

Alexandria, Virginia, Makes 911 System Remote During COVID-19

The city is the first in the nation to enable 911 staff to take and dispatch calls from home during the pandemic.

By Vanetta Pledger / *Alexandria, Virginia*

The nation's 911 professionals are on the front lines of emergencies every day and play a vital role in keeping communities safe and secure. As they take calls and gather essential information to determine a situation's severity, public safety telecommunicators use the First Responder Network Authority (FirstNet) network to support innovative approaches to fielding 911 calls and dispatching services.

COVID-19 and physical distancing requirements mean technologists and dispatchers have to leverage innovative solutions that provide creative ways to keep staff safe while maintaining this critical service. In Alexandria, Virginia, the Department of Emergency and Customer Communications (DECC) responded quickly to the physical distancing requirements for staff. DECC partnered with the city's Information Technology Services (ITS) Department and industry partners to arrange for a reliable telecommunications solution for 911 dispatchers to perform their job duties from the safety of their homes.

DUPLICATING 911 DISPATCHING

DECC needed to duplicate the three legs of dispatching: receiving a call, logging a call into the Computer Aided Dispatch (CAD) system, and dispatching the call to first responders. The department upgraded the 911 telephony environment to include the capability for remote 911 call-taking. It used technological solutions to ensure reliable connectivity and remote access

to the 911 telephone system and to the CAD system. All identified solutions were properly vetted and tested prior to implementation because they had never been used before.

Renee Gordon, director of DECC, says there were some concerns about the unknowns of remote call-taking, but the COVID-19 crisis spurred the department into action.

"We started planning and testing in January. We've had this equipment but never used it, and it's been in the back of our minds that we need to explore this technology," she says. "We did a lot of testing. Probably why others aren't using it is because it's scary. What happens if the call drops? As it turns out, it just goes back into the 911 telephone queue."

To accomplish this complex and technically sophisticated goal of remote call-taking, hot spots connected to the FirstNet network were deployed to the homes of the Alexandria 911 dispatchers. The hot spots connect directly to FirstNet's dedicated public safety broadband, which is a stand-alone service that does not compete with commercial internet users and receives the highest priority for services.

The FirstNet network is uniquely designed to provide dedicated, secure and reliable communication for public safety for everyday operations or emergency communications. The nationwide network is being built by AT&T in public-private partnership with FirstNet.

The ITS department provided laptops and software to connect to the 911 center systems

via secure connections. Dispatchers at home use the city-issued laptops to remotely access DECC's CAD system, which is located at the 911 center. The 911 dispatchers successfully access the designated CAD position, and this puts the full functionality of the center at their fingertips.

TRUST BUT VERIFY

Before the 911 remote call-taking capability was fully operational, DECC developed a plan to first test only non-emergency call-taking and eventually advanced to emergency call-taking. Adequate testing allowed staff to consult and verify the results, then make needed adjustments to ensure optimal design and success.

Alexandria's implementation was the first in the nation to provide the

capability of remote 911 call-taking. This novel achievement made remote work possible while reducing 911 dispatchers' risk of getting or transmitting COVID-19. It also ensured staff availability for all necessary work shifts, with no degradation in services provided to the public and first responders.

"With COVID-19, we needed to separate our teams for social distancing," says Doug Campbell, deputy director of DECC. "We broke the four shifts into two and two: two in our primary emergency call center and two in our backup emergency call center, which is always ready to go. Then we realized we needed to separate even more. So, Bob Bloom, the DECC public safety systems administrator, and his team went to dispatchers' homes and set up the equipment."

DECC also set up a fourth team, called an isolation team, made up of two fire dispatchers, two police dispatchers, and one call telecommunicator, who stayed and worked at a nearby hotel for 10 days in a row.

Creativity and willingness to try new and innovative technological solutions offered successful delivery of 911 services from multiple locations and made sure every measure was taken to prevent and reduce the spread of COVID-19 to essential staff.

Alexandria's telecommunications program manager, Smail Farid, worked with the telecommunications partners and his technical peers to ensure the proper connections were made and voice communications were passed successfully between dispatchers' homes, 911 callers, and FirstNet. The combined efforts provided an outstanding outcome by maintaining one of the most critical services the city performs for the community.

"The word is out about what we're doing, and the phone rang several times yesterday with people around the country asking how we did it," said Bob Bloom. "This has never been done before. Prior to 911, dispatching in the old days started in people's homes, and citizens volunteered to answer calls for help. Then, they'd sound the alarm, calling a number that rang in the homes of certain fire officers. We're full circle now, putting dispatchers back in people's homes."

Alexandria received the 2020 Solutions Award from the Computer Technology Industry Association and Public Technology Institute for becoming the first 911 team in the United States to enable staff to provide 911 services from home.

City manager Mark Jinks said in a press release that "not only has developing an at-home capability for 911 call-takers helped them to continue their lifesaving services during these unprecedented times, it also provides a replicable mode for governments and other organizations to follow." ❖

IN MEMORIAM: ROBERT BLOOM, PUBLIC SAFETY AND 911 PIONEER

Robert Bloom, public safety systems administrator in Alexandria's Department of Emergency and Customer Communications (DECC), died in a vehicle crash on July 20.

After serving in previous roles with the Metropolitan Washington Airports Authority, the city of Baltimore and telecommunications vendors, Bloom joined the city of Alexandria, Virginia, in 2016. After beginning his career in a small county 911 center in Pennsylvania, he helped implement nearly every advancement in 911 technology over the next three decades. He earned several top certifications and was regarded as a national leader in public safety telecommunications. In 2019, he led the international convention of APCO International (the global organization of public safety communications professionals) and served on APCO's cybersecurity committee.

Bloom led Alexandria to become the first city in the United States that enabled staff to answer 911 and 311 calls from home during the COVID-19 pandemic. This helped DECC reduce the risk of transmission to staff and ensure continuity of service to the community.



Robert Bloom

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