California Fire Department

California Fire Department Utilizes AirLink® Gateways to Improve Public Safety Services

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A Sierra Wireless® Mobile Workforce Solution

CUSTOMER CRITICAL CHALLENGE

- Required reliable communication connectivity and GPS location
- Needed to be integrated with existing CAD system

SOLUTION

- AirLink® mobile gateways provided new communications mapping functionalities and reliable performance

BENEFITS

- Robust connectivity for vital mobile data applications
- Seamless integration with 3rd party GPS application
- MIL-STD 810 compliant for harsh environmental conditions
- Reduced costs with more efficient vehicle dispatching capabilities

The mission of the Ventura County Fire Department is to anticipate and respond to the dynamic public safety needs of a diverse community. The dedicated team of 583 menand women responds to more than 30,000 incidents a year, and the county’s response area serves more than 480,000 people in unincorporated areas of Ventura County.

Business Challenge

When Ventura County Fire Department began to replace its obsolete computer-aided dispatch (CAD) system, its public safety technicians took a closer look at its entirecommunications system and decided to undertake a more ambitious project to build a state-of-the-art Fire Communications Center (FCC) with progressive mobile data capabilities.

With the Ventura Co. FCC dispatching for the fire department, all of the county’s private ambulance companies and all but one of the municipal fire departments, the county’sneed for reliable equipment is critical. In addition to new CAD, radio and telephone dispatch systems in the center, mobile computers and global positioning system (GPS)modems were also installed in each of the 125 vehicles — including fire trucks and EMS vehicles. This radically changed the way resources were allocated to the sceneof an emergency by allowing operators to locate and dispatch vehicles according to their actual proximity to an incident, improving the delivery of fire services and EMS throughout the county.

Unfortunately, the public safety technicians began seeing a drop-off in GPS system performance soon after launch. Tom Guerrero, Network Specialist III at the County ofVentura, described the system as “intermittent.” “When the units were at the stations, they were having a rough time getting GPS coordinates and were losing signal out in the field,” explained Guerrero.

After several attempts to resolve the connectivity issue, including having the GPS vendor on-site to inspect the units, Ventura County decided to trial Sierra WirelessAirLink® gateways designed for the harsh environments of public safety.

Sierra Wireless AirLink Solution

Guerrero and his team began by testing the AirLink gateways at two stations where the fire department was experiencing a large number of signal problems. The wirelessin-vehicle mobile computer integrated into the FCC’s CAD system, allowed dispatch and vehicle operators to utilize GPS mapping software to quickly

and easily locate vehicles in the field.

After four weeks of strong, persistent cellular connectivity in the troublesome areas, Ventura County purchased additional gateways to extend its testing. With continuedstrength on the cellular network, Ventura Co. purchased AirLink gateways to replace all previous GPS units in the mobile data system, and expand to additional vehicles as necessary.

“The configuration tools definitely made the process easier for us,” said Guerrero, whose team used the configuration tool to initiate and program the devices. Prior toreplacing the modems, the process of setting up and configuring devices was more labor intensive.

“Our Sierra Wireless representative was extremely helpful in showing us how to remotely view and access the devices in the field, which will be a great tool for us tomanage our fleet without interrupting service or dispatching a field technician, helping us control costs and eliminate equipment downtime,” said Guerrero. “Right now we’rejust really happy with the improved coverage and reliability that we’re seeing; the system has become very predictable and dependable.”

Results

Guerrero and his team were able to integrate the gateways into the mobile data system and replace the outdated in-vehicle modems at a rate of six to eight per day.By allowing people to access real-time operations information, the Ventura County Fire Department has created a more efficient system that better utilizes its criticalresources, and Guerrero confirmed a noticeable increase in fire services and EMS vehicle efficiency and response times.

“With the GPS functionality and reliable connectivity, our FCC dispatch and first responders can take full advantage of the mapping functionality by seeing where theircounterparts are and where they need to go,” said Guerrero.

“Our mobile data system is making people in the field much more efficient in decreasing response time,” he explained. “It’s only going to be expanded to more of our operation as time goes on.”