

**TO: James L. App, City Manager**  
**FROM: David McCue , Information Technology Manager**  
**SUBJECT: City-Wide Central Telephone System replacement**  
**DATE: February 5, 2008**

**NEEDS:** For the City Council to authorize the acquisition and installation of a centralized telephone system to replace multiple aging telephone systems and meet expanding facility as well as voice/data communication needs.

**FACTS:**

1. The City's Information System Strategic Plan calls for the integration of computer and telephonic equipment to achieve efficiencies in communications.
2. The City Council has leased space for a City Hall Annex at 821 Pine Street to house Administrative Services and Information Technology staff and services. This new office space requires telephonic equipment.
3. Telephone equipment is designed to last and be supported by the manufacturer for 8-12 years. The telephone system at City Hall is 13 years old. It, and the system at the Public Safety Center, are not expandable. Council budgeted \$75,000 for the replacement of the City Hall telephone system in the fiscal year 08-09.
4. The 911 telephone and radio recording system at the Public Safety Center utilizes a traditional voice recording technology and cannot be integrated into a modern voice/data system.
5. City-wide, there are 11 telephone systems with just City Hall and the Public Safety Center being fully integrated (voice mail connectivity and call transfer capabilities).
6. New technologies like Voice Over Internet Protocol (VOIP) provide the ability to bring full featured telephones to both directly connected and remote sites through the data networks. VOIP telephone systems have eclipsed traditional voice systems and now account for 80% of new medium to large businesses phone systems.
7. Installation of a new centralized phone system at this juncture will avoid piecemeal expansion of an already aging system and eliminates the need to "fit" new systems with old systems when expansion or replacement is required.
8. To expedite the project and take advantage of the State's discounted purchasing ability, the California Multiple Award System (CMAS – State Bid List) and Western States Contract Alliance (WSCA) were utilized to obtain quotes for the project components. The City utilized the services of Pacific Design Engineering (PDE) to define the scope of the project to ensure consistent bid comparison.
9. This is a complex project that contains multiple elements of both hardware and service purchasing. Each piece/task is interrelated, and required for the success and functionality of the others. It is necessary to implement all of the following project elements to accomplish the centralized communication system:

Purchase new VOIP telephone system hardware, software, licensing and installation services:

Quotes from 4 phone system vendors were received, then were compared and contrasted in the context of the City's integration and expansion needs. The Phone Center's Avaya solution is the recommended phone system vendor based on their providing the greatest value in a benefit vs. cost analysis as highlighted below:

- The Avaya solution is a complete solution with appliances that plug into a data network that is less complex than required by some other vendors.
- The Avaya solution is less expensive than the other best selling product.
- Avaya has a well thought-out User interface for maintenance and would require less training.
- Avaya with 90% of the telephone market for fortune 1000 companies would be easy to find maintenance support in the future.
- The Gartner Group's analysis of telephone vendors places Avaya (along with Cisco and Nortel) in their "Magic Quadrant" providing the most complete vision and ability to execute of all major vendors.
- The Avaya telephone equipment will be fully compatible with the Police Department's new recording system.

Purchase supplemental hardware to expand existing network to support new phone system:

The purchase of necessary network hardware (routers and switches) will come from Insight Enterprises Inc. as they have the most competitive pricing from the State bid list.

Contract services for expansion of existing data network to support the new phone system:

PDE has proven experience in the field of telephone and data systems, and has designed a data network capable of handling the City's current and growing needs. Based on PDE's familiarity with the telephone system design, and involvement in the RFQ process for phone vendors, they are being recommended as a sole source vendor to provide the necessary services to install the needed data network expansion (a portion of the system not provided by the phone system vendor). PDE will be able to provide this service in the short timeframe needed and at a noticeably reduced cost versus other potential vendors based on their familiarity with the project design.

Purchase hardware and contract services to install a new 911 recording system:

Executive Communications Systems is the current vendor for the City's 911 recording system and are the recommended vendor and service contractor for installation of the upgraded system. In addition to utilizing existing software (no interruption to users for training) the City will receive a trade-in credit toward the upgrade of this system.

