



**CITY OF FORT LAUDERDALE  
City Commission Agenda Memo  
CONFERENCE MEETING**

**#15-0413**

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**TO:** Honorable Mayor & Members of the  
Fort Lauderdale City Commission

**FROM:** Lee R. Feldman, ICMA-CM, City Manager

**DATE:** April 7, 2015

**TITLE:** Report on Public Safety Radio System Replacement

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In 1993 the Cities of Fort Lauderdale and Pompano Beach implemented a Motorola 26-channel 800 MHz trunked radio system to support their local government and public safety radio communications needs. This system has served both cities well for over 22 years. However, over the past several years the system has been plagued with issues due to aging and a lack of critical parts and components because they are no longer manufactured or obtainable. In addition, the manufacturer, Motorola, can only support the system through a service agreement that is deemed a “best faith effort”.

In October 2007, the City Commission approved an independent consultant, Tusa Consulting Services (Tusa), to provide the City of Fort Lauderdale with an analysis of its 800 megahertz (MHz) Trunked Radio System. Tusa delivered two reports and also conducted an inspection of the existing physical infrastructure. During the inspection, it was determined that much of the system’s critical infrastructure was obsolete. Many key simulcast and connectivity components were no longer supported by their manufacturers. Tusa reported that in order to maintain system availability, the City has been forced to cannibalize existing infrastructure components and correspondingly reduce system capacity. Of primary concern was that the City would have no way to effectively recover from significant failures and critical system components. The ability to effectively respond to potential equipment failure is imperative to support the public safety needs of the City.

In May 2011, the City Commission approved funding for the replacement of one of three critical components of the system, namely the Microwave Network. In September 2011, the City Commission approved an agreement with Motorola Solutions, Inc. for \$3,491,064.00 to replace the Microwave Network equipment.

Since completion of the Microwave Network, staff has been dealing with other failures and issues associated with the remaining major components. Staff has used creative means to support the system in its current state, but parts and components are not readily available and the City’s service provider, Motorola Solutions, Inc., continues to struggle to support this legacy system. Due to the lack of parts and components, the City’s 26 channel capacity has been reduced to 20 channels.

Staff continues to search open market spare parts sources, but this resource is becoming more limited as time passes.

In 2012, Tusa was again hired to provide an updated evaluation and recommendation for the City's radio communications challenges. Tusa provided recommendations that included the purchase and/or lease of a state-of-the-art Project 25 radio communications system.

In discussions with Broward County officials, utilization of the County radio system has been considered for the City's radio communications needs. However, the Broward County radios system is unable to accommodate the current Fort Lauderdale requirements and they also have support and technical issues. The County radio system is 23 years old and there is no independent backup system. Without a backup system, the City would be vulnerable for dispatching its public safety entities.

The County has indicated plans to upgrade their radio system but could not definitively provide their plan and timeline for doing so. The County's upgrade would be beyond the year 2018 and possibly as late as the year 2020.

Staff now recommends a solution for a five-year lease of a Motorola 12 Channel APCO (Association of Public Safety Communications Officials) Project 25 (P25) 800 MHz Trunked Radio System. Staff believes that a five-year lease will allow and ensure continual operations for public safety employees. In addition, a five-year lease system would provide the City with more time to further determine the feasibility of using the County system if and when it is upgraded.

The total cost of the five-year lease and four-year support will be \$2,776,830. However, factoring in cost reductions for the support of the existing end of life system will result in a net five-year cost of \$1,728,282.

#### **Strategic Connections:**

This item is a Press Play Fort Lauderdale Strategic Plan 2018 initiative included in the Public Safety Cylinder of Excellence

- Goal 9: Be the safest urban coastal City in South Florida through preventative and responsive police and fire protection;
- Objective 2: Provide quick and exceptional fire, medical, and emergency response

This item is also in furtherance of the *Fast Forward Fort Lauderdale 2035 Vision Plan: We Are Ready*.

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