

TO: James L. App, City Manager
FROM: Dennis J. Cassidy, Chief of Police
SUBJECT: Mobile Data Computer System Infrastructure
DATE: March 6, 2007

NEEDS: For the City Council to consider a contract to provide and install Mobile Digital Communications (MDC) system infrastructure and the addition of an Information Technology (IT) Technician to support the project, along with other growing IT needs citywide.

FACTS:

1. The Police Department has been posturing itself to incorporate a comprehensive Mobil Digital Communications system in the patrol environment for many years. Such a system will greatly increase the level of information available to the officer in the field, improve officer safety and work efficiency, enhance both police and fire dispatching and improve communications between field units and the station.
2. Mobile Data Communications is made up of three components; computer hardware in the car/unit, communication conduit (cellular or radio) and the remote Computer Aided Dispatch (CAD) and Records Management (RMS) software. The remote CAD/RMS software is proprietary and is actually an optimized version of the same system used by the station-bound dispatchers.
3. The Department's CAD/RMS system is the Public Safety Network Suite (PSnet) that is provided by Executive Information Services (EIS).
4. The Department will be required to contract with EIS to provide "back-end" infrastructure and software support for the MDC systems that will go to the police units, as this essentially moves the product they currently provide to the field environment.
5. EIS has provided a proposal (Attachment "A") for this work which, in summary, calls for \$25,000 for "back-end" infrastructure and \$2,000 per police unit for installation and configuration.
6. The EIS contract is a necessary piece of the total MDC project, regardless of other hardware purchases or decisions regarding connectivity.
7. Additional costs of \$113,000 are expected to fund the remainder of the MDC project, including hardware procurement, wireless data connection fees and San Luis Obispo County connectivity fees. These costs will be funded through the same grant source, and the Police Department will return to Council for authorization to proceed with significant associated expenditures as the project progresses.
8. Recurring annual costs are expected to be approximately \$32,400, including maintenance, wireless connectivity fees and contributions to the equipment replacement fund for future equipment upgrades / replacement.
9. Growing IT demands from every city department have significantly impacted workload of the City's IT personnel. The MDC project is a substantial undertaking, which will further tax City IT resources.
10. This project will be paid for with State of California COPS funds. These funds may be used for equipment and/or personnel to accomplish project management and implementation. The Police Department recommends using the monies currently set aside to accomplish the following:

Purchase MDC infrastructure	\$ 47,000
Assist with funding an IT Tech position for one year	\$ 95,000
IT Staff Workstation	<u>\$ 5,000</u>
TOTAL:	\$147,000

11. The Department of Emergency Services is also pursuing a MDC project of their own to provide CAD dispatching of their personnel. This infrastructure upgrade will be shared with Emergency Services on those projects.
12. Recurring costs to maintain the IT Technician position in the budget as well as annual maintenance of the equipment will be brought forward in the upcoming budget process.

**ANALYSIS &
CONCLUSION:**

The proposed Mobile Digital Communications system is designed to extend the existing Computer Aided Dispatching, Records Management and other computerized systems to the officer in the field. The Police Department has carefully planned, setting aside grant money to provide total project funding. It is anticipated the Department will spend approximately \$260,000 entirely from grant funds on this project; \$165,000 for equipment and \$95,000 for personnel. Annual maintenance of the MDC system is expected to be approximately \$32,400, which includes set-aside money to the equipment replacement fund.

In order to accomplish the MDC project without adversely affecting IT services throughout the City, the Police Department recommends using some of the grant monies currently set aside to fund an IT Technician position for one year.

The Police Department is compelled to enter into a sole-source contract with EIS to provide the MDC infrastructure component of this project, as they are the current software provider for the CAD/RMS system. For this reason, the sole source acquisition for this phase has been approved by the City Manager.

**POLICY
REFERENCE:**

City purchasing policy.

**FISCAL
IMPACT:**

Current balance of the State COPS fund is \$284,700. Funding of the entire project will be from this account. For this phase, \$147,000.00 will be appropriated as follows:

- o \$47,000 to #117-210-5224-136 (EIS contract)
- o \$ 5,000 to #117-210-5454-136 (IT computer)
- o \$95,000 inter-fund transfer from COPS Fund 117-000-5899-000 to General Fund #100-000-4899-000
- o \$95,000 to #100-130-51XX-120 as one time for appropriation for IT staff position for FY 2008 from General Fund (resources transferred from COPS Fund)

OPTIONS:

- a. Adopt Resolution No. 07-xx authorizing the Chief of Police to enter into a contract with Executive Information Services in the amount of \$47,000 for installation of the appropriate Mobile Digital Computer network support hardware and software, MDC workstation configuration and other associated services, and authorizing the hiring of an additional IT Technician.
- b. Amend, modify, or reject the above option.

Paso Robles Police Department

Mobile Digital Communications System

Introduction

This is a proposal to the City of Paso Robles Police Department for a mobile digital communications capability. The proposed system is designed to extend the existing computer assisted dispatching, RMS, and other computerized systems to the field officer.

The City of Paso Robles currently has a large investment in infrastructure. Installation of mobile/wireless workstations will move the benefits of this technology to the field and to the front-line officer and emergency responders in the City.

The effectiveness and utility of mobile digital communications systems is well documented and proven in years of use. Recent developments in communications technologies however, coupled with new commercial service offerings have dramatically changed both the utility of the systems and lowered the overall cost of entry to allow almost any agency to deploy these technologies.

This proposal is submitted for your consideration by Executive Information Services, Inc. As the current systems supplier for the Department, EIS is well qualified to provide the additional components required to implement mobile digital communications and fully interface this technology with the current CAD and RMS systems for maximum utility.

