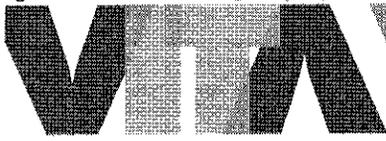


FY13

PSAP GRANT PROGRAM APPLICATION



VIRGINIA INFORMATION
TECHNOLOGIES AGENCY
Integrated Services Division
FY13



FY13 PSAP GRANT PROGRAM APPLICATION

HOW TO APPLY/DEADLINE

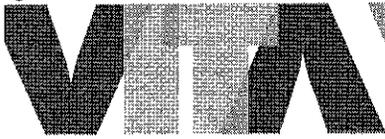
The grant application is available and accessible from VITA's Integrated Services Program's website

(<http://www.vita.virginia.gov/isp/default.aspx?id=8578>). 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, including mandatory budgets for projects (if applicable).

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. Technical assistance is available from VITA's Public Safety Communications (PSC) staff throughout the grant process. The FY13 PSAP Grant Application Cycle starts July 1, 2011 and concludes on October 31, 2011 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.



FY13 PSAP GRANT APPLICATION

PROJECT TITLE

Central Office Diversity for Spotsylvania County's Emergency Communications Department

GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: Spotsylvania County

CONTACT TITLE: Director of Capital Projects

CONTACT FIRST NAME: Becky

CONTACT LAST NAME: Golden

ADDRESS 1: P.O. Box 99

ADDRESS 2: 9104 Courthouse Road

CITY: Spotsylvania, VA

ZIP CODE: 22553

CONTACT EMAIL: bgolden@spotsylvania.va.us

CONTACT PHONE NUMBER: (540)507-7009

CONTACT MOBILE NUMBER: N/A

CONTACT FAX NUMBER: (540)507-7019

REGIONAL COORDINATOR: Sam Keys

HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

Spotsylvania County Sheriff's Office E911

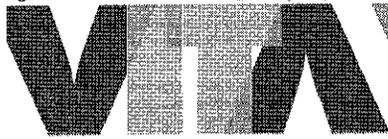
GRANT TYPE

Individual PSAP

Consolidation

Regional Initiative

Secondary Consolidation



GRANT PROGRAM TYPE

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

TIER

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 Technically Outdated* Strengthen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

If technically outdated or non-vendor supported, application MUST include age and/or version of hardware/software.

VERSION: N/A

YEARS of HARDWARE/SOFTWARE: N/A

PROJECT FOCUS NETWORK

If "Other" selected, please specify: [Click here to enter text](#)

FINANCIAL DATA

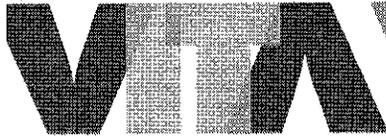
Amount Requested: \$ 150,000.00

Total Project Cost: \$ 174,355.00

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:

Spotsylvania County respectfully requests \$150,000 in FY 2013 PSAP funds to provide Central Office Diversity for the County's Emergency Communications Center (ECC). This project will further the Wireless E-911 Enhancement Program by strengthening the County's current E-9-1-1



operations beyond its current capabilities and will benefit Next Generation 9-1-1, future technologies and disaster and redundancy planning for the County.

Spotsylvania County is located in Northern Virginia, midway between the Nation's capital of Washington D.C. and the Commonwealth's capital of Richmond. The county covers over 400 square miles and has a 2010 population estimate of 122,397 according to the U.S. Census Bureau. This reflects a population increase of 35.4% over the 2000 Census figures and has resulted in the County being included in the past in the rankings of the hundred fastest growing counties in the Nation. The County's consistent growth can be attributed to several factors. The County is located along the I-95 interstate corridor with close proximity to businesses, industries, military installations, as well as federal and state governmental offices. Affordable housing, relative to the surrounding areas, has led many individuals and families to migrate to Spotsylvania County. Within its boundaries, the county possesses the scenic beauty of Lake Anna, rural landscape, suburban amenities and a wealth of historical attractions from the Colonial and Civil War eras. These resources also make the County a favorite tourist destination.

