East Baton Rouge Parish Emergency Medical Services

Municipality Uses Cellular Broadband and Wi-Fi to Improve Efficiencies and Business Decisions

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Located in Southeastern Louisiana, East Baton Rouge Parish Emergency Medical Services (EMS) is responsible for coordinating the dispatch, movement,and communications of all emergency support vehicles and mobile command posts within the parish.

BUSINESS CHALLENGE

Like most emergency medical organizations, East Baton Rouge Parish EMTs spend a great deal of time in their vehicles out in the community servingpatients. The ability to both pull and push data from dispatch and medicalfacilities while on the road is critical for EMTs to more effi ciently completetheir duties, such as fi nding call locations, prepping medical staff for arriving patients, and logging reports.

“We recognized that our current process was not providing us with all therelevant data that was being collected on our routes. In order to make soundbusiness decisions, we needed to collect and store as much data as possiblein an effi cient and timely manner,” explained Darryl Beard, EMS Planning &Research Manager at East Baton Rouge Parish EMS. Beard and his team wereconfi dent that mobile connectivity could solve its data access issue, provide thestructure for automatic vehicle location (AVL), and perhaps even benefi t other public service agencies in need of the same functionality.

SIERRA WIRELESS AIRLINK® SOLUTION

With the assistance of USAT Corporation, a Sierra Wireless partner and mobileback-haul specialist, East Baton Rouge Parish EMS selected the ultra-ruggedSierra Wireless in-vehicle gateway with Wi-Fi.

“We had been looking at other devices, and the AirLink® gateway was the onethat satisfi ed both our functionality requirements and desired price point,” saidBeard. Beard is also pleased with the service provided by USAT Corporation,which helped East Baton Rouge navigate through any issues that arose duringinitial deployment by working towards quick resolution and, when necessary,bringing in the proper parties to remove roadblocks.

“It’s great to work with a client who is very knowledgeable and professional,”commented USAT Corporation’s Milissa Reid, regional sales manager,regarding working with East Baton Rouge Parish EMS on its deployment. “Theyknew what they wanted, and we knew that we could meet their needs with anadvanced, reliable solution in the AirLink product line - making the deploymentas seamless as possible.”

East Baton Rouge Parish EMS is taking advantage of the advancedcommunications capabilities for several applications.

Data collection

– When a 911 dispatcher routes a call to EMS, call data fromthe CAD system gets pushed to a server using cellular broadband and is madeavailable for paramedics to download onto one of two laptops located in eachambulance. Data includes address of call, nature of incident, time of dispatch,and more.

Reporting

– EMTs are often required to use 12-lead electrocardiogram (EKG)machines to collect and monitor a patient’s heart activity during transport. Theinformation is captured in an electronic report, which can be securely posted toa main database using cellular broadband communications.

Wi-Fi

– The gateway creates a Wi-Fi hotspot that allows EMTs to remove theirlaptops and continue wireless data transfer capabilities outside their vehicles.The parish EMS has also deployed the AirLink gateway in some of its specialevent trailers to create a Wi-Fi hotspot so that paramedic crews can pull andpush incident data during the course of the event.

AVL / mapping

– Using the gateway’s GPS host interface, East Baton RougeParish EMS has been able to implement a mapping application, tied into CAD,which allows dispatch to locate emergency vehicles within the parish andprovide the most effi cient route to the next destination.

Mobile data

– The parish EMS’ telemedicine program allows EMTs to identifyhigh risk situations in the fi eld for which captured EKG data can be forwardedto a medical facility using cellular broadband. This allows doctors to beproperly prepared for a situation when it hits their doors; the faster the patientreceives treatment, the greater his chances for survival.

Beard praised the AirLink management software for enabling him to makeglobal changes to his fl eet of in-vehicle gateways by explaining, “A lot of thingsthat we confi gure for wireless devices are going to be common over the entirefl eet. Yet, we can also separate out particular items to change on particulardevices, so management can be as universal or granular as we need.”

RESULTS

“Adding the AirLink gateways to our solution has shown a signifi cantimprovement in our ability to capture the data we need to work more effi cientlyand make better business decisions,” he continued. “We are capturing dataon call trends, for medical uses, during a particular shift, or on a particularparamedic. We are also seeing inventory usage based on time-of-year foradvanced stocking, and we can see where the bulk and frequency of 911 callsare coming from to plan for future growth and substation placement.”

APPLICATION: MOBILE WORKFORCE

CUSTOMER CRITICAL CHALLENGE:

- Capture more in-field emergency reporting and activity data
- Real-time connectivity for invehiclelaptops, CAD systems, and Wi-Fi hotspot data requirements

SOLUTION:

- AirLink® in-vehicle gateways provided reliable, secure broadband and Wi-Fi communications between vehicles and dispatch to create mobile office environment and enhance communication between the field and medical facilities

BENEFITS:

- Secure, reliable connectivity for real-times reporting and access to critical CAD and information databases
- Cellular and Wi-Fi access point that provides connections to any Wi-Fi enabled device
- Plug-and-play installation and remote management of network of in-vehicle devices
- Mobile resource management for easy global or individual changes
- Improved data collection for reporting and business analysis
- Enhanced emergency response