

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

Click here to enter text

GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: Montgomery County

CONTACT TITLE: GIS Manager

CONTACT FIRST NAME: Robert

CONTACT LAST NAME: Pearsall

ADDRESS 1: 755 Roanoke Street

ADDRESS 2: Suite 2A

CITY: Christiansburg, VA

ZIP CODE: 24073

CONTACT EMAIL: pearsallrj@montgomerycountyva.gov

CONTACT PHONE NUMBER: 540-394-2148

CONTACT MOBILE NUMBER: Click here to enter text

CONTACT FAX NUMBER: 540-381-8897

REGIONAL COORDINATOR: Tim Addington

HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

Montgomery County

Town of Blacksburg

Town of Christiansburg

Virginia Tech

GRANT TYPE

Individual PSAP

Consolidation

Regional Initiative

Secondary Consolidation



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 Montgomery Regional Area PSAPs included in this grant application have identified a critical need to improve 911 emergency responses within and across jurisdictional boundaries. For mutual aid, regional responses and daily operations, 911 call takers are required to dispatch emergency personnel across jurisdictional boundaries. It is imperative to have a mechanism in place to more fully assimilate, use, and automate the sharing of GIS data used by the PSAPs. This project will improve PSAP dispatcher actions, first responder response times and foster higher PSAP service levels for the benefit of our citizens and visitors.

With current economic times every jurisdiction must make difficult decisions allocating dollars and preparing budgets. Each PSAP partner in this regional project is no exception. Declines in local tax revenue, increased contention for existing monies, reductions in state funding and unforeseen demands for crucial services make it extremely difficult for the regional PSAP partners to budget funds for new capital expenditures. The PSAP Grant Program is a preeminent source available to PSAPs to offset funding impacts as we move forward in these uncertain times.

Our local government partners face severe funding challenges and unforeseen operational expenditures. They work diligently to maintain fiscally accountably to maintain the high levels of public safety services provided to the community.

An important aspect of this project is to ensure our state emergency management and public safety and fire/rescue entities have full advantage of the services we create and use of the PSAP data repository.

This project and grant request is submitted under the Continuity and Consolidation Program.



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

The regional partners have involved multiple disciplines from each jurisdiction/entity in their discussions and planning for this GIS data sharing collaboration and repository project which includes Administrators, PSAP personnel, GIS Managers/Coordinators/Analysts and IT staff. This collaboration will ensure full support for this regional project and identified the roles and responsibilities of everyone involved.

Due to continued local funding and budget constraints, the regional PSAP partners request procurement and sustainability of this project for a period of five years.

A letter of intent will be provided. A project team made up of the regional PSAPs and county/town/university GIS experts will be established to conduct regular calls and/or meetings during each phase of the project.

Montgomery County will act as fiscal agent and adhere to all PSAP Grant requirements.

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.

Montgomery County, the Towns of Blacksburg and Christiansburg, Virginia Polytechnic Institute and State University desire to implement a regional GIS data sharing collaboration and repository project that will allow each locality and state emergency management, public safety, and forestry agencies access crucial data for emergency response.

The project will streamline the process for updating GIS data between localities, 911 applications and the VGIN VBMP program by improving GIS data sharing and consistency to provide dispatchers with a uniform, seamless map view of the included jurisdictions. The jurisdictions use ESRI's ArcGIS software (Desktop and/or Server) to manage their geospatial data, but do not have a system for merging data between jurisdictions or creating a seamless geodatabase. The project's primary focus will be on the manipulation, standardization, and unification of road centerline, address building point, and address building polygon datasets from each jurisdiction.

The system will help foster accurate location information for wireless 911 callers and improve response times within the region. The project team will select a vendor to design a system to automate the extraction and integration of each localities GIS data into a common geodatabase. This process will entail a scheduled or on-demand data transfer for daily or weekly updates as determined appropriate by the project team.

The project will also create a secured repository to permit the regional PSAPs to share GIS data efficiently. This secured repository would be available to state emergency management, public safety, and fire/rescue agencies.

Current PSAP 911 application vendors for CAD and display mapping will be included to ensure proper configuration.



