

## PSAP Grant Program Grant Ranker

# View Application--25--PC replacement and Disaster Communicaitons

**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:** Individual PSAP

**Priority:** Other (**OTHER**)

**Primary PSAP Applicants:** Chesterfield County ECC

**Jurisdictions Served:** Chesterfield

### **Project Director:**

George Thomas  
Operations Support Manager  
6610 Public Safety Way, Chesterfield, Va 23831  
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thomasgk@chesterfield.gov

### **Project Description:**

The Chesterfield ECC requests grant funding for two projects. The first, to provide immediate updates, policy changes, and life-saving techniques and information during a disaster, Chesterfield County proposes to purchase 5 video screens integrated with multiple input sources. Information can be displayed immediately to needed County officials, Public Safety providers and ECC members. The second, to ensure continued operations, Chesterfield County proposes to purchase replacement CAD/Mapping PCs and monitors. In FY09 these PCs will be over the accepted replacement cycle of 4 years old. The goal of this project is to allow us to maintain necessary equipment to perform functions related to 911 calls, mapping and public safety data.

**Total Project Cost** \$172,040.00

**Amount Requested:** \$137,632.00

**Matching Funds:** \$34,408.00

**Additional Local Funds:**

### **Statement of Need:**

Chesterfield County Emergency Communication Center is an integral part of public safety for the County and Central Virginia. During times of disaster the ECC is called upon to react quickly to the needs of the citizens, field providers of the county and of the region as a whole, if required. By installing the 5 video screens, integration hardware and software the funds are being requested for, it will enable the ECC to communicate in more timely fashion with absolute accuracy to the members of the ECC, Emergency Management, County leaders and Public Safety partners during disasters through a graphic display of

information, such as ad-hoc policy changes or life saving procedures specific to the event/disaster faced. It will also allow those Public Safety liaisons (Police, Fire & EMS) physically in the ECC to quickly view comprehensive county wide data and information (CAD and mapping data, external video sources for news and/or weather, or EOC internal contact phone numbers). The ECC does not have adequate funds in the projected FY09 budget to support this project and did not receive requested Capital Improvement Project (CIP) funding for this project either. Computer technology changes almost daily. Our current CAD and mapping PCs will have been utilized in the ECC for a period of over 4 years in FY09. The typical life-cycle of PC technology and equipment is 3-5 years. Our mapping data is stored locally on the hard drive of these PCs and, as our mapping data is improved and more elements and layers are added, it is important to have technologically up-to-date PCs to store and access this data in case of CAD or network downtime so that GIS data and other elements embedded in our maps are still searchable (able to be mapped), such as wireless callers' transmitted lat/lon. In order to maintain our current standard of delivering customer service and necessary response to the citizens and public safety providers, it is necessary for the ECC to maintain its equipment in the most current fashion. These computers were purchased with Wireless True Up funds, but replacement funding cannot be budgeted for in FY09, nor will there be any end of year funds in the current year as the County has instituted a 3% budget reduction for FY08.

### **Project Impact:**

Both projects requested will allow the ECC to provide the most up to date, accurate information during routine calls for service and disasters. In addition, by replacing the current CAD PCs, we will be ready to keep pace with computer, mapping (GIS) and computer aided dispatch (CAD) technology advances, and more importantly, ensure continued operation of this critical equipment while entering and dispatching emergency requests for public safety service. The video screen system project will realize a great enhancement to our current standards and services. While the PC replacement project ensures continuity of services by avoiding hardware failure caused by aging equipment.

### **Consequence of Not Receiving:**

In reference to not receiving the video screens, we will continue to have to rely on person to person communication during a crisis to relay critical information during disasters. ECC members, Public Safety field providers and Emergency Management will not receive this information in a timely manner that is needed to manage the county resources during a critical emergency, or they may receive inaccurate information due to the "pass" from one person to another. The failure to relay certain portions of this information immediately to a large number of call takers and/or public safety dispatchers could harm someone, result in loss of life or property. In order to maintain our current standard of delivering customer service and necessary response to the citizens and public safety providers, it is necessary for the ECC to maintain its equipment in the most current fashion and avoid equipment failures associated with aging computer hardware.

