

### IMPROVING SYSTEM STATUS MANAGEMENT FOR THE RIGHT RESPONSE AT THE RIGHT TIME

#### BACKGROUND



Sedgwick County Emergency Medical Service is the primary agency in Sedgwick County responsible for Advanced Life Support out-of-hospital care and transportation of area residents. In 2010, Sedgwick County EMS responded to 52,815 calls for service and is a regional Basic Life Support Training Center for the American Heart Association.

#### THE CHALLENGES

Sedgwick County EMS needed a communications solution that could support multiple technologies such as CAD/AVL, Electronic Patient Care Reporting (EPCR), ECG, scanners, laptops, tablets, RFID asset tagging for equipment and medicine temperatures,

and ambulance deployment software. They wanted a single communications platform that could support these technologies with greater capabilities and reliability. Sedgwick County EMS needed to be able to deploy quickly, without disrupting current systems and without requiring major equipment acquisition.

In addition, Sedgwick County EMS also wanted an effective automatic vehicle location and emergency dispatch system that would enable them to better track, route and ultimately reduce the time required to dispatch EMS crews.

With these two major challenges facing Sedgwick County EMS, they needed a single mobile network solution that would enable:

- Cost-effective future proof technology
- Easy IT upgrades of EMS devices and applications
- Stable and reliable network connection
- Improved dispatch and routing
- Real-time ability to track vehicles and devices

*“We needed a communications platform and software solution that would support our latest enhancements and upgrades to dispatch and deployment practices, automated scheduling, and patient care reporting for the entire health care system,” said Scott Hadley, EMS Director, Sedgwick County Emergency Medical Service.*

#### THE SOLUTION

After reviewing many alternatives, Sedgwick County EMS awarded In Motion Technology and Bradshaw Consulting Services, Inc. the contracts to provide improved communications and emergency dispatch.



#### QUICK FACTS

Formed: 1975

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Total calls: 52,815 in 2010

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Jurisdiction: 1,008 sq. miles

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Transports: 36,500 per yr.

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Serving: 498,000 people

In 2010, Sedgwick County EMS became the 142nd ambulance service in the United States to successfully complete the voluntary review process of the Commission on Accreditation of Ambulance Services for its compliance with national standards of excellence. Sedgwick County EMS is now the only ambulance service accredited in the state of Kansas.

# Sedgwick County Emergency Medical Service

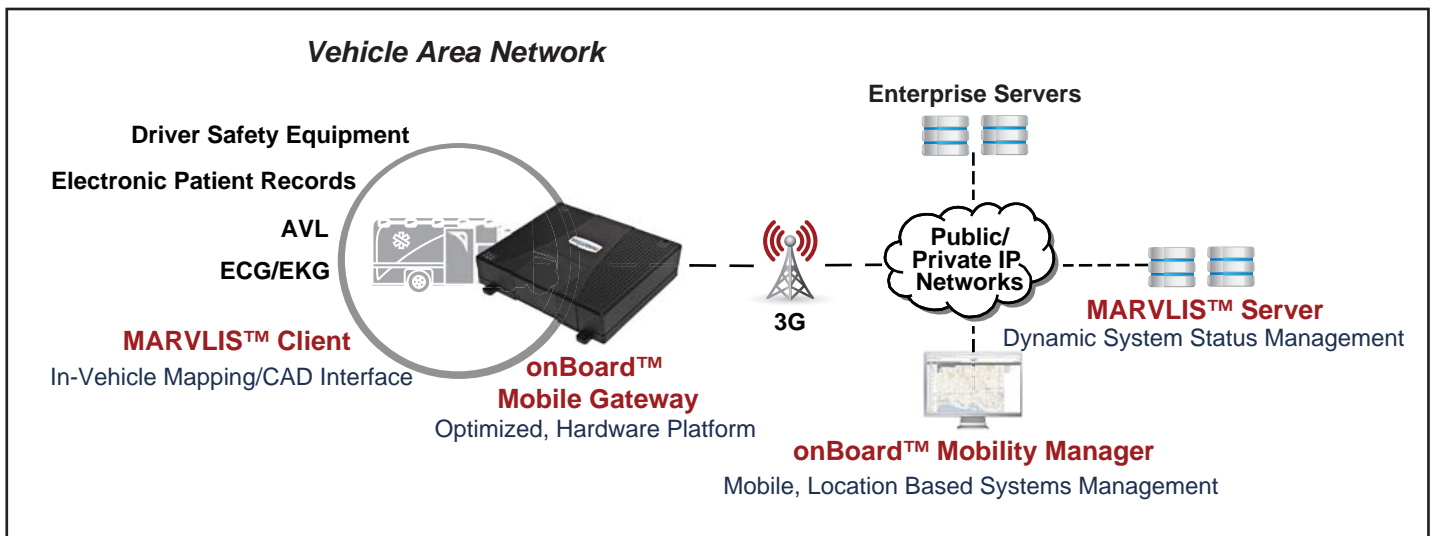
## CASE STUDY



In Motion Technology is the leader in mobile networking systems that provide organizations with secure, manageable end-to-end communications, serving all systems in and around the vehicle using multiple broadband networks. The onBoard™ Mobile Gateway extends the emergency room to Sedgwick County EMS vehicles, enabling medics to provide improved out-of-hospital health care. The Gateway turns ambulances into wireless hotspots, providing seamless, secure and reliable connectivity to tablets, laptops, electronic patient care reports, 12-Lead ECGs, RFID Wi-Fi tags for monitoring equipment and medicine temperatures, scanners, printers and other devices in and around the ambulance. Additionally the Gateway plays a critical role in dispatch and vehicle location, because if communications are not reliable, dispatch information cannot be shared with emergency crews as needed. Sedgwick County EMS was able to move their current tablet aircards to the Gateway and greatly enhanced the amount of information available for medics, without additional monthly reoccurring costs associated with additional radios.



Bradshaw Consulting Services, Inc., is a market leading provider of unique software solutions that improves the efficiency and effectiveness of local public safety agencies with Geographic Information Systems (GIS). The Mobile Area Routing & Vehicle Location Information System (MARVLIS™) provides fundamental changes to the dispatch management and deployment of time sensitive services such as intelligent routing, live geographical display of current resources, and on-demand innovative analysis. MARVLIS is a family of integrated products designed to reach the bottom line: saving time by getting the right resources to the right location at the right time to best meet Sedgwick County EMS needs. MARVLIS provides the ability to implement dynamic System Status Management – the practice of extrapolating, based on past calls, the likelihood and location of future calls for help and their severity. With this knowledge in hand, Sedgwick County EMS can position ambulances in areas where these calls are most likely to occur.



*"In Motion Technology and Bradshaw Consulting Services together help Sedgwick County EMS ensure that we have the right resources at the right locations based on historic call data and provide us with a bird's eye view of our mobile resources," said Scott Hadley, EMS Director, Sedgwick County Emergency Medical Service. "These are critical tools that are allowing us to provide better and faster emergency responses to the citizens of Sedgwick County."*

## RESULTS

With the Gateway and MARVLIS, Sedgwick County EMS is able to improve communications and increase efficiency in its emergency dispatch, routing, and operations and improve response times and patient outcomes.

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