Install conduit and fiber optic cabling to the City Hall Annex:

This work has already been incorporated into the remodel work for the City Hall Annex site, as it will be required for either a stand alone system for the new Annex facility, or for part of an integrated solution.

Contract services to install necessary infrastructure to connect remote site:

The purchase of data circuits and telephone services will come from our existing Calnet contract with AT&T.

**ANALYSIS &  
CONCLUSION:**

Establishment of the City Hall Annex at 821 Pine Street requires the installation of a new telephone system. The phone system for the City Hall facility can no longer be purchased or upgraded; therefore new systems and vendors are being considered. The City budgeted \$75,000 in FY 2008-09 for the replacement of the telephone system at City Hall / Library complex, but this is not adequate to integrate voice and data communication consistent with the City's Information System Strategic plan.

Modern telephone systems using Voice over IP send the voice call over the data network taking advantage of the data infrastructure. A centralized system utilizing the city's data network would not only connect the City Hall Annex on Pine Street to City Hall and the Public Safety Center, but would allow the expansion of this core system to include other sites such as Centennial Park, Water Yard and Waste Water Treatment Plant. The Avaya system would provide full featured telephones at all connected sites including efficiency features like call queuing, transferring calls, conference calls, and message waiting notification. This would provide for a level of integration not possible with separate systems.

The City is at a critical juncture in purchasing and expanding its telephonic communication. While it would be possible to "band aid" in additional systems to accommodate the new City Hall Annex and replace the aging City Hall system next year, it is only possible to fully integrate the City's multiple public facilities by migrating to new technology. This migration will be initially costlier, but will have the significant added benefit of integrating multiple public facility sites, thereby improving information connectivity and maintenance efficiency. A lease-purchase solution was considered but an inter-fund repayment schedule would eliminate external finance charges.

**POLICY**

**REFERENCE:** City purchasing policy, Information System Strategic Plan.

**FISCAL  
IMPACT:**

The total cost for the project including City Hall, Public Safety Center, City Hall Annex and six (6) remote sites is \$480,000. The project is partially funded with \$183,000 committed from the City Hall Annex project, the FY 2008 equipment replacement schedule, and the network expansion projects of the Water Yard and Waste Water Treatment Plant facilities. Additional resources of \$78,000 from enterprise funds and a \$219,000 appropriation from the Equipment Replacement Fund are required to complete the project. The Equipment Replacement Fund has sufficient resources to provide the needed funds to be paid back in four (4) annual payments starting in FY 2011.

**OPTIONS:**

Option A:

For the City Council to adopt Resolution No. 08-xx which would:

- 1) Authorize the City Manager to:
  - (i) To execute an agreement with The Phone Center, for a not to exceed cost of \$256,000, to purchase and install the Avaya IP Office central telephone system at City Hall, Public Safety Center, City Hall Annex at 821 Pine, Water Yard, Waste Water Treatment Plant, Centennial Park, Airport, Shop and Fire Station 2; and
  - (ii) To purchase \$70,000 in network routers, switches and hardware from Insight Enterprises Inc.; and
  - (iii) To execute a contract with Pacific Design Engineering for a not to exceed cost of \$40,000 for the installation of the data network upgrades; and
  - (iv) To execute a contract with Executive Communications Systems, for a not to exceed cost of \$65,000, for installation of an upgraded Dynamic Instruments' Dispatch Recorder (911 recording system); and

- (v) To purchase up to \$9,000 in necessary data and telephone services from AT&T; and
  - (vi) To set up a repayment schedule for \$219,000 from the General Fund to the Equipment Replacement Fund for this project with repayments in 4 annual installments starting in FY2011; and
- 2) Appropriate \$219,000 from the Equipment Replacement Fund and \$78,000 from enterprise funds to meet the project balance needs.

Option B:

Amend, modify, or reject the above option.

