

PSAP Grant Program Grant Ranker

View Application--42--FY09 PSAP Grant Program

Grant Period: 2009

Tier: Strengthen current equipment and service delivery capability by upgrading existing wireless E-911 related equipment or services (**STRENGTHEN**)

Grant Program: Enhancement **Grant Type:** Regional Initiative

Priority: Fixed back-up for primary items of PSAP operations (**FIXED BACKUP**)

Primary PSAP Applicants: Madison County
Orange County Communications

Jurisdictions Served: Louisa
Madison
Orange

Project Director:

Denice Marrs
Director of Communications
Louisa County Sheriff's Office P.O. Box 504 Louisa, VA 23093
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Project Description:

This project ensures adequate back-up plans are in place for emergency communications in Louisa, Orange, and Madison Counties should any of the PSAPs have to be evacuated for natural or man-made causes, or a potential terrorist disaster. To be effective, two project components must be addressed: Contingency routing and radio frequency access. All PSAPs must have the necessary radio components in place to access each other's frequencies and the ability dispatch responders in return. In summary, the desired solution fills the gaps in each of the three localities' back-up plans, reducing liability for each locality and the risk to citizens.

Total Project Cost \$127,681.00

Amount Requested: \$127,681.00

Matching Funds: \$0.00

Additional Local Funds: \$0.00

Statement of Need:

Louisa County The Louisa County Sheriff's Office Dispatch Center is the primary PSAP serving Louisa County. In addition, the Louisa PSAP serves as the primary emergency dispatch center for the North Anna Nuclear Power Station. The PSAP operates on a 24/7 basis, running three, twelve hour shifts with a total of 15 employees to include supervisory positions and four part-time employees. In 2006, Dispatch received an average of 12,425 emergency and non-emergency calls per month. The number of calls has increased in 2007 to an average 12,886 calls per month. This number continues to rise each year placing significant strain on the emergency communications center. Louisa County does not currently have a 9-1-1 back-up

plan. Actions have been taken to ensure the PSAP remains functional during possible equipment failure; however, should the need arise for PSAP evacuation, incoming 9-1-1 communications will be non-existent until such time as the PSAP is rendered safe and functional. The Agency has identified this as a primary operational deficiency and recognizes that measures must be taken as soon as possible to avoid placing the community at continued risk. At present the Louisa County Sheriff's Office faces the difficult challenge of balancing the needs of law enforcement operations and public safety communications. Both are of equal importance and of increasing demand as the County's population rises. Approximately 80% of the Agency's annual budget goes into retaining current officers and recruiting additional officers to meet coverage needs throughout the County. The remainder of the annual budget goes toward homeland security directives issued by federal and state agencies, communications, and other crucial necessities. While Agency priorities continue to increase, budget cuts remain imminent as County funding is being directed towards critical capital needs such as a new elementary school and two wastewater treatment facilities to support the influx of new residents. The Louisa County Sheriff's Office has held several meetings with local officials and VITA Integrated Services Program staff with regards to the best solution for Louisa 9-1-1 back-up plan. Aspects such as working relationships with other localities, radio operability potential, and maximization of enhanced ALI to the back-up PSAP were examined. A thorough evaluation of the five surrounding jurisdictions, which includes Spotsylvania County, Caroline County, Hanover County, Goochland County, and Orange County, determined Orange County as the best option for a back-up PSAP designee. This can be accomplished by contingency routing of 9-1-1 calls to the Orange County PSAP and equipping the Orange County PSAP to dispatch Louisa County's emergency responders through the installation of conventional radio components. Orange & Madison County The Orange County Emergency Communications Center and Madison County 9-1-1 Dispatch have a strong working relationship with one another. On October 11, 2005, both counties entered into a mutual aid agreement which established each county as the other county's 9-1-1 back-up. Both counties agreed to furnish emergency communications resources to each other on a non-reimbursable basis in the event the PSAPs are affected by natural or man-made causes, or a potential terrorist disaster. 9-1-1 contingency routing is in place for each PSAP; however, neither county has access to the other county's radio system, thus preventing the back-up PSAP from being able to dispatch responders throughout the other county. This is a significant flaw in each county's 9-1-1 back-up plan and can be resolved by enabling Madison to access Orange County's radio frequencies, and vice versa, through the installation of conventional radio components. Additionally, Orange County does not have access to the Orange bus system radio frequency. By installing the necessary components, both Orange and Madison Counties would have access to Orange's bus frequency for large-scale evacuation purposes should the need arise.

