

FY12

PSAP GRANT PROGRAM APPLICATION



FY12



FY12 PSAP GRANT PROGRAM APPLICATION

HOW TO APPLY/DEADLINE

The grant application will be available and accessible from VITA's Integrated Services Program's website (<http://www.vita.virginia.gov/isp/>). Upon completion of the application, it is to be submitted to the PSAP Grant Manager, Lisa Nicholson, at lisa.nicholson@vita.virginia.gov. Any supporting documentation must also be submitted along with the application.

After submission, the PSAP Grant Manager will assign a Grant ID and send an e-mail notification to the project contact e-mail address listed on the application received.

All funding requests must be submitted using the grant application. In addition to the grant application reference manual, technical assistance is available from VITA's Public Safety Communications (PSC) staff throughout the grant process. The FY12 PSAP Grant Application Cycle deadline is December 22, 2010 at 11:59 pm.



FY12 PSAP GRANT APPLICATION

PROJECT TITLE

Fredericksburg GIS Hydrants and Hydrography

GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: Fredericksburg Police Department

CONTACT TITLE: Director of Information Technology

CONTACT FIRST NAME: Suzanne

CONTACT LAST NAME: Goodman

ADDRESS 1: 2200 Cowan Blvd

ADDRESS 2: [Click here to enter text](#)

CITY: Fredericksburg

ZIP CODE: 22401

CONTACT EMAIL: sgoodman@fredericksburgva.gov

CONTACT PHONE NUMBER: 540-372-6662 ext 200

CONTACT MOBILE NUMBER: [Click here to enter text](#)

CONTACT FAX NUMBER: 540-371-8651

REGIONAL COORDINATOR: [Click to select a Regional Coordinator from the drop down list](#)

HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

Fredericksburg Police Department

Fredericksburg, Virginia

<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

GRANT TYPE

Individual PSAP

Consolidation

Regional Initiative

Secondary Consolidation



GRANT PROGRAM TYPE

- Wireless E-911 PSAP Education Program
- X Continuity and Consolidation
- Enhancement

TIER

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- Technically Outdated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

PROJECT FOCUS [Click to select a project focus from the drop down list](#)

If "Other" selected, please specify: Add data layers to existing GIS system that depict fire hydrant locations and hydrography

FINANCIAL DATA

Amount Requested: \$ 22,350
Total Project Cost: \$ 22,350

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. Additional items to discuss that referenced need should include: impact on operational services; consequences of not receiving funding; inclusion of project in a long-term or a strategic plan; and local sustainability:

The City of Fredericksburg is located equidistant between Washington, D.C. and Richmond, Virginia on Interstate 95, one of the most heavily traveled highway corridors in the nation, and bounded by the Rappahannock River. Although occupying only eleven square miles with a resident population of 22,000, Fredericksburg is surrounded by two of the fastest growing counties in the Commonwealth of Virginia, and is the hub of a region with a population of approximately 250,000. As a nationally known tourist destination, it is estimated that over one million visitors every year will be within the jurisdiction of the Fredericksburg 911 center and potentially in need of emergency services. Additionally, the region is largely comprised of bedroom communities, whose residents commute to their jobs north and south on Interstate 95. The large majority of individuals who are in their vehicles for the purpose of tourism, shopping, or commuting to work remain in touch through the use of wireless cell phone service.

To further emphasize the importance of the city's 911 operations, Fredericksburg also acts as the secondary PSAP to both Stafford and Spotsylvania Counties. In the event of a failure in 911 capability in either of those jurisdictions, calls for service are automatically routed to the Fredericksburg PSAP to ensure that emergency services continue uninterrupted. The Fredericksburg Police Department has the responsibility for receiving all of the 911 calls within the jurisdiction as well as dispatching units from Police, Fire, or Rescue services as appropriate.

