



CITY OF HAYWARD
AGENDA REPORT

AGENDA DATE 04/24/07

AGENDA ITEM 4

WORK SESSION ITEM _____

TO: Mayor and City Council

FROM: City Manager

SUBJECT: Appropriation of Funds Regarding the Public Safety Radio Upgrade Project

RECOMMENDATION:

It is recommended that the City Council adopt the attached resolution appropriating \$380,000 to the Public Safety Radio Upgrade Project.

BACKGROUND:

In Fiscal Year 2003-04, Council reserved \$2.25 million to upgrade the Public Safety Radio System. In October 2005, Council appropriated \$1.6 million for Phase I of the Public Safety Radio System Replacement Project. This included \$600,000 to replace the radio microwave system, \$300,000 for antennas and transmission lines, \$300,000 for the simulcast and voting systems, \$300,000 for replacing existing Mobile Data Terminals (MDT) with Mobile Data Computers (MDC) in the Fire Department, and the remainder (just under \$100,000) for project contingencies. The \$1.6 million, plus an earlier appropriation of \$270,000 for system analysis and design, left a balance of \$380,000 remaining in the General Fund reserve for this project.

DISCUSSION:

The City's existing Public Safety Radio System has evolved over several years and primarily serves public safety (Police and Fire) by providing central dispatch services and two-way communications between the user(s) and the city's Communications Operations Center (Comm Ops or Dispatch); and it provides two-way communication between two users in the field. Public Works also has access to and utilizes the system. An example of full use of the system might be the receipt of a 9-1-1 call by Comm Ops where Dispatchers evaluate the call and typically dispatch Fire and/or Police to the scene. In the course of response, there may be considerable communication traffic among responders in the field and between responders and Central Dispatch asking and giving information, securing back-up, or allocating other resources.

The system consists of several major "subsystems":

- Transmitter Towers/Microwaves – There were three transmitter sites (towers) in the City: Police Department building, Walpert Ridge, and Hesperian Pump Station. These sites were maintained and upgraded and a fourth site at the Garin Water Tank was added during this project. The four sites are connected via microwave and are the backbone of the Public Safety Radio transmission system.

- Simulcast Subsystem – A message entered into the system at Comm Ops is broadcast from all four towers simultaneously, improving coverage and helping to ensure that users simultaneously receive one clear message, rather than garbled multiple versions of the message milliseconds apart. The upgraded equipment and the additional tower now assure clear, strong communications over a broader area.
- Voter/Receivers – The system is equipped with multiple receiver sites that pick up the transmission and completes the communication loop. When a receiving site picks up a transmission from the field, the voting system selects the strongest signal and uses that site to complete the transmission. The Upgrade Project added receiver sites, strengthened signals, and improved the speed of the voting system.

The MDT's in the Fire Department have been replaced. The new Public Safety Radio System is in place and working, with cut over to the new system occurring in March 2007. However, during project implementation, increases in service, materials, and equipment costs over what was estimated in the original budget were encountered. Additional site work and equipment were added to the Radio System to improve coverage throughout the City, as well as clarity and reliability of transmission.

The cost of the radio antenna towers also proved to be more costly. The electrical upgrades and the battery systems at all sites proved to be more expensive than anticipated, as did the back up generator at Garin. With the new MDC's, it became necessary to strengthen the wireless connection between Fire apparatuses and their respective Fire Stations when equipment is moving to and from an incident scene. All of these items increased costs for the project.

The October 2005 agenda report noted that the portable or handheld radio units used by Public Safety personnel were analog and in need of replacement. At that time, it was reported that the radios would not be replaced, but rather the maintenance program for the existing units would be expanded. Upon further assessment, this proved to be impractical given the improvements made in the Public Safety Radio project system, thus requiring the 300 handheld units to be replaced. Motorola offered the City an extremely good price with low cost financing, which staff utilized. This was not included in the original project budget.

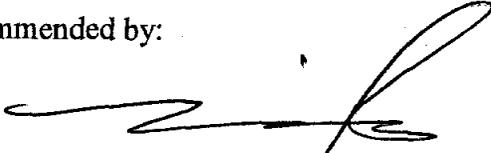
Given all of the above, an additional \$380,000 is required to complete all aspects of both the Fire MDT replacement program and the full implementation of the Public Safety Radio Project. Although this represents a new appropriation, it is within the overall allocation set aside for this project, and does not entail the allocation of new funds. Therefore, it is recommended that Council adopt the attached resolution to appropriate \$380,000 from the General Fund reserve to the Public Safety Radio Replacement Project.

Prepared by:



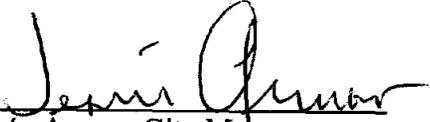
Clancy Priest, Deputy City Manager/Technology Services Director

Recommended by:



Fran David, Assistant City Manager

Approved by:



Jesús Armas, City Manager

DRAFT

HAYWARD CITY COUNCIL

RESOLUTION NO. 07-

Introduced by Council Member _____

RESOLUTION AMENDING RESOLUTION 06-080, AS AMENDED, THE BUDGET RESOLUTION FOR FISCAL YEAR 2006-07, RELATING TO AN APPROPRIATION OF FUNDS TO REPLACE THE PUBLIC SAFETY RADIO SYSTEM

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Hayward that Resolution No. 06-080, as amended, the Budget Resolution for fiscal year 2006-07, is hereby amended by approving an appropriation of \$380,000 from the General Fund Public Safety Radio Replacement Fund (Fund 100) to the Capital Projects Fund, Public Safety Radio Replacement Project (Fund 410) to complete the City's Public Safety Radio System and the Fire MDC Replacement Projects.

IN COUNCIL, HAYWARD, CALIFORNIA _____, 2007

ADOPTED BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:

MAYOR:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST: _____
City Clerk of the City of Hayward

APPROVED AS TO FORM:

City Attorney of the City of Hayward