



**FY18**

# **PSAP GRANT PROGRAM APPLICATION**



VIRGINIA INFORMATION  
TECHNOLOGIES AGENCY  
Integrated Services Division



## FY18 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 the electronic mailbox for grant applications - [psapgrants@vita.virginia.gov](mailto:psapgrants@vita.virginia.gov). Any supporting documentation must also be submitted along with the application when making your grant application submission.

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 FY18 PSAP Grant Application Cycle starts July 1, 2016 and concludes on September 30, 2016 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.**



## FY18 PSAP GRANT APPLICATION

### PROJECT TITLE

Middle Peninsula RRCL – Phase 2

### GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: King and Queen County, VA

CONTACT TITLE: Emergency Services Coordinator

CONTACT FIRST NAME: Greg

CONTACT LAST NAME: Hunter

ADDRESS 1: 242 Allens Circle, Suite L

ADDRESS 2: P.O. Box 177

CITY: King and Queen C.H.

ZIP CODE: 23085

CONTACT EMAIL: ghunter@kingandqueenco.net

CONTACT PHONE NUMBER: 804.785.5975

CONTACT MOBILE NUMBER: 804.769.5000

CONTACT FAX NUMBER: 804.785.5999

REGIONAL COORDINATOR: Lyle Hornbaker

### HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

**King and Queen County, VA**

**Mathews County, VA**

**Essex County, VA**

**King William County, VA**

**Gloucester County, VA**

**Richmond County, VA**

**Middlesex County, VA**

**Lancaster County, VA**

### GRANT TYPE

Individual PSAP

Shared Services



## TIER

- |   |   |
|---|---|
| <input type="checkbox"/> Out of Service                   | <input checked="" type="checkbox"/> Non-Vendor Supported* |
| <input checked="" type="checkbox"/> Technically Outdated* | <input type="checkbox"/> Strengthen                       |
| <input type="checkbox"/> Not Applicable                   |   |

**If technically outdated or non-vendor supported, application MUST include age and/or version of hardware/software.**

VERSION:

# YEARS of HARDWARE/SOFTWARE:

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King and Queen County, along with its partnering localities, are proposing this project under the Technically Outdated Tier. Many localities in Virginia are already using this technology as a result of grant funding, thus the Middle Peninsula RRCL Region is technically outdated in NG-911 preparation and mutual aid ability. Many localities participating in this grant application are lacking the tools to complete this type of analysis within their own jurisdictions independently, and do not have the licensing capability to share data in an effective, timely manner.

**PRIORITY/PROJECT FOCUS** NG 9-1-1 GIS

## FINANCIAL DATA

Amount Requested: \$ 515,728.86

Total Project Cost: \$ 645,369.86

Please note, the difference between the Amount Requested and the Total Project Cost is \$129,641 which was awarded to Phase 1 of this project in the FY17 cycle. The difference in original Phase 2 pricing submitted in FY17 is due to the addition of three new localities, and adding recommended 10% contingency.



## PROJECT DESCRIPTION

King and Queen County, with the supporting Counties of Gloucester, Essex, Mathews, Middlesex, King William, Richmond, and Lancaster, are submitting a grant for the Phase 2 Implementation of the Middle Peninsula Regional Routable Project. Phase 1, which is currently under way and on schedule, is currently funded under the FY17 cycle of this grant program. Originally, the project was comprised of only King and Queen, Gloucester, Essex, Mathews, and Middlesex. In Phase 2, the project will be expanding its regional capability with the additions of King William, Richmond and Lancaster. For these localities, some of the tasks that were originally performed for the 5 localities will have to be performed on a smaller scale to incorporate the 3 new localities. Some other services originally priced in Phase 1 were raised slightly to incorporate the new localities as well, which overall will account for the difference in the project price compared to our original submission for the FY17 funding cycle. Phase 2 of this project will continue to establish a seamless regional GIS repository to support NG-911 and possible PSAP consolidations over the next several years. The needs of this grant are driven by mutual aid, and a desire by the localities to begin the process of regionalizing more public safety initiatives. To improve upon the regional efforts that have been completed under this grant program to date, the Middle Peninsula RRCL will have a newer, cloud-based hosting environment as well as providing data analysis functions through the regional server, and not on the desktops of localities. These changes will require less software licensing and staff time on behalf of the participating localities. Upon successful completion of the project, the Middle Peninsula will continue to incorporate additional localities and will encourage even more of their neighbors to become involved in the future to strengthen the safety of an increasing number of Virginia citizens as well as those visiting the Commonwealth. Without grant funding, this important initiative will not go further than the Phase 1 process with this program chose to fund in FY17, meaning new localities cannot be incorporated and the project itself will not be completed. Providing a regional data model and GIS repository is the foundation of many important future advancements in this region.



