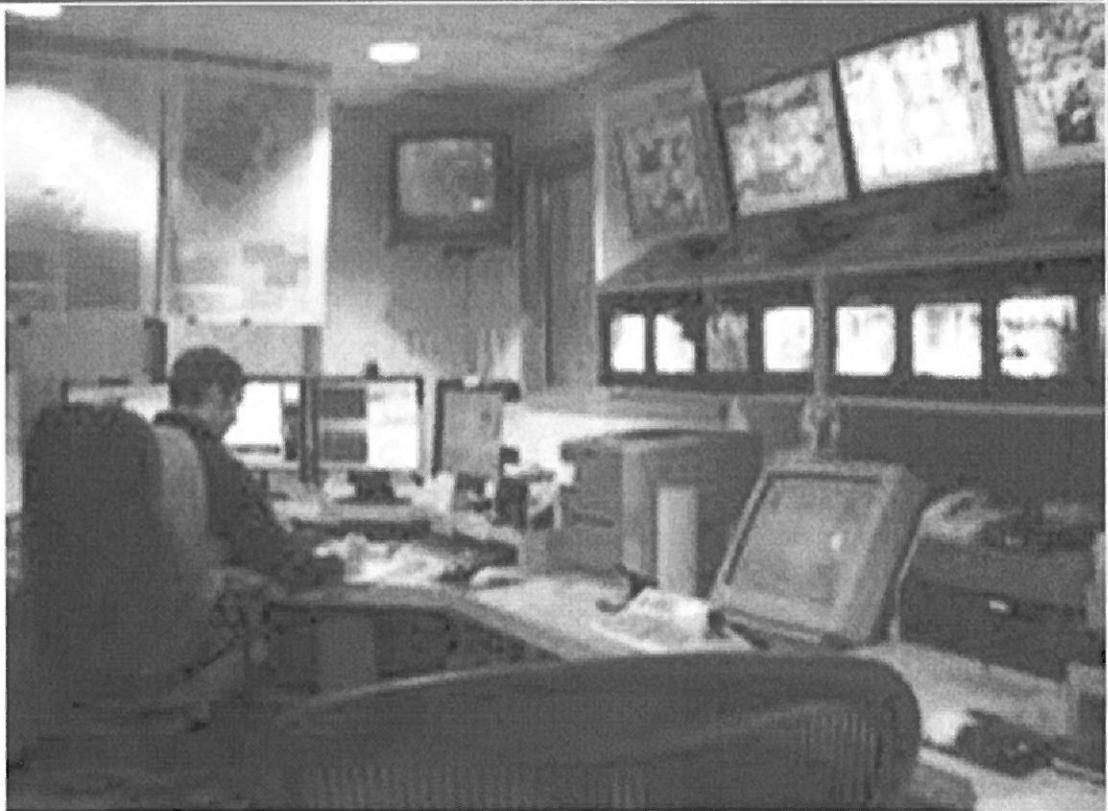


FY16

**PSAP GRANT PROGRAM
APPLICATION**



VIRGINIA INFORMATION
TECHNOLOGIES AGENCY
Integrated Services Division



FY16 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 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 FY16 PSAP Grant Application Cycle starts July 1, 2014 and concludes on September 30, 2014 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.



FY16 PSAP GRANT APPLICATION

PROJECT TITLE

Regional GIS Map Repository (MERG2)

GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: Twin County 911 Regional Commission

CONTACT TITLE: 911 Coordinator

CONTACT FIRST NAME: Jolena

CONTACT LAST NAME: Young

ADDRESS 1: PO Box 510

ADDRESS 2: 353 N Main St

CITY: Galax

ZIP CODE: 24333

CONTACT EMAIL: jyoung@galaxva.com

CONTACT PHONE NUMBER: 276-236-5122

CONTACT MOBILE NUMBER: 276-233-3231

CONTACT FAX NUMBER: 276-236-2965

REGIONAL COORDINATOR: Tim Addington

HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

Twin County 911 (Host)