Project Impact:

Each of the PSAPs involved carry the goal of providing continuous emergency communications to their jurisdictions with the utmost in service and standards. 9-1-1 communications are the backbone of public safety. The proposed project will enable each of the PSAPs to have effective contingency emergency communications for incoming and outgoing 9-1-1 traffic. It will create a level of redundancy that does not effect the level of service but keeps PSAP staff out of danger. Uniformity in public safety operating procedures reduces the risk of a plan failure and keeps the communities involved safe.

Consequence of Not Receiving:

Without project funding through the PSAP grant program, Louisa, Orange, and Madison Counties will remain vulnerable during the event in which any of the PSAPs need to be evacuated. Not only does this place the citizens of these jurisdictions at risk, it also places PSAP personnel and emergency responders at risk caused by interrupted communications with their primary PSAPs.

Part of Long Term or Strategic Plan?: Yes

Likelihood of Completion Unfunded?: 0%

Other Available Funding Sources?: No

Percent of Grant Funding Requested To Total Funding Cost?: 100%

Is Project Locally Sustainable?: Yes

Comprehensive Project Description:

Louisa, Orange, and Madison County emergency communication centers all function as the primary public safety answering point for each of their jurisdictions. The following workplan outlines an effectual

contingency plan at each locality that secures the smooth transition of critical communications during a PSAP emergency. The project allows each PSAP to continue to work with their existing radio system, which makes for significant cost savings and allows each Agency to continue to build upon their current hardware and software platforms. Once the requested project components are installed and functional, each locality will sustain the project by funding any additional and annual maintenance costs through their yearly operating budgets. Goal: Establish effective 9-1-1 communications back-up plans for Louisa, Orange, and Madison Counties. Objective 1: Formal Policy Development Each locality shall develop a formal standards of practice to include switchover protocol and issues regarding radio usage during the event of 9-1-1 backup incident. Objective 2: Procurement Each locality will purchase the necessary components in accordance with their local and state procurement guidelines. This may require a formal Invitation for Bid (IFB). Objective 3: Installation The selected equipment will be installed by a certified vendor at each location. Objective 4: Testing The selected equipment will be tested by the selected vendor to ensure full functionality during a 9-1-1 backup incident. Performance Measures and Timeline Item 1: Begin 7/1/2008 - End 8/15/2008 Formal SOP development for PSAP switchover. Evaluation: Protocol Document. Item 2: Begin 7/1/2008 - End 9/1/2008 Procurement of goods and services. Evaluation: Award of contract to vendor. Item 3: Begin 10/1/2008 - End 11/30/2008 Component Installation Evaluation: Delivery and installation documentation. Item 4: Begin 10/15/2008 - End 11/30/2008 Component Testing Evaluation: Vendor certification that back-up systems are fully functional.

What type of interface or compatibility solution will be used between existing equipment and/or software and that which you intend to purchase?:

Thorough assessments of each PSAP show significant similarities in radio systems and operating platforms. This project builds upon the existing compatibility of the equipment located at each of the three PSAPs by bridging the similar systems together through network control modems, channel cards, and call forwarding technology. Each PSAP will be at the advantage of working with their existing radio systems and hardware platforms while building a secure contingency solution to reduce liability and risk to the jurisdictions involved.

