

FY14

PSAP GRANT PROGRAM APPLICATION



VIRGINIA INFORMATION
TECHNOLOGIES AGENCY
Integrated Services Division



FY14 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 FY14 PSAP Grant Application Cycle starts July 1, 2012 and concludes on October 31, 2012 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.



FY14 PSAP GRANT APPLICATION

PROJECT TITLE

3T

GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: County of Wise
 CONTACT TITLE: Geographic Information Officer
 CONTACT FIRST NAME: Jessica
 CONTACT LAST NAME: Swinney
 ADDRESS 1: PO Box 570
 ADDRESS 2: 206 E Main St
 CITY: Wise
 ZIP CODE: 24293
 CONTACT EMAIL: gio@wisecounty.org
 CONTACT PHONE NUMBER: 276-328-7110
 CONTACT MOBILE NUMBER: 276-219-1793
 CONTACT FAX NUMBER: 276-328-9780
 REGIONAL COORDINATOR: Tim Addington

HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

| | |
|----------------------------|-----------------------|
| County of Dickenson | County of Wise |
| County of Lee | |
| City of Norton | |

GRANT TYPE

- Individual PSAP
- Consolidation
- Regional Initiative
- Secondary Consolidation



GRANT PROGRAM TYPE

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Technically Outdated*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If technically outdated or non-vendor supported, application MUST include age and/or version of hardware/software.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

YEARS of HARDWARE/SOFTWARE:

Mapping Displays were purchased in fiscal year 08/09

PROJECT FOCUS GIS: HIGH PRIORITY

If "Other" selected, please specify: 3T

FINANCIAL DATA

Amount Requested: \$ 425,000

Total Project Cost: \$ 429749.56

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 Southwest Virginia 911 Standards Committee was formed in 2011. The committee is comprised of members from Dickenson County, Lee County, City of Norton, and Wise County. The Standards Committee was formed out of the “Southwest” pilot project. Each of these localities now shares the same CAD, CPE, and radio console equipment. The localities are all linked together with redundant connectivity and the ability of each PSAP to backup or duplicate the same environment in each PSAP.

The purpose of this grant is to get the last piece of equipment: the mapping displays all on the same platform and same level of operation. The mapping displays were purchased in fiscal year 08/09 and are technically outdated. Each PSAP has different versions of mapping displays and different software versions running the mapping. It is difficult to troubleshoot CAD interfaces and mapping problems when each PSAP is running different levels of service.

The Southwest Virginia Group is in need of financial funding to upgrade the current dispatch mapping application across all four PSAPs.

Without financial support from the Virginia Wireless E-911 Services Board, it is unlikely that the Southwest Virginia Group – 9-1-1 Map Display Upgrade Project will take place. Budget shortfalls along with local and State budget cuts have made it impossible to fund the upgrade to the 9-1-1 Map Display System in the foreseeable future. Also, the Southwest Virginia Group does not have general funds that it can allocate to upgrade the mapping software and hardware at the Primary PSAPs. The budget forecasts in the Southwest or “coal country” region is very bleak. Coal severance taxes have taken a huge hit in the last few years and local budgets are taking an even bigger hit with numerous layoffs and job losses.

The Southwest Virginia Group has identified this upgrade to be a critical component of our Strategic Plan. The goal has been to regionalize all dispatch efforts into a shared solution. This provides dispatchers from any jurisdiction; (1) the ability to perform daily operations from any PSAP within the region, (2) a common set of tools, allowing easier transition from PSAP to PSAP. Progress has been made towards regionalization for CPE and CAD however the dispatch mapping solution remains localized. Regionalization of dispatch mapping is yet another step towards our Strategic Plan for Southwest Virginia.