Wythe County

Giles County

Pulaski County

Bland County

Patrick County

Floyd County

NP – No Participation Letter

GRANT TYPE

Individual PSAP

XX Shared Services



- Regional Initiative
- Secondary Consolidation

- Consolidation
-

GRANT PROGRAM TYPE

- XX Continuity and Consolidation
- Enhancement

TIER

- Out of Service
- Technically Outdated*
- Not Applicable
- Non-Vendor Supported*
- XX Strengthen

If technically outdated or non-vendor supported, application MUST include age and/or version of hardware/software.

VERSION: _____ # YEARS of HARDWARE/SOFTWARE: _____

PRIORITY/PROJECT FOCUS PRIMARY MAPPING SUPPORT

If "Other" selected, please specify: [Click here to enter text](#)

FINANCIAL DATA

Amount Requested: \$ 339,470
 Total Project Cost: \$ 339,470

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:

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:

This is a Shared Service Continuity and Consolidation Program application for funding to primary PSAPs serving the financially handicapped populations of Southwest Virginia.

This project would create a GIS repository (MERG2) to enable a regional map and more timely update of surrounding county data in local maps for back-up/mutual aid. The project builds on two regional collaborative efforts, and lays a foundation for NG911 regional mapping.

Firstly, Bland, Twin County and Wythe County are in the process of implementing geo-diverse call-processing equipment as a first step to enable site-redundancy for disaster planning/recovery. A regional map repository is a necessary additional component for creating site redundancy.

Secondly, this project builds on the success of MERG. MERG was created to build a GIS repository and a seamless regional data model. It was created to allow members to efficiently share data which before was an arduous task taking many hours of staff time to communicate with all the jurisdictions around them in order to obtain data. Now fully implemented, it has become the model for other localities in Southwest VA to develop a second hub so that more PSAPs will have the benefit of being able to use adjacent PSAP's data in their mapping system for dispatching wireless calls and multi-jurisdiction emergency response. GIS data from each of the localities will be updated into the system daily and appropriate data is outputted back to each PSAP to update their mapping system. Data will be shared between MERG and MERG2 to enable sharing of all region data. MERG2, like MERG, will also have a regional web site that allows members to see the entire region providing a tool for regional emergency planning.

Another great aspect of MERG2 is that VG1N will have access to the member's GIS data. VG1N now uses FTP to download the data from one location rather than contacting each locality to request updated data. As more localities are added to MERG and MERG2 it will save VG1N even more time and expense.

The process of the region working together on the planning for this grant application reflects a new regional cooperation and collaboration in a long-term plan for sustainment. The new project in this proposal is not currently being supported by a local, state or federal grant and applicants can demonstrate dire financial need.



The purchase of equipment and services for this project directly supports the continuity and enhancement of wireless E-911 by strengthening primary mapping. This shared service map project is number 39 in funding priority for the Continuity and Consolidation Program in the 2016 grant cycle. However, the regional collaboration may merit more weight. Although timeliness of data is the current objective, this moves one step closer to eliminating technical barriers for NG911 for which regional maps are an essential element.

The host applicant is Twin County E-911, a primary PSAP serving all the City of Galax and the Counties of Carroll and Grayson. Twin County E-911 serves nearly 1,000 square miles of rugged mountainous terrain along the Blue Ridge in the Southwest corner of the Commonwealth. Our citizens are financially handicapped and under-employed. It may be hard to imagine a place where 31% of the individuals live below poverty level (triple the state average); where unemployment doubles the state rate; and where the median household income is \$22,105 which is nearly two-thirds less than the average Virginia household income of \$61,126. But these hard facts do define us.

