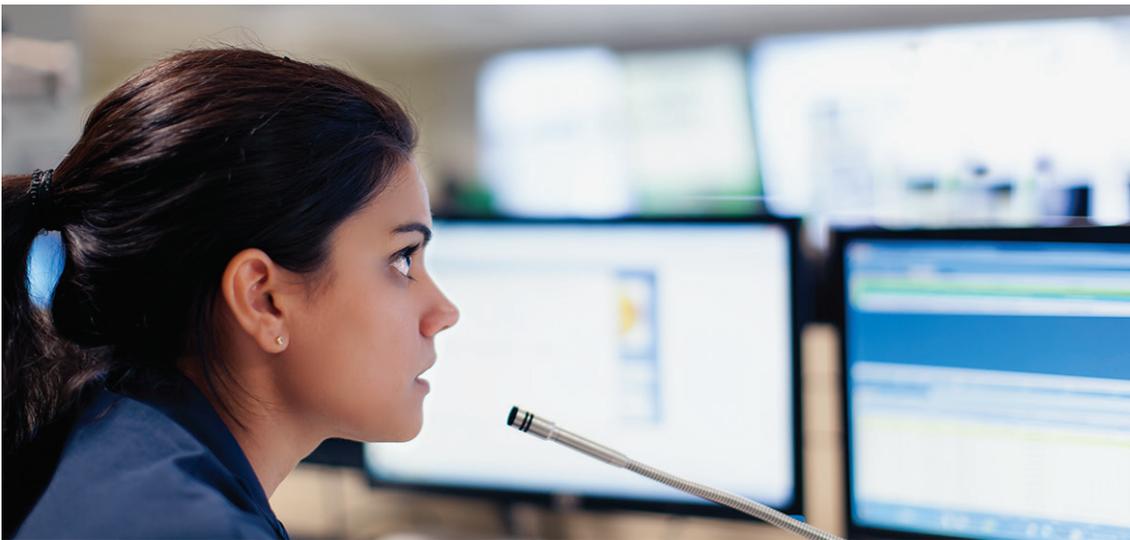




SAN LUIS OBISPO COUNTY TURNS TO MOTOROLA FOR NEXT-GENERATION COMMUNICATIONS SYSTEM THAT LINKS RADIOS WITH SMARTPHONES



Located on the California coast, San Luis Obispo County is home to more than 270,000 people. The Sheriff's Department is the largest and oldest law enforcement agency in the county, covering an area of more than 3,200 square miles. The department fields all emergency calls, dispatches law enforcement and EMS services, and collaborates with agencies such as the California Highway Patrol and seven neighboring police and fire departments.

THE CHALLENGE

The Sheriff's Department sought to improve the capability of its aging dispatch system, achieve interoperability with other systems and extend land mobile radio (LMR) communications to smartphones. With many participants and cooperating agencies involved in emergency planning and response, seamless communications among different organizations and teams of first responders often proved problematic. The large geographic area policed by the department also presented a unique challenge to reliable communications, covering both flat and mountainous terrain as well as 100 miles of coastline. The department therefore sought a dispatch system that could connect the disparate networks and devices in use

by multiple teams and first responders. Specifically, the solution would need to allow for the use of smartphones and interoperability with LMR systems. The department also anticipated the rollout of future networks, such as FirstNet, and wanted a solution that could easily work with these systems in the future.

THE SOLUTION

After searching for a year, the county turned to Motorola Solutions and its WAVE Work Group Communications solution to help implement one of the nation's first strictly IP-based systems that supports the use of smartphones and tablets for critical communications. The next-generation solution includes the WAVE Dispatch Communicator to turn the

CASE STUDY SAN LUIS OBISPO

department's standards-based PCs into richly-featured communications dispatch consoles, as well as the WAVE Mobile Communicator to turn any Android, Apple or BlackBerry device into a multichannel LMR handset ready for secure push-to-talk (PTT) communication. The system also implements a 3rd party interoperability gateway to enable communications with the county's existing analog simulcast radio system and neighboring radio systems.