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

The Southwest Standards Committee meets regularly and each PSAP shares a portion of the maintenance costs for all the shared equipment. The mapping equipment maintenance and support is already a part of the group. The group serves as a great forum for each PSAP to voice concerns or problems with the equipment and software. Vendors regularly conference in to address any issues the group has. Each PSAP will need to budget maintenance in their individual budgets. A cost flow analysis and projections have been created for each piece of equipment, software, and connections in the PSAPs for the Southwest Standard Committee. The cost flow analysis can be adjusted for the cost of maintenance for the server based mapping system

COMPREHENSIVE PROJECT DESCRIPTION



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:

1. Upgrade the dispatch mapping solution from a desktop solution to a server based solution
2. Provide each PSAP with a dispatch mapping application which is compatible with the latest ESRI Arc10 version release
3. Standardize dispatch mapping software versions across the regional system
4. Enable Advanced ESRI technology for each PSAP.
5. Enable the PSAPs to take advantage of a single dispatch mapping repository.
6. Eliminate the need for high-end GIS hardware at each workstation
7. Regionalize the dispatch mapping tools providing dispatchers with a common application system wide.
8. Allow dispatchers to access their specific jurisdiction from any location within the network based on user login and role
9. Incorporate a role based system allowing administrative control over specific system functionality based on user login and user role
10. Provide a better Common Operating Picture (COP) by allowing user access from any computer connected to the regional network.
11. Allow dispatcher access from any location within the network.
12. Provide Active/Active Geo-diverse Server Redundancy
13. Further CAD/Map integration
14. Provide an easier method of adding additional dispatch workstations as needed.

Implementation Strategy:

We will begin by having local IT staff work with the vendor to identify any needed network connectivity.

Local IT staff will then ensure all required network connectivity is in place.

The vendor will provide full implementation services for Software and Server Hardware components. One Server will be located in Dickenson County. The second server will be located in Wise County.

Once the new system is installed each PSAP will be given access via network connection and web browser. The vendor will then provide full training services for the new system.

**Work Plan:**

Our strategy for implementing the latest GeoLynx 9-1-1 Map Display System is to:

1. Assess the overall cost of the project
2. Collect vendor quotes for hardware and software
3. Consult with vendor on desired implementation schedule
4. Secure funding for the project
5. Ensure Map Data meets vendor specification
6. Secure contracts for software and hardware upon approval of funding
7. Work with local IT staff on installation and networking of new hardware
8. Coordinate with software vendor on installation of new software
9. Establish Software Support and Maintenance agreements with software vendor
10. Initiate and complete acceptance test plan for software

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 |
|---|---------------------------|
| <input type="checkbox"/> INITIATION (Project approved by appropriate stakeholders) | 04 / 15 / 2013 |
| <input type="checkbox"/> DESIGN/PLANNING (Project, system, or solution requirements are developed) | 08 / 01 / 2013 |
| <input type="checkbox"/> ACQUISITION (Selected system or solution is procured) | 10 / 01 / 2013 |
| <input type="checkbox"/> IMPLEMENTATION (Selected system or solution is configured and installed) | 1 / 01 / 2014 |
| <input type="checkbox"/> TESTING/COMPLETION (Selected system or solution is tested and put in production) | 4 / 15 / 2014 |



Identify the longevity or sustainability of the project.

Each PSAP is responsible for individual budgets and funding. Geocomm desktop mapping is already in place in the PSAPs and is an established system for each locality. The funding will be budgeted based on the projected costs for each PSAP. A cost forecast for each piece of equipment and service has been compiled for each PSAP in the Southwest Standards Committee. This is a document that is regularly referenced in the meetings.



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

The Southwest Virginia Group 9-1-1 Map Display Upgrade Project mirrors the vision of the Virginia Statewide E-911 Comprehensive Plan to allow 9-1-1 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 Southwest Virginia or the Commonwealth, at any time of day, and during any event. This project also allows all PSAPs within the regional group to keep up with the rapid pace of technology, innovation, and the constant changes in customer's expectations.

The Southwest Virginia Group has also developed a strategic plan to deal with current and future wireless communication needs in the PSAPs. One of the primary goals of the plan is to ensure that mapping system upgrades are completed on a regular schedule ensuring PSAP mission critical equipment is always kept operational and has maintenance support.

REGIONAL INITIATIVE (if applicable)



The relationship of the initiative to the participating PSAPs:

Each PSAP already has identical CAD, CPE, and radio console equipment. The goal of the Southwest project is for dispatchers to be able to support the other PSAPS in an emergency situation. Also, that in the event that one PSAP goes down, one of the other PSAPs can operate in its place. Each PSAP now shares equipment for all other components of 911. The mapping systems are critical and are the last piece of the puzzle for the Southwest group. The mapping systems are not connected and are not redundant at this time.