By comparison to Twin Counties and Galax, the economic statistics in Bland County are vastly improved, but they still fall far short of state and national figures and clearly express financial need. In Bland County, the median household income is \$42,231, nearly one-third less than the average Virginia household income. Non-applicants Wythe County and Wytheville, who are presently completing a consolidation award, are similarly situated with a median household income of \$38,490, which is one-third less than the average Virginia household income.

Giles, Patrick, Pulaski, Floyd and Tazewell have similar economic statistics as Bland and Twin Counties.

Likewise, our local governments have not been immune to the financial constraints of their taxpayers and tax base. The applicant localities have suffered by making budget cuts in many areas where it can, including personnel and not filling vacancies. Despite the urgent and compelling need for 911 services, the reality is simply that we cannot afford to do this without grant assistance.

Without grant funding, the PSAPs in this regional project will not be able to address their needs. There is no other source of funding for this project. The applicants, their localities and the citizens they serve are at a crippling financial disadvantage. The PSAPs covering Bland, Carroll, Floyd, Giles, Grayson, Patrick, Pulaski and Wythe Counties and associated Cities will continue to be behind neighboring PSAP's in mapping capabilities and at risk to provide continuous uninterrupted 9-1-1 service to their communities.



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

Five years support has been built into the grant request. In addition, a MERG2 Steering Team will be formed and a Memo of Understanding developed to guide the strategic direction and future funding. The Steering Team will be fashioned after that in place for MERG. It is envisioned that similar to MERG each participant will pay an annual maintenance fee for GIS and IT support of approximately \$3,000. The monies will be requested from the local Board of Supervisors or budgeting agents to maintain the MERG system. The grant funding will offset those costs by allowing the localities to only provide maintenance costs and not the burden of the initial hardware and configuration costs.

And even if jurisdictions decide not to continue, the State will benefit from having a Region IV Regional map to build on.

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.

The goals of the project are to:

1. Create a second Region IV Repository fashioned after MERG or the NRV Regional GIS resulting in PSAPs map data connected together using VPN and ArcGIS Server Replication.
2. Create a technologically safe and efficient environment for map data to be exchanged between the repository and local sites daily
3. Edge match surrounding county data
4. Create a mapping between local data and repository data for minimal impact to local maps
5. Establish tools to enhance the user interface for the GIS repository.

Once grant award notification is received, the regional team will establish a bi-weekly schedule through implementation.



Phase/Task	Assigned	End Date
<u>Initiation</u>		
Document Project Concept	J Young	8/1/2014
Obtain Budgetary Estimates	J Young	9/1/2014
Document Regional Agreement	All	9/30/2014
File PSAP grant application	J Young	9/30/2014
Receive grant funding decisions	J Young	1/31/2015
<u>Design and Planning</u>		
Document detail requirements	Team	6/30/2015
Define Critical Success Factors	Team	6/30/2015
Develop detail design	Team	6/30/2015
Review design with stakeholders	Team	6/30/2015
ID components to be purchased based on final design	Team	6/30/2015
Develop test and training plans	Team	6/30/2015
<u>Acquisition</u>		
Obtain approval for Sole Source Procurement	J Young	7/30/2015
Sign Contract(s)	J Young	8/31/2015
Issue Purchase Orders	J Young	8/31/2015
Request Grant Fund Draw Down	J Young	3/31/2016
<u>Implementation</u>		
Determine delivery and installation dates	Team	9/30/2016
Develop implementation plan	Team	9/30/2016
Review implementation plan with stakeholders	Team	9/30/2016
Excute implementation against plan	Team	1/31/2016
Train users	Team	2/15/2016
<u>Testing/Completion</u>		
Execute the test plan	Team	2/28/2016
Validate system performance	Team	2/28/2016
Go Live	Team	3/1/2016
Measure and report on critical success factors	Team	6/30/2016



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)	09 / 24 / 14
<input type="checkbox"/> DESIGN/PLANNING (Project, system, or solution requirements are developed)	06 / 30 / 14
<input type="checkbox"/> ACQUISITION (Selected system or solution is procured)	09 / 30 / 14
<input type="checkbox"/> IMPLEMENTATION (Selected system or solution is configured and installed)	02 / 28 / 15
<input type="checkbox"/> TESTING/COMPLETION (Selected system or solution is tested and put in production)	03 / 31 / 15

Identify the longevity or sustainability of the project.