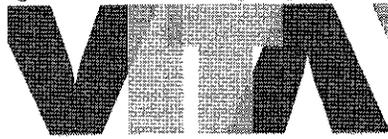
As part of the Spotsylvania County Sheriff's Office, the Emergency Communications Center (ECC) is staffed 24 hours a day, seven days a week and is responsible for answering all 9-1-1 calls for the County as well as some administrative numbers for the Sheriff's Office. The ECC provides dispatch services for the Sheriff's Office, the Department of Fire, Rescue, and Emergency Management as well as the Chancellor Volunteer Fire and Rescue Department and the Spotsylvania Volunteer Fire and Rescue Department. The Criminal Warrants function of the Sheriff's Office is also a component of the ECC and is responsible for receiving, entering, and removing criminal warrants from the internal records management system as well as the Virginia Crime Information Network and National Crime Information Center. The ECC is staffed by 31 full time employees. Of these employees, 28 (16 dispatchers, 8 call takers, and 4 supervisors) are directly responsible for responding to 9-1-1 calls. Over the past five fiscal years, the Spotsylvania ECC has been responsible for responding to the following calls:

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011*
9-1-1 Calls	51,826	52,600	52,600	50,941	51,288
Total Calls	215,984	205,535	217,365	213,419	202,674

*Please note that the numbers for FY 2011 may be off due to a change in the data collection system in October 2010. Some data may have been lost during this transition.

In order to address on-going office space and storage issues, Spotsylvania County will open two new facilities in FY 2012 – the new Circuit Court and the new Public Safety Building. These two new facilities will increase operating costs by approximately \$700,000 in FY 2012 and will also increase the County's debt service. The ECC will be located within the new Public Safety Building with occupancy tentatively scheduled for December 2011.

Spotsylvania has provided diverse routing on the campus to the new Public Safety Building but Verizon currently only serves the campus from one Central Office (CO), the Spotsylvania CO. Verizon engineers have identified service from one CO as a potential single point of failure and recommended connecting the new facility to another CO to provide more diverse routing. Verizon has installed fiber lines from the Lee Hill CO almost to the new E911 call center;



approximately 0.45 mile of line is needed to complete the second CO pathway. Additional funding is needed to complete the connection from a second CO to the new Public Safety Building.

According to the Public Safety and Homeland Security Bureau's website <http://transition.fcc.gov/pshs/about-us>, "The FCC'S Public Safety & Homeland Security Bureau (PSHSB) is responsible for developing, recommending, and administering the agency's policies pertaining to public safety communication issues....A primary goal of PSHSB is to support and advance initiatives that further strengthen and enhance the security and reliability of the nation's communications infrastructure and public safety and emergency response capabilities that will better enable the FCC to assist the public, first responders, law enforcement, hospitals, the communications industry, and all levels of government in the event of a natural disaster, pandemic or terrorist attack."

According to the PSHSB's Tech Topic 14: Diversity, Redundancy, and Resiliency – in that Order, found at <http://transition.fcc.gov/pshs/techttopics/techttopics14.html>, "In the ideal situation, diversity should be gained by connection to separate central offices. This would allow the PSAP to switch or divert its routing in the case of lost connection via one of its central office connections."

Funds for connecting the new ECC to a second CO are not available in the FY 2012 or future budgets. As part of the FY 2012 Budget Adoption process, the County's Budget Division undertakes a five-year financial forecast. This analysis assumes no new operating initiatives for the out-years. The out-year costs of maintaining current service levels for programs, and maintaining competitive salary and benefits are calculated using assumptions of inflation and growth. Unless revenue projections significantly improve, there will be budget deficits as follows in the General Fund:

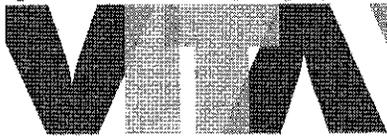
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Deficit	\$0	\$5,600,000	\$10,800,000	\$16,900,000	\$19,400,000

These budget deficits will need to be addressed during each budget cycle through increased tax rates, reductions in budgeted expenditures, reprioritization of capital projects to be financed, or a combination of each of these options.

If funding for this project is not received, the citizens and visitors of Spotsylvania County will not be able to contact 9-1-1 in the event of a single point of failure occurring at the existing CO. Lives and property will be at risk.

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

Once installed, it is not anticipated that there will be any additional costs to the County for the diverse routing.



COMPREHENSIVE PROJECT DESCRIPTION

WIRELESS E-911 PSAP EDUCATION PROGRAM GRANT REQUESTS ONLY:

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.

