

Applicant Information

EMW-2012-FO-04624

Originally submitted on 07/06/2012 by Pam Jenkins (Userid: pamjenkins)

Contact Information:

Address: 301 University Ridge
 City: Greenville
 State: South Carolina
 Zip: 29601
 Day Phone: 8644677009
 Evening Phone:
 Cell Phone:
 Email: pjenkins@greenvillecounty.org

Application number is EMW-2012-FO-04624

* Organization Name	Greenville County EMS
* Type of Applicant	Non-Affiliated EMS Organization
* Type of Jurisdiction Served	County
If other, please enter the type of Jurisdiction	
* <u>Employer Identification Number</u>	57-6000356
* What is your organization's <u>DUNS Number</u> ?	077991206 (call 1-866-705-5711 to get a DUNS number)
Headquarters or Main Station Physical Address	
* Physical Address 1	301 University Ridge
Physical Address 2	Suite 1100
* City	Greenville
* State	South Carolina
* Zip	29601 - 3636 Need help for ZIP+4?
Mailing Address is the same as the Physical Address	
* Mailing Address 1	301 University Ridge
Mailing Address 2	Suite 1100
* City	Greenville
* State	South Carolina
* Zip	29601 - 3636 Need help for ZIP+4?
* Please describe all grants that you have received from DHS, for example, 2008 AFG grant for a vehicle or 2010 HSGP grant for exercises. (Enter N/A if Not Applicable).	
n/a	
Account Information	
* Type of bank account	Checking
* Bank routing number - <u>9 digit</u> number on the bottom left hand corner of your check	053902197

* Section # 1 Project Description: In the space provided below include clear and concise details regarding your organization's project's description and budget. This includes providing local statistics to justify the needs of your department and a detailed plan for how your department will implement the proposed project. Further, please describe what you are requesting funding for including budget descriptions of the major budget items, i.e., personnel, equipment, contracts, etc.? *3000 characters

Greenville County Emergency Medical Services (GCEMS) respectfully requests support from the Assistance to Firefighters Grant to purchase ten 12-lead cardiac monitor defibrillators.

GCEMS is a third-service, career, municipal and rural emergency medical system located in Greenville (Greenville County), South Carolina. This system serves the state's most populous county and is the largest EMS service in the state.

GCEMS provides 911 pre-hospital emergency medical treatment and transport to just over 450,000 residents, covering 795 square miles. GCEMS has an authorized strength of over two hundred field personnel who work a hybrid system of high-performance EMS. In 2011 GCEMS responded to 63,128 emergency medical calls.

By August 2013, 59% of GCEMS's current supply of cardiac monitors will be nine (9) years old or older. The manufacturer recommends a useful lifespan of seven years, the American Hospital Association recommends a lifespan of five years for similar equipment, and the U.S. Army recommends a lifespan of eight years. Of the agency's total supply of 37 monitors, 40% of them lack the capability to measure end tidal CO₂ with waveform capnography. This diagnostic tool is critical for determining whether an endotracheal intubation has been performed correctly.

The use of quantitative waveform capnography for confirmation and monitoring of endotracheal tube placement is a Class 1 recommendation by the American Heart Association in their 2010 Guidelines for CPR and ECC. The requirement of quantitative waveform capnography is also a mandate by the Department of Health and Environmental Control; the regulating agency for EMS in the State of South Carolina. This mandate is effective October 1, 2011.

GCEMS believes that the purchase of new monitors will allow the service to meet the national standard of pre-hospital care and improve the survival of patients in cardiac arrest. The requested equipment would be placed on 10 of GCEMS advanced life support response units, which includes ambulances, quick response vehicles and supervisor vehicles. The cardiac monitors cost approximately \$33,000, which includes monitor/defibrillator, CPR, pacing, to 360J, SPO₂/CO, 12L GL, NIBP, CO₂, Trending, BT, and Temperatur, Lithium Ion batteries 5.7amp capacity with fuel gauge, monitor AC power supply, cable external power extension, AC power cord, temperature sensor skin probe, temperature sensor esophageal-rectal 9Fr, carrying bag main bag (which includes shoulder strap), top pouch for storage items, rear bag carry pouch, and Rainbow DCI ADT reusable sensor. The total cost for 10 monitor/defibrillators would be \$330,000 and GCEMS would commit to 20% of the cost.

