

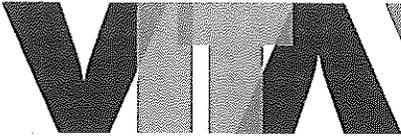
**Appomattox County &  
Town of Farmville  
911 Mapping Display Project**

**FY17**

# **PSAP GRANT PROGRAM APPLICATION**



**VIRGINIA INFORMATION  
TECHNOLOGIES AGENCY**  
Integrated Services Division



## FY17 PSAP GRANT PROGRAM APPLICATION

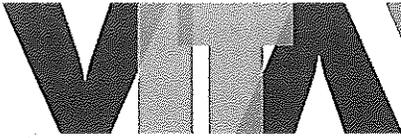
### HOW TO APPLY/DEADLINE

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 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

Appomattox & Farmville 911 Mapping Display Project

## GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: Appomattox County

CONTACT TITLE: Public Safety Director/911 Coordinator

CONTACT FIRST NAME: Bobby

CONTACT LAST NAME: Wingfield

ADDRESS 1: 339 Court St.

ADDRESS 2: P.O.Box 397

CITY: Appomattox

ZIP CODE: 24522

CONTACT EMAIL: bobby.wingfield@appomattoxcountyva.gov

CONTACT PHONE NUMBER: 434-352-3950

CONTACT MOBILE NUMBER: 434-610-8872

CONTACT FAX NUMBER: 434-352-3968

REGIONAL COORDINATOR: Stefanie McGuffin

## HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

**Appomattox County - Host**

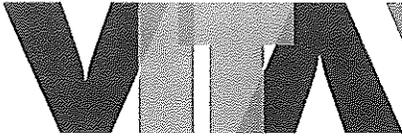
Farmville Emergency Communications

\_\_\_\_\_

## GRANT TYPE

Individual PSAP

Shared Services



**TIER**

Out of Service

Non-Vendor Supported\*

x Technically Outdated\*

Strengthen

Not Applicable

**If technically outdated or non-vendor supported, application MUST include age and/or version of hardware/software.**

VERSION: 8.0.2

# YEARS of HARDWARE/SOFTWARE: 5

**Windows XP/Windows server 2008**

**PRIORITY/PROJECT FOCUS 9-1-1 MAPPING DISPLAY**

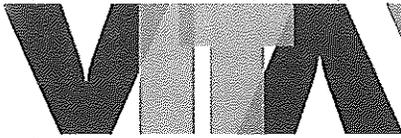
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**FINANCIAL DATA**

Amount Requested: \$ 350,000

Total Project Cost: \$ 442,314.42

**STATEMENT OF NEED**



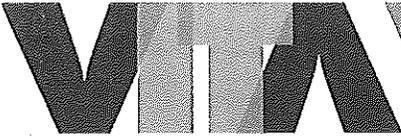
This statement should reference the relationship to the current funding priorities established by the Grant Committee and include evidence of any financial need, along with additional information on the impact on operational services; consequences of not receiving funding; inclusion of project in a long-term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

The Appomattox/Farmville 911 Mapping Display Systems Upgrade Project directly relates to the funding priority established the PSAP grant Committee under the Shared Services Program. The purpose of this project is to address technically outdated hardware and software.

Appomattox County along with the Town of Farmville is in need of financial funding to upgrade our current 911 display mapping systems. Without financial support from the Virginia Wireless E-911 services Board it is unlikely that Appomattox County or Town of Farmville could do this project.

The impact to operational services is a major step forward for our PSAP's. This project includes an active and passive server based solution, load balancers and a 20 Mbps Ethernet private E-line connecting Appomattox County PSAP to Town of Farmville PSAP for shared services. A major hardware/software solution Appomattox County has began is consolidating equipment at an offsite NOC that is comprised of Appomattox Public School System and Appomattox County to reduce cost short and long term. A key component is fiber connections between the Appomattox County PSAP and the Appomattox Public School NOC. In this grant Appomattox County would invest in new fiber placement between the two buildings for an additional service and routing for connectivity in an event one service route was damaged and for added capacity.†

The consequences of not receiving funding would have adverse consequences not only to Appomattox County PSAP and Town of Farmville PSAP but to the public as services would become slow or non-existent with locations of wireless and wireline 911 calls.



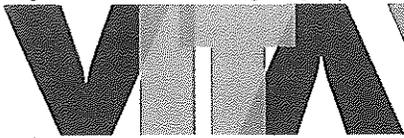
Describe how the grant will be maintained and supported in the future, if applicable.

The Grant will be maintained and supported by having the equipment hardware and software covered by the manufacture warranty that includes both vendor support and maintenance. Once the manufacture warranty expires the PSAP's will include future maintenance in the local budget.

#### **COMPREHENSIVE PROJECT DESCRIPTION**

Identify the longevity or sustainability of the project.

The Appomattox County and Farmville PSAP 911 mapping display project will install up to date hardware and software to virtualize servers needed for GeoLynx applications and to store needed data. As stated before all hardware and software equipment will be covered by the manufacture warranty that includes both vendor support and maintenance.



