



State of Texas Deploys Special Needs Evacuation Tracking System



“We live in a 72 hour world, from decision to evacuation. By 36 hours, we want departure hubs set up, personnel trained, links made, equipment ready, and transportation deployed. With TX SNETS, we control the event, the event does not control us.”

- Chief Jack Colley, Texas Division of Emergency Management

Situation: Improve mass evacuation procedures

When more than one million people evacuated from Hurricane Katrina in August 2005 and more than 2.7 million people fled from Hurricane Rita the following month, evacuation routes were gridlocked, fuel supplies drained and shelters overwhelmed. Thousands of families were separated and hundreds of pets lost or left behind. The lessons learned from these catastrophic events reshaped the way the State of Texas approached mass evacuation and amplified the need to better assist and track special needs individuals throughout the process.

Solution: Texas Special Needs Evacuation Tracking System (TX SNETS)

In response to the recommendations of a state-appointed special task force, the Texas Division of Emergency Management (TDEM) reached out to the private sector. An AT&T-led group of technology providers including Motorola and Radiant RFID, worked together to create an automated evacuee tracking system. Called TX SNETS, the system integrates Motorola handheld computers with Geographic Information System (GIS) databases with status and tracking displays, tracking software, RFID/barcode wristbands and Radio Frequency Identification (RFID) scanners, and commercial coaches and school buses equipped with mobile Global Positioning System (GPS) units.

Results: Simple process that registers 12,000 evacuees and pets per hour

Wristbands are scanned as evacuees board GPS-equipped buses and again upon arrival at the sheltering destination, updating the information at each point and sending the data wirelessly to a centralized database maintained by the University of Texas Center for Space Research. The TX SNETS solution allows the state to monitor the evacuation status, keep family members and pets together, and provide information to loved ones at each stage in the evacuation process.

Products

- AT&T wireless network and hardware support
- Motorola MC9094 rugged handheld wireless computers and XR400 fixed readers
- Radiant RFID wristbands and RFID portals
- Radiant RFID Evac Center tracking software
- University of Texas Center for Space Research database
- Radiant RFID On-site Evacuation Support Services

Partners

- AT&T
- Radiant RFID
- University of Texas Center for Space Research

Benefits

- Orderly real-time evacuation tracking
- Efficient registration process
- Up-to-date information from point-to-point



“We didn’t look at it specifically from a technical point of view. Technology had to link with our operation, not the other way around. The requirement had to drive the technology,” says Chief Colley.

Improving the evacuation process through integrated technology

When Hurricane Katrina hit the southern coast of the United States, approximately 475,000 evacuees fled to Texas. More than 126,000 had no identification, 9,000 were special needs individuals, and 2,000 children under eighteen were unaccompanied by an adult. “It was a major relief operation,” recalls Chief Jack Colley, Texas Division of Emergency Management (TDEM).

The TDEM invited Motorola and other private sector technology providers to develop an effective, secure solution that would help the state evacuate and track special needs individuals quickly, efficiently and safely. With special needs redefined as anyone who could not self-evacuate for any reason, the numbers of potential evacuees increased dramatically, adding layers of complexity to the challenge. A rapid registration process and a secure method of tracking each evacuee, as well as their pets, wheelchairs, walkers, and other necessities, throughout the entire evacuation process was critical.

Motorola partnered with Radiant RFID to create an integrated technology solution using Radiant RFID’s customized bar-coded RFID wristbands and RFID portals, Radiant’s Evac Center tracking software, and Motorola’s rugged MC9094 handheld computers.

“We worked with about 58 private groups to make this system happen and those groups were essential to developing answers that work in the real world,” Chief Colley says. “For example, Motorola gives us great support from border security to evacuations. They are there when we need them most. We’re dealing with life and death, not proficiency issues, so the technology has to work, it cannot fail.”



The MC9094 provides emergency personnel with true mobility, enabling them to register evacuees on-site.