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 checked="" type="checkbox"/> INITIATION (Project approved by appropriate stakeholders)	12 / 20 / 11
<input type="checkbox"/> DESIGN/PLANNING (Project, system, or solution requirements are developed)	05 / 01 / 12
<input type="checkbox"/> ACQUISITION (Selected system or solution is procured)	08 / 01 / 12
<input type="checkbox"/> IMPLEMENTATION (Selected system or solution is configured and installed)	11 / 01 / 12
<input type="checkbox"/> TESTING/COMPLETION (Selected system or solution is tested and put in production)	02 / 01 / 13

**Identify the longevity or sustainability of the project.**

This project will create a system including a strategic plan to design and implement a regional GIS data sharing and repository project that will become part of a strategic plan for participating PSAPs. The project will strengthen current procedures and offer more effective work processes that ultimately could save time and lives. The participants are committed to this project and will make plans to maintain it beyond the original procurement and pre-paid maintenance and support of 5 years.

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

This project supports the Virginia Statewide E-911 Strategic Comprehensive Plan by implementing a project that improves 911 response and location information for wireless 911 callers needing assistance.

REGIONAL INITIATIVE (if applicable)**The relationship of the initiative to the participating PSAPs:**

The regional GIS data sharing and repository project is crucial for the participating PSAPs to continue to provide a high level of service and response for all emergency requests. The PSAPs collaborating on this regional project dispatch field units across jurisdictional boundaries on a routine basis using emergency service zones, mutual aid agreements and regional response. Police, Fire and Rescue units are often dispatched as a secondary or back-up response for emergency calls. Therefore, accurate and up to date GIS data is critical for their daily operations.

**Intended collaborative efforts:**

This project will include collaboration across jurisdictional boundaries, local government agencies and public safety disciplines as well as state agencies such as VGIN, VITA, Emergency Management, and State Police. This effort will demonstrate the multiple benefits for working collectively toward a common goal by local and state government entities.

An important aspect of this project is the creation of secured ArcGIS Server based services available to our regional partners, neighboring jurisdictions, and state emergency management and public safety entities.

Resource sharing:

The PSAP project partners will share any available resources needed to successfully design and implement this regional project. This will include, but not be limited to knowledge, methodologies, personnel, equipment and services.

Through regional resource sharing and uniform GIS data utilization by the partner PSAPs we anticipate a less costly project than proposed in the previous grant submission.



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

This GIS data sharing and repository project is a key component in the operational and strategic plan for each participating PSAP. In order to continue the level of service and response on emergency calls, it is imperative that PSAP 911 dispatchers have full access to a uniform and up-to-date GIS data within and surrounding their borders. Daily operations and procedures require the need to dispatch responders across jurisdictional boundaries for assistance, secondary response or mutual aid, therefore the exhausting process of manually correlating and converting each PSAP's mapping data can be avoided.

PSAP operations and procedures in many cases require the call takers to dispatch responders across jurisdictional boundaries for first line assistance, secondary response or mutual aid. Therefore each PSAP needs a uniform set of data to be commonly used. The exhausting process of manually correlating and converting each PSAP's mapping data needs to be done with the utmost in automation. As the PSAP partners move forward with regional collaboration, uniform GIS data is critical to each PSAP.

CONSOLIDATION (Primary or Secondary) - (if applicable)

How would a consolidation take place and provide improved service:

Not Applicable

How should it be organized and staffed:

Not Applicable



What services should it perform:

Not Applicable

How should policies be made and changed:

Not Applicable

How should it be funded:

Not Applicable



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

Not Applicable

BUDGET AND BUDGET NARRATIVE

List the planned expenditures to be made with grant funds. (NOTE: In lieu of a line item breakdown, an itemized cost schedule or detailed vendor prepared quote may be submitted as an attachment.) Briefly explain the reason for each requested budget item and provide the basis for its cost:

The regional partners have received a budgetary estimate for uniform GIS data sharing and repository project. A separate project description and spreadsheet will be attached to this application with the budgetary quote based upon project objectives.



EVALUATION

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

The regional PSAP partners will establish a project team to evaluate each phase of the initiative. The project's success will be measured in several areas.

