



**FY19**

# **NG-911 GRANT PROGRAM APPLICATION**



VIRGINIA INFORMATION  
TECHNOLOGIES AGENCY  
Integrated Services Division



## FY19 NG-911 GRANT PROGRAM APPLICATION

### HOW TO APPLY/DEADLINE

The grant application is available and accessible from VITA ISP's website (<http://www.vita.virginia.gov/isp/default.aspx?id=8578>). Upon completion of the application, it is to be submitted to the electronic mailbox for grant applications - [psapgrants@vita.virginia.gov](mailto:psapgrants@vita.virginia.gov). Any supporting documentation must also be submitted along with the application when making your grant application submission.

After the close of the grant application cycle, a Grant ID and email receipt notification will be sent to the e-mail address listed on the application received.

All funding requests must be submitted using the grant application. Technical assistance is available from VITA's Public Safety Communications (PSC) staff throughout the grant process. The FY19 NG-911 Grant Application Cycle starts July 1, 2017 and concludes on October 2, 2017 at 5:00 pm.

**ALL APPLICABLE SECTIONS MUST BE COMPLETED IN ITS ENTIRETY OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE AND NOT ACCEPTED FOR CONSIDERATION.**



## FY19 NG-911 GRANT APPLICATION

### PROJECT TITLE

Cumberland County NG-911 Data Readiness Project

### GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: Cumberland County, VA

CONTACT TITLE: IT Manager

CONTACT FIRST NAME: Shawn

CONTACT LAST NAME: Howard

ADDRESS 1: 1 Courthouse Circle

ADDRESS 2: PO Box 110

CITY: Cumberland

ZIP CODE: 23040

CONTACT EMAIL: [showard@cumberlandcounty.virginia.gov](mailto:showard@cumberlandcounty.virginia.gov)

CONTACT PHONE NUMBER: (804)492-5398

CONTACT MOBILE NUMBER:

CONTACT FAX NUMBER: (804) 492-9224

REGIONAL COORDINATOR: Sam Keys

### HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

**Cumberland County**

_____	_____
_____	_____
_____	_____
_____	_____

### GRANT TYPE

Individual PSAP

Shared Services



**Non-vendor supported application MUST include age and/or version of hardware/software, **along with a copy of the notice from the vendor.****

VERSION:

# YEARS of HARDWARE/SOFTWARE:

---

**PRIORITY/PROJECT FOCUS** NG 9-1-1 GIS

**FINANCIAL DATA**

Amount Requested: \$ **149,798.00**

Total Project Cost: \$ **149,798.00**



## PROJECT DESCRIPTION

Cumberland County is seeking to do an extensive evaluation and remediation of its existing addressing based on the results of the VITA Readiness Report that evaluated significant deficiencies in the County's data. An address verification and future maintenance planning project to ensure that their data is gaining accuracy needed for future NG-911. The County was originally mapped in the late 90's, and for many years the address locations were placed without regard to imagery, building footprints, or GPS locations. Due to these address placements that have taken place over the years, it has become necessary for the County to seek field verification of addresses.

Cumberland does not have the funding available to complete this project, and does not have the staff available to take on this type of project in-house. It is the fear of the County that with upcoming NG-911 transitions looming, their data is not accurate enough to be reliable. Without funding through this grant program, the County will be unable to complete this work.

A portion of this project is geared towards allowing the County the tools and training necessary to maintain addressing data completely in-house once they have a solid basis to start from. The County's Data manager is committed to continue improving centerlines and errors as they arise, and will use Collector for ArcGIS to capture building points and access points in the future to ensure that data is accurately captured and sustained into the future.

Phase 1 - The first phase of the project will be to collect all of the data we will need to complete the project. This will include sources such as paper maps, data from vendors, data models Esri, NENA, and many different departments within the County. This data will be loaded into a newly drafted database schema, organized and verified as to whether it is reliable enough to serve as a data source moving forward. Please note, the County is aware of the State's identified critical datasets, and the County will not be using this grant to alter any data (such as parcels) that are used as reference in this project.