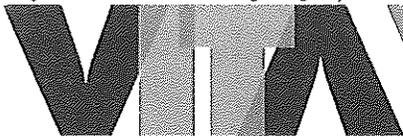
Describe how this project supports the Virginia Statewide Comprehensive 9-1-1 Plan.

The Appomattox County & Town of Farmville PSAP 911 Map Display Upgrade project mirrors the vision of the Virginia Statewide E-911 comprehensive plan to allow 911 emergency response to operate at an optimal level of service and capability. Our project also follows the Strategic Goals established in the plan to provide consistent emergency response services to anyone residing in or passing through Appomattox County, Prince Edward County and the Town Of Farmville or the Commonwealth, at any time of day, during an event. The proposed system can easily be incorporated into an Emergency Services Network (EsiNet) and serve as the primary mapping system for Regional or Statewide NG911.

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

The relationship of the project to the participating PSAPs:

Appomattox County & Town Of Farmville that dispatches for Prince Edward County share not only a County border but the Town Of Pamplin is in both Appomattox County and Prince Edward County. Both PSAP's will be connected by an ISP so the dispatcher can view locations of 911 calls in either County or Town.

**Intended collaborative efforts:**

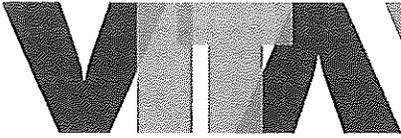
Since Appomattox County is serviced by Verizon phone system and Prince Edward County is serviced by Century Link phone system the caller location cannot be transferred. This 911 Mapping Display System can be viewed by both Appomattox PSAP dispatchers and the Town Of Farmville PSAP dispatchers at the same time, that we will be able to have a quicker emergency response to a citizen in need whether it is a 911 wireline or 911 wireless caller.

**Resource sharing:**

The proposed effort will share GeoComm software solutions at both locations and connecting the PSAP centers using a 20 Mbps Ethernet Private Line and to allow the GIS mapping data to be viewed at once.

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

This project will allow Appomattox County & Town Of Farmville PSAP to move closer to NG911 and incorporated into an Emergency Services Network (EsiNet) in the future once VITA decides on the direction and service.



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

**Project Goals and objectives:**

Upgrade the 911 dispatch mapping solution from a desktop solution to a server based solution.

Enable the PSAP to take advantage of a single dispatch mapping repository while also sharing the view with another PSAP.

Allow dispatchers to access the mapping from any workstation whether it is in Appomattox County PSAP or Farmville PSAP.

Provide a better Common Operating Picture by allowing user access from any computer connected to the network.

Provide Active and Passive Server Redundancy.

Provide an easier method of adding additional dispatch workstations as needed.

Improve accuracy of the 911 caller locations with using shared resources.

**Implementation Strategy:**

Local IT staff and outside vendor IT staff will ensure all proper network connectivity, software and hardware in place. The vendor will then provide full implementation services for Software and server Hardware components. The vendor will then provide full training services for new system.

**Work Plan:**

Assess the overall cost of the project.

Collect vendor quotes for hardware and software.

Consult with vendor on desired implementation schedule.

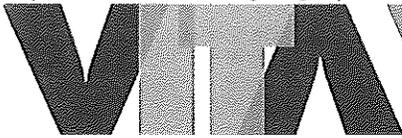
Secure funding for the shared project.

Secure contracts for software and hardware upon approval of funding.

Work with local IT and Vendor IT on installation and networking of new hardware and software.

Establish Software support and Maintenance agreements with the software vendor.

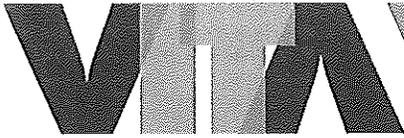
Initiate and complete acceptance test plan for software.



**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 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>03 / 07 / 16</b>
<input 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>04 / 04 / 16</b>
<input 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>06 / 06 / 16</b>
<input type="checkbox"/> <b>IMPLEMENTATION</b> (Selected system or solution is configured and installed)  Sample activities: purchased components are delivered and installed and training is performed	<b>08 / 01 / 16</b>
<input type="checkbox"/> <b>TESTING/COMPLETION</b> (Selected system or solution is tested and put in production)  Sample activities: performance of system/solution is validated and system/solution goes "live"	<b>10 / 03 / 16</b>



## 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.

\$ 260,058.00 For Shared Mapping project.

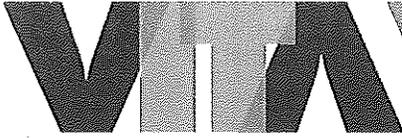
167,256.42 For Hardware and Software.

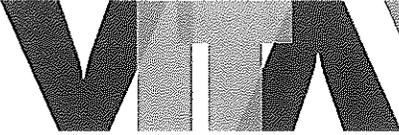
15,000.00 Shared Communications for 5 years.

## EVALUATION

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

The vendor will be required to submit a detailed timeline. The project will be monitored by periodic meeting between the PSAP's directors and vendors. Appomattox County will lead this project since it is a shared project and all invoices will flow through Appomattox County. Payments will be based on term milestones events that will be agreed upon before the contract is signed. The PSAP directors will ensure all items in the acceptance test plan have been met before accepting the new system.