Intended collaborative efforts:

The mission of the Standards Committee for the Southwest Virginia Regional E-911 Project is to plan, implement, control, maintain, and upgrade to meet current and future demands so we can provide our communities with a reliant, interoperable emergency communication system that maximizes resources and provides long term savings.

Resource sharing:

The purpose of the Southwest Standards committee is to promote the regional collaboration of the procurement, design and implementation of shared and integrated 911 services and effectuate the cooperative agreement executed by the member jurisdictions.

The Southwest Virginia Group shares many resources that are required by regionalization efforts. This project is a good example. If this project is funded, 9-1-1 Map Display can be shared amongst the participating PSAPs. Additionally, due to the server based technology included in this project, PSAP staff will be able to access the 9-1-1 Map Display solution from any web enabled PC. This project will allow the group to control specific information, GIS Data Layers and GIS Tools which can be shared amongst users throughout the regional network.



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

Members of the Southwest Virginia Group share common operational and strategic plans;

Operational Plan:

While each PSAP's daily operations may vary to some degree they all share common operational elements. By regionalizing critical dispatch tools, dispatchers will have the ability to log into any workstation at any PSAP and have access to dispatch operations in their home jurisdiction.

While the region has implemented CAD/CPE tools for this effort, the 9-1-1 Map Display system has not yet been regionalized. This regional initiative will provide yet another critical component towards this effort for each PSAP involved.

Strategic Plan:

Just as with operational plans, the strategic plan for each PSAP shares the common goal of regionalized public safety efforts for all PSAP involved. This regional effort helps to complete elements common to each PSAP's strategic plan by providing a single, shared 9-1-1 Map Display and common operating picture for dispatcher.

CONSOLIDATION (Primary or Secondary) - (if applicable)

How would a consolidation take place and provide improved service:

3T



How should it be organized and staffed:

3T

What services should it perform:

3T

How should policies be made and changed:

3T

How should it be funded:

3T



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

3T

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:

. A total of 13 workstations will be needed between the four PSAPs. The cost for those workstations will be \$82,317.56.

Below is a brief description of planned expenditures. Please see the attached Vendor Quote for more detail. All components in the vendor quote are required for this upgrade.

1. GeoLynx Enterprise Server Software: Provides the core functional components of the system. This will include two active server licenses for redundancy
2. Server Hardware: Includes two servers for each GeoLynx Server Software License
3. Load Balancer Software: Includes two licenses of load balancing software
4. Load Balancer Hardware: Includes two load balancers enabling geographic redundancy.
5. 13 GeoLynx Server Dispatch Modules: Enables dispatch functionality for the 13 positions include in the Southwest Virginia Group. This also includes 13 backup licenses for redundancy
6. Dispatch CAD Interface: Includes software and services required to interface GeoLynx Enterprise Server with our existing CAD system
7. Installation and Training Services: Includes all installation and training services required for system implementation.
8. Software and Hardware Warrantee: Warrantees include support and maintenance as outlined in the vendor quote



EVALUATION

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

The vendor will be required to submit a detailed project timeline, goals and deliverables as part of the awarded contract. The Southwest Virginia Group conducts periodic meetings for ongoing projects and regional initiatives. This project will be monitored through these meetings. Depending on the specific milestone and related deliverable, vendor representatives will be required to participate in the regional meetings and provide project updates or status reports.

The group will designate one of its members as a project lead. The project lead will work with the vendor to ensure specific goals are met throughout the project.

Payment terms will be based on milestone events. Milestone events will be carefully developed and negotiated before contract signing to ensure the

As part of the implementation plan the vendor will be required to produce and adhere to an acceptance test plan. The project lead will ensure all items in the acceptance test plan have been met. The project lead will also review the acceptance test plan with other members of the group before signing. Final payment will be withheld until the acceptance test plan has been approved and signed



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"

GeoComm

Southwest Virginia Group

GeoLynx Server with Dispatch Add-on Module
Budgetary Quote

October 19, 2012



Southwest Virginia Group GeoLynx Server with Dispatch Add-on Module Pricing

Prices are valid for a period of 90 days.