**Part of Long Term or Strategic Plan?:** Yes

**Likelihood of Completion Unfunded?:** 25%

**Other Available Funding Sources?:** No

**Percent of Grant Funding Requested To Total Funding Cost?:** 80%

**Is Project Locally Sustainable?:** Yes

### **Comprehensive Project Description:**

**Video Screen System Project** - Our goal is to resolve the current and future deficits experienced by the ECC and Chesterfield County in regards to relaying information in an accurate, timely fashion during crisis mode or in the event of a disaster or major weather incident. This will enable information to be processed and relayed quickly, saving lives and property. Our plan is for the ECC, in coordination with the County Purchasing Department, to formulate a scope of services desired and release an RFP/IFB. During the selection and negotiation phase, the ECC, IST, and Purchasing would have the vendor create a task list and timeline establishing County and Vendor responsibilities for tasks. The ECC would appoint a Project Manager to work with the vendor to make sure all tasks were completed on time and within agreed upon budget, analyzing options and implementation processes. We anticipate the entire project to be completed within the fiscal year by allotting 3-6 months for planning and RFP/IFB process and 6 months for system installation, integration, optimization and acceptance.

**Computer Replacement Project** - Our goal is to resolve current and future deficits experienced by the ECC as it pertains to reliability of computers utilized in

the ECC by replacing one half of PCs in use within the 911 dispatch center (14 of 28). Our work plan would be to establish PC and monitor equipment requirements (processor speed, hard drive speed and space, etc.), have our IST Department obtained quotes from Dell through already existing County contracts, review quotes to ensure they are within approved grant funding amounts and, if so, request IST to obtain PCs and monitors. Chesterfield IST would install software, optimize hardware, and network these computers at no additional costs. Each PC would be checked prior to and just after installation in the ECC to ensure all hardware and software was operating successfully.

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

The Video Screen system will eventually be integrated with a planned "Security Console" within the ECC for monitoring Fire and Security alarms and Cameras at County facilities. We will require our vendor through hardware or software to have the system accept a wide variety of graphic and A/V input sources to include, but not limited to, PC accessible resources such as the Internet, WebEOC in use at our EOC, CAD & mapping data and display screens and other common sources such as cable television. The computers will be used on the County network and our CAD software is capable of running on current off the shelf (COTS) computers running Windows XP. Chesterfield IST will ensure all configurations are set properly to operate on the County network and our CAD/Mapping system.

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

Our long range future plans call for accurate and more reliable communication during a disaster or crisis. In addition, replacing the PCs in the ECC goes hand in hand with our future plans, to maintain integrity of the computerized portions of the public safety response system.

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

All projects will allow the PSAP to grow in the future. Computers will only enhance our ability to receive information and will continue our readiness status. The video screens have the latest technology and again, will only enhance our PSAP's readiness.

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

Video Screens--Total cost of \$123,350 for equipment, hardware, software, connectivity to our network, installation and 15% contingency funding. This pricing is based on a quotation for a turnkey quotation for 4 integrated screens of \$102,476, adding the quoted price for one additional screen (\$4785) and adding a 15% contingency (\$16,089) fund for related electrical and facilities projects. The ECC will locate funding in the amount of \$24,670 in combination with \$98,680 grant funds, if approved, to support this project. This will enable us to communicate in a more efficient manner during a crisis or disaster mode. An attached quote has been provided and serves as the basis of this request. Computers and Monitor array -- total cost of \$48,690. This pricing is based on the following breakdown per PC and monitor set-up - Tower PC \$1500, 3 monitors \$1050, Soundbar \$35, Video Quad Card \$450 and \$100 cables or \$3,135.00 per PC & Monitor array (\$43,890 for 14) plus four (4) network printers at \$1,200 each (\$4,800). Our IST Department will provide installation of all CAD & Mapping software and physical installation of equipment at ECC workstations at no cost. The ECC will provide funding of \$9,738 towards this project combined with \$38,952 in grant funds, if approved, to support this project. This will enable us to maintain our integrity with our public safety computerized system and ensure continued location of wireless callers through our integrated CAD/mapping system.

