



**Date:** October 16, 2012

**To:** Thomas J. Bonfield, City Manager

**Through:** Wanda Page, Deputy City Manager

**From:** Joseph W. Clark, Fleet Management Director  
Rik Rasmussen, Radio Systems Manager

**Subject:** Radio System Sole Source Upgrade

### **Executive Summary**

The contract under consideration is a Capital Improvement Project to upgrade existing dispatch consoles, infrastructure equipment and additional consoles for the backup 911 center. This will replace computers and servers that are over seven years old and which are increasingly unreliable and difficult to maintain. This upgrade will also start us on a path of gradual migration from the 1994 purchased radio infrastructure to the newer P25 Public Safety standard digital system. The upgrade outlined will allow non Public Safety Departments two additional years to purchase replacement upgraded radios.

The core of a public safety radio system is its dispatch function. Dispatch is provided on the Durham system from the 911 center and three other dispatch locations using radio dispatch consoles which operate on computers, servers and network equipment. As with all information technology equipment the upgrade and replacement cycle is relatively short. The equipment that was purchased in the upgrade project of 2005 is already over seven years old.

Parts for maintenance of aging electronic equipment have become increasingly difficult to obtain. Old equipment deteriorates and becomes increasingly unreliable. Neither of these eventualities is acceptable in a Public Safety radio system that must maintain critical communications 24 hours a day, 7 days a week. Manufacturer support for our current infrastructure ends by 2015.

### **Recommendation**

The Fleet Management Department recommends authorizing the City Manager to enter into a sole source contract with Motorola Solutions, Inc. in the amount of \$12,397,744, without competitive bidding as authorized by G.S. 143-129 (e) (6) "on the grounds that the product is available from only one source of supply", for the upgrade

of the current radio system in a manner that allows a gradual transition to newer technology and continued use of our existing Motorola system during the three year project. Three years of overlapped and simultaneous use of the old and new systems, a capability which only Motorola can supply is needed.

Fleet Management also recommends that the City Manager be authorized to modify the contract before execution provided that modifications do not increase the dollar amount of the contract and are consistent with the general intent of the existing version of the contract

### **Background**

Radio system infrastructure equipment today has a replacement lifecycle of approximately ten years. Most of the radio system infrastructure equipment was purchased in 1994. It will be 20 years old when we complete its replacement in 2014. The remaining equipment was purchased in the 2005 upgrade project, which anticipated a ten year use.

### **Issues and Analysis**

The core of a public safety radio system is its dispatch function. Dispatch is provided on the Durham system from our 911 center and three other dispatch locations using radio dispatch consoles which operate on computers, servers and network equipment. As with all information technology equipment the upgrade and replacement cycle is relatively short. The equipment that was purchased in the upgrade project of 2005 is already over seven years old.

Parts for maintenance of aging electronic equipment have become increasingly difficult to obtain. Old equipment deteriorates and becomes increasingly unreliable. Neither of these eventualities is acceptable in a Public Safety radio system that must maintain critical communications 24 hours a day, 7 days a week. Manufacturer support for our current infrastructure ends by 2015.

The Public Safety community nationally, through the Association of Public-Safety Communications Officials (APCO) organization, has spent over two decades developing a standard for public safety radio communications. The APCO Project 25 standard is now the recognized platform for the next generation of public safety communications. The surrounding towns and counties with which we have mutual aid agreements are committed to moving to the APCO P25 standard. Recently, the Town of Cary awarded a contract to Motorola for the purchase of a P25 system. Duke University Public Safety is already operating on a P25 system. The State of North Carolina VIPER system which is the interoperability platform for our communications with the surrounding counties has begun a gradual upgrade to P25. By upgrading the Durham radio system to P25, we will ensure maximum interoperability.

### **Alternatives**

There are no good alternatives to this upgrade. The equipment is becoming obsolete. Continued use of old, un-supported equipment could result in system failure and loss of Public Safety Communications.

**Financial Impact**

The total project is expected to cost \$13.2 million, of which the \$12.4 million is this Motorola contract. Approximately \$205,000 of the total is to be reimbursed to the City by North Carolina Central University for their two dispatch console positions included in this project. The remainder of the project costs will be shared by the City and the County, \$6,097,500 respectively. Motorola Solutions is offering a three year lease-purchase which delays the first of three annual payments until FY 2014. The County is to reimburse the City for its share of each annual payment.

**SDBE Summary**

There were no SDBEs to provide this Product.

The workforce statistics for Motorola Solutions, Inc. are as follows:

Total Workforce	9810	100%
Total Females	2472	25%
Total Males	7338	75%
Black Males	318	3%
White Males	5273	54%
Other Males	1747	18%
Black Females	168	2%
White Females	1606	16%
Other Females	698	7%

**Attachments**

- Attachment 1: Communications System Agreement
- Attachment 2: Equipment Lease Purchase Agreement
- Attachment 3: Motorola Project 25 Upgrade Proposal