

SAN DIEGO FIRE RESCUE

SITUATION

San Diego Fire-Rescue sought to replace archaic mobile display terminals in hundreds of city fire trucks, ambulances and other emergency vehicles. The agency was able to accomplish this through a grant financed in part by the Urban Area Security Initiative grant funding, issued from the Federal Office of Homeland Security, to help urban areas enhance their overall security and preparedness level to prevent, respond, and recover from acts of terrorism and credible threat information. The 2003 Cedar Fire, which destroyed more than 2,000 homes in San Diego County, emphasized the city's critical need for a better mobile communications system.

CHALLENGE

The mobile equipment firefighters and paramedics utilized in their vehicles were text-based "dumb" terminals dating back to 1981. These mobile data terminal systems and technology were obsolete. Users could not modify the screens, they were no longer supported, and parts could not be obtained to repair them. The data screens were not configurable enough to accommodate the operational changes of San Diego Fire-Rescue, and personnel did not have the ability to add new features and fields. In addition, they delivered only limited incident information. The solution did not provide fire personnel with access to pre-plan information, hazmat data, position and location of other units, or the ability to enhance situational awareness for the responders.

SOLUTION

CentralSquare (formerly TriTech) Mobile Enterprise (formerly Inform Mobile) provides San Diego Fire-Rescue with a seamless extension of their CAD Enterprise (formerly Inform CAD) computer aided dispatch solution. Field personnel will have superior functionality with rapid, complete incident details for increased situational



VITAL STATISTICS

Agency	San Diego Fire & Rescue
Mobile Units	350 combined

Vital Statistics

Area Served	372 sq. miles
Population	1.3 million
Dispatcher/Call Taker Seats	8

Products

CAD Enterprise (formerly Inform CAD); Mobile Enterprise (formerly Inform Mobile)

awareness, extensive messaging and query capabilities, robust GIS mapping with integrated GPS, with an easy-to-manage commercial, wireless infrastructure. The flexible, comprehensive solution facilitates quick on-scene decisions, enhances personnel safety, and improves operational efficiency.

"Our personnel are very excited to have real-time incident updates and detailed mapping at their fingertips," says Susan Infantino, Communications Manager for San Diego Fire-Rescue. "Our old system did not provide any premise history or hazmat information and now this information is available before the unit arrives at scene, to help the responders decide in advance the best course of action."

San Diego firefighters and paramedics used to rely on wall



maps to locate the address of the incident. Now, Mobile Enterprise's integrated mapping capability has greatly enhanced their ability to allocate the right resource, quickly locate the address, and respond to calls in various types of terrain.

"San Diego's topography is particularly challenging," says Infantino. "Canyons and mountains traverse our service area and make it difficult to coordinate multi-unit responses. Mobile Enterprise allows us to view a satellite overlay of the scene which provides depth of detail that enables us to proactively dispatch the appropriate resource for response, in addition to being able to view any access points for evacuations."

Integrated turn-by-turn voice navigation directly into the headsets worn by personnel in the vehicles allow drivers to more easily find the incident. Routing instructions are integrated with the CAD's powerful navigation engine to take into account road closures, nearest intersections or mile markers, traffic patterns, and the City's changing road network. Mobile Enterprise further simplifies use and maintenance of the system with voice recognition for text-to-speech directions and messaging, and automatic over-the-air updates to synchronize with the latest software, CAD data files, preplans, map layers, and client configuration settings. With City-installed WiFi hotspots, personnel can take advantage of the increased bandwidth to do housekeeping. This means that the cost of ownership to the City is very low. "On our old system we had to constantly bring the MDT's in for diagnostics or updates. With Mobile Enterprise the software, GIS, and pre-plans are updated automatically without a technician needing to gain access to the unit," says Infantino. "We expect this to reduce our maintenance cost considerably." Utilizing a commercial network has had other advantages for the City. When the agency deployed a strike team near wild fires northwest of Los Angeles, Personnel were still able to use Mobile Enterprise's detailed mapping functionality to view San Diego events, as well as make strategic resource allocations for the fire in Los Angeles.

Additionally, they utilized the extensive messaging capability to communicate in real-time the latest updates on the situation for dispatch and communication with other connected units.

Infantino is excited about the positive impact on field performance and morale. "Mobile Enterprise is a big step forward in the evolution of our department. It puts the power of information into the hands of the people who need it most—our field personnel."

CLIENT BENEFITS

San Diego Fire-Rescue Command Staff has a fast, secure connection with field personnel through their CAD and Mobile connection. With the seamless integration of Mobile Enterprise to the CAD Enterprise system, field personnel are equipped with real-time incident details and enhanced mapping. The use of these technologies has resulted in effective incident awareness through access to premise preplans, hazmat information, closest hydrants, and unit position and status. The advance GIS technology of Mobile Enterprise provides satellite overlay allowing San Diego Fire to respond effectively despite the challenging topography of San Diego. The use of the CentralSquare's integrated CAD and Mobile has significantly enhanced dispatch and response performance to deliver a reliable, leading edge solution that provides emergency personnel and San Diego residents with the confidence that emergency situations will be processed in the most accurate and expeditious manner possible.