1. Identifying and selecting a qualified vendor to assist with the design and implementation.
2. Identify and data services to be reviewed and merged.
3. Improved work processes accomplished with hardware and software upgrades or procurement.
4. Improved productivity and time management for PSAP, GIS and IT personnel for data sharing/transfer.
5. Effective call processing, dispatch and response from improved local and regional data.
6. Improved process for data sharing with state programs.
7. Thorough testing and implementation plan.
8. Training and documentation for all aspects of the project.
9. Final acceptance and cut-over.



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"



Project Description

The County of Montgomery, the Towns of Blacksburg and Christiansburg, and Virginia Polytechnic Institute and University seek to improve GIS data sharing and consistency, in order to provide PSAP dispatchers and call takers with a uniform, seamless map view of the included jurisdictions fully integrated with CAD. The jurisdictions use ESRI's ArcGIS software (Desktop and/or Server) to manage their geospatial data, but do not have a system for merging data between jurisdictions or creating a seamless geodatabase. The project's primary focus will be on the manipulation, standardization, and unification of road centerline, address building point, and address building polygon datasets from each jurisdiction.

This project will accomplish the following objectives:

1. Data Manipulation and Unification

- a. Review current data formats / standards in use at each jurisdiction's GIS department, and in each jurisdiction's Computer-Aided Dispatch (CAD) software. Also review current (and incubating) standards at the regional, statewide, and federal levels, so as to determine the extent to which this project can be aligned with these efforts.
- b. Develop a process to merge the separate jurisdictions' data into a regional dataset that can be used by all the jurisdictions, as well as adjacent localities and the state.
- c. Create a computer program (or system) that automates the process of collecting current data from each jurisdiction, merging the datasets, and then distributing the merged dataset back to each jurisdiction.
- d. Install this program (or system) on Montgomery County's ArcGIS server, where it should run on a scheduled and/or on-demand basis. Depending on the design of the system, it may also be installed on other jurisdictions' server(s).
- e. Select (or design) an appropriate distribution method and cartographic display for the regional dataset that will be appropriate for use in mapping displays currently used by dispatchers.



2. Web Mapping

- a. Implement secured web mapping services based on the regional dataset, to be hosted on jurisdictional ArcGIS servers; the map services should be designed for compatibility with existing mapping displays that have the ability to consume such map services.
- b. Develop a stand-alone webpage for viewing the secured web mapping services in a standard web browser.

Creating a uniform set of data will improve PSAP dispatcher decision-making and emergency management, public safety, and fire/rescue dispatch activities including mutual-aid responses.

By creating a uniform geodatabase for the full extent of all the participating jurisdictions, this project will also support training activities that may be conducted during the transition from separate dispatch centers in each jurisdiction to a proposed regional dispatch center.

Since the data formats and software (ESRI ArcGIS) used in this project are widely-supported, the results of this project should also be useful in participation with other regional partners and the state entities. For example, the map data and server infrastructure involved the creation of the web mapping services may be utilized in mobile mapping applications.



Proposed Project Budget Estimate 10/25/2011

**VIRGINIA E-911 SERVICES BOARD PSAP GRANT APPLICATION FOR
MONTGOMERY COUNTY, TOWNS OF BLACKSBURG & CHRISTIANSBURG,
VIRGINIA POLYTECHNIC INSTITUTE AND UNIVERSITY**

Base Project - 1: Data Manipulation and Unification	\$39,000
Format Review	
Merge Process Design	
Programming	
Installation	
Distribution to Dispatcher Displays	
<u>Pre-paid Maintenance/ Support for 5 years</u>	\$24,000
Base Project - 2: ArcGIS Enterprise Server, SQLServer dB, & IT hardware	\$33,000
Data sharing & repository server hardware for enterprise server	
ArcGIS Enterprise server application	
SQLServer database (dual processor)	
<u>Pre-paid Maintenance/ Support for 5 years</u>	\$20,000
Base Project - 3: Transactional Web Services Mapping Application	\$8,100
Implement secured web mapping services	
Develop stand-alone viewer	
<u>Pre-paid Maintenance/ Support for 5 years</u>	\$24,000

Grand Total \$148,100