



FY17

# PSAP GRANT PROGRAM APPLICATION





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### 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 your Regional Coordinator. Any supporting documentation must also be submitted along with the application, including mandatory budgets for projects (if applicable).

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 FY17 PSAP Grant Application Cycle starts July 1, 2015 and concludes on September 30, 2015 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.**



## FY17 PSAP GRANT APPLICATION

### PROJECT TITLE

Replacement and upgrades to Dispatch Mapping System

### GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: Westmoreland County Sheriff's Office

CONTACT TITLE: IT Director

CONTACT FIRST NAME: William

CONTACT LAST NAME: Cease

ADDRESS 1: 111 Polk Street

ADDRESS 2: PO Box 1000

CITY: Montross

ZIP CODE: 22520

CONTACT EMAIL: bcease@westmoreland-county.org

CONTACT PHONE NUMBER: 804-456-6268

CONTACT MOBILE NUMBER: 804-456-6268

CONTACT FAX NUMBER: 804-493-1034

REGIONAL COORDINATOR: Sam Keys

### HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

**Westmoreland County**

**Colonial Beach PD**

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### GRANT TYPE

Individual PSAP

Shared Services



**TIER**

- Out of Service
- Technically Outdated\*
- Not Applicable
- Non-Vendor Supported\*
- Strengthen

**If technically outdated or non-vendor supported, application MUST include age and/or version of hardware/software.**

VERSION:

# YEARS of HARDWARE/SOFTWARE:

**Eagle Mapped ALI Version 6.5**

**11 years (software installed in fall of 2004)**

**PRIORITY/PROJECT FOCUS**

**If "Other" selected, please specify: GIS: HIGH PRIORITY**

**FINANCIAL DATA**

Amount Requested: \$ 150,000.00

Total Project Cost: \$ 166,625.00



## STATEMENT OF NEED

This statement should reference the relationship to the current funding priorities established by the Grant Committee and include evidence of any financial need, along with additional information on the impact on operational services; consequences of not receiving funding; inclusion of project in a long-term or a strategic plan; and local sustainability:

Westmoreland County has just recently replaced its antiquated 911 mapping product (Eagle Mapping) with a copy of a modern 911 mapping product suite. This has enabled Westmoreland County 911 with the ability to view calls for service and a variety of other critical data sets. However, the underlying GIS data is comprehensively inadequate for today's public safety purposes and more so for Next Generation 911 purposes. Westmoreland County must acquire additional seats of software and improve the base GIS data to be fully functional. Because of limited funds, the County was only able to establish a temporary environment for this new technology. Optimally, the new software requires ESRI's ArcGIS for Server for access throughout the 911 center and the field. However, the County had to acquire a non-server based solution (ArcGIS runtime) due to lack of funds. This requires a load on each computer that is using the solution. Westmoreland County needs to upgrade to the server based version to simplify operations and to expand the use of the software.

With this application, Westmoreland County proposes to acquire additional seats of GIS software, additional software functionality, and improved the GIS base layers. The proposed software incorporates the latest software capabilities and the software to maintain and improve our GIS data. The software is built on the latest ArcGIS architecture, is compatible with the most recent ArcGIS 10.x release, and is web-based, allowing for access to the system from any computer on the network without the need for multiple installations of expensive and support intensive workstation-based technology. Additionally, the software will enable our field personnel to view calls for service and automated vehicle location (AVL) information on any mobile data device to include smart phones and tablets. Currently, public safety GIS data is only viewable in the communications center. With the base data being a major concern this project will allow for an enhanced means of graphical communication and improved emergency response. Currently, the County has access to an old copy of a GIS street centerline layer that was created a decade ago and was incomplete at the time. Furthermore, no address point layer exists that allows us to map to the actual location of the calls. This results in many calls not be mapped to their actual location or not at all, thus creating delays in call location and putting the public at an increased risk. Westmoreland County, needs modernized GIS layers for the GIS software to be effective.

The initial cost estimate for the proposed system is \$122,000 with an additional \$44,625 in extended maintenance costs over five (5) years. Westmoreland County's total E-911 Management budget is approximately \$107,000.00, which also must be used to pay costs associated with the landline 911 trunks, voice logging recorder, UPS as well as maintenance of the CPE and radio system. With the current state of the economy, the prospect of receiving additional local funds to utilize toward a project of this type seems unlikely. Without the funding requested through this PSAP grant application, Westmoreland County will be unable to take on this mapping system update.



This grant application falls under High Priority– 1) Enterprise Software ESRI 10.x supporting the PSAP with enterprise considerations, 2) Maintenance Tools for 9-1-1 applications, supporting the PSAP with enterprise considerations, 3) Data Manipulation – Road Centerlines (MSAG Valid) and Address Building Points (MSAG Valid)

Describe how the grant will be maintained and supported in the future, if applicable.