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

How would a consolidation take place and provide improved service:

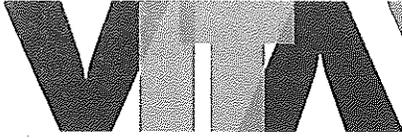
N/A

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:

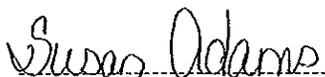
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MEMORANDUM OF UNDERSTANDING BETWEEN  
APPOMATTOX COUNTY EMERGENCY COMMUNICATIONS  
AND  
TOWN OF FARMVILLE EMERGENCY COMMUNICATIONS  
FOR SHARED SERVICES PROJECT

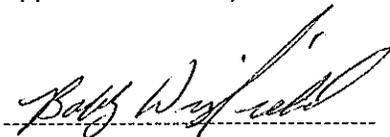
This Memorandum of Understanding (MOU) is entered into this day, September 23, 2015,  
Between the Appomattox County Emergency Communications and the Town of Farmville  
Emergency Communications who have operational control of their respective Public safety  
Answering Points (PSAP).

This MOU is to confirm support for the submittal of a Shared Services Project under the FY 17  
Virginia E-911 services Board PSAP Grant Program that will benefit the Appomattox County and  
Town of Farmville 911 Centers.

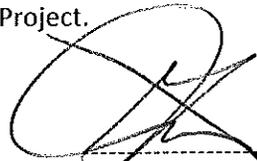
If awarded funding, both PSAP's will work to establish a cooperative agreement that will outline  
the responsibilities, commitment and continual funding from each participant to ensure the  
initial and long term success of the Shared Services Project.



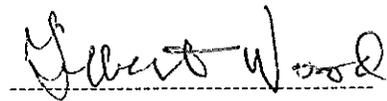
Susan Adams  
County Administrator  
Appomattox County



Bobby Wingfield  
PSAP, Appomattox County



Gerald Spates  
Town Manager  
Town Of Farmville



Gilbert Wood  
PSAP, Town Of Farmville

# GeoComm

"When seconds matter, we help save lives and protect property by providing essential, innovative location-based solutions to public safety professionals."

Proposal Presented to:  
**Appomattox County and the Town of Farmville,  
Virginia**

**Shared GeoLynx Server Dispatch Mapping System**

September 17, 2015

Uniting Public Safety GIS and Communications  
<http://www.geo-comm.com/>

Main: 320.240.0040 Fax: 320.240.2389 Toll-free: 888.436.2666  
601 West St. Germain Street St. Cloud, Minnesota 56301

## Budgetary Quote

*Prices are valid for a period of 90 days.*

*Total does not include sales tax. Applicable taxes will be determined upon contract signing.*

*Buyer is responsible for paying all sales taxes.*

### Shared Services Pricing Summary

Description	One-time Price	Year One Annual Price	Extended Annual Price	Total
GIS Services	\$2,840	\$2,882	\$6,211	\$11,933

### Appomattox County Pricing Summary

Description	One-time Price	Year One Annual Price	Extended Annual Price	Total
GeoLynx Server Dispatch Mapping	\$68,076	\$9,200	\$39,188	\$116,464

### The Town of Farmville Pricing Summary

Description	One-time Price	Year One Annual Price	Extended Annual Price	Total
GeoLynx Server Dispatch Mapping	\$83,273	\$9,200	\$39,188	\$131,661

Notes: Fees from third party vendors are not included in this proposal.

Software support and maintenance services shall commence after software installation and continue for five years.

## Price Detail

### Shared Services

Description	Total Price
<b>Base Pricing</b>	
GeoLynx Server GIS Setup Services	\$1,000
GIS Data Aggregation Services	\$1,840
<b>Base Pricing Total:</b>	<b>\$2,840</b>
<b>Annual Pricing</b>	
Recurring Data Aggregation and Provisioning Services (service performed quarterly)	\$2,882
<b>Total:</b>	<b>\$5,722</b>
<p>Notes: GeoComm will aggregate Appomattox County and the Town of Farmville's disparate GIS datasets into a combined GIS dataset to be consumed by the entities' GeoLynx Server Dispatch Mapping systems.</p> <p>On a quarterly basis, GeoComm will re-aggregate Appomattox County's and the Town of Farmville's GIS data into an updated dataset and provision to the GeoLynx Server Dispatch Mapping systems.</p> <p>Included in one time and recurring GIS Data Aggregation Services pricing are services to create and maintain an Esri Network Routing Dataset. The Network Routing Dataset is a required component to achieve basic routing in GeoLynx Server Dispatch Mapping. Additional routing details may be found in the GeoLynx Server Dispatch Mapping system table below.</p>	
<b>Extended Annual Pricing</b>	
Recurring Data Aggregation and Provisioning Services (performed quarterly for 4 additional years)	<b>\$6,211</b>