* Section # 2 Cost/Benefit: In the space provided below please explain, as clearly as possible, what will be the benefits your department or your community will realize if the project described is funded (i.e. anticipated savings and/or efficiencies)? Is there a high benefit for the cost incurred? Are the costs reasonable? Provide justification for the budget items relating to the cost of the requested items. *3000 characters

In the past six months alone, Greenville County EMS used cardiac monitors on its patients almost 12,000 times; an average of 65 times a day; all for Advanced Life Support care. Based on the \$358,600 cost to purchase ten new monitors annualized per-use cost is \$15.11 Cardiac monitors are used most frequently for those patients reporting shortness of breath, chest pain, syncope, strokes, and cardiac arrest. It is clear that these highly critical pieces of equipment are used on an hourly basis in a high performance system like Greenville County EMS.

The purchase of these new will significantly enhance the agency's focus on improved cardiac care; including ST-segment elevation myocardial infarction (STEMI) and cardiac arrest patients.

GCEMS has been striving to improve the outcome of certain patients through a detailed, department wide quality assurance program. GCEMS is striving to ensure clinical excellence in the areas of STEMI care, acute coronary syndrome, cardiac arrest, congestive heart failure, airway (intubations) and trauma patients. Each of these groups of patients requires the application of a cardiac monitor. It has been proven that EMS can have a positive effect on the mortality and morbidity of these patient groups.

One area in particular is the patient that requires a protected airway. A definitive way to determine if an endotracheal tube is placed correctly is through the use of end-tidal CO2 monitoring and the use of wave-form capnography. These new monitors are equipped with wave form capnography. Having this feature on the new monitors will help to ensure the correct placement of an endotracheal tube on patients that require an advanced airway.

* Section # 3 Statement of Effect: How would this award affect the daily operations of your department (i.e., describe how frequently the equipment will be used or what the benefits will provide the personnel in your department)? How would this award affect your department's ability to protect lives and property in your community? *3000 characters

According to the Center for Disease Control, from 2003-2005 cardiovascular disease mortality was generally highest in the Southeastern United States; with South Carolina and Greenville County falling within this locale. The mortality rate was nearly 400 deaths per 100,000. The American Heart Association statistics state the national rate from cardiovascular disease for this time period is 262 deaths per 100,000. As previously stated, Greenville County EMS has used a cardiac monitor 12,000 times in the past six months.

With the much higher-than-average mortality rates in this community, it is critical for GCEMS to provide the highest level of pre-hospital care possible. The purchase of these new cardiac monitors will make upgrading to that higher level of care possible.

This award will ensure that all Advanced Life Support providers at GCEMS have access to an up-to-date, technologically-advanced cardiac monitor; allowing them to give their patients the best available care. It will also help GCEMS to continue making progress toward its goal to be an entirely medically-focused and data-driven system.

* Section # 4 In the space provided below include details regarding your organization's request not covered in any other section. *3000 characters

Greenville County EMS strives to be medically focused and data driven and is committed to the development of the latest advances in basic and advanced life support patient care. Most recently, GCEMS has focused its attention on improving pre-hospital cardiac care; it is with the special functions and capabilities available in the newest generation of cardiac monitors that will ensure the improvement in that area of pre-hospital medical care continues.

Budget

Budget Object Class

a. Personnel	\$ 0
b. Fringe Benefits	\$ 0
c. Travel	\$ 0
d. Equipment	\$ 331,000
e. Supplies	\$ 0
f. Contractual	\$ 27,600
g. Construction	\$ 0
h. Other	\$ 0

i. Indirect Charges	\$ 0
j. State Taxes	\$ 0
Federal and Applicant Share	
Federal Share	\$ 286,880
Applicant Share	\$ 71,720
Federal Rate Sharing (%)	80/20
* <u>Non-Federal Resources</u> <i>(The combined Non-Federal Resources must equal the Applicant Share of \$ 71,720)</i>	
a. Applicant	\$ 0
b. State	\$ 0
c. Local	\$ 71,720
d. Other Sources	\$ 0

If you entered a value in Other Sources other than zero (0), include your explanation below. You can use this space to provide information on the project, cost share match, or if you have an indirect cost agreement with a federal agency.

Total Budget **\$ 358,600**