VESTΛ® SMS CASE STUDY

BRAZOS VALLEY COUNCIL OF GOVERNMENTS, TEXAS
IMPLEMENTING TEXT-TO-9-1-1: THINKING AHEAD AND TRAINING UP

The Brazos Valley region of East Texas is home to approximately 315,000 people within 5,109 square miles in the counties of Brazos, Burleson, Robertson, Grimes, Leon, Madison and Washington. As the Brazos Valley Council of Governments (BVCOG), which oversees and manages Public Safety communications for the region, moved toward the next generation of Public Safety, it looked to bring Text-to-9-1-1 to its communities. Importantly for BVCOG, the added Text-to-9-1-1 functionality needed to integrate seamlessly with Call Takers' workflows and processes. Only one solution fit the bill – Motorola Solutions' VESTA® SMS,

the company's 9-1-1 solution with a fully integrated Text-to-9-1-1 application.

On June 16, 2015, implementation of VESTA SMS was complete in Washington, Grimes and Burleson counties as well as the City of Navasota in Grimes County. With this, BVCOG became the first agency in the U.S. to complete a native Text-to-9-1-1 call. Then, in 2016, the counties of Leon, Madison and Robertson implemented VESTA SMS. This means all residents - more than 126,000 - in six counties of Brazos Valley now have potentially life-saving access to Text-to-9-1-1.

"We were not interested in implementing other solutions such as the web-based browser solution or text-to-TTY. We wanted something that would fully integrate into our existing 9-1-1 call taking system. With VESTA SMS, text messages are answered via our existing 9-1-1 equipment in almost the same way as a voice call. And the interface makes responding to 9-1-1 text calls almost as easy as texting on your phone."

Anita Pitt, BVCOG 9-1-1 program manager

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*"**It was an easy transition with VESTA SMS. The system makes answering Text-to-9-1-1 calls so seamless and unobtrusive that it's now just another natural way to communicate.**"*

Anita Pitt, BVCOG 9-1-1 program manager

▶ Watch the video

PLANNING AHEAD

Getting to that stage, though, took some time including numerous late nights, and a lot of coordination and cooperation between multiple providers. Together, this work moved BVCOG from discussion and planning to the end result of receiving the first native 9-1-1 SMS call in the nation.

As BVCOG discovered, a number of critical decisions must be made early in the planning process. Text-to-9-1-1 relies on multiple outside agencies, some of which have significant lead times when starting service or requesting equipment. This could lead to delays if there isn't careful planning and coordination, including:

Request Text-to-9-1-1 Service – The 9-1-1 governing authority must first notify the Commercial Mobile Radio Service providers that the PSAP is ready to receive Text-to-9-1-1 messages. The recommended approach is for the PSAP to complete the Text-to-911 Readiness and Certification Form found on the FCC site. When the governing authority sends this form to the FCC, the FCC then provides notice to the carriers of the PSAP's readiness. Wireless carriers are allowed six months from the date of request to begin implementing text functionality.

Selecting the TCC – PSAPs must decide which Text Control Center (TCC) provider to use—the critical link that ensures a text sent to a cellular provider's network is routed to the appropriate 9-1-1 call center. This decision could be driven based on price, existing relationships or company preference. PSAPs should be aware that TCC providers may have lead times of two to three months to establish service and may have testing requirements that will need to be built into timelines.

Network Design – PSAPs should understand how the 9-1-1 equipment will connect to the TCC and if new equipment will be required based on TCC selection, existing infrastructure or customer preference. Network design review meetings with appropriate parties should be held early in the planning process to ensure all aspects of the design are reviewed and approved prior to implementation.

Circuit Orders – PSAPs may need to order new circuits from their network provider for connection to the TCC in order to handle text messages. Obtaining these circuits can take 45 to 60 days, with additional time needed for implementation.

Routing Policies – Text-to-9-1-1 is an initial step into the true next-generation PSAP environment, and new routing policies need to be established. For instance, if a PSAP is unable to answer a 9-1-1 text message call due to timing or staffing, or if the PSAP is offline, where does that message route? What happens with that message? How is it handled? These decisions need to be made prior to final implementation.

EXAMPLE OF ROUTING POLICY

Early on, the BVCOG team implemented several new routing policies by designating a nearby agency, Washington County 9-1-1, to provide support if the local PSAP is unable to answer Text-to-9-1-1 calls. For example, calls will automatically be rerouted to Washington County 9-1-1 if a BVCOG PSAP is unmanned due to evacuation or a text message has been waiting in queue for more than two minutes. If those and similar events occur while Washington County 9-1-1 is also unable to respond, a reject notification will be sent by the TCC so the caller knows to call by phone.

DESIGNING, TESTING AND TRAINING

The key to BVCOG's successful beta tests and later full implementation was that the system was designed and tested with Call Takers in mind. Although some Call Takers were initially concerned about the new actions and processes required to answer text calls, they were pleasantly surprised how seamless the integration is with their regular activities and workflow.

"It's been an easy transition with VESTA SMS," added Anita. "The system makes answering Text-to-9-1-1 calls so seamless and unobtrusive that it's now just another natural way to communicate."

Another integral part of BVCOG's implementation was the testing and training provided in preparation of implementing VESTA SMS. Some best practices include:

Educate Call Takers – Provide education to Call Takers on clear operational procedures and the overall importance of Text-to-9-1-1.

Prepare for Testing – It's important to send test messages on each mobile provider's network, which requires securing phones from each provider. Involving Call Takers in this early process can begin to build familiarity and confidence in the system.

Simulated Training – As soon as possible, begin training Call Takers in a simulated environment to build familiarity and confidence as well as to identify procedures and future training that should be refined.