Attachments:

1. Resolution 08-xxx authorizing project funding and purchase/service contracts

**RESOLUTION NO. 08-**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES AUTHORIZING THE PURCHASE OF CITY-WIDE CENTRAL TELEPHONE SYSTEM REPLACEMENT**

WHEREAS, the City's Information System Strategic Plan calls for the integration of computer and telephonic equipment to achieve efficiencies in communications; and

WHEREAS, the City has leased space at 821 Pine Street (City Hall Annex) which requires telephonic equipment; and

WHEREAS, the telephone system at City Hall and the Public Safety Center are no longer expandable and the City has budgeted \$75,000 in FY 08/09 for the replacement of the City Hall phone system; and

WHEREAS, in order to integrate the Public Safety Center's 911 telephone and radio recording system with a new centralized system, modernized voice/data technology is needed; and

WHEREAS, city-wide there are 11 telephone systems with just City Hall and the Public Safety Center being fully integrated, but a centralized system will fully integrate all sites; and

WHEREAS, installation of a centralized phone system will best meet the expanding needs of the organization in the context of the City's Information System Strategic Plan; and

WHEREAS, the City utilized the State Bid List (CMAS) and Western States Contract Alliance (WSCA) to obtain quotes for components of this project, and utilized the services of Pacific Design Engineering (PDE) to define the scope of the project to ensure consistent bid comparisons; and

WHEREAS, the total cost for the centralized telephone/data system project (including the linkage of six remote public facilities) is \$480,000; and

WHEREAS, \$183,000 is previously allocated to telephone and data networks from the City Hall Annex project (\$134,000), the FY 2008 equipment replacement schedule (\$28,000), and the network expansion projects of the Water Yard (\$10,500) and Waste Water Treatment Plant (\$10,500) facilities; and

WHEREAS, additional resources of \$78,000 from enterprise funds (proportional to their share in the centralized system) and a \$219,000 appropriation from the Equipment Replacement Fund (ERF) to be paid back in four (4) annual installments by the General Fund starting in fiscal year 2011 can be provided to complete the funding for the project.

NOW, THEREFORE, BE IT HEREBY RESOLVED that the City Council of the City of El Paso de Robles does authorize the City Manager to take actions necessary to purchase and install the central telephone system, data network and 911 recording devices at City Hall, Public Safety Center, City Hall Annex at 821 Pine, Water Yard, Waste Water Treatment Plant, Centennial Park, Airport, Riverside Avenue Shop and Fire Station No. 2, including the following:

- (i) To execute an agreement with The Phone Center, for a not to exceed cost of \$256,000, to purchase and install the Avaya IP Office central telephone system at City Hall, Public Safety Center, City Hall Annex at 821 Pine, Water Yard, Waste Water Treatment Plant, Centennial Park, Airport, Shop and Fire Station 2; and
- (ii) To purchase \$70,000 in network routers, switches and hardware from Insight Enterprises Inc.; and
- (iii) To execute a contract with Pacific Design Engineering for a not to exceed cost of \$40,000 for the installation of the data network upgrades; and
- (iv) To execute a contract with Executive Communications Systems, for a not to exceed cost of \$65,000, for installation of an upgraded Dynamic Instruments' Dispatch Recorder (911 recording system); and
- (v) To purchase up to \$9,000 in necessary data and telephone services from AT&T; and

- (vi) To set up a repayment schedule from the General Fund to the Equipment Replacement Fund in the amount of \$219,000 for this project with repayments in 4 annual installments starting in FY2011; and

BE IT FURTHER RESOLVED by the City Council of the City of El Paso de Robles that a one time budget appropriation in the amount of \$297,000 is hereby approved and allocated to the following funds/accounts:

- (i) \$219,000 from the Equipment Replacement Fund 112.130.5454.120
- (ii) \$31,000 from the Water Fund 600.310.5454.165
- (iii) \$31,000 from the Sewer Fund 601.310.5454.164
- (iv) \$12,000 from the Airport Fund 602.310.5454.166
- (v) \$4,000 from the Transit Fund 206.140.5454.130

APPROVED AND ADOPTED by the City Council of the City of El Paso de Robles this 5<sup>th</sup> day of February, 2008 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

\_\_\_\_\_  
Frank R. Mecham, Mayor

Attest:

\_\_\_\_\_  
Deborah Robinson, Deputy City Clerk