N/A

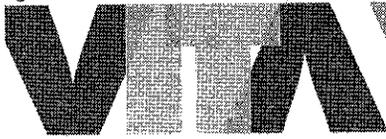
FOR CONTINUITY AND CONSOLIDATION OR ENHANCEMENT PROJECTS:

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

The goal of the Spotsylvania County ECC is to provide the most efficient and effective communications operation possible. The primary objective is to satisfy emergency and routine communications and informational needs for the County's Public Safety Departments. The objective requires coordinated response to both Public Safety needs and the citizen's request for service. An integral component of meeting this objective is to provide a redundant means of receiving and responding to 911 calls in the event of a communications failure. The second objective is to develop and maintain professional standards. The National Emergency Number Association (NENA) Wireless E-911 Overflow, Default, and Diverse Routing Operational Standard (NENA 57-001) states, "Route Diversity: Operational Standard Recommendations: Call path facilities shall be diverse and redundant between the MSC (Mobile Switching Center)/SR (Selective Router) and the SR-PSAP (Public Safety Answering Point) to avert single points of failure. Diversity and redundancy within associated 911 components in the network and the PSAP is a desired feature to avert single points of failure."

As previously stated, Spotsylvania has provided diverse routing to the new Public Safety Building but Verizon currently only serves the campus from one Central Office (CO). Verizon has installed fiber lines from a second CO almost to the new E911 call center; approximately 0.45 mile of line is needed to complete the second CO pathway. Funding of this project will enable the County to meet professional standard NENA 57-001 as well as provide a diverse route to receive 911 calls in the event of a communications failure at the existing CO.

If grant funding is received the award will be submitted to the Spotsylvania County Board of Supervisors for acceptance and appropriation. After Board acceptance, the Project Director will work with Procurement staff to procure and install the line. Immediately following installation of the line, the vendor and staff will test the line to ensure that the second CO pathway is functional and will provide a seamless transition for 911 calls to be received at the ECC in the event of a failure at the first CO. Thereafter, routine testing of the second CO pathway will be conducted to ensure that the line is operational and available at all times.



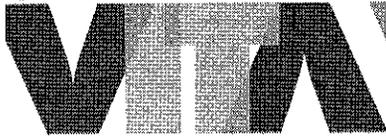
FOR CONTINUITY AND CONSOLIDATION OR ENHANCEMENT PROJECTS:

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* Assuming Award and Notification Date of 07/01/12
<input type="checkbox"/> INITIATION (Project approved by appropriate stakeholders)	08/31/12
<input type="checkbox"/> DESIGN/PLANNING (Project, system, or solution requirements are developed)	08/31/12
<input type="checkbox"/> ACQUISITION (Selected system or solution is procured)	12/15/12
<input type="checkbox"/> IMPLEMENTATION (Selected system or solution is configured and installed)	03/31/13* *This may be impacted by weather
<input type="checkbox"/> TESTING/COMPLETION (Selected system or solution is tested and put in production)	04/15/13

Identify the longevity or sustainability of the project.

It is anticipated that the second CO pathway to the ECC would last for a minimum of 10 years. At that time, the replacement of the line would need to be incorporated into the Spotsylvania County Capital Improvement Budget.



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

The Virginia Statewide Comprehensive Plan for 9-1-1 outlines several goals for providing 911 services to the citizens and visitors of the Commonwealth. The implementation of CO diversity for the Spotsylvania ECC will help move the Commonwealth forward in meeting those goals.

Goal A is provide a standard level of 9-1-1 emergency response services to the public. Consistent service is defined by the Plan as all 9-1-1 centers being able to receive, process, and dispatch calls in a dependable and repeatable manner. In the event of a failure at the existing CO, the Spotsylvania ECC will not be able to receive calls and therefore would not be able to process or dispatch calls.

Goal B is to position 911 centers to continuously meet the public's expectations. The public expects seamless, prompt, and dependable service when they dial 9-1-1. In the event of a failure at the existing CO, the Spotsylvania ECC will not be able to receive calls and therefore would not be able to process or dispatch calls.

By connecting the new ECC to a second CO, a standard level of 9-1-1 emergency response services will still be available to the public if the current CO experiences problems. In addition, the ECC will be able to continue to meet the public's needs by providing vital life and property saving service to the citizens and visitors of Spotsylvania County.