As part of the proposed mapping system update, Westmoreland County plans to purchase three (3) years of manufacturer support for all hardware components, as well as pay up-front for five (5) years of extended maintenance on all software components. The total software extended maintenance costs for the project are estimated at \$44,625. All hardware maintenance will be covered through the County's annually budgeted E-911 Management funds. Any software extended maintenance costs not able to be covered by the requested grant funds will also be covered through the E-911 Management budget.

## COMPREHENSIVE PROJECT DESCRIPTION

Identify the longevity or sustainability of the project.

Westmoreland County trained staff will be able to maintain the critical GIS layers (address points and street centerlines) in a Geodatabase format once they are received utilizing ESRI's ArcGIS for Desktop Standard GIS software. This converted data, as well as the in-house maintenance software, will continue to be utilized with the proposed server-based mapping system, showing a continued return on the investment that the E-911 Services Board has made in Westmoreland County. In addition, moving to a web-based mapping solution will allow for much easier addition of dispatch mapping positions in the future, as well as provide for remote access to the system by emergency services personnel in the field. Also, the new GIS software will be able to incorporate any Next Generation 911 data as it becomes available. By replacing the Westmoreland County PSAP's GIS data and dispatch mapping system with one that is based on the latest in ESRI technology, the office will be much more prepared to accept additional changes in dispatch mapping technology in the future.



Describe how this project supports the Virginia Statewide Comprehensive 9-1-1 Plan.

The strategic goals of the Virginia Statewide Comprehensive 9-1-1 Plan are to “provide a standard level of 9-1-1 emergency dispatch services to the public” and “position 9-1-1 centers to continuously meet the public’s expectations.” By moving Westmoreland County’s mapping system to one that is based on the latest in ESRI technology, Next Generation 911 ready, and one that will also allow for remote access by emergency services personnel, this project will be meeting the plan’s goals by furthering a standard of dispatch mapping services and emergency response provided to members of the public as they travel through this jurisdiction. In addition, this project will be positioning Westmoreland County in a much better place to meet the public’s continuously changing expectations in regards to dispatch mapping systems’ capabilities and to embrace Next Generation 911 technology once it becomes available.

#### **SHARED SERVICES (if applicable)**

The relationship of the project to the participating PSAPs:

2T



Intended collaborative efforts:

2T

Resource sharing:

2T

How does the project impact the operational or strategic plans of the participating agencies:

2T

Provide a thorough, concise, and complete description of the project, including an outline of the goals and objectives, implementation strategy, and a work plan.

Westmoreland County proposes to continue its replacement of its antiquated mapping with the ESRI based Next Generation 911 compatible software solution that includes an additional dispatch position, migration to a server based solution (ESRI ArcGIS for Server based), ESRI software for editing GIS data, automated-vehicle-location (AVL) integration, connectivity to 911 feeds, field access, and the creation of mission critical GIS data (street centerlines and address points). Since the new web-based system will require ESRI's ArcGIS for Server, Westmoreland County will establish an automatic backup and failover system.

**Project Goals and Objectives:**

1. Replace the existing workstation-based dispatch mapping system with a server-based solution.
2. Provide the PSAP with a mapping system that is compatible with the latest ESRI ArcGIS 10.x release.
3. Eliminate the need for expensive and support-intensive mapping software at each workstation (runtime).
4. Allow dispatchers and other Sheriff's Office staff to access the mapping system from any workstation on the network.
5. Provide an easier method of adding additional dispatch mapping positions in the future.
6. Provide key data layers that allow the County to visualize calls for service and incidents.
7. Provide ESRI software that allows the County to maintain these 911 GIS layers.
8. Provide an interface between the mapping system and the office's existing CAD, allowing for the mapping of CAD incidents in addition to E-911 calls.
9. Provide the tools necessary to allow emergency services personnel to view the mapping system from within the field.
10. Provide the GIS tools necessary for the County to view Next Generation 911 data as it becomes available.
11. Provide administrative control over user allowances on the system based on user login and role.
12. Ensure the new system is fully supported through extended warranties and maintenance agreements.

**Work Plan:**

1. Through a competitive procurement process, choose a vendor(s) who can provide a mapping solution meeting the PSAP's goals and objectives.
2. Finalize the technical specifications of the project.
3. Receive vendor quote(s) detailing the costs of the project as specified.
4. Consult with the vendor(s) on a desired project implementation schedule.
5. Review mapping and MSAG data to ensure that it meets the vendor's specifications.
6. Provide vendors a copy of the existing GIS data.
7. Secure contracts for the implementation of the project.
8. Prepare the network infrastructure for installation of the new system hardware, software, and data.
9. Coordinate with the vendor(s) on installation of the new mapping system.
10. Create and execute a comprehensive QA/QC procedure for the review of the new GIS layers.
11. Coordinate with the vendor(s) on receipt of the GIS data layers.



