



NEXT GEN 9-1-1 BRINGS GREATER INTEROPERABILITY AND SAFETY TO GLOUCESTER COUNTY

The next generation of emergency response positions **Gloucester County 9-1-1** as a leader in technology and public service.

Gloucester County in southwest New Jersey is home to a mix of rural and urban municipalities. Its slogan is, "Close to everything, far from it all"; valuing excellence, customer service, fiscal responsibility, collaboration, integrity, and innovation. All of these values and more are evidenced in its integration and move to next generation solutions to better the county.

More than 1,500 police officers and 300 civilians provide a full range of law enforcement services to nearly 900,000 residents and business owners.

The Emergency Response Center (ERC) dispatches police, fire and emergency medical services for all 24 towns in Gloucester County, as well as for five towns in the neighboring Atlantic County.

In the ERC, a call-taker responds to 9-1-1 calls from throughout the area. The first step is locating the caller and asking for basic information such as the person's

name, phone number and the circumstances. The call-taker then hands the call off to a dispatcher who identifies and contacts the best resource.

Michael Briar, a public safety telecommunicator with the County of Gloucester, explains, "Although people who call 9-1-1 expect an ambulance, fire trucks or police at their house immediately, it takes time to process the calls. We have to ask questions to get an idea what's going on at the scene to send appropriate resources to the needed address."

The ERC may need to send a police officer, firefighters and/or an emergency medical response team to the location. These different first-responder agencies must be able to coordinate with each other to maintain safety and provide the fastest and highest level of service. The Gloucester County Fire/EMS Department alone responded to more than 145,000 calls in 2016.

GLOUCESTER COUNTY EMERGENCY RESPONSE CENTER

- 24 municipalities covering 329 square miles
- 80 first-responder units
- Serves 288,00 people
- Receives 317,000 calls a year

KEY BENEFITS:

- CallWorks Next Gen 9-1-1 solution
- APX Radios
- Motorola Solutions Infrastructure and WAVE





With such a wide geographic area covering multiple towns, radio communications interoperability is a critical issue. Emergency response call takers must be able to immediately help anyone who calls in and then route the call to the appropriate resources no matter where they are located. Calls may be transferred anywhere in the county or even the state. At the same time, first responders on the move must be able to stay in contact as they rush to the scene.

"We have four state highways that run through our township, so police officers do a lot of traffic enforcement," says Gloucester County Chief of Police Tom Mills. "They're always on the radio with our dispatchers, they're getting lookups and checking people for warrants. There's a lot of communication back and forth between the dispatcher and our officers. Parts of our jurisdiction are rural, so having good radios is imperative to officer safety."

In addition to the need for interoperable communications across the state, another challenge was that the county's old, analog system was receiving interference from digital television interference on its 500-megahertz T-band platform.

Gloucester County is an influential leader in adopting new technology, and that extends to its emergency-services communications systems. The county is committed to using the

best technology available to deliver high-performance services at the best cost to its end users and taxpayers.

With a growing population and rapid changes in technology, officials knew it was important to bring new capabilities in effort to help the citizens in times of need.

COMMUNICATIONS ACROSS BORDERS

A current statewide Talk Pass in radios, providing statewide operability is available in the county therefore when evaluating technologies, interoperability was top of mind for Tom Butts, emergency response director for the County of Gloucester. The state developed a corrections talk group so that corrections personnel can travel to different prisons in the state and still communicate with dispatchers.

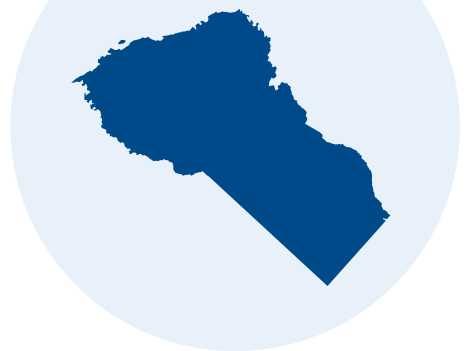
Accurate mapping is essential in this county that contains 2,032 total miles of road, including 410 miles of county highway. The 500-megahertz system was quirky and coverage dropped in some areas.

As citizens increasingly prefer to communicate by text message, it became imperative that the Gloucester County Emergency Response Center (ERC) be equipped to take calls this way. There's another important reason why texting capability is vital: There are times when it's not safe for someone to make a voice call, such as when he or she is hiding from a perpetrator.