Planned Announcements – Do not publicly announce the go-live-date for Text-to-9-1-1. Calls for help via text will occur even without a public announcement, so waiting allows time for live training before receiving calls from the public en masse.

Clear Public Communication – Once the time comes to announce to the public-at-large that Text-to-9-1-1 is available in the area, it is vital that communication focus on education. Text-to-9-1-1 is new to everyone, and citizens are just as much a partner to the Call Takers as the other way around. NENA has a trove of Text-to-9-1-1 resources for PSAPs and 9-1-1 Authorities and information related to SMS readiness, training and public education.

In all, the move to Text-to-9-1-1 must be methodical with every step, test and roll out carefully considered. Consulting with those who have done it before can provide invaluable insights, as can selecting the right partners.

The work Anita and her team accomplished, along with the TCCs and service providers, paved the way for PSAPs across the U.S. to make it easier for them to realize the benefits to integrated SMS. Anita's "lessons learned" deliver value to the Public Safety industry as it takes the next steps forward to full Next Generation 9-1-1 implementation.

MORE ON THE INTEGRATED TEXT-TO-9-1-1 SOLUTION

The VESTA® 9-1-1 Next Generation call handling solution integrates VESTA SMS' Text-to-9-1-1 functionality into its operating system. VESTA 9-1-1 and VESTA SMS are compliant with the National Emergency Number Association's (NENA) i3 standard, the Joint Alliance for Telecommunications Industry Solutions (ATIS) and the Telecommunications Industry Association's (TIA) J-STD-110 specifications. The solutions support connections via the Emergency Services IP Network (ESInet) or through dedicated, redundant IP circuits to a Text Control Center.

The Brazos Valley Council of Governments was among the first to deploy the VESTA SMS application, and was the first Public Safety agency in the nation to deliver a native Text-to-9-1-1 message through call answering equipment, not a third-party texting or messaging application.

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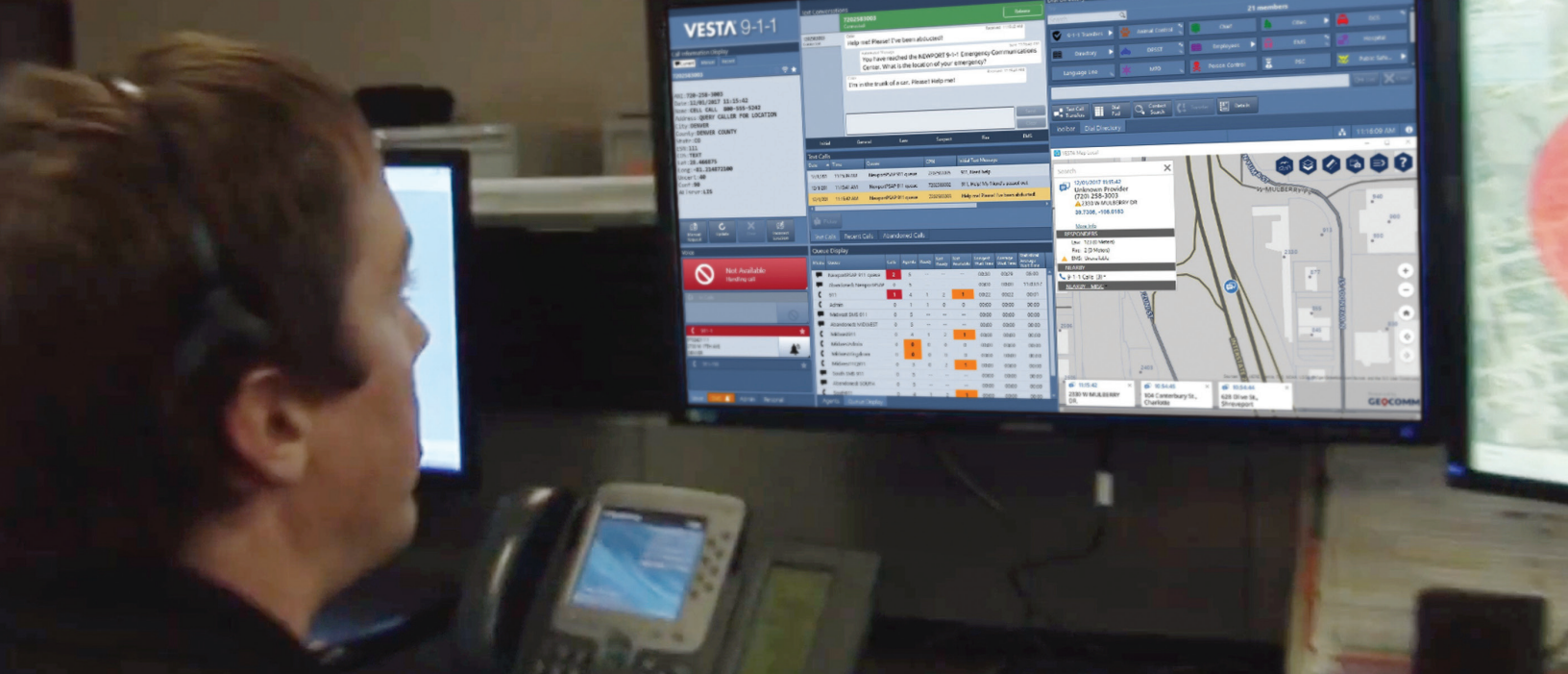
THE VESTA® SOLUTIONS SUITE

Our VESTA Next Generation 9-1-1 solutions serve more than 60% of all U.S. Public Safety Answering Points, as well as Federal DoD operations globally. Our Emergency Notification solutions support the communications needs of hundreds of public and private sector organizations worldwide. As one of the most trusted solutions providers in Public Safety communications, we help people be their best in the moments that matter.

Experience the VESTA difference. Call **951.719.2100**.

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