

Memorandum



CITY OF DALLAS

DATE April 24, 2015

TO Honorable Members of the Public Safety Committee: Sheffie Kadane (Chair), Adam Medrano (Vice-Chair), Dwaine Caraway, Jennifer S. Gates, Sandy Greyson, Scott Griggs

SUBJECT Radio Network Replacement Project (P25)

On Monday, April 27, 2015, you will be briefed on the Radio Network Replacement Project (P25). The briefing materials are attached for your review.

A handwritten signature in black ink, appearing to read 'Jill Jordan'.

Jill A. Jordan, P.E.
Assistant City Manager

Attachment

c: Honorable Mayor and Members of the City Council
A.C. Gonzalez, City Manager
Warren M.S. Ernst, City Attorney
Craig D. Kinton, City Auditor
Rosa A. Rios, City Secretary
Daniel F. Solis, Administrative Judge
Ryan S. Evans, First Assistant City Manager
Eric D. Campbell, Assistant City Manager

Mark McDaniel, Assistant City Manager
Joey Zapata, Assistant City Manager
Jeanne Chipperfield, Chief Financial Officer
Sana Syed, Public Information Officer
Elsa Cantu, Assistant to the City Manager – Mayor & Council

RADIO NETWORK REPLACEMENT PROJECT (P25)

Public Safety Committee

April 27, 2015

William Finch
Chief Information Officer



Purpose

The purpose of this briefing is to recap the scope and provide a status update on the Radio Network Replacement Project (P25) that was planned in 3 distinct phases. Additionally, this briefing will discuss the upcoming Request for Competitive Sealed Proposals (RFCSP) for the replacement of the Radio System infrastructure.

City's P25 Radio Project Recap

- Project 25 (P25) is a digital radio standard developed by the Association for Public Safety Communications Officials (APCO) and recommended by Homeland Security to ensure radios made by different manufacturers can communicate with each other (interoperable).
- Several factors lead to the need for the City to update and in many cases replace components of its Radio Network.
 - FCC mandated that all public safety radio systems be “narrowbanded” by January 1, 2013.
 - State of Texas has set an objective that radio communications for all first responders be P25 compliant
 - The current radio network was built over 40 years ago and most of the technology is 20 years old and no longer supported.

City's P25 Radio Project Recap (cont.)

- The City engaged a consultant in 2008 to conduct a Vulnerability Assessment on the Radio Network.
- Outcomes from that assessment included:
 - Radio network was not narrowband or P25 compliance
 - Radio coverage is inadequate in certain areas and inside buildings
 - Mobile radios were susceptible to security breaches (hacking / listening in)
 - Radio microwave system did not support redundancy or fault tolerance
- The City chose to address these recommendations in 3 phases
 - Phase 1 – Narrowband Equipment Refresh – Complete
 - Phase 2 – Replace Microwave Communications System – Complete
 - Phase 3 – Replace Radio Communication System (infrastructure) – Ongoing

Phase 1 – Narrowbanding

- Phase Status – Completed (December 2013)
 - Upgraded or replaced 8,275 handheld and mobile radios for Police, Fire-Rescue, City Marshals, Office of Emergency Management and Water Utilities
 - All devices upgraded/replaced are P25 compliant
 - Total cost of \$27.7M



x17640824 fotosearch.com

Phase Created
Narrower Lanes
=
MORE Lanes of
traffic in the same
space



Phase 2 – Microwave Replacement

- Phase Status – Completed (December 2014)
 - Replaced existing Microwave system that provided network redundancy, tripled capacity and improved performance.
 - New system allows for the option to transition from traditional wired voice and data circuits operating in City facilities to the microwave system.
 - Also setup for expanding the using the system for Wi-Fi and wireless growth for City field operations such as traffic lights and cameras.
 - Total cost of \$6.6M



Phase 3 – Radio System Replacement

- Phase Status – Currently Underway
 - The City and Dallas County have engaged a consultant to assess operating needs, compile business requirements and develop technical specifications.
 - A RFCSP has been developed and is ready for solicitation to acquire a new P25 Radio System.
 - Process includes the development of an evaluation committee to review vendor proposals and make the recommendation for award
 - Mandatory, desired and optional components of a new radio system and various forms of vendor support levels are included
 - The solution will replace legacy communication infrastructure such as transmitters, receivers and antennas to a P25 compliance system that will improve performance and resolve network vulnerabilities