### Price Detail Appomattox County

Description	Total Price
<b>Base Pricing</b>	
GIS Map Data, ALI Database, and MSAG Analysis Service	\$1,375
GIS Map Data Update Services	\$5,701
Esri ArcGIS Network Analyst Extension for Server license (1)	\$7,500
GeoLynx Server Dispatch Mapping licenses (4)	\$34,000
GeoLynx Server 9-1-1 Call and CAD Incident Viewing	Included
GeoLynx Server Dispatch Mapping Installation and Training	\$11,955
Standard Dispatch CAD Interface	Included
Project Coordination Fee	\$7,545
<b>Base Pricing Total:</b>	<b>\$68,076</b>
<b>Annual Pricing</b>	
GeoLynx Server Dispatch Mapping licenses Annual Software Support and Maintenance	\$6,800
GeoLynx Server 9-1-1 Call and CAD Incident Viewing Annual Software Support and Maintenance	Included
Esri ArcGIS Network Analyst Extension for Server license Annual Support and Maintenance	\$1,500
Standard Dispatch CAD Interface Annual Software Support and Maintenance	\$900
<b>Annual Pricing Total:</b>	<b>\$9,200</b>
<b>Year One Total:</b>	<b>\$77,276</b>

### Extended Annual Support and Maintenance Services

Description	Total Price
GeoLynx Server Dispatch Mapping licenses Annual Support and Maintenance	\$29,309
GeoLynx Server 9-1-1 Call and CAD Incident Viewing Annual Support and Maintenance	Included
Esri ArcGIS Network Analyst Extension for Server license Support and Maintenance (4 additional years)	\$6,000
Standard Dispatch CAD Interface Annual Software Support and Maintenance	\$3,879
<b>Extended Support and Maintenance Total:</b>	<b>\$39,188</b>

Notes: Server hardware specification capacity is recommended for <50 simultaneous users. Performance is impacted based on a number of things including network performance, map data configuration, and the number of users.

GeoComm proposes GeoLynx Server in an N+1, Active + Passive type architecture. Use of the GeoLynx Server backup license will provide redundancy in instances when the active server is not available. The use of both GeoLynx Server licenses simultaneously is not permitted. Appomattox County's GeoLynx Server System will serve as additional backup to the Town of Farmville's GeoLynx Server system. Pricing does not include system hardware. Buyers are responsible for providing hardware meeting minimum specifications below. If the provided dedicated web server has more than one quad core processor (four cores of processing), additional GeoLynx Server license fees will apply.

The Town of Farmville has previously purchased Standard Dispatch CAD interface functionality with GeoLynx Desktop. As such, additional Standard CAD Interface license purchase is not required at this time. Software support and maintenance prices will be prorated based on actual date of installation and term of existing support contract.

To achieve basic routing using local data in GeoLynx Server, the Town of Farmville may implement an Esri Network Routing Dataset with one-way, speed, distance, and minutes attributes. As part of the GIS Data Aggregation Services proposed above, GeoComm will develop a network routing dataset for use in the GeoLynx Server Dispatch Mapping system. The network routing dataset and associated road centerline layer will be maintained by GeoComm as part of the Recurring Data Aggregation and Provisioning Services GeoComm proposes to Appomattox County and the Town of Farmville.

The ArcGIS Network Analyst extension is required for routing in GeoLynx Server.

GeoComm anticipates resolving the map data errors listed below as part of the GIS Map Data Updates Services. A full service scope of work and firm pricing would be determined after the GIS Map Data, ALI Database, and MSAG Analysis Service quoted above is completed at a later date.

- Road range overlaps and inconsistencies
- Line direction consistency issues, unmapped ramps issues, and overpass mapping issues
- Misaligned roads or site/structure points with respect aerial imagery
- ALI/MSAG to GIS synchronization issues
- Road and boundary topology errors (unbroken/unsnapped intersections, gaps, and overlaps in polygon coverage)
- Missing NG9-1-1 layers, fields, and attributes

### Price Detail the Town of Farmville

Description	Total Price
<b>Base Pricing</b>	
GIS Map Data, ALI Database, and MSAG Analysis Service	\$1,375
GIS Map Data Update Services	\$19,516
Esri ArcGIS Network Analyst Extension for Server license (1)	\$7,500
GeoLynx Server Dispatch Mapping licenses (4)	\$34,000
GeoLynx Server 9-1-1 Call and CAD Incident Viewing	Included
GeoLynx Server Dispatch Mapping Installation and Training	\$11,955
Standard Dispatch CAD Interface	Included
Project Coordination Fee	\$8,927
<b>Base Pricing Total:</b>	<b>\$83,273</b>
<b>Annual Pricing</b>	
GeoLynx Server Dispatch Mapping licenses Annual Software Support and Maintenance	\$6,800
GeoLynx Server 9-1-1 Call and CAD Incident Viewing Annual Software Support and Maintenance	Included
Esri ArcGIS Network Analyst Extension for Server license Annual Support and Maintenance	\$1,500
Standard Dispatch CAD Interface Annual Software Support and Maintenance	\$900
<b>Annual Pricing Total:</b>	<b>\$9,200</b>
<b>Year One Total:</b>	<b>\$92,473</b>