As noted in the statement of need, the funding request includes 5 years maintenance. In addition, a MERG2 Steering Team will be formed and a Memo of Understanding developed to guide the strategic direction and future funding. The Steering Team will be fashioned after that in place for MERG. Additionally, it is envisioned that similar to MERG each participant will pay an annual maintenance fee for GIS and IT support of approximately \$3,000, and \$100-\$200 toward the server maintenance. However, even if/when MERG and MERG2 were to become obsolete, the need to access regional and statewide data will still exist --- even more so with NG911. The GIS edge matching and the structure for collaborative working would be necessary for any regional/statewide mapping repository.



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

This project supports both goals of the Virginia Statewide Comprehensive 9-1-1 Plan and seeks to fulfill an important initiative. There are only two goals in the Virginia Statewide Comprehensive 9-1-1 Plan. The first goal is provide a standard level of 9-1-1 emergency dispatch services to the public. *When achieved, this goal will provide consistent 9-1-1 emergency dispatch services to anyone residing in or passing through the Commonwealth, at any time of day, and during any event. Consistent service means that all 9-1-1 centers can receive, process, and dispatch "calls" in a dependable and repeatable manner.* As noted in the Statement of Need, a regional map will facilitate up to date information for surrounding counties enhancing mutual aid across boundaries. It is also a building block for disaster planning to ensure seamless service for system or site failures.

The second goal of the Virginia Statewide Comprehensive 9-1-1 Plan is to position 9-1-1 centers to continuously meet the public's expectations. *When achieved, this goal will allow Virginia to keep up with the rapid pace of technology innovation and therefore the constant changes in customers' expectations.* However, again as reflected in the statement of our need for this project, our localities are behind the curve of most PSAP's with access to regional maps enabling the ability to switch sites seamlessly.

A crucial element of 911 PSAP operations is to ensure the GIS map data, ALI database, and MSAG are maintained properly for accurate 9-1-1 call plotting. This project will provide the nine (9) PSAPs with industry standard hardware and software necessary to keep the GIS data in the dispatch center up-to-date. This project will be used to provide continuity of operations in the MERG2 PSAPs by providing a standard level of emergency response service to the public by providing dispatch with the surrounding jurisdictions mapping data.

SHARED SERVICES/REGIONAL INITIATIVE (if applicable)



The relationship of the initiative to the participating PSAPs:

Twin County will be fiscal agent for the project.

This initiative builds on the regional alliance between Bland, Twin County and Wythe/Wytheville. Wythe/Wytheville has agreed to the use of their mapping server for the MERG2 repository.

Floyd, Giles, Patrick, and Pulaski are surrounding counties for Bland, Twin County, and Wythe County. Their data is needed to facilitate a complete Virginia map for Bland and Twin County. Additionally, by participating, these jurisdictions get the benefit of up-to-date surrounding county data for the participants of MERG and MERG2. It also gives them a tool to share data as other GIS Repositories are developed.

Washington and Smyth Counties are non-grant partners to champion the linking of MERG and MERG2 with the MERG Steering Team.

Intended collaborative efforts:

The participants will share in the development and maintenance of a new regional technology infrastructure to enable daily GIS repository updates of edge matched mapping data. Localities will participate on a MERG2 Steering Team to manage operating framework and strategic direction.

This allows VGIN to download the data from one location rather than contacting all fifteen (15) localities individually.

MERG has a regional web site that allows members to see the entire region providing a tool for regional emergency planning. There are also plans to add the VDEM Viper application to the regional website allowing current up to date map data for eighty-five (85) percent of Region IV to be viewed as a layer on the VIPER.