### **Ongoing Expenses:**

The on-going maintenance expenses will be absorbed in our biennial budget for maintenance support to Chesterfield IST for support of video screens and CAD/Mapping PCs after manufacturer's warranty period is over.

### **Evaluation:**

Video Screens - The video screens will go through a series of testing to ensure we are able to receive information and relay information as stated via vendor and vision. As this is a turnkey solution, the vendor will be paid as milestones are met for installation of equipment, successful integration of different video sources, demonstration of abilities of equipment and training to our personnel on operation. PC and Monitor

array - Each PC will be shown to be in good working order at IST upon delivery. IST will install software at IST and test for successful software installation and networking capabilities prior to physical installation in the ECC. Each PC will be tested individually for successful hardware and software installation once physically installed at the ECC.

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

Video screens-to relay information in a timely and accurate fashion in the short term and find other useful applications for day-to-day operations in the intermediate and long term future, to include integration with planned for Security Console. This would include display of views from County maintained cameras at major intersection and County facilities. PC and Monitor array-short term goal is to ensure continued day-to-day operation in the 911 Center to relay and receive information related to wireless E-911 mapping abilities and avoid a delayed response caused by failure of outdated individual PCs. Long term this would keep us in a 4-5 year replacement cycle of these mission critical PCs and monitors.

**What measures will be used to determine outcomes?:**

Checkoff sheets will be used for the video screens to ensure all components are working as they should and an Acceptance Test Plan (ATP) for functionality. As for the computers, the day to day functionality of the computers will be the measure.

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

Data will be collected via the checkoff sheets made by our internal IT employees and an agreed upon ATP between the vendor and County for Video Screens. Evaluations will be conducted by the vendor, Operations Support Manager and Senior Automation Analyst of the ECC to test the components and integration with A/V sources with the vendor for the video screens. IST has an accepted installation plan for the PCs and functunality of the PCs is first completed at IST facility(hardware operability and OS operation)and then CAD specific application functionality is tested with each PC at installation.

**How will data be presented?:**

In the form of a written and signed off on ATP for Video Screen system. When PCs are successfully installed, to include testing of all CAD application functionality, IST and ECC data concerning PC serial numbers, etc. will be changed for maintenance and inventory reasons.

**Attachments**

[Video Display system 911 Center 2007\\_05\\_02.pdf](#)

**DRAFT  
QUOTATION**

**FROM:** The Whitlock Group  
3900 Gaskins Road  
Richmond, VA 23233  
(804) 273-9100; FAX: (804) 273-9380  
DIT CONTRACT # VA-020501-WHIT

