



APPLICATION FORM

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 2, 2017.** Please include this application form with electronic entry.

PROGRAM INFORMATION

County: Loudoun County

Program Title: Emergency Communications Center

Program Category: Criminal Justice & Public Safety

CONTACT INFORMATION

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SIGNATURE OF COUNTY ADMINISTRATOR OR CHIEF ADMINISTRATIVE OFFICER

Name: Tim Hemstreet

Title: County Administrator

Signature: 

Loudoun County's Emergency Communications Center

Brief Summary

In the fall of 2012, Loudoun County formally embarked on a project to replace its Emergency Communications Center (ECC). At that time, the ECC was a 20 console center located in the basement of the Fire & Rescue training academy. The ECC was receiving 911 service via 20 CAMA trunk lines integrated with an eight year old analog phone system. The Computer Aided Dispatch (CAD) was a 23 year old text-based system.

Staff from the Department of General Services, Information Technology, Fire & Rescue as well as the Sherriff's Office convened in order to move forward with construction. Loudoun County purchased a pre-standing office building in which the ECC was to be located. Reconstruction work began in the spring of 2013. While the reconstruction work was ongoing, simultaneous projects were being worked for the replacement of the CAD system, logging recorder, 911 telephony and phone switch.

On November 3, 2015 the new ECC opened, with consoles for 29 personnel along with a 4 position live training area. The IP based 911 telephony system, A911 call delivery and logging recorder also went into production that same day. The New CAD system went live on September 13, 2016.

Project Details

In 2012, a study was conducted which identified the need to enlarge Loudoun County's Emergency Communications Center (ECC). Also during this time, several events took place that necessitated a refresh in technology of the 911 telephony and phone system - 1) Verizon publicly announced that they were going to exit the 911 telephony business and 2) the existing telephone switch was eight years old, based on analog technology, and spare parts were becoming increasingly hard to find.

At the same time Loudoun County had decided to transition towards a Next Generation 911 platform. The Metropolitan Washington Council of Governments, Public Safety Access Point (PSAP) Directors started a campaign towards rolling out Text to 9-1-1. While Text to 9-1-1 is not meant as a substitute for calling 9-1-1, Text to 9-1-1 was identified as a good tool for our hearing impaired community, individuals at a high risk for domestic abuse and as an alternative to calling 9-1-1 when it is not safe to make a voice call. Due to this project, Loudoun County became the first PSAP in the National Capital Region to utilize an integrated solution for Text to 9-1-1 and as of August 30, 2016, Text to 911 is available from all major carriers in Loudoun.

The construction of the new ECC entailed a 75' x 150' dispatch center enlarging the center from 20 positions to 29 positions, a 20' x 40' data center in the same facility to house the critical IT infrastructure required for the ECC, and a four position live training area for call takers and dispatchers to receive new and continuing training at a console as opposed to a typical classroom environment. The four training positions also provide the ability to up-staff the center.

The Backup ECC was also updated as part of this project. In addition to the refresh of the 911 phone system, the backup ECC was equipped with 12 identical positions. The phone switch at the ECC and the phone switch at the backup ECC are geo diverse and connected through an ESInet ring which is self-healing in the event one portion is disrupted. This provides continuity of critical operations in the event of a disaster and the ability, if needed, to place both centers in service at the same time.

This project also incorporated the implementation of a new logging recorder. This provided a technology refresh and the ability for recording capability at the backup ECC for the first time. Other improvements included redundancy of the radio system to include both Fiber and Microwave backbone from the ECC to the Radio system's Prime and Master Site.

On September 13, 2016, the new Computer Aided Dispatch (CAD) and Records Management System (RMS) were put into service, replacing a 25 year old text based system. The increased capabilities have given Loudoun County state of the art live equipment resource location management (ARL), better processing times for events, and analytics availability to the units, dispatchers and command staff. . It also added the capabilities of records management for Fire & Rescue along with Volunteer System Administrative Services to the portfolio.

This project was funded through Loudoun County's Capital Improvement Program, which is developed biennially with a six-year period moving out an additional two years every other fiscal year. Funding decisions concerning the CIP are made in conjunction with decisions regarding the County's operating budget. Final authority to spend public funds for purposes specified in the County's operating and capital budgets is accomplished through the adoption of

an appropriations resolution by the Board of Supervisors. A team of approximately 20 personnel were utilized in addition to vendor partnerships to construct and outfit the center. None of the Loudoun County personnel involved in this project were 100% dedicated to the project and were expected to perform their daily assigned duties as well. The Loudoun County ECC project promotes intergovernmental cooperation by increasing Loudoun's interoperability with the region for the NG911 initiative.

Overview and Summary

The New Emergency Communications Center replaced a 23 year old facility that had outgrown its usefulness to the community with increased lighting and HVAC systems for the comfort of the call takers and dispatchers. The 911 telephone system and telephony call delivery were overhauled to provide a NG911 platform. Along with this overhaul, equipment was placed into the backup center to allow for Continuity of Operations without delay in technologies along with increased capacity if the need arose. Text to 9-1-1 was introduced to the citizens and visitors of Loudoun County, along with upgraded CAD/RMS systems.