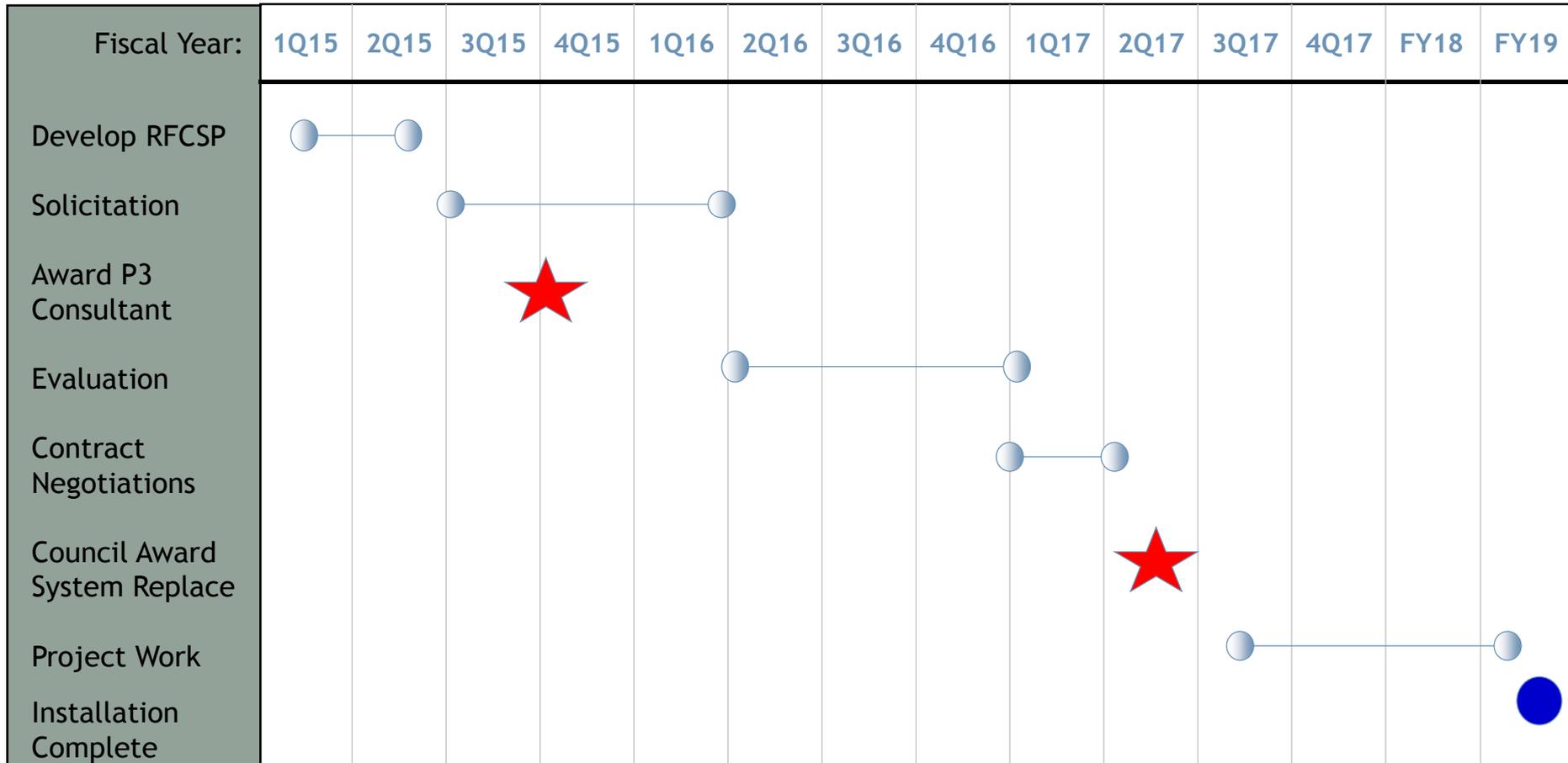
Phase 3 (continued)

- The RFCSP gives the vendors the option of submitting a variety of different proposals. Such as:
 - **City Owned:** allows for the City to purchase and own all hardware/software and requires City employees to support and maintain the system with limited vendor support. Includes terms for City and Vendor financing options.
 - **Subscription Service:** allows the City to lease transmission equipment from the vendor to use on City owned towers and frequencies.
 - **Public/Private Partnership:** a shared system to reduce costs and to harness expertise of the corporate partner and utilizing the partner to bear a substantial portion of the capital investment on behalf of the public sector.

RFCSP Evaluation Ranking Criteria

Category	Ranking
Cost of Solution	30%
Experience & Capability	25%
Functional / Technical Match to City and Dallas County Requirements	30%
Business Inclusion and Development	15%
TOTAL	100%

Proposed Procurement Timeline



- **Council Award Needed:**

- Phase 3 Consultant contract (3Q15) at an estimated \$780K using CIS FY15 budgeted funds
- Replacement of Legacy Radio Communication System (3Q17)

Next Steps

- Advertise bid solicitation in the Dallas Morning News
- Release Request for Competitive Sealed Proposals (RFCSP) to potential proposers
- Recommend award for phase 3 of the consultant contract to City Council in June 2015
- Tentative award for the legacy system replacement scheduled for early 2017