Phase 2 - Phase 2 of the project will focus on evaluating the County's data for accuracy and NG911 readiness. This will involve evaluating the addresses, centerlines, emergency service zones, and boundaries.



### **PROJECT DESCRIPTION (cont):**

Phase 3 - In Phase 3, procedures developed and approved to correct the County's data will be completed in batches for the remainder of the County. These corrections range from boundary edits, moving structure points on imagery, and re-ranging centerlines to making recommendations for re-addressing. Technicians will follow a systematic planned inspection of the County to verify and address issues found in the VITA readiness reporting. This effort is anticipated to include evaluation of the existing address data (Centerlines, points, etc.) and NG-911 data overlay layers to determine office-based solutions to the issues found in the data. In some instances, remediation may require field based review and resolution of complex deficiencies in the data.

Phase 4 - The focus of Phase 4 will be providing the County with the tools necessary to maintain their data over time, as well as soliciting feedback from its citizens. Due to the concern that the County currently has for the placement and accuracy of the address points, a web tool will be added to the County's pre-existing website, which will lead citizens through the process of verifying their structure on the latest VBMP imagery and automatically report changes necessary to the County if necessary. Workflows will also be established in this phase, with the goal of providing sustainable methods and tools that will enable the County to continue progressing in data quality assurance following project completion.

Phase 5 - Phase 5 will focus on training those County employees that are most crucial to supplying E911 and eventually NG911. Training sources will be formally provided by Esri, and training documentation and development will be completed by the vendor creating sustainable workflows.

Phase 6 - In Phase 6, quality control and assurance plans for all data and tools will be completed, and changes made as necessary.

Phase 7 - In the final phase of the project, the new data will be tested in the current E911 environment, the proposed Farmville Regional environment, and all other vendors.



## PROJECT GOAL

Describe how this project addresses locally identified need(s) and supports the Virginia 9-1-1 Comprehensive Plan:

This project supports the Virginia Statewide Comprehensive Plan. Cumberland County is striving to meet Goal A from Section 2.2 – which is to provide a level of emergency response service to the public, which is further described as providing consistent emergency response services to anyone residing in or passing through the Commonwealth.

## PROJECT OBJECTIVES

Describe the objectives that will support the goals identified above:

The objectives of this project include:

1. Moving the data into a data-sharing capable schema that also supports Esri and NG911
2. Correcting existing data and providing tools necessary to maintain the data in the best condition to support E911 and NG911
3. Providing training to the County staff that are responsible for providing services that will ensure the safety of citizens
4. Providing a tool that encourages citizens to verify their own addresses at little cost to the County – allowing a service that the County could not fund or staff on its own.

All the above objectives center on providing quality service to the citizens of Cumberland County and any individual traveling through the County.



**SHARED SERVICES (if applicable)**

**IMPLEMENTATION PLAN**  
**SHARED SERVICES & INDIVIDUAL PSAP APPLICATIONS:**

For each applicable phase of the project, indicate the planned completion date.

Describe the relationship of the project to the participating PSAPs:

Not applicable to this grant; however, Cumberland is interested in participating in a regional data sharing plan with neighboring PSAPs that will only be fully successful in the County is able to completely remediate its existing data issues.

Describe the intended collaborative efforts and resource sharing opportunities:

Cumberland County hopes to remediate its data issues in conjunction with proposed regional data sharing initiatives to provide its data in such a way as to provide complete certainty when reciprocal/regional response is required.





