

**ORANGE COUNTY  
BOARD OF COMMISSIONERS**

**ACTION AGENDA ITEM ABSTRACT**

**Meeting Date:** February 16, 2010

**Action Agenda**

**Item No.** 4-g

**SUBJECT:** Public Safety Communications Improvements

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**DEPARTMENT:** Emergency Services

**PUBLIC HEARING: (Y/N)**

No

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**ATTACHMENT(S):**

Emergency Services Reserve Capital  
Project Ordinance

**INFORMATION CONTACT:**

Frank Montes de Oca, 919-245-6100  
Craig Blackwood, 919-245-6100

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**PURPOSE:** To consider an allocation from the Emergency Services Reserve Capital Project to update and improve the Public Safety Communications infrastructure.

**BACKGROUND:** In January 2009 the Orange County Emergency Services E911 Center relocated to 510 Meadowlands Drive. Following several years of planning, the project culminated in a successful transition from a conventional system consisting of various aging components and subsystems to 800 MHz technology. This system is the critical communication link between the County and all emergency first response units within Orange County and to neighboring partners in adjacent counties.

This system utilizes towers to transmit radio signals from the E911 Center throughout the system. Currently there is no redundancy in the tower configuration. Should one of the towers malfunction or fail catastrophically, an alternative link must be available to maintain system integrity. Installing directional antennas on each back-up radio located in the E911 Center will provide connection to these individual towers and regain communication with the agencies on that tower if it becomes isolated. The cost to purchase back-up radio antennas is \$10,000.

Another integral part of the 800 MHz radio system is the field units operating from portable and mobile radios. Since the system's startup, several changes have taken place including the need to fully activate the system's "mayday" feature. This allows firefighters and first responders to activate the button to summon help if they become trapped or come under fire and cannot call for help using verbal communication. This requires portable and mobile radios in the system to be re-programmed. This action will update every 800 MHz radio in the County system with needed radio template changes and implement the emergency "mayday" button feature. The cost for the 800 MHz radio programming is \$25,000.

Supporting the communication efforts and playing a key role during disasters and special events is a group of dedicated volunteers - the Amateur Radio Emergency Service (ARES). To support their operation, the Emergency Services Meadowlands site needs to properly accommodate the equipment in the form of an antenna and radio set-up within the Emergency Operations Center at a cost of \$10,000. ARES members bring to the operation their own portable radio equipment reflecting thousands of dollars of personal investment. This action will provide equipment complimenting their system to allow them better, quicker start-up time during disasters when time is critical.

The Satellite phone system provides Orange County with a satellite based communications tool during a widespread disaster. The Satellite phone system can connect directly with mutual aid counties as well as the State Emergency Operations Center when other forms of communication are down. In addition, maintaining the satellite phone is a requirement of the annual Emergency Management Performance Grant (EMPG) from North Carolina Emergency Management. Emergency Services would move the satellite phone hardware from 1914 New Hope Church Road and reinstall it in the new Emergency Services building at 510 Meadowlands Drive at a cost of \$2,000.

The NC Department of Transportation allows access to its network of traffic cameras to assist public safety with monitoring traffic along major highways and interstates. This action will allow Emergency Services through the E911 Center to monitor roadway situations and more effectively route emergency response vehicles to major accident scenes. Further, weather conditions could also be better monitored along I40 and I85 utilizing this system. The cost of this initiative is \$65,000.

**FINANCIAL IMPACT:** Funds for the purchase of the above mentioned items, totaling \$112,000, will come from the \$1.2 million surplus 911 funds that the Board approved setting aside in an Emergency Services Reserve Capital Project for equipment, vehicles, and capital maintenance. Currently, there is \$400,000 available in this reserve. With this appropriation, \$288,000 would remain available for future allocations from the Board.

**RECOMMENDATION(S):** The Manager recommends that the Board:

1. Approve the purchase of these items to update the Public Safety Communications Infrastructure; and
2. Approve funds up to \$112,000 from the Emergency Services Reserve Capital Project, allocate this amount to the Emergency Services Department's capital budget section within the General Fund for the purchase, and approve the attached capital project ordinance.

**Emergency Services Reserve  
Capital Project Ordinance**

Be it ordained by the Orange County Board of County Commissioners that pursuant to Section 13.2 of Chapter 159 of the General Statutes of North Carolina, the following capital project is hereby adopted.

**Section 1.** The project authorized reserves monies for Emergency Services related equipment, vehicles and capital maintenance. Proceeds from the use of Emergency Telephone funds as authorized by the General Assembly in FY 2008-09 finance this project.

**Section 2.** The officers of the County are hereby directed to proceed with the project within the budget contained herein.

**Section 3.** The following revenue is anticipated to complete this project:

	Through FY 2008-09	FY 2009-10	Through FY 2009-10
Sales Tax	\$0	\$0	\$0
2001 Bonds	\$0	\$0	\$0
2004 Two-Thirds Net Debt	\$0	\$0	\$0
From E911 funds	\$0	\$1,200,000	\$1,200,000
Other	\$0	\$0	\$0
<b>Total Funding</b>	<b>\$0</b>	<b>\$1,200,000</b>	<b>\$1,200,000</b>

**Section 4.** The following amount is appropriated for this project:

	Through FY 2008-09	FY 2009-10	Through FY 2009-10
Land/Building	\$0	\$0	\$0
Planning/Architect/Engineering	\$0	\$0	\$0
Reserve	\$0	\$288,000	\$288,000
Transfer to General Fund (Communications Improvements - FY 2009-10)	\$0	\$112,000	\$112,000
Transfer to General Fund (Vehicle Purchases - FY 2009-10)	\$0	\$750,000	\$750,000
Transfer to General Fund (Revere Road EMS Station - FY 2009-10)	\$0	\$50,000	\$50,000
<b>Total Costs</b>	<b>\$0</b>	<b>\$1,200,000</b>	<b>\$1,200,000</b>

**Section 5.** This ordinance shall remain in effect until the Board of County Commissioners takes action to amend the ordinance or close the project ordinance upon completion of the project.

Adopted this 16th day of February 2010.