With grant funding provided by the Wireless E-911 Services Board during the FY10 grant cycle, the City of Fredericksburg built the foundation of a functional GIS system that is now fully integrated with the Computer Aided Dispatch system in the PSAP. The available funding allowed for the purchase of a dedicated server and the creation of MSAG valid structure addressing and parcel mapping in the digital format, as well as for the assembly of completely updated map books. However, additional data layers that comprise fire hydrant GPS and hydrography are required to augment the project and develop a comprehensive GIS system. These data layers will develop a) within sub-foot accuracy, the location of the City's 1400 emergency hydrants, and b) water body polygon data, including ponds, lakes, streams and rivers. This medium priority GIS data is ranked #18 on the priority matrix established by the E-911 Services Board.

The current fire hydrant data is incomplete and inaccurate, rendering it useless for the purpose of emergency planning, and the water boundary data is non-existent in the GIS data layers.

The City of Fredericksburg is experiencing the same economic hardships as the rest of the Commonwealth, with significant revenue reductions across the board. From the City Manager's Budget memorandum for FY2011: "By way of background, in the FY2010 budget, the City used \$1.3 million of Fund Balance to achieve a balanced budget. In FY2011, staff estimates that General Fund revenues will decline by an additional \$450,000." Without funding from the E-911 Wireless Board to complete the Fredericksburg GIS project, the City will not be able to include the expenditure in the foreseeable future.



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

During 2010, the original Fredericksburg GIS Project was completed with funding supplied in part by the E-911 Wireless Services Board. The vendor for the project, WorldView Solutions, built the data layers for structure addressing and parcel mapping, among other core applications. The proposed vendor for the additional data layers requested in this grant is again WorldView Solutions.

The Fredericksburg GIS project was given a year of system support as a part of the GIS Implementation contract with WorldView. In addition to this support, WorldView provided the City two weeks of on-site training on the new system to teach the City IT staff to maintain and edit the data. While the training was comprehensive and thorough and the IT staff is efficiently maintaining the data at this time, WorldView does continue to be available to provide assistance and answer questions as needed. The same training, support, and maintenance will be included in any subsequent contracts with WorldView for GIS data development.

COMPREHENSIVE PROJECT DESCRIPTION

FOR WIRELESS E-911 PSAP EDUCATION PROGRAM GRANT REQUESTS:

Describe how the education/training is 9-1-1/public safety communications specific and how this will benefit E-911 and the employee(s) and/or PSAP.



FOR CONTINUITY AND CONSOLIDATION OR ENHANCEMENT PROJECTS:

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

One of the fundamental priorities in every community is the safety of its citizens. The recognition of this priority led to the development of the original 911 system and subsequent advancements with enhanced wireline and wireless technology. The core focus of Enhanced 911 (E-911) is the accurate pinpointing of a caller's location to allow emergency responders to arrive at the scene without delay. With concurrent advancements in Geographic Information Systems (GIS), the integration of E-911 with GIS data is the logical answer to continuing improvements in the provision of emergency services. The data required for optimum emergency response includes the location of mitigation infrastructure such as hydrants, and the boundaries of all permanent water bodies.

In addition to the address and parcel data development that is already in place, it is of critical importance to build MSAG valid data layers in the GIS that identify water boundaries and provide details on the location of emergency hydrants. The funding provided by this grant will allow for:

- Fire hydrant GPS – field data collection, with sub-foot accuracy, of 1400 existing hydrants in the City
- Hydrography – Development of a water body polygon data, including ponds, lakes, streams and rivers using existing aerial photography

Goals and Objectives:

To provide the citizens of Fredericksburg with the most efficient and high quality level of emergency service that is available, with emphasis on technical advancements that support this goal.

To augment the existing GIS system foundation with additional data layers that will increase the accuracy and efficiency of emergency response.

Implementation Strategy:

Research available resources from WorldView Solutions for GIS data development (already complete).

Arrange contracted purchase from vendor.

Install data layers.

Train E-911 supervisors and operators on use of data for application in the E-911 Center.

Work Plan:

The GIS vendor WorldView Solutions will install the requested data layers on a schedule determined to be most beneficial to the overall project. The vendor will test quality and control performance measures, and train personnel.


FOR CONTINUITY AND CONSOLIDATION OR ENHANCEMENT PROJECTS:

PROJECT TIMELINE – Select each applicable phase of the project and indicate the estimated completion date. Sample activities for each phase can be found in the PSAP Grant Program Guidelines as well as on the addendum to this form.