Cost Proposal Summary

| Description | Grant Classification | One-time Cost | Annual Costs (Five Years) | Total Cost |
|---------------------------------------|----------------------------------|------------------|---------------------------|------------------|
| GeoLynx Server Software | Enterprise Software/ Hardware | \$68,686 | \$86,417 | \$155,103 |
| GeoLynx Server Dispatch Add-on Module | 9-1-1 Mapping Display | \$59,500 | \$86,257 | \$145,757 |
| Dispatch CAD Interface | 9-1-1 Mapping Display | \$30,040 | \$15,532 | \$45,572 |
| GIS Set Up Services | Data | \$1,000 | N/A | \$1,000 |
| Project Total: | | \$159,226 | \$188,206 | \$347,432 |

Optional Items Summary

| Description | Grant Classification | One-time Cost | Annual Costs (Five Years) | Total Cost |
|-------------------------|----------------------------------|---------------|---------------------------|------------|
| GeoLynx Server Hardware | Enterprise Software/ Hardware | \$19,500 | N/A | \$19,500 |

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

Southwest Virginia Group is responsible for paying all applicable sales tax. Taxes will be determined at contract signing.

Software support and maintenance costs are quoted for multiple years (up to five years). Pricing proposed for four additional years increases by only five percent per year after the second year if the services are not paid in full at contract signing, but rather are paid for over the life of the contract. Additional software support and maintenance following the first year can be purchased at the current list price at the time of future purchase if not purchased as part of the original agreement. The current list price at the time of future purchase may be slightly different than the prices quoted in this proposal.

Pricing presented in this quote reflects the total cost of an active/active, geographically redundant GeoLynx Server system with Dispatch Add-on Module and CAD incident display.



Enterprise Software/Hardware

GeoLynx Server Software

| Description | Qty | Total Price |
|---|-------------------|------------------|
| Base Costs | | |
| GeoLynx Server with Network Analyst (active/active system) | 2 active licenses | \$60,716 |
| GeoLynx Server with Dispatch Add-on Module Installation and Training | | \$7,970 |
| Base Costs Total: | | \$68,686 |
| Annual Costs (Year One) | | |
| Annual GeoLynx Server Software Support and Maintenance | | \$16,274 |
| Annual Costs Total (Year One): | | \$16,274 |
| Annual Costs (Years Two - Five) | | |
| Annual Costs Total (Year Two) | | \$16,274 |
| Annual Costs Total (Year Three) | | \$17,088 |
| Annual Costs Total (Year Four) | | \$17,942 |
| Annual Costs Total (Year Five) | | \$18,839 |
| Annual Costs (Years Two through Five): | | \$70,143 |
| GeoLynx Server Total: | | \$155,103 |
| <p>Notes: Server hardware specification capacity is recommended for <100 simultaneous users. Performance is impacted based on a number of things including network performance, map data configuration, and the number of users.</p> <p>The above prices reflect Southwest Virginia Group providing required GeoLynx server hardware. This includes two dedicated web server meeting required specifications and two load balancers comparable to a Barracuda Model 340. If Southwest Virginia Group decides to have GeoComm provide the hardware, the overall price will increase. GeoComm's hardware prices are listed on page five.</p> <p>If Southwest Virginia Group provides the dedicated web servers and they have more than one quad core processor each (four cores of processing) or if more than two servers are utilized in the load balanced system, the software license for GeoLynx Server will increase.</p> <p>ArcGIS Online World Routing Service Subscription is provided with GeoLynx Server if used for non-commercial use. The standard World Routing service includes: 5,000 routes per year, 10 route steps per route, 25 barriers per route, and multilanguage routing directions.</p> | | |

GeoLynx Server Hardware (Optional)

| Description | Qty | Price/Unit | Total Price |
|---|-----|------------|-----------------|
| Dell PowerEdge R610 Server with 3-Year Dell ProSupport | 2 | \$5,600 | \$11,200 |
| Barracuda Load Balancer 340 with 3-Year Energize Updates | 2 | \$3,000 | \$6,000 |
| Optional 3-Year Instant Replacement of Barracuda Load Balancer 340 | 2 | \$1,150 | \$2,300 |
| Hardware Total: | | | \$19,500 |
| <p>Notes: GeoComm will purchase and configure the GeoLynx Server hardware and then ship it to Southwest Virginia Group regional dispatch centers. The cost of shipping is included in the price listed above.</p> <p>Southwest Virginia Group is responsible for installation of the GeoLynx Server hardware.</p> <p>GeoComm does not provide support or maintenance for the GeoLynx Server hardware. Southwest Virginia Group is responsible for coordinating with Dell or Barracuda regarding any support or maintenance issues related to the server or load balancing hardware.</p> | | | |