NEXT-GENERATION COMMUNICATIONS AND COVERAGE

Following a competitive bidding process, Gloucester County chose Motorola Solutions CallWorks to provide next generation call taking system and 3,500 radios for first-responder organizations. It later converted all county departments to the new solution. The digital, 800-megahertz system is NG 9-1-1 ready. Coverage has increased to more than 99 percent of the county. There is full interoperability among ground operations and dispatch.

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“The challenge of the new technology and trying to do the best quality service for our first responders is what brings me back every day,” says Butts.

With the old system, mapping errors had to be corrected manually. The new system automatically plots the call’s origination point and identifies whether the call is from a mobile or landline.

This can be life-saving, according to Butts. There have been several times when people were lost in the woods and unable to find their way out. With the new system, personnel can locate a cell phone by plotting latitude and longitude in the mapping system.

A directory allows telecommunications operators to transfer a call to another agency anywhere in the state or county while automatically providing the necessary information.

“We can easily add phone numbers that are missing or correct them with a couple of easy clicks,” says Briar, the telecommunicator. For those times when there is an issue, a help desk is available to provide answers quickly.

A barge feature has proven extremely useful to the telecommunicators. It allows another person to quickly join a call to add information or do whatever it takes to complete the call.

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MULTIPLE WAYS TO COLLABORATE

Following the original upgrade to CallWorks, Gloucester County purchased 100 licenses for push to talk technology WAVE. This will allow personnel and managers who don’t carry a radio collaborate across agencies. When there’s a situational report, for example, they can participate in conference calls without having to use a radio.

Another important component of the emergency response system is a campus emergency system for Rowan University. Emergency phones lit with blue lights are in strategic locations in parking lots, campus walks and in buildings and offices. When someone picks up the phone, it automatically calls 9-1-1 with a prerecorded message giving the location of the phone. Next, the phone connects the caller with a live telecommunicator who can send help immediately.

Heather Simmons, a Gloucester County freeholder, says, “By collaborating with all 24 of our municipalities on 9-1-1 dispatch and on emergency management, we’re able to make the response system very quick and very effective. We’ve reduced the time of response for emergencies, while at the same time increasing the quality of that response. People here feel safe because of that.”

Records management is another important feature of the ERC operations, and here again, interoperability is key. The county offers records management services to police and fire departments, and it hosts regular user group meetings.

Says Butts, “Our group attends the Police Chiefs’ Association and the Fire Chiefs’ Association, and we interact with them on an almost daily basis.”



IMMEDIATE BACKUP

Gloucester County's state-of-the-art emergency response center is the first line of defense in case of disaster, but there is also a completely redundant backup site at the opposite end of the county from the main facility. The two facilities are on separate power grids, as well as serviced by generators, and connect to separate central telephone offices.

"Everything we do is done with redundancy in mind," Butts says. "If we lost this building today, in the time it would take to travel from one PSAP to the second one, we'd be operational, again. We wouldn't miss a beat."

In addition, two field communication vehicles also replicate the functionality of the main ERC. These mobile units go to major fires and police operations, and they're also used for large events such as college graduations or county fairs.

"Any kind of first responder can request our field communications units, and we go out and support them," Butts says."

THE FUTURE OF COMMUNICATIONS IN GLOUCESTER COUNTY

Gloucester County intends to continue to be proactive in its approach to technology, leading the way for other counties to follow.

Says Butts, "The communication system is the lifeline for all our first responder organizations. We take the initial information, we direct assets, we give them the information they need to respond appropriately. Without that, they'd just be chasing their tails out there."

At the same time, there are strong bonds of cooperation among the emergency response

center staff and the first-responder agencies they serve. Telecommunicator Mike Brian says, "The relationship between us and the field units is tight. A lot of us know the fire and EMS personally. I can tell if somebody is having a bad day—and they can understand if I am from the tone of my voice on the radio."

These dedicated personnel are constantly renewing their commitments to the citizens and their fellows. Says Briar, "What brings me back here every day is the ability to help people. I'm not in this job to get a thank you or to get praise. I'm here to help people and help the community of Gloucester and serve the public."

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— Tom Butts, Emergency Response Director
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