What is the overall relationship of your project to your PSAP or locality's established long-range future plans?:

Louisa, Orange, and Madison PSAPs all work towards the long-term goal of providing their jurisdictions the best emergency communications possible. This is an ongoing process in the light of today's changing technology needs. The proposed project allows each locality to establish one of the most important parts of service to the public: Uninterrupted emergency communications. This will be accomplished by building on existing communications framework, enabling each PSAP to continue to progress with the resources currently on hand. Moreover, the proposed project will result in significant cost savings by three PSAPs working together in partnership. This will secure a strong working relationship between the three agencies as well as the opportunity to work together on future PSAP projects.

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

The proposed project requires select components to be installed at each PSAP to create a safety net in the event of a 9-1-1 failure or PSAP evacuation. Redundancy is the key in reducing the risk of interrupted emergency communications. This plan allows each PSAP to have a fully functional back-up system in the event a contingency plan must be enacted, ensuring each PSAP is fully prepared to continue emergency call and dispatch operations regardless of a failure or evacuation.

Budget and Budget Narrative:

Please see attachments

Ongoing Expenses:

The selected equipment for the project is compatible with each agency's existing equipment. The only on-going fees involved in sustaining the project are maintenance costs which will most likely be required on an annual basis. These funds will be anticipated each year and provided by each locality through their annual operating budgets.

Evaluation:

Evaluation of the success of this project is relatively simplistic in nature. Based on the goals and objectives

related to the creations of the back-up plans for the three localities, there are four items that will produce measurable results: Item 1: Development of uniform standards of practice with regards to a PSAP switchover. Item 2: Procurement of necessary goods and services, through which officiating documentation will be required. Item 3: Installation of purchased project components, though which officiating documentation will be required. Item 4: System testing by the selected vendor which will result in vendor certification that systems are fully functional and ready to operated during a contingency event.

What are the short term, intermediate, and/or long-term outcomes desired for this project?:

The desired outcome of this project meets the immediate and long-term need for the delivery of uninterrupted emergency communications in Louisa, Orange, and Madison Counties. Each of the three primary PSAPs will have the ability to receive and process 9-1-1 communications promptly and effectively in the event that an evacuation needs to take place to ensure the safety of the PSAP employees. Moreover, emergency responders in each locality will no longer be at risk of losing communications while in the field.

What measures will be used to determine outcomes?:

The central outcome of the proposed project is that each locality have an effective emergency communications back-up plan that ensures uninterrupted emergency communications. Once the selected project components are installed at each location and tested for functionality, each PSAP will be capable of receiving re-routed 9-1-1 calls and dispatching back to emergency responders.

How will data be collected and how will evaluations be conducted?:

The overall goal of the proposed project ensures adequate back-up systems are in place for three localities and that 9-1-1 communications remain operational during any unforeseen event in which one of the respective PSAPs needs to be evacuated. Success of the project will be measured through procurement and installation documentations and certifications as well as the success of periodic switchover testing to ensure all PSAP employees are proficient in the standards of practices involved.

How will data be presented?:

Project success data will be presented in the form of formal documenation reflecting periodic switchover testing outcomes. Each test will be evaluated thoroughly to detect areas of needed improvement during a PSAP switchover.

Attachments

MOU.pdf
Budget and Narrative.pdf

MEMORANDUM OF UNDERSTANDING

The Counties of Louisa, Madison and Orange are interested in pursuing a regional grant through the Virginia Wireless E-911 Services Board PSAP Grant Program for the provisioning of telecommunications and radio goods and services that would enable a 9-1-1 contingency back-up plan for each county. The desired solution would allow Orange County to back-up Louisa and Madison Counties and would allow Madison County to back-up Orange County. This MOU serves as the official intent of each of the three named counties to participate jointly in submitting a regional grant request.

Louisa County shall act as the "host applicant" for the funding request. The host will be the fiscal agent for receipt and disbursement of grant funds, and shall provide coordination for the purpose of meeting all grant requirements.