REGIONAL INITIATIVE (if applicable)

The relationship of the initiative to the participating PSAPs:
N/A

Intended collaborative efforts:
N/A

Resource sharing:
N/A

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

CONSOLIDATION (Primary or Secondary) - (if applicable)



How would a consolidation take place and provide improved service:

N/A

How should it be organized and staffed:

N/A

What services should it perform:

N/A

How should policies be made and changed:

N/A

How should it be funded:

N/A

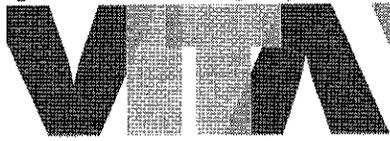
What communication changes or improvements should be made in order to better support operations:

[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:

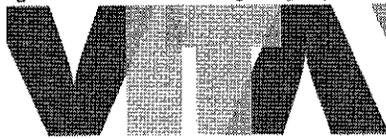
Please see attached quote from Verizon.



EVALUATION

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

The line will be purchased and installed. After installation of the line to the second CO, testing will be conducted by qualified communications personnel to measure the effectiveness and reliability of the second CO connection. Issues or unusual occurrences with the system will be reported and tracked for future reliability assessments.



FINANCIAL AND PROGRAMMATIC REPORT

PROJECT PHASES

SAMPLE ACTIVITIES

PHASE	SAMPLE ACTIVITIES
INITIATION (Project approved by appropriate stakeholders)	<ul style="list-style-type: none">• 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)	<ul style="list-style-type: none">• Requirements are documented• Components to be purchased are identified• General design is documented
ACQUISITION (Selected system or solution is procured)	<ul style="list-style-type: none">• 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)	<ul style="list-style-type: none">• Purchased components are delivered and installed• Training is performed
TESTING/COMPLETION (Selected system or solution is tested and put in production)	<ul style="list-style-type: none">• Performance of system/solution is validated• System/solution goes "live"

Subject: E911	CBSCNE Case #: 2011-578342
 PRICING and CONTRACTS MANAGEMENT (PCM) – ILEC RATE QUOTE	
Date: 9/21/2011	

Customer Name: Spotsylvania County 911
Street Address: 9119 Dean Riding Lane
City State, Zip: Spotsylvania, Va 22553
BTN: 540-582-7198

- **Term of Contract:** 5 years contract
- **Description of Service:** This quote provides for the installation of E911 fiber diversity for Spotsylvania County, Va 911. The E911 Center will be served by the Spotsylvania and Lee Hill COS. This case is associated with a case 2011-577500. This solution places a Litespan system, 1200 ft. Buried Fiber, trench and drilling for buried fiber and PICS stocking of Litespan cards to support 7 CAMA Trunks on the diverse request.

Please note this does not include any cost for ordering the 911 trunks or services. This cost is only for the E911 Fiber diverse and Litespan system.

- **Service Location:**
- **Rates and Charges:** These charges DO NOT include any applicable local, state, or federal fees, taxes, surcharges or other applicable tariff charges.
-

SERVICE RATE STRUCTURE

Element name:	60 month term	
	Up-front payment	
ASWC, New Fiber, per month, 60 month term		
ASWC, Embedded Fiber, per month, 60 month term		
ASWC, C.O. Mux, per month, 60 month term		
ASWC, Customer Prem Mux, per month, 60 month term		
ASWC, Cross Connect, per month, 60 month term		
Case Processing Costs, per month, 60 month term		
Total	\$174,355	

1. These rates are valid until **13 December, 2011**.

workand time schedule and will not start until a firm sale notification has been sent to Verizon CNE. Any difficulties or unforeseen circumstances that would hinder Verizon to meet this date are not included. (Some examples of difficulties or unforeseen cumstances include: not having timely access to POP/End user locations, emergencies or natural disasters, customer changing their request, special permits and easements.)

