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2013 Achievement Awards

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Call for Entries



2013 VACo Achievement Awards

Deadline: June 1, 2013

Application Form

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 1, 2013.**

Program Information

Locality York County

Program Title "Virtual PSAP"

Program Category Criminal Justice & Public Safety

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Title County Administrator

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2013 VACo Achievement Award Program York County, Virginia "Virtual PSAP"

The York-Poquoson-Williamsburg Public Safety Answering Point (PSAP) partnered with the County of James City PSAP to develop total redundancy by creating a "Virtual PSAP" between the two adjacent agencies. The Virtual PSAP program will allow for each agency to back up the other's agency which will allow for back up, disaster recovery and overflow operation with the ability to provide reliable service under any unexpected conditions. In simple terms, both 9-1-1 Centers mirror the other in virtually every aspect of the emergency operations. York County's PSAP partnered with James City County's PSAP to provide back up services to each other in case of a power failure or other interruption in service. The PSAP partnership solves a myriad of potential problems and has already proven effective.

Past problems have showed that human interface or intervention sets the system up to fail. By setting these technologies to automatically overflow, through a Virtual PSAP, eliminates human error. We no longer depend on the local exchange carrier to reroute emergency calls from one 9-1-1 Center to another that in the past had proven unreliable and time consuming on too many occasions. Often it could take up to 45 minutes to have communications rerouted to another agency in emergency situations leaving a critical gap in public safety functions that could potentially reduce responses to citizens in need. The Virtual PSAP Program empowers the 9-1-1 Center to deter potential outage caused by man-made or natural disasters.

As an example, in June 2012 the Mid-Atlantic and Midwest derecho was one of the most destructive and deadly fast-moving severe thunderstorm complexes in North American history. The storm taught us that even the local exchange carriers, public safety grade networks and services can fail during natural and man-made events. To mitigate the issue, we utilized the existing radio communications regional microwave system for this redundancy, thus eliminating the local exchange carriers.

After approximately two years of design and implementation with the vendors and county officials, on January 23, 2012 the Virtual PSAP concept was launched. This implementation allowed for the York Poquoson Williamsburg PSAP to have 16 dispatch positions that serve a population of more than 100,000 residents and processed over 325,000 calls for service in 2011 and allowed the James City County PSAP to have 12 dispatch positions that serve a population of more than 70,000 residents and processed over 150,000 calls for service in 2011. The Virtual PSAP allows dispatchers from both PSAPS to be cross trained to process calls for service using their same login ID and credentials at either PSAP. Both agencies share the same fire run responses, policies and procedures, Emergency Medical Dispatch protocols, GEO based mapping system, and radio system.

If, during heavy call volume, one PSAP becomes over saturated with calls, the other PSAP is able to process the calls that have not been answered by the seventh ring. Furthermore, if one PSAP were to have a catastrophic event and requires them to immediately evacuate the PSAP, all the dispatchers have to do is log off and all calls for service are automatically routed to the other PSAP. This eliminates having to get the Local Exchange Carrier involved in doing a manual transfer of all phone lines to the other PSAP.

The system was designed to benefit both agencies with new emerging technologies that will incorporate NG9-1-1 (Next Generation 9-1-1). NG9-1-1 is defined as the emerging technology of Voice over Internet Protocol (VoIP), video, data and text messaging to the PSAPs.

At the time to replace existing emergency communications equipment that had reached the technological life expectancy, the opportunity was taken to design the Virtual PSAP concept that would implant the redundant program linking the adjacent counties. Both agencies recognized the cost benefits of purchasing together as opposed to entering into new separate contracts for vital communication systems. The cost of the equipment was previously budgeted with minimal additional costs incurred for the Virtual PSAP Program.

The Virtual PSAP program concept was vindicated for the first time when the James City County PSAP was forced to evacuate their 9-1-1 Center due to an electrical malfunction. The system was seamlessly rerouted to the York-Poquoson-Williamsburg PSAP with no interruptions in service to the citizens of James City County. The dispatchers simply unplugged all of the headsets from their consoles which resulted in all of their calls for service to be routed via the Virtual PSAP. The York-Poquoson-Williamsburg emergency communications dispatchers began to receive and process all emergency communications for James City County. The James City County dispatchers traveled approximately 30 miles to the other 9-1-1 Center, took their seats and continued business as usual without the knowledge or perception from the public that any malfunction had occurred. Without this Virtual PSAP Program the citizens and visitors of James City County would have been without the critical means to communicate with law enforcement, fire and emergency medical service first responders. After approximately six hours, the electrical malfunction was resolved and the dispatchers traveled back to their 9-1-1 Center to again pickup the communications without evidence to the citizens.

With critical infrastructure in place, a Virtual PSAP program provides an agency with the ability to seamlessly process calls for service even during manmade or natural disasters. Ensuring the community always has an infallible link with emergency first responders, the Virtual PSAP program being cost effective and with state-of-the-art technology achieves the ultimate sense of security that our citizens are expecting and deserve.

The program eliminates steps in processing emergency calls for service and allows for a quicker dispatch time to first responders and having the back-up of the other PSAP provides uninterrupted service should either PSAP become inoperable as the call takers at each location are familiar with the equipment and geography.

