



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 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 \$12,397,744.00, 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 execute a lease agreement with Motorola provided that the dollar amount of the contract does not exceed \$12,397,744.00, the term of the lease does not extend beyond 59 months or include an interest rate that is not over 2.50%.

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 an estimated \$13,200,000.00, of which the Motorola contract is approximately \$12,400,000.00.

Motorola Solutions has offered a flexible lease-purchase option which would allow the City to use the lease as low-cost interim financing solution until the project is completed and then the City would execute a final, long-term financing solution in FY 2016.

The anticipated principal and interest expenses related to the Motorola lease would be approximately:

FY2014:	\$400,000.00
FY2015:	\$750,000.00
FY2016:	\$11,350,000.00

The anticipated revenues from our partners (NCCU and Durham County) will be received in accordance with completion timelines of each phase of the project. As each payment is received, it will be applied to the outstanding balance of the lease.

County:

FY2014:	\$2,950,000.00
FY2015:	\$2,300,000.00
FY2016:	\$1,350,000.00

NCCU:

FY2015:	\$205,000.00
---------	--------------

The execution of this financing agreement will have no impact on the FY2013 budget and has been planned for as part of the City’s long-term financial planning process. It will cause no variance from the plan.

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: Motorola Project 25 Upgrade Proposal