## PROJECT GOAL

Describe how this project addresses locally identified need(s) and supports the Virginia 9-1-1 Comprehensive Plan:

The first goal fulfilled by this project is the achieving the level of emergency dispatch services to the public: “When achieved, this goal will provide consistent 911 emergency dispatch services to anyone residing or passing through the Commonwealth, at any time of day, and during any event. Consistent service means that all 911 centers can receive, process and dispatch calls in a dependable and repeatable manner.” The second goal of the project achieves is to continuously meet the public’s expectations, which “will allow Virginia to keep up with the rapid pace of technology innovation and therefore the constant changes in customers’ expectations.” This project lays the ground work for NG-911 as well as regional consolidation, which is what the public expects – to reach 911 by any means necessary when in need of help.



## PROJECT OBJECTIVES

Describe the objectives that will support the goals identified above:

The objectives of this project is to create a regional GIS repository, and create a new database for regional data sharing, following new standards established by VGIN and NENA in preparation for NG-911 and mutual aid. Each locality will be able to upload data to the Regional Server and Data Reviewer checks will be performed on the server rather than on each localities' individual machines, thus enabling cost savings to each locality. Data Reviewer will notify the users of the data's quality and issue warnings.

Step by step project objectives are described below:

- Task 1 - Integrate New Localities (3) into Middle Peninsula Regional Project
- Task 2 - Geoprocessing All Localities (8)
- Task 3 – Set Up Regional Server
- Task 4 – Set Up Exchange Portal
- Task 5 – Implement Hardware and Software Solutions

## SHARED SERVICES (if applicable)

Describe the relationship of the project to the participating PSAPs:

The relationship of the project to the participating PSAPs:

King and Queen County will act as the host locality for this application, as well as the licensing and hosting requirements from Amazon Web Services and Esri. In Phase 1, each locality submitted an MOU for the entirety of this project, and for the Phase 2 application we have included the signed MOU's from new localities entering into this partnership: King William County, Richmond County and Lancaster County.



Describe the intended collaborative efforts and resource sharing opportunities:

The MidPenRRCL partners will meet on a continuous basis to ensure that all localities are part of the process as the project is planned, implemented, and maintained. The MidPenRRCL members are also open to sharing data with other localities that are not involved at this time, and are open to including more localities in the future.

This project will also work in full cooperation with VGIN to ensure that they are meeting the standards that Virginia sets, and are able to share their project lessons with each other to continue increasing the benefits of shared services projects to the Commonwealth.

King and Queen will host the Resources through Amazon Web Services and every locality participating will have equal access and ability within the regional dataset. The tools created will reside in the server environment, and not within one locality, giving each access to same technology and software.

This project will enable the partners of the Middle Peninsula RRCL initiative to improve operational efficiency and data sharing. It will also further the region's early planning processes for NG-911 and consolidation.



**IMPLEMENTATION PLAN  
SHARED SERVICES & INDIVIDUAL PSAP APPLICATIONS:**

For each applicable phase of the project, indicate the planned completion date.

<b>PROJECT PHASE</b>	<b>PLANNED COMPLETION DATE</b>
<b>INITIATION</b> – 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>09 / 30 / 16</b>
<b>DESIGN/PLANNING</b> - Requirements are documented, components to be purchased are identified, and general design is documented.	<b>09 / 29 / 17</b>
<b>ACQUISITION</b> - RFP (or other bid related processes) are drafted, proposals are evaluated, contract is signed, purchase orders are issued, and quotes are obtained.	<b>02 / 02 / 18</b>
<b>IMPLEMENTATION</b> - Purchased components are delivered and installed and training is performed	<b>06 / 08 / 18</b>
<b>TESTING/COMPLETION</b> - Performance of system/solution is validated and system/solution goes “live”	<b>07 / 06 / 18</b>



## BUDGET AND BUDGET NARRATIVE

### Task 1 - Integrate New Localities into

Requirements Gathering for New Localities	\$5,760.00
Integrate Richmond, King William, and Lancaster into Regional Data Model	\$10,357.80
Data Reviewer Checks	\$4,218.60
Initial Corrections to GIS Data	\$6,748.20
ETL Process to Regional Model	\$25,496.40
ETL Process to Locality Model	\$13,141.80
Testing of Tools	\$14,941.80

### Task 2 - Geoprocessing New Localities

Python Intake / Output Process Richmond, King William, and Lancaster	\$79,441.60
Reporting Tools	\$27,940.80
Notification Tools	\$27,940.80

### Task 3 - Regional Server

Configure Server Environment	\$13,093.30
Configure ArcGIS Server	\$11,826.10
Configure SDE Database	\$8,020.10

### Task 4 - Exchange Portal

Develop Exchange Portal	\$16,214.40
Design Mock Up and Wireframe	\$3,977.60
Develop Testing Plan	\$5,304.00
Development	\$34,081.30
Deployment	\$25,325.30