PROJECT PHASE	PLANNED COMPLETION DATE
<p><b>INITIATION</b> – Project concept is documented, local board or governing authority approval or endorsement is received, NG-911 Grant application is filed, local budgets are obtained, appropriated grant funds are approved, and budgetary estimates are obtained.</p>	<p><b>05 / 30 / 18</b></p>
<p><b>DESIGN/PLANNING</b> - Requirements are documented, components to be purchased are identified, and general design is documented.</p>	<p><b>07 / 01 / 18</b></p>
<p><b>ACQUISITION</b> - RFP (or other bid related processes) are drafted, proposals are evaluated, contract is signed, purchase orders are issued, and quotes are obtained.</p>	<p><b>07 / 30 / 18</b></p>
<p><b>IMPLEMENTATION</b> - Purchased components are delivered and installed and training is performed</p>	<p><b>12 / 31 / 18</b></p>
<p><b>TESTING/COMPLETION</b> - Performance of system/solution is validated and system/solution goes “live”</p>	<p><b>02 / 01 / 19</b></p>



## BUDGET AND BUDGET NARRATIVE

Cumberland County has consulted a vendor who has provided the quoted costs included in this narrative. The project will be broken down into many phases and includes costs for both software licenses as well as costs for data correction, data preparation for NG-911, data preparation and support for software.

<b>Task Description</b>	<b>Subtotal</b>	<b>Total</b>
<b>Phase 1 - Receiving Verifying and Loading Data</b>		<b>\$3,840.00</b>
<b>Phase 2 - NG911 Data Evaluation</b>		<b>\$6,420.00</b>
<b>Phase 3 - Data Manipulation and Correction</b>		<b>\$49,500.00</b>
Address Data Correction	\$21,960.00	
Centerline Correction	\$11,280.00	
ESZ Polygon Creation and Correction	\$5,520.00	
Attribution Standardization	\$6,720.00	
Topology	\$4,020.00	
<b>Phase 4 - GIS and Verification Tools</b>		<b>\$42,820.00</b>
Mapbook Creation and Tools	\$8,820.00	
Citizen Address Verification Tool	\$4,620.00	
Esri Software License (cost estimated)	\$7,500.00	
Esri Software – ArcGIS Online Organizational Account (4 Years)	\$10,000.00	
Workflow Creation and Development	\$4,380.00	
Addressing Equipment – Trimble R1 Receivers	\$7,500.00	
<b>Phase 5 - Training</b>		<b>\$14,580.00</b>
Esri Training (cost estimated)	\$5,000.00	
Training Documentation and Development	\$4,580.00	
Multiuser GIS/GPS/Address Training	\$5,000.00	
<b>Phase 6 - Quality Control</b>		<b>\$11,520.00</b>
Quality Control and Assurance Data	\$4,080.00	
Quality Control and Assurance Tools	\$7,440.00	
<b>Phase 7 - 911 Dataset Development and Testing</b>		<b>\$7,500.00</b>
Coordination of new dataset with Vendors	\$1,500.00	
Onsite Testing and Deployment of New Dataset	\$6,000.00	
<b>Project Contingency (10%)</b>		<b>\$13,618.00</b>
<b>Total Project Cost</b>		<b>\$149,798.00</b>



## EVALUATION

How will the project as identified in the project description be evaluated and measured for achievement and success:

Overall, this project's success will be measured by the amount of improvement in emergency services resulting from an improved, NG911-ready dataset and tools.

Successful project accomplishment will be based on achieving the following project milestones:

1. Hiring a geospatial consultant to assist in project planning and execution
2. NG911 data evaluation
3. Office and Field Tool Development
4. Final data exported and used successfully in PSAP mapping

### PHYSICAL CONSOLIDATION - (complete only if applicable)

How would a consolidation take place and provide improved service:

*Not Applicable*

How should it be organized and staffed:

*Not Applicable*

What services should it perform:

*Not Applicable*

How should policies be made and changed:

*Not Applicable*

### PHYSICAL CONSOLIDATION - (complete only if applicable) – continued

How should it be funded:

*Not Applicable*

What communication changes or improvements should be made in order to better support operations:

*Not Applicable*