### Extended Annual Support and Maintenance Services

Description	Total Price
GeoLynx Server Dispatch Mapping licenses Support and Maintenance (4 additional years)	\$29,309
GeoLynx Server 9-1-1 Call and CAD Incident Viewing Support and Maintenance (4 additional years)	Included
Esri ArcGIS Network Analyst Extension for Server license Support and Maintenance (4 additional years)	\$6,000
Standard Dispatch CAD Interface Software Support and Maintenance (4 additional years)	\$3,879
<b>Extended Support and Maintenance Total:</b>	<b>\$39,188</b>

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- Road range overlaps and inconsistencies
- Line direction consistency issues, unmapped ramps issues, and overpass mapping issues
- Misaligned roads or site/structure points with respect aerial imagery
- ALI/MSAG to GIS synchronization issues
- Road and boundary topology errors (unbroken/unsnappped intersections, gaps, and overlaps in polygon coverage)
- Missing NG9-1-1 layers, fields, and attributes

## System Specifications

To achieve system functionality, both Appomattox County and the Town of Farmville are responsible for ensuring the following hardware and system specifications are met.

### GeoLynx Server Network and Hardware Requirements

- Provide an Internet connection with a minimum speed of 15 Mb/sec symmetrical to serve the GeoLynx Server website to external site users.
- Provide an Intranet connection with standard speed(s) of 10/100/1000 Base-T Mbps to serve the GeoLynx Server website to internal site users.
- If multi-agency, ensure all PSAPs are connected on a Wide Area Network (WAN).
- Make remote connections available on the provided system servers for on-going technical support of GeoLynx Server.
- Remote connections for initial software and data loading, configuration, and testing must be made available on the system servers or hardware. Alternatively, Appomattox County and/or the Town of Farmville may ship the hardware to GeoComm for loading, configuration, and testing.
- Procure, install, configure, maintain, and support one (1) Barracuda Load Balancer, model 440.
  - Appomattox County and the Town of Farmville will each require their own load balancer
- Procure, install, configure, maintain, and support two (2) dedicated web servers meeting the minimum specifications below. GeoComm will implement a license of GeoLynx Server on each server in an active/passive-type architecture. One server will be primary and the other used in a backup capacity only.
  - Appomattox County and the Town of Farmville will each require two dedicated web servers meeting the minimum specifications below.

System Component	Minimum	Recommended
<b>Form and factor location</b>	Rack mount server in a secured server room	
<b>CPU Form Factor</b>	Single chip with 4 cores (quad core)	
<b>CPU Clock Speed</b>	1.8 GHz or higher	2.8 GHz or higher
<b>CPU SPEC Rate</b>	SPEC rate of 35 per core or higher	SPEC rate of 45 per core or higher
	Note: SPEC rate is set by an independent organization that evaluates CPU performance. To search for the SPEC rate of a CPU, go to: <a href="http://www.spec.org/cgi-bin/osgresults?conf=rirt2006">http://www.spec.org/cgi-bin/osgresults?conf=rirt2006</a> . The number to look at is called the "SPECint@_rate2006" and divide by 4 (for the number of cores) to compare it with the minimum and recommended rates above.	
<b>RAM</b>	12 GB or more	24 GB or more
<b>Hard Drive Capacity</b>	3x250 GB or larger in RAID 5 array	
	Note: Partitioned as a single partition. Consider disk space not only for GIS and aerial data, but also for geographical area covered by map caches. An estimated 40 GB is dedicated for ArcGIS Server, GeoLynx Server, and GeoComm database components.	

System Component	Minimum	Recommended
Hard Drive RPM	7,200	10,000 or 15,000
Hard Drive Interface	SATA	SAS
Display	1024x768 resolution	
Graphics Card	8 MB integrated graphics card or higher	
Operating Systems	Windows Server 2012 R2 Standard x64 Windows Server 2008 R2 Standard x64 Note: ArcGIS for Server requires 64-bit OS.	
Virtualized Environments	Windows Server 2012 R2 Standard x64 Windows Server 2008 R2 Standard x64 Note: ArcGIS for Server requires 64-bit OS.	
Virtualized Software	VMware ESXi	
Network	Dual gigabit NICs or better with failover capabilities configured in a failover group	
Internet Connection Server-Side	15 mbps per 10 expected connections (symmetric) Note: VPN connections are not officially supported	50 mbps per 10 expected connections (symmetric)
Internet Connection Client-Side	1.5 mbps Note: VPN connections are not officially supported	5 mbps
Serial Ports	Serial port if also using your server as a GeoLynx Message Switch computer	
Optical Drive	DVD+-RW	
Backup	Offsite tape or hard drive backup solution	
Web Browser	GeoLynx Server is fully tested and supported against Microsoft Internet Explorer 11. Browsers such as Mozilla Firefox and earlier versions of Internet Explorer and Google Chrome may be compatible, but have not been tested. GeoLynx Server is not compatible with Google Chrome 45 and higher.	

Note: Disk space should be considered for not only GIS & aerial data, but also for the geographical area covered by map caches. An estimated 40 GB will be dedicated for ArcGIS Server, GeoLynx Server, and GeoComm database components. GeoComm applications cannot be installed on a primary domain controller or a backup domain controller. The server name cannot include a "\_" in the server name.

## GeoLynx Server Client Hardware Requirements

- Provide client workstations meeting the minimum requirements below. The workstation should be accessible 24/7. GeoComm applications cannot be installed on a primary domain controller or a backup domain controller.