Deployment of the new system took less than two months to complete, from start of installation to customer sign-off. Participants are now able to use their smartphones and devices to instantly connect to the county's radio system and dispatch center. This extends the range of the system, and allows a large number of users and teams to communicate both day-to-day and in large-scale, time-critical scenarios. And because the system does not require the purchase of new hardware, the county was able to save on costs.

"Motorola helped provide us with a system that bridges our existing radio system to the new capabilities of today's smartphone and tablet technology," said Sheriff Ian Parkinson of the San Luis Obispo County Sheriff's Department. "It means a lot to me personally that our department is able to deploy the same technology to enhance the county's public safety that protects the communications for our most sensitive government installations worldwide."

THE RESULTS

By linking all types of systems the solution offers first responders secure, real-time PTT communications regardless of device or network type, geographic location or governing agency. This ability has especially been beneficial for improving the safety of the county's approximately 40 undercover specialized officers, who typically have their smartphones at hand but do not always carry radio handsets. With the new system, these plain-clothes officers can use their smartphones to instantly access the county's dispatch center, improving transmission of critical information without requiring them to carry bulky, visible communications equipment.

The system also provides for seamless redundancy, a feature which was tested by a massive power outage. Soon after the new system went live, the area experienced a blackout that covered three counties with San Luis Obispo County at the center. Undersheriff Tim Olivias would normally communicate over the department's radio network in such an incident, but he happened to be in a nearby county when the outage occurred.

Under the previous system, Olivias would not have been able to connect to the radio network from outside the county. But with the new system in place, he was able to easily use his personal smartphone to immediately connect to his department's network and participate in the large-scale response. In this way, the system has improved critical and disaster response for not only the Sheriff's Department, but also for the corresponding agencies and departments across the county.

"The biggest benefit of WAVE for us is that there is no limit on the types of devices you can carry and no limits to what you can do with them," Parkinson said. "I'm proud to say our officers are fully equipped to use whichever device is at hand to respond to emergencies. They can truly be anywhere in the world, on any device over any available network, and still talk to our dispatch center."

The system's portability gives the department the ability to easily expand to a second dispatch center for use in the northern part of the county. By not being locked into a certain product or carrier, the county has the option of bringing other next-generation devices into its communications infrastructure down the line.



San Luis Obispo system participants are now able to use their smart devices to instantly connect to the county's radio system and dispatch center. Devices shown used for illustration purposes only.

BENEFITS OF WAVE TO THE SAN LUIS OBISPO COUNTY SHERIFF'S DEPARTMENT

Interoperability:

The system's ability to bridge radio systems with smart devices met all of the department's interoperability goals. First responders can now use whichever device they prefer to communicate, making the most of existing systems while harnessing the capability of more powerful smart technology. This enables seamless communications and critical response within the department as well as simpler collaboration with other agencies in large-scale responses. The ability to access PTT channels on smartphones greatly enhanced the safety of undercover officers, who can now connect instantly with the dispatch center using their personal phones.

Cost savings:

The ability to deliver upgraded critical communications infrastructure while conserving costs exceeded the expectations of the county. The department wanted a solution that would expand LMR to smart devices but not entirely overhaul its existing radio system. Because the solution unites all device and network types, the county was able to integrate its existing system and avoid purchasing any expensive new radios, repeaters or equipment.

Portability:

The system was primarily installed at the department's main dispatch center. But its portability means the department can easily expand, if it chooses, to additional dispatch centers for use in other parts of the county. In case of failure at the primary dispatch site, it now can set up a secondary center off-site wherever there is an existing Internet connection. And because the county is not locked into a specific product or carrier, it has the flexibility to explore and easily adapt to other next-generation capabilities and networks in the future.

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. ©2014 Motorola, Inc. All rights reserved.