9-1-1 Mapping Display

GeoLynx Server Dispatch Add-on Module

| Description | Qty | Total Price |
|---|-----|------------------|
| Base Costs | | |
| GeoLynx Server Dispatch Add-on Module | 13 | \$58,500 |
| Dispatch Add-on Module Installation and Training | | \$1,000 |
| Base Costs Total: | | \$59,500 |
| Annual Costs (Year One) | | |
| Annual GeoLynx Server Dispatch Add-on Module Software Support and Maintenance | | \$16,244 |
| Annual Costs Total (Year One): | | \$16,244 |
| Annual Costs (Years Two - Five) | | |
| Annual Costs Total (Year Two) | | \$16,244 |
| Annual Costs Total (Year Three) | | \$17,056 |
| Annual Costs Total (Year Four) | | \$17,909 |
| Annual Costs Total (Year Five) | | \$18,804 |
| Annual Costs (Years Two through Five): | | \$70,013 |
| Dispatch Add-on Module Total: | | \$145,757 |



Dispatch CAD Interface

| Description | Qty | Price/Unit | Total Price |
|---|-----|------------|-----------------|
| Base Costs | | | |
| Dispatch CAD Interface Development Services (see CAD incidents add/removed from CAD-auto refresh) | | | \$17,250 |
| Standard Dispatch CAD Interface | 13 | \$830 | \$10,790 |
| Remote Installation and Configuration | | | \$2,000 |
| Base Costs Total: | | | \$30,040 |
| Annual Costs (Year One) | | | |
| Annual Standard Dispatch CAD Interface Support | | | \$2,925 |
| Annual Costs Total: | | | \$2,925 |
| Annual Costs (Years Two - Five) | | | |
| Annual Standard Dispatch CAD Interface Support (Year Two) | | | \$2,925 |
| Annual Standard Dispatch CAD Interface Support (Year Three) | | | \$3,071 |
| Annual Standard Dispatch CAD Interface Support (Year Four) | | | \$3,225 |
| Annual Standard Dispatch CAD Interface Support (Year Five) | | | \$3,386 |
| Annual Costs Total: | | | \$12,607 |
| Dispatch CAD Interface Total: | | | \$45,572 |

Notes: Fees, if applicable, from your CAD vendor are not included in the above pricing.

CAD Interface development services pricing assumes the CAD vendor has the necessary data within the CAD system and will make it accessible to GeoComm.

The Dispatch CAD Interface will be installed and configured remotely by GeoComm's software development and testing staff. Southwest Virginia Group must make remote connections available on the system servers.

Pricing for development services is based off of Spillman API version 4.0.0 from January 2008 and includes the following assumptions:

- All position IDs across the region are unique.
- Position ID list is the same on both ALI controllers.
- ALI comes in via standard Serial or TCP connections.
- Both ALI controllers output the ALI in the same format.
- Spillman CAD Server will allow two clients to connect simultaneously.
- CAD will include jurisdiction to differentiate incidents between PSAPs.
- GeoComm will ignore CAD data not necessary for normal map display (minimum fields processed: caller name, incident number, incident type, address, community, ESN, jurisdiction).
- GeoComm will query Spillman CAD on configurable timer and not real time (dependent on number of active incidents, network and server capacity).
- All active CAD calls are in the same table in Spillman CAD.
- The CAD interface will display active incidents and not unit assignments (communication will be from Spillman CAD to GeoLynx Server only).
- Spillman will provide XML schema documents for development and testing and allow remote access to Spillman test server.
- The CAD interface will search for only active calls in the Spillman CAD system.
- All call data is located in one table/view.



Data

GIS Set Up Services

| Description | Total Price |
|------------------------------------|-------------|
| Base Cost | |
| GeoLynx Server GIS Set Up Services | \$1,000 |