With the MERG Virtual Private Network (VPN), the foundation has been and will be set for future applications such as radio over IP and the ability to view all the active 911 calls, CAD incidents, and AVL in one web application.



Resource sharing:

Wythe/Wytheville server will be used to create the regional GIS repository to be used by all the participants and VGIN. The repository may also be linked with other GIS repositories.

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

This project will enable all participants and VGIN to improve operational efficiency and timeliness in exchanging map data.

This project will enable participants to put in place another regional tool toward a Strategic Goal to enable NG911.

CONSOLIDATION (Primary or Secondary) - (if applicable)

How would a consolidation take place and provide improved service:

N/A

How should it be organized and staffed:

N/A



What services should it perform:

N/A

How should policies be made and changed:

N/A

How should it be funded:

N/A

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

N/A



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.

MERG II - Per County Costs

Server (provided by the County)	\$0
Network Switch (HP ProCurve 24port gigabit switch)	\$1,400
Fortinet 50B firewall (dual port WAN, 3 port LAN, IPSEC and SSL VPN) (3 year warranty)	\$2,000
Cables/rack/etc.	\$300
IT Labor	\$4,500
GIS Labor	\$3,500
IT support 5 years (\$1,600/year)	\$8,000
GIS support 5 years (\$1,600/year)	\$8,000
	total per locality
	\$27,700
	# of localities
	7
	Total
	\$193,900

MERG II - Server Hub Costs

ArcGIS Server software from Esri	\$18,000
ArcGIS Server support from Esri (5 years)	\$20,600
ArcInfo license for Server from Esri	\$8,910
ArcEditor license support from Esri (5 years)	\$12,360
SQL License	\$3,000
Worldview Regional Web site and Web Portal	\$48,000
Worldview setup costs	\$9,700
Worldview on-going support (5 years)	\$25,000
	\$145,570
	Participating
	Total
	\$339,470

Budgetary estimate provided by King-Moore.



EVALUATION

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

Our performance measures will begin with proper purchases of equipment and services to achieve a new regional GIS Repository and exchange technology infrastructure. Procurement will be in accordance with all federal, state and local procurement standards. After installation of the equipment and implementation of the services, each PSAP will be able to update the GIS repository and local maps as determined by a detailed evaluation plan. Each PSAP will record these performance measures and report them to the host applicant for inclusion on the final report.

Twin County Regional 911 Commission and Other Virginia
PSAPs Memorandum of Understanding
On a VITA Grant submission for FY 2016

The Twin County 911 Regional Commission and certain of the other Virginia Public Safety Answering Points (PSAPs), to include the PSAPs of Bland County, Floyd County, Giles County, Patrick County, and Wythe County (the MERG2 PSAPs) agree that, for the benefit of improving the efficient and quality of surrounding GIS data used in the PSAP and taking preparatory actions towards Next Generation 9-1-1 (NG9- 1-1), the MERG2 PSAPs will collaborate in a shared services grant application and, if awarded, subsequent project effort for the implementation of a Regional Map with daily update capabilities. This Memorandum of Understanding (MOU) establishes the agreement for the MERG2 PSAPs to jointly submit an FY 2016 grant application to the Virginia Information Technology Agency (VITA) and within that application and associated vendor proposal are outlined the goals, objectives and approaches to guide the Regional Map should the grant be awarded to the MERG2 PSAPs by the VITA Board of Directors.

RECITALS

- A. The Twin County Regional 911 Commission will serve as the Host PSAP for the purposes of the grant, and the grant award, should VITA decide to approve the grant application.
- B. The grant application and vendor proposal associated with the grant submission outline the collaborative efforts involving each of the MERG2 PSAPs during the period of the grant.