System Component	Minimum	Recommended
CPU	2.2 GHz dual core or higher	2.5 GHz dual core or higher
RAM	2 GB RAM or more	4 GB RAM or more (3 GB RAM for XP only)
Display	17" monitor, 1024x768 or higher, 24- or 32-bit color depth	17" or 21" monitor, 1280x1024 or higher, 24- or 32-bit color depth
Video Card	32 MB integrated video card	512 MB discrete memory video card with OpenGL 2.0 support
Operating System	Vista Business & Ultimate (32 bit & 64 bit), or Windows 7 Pro, Enterprise, & Ultimate (32 bit & 64 bit)	
Web Browser	GeoLynx Server is fully tested and supported against Microsoft Internet Explorer 11. Browsers such as Mozilla Firefox and earlier versions of Internet Explorer and Google Chrome may be compatible but have not been tested. GeoLynx Server is not compatible with Google Chrome 45 and higher.	
Network Card	10/100 Mbps	1 Gbps
Remote Access	High-speed Internet connection 1.5Mbps	High-speed Internet connection 5 Mbps

Note: Some antivirus software can cause sporadic issues with the map fully rendering on the screen, which is observed by the user as blank squares. Please contact your system administrator for more information.

## GeoLynx Server Dispatch Mapping

- Provide access to a system-wide live 9-1-1 caller information and location information feed, including answering position ID, at the two centralized data center locations for access by the GeoComm Message Switch Applications, via NENA 2.1/3.1/4 ALI over serial or IP, a supported proprietary interface, or NG9-1-1 EIDD containing P1DF-LO and additional data URI's via subscribe/notify.



### Computer Exchange Service & Sales

DATE: SEPTEMBER 21, 2015

20607 Timberlake Road Suite B, Lynchburg, VA 24502  
 Phone 434.239.0439 Fax 434.239.0310  
 cxe@cxeonline.com

TO Appomattox/Farmville ECC  
 Bobby Wingfield - 434-352-3950 434-610-8872

SALESPERSON	JOB	SHIPPING METHOD	SHIPPING TERMS	DELIVERY DATE	PAYMENT TERMS	DUE DATE
Andy	Appomattox/Farmville ECC	N/A	N/A	TBD	½ Down ½ on Completion	TBD

QTY	ITEM #	DESCRIPTION	UNIT PRICE	LINE TOTAL
4	server	PowerEdge R630 - See attached sheet for specs	\$9,480.04	\$37,920.16
4	Storage	PowerVault MD3420 - See Attached Sheet for specs	\$25,962.20	\$51,924.40
2	Backup	DL4300 Backup & Recovery Appliance	\$30,790.81	\$61,581.62
1	Software	VMWare software and licensing	\$15,830.24	\$15,830.24

Notes: Prices include hardware only. Labor to configure and setup will be billed separately.

SUBTOTAL	\$167,256.42
TAX	\$0.00
TOTAL	\$167,256.42

This is a quotation on the goods named, subject to the conditions noted below:  
 Prices are good for 30 days from date of quote. Computer Exchange S&S is not responsible for typographical errors or price changes beyond our control. Warranties for new desktop systems are 3 years on labor, and 1 year on parts unless otherwise noted. Labor and/or maintenance agreements purchased will cover remote assistance with on-site labor billed separately.

To accept this quotation, sign here and return: \_\_\_\_\_

**THANK YOU FOR YOUR BUSINESS!**

PowerEdge R630 Quantity: 4	Unit Price \$9,480.04 Extended Price \$37,920.16
PowerEdge R630 Server, TPM	1 [210-ACXS][329-BCIY][461-AACZ]
Chassis with up to 8, 2.5" Hard Drives, Software RAID, 3 PCIe Slots	1 [321-BBKK]
PowerEdge R630 Shipping- 8 Drive Chassis	1 [340-AKPS]
Intel® Xeon® E5-2640 v3 2.6GHz,20M Cache,8.00GT/s QPI,Turbo,HT,8C/16T (90W) Max Mem 1866MHz	1 [338-BFFO]
Upgrade to Two Intel® Xeon® E5-2640 v3 2.6GHz,20M Cache,8.00GT/s QPI,Turbo,HT,8C/16T (90W)	1 [374-BBGV]
2133MT/s RDIMMs	1 [370-ABUF]
Performance Optimized	1 [370-AAIP]
16GB RDIMM, 2133MT/s, Dual Rank, x4 Data Width	8 [370-ABUG]
Diskless Configuration (No RAID, No Controller)	1 [780-BBJB]
Embedded SATA	1 [405-AACD]
No Hard Drive	1 [400-ABHL]
Broadcom 5720 QP 1Gb Network Daughter Card	1 [540-BBBW]
SAS 12Gbps HBA External Controller, Low Profile	1 [405-AAFB]
Internal Dual SD Module with 2x 16GB SD Cards	[330-BBCL][385-BBCF][385-BBHV]
DVD ROM, SATA, Internal	1 [429-AAQM]
Bezel 8 Drive Chassis	1 [325-BBII]
ReadyRails™ Sliding Rails With Cable Management Arm	1 [770-BBBL]
Performance BIOS Setting	1 [384-BBBL]
Dual, Hot-plug, Redundant Power Supply (1+1), 750W	1 [450-ADWS]
NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord, North America	2 [450-AALV]
Electronic System Documentation and OpenManage DVD Kit	1 [343-BBDK]
No OS, No Utility Partition	1 [611-BBBG]
No Media Required	1 [421-5736]
VMware ESXi 6.0 Embedded Image on Flash Media	1 [634-BDXD]
2 CPU up to 120W	1 [370-ABWE][412-AAEE][412-AAEE]
iDRAC8, Enterprise with OpenManage Essentials,Server ConfigMgmt	1 [385-BBHO][634-BBWU]
ProSupport Plus: 3 Year Mission Critical 4Hr On-site Service	[951-2015][976-7728][976-7782]
No Installation	[976-7794]
	1 [900-9997]