12. Establish software support and maintenance agreements with the vendor(s).
13. Complete the installation and testing of the new web-based mapping system and GIS data.

The project director will be the County's Information Technology Director. Staff from the Sheriff's Office and County will also support this effort. The vendor will be responsible for the installation and configuration of all of the server components, GIS data, as well as the training of local staff on the use of the new system.

### PROJECT TIMELINE FOR SHARED SERVICES & INDIVIDUAL PSAP APPLICATIONS:

For each applicable phase of the project, indicate the estimated completion date. Sample activities for each phase are included.

PROJECT PHASE	ESTIMATED COMPLETION DATE
<input checked="" type="checkbox"/> <b>INITIATION</b> (Project approved by appropriate stakeholders)  Sample activities: project concept is documented, local board or governing authority approval or endorsement is received, PSAP grant application is filed, local budgets are obtained, appropriated grant funds are approved, and budgetary estimates are obtained	<b>07 / 15 / 16</b>
<input checked="" type="checkbox"/> <b>DESIGN/PLANNING</b> (Project, system, or solution requirements are developed)  Sample activities: requirements are documented, components to be purchased are identified, and general design is documented	<b>08 / 01 / 16</b>
<input checked="" type="checkbox"/> <b>ACQUISITION</b> (Selected system or solution is procured)  Sample activities: RFP (or other bid related processes) are drafted, proposals are evaluated, contract is signed, purchase orders are issued, and quotes are obtained	<b>09 / 30 / 16</b>
<input checked="" type="checkbox"/> <b>IMPLEMENTATION</b>	<b>12 / 31 / 16</b>



<p>(Selected system or solution is configured and installed)</p> <p>Sample activities: purchased components are delivered and installed and training is performed</p>	
<p><input checked="" type="checkbox"/> <b>TESTING/COMPLETION</b>                  (Selected system or solution is tested and put in production)</p> <p>Sample activities: performance of system/solution is validated and system/solution goes "live"</p>	<p><b>02 / 15 / 16</b></p>



## BUDGET AND BUDGET NARRATIVE

List the planned expenditures to be made with grant funds. (NOTE: In lieu of a line item breakdown, an itemized cost schedule or detailed vendor prepared quote may be submitted as an attachment. However, budgetary quotes received from a particular vendor(s) during the application process do not commit the PSAP to use that vendor(s) once the grant is awarded.) Briefly explain the reason for each requested budget item and provide the basis for its cost. In addition, if contingency cost has been added, please identify the amount.

Westmoreland County is requesting a total of \$150,000 in grant funds to cover the costs associated with moving to a server-based dispatch mapping solution. The total cost of the project, which also includes add-on modules for dispatch and an interface to the office's current Southern Software CAD is estimated at \$166,625, of which \$44,625 is associated with extended software maintenance. Please see the attached vendor quotes for additional details.

Any costs not allowable through the PSAP grant program will be paid using local funds.

Below is a brief description of the planned expenditures referenced to Appendix C: GIS-Related Grant Request Priority Matrix

High Priority 9-1-1 Mapping Display Software/Hardware:

1. Mapping Display Software: Software will provide 9-1-1 Mapping Display, call plotting and administrative functions.
2. Field Mobility Software: Software that will enable field staff to view GIS data via mobile device
3. CAD-to-Map Interface: Software and services required for CAD-to-Map integration, provided by the selected CAD vendor.
4. Software Warranty: Warranties include support and maintenance as outlined in the vendor quotes.

High Priority GIS Data:

1. GIS Data: Street Centerline and Address Point data for Westmoreland County to include field verification.



## EVALUATION

How will the project be evaluated and measured for achievement and success:

Evaluation of the success of Westmoreland County's mapping system mapping, modernization and migration to a server-based dispatch mapping solution will include demonstration that the proposed mapping system software and data have been purchased, installed, and are operational within the PSAP. This will include demonstration that the PSAP has upgraded to three (5) functional dispatch mapping positions, has a functional interface between the mapping and CAD systems, and is providing remote access to its mapping system for emergency services personnel in the field.

The selected vendor(s) will be required to submit a full project schedule with specific milestone events. The vendor(s) will also be required to provide an Acceptance Test Plan (ATP). Final vendor payment will be withheld until the system is operating as proposed and the ATP has been approved and signed by the project director.



**CONSOLIDATION (Primary or Secondary) - (complete only if applicable)**

How would a consolidation take place and provide improved service:

2T

How should it be organized and staffed:

2T

What services should it perform:

2T



How should policies be made and changed:

2T

How should it be funded:

2T

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

2T