- The actual service interval: TBD at kick-off by the implementation team.
- The customer must provide sufficient power, space and/or backboard and a path for Verizon to place the required network equipment at each customer site. The customer must provide an isolated power outlet and an adequate grounding location, if required by Verizon. It is highly recommended that the customer supplied power be UPS/Surge protected.
- The customer is responsible for providing a conduit-protected path for any cable placements required at the customer's site(s) and for securing any permits and right-of-ways on private property, as well as new building entrances, if required.
- Placement of conduit for Verizon's cable from Customer's property line to the demarcation point located on the Customer's premises, as required. Such conduit is in addition to any conduits provided by Verizon as part of the Services under this Agreement, which shall be owned by Verizon.
- If Customer desires this circuit terminate at a location other than the main demarcation point, Customer will have to provide a pathway from the proposed location for termination of the circuit and the main demarcation point, as required.
- Verizon will not suffer any contractual consequences for failing to meet any negotiated installation dates.
- It is contemplated that all of the work detailed in the case will be performed during normal working hours and within normal working intervals. The customer will be required to pay the amount of additional costs incurred by Verizon as a result of the customer's special requirements.
- The customer must provide access to all sites as needed by Verizon personnel and a SECURE environment for network equipment located on the premise.
- Verizon must be able to obtain the required permits for cable placement.
- Network equipment stored at the customer's premise must be in secure cabinets, not accessible to unauthorized personnel.
- No equipment orders for this project will be issued until CNE receives a copy of the signed contract/application for service/project abstract.
- OSP reserves the right to amend fiber routing based on rod and roping results.
- The customer must specify if they want a single mode or multi-mode interface. If the customer chooses multi-mode fiber, they must specify whether they are using 50 or 62.5 micron fiber jumpers.
- Please note that if this service is sold, sales should include the following information on the notification of sale: 1) Contact person's name and telephone number for each location, and 2) specific location within the building if not indicated on the inquiry.
- If Customer does not provide to Verizon contact information for Customer's agents or representatives who may be required to be available at the location where the Services are being performed, and Verizon incurs any additional costs in performing the Services, such additional costs will be the responsibility of the Customer.

County of Spotsylvania

Founded 1721

Board of Supervisors
HENRY CONNORS, JR.
GARY JACKSON
JERRY I. LOGAN
EMMITT B. MARSHALL
BENJAMIN T. PITTS
GARY F. SKINNER
THOMAS C. WADDY, JR.



County Administrator
C. DOUGLAS BARNES
Deputy County Administrator
ERNEST L. PENNINGTON
P.O. BOX 99
SPOTSYLVANIA, VIRGINIA 22553
Voice: (540) 507-7010
Fax: (540) 507-7019

Service, Integrity, Pride

At a meeting of the Spotsylvania County Board of Supervisors held on October 25, 2011, on a motion by Mr. Skinner, seconded by Mr. Jackson and passed unanimously, the Board adopted the following resolution:

RESOLUTION NO. 2011-194

WHEREAS, the National Emergency Number Association (NENA) Wireless E-911 Overflow, Default and Diverse Routing Operational Standard (NENA 57-001) states, "Route Diversity: Operational Standard Recommendations: Call path facilities shall be diverse and redundant between the MSC (Mobile Switching Center)/SR (Selective Router) and the SR-PSAP (Public Safety Answering Point) to avert single points of failure. Diversity and redundancy within associated 911 components in the network and the PSAP is a desired feature to avert single points of failure," and

WHEREAS, Spotsylvania County has provided diverse routing on their campus to the new Public Safety Building but Verizon currently only serves the campus from one Central Office (CO), the Fredericksburg CO, and

WHEREAS, Verizon engineers have identified service from one CO as a potential single point of failure and recommended connecting the new facility to another CO to provide more diverse routing, and

WHEREAS, Verizon has installed fiber lines from the Lee Hill CO almost to the new E911 call center, and

WHEREAS, approximately 0.45 mile of Verizon line is needed to complete the Lee Hill CO pathway, and

WHEREAS, additional funding is needed to complete the connection from a second CO to the Public Safety Building, and

WHEREAS, the Virginia E-911 Service Board administers the Public Safety Answering Point (PSAP) Grant Program, and

WHEREAS, the purpose of the PSAP Grant Program is to provide funding to assist Virginia primary PSAPs with the purchase of equipment and services that support the continuity and enhancement of wireless E-911,

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF THE COUNTY OF SPOTSYLVANIA, VIRGINIA THAT the Board of Supervisors respectfully requests funding from the Virginia PSAP Grant Program in order to assist in paying for redundant fiber so that the 911 Center may be served by the Lee Hill CO in the event of a single point of failure on the Fredericksburg CO.

BE IT FURTHER RESOLVED THAT:

C. Douglas Barnes, County Administrator, OR

Ernest L. Pennington, Deputy County Administrator, OR

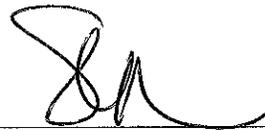
Becky Golden, Capital Projects,

Is hereby authorized to execute for and on behalf of Spotsylvania County, a public entity established under the laws of the Commonwealth of Virginia, any actions necessary for the purpose of obtaining financial assistance to assist in paying for redundant fiber to be installed.

Passed and approved this 25th day of October, 2011.

(SEAL)

A COPY TESTE:



Aimee R. Mann
Deputy Clerk to the Board of Supervisors