THE PARTIES TO THIS UNDERSTANDING ARE MUTUALLY AGREED TO THE ABOVE AND CONCUR IN THE SUBMISSION OF THE FY 2016 VITA REGIONAL MAP GRANT APPLICATION.



Eric Workman
Bland County Administrator



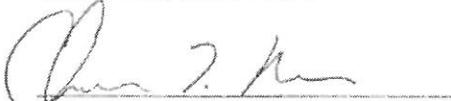
Kevin Sowers, Coordinator
Floyd County Emergency Management



John Davis
Giles County 911 Director



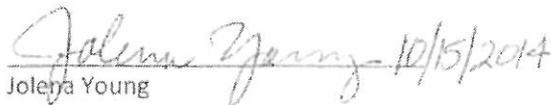
Patrick County



Chris Akers, Executive Director
Pulaski County Joint 911



Wythe County



Jolena Young
Twin County 911 Director

This Memorandum shall take effect upon its signing by the authorized representative of each party.

Jolena Young

From: Brandon Moore <moore@king-moore.com>
Sent: Wednesday, August 20, 2014 11:33 AM
To: jyoung@GalaxVa.com
Subject: RE: MERG2
Attachments: CostEstimateforMERG_II.xls

Jolena, here is an updated quote on MERGII. It looks like the last time I had updated it was in 2012. I used it to update some for inflation to generate this latest one attached. I feel this is good for a budget. Keep in mind on the top section you might adjust based on the number of localities.

Thanks,
Brandon

From: Jolena Young <jyoung@galaxva.com>
Sent: Monday, August 18, 2014 9:53 AM
To: Brandon Moore
Cc: Ikey Davidson; jpcopeland@wytheco.org
Subject: MERG2

Brandon – BTW2 Committee is planning to re-submit the grant for MERG2 this year. Can you provide an updated budgetary quote?

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GIS Labor	\$3,500
IT support 5 years (\$1,600/year)	\$8,000
GIS support 5 years (\$1,600/year)	\$8,000
total per locality	\$27,700
# of localities	8 not sure on how many counties, we used 8 last time quote was submitted
Total	\$221,600

MERG II - Server Hub Costs

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Worldview setup costs	\$9,700 opt
Worldview on-going support (5 years)	\$25,000 opt
	\$145,570

Grand Total \$367,170
\$245,870 total without options

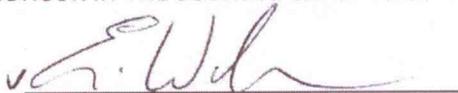
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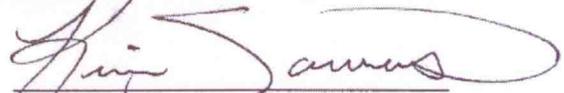
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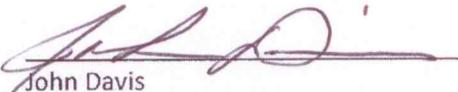
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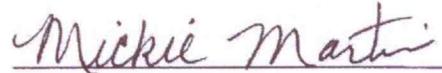
Eric Workman
Bland County Administrator



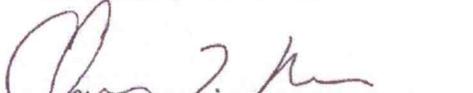
Kevin Sowers, Coordinator
Floyd County Emergency Management



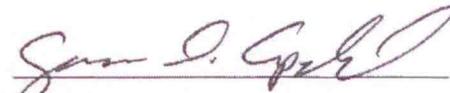
John Davis
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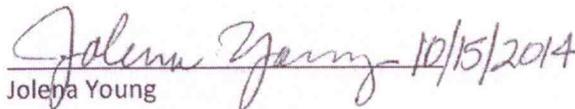
Patrick County



Chris Akers, Executive Director
Pulaski County Joint 911



Wythe County



Jolena Young
Twin County 911 Director

This Memorandum shall take effect upon its signing by the authorized representative of each party.