Appassure DL4300 Appliance, Basic Remote Installation Service, Prepaid Consulting (975-8374)	1
US Order (332-1286)	1
DAO Shipping Material (340-AODN)	1
Broadcom 5719 QP 1Gb Network Interface Card, Low Profile (540-BBHS)	1
PERC H830 RAID Adapter for External MD14XX only, 2GB NV Cache, Low Profile (405-AAEZ)	1
4 x 16GB RDIMM, 2133 MT/s, Dual Rank, x4 Data Width (64GB) (370-ACBJ)	1
ReadyRails Sliding Rails With Cable Management Arm (770-BBBR)	1
Dual, Hot-plug, Redundant Power Supply (1+1), 1100W (450-ADWM)	1
NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord, North America (450-AALV)	2
Windows Server 2012R2, Standard Edition,Media Kit (618-BBDF)	1
Windows Server 2012R2 Standard Edition,Factory Installed, No Media, 2 Socket, 2 VMs,NO CALs (618-BBDS)	1
APPASSURE BACKUP/REPLICATION W/APPLIANCE PER 10TB BACK END DATA CAPACITY LICENSE (528-BBFE)	1
Support for AppAssure Backup and Replication Appliance Software (24x7) 10TB Protection, 3 Years (975-8338)	1
AppAssure Software Replication Target License only (379-BBOU)	1

*Total Purchase Price:	\$61,581.62		
Product Subtotal:	\$61,581.62		
Tax:	\$0.00		
Shipping & Handling:	\$0.00		
State Environmental Fee:	\$0.00		

GROUP: 1    QUANTITY: 2    SYSTEM PRICE: \$30,790.81    GROUP TOTAL: \$61,581.62

Base Unit	DL4300 Backup & Recovery Appliance - Standard Capacity Edition (210-AEGE)	1
Base Unit	DL4300 Base Hardware Components (329-BCMO)	1
Base Unit	16GB SD Card For IDS DM (330-BBFC)	1
Base Unit	Intel Xeon E5-2640 v3 2.6GHz,20M Cache,8.00GT/s QPI,Turbo,HT,8C/16T (90W) Max Mem 1866MHz (338-BFFO)	1
Base Unit	Chassis & HD Configuration for 5 - 10TB internal capacity (16 x 1TB NLSAS) - Standard Edition (350-BBGV)	1
Base Unit	Upgrade to Two Intel Xeon E5-2640 v3 2.6GHz,20M Cache,8.00GT/s QPI,Turbo,HT,8C/16T (90W) (374-BBGV)	1
Base Unit	iDRAC8 Enterprise, integrated Dell Remote Access Controller, Enterprise (385-BBHO)	1
Base Unit	PowerEdge Server FIPS TPM (461-AACZ)	1
Base Unit	Broadcom 5720 QP 1Gb Network Daughter Card (540-BBBW)	1
Base Unit	PowerEdge R730/R730xd Motherboard (591-BBCH)	1
Base Unit	OpenManage Essentials, Server Configuration Management (634-BBWU)	1
	Dell Hardware Limited Warranty (802-7923)	1
	ProSupport Plus: 7x24 Next Business Day Onsite Service,1 Year (802-7934)	1
	ProSupport Plus: 7x24 HW/SW Tech Support and Assistance,3 Years (802-7945)	1
	ProSupport Plus: Next Business Day Onsite Service After Problem Diagnosis,Extend to 2 Years (802-7997)	1
	Thank you for choosing Dell ProSupport Plus. For tech support, visit <a href="http://www.dell.com/contactdell">http://www.dell.com/contactdell</a> (951-2015)	1
	Dell Limited Hardware Warranty Extended Year(s) (975-3461)	1

SOFTWARE & ACCESSORIES	GROUP TOTAL: \$15,830.24		
<b>Product</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total</b>
VLA VMWARE VCTR SVR 6 FOUND FOR VSPH UP TO 3 HOST (A8269824)	2	\$1,575.00	\$3150.00
VLA VMWARE PROD VCTR SVR 6 FOUND FOR VSPH 3 HOST 1YR (A8269825)	2	\$699.00	\$1,398.00
VLA VMWARE VSPHERE 6 STANDARD FOR 1 PROCESSOR (A8262891)	8	\$1025.28	\$8202.24
VLA VMWARE PROD SUP/SUB VSPHERE 6 STANDARD FOR 1 PROCESSOR FOR 1 YEAR (A8263519)	8	\$385.00	\$3080.00