**TO:** Chesterfield County Emergency Communications  
6610 Public Safety Way  
Chesterfield, VA 23832

**ATTN:** Allan Weese  
**PHONE:** 804-796-7065  
**FAX:** 804-751-6610

**DATE:** 5/2/2007  
**FOB:** Destination  
**TERMS:** Net 30 Days  
**DELIVERY:** As Available

**NUMBER:** 478

**VITA Contract VA050912-WHIT**

QTY	DESCRIPTION	CATEGORY	LIST PRICE	DISCOUNT %	VITA PRICE	TOTAL
1	4 Sharp PN-465U 46" HD LCD Monitor 1920x1080		\$ 7,595.00	37%	\$ 4,784.85	\$ 19,139.40
2	4 Chief PNR-2045B Pivoting wall mount		\$ 749.00	15%	\$ 636.65	\$ 2,546.60
3	4 Chief PAC-140 Chief Q-Clamp		\$ 42.00	15%	\$ 35.70	\$ 142.80
4	2 Extron 60-289-01 (RGB-1 (RGB-109xi) Dedicated VGA Interface with A		\$ 720.00	20%	\$ 576.00	\$ 1,152.00
5	1 JVC SR-MV55U DVD-R & S-VHS/VHS DUAL DECK W/RS-		\$ 995.00	18%	\$ 815.90	\$ 815.90
6	3 Contemporary Rest 232-ATSC Tuner w/ RS232 Control		\$ 799.00	10%	\$ 719.10	\$ 2,157.30
7	3 Contemporary Rest RK1-HD Single rack kit for AV Tuners, 1RU		\$ 45.00	10%	\$ 40.50	\$ 121.50
8	4 Extron DVS204 (60-442-01) Composite Video to RGBHV Sca		\$ 1,995.00	20%	\$ 1,596.00	\$ 6,384.00
9	1 Extron Crosspoint 1616H (60-242-06) Routing Switcher 16X16 RGBHV		\$ 12,999.00	20%	\$ 10,399.20	\$ 10,399.20
10	1 RGB Spectrum QV XL-4/0 Quadview Image Processor		\$ 9,995.00	12%	\$ 8,795.60	\$ 8,795.60
11	4 Extron USP405 (60-369-01) Univeral Signal Processor Scale		\$ 4,495.00	20%	\$ 3,596.00	\$ 14,384.00
12	1 Crestron CP2E Processor Compact Presentation Controller		\$ 1,800.00	18%	\$ 1,476.00	\$ 1,476.00
13	1 Crestron C2NVEQ-4 Volume Controller (touch panel monitoring		\$ 800.00	18%	\$ 656.00	\$ 656.00
14	1 Crestron C2NH-Block Cresnet Network Distribution Block		\$ 170.00	18%	\$ 139.40	\$ 139.40
15	1 Crestron PW-2420RU Power Pack, Desktop, 24VDC,		\$ 250.00	18%	\$ 205.00	\$ 205.00
16	2 Crestron TX-QM RGB Input Card Touchpanel QM		\$ 825.00	18%	\$ 676.50	\$ 1,353.00
17	1 Crestron TPS-12G-QM 12" TouchPanel with Dual QM Inputs		\$ 8,000.00	18%	\$ 6,560.00	\$ 6,560.00
18	1 Crestron CNPWS-75 External Cresnet Power Supply, 75 watt		\$ 450.00	18%	\$ 369.00	\$ 369.00
19	1 Crestron TPS/TPMC-CBL-T Triamase Touchpanel Cable 9 Ft		\$ 200.00	18%	\$ 164.00	\$ 164.00
20	1 Middle Atlantic WRK44SA-32 Equipment Rack 44RU with Rear Door		\$ 1,133.00	9%	\$ 1,031.03	\$ 1,031.03
21	1 Middle Atlantic MW-VT Vented Top		\$ 50.50	9%	\$ 45.96	\$ 45.96
22	1 Middle Atlantic CBS-WRK-32 Caster Base		\$ 162.50	9%	\$ 147.88	\$ 147.88
23	1 Middle Atlantic PVFD-44 Plexiglass Vented Front Doorv		\$ 737.75	9%	\$ 671.35	\$ 671.35
24	1 Middle Atlantic PD-2415CS-NS Power Strip 15 amp 24 Outlet		\$ 131.00	9%	\$ 119.21	\$ 119.21
25	160 TWG Installation Labor		\$ 75.00	0%	\$ 75.00	\$ 12,000.00
26	1 TWG Installation Materials		\$ 2,800.00	0%	\$ 2,800.00	\$ 2,800.00
27	8 TWG Documentation		\$ 75.00	0%	\$ 75.00	\$ 600.00
28	44 TWG Programming		\$ 75.00	0%	\$ 75.00	\$ 3,300.00
29	1 TWG Warranty Extension		\$ 4,800.00	0%	\$ 4,800.00	\$ 4,800.00
30					\$ -	\$ -
31					\$ -	\$ -
					<b>SUB TOTAL</b>	<b>\$ 102,476.12</b>
					<b>TOTAL</b>	<b>\$ 102,476.12</b>

Shipping and Sales Tax Not Included.  
Quotation Valid For 30 Days.