

## PSAP Grant Program Grant Ranker

# View Application--107--Regional Replication

**Grant Period:** 2010

**Tier:** Replacement of technically outdated wireless E-911 equipment or service to enable primary PSAP to maintain current service levels to the general public (**TECHNICALLY OUTDATED**)

**Grant Program:** Continuity and Consolidation **Grant Type:** Regional Initiative

**Priority:** GIS: high priority (refer to GIS-related Grant Request Prioritization Matrix for a description of GIS projects that would have a high funding priority) (**GIS HIGH PRIORITY**)

**Primary PSAP Applicants:** Campbell County  
**Jurisdictions Served:** Altavista, Town of  
Amherst, County of  
Amherst, Town of  
Appomattox, County of  
Brookneal, Town of  
Campbell, County of  
Lynchburg, City of

### Project Director:

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### Project Description:

**Total Project Cost** \$624,700.00

**Amount Requested:** \$624,700.00

### Statement of Need:

Replication – Statement of Need We are requesting this as a regional grant under the Continuity and Consolidation Program. Successful accomplishment of this project will improve the participating PSAP's ability to respond to wireless and wireline calls within their area and in the other participating PSAPs. Successful accomplishment will also enable the participating PSAPs to have a reliable and sustainable catastrophic backup resource. In addition, this project will be performed taking maximum advantage of the statewide VBMP data products thus enabling the efficient data sharing with the State. Consequences of not receiving funding This project is reliant upon the award of the grant funding described in the budget section below. Should grant funding not be awarded or is significantly reduced from the requested amount, this project will not be undertaken. Impact on Operational Services Participating PSAPs will benefit through the establishment of a common geospatial landscape. Operationally, this will enable the automated update of roads, structures, addressing, etc. in a near-real time environment. This would aid call takers and dispatchers to locate wireless calls using current data within and outside their locality. In addition, this project will simplify the loading of data updates into the PSAP mapping systems through the use of standard adaptors. These data adaptors provide the mapping update data in the specific format and content necessary to be consumed by the mapping system.

### Comprehensive Project Description:

**Replication – Project Description** Our participating PSAPs desire to implement a project that will streamline the process of sharing data between PSAPs. This can occur with near-real time geospatial updates of critical infrastructure and address layers using ArcGIS Server replication. In addition, any disparate data sets can be consolidated using geoprocessing (GP) tasks, facilitating the consumption of these layers into the PSAP's mapping system. This grant project will enhance our PSAPs ability to assist each other with mutual aid, provide effective regional response, backup each other's critical data, and provide backup emergency dispatch capability. Participating localities would like to streamline the process of data sharing with other localities and the state. Through the use of an ArcGIS Server geodata service, localities can efficiently share data with the state VITA VBMP program. Through similar geodata services, localities can acquire data for other jurisdictions. Prior to enabling replication in the participating PSAP's, software systems and capabilities of those involved will be evaluated and upgraded where necessary. Evaluation will include ESRI versions and licensing, mapping display capabilities and conformance, and mapping display rendering assistance. Upgrades in versions, licensing, and mapping will also fall into this category. **Implementation Strategy and Work plan** We anticipate this project will include: 1. Securing a geospatial consultant to assist in project planning and execution 2. Assessment of the current PSAP and GIS systems and requirements to enable ESRI ArcGIS Server Replication for participating PSAPs. 3. Data standardization to support the individual PSAP mapping / CAD systems 4. Development of work processes required to automate the data update in each locality and replication to the PSAP mapping systems 5. Configuration of a Geodata service providing two way replication between participating PSAPS 6. Configuration of a Geodata service providing replication between the PSAP and VITA 7. Procurement of necessary hardware and software to enable the successful project 8. Training and documentation on the installation, setup, and configuration of any GP tasks and replication services **Project Timeline (days from grant award)** • 60 – Contract with consultant • 120 – Complete current PSAP and GIS systems and requirements assessment and specification • 210 – Complete data standardization and development of work processes. Procurement of necessary hardware and software. • 240 – Implementation at PSAPs • 260 – Project closeout and report **Project Sustainability** It is anticipated that the automated process will remain in place unless there is a significant industry change. The sustainability of the project will remain a central focus of the project participants by the driving force of need for up-to-date geospatial data. All entities involved are prepared to fund long-term changes of the collaborative system in the event of upgrades or product changes.

### **How will the equipment purchased will support future technologies for PSAP readiness?:**

The equipment and services purchased under this grant will provide the PSAP with the ability to improve the emergency response by enabling the participating PSAPs to have a reliable and sustainable catastrophic backup resources.

### **Budget and Budget Narrative:**

budget attached

### **Evaluation:**

Evaluation data will be collected throughout the project as specific milestones are achieved. The data sources will include regular project status reports, milestone testing and acceptance documents, and final project acceptance documents. Project milestones and status reports will follow our specific work plan: 1. Securing a geospatial consultant to assist in project planning and execution 2. Assessment of the current PSAP and GIS systems and requirements to enable ESRI ArcGIS Server Replication for participating PSAPs. 3. Data standardization to support the individual PSAP mapping / CAD systems 4. Development of work processes required to automate the data update in each locality and replication to the PSAP mapping systems 5. Configuration of a Geodata service providing two way replication between participating PSAPS 6. Configuration of a Geodata service providing replication between the PSAP and VITA 7. Procurement of necessary hardware and software to enable the successful project 8. Training and documentation on the installation, setup, and configuration of any GP tasks and replication services As part of the overall project, a Project Management Document shall be developed that incorporates each stage of the project, and provides an audit trail associated with final outcomes, final project metrics, and achievement of specific project goals.

### **Attachments**


[RegionalReplication\\_Budget.pdf](#)

## Budget and Budget Narrative Section

### *Budget and Budget Narrative - Purpose*

<b>Task</b>	<b>Fee</b>
<b>Site Review and Implementation Planning</b>	\$ 55,721
Assessment	
Site specific design	
Documentation development and approval	
<b>Replication Workflow Designs and Set-up / Models</b>	\$ 162,430
Replication Model Design (GIS to PSAP)	
Replication Model Design (GIS to VITA))	
Data Workflows GeoProcessing Model to PSAP	
<b>Applications Development</b>	\$ 139,242
Replication Tools (Locals)	
Incoming QA / QC Application	
ETL Tool Development	
Interface for GeoProcessing Models to PSAP	
Outgoing QA / QC Application	
<b>Mapping Software Upgrades for Replication</b>	\$ 117,300
<b>Implementation</b>	\$ 95,589
<b>Testing, Training, and Documentation</b>	\$ 54,419
<b>Total Project</b>	<b>\$ 624,700</b>