### Task 5 - Hardware, Software and Maintenance Requirements

Esri Enterprise Standard Server			\$18,000.00	
Esri Enterprise Standard Server Data Reviewer Extension			\$9,000.00	
Esri Enterprise Standard Server Maintenance - 5 Years			\$25,750.00	
Esri Enterprise Standard Server Data Reviewer Extension Maintenance - 5 Years			\$12,875.00	
AWS Reserved Instances Fee (Windows on m4.xlarge)			\$2,775.00	
AWS Reserved DB Instances Fee (PostgreSQL on db.m3.xlarge)			\$2,105.00	
AWS Monthly Services				
	<i>DEB Volumes</i>	<i>\$8.00</i>	<i>12 months</i>	<i>\$96.00</i>
	<i>Elastic Load Balancer</i>	<i>\$18.30</i>	<i>12 months</i>	<i>\$219.60</i>
	<i>Elastic Load Balancer Data Processing</i>	<i>\$0.08</i>	<i>12 months</i>	<i>\$0.96</i>
	<i>S3 AMI Storage</i>	<i>\$15.00</i>	<i>12 months</i>	<i>\$180.00</i>
	<i>RDS Storage</i>	<i>\$4.03</i>	<i>12 months</i>	<i>\$48.36</i>
	<i>RDS Backups (2 weeks, 5 min granularity)</i>	<i>\$95.00</i>	<i>12 months</i>	<i>\$1,140.00</i>



Complete AWS Solution Maintenance - 5 Years	\$32,824.60
Data Exchange Portal and Database Maintenance - 5 Years	\$30,000.00
<b>Contingency 10%</b>	<b>\$46,884.44</b>
	<b>Phase 2 Project</b>
	<b>Total</b>
	<b>\$515,728.86</b>

## EVALUATION

How will the project as identified in the project description be evaluated and measured for achievement and success:

The success of the project will be measured by the milestones we reach upon completion of each task in Phase 2:

- Task 1 - Integrate New Localities (3) into Middle Peninsula Regional Project
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Localities will all report their individual progress with King and Queen County on a regular basis. Weekly and/or monthly project meetings will occur over the duration of the project with stakeholders from all eight participating localities to ensure that successful completion and ultimately the benefits provided by this opportunity are achieved.



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



**CONSOLIDATION (Primary or Secondary) - (complete only if applicable) – con't**

How should it be funded:

Not applicable

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

Not applicable



# MEMORANDUM OF UNDERSTANDING

## FY 18 GRANT APPLICATION FOR THE MIDDLE PENINSULA DATA SHARING PROJECT

The Counties of King and Queen, Gloucester, Middlesex, Mathews, and Essex are collectively working on Phase 1 of a 2-Phased project that is being funded through the FY17 PSAP Grants coordinated by VITA/VGIN. This project is based on a shared services grant for provisioning of regional GIS data to support mutual aid routing and data sharing of other essential E911 and future NG911 feature data. The solution will follow the guidelines of previously successful projects around the state while in compliance with VITA/VGIN standards for sharing data across localities.

This MOU addresses the Phase 2 FY18 PSAP Grant Program Application, in which some additional localities are choosing to join this project. This MOU serves as the official intent of each of the new jurisdictions joining the project to participate jointly in submitting and supporting this shared service request.

The Hosting Locality for this grant is King and Queen County and thus King and Queen will be making the official funding request. King and Queen will be the fiscal agent for receipt and disbursement of grant funds, and will provide overall coordination to ensure that each participant fulfills the grant requirements.

In addition to King and Queen, Gloucester, Middlesex, Mathews and Essex Counties, this project now includes the Counties of King William, Richmond, and Lancaster.

King William County:

Printed Name	Title	Signature	Date
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Richmond County:

Printed Name	Title	Signature	Date
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Lancaster County:

Terrence McGregor	Chief of Emergency Services		9/29/16
Printed Name	Title	Signature	Date



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King William County:

_____	_____	_____	_____
Printed Name	Title	Signature	Date

Richmond County:

<i>R. Morgan Quicke</i>	<i>County Admin</i>		<i>9-28-2016</i>
Printed Name	Title	Signature	Date

Lancaster County:

_____	_____	_____	_____
Printed Name	Title	Signature	Date



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King William County:

<u>SANFORD B. WANNER</u>	<u>INTERIM COUNTY ADMINISTRATOR</u>	<u><i>Sanford Wanner</i></u>	<u>9/23/16</u>
Printed Name	Title	Signature	Date

Richmond County:

_____	_____	_____	_____
Printed Name	Title	Signature	Date

Lancaster County:

_____	_____	_____	_____
Printed Name	Title	Signature	Date