*Total Purchase Price:		\$15,830.24
<b>Product Subtotal:</b>	\$15,830.24	
<b>Tax:</b>	\$0.00	
<b>Shipping &amp; Handling:</b>	\$0.00	
<b>State Environmental Fee:</b>	\$0.00	
<b>Shipping Method:</b>	STANDARD GROUND	



## McGuffin, Stefanie (VITA)

---

**From:** bobby.wingfield <bobby.wingfield@appomattoxcountyva.gov>  
**Sent:** Monday, October 19, 2015 9:01 AM  
**To:** McGuffin, Stefanie (VITA)  
**Cc:** 'Gilbert Wood'  
**Subject:** RE: Appomattox /Farmville FY 17 Mapping Project

Stefanie,

I agree to move to Non Vendor Supported.

Thanks,

Bobby Wingfield

-----Original Message-----

From: McGuffin, Stefanie (VITA) [<mailto:Stefanie.McGuffin@vita.virginia.gov>]  
Sent: Friday, October 16, 2015 2:50 PM  
To: Wingfield, Bobby  
Cc: Gilbert Wood  
Subject: RE: Appomattox /Farmville FY 17 Mapping Project

Bobby and Gilbert,

We have reviewed this application and will recommend to the grant committee that it be considered as Non Vendor Supported since there are XP servers in place that need replacement. Please let me know you have received this message and if you agree/disagree.

Thanks,

Stefanie McGuffin, GISP

Regional Coordinator, Integrated Services Program Service Management and Delivery Virginia Information Technologies Agency (VITA) VITA – Enabling the Business of Government

[stefanie.mcguffin@vita.virginia.gov](mailto:stefanie.mcguffin@vita.virginia.gov)

[www.vita.virginia.gov](http://www.vita.virginia.gov)

(540) 579-4459 (office)

(540) 490-0380 (mobile)

(540) 751-3155 (fax)

VITA Customer Care Center - Call (866) 637-8482 (toll free) to report an outage or request service. Or e-mail the VCCC at [vccc@vita.virginia.gov](mailto:vccc@vita.virginia.gov). Please note: E-mail should not be used to report critical issues or outages impacting an agency. To report a critical issue, please call the VCCC directly.

-----Original Message-----

From: [bobby.wingfield@appomattoxcountyva.gov](mailto:bobby.wingfield@appomattoxcountyva.gov) [<mailto:bobby.wingfield@appomattoxcountyva.gov>]  
Sent: Friday, September 25, 2015 9:00 AM  
To: McGuffin, Stefanie (VITA)  
Cc: Gilbert Wood  
Subject: Appomattox /Farmville FY 17 Mapping Project

Stefanie,

Please see the attached Appomattox Co. & Town of Farmville 911 Mapping Display Project.

Thanks,

Bobby Wingfield  
Public Safety Director/911 Coordinator  
Appomattox County  
339 Court St.  
P.O.Box 397  
Appomattox, VA 24522  
Phone: 434-352-3950  
Cell: 434-610-8872

This email may contain confidential material. If you were not an intended recipient, please notify the sender and delete all copies.

Windows XP **End of Windows XP support** Your options PCs & offers Top questions  
Free data transfer

# Windows XP support has ended

As of April 8 2014, your XP computer is no longer receiving updates that help protect your personal information. Even if you have anti-virus software, your computer may not be fully secure.



## What this means for you

If you continue to use Windows XP without XP support, your computer may still work but will become vulnerable to security risks and viruses. And as more software and hardware manufacturers continue to optimize for more recent versions of Windows, a greater number of programs and devices like cameras and printers won't work with Windows XP. Windows XP end of support help for [business](#).

## Why Windows XP support ended

Windows XP is 12 years old. It's typical to end service for software as it gets older and technology evolves. Most of us have replaced cell phones and even our cars over the last 12 years – now it's time to replace your Windows XP computer with a new PC. Or you can check to see if your Windows XP computer can run the new Windows. We've outlined [your options](#) and are here to support you as you make your next step.

## Help protect your personal files

We want to help your personal files, photos, etc. stay secure. To help ensure they stay secure, you'll need to either upgrade your Windows XP machine to the new Windows (which may not work, [learn more](#)) or get a new Windows PC. If you get a [new Windows PC](#) we'll help you [migrate your files, photos, and more for free](#).

# We're here to help

If you still need answers, check out our [top questions](#) about the end of Windows XP support. And if you're concerned about moving your personal files, photos, music and more when you upgrade, we can help you [transfer it for free](#).

Edfn#r  
Z bgrz v#lS#ryhulhz

Frgwlpqh#r  
\rxu#swlrqv

## Need help along the way? We are here for you.

Have questions about the end of Windows XP support?  
Need help finding a new PC? Just give us a call.

P lfurvriw#fxwrcp hu#xssrw  
40; ::09<90: ::;9#



G lvclp hu Whup v#i#Kvh Wudghp dnv Sulydf|# #Frrnlhv Ø 5348# lfurvriw