PROJECT PHASE	ESTIMATED COMPLETION DATE
X INITIATION (Project approved by appropriate stakeholders)	07 / 31 / 11
X DESIGN/PLANNING (Project, system, or solution requirements are developed)	08 / 30 / 11
X ACQUISITION (Selected system or solution is procured)	10 / 31 / 11
X IMPLEMENTATION (Selected system or solution is configured and installed)	01 / 31 / 12
X TESTING/COMPLETION (Selected system or solution is tested and put in production)	03 / 31 / 12

Identify the longevity or sustainability of the project.

The GIS data will continue to be maintained, updated, and edited with new information by IT staff with the City of Fredericksburg. The existing GIS hardware has a replacement life of five years and the software, supported by maintenance contracts, will be continually enhanced as system upgrades become available. The replacement and enhancement costs of the systems will be included in the budget of the City's Department of Information Technology.



Describe how this project supports the Virginia Statewide E-911 Strategic Comprehensive Plan.

The objectives contained in this grant proposal support the following goal stated in the Virginia Statewide E-911 Strategic Comprehensive Plan:

Goal B: Position 911 Centers to continuously meet the public's expectations.

The creation of additional critical data layers in the GIS system will allow the Fredericksburg PSAP "to keep up with the rapid pace of technology innovation and therefore the constant changes in customers' expectations." The public expects rapid and accurate response from its emergency providers and it expects those providers to have access to the latest technological resources to augment that response. In order to meet this goal, the Fredericksburg PSAP must be equipped with the necessary tools that support the trained dispatchers in the performance of their duties.



REGIONAL INITIATIVE (if applicable)

The relationship of the initiative to the participating PSAPs:

[Click here to enter text](#)

Intended collaborative efforts:

[Click here to enter text](#)

Resource sharing:

[Click here to enter text](#)

How does the initiative impacts the operational or strategic plans of the participating agencies:

[Click here to enter text](#)

CONSOLIDATION (Primary or Secondary) - (if applicable)

How would a consolidation take place and provide improved service:

[Click here to enter text](#)

How should it be organized and staffed:

[Click here to enter text](#)

What services should it perform:

[Click here to enter text](#)

How should policies be made and changed:

[Click here to enter text](#)

How should it be funded:

[Click here to enter text](#)



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

[Click here to enter text](#)

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.) Briefly explain the reason for each requested budget item and provide the basis for its cost:

The following is from a fixed quote from WorldView solutions and includes all services, travel, time and materials.

Data Development Services:

Fire Hydrant GPS – The accurate depiction of the location of hydrants is critical to optimum response and the security of life and property.

GPS field data collection, with sub-foot accuracy, of 1400 fire hydrants in the City
----- \$19,600

Hydrography – The City of Fredericksburg is bounded on its northern side by the Rappahannock River, and is bisected by Hazel Run and a historic canal. There are additional numerous retention ponds and smaller streams, all of which represent both resources and impediments to mitigation of emergencies.

Development of water body polygon data, including ponds, lakes, streams and rivers, using existing aerial photography-----\$2750

Project Total-----**\$22,350**

EVALUATION



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

A performance plan for the successful completion of this project will measure and guarantee the following:

- Data layers purchased
- Data layers installed
- Data layers evaluated for quality and control
- Training conducted for all relevant personnel



FINANCIAL AND PROGRAMMATIC REPORT

PROJECT PHASES

SAMPLE ACTIVITIES

PHASE

SAMPLE ACTIVITIES

INITIATION

(Project approved by appropriate stakeholders)

- 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
- Budgetary estimates are obtained

DESIGN/PLANNING

(Project, system, or solution requirements are developed)

- Requirements are documented
- Components to be purchased are identified
- General design is documented

ACQUISITION

(Selected system or solution is procured)

- RFP (or other bid related processes) are drafted
- Proposals are evaluated
- Contract is signed
- Purchase orders are issued
- Quotes are obtained/grant funds draw down

IMPLEMENTATION

(Selected system or solution is configured and installed)

- Purchased components are delivered and installed
- Training is performed

TESTING/COMPLETION

(Selected system or solution is tested and put in production)

- Performance of system/solution is validated
- System/solution goes "live"