Louisa County:

<u>Denice R. Marrs</u> Printed Name/Title	<u>Director of Emergency Communications</u>	<u>Denice R. Marrs</u> Signature	<u>10/23/07</u> Date
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Madison County:

<u>ROBERT L. FINKS</u> Printed Name/Title	<u>DIRECTOR OF EMERGENCY COMMUNICATIONS</u>	<u>Robert L. Finks</u> Signature	<u>11/19/07</u> Date
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Orange County:

<u>Melissa G. McDaniel</u> Printed Name/Title	<u>Director of Emergency Management and Operations</u>	<u>Melissa G. McDaniel</u> Signature	<u>11/14/07</u> Date
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Orange, Louisa, and Madison County Cost Estimate to Fill 9-1-1 Back-Up Gaps

Locality Purchasing	Reason	Component	Fixed Cost	Monthly Cost	Qty	Total Fixed Cost	Total Annual Cost
Louisa	Route calls to Orange from Chester/Stuart Tandems and Winchester/Fredericksburg Tandems	Network Control Modems		\$447	12	\$0	\$5,363
Louisa	Route calls to Orange from Chester/Stuart Tandems (not in same LATA as Orange - RCF is necessary)	Remote Call Forwarding		\$64	12	\$0	\$770
Louisa	Install Network Control Modems and Remote Call Forwarding	Installation NCM and RCF	\$141		1	\$141	\$0
Orange	Dispatch Louisa Responders	Control Station	\$5,000		4	\$20,000	\$0
Orange	Dispatch Louisa Responders	Channel Cards	\$2,000		4	\$8,000	\$0
Orange	Dispatch Louisa Responders	Licensing	\$1,700		1	\$1,700	\$0
Madison	Dispatch Orange Responders	Control Station	\$5,000		5	\$25,000	\$0
Madison	Dispatch Orange Responders	Channel Card	\$2,000		5	\$10,000	\$0
Madison	Dispatch Orange Responders	Licensing	\$1,700		1	\$1,700	\$0
Orange	Dispatch Madison Responders	Control Station	\$5,000		4	\$20,000	\$0
Orange	Dispatch Madison Responders	Channel Cards	\$2,000		4	\$8,000	\$0
Orange	Dispatch Madison Responders	Licensing	\$1,700		1	\$1,700	\$0
Orange	Physical Channel Card Space	Channel Card Rack	\$5,000			\$5,000	\$0
Orange	Add Bus Frequency	Control Station	\$5,000		1	\$5,000	\$0
Orange	Add Bus Frequency	Channel Cards	\$2,000		1	\$2,000	\$0
Orange	Add Bus Frequency	Licensing	\$1,700		1	\$1,700	\$0
		10% Incidentals				\$11,607	\$0
Total Fixed and Annual Costs							\$127,681

BUDGET NARRATIVE

ITEM A: 9-1-1 Contingency Routing for Louisa County – Network Control Modems and Remote Call Forwarding are necessary to steer Louisa’s County’s 9-1-1 call traffic (which route through four of Verizon’s tandems in two LATAs) to Orange County. Orange and Madison County currently have 9-1-1 contingency routing in place.

ITEM B: Control Stations – Conventional radio components to allow Orange County to access the Louisa County radio system, Orange County to access the Madison County radio system, and Madison County to access the Orange County radio system and bus system.

ITEM C: Channel Cards – Conventional radio components to allow Orange County to access the Louisa County radio system, Orange County to access the Madison County radio system, and Madison County to access the Orange County radio system and bus system.

ITEM D: Channel Card Rack – Orange County does not have the physical capacity in the current channel card rack to accommodate the additional channel cards. An additional channel card rack is necessary for Orange County only.

ITEM E: Licensing Fee – Coordination of FCC licensing requirements for radio components. While this cost is recurring, each locality is only requesting assistance for one year.

ITEM F: Incidentals – 10% contingency dollars, as needed.