For questions or additional information about this proposal, please contact:

Mr. Richard Sandona
Executive Information Services, Inc.
(626) 353-5204
rick@goeis.net



Proposal

EIS proposes to install a comprehensive mobile digital communications system for law enforcement use. This system and many core components can be expanded at a future date to also provide mobile computer assisted dispatch support for fire apparatus.

The proposed system will utilize the existing message switch installed with the CAD system and will fully integrate with other systems in use. Key functionality in the proposed system includes the following.

- Copies of dispatch messages are sent immediately to the mobile unit
- Mobile Units can generate field initiated events such as vehicle and subject stops
- Mobile units can add additional comments to full events in the CAD system.
- A single inquiry from the mobile will run local, regional and CLETS/NCIC queries on names, vehicles, articles, and weapons. (Provided the agency has or seeks county Network permissions).
- The system supports AVL/GPS in the units, including an in vehicle "heads up" map display and moving unit map displays in communications.
- Car-to-car and car-to-base instant messaging
- In vehicle status summaries similar to those in dispatch
- Entry of core incident and field contact reports in the field.

The EIS mobile digital offerings are based on our PS.NET/MDT software. PS.NET/MDT is a packaged wireless digital communications software application that supports mobile computing in the law enforcement and fire communities. It consists of a number of specially designed software modules that effectively integrate standard hardware into a highly efficient radio digital communications system tailored to the requirements of the public safety environment.

A more complete description of the mobile software functionality is included in the Appendix.

Mobile Controller

The mobile controller software provides base end communications control and interfacing services for the mobile digital system. EIS recommends that this software run on a separate stand-alone server class computer. *Hardware for the mobile controller is included in the base system costs proposed.* Typical specifications for the included controller include the following:

Processor:	2.8 GHz Minimum
Memory:	1 GB Minimum
OS:	Windows 2003 Server
Disk:	72 GB RAID 0 or 5
Network:	Dual NIC's

The mobile controller maintains configuration data in a Microsoft SQL Server database which must be available and accessible on the network.

Client Workstation Software

The client workstation software runs on a standard laptop computer in the patrol vehicle and effectively converts it into a highly efficient mobile workstation. The operator interface on the mobile workstation is highly optimized for the field officer. Large displays, single keystroke commands, and other techniques have been used to make the system easy to use for the field officer.

EIS has two options for mobile client software; a heavy client workstation and a WEB browser based client. The applicability of the client depends on the functionality desired and the interconnections available. Characteristics of the clients include the following.

WEB Client

1. Requires no installation or software maintenance in the patrol vehicle
2. Supports inquiry/response transactions only
3. Is compatible with hand-held devices, cellular phones, and other Pocket PC based clients.

Windows Client

1. Requires a Windows program installation in the patrol vehicle
2. Supports full range of functionality
3. Is compatible with Laptop computers only



Wireless Communications

This system will connect mobile workstations in patrol vehicles to the Department via CDMA/GPRS wireless communications from a commercial carrier such as Sprint, Cingular, or Verizon.

Inquiry/Response Operations

The proposed system will utilize the existing message switch installed with the CAD system to provide mobile connectivity to CLETS/NCIC via the SLO County message switch.

The proposed system can fully participate in the SLO County Regional System. Inquiries submitted from the mobile can optionally return officer safety and subject identification information from other County Agencies; including Atascadero, Morro Bay, SLO County Sheriff, Pismo Beach, and Arroyo Grande.

Implementation Requirements

A full mobile digital implementation for the Paso Robles Police Department will involve the following specific components.

1. Installation of acceptable laptop computers in patrol vehicles
2. Installation of an acceptable rf/wireless solution to connect the laptops to the Department.
3. Installation of a host end mobile digital controller (computer and software) at the base.
4. Interfacing of the mobile digital system to existing CAD and RMS systems
5. Interfacing to the existing SLO County switch
6. Optional GPS (vehicle location) units in patrol vehicles and interfacing to the base end CAD system.
7. Optional hand-held wireless units for detectives, bike officers, and other users for which a full size laptop is not feasible.

Installation

The EIS installation services include the following:

1. Installation of the mobile controller and configuration to operate on the local network.
2. Installation and configuration of mobile digital controller software and interfacing to RMS, CAD, and switching systems.
3. Installation of mobile workstation software on all mobile units.
4. Installation consulting on the required CLETS upgrade application, mobile communications hardware and communications equipment selection, etc.
5. Project management.

User Training

After contract, EIS puts together a customized training plan tailored specifically to the agency requirements. User training typically includes one to two hour training sessions for field officers and separate systems level training for administrators and technical systems personnel. User training can be conducted in multiple sessions and at multiple times to accommodate shift requirements of the Agency. The Agency is responsible for arranging training time.

System Documentation

EIS will provide printed users guides for all system users. Manuals are also available electronically on-line and can be down-loaded and reproduced by the Department for internal use.

Schedule

Installation is scheduled after contract in conjunction with the Agency project manager. Typical installation cycles range from three to six months.

System Cost Proposal

This section of the proposal presents a listing of contract deliverables, system pricing, and applicable terms and conditions under which this proposal is presented. While we believe the proposal presents a complete and optimum system we will be please to amend the configuration or negotiate specific contractual terms and conditions prior to finalizing the order at the request of the City.

Mobile Digital Controller (Includes Hardware)	\$ 25,000.00
Mobile Workstation (11 Each)	\$ 22,000.00
Implementation Services	Included
User Training	Included
System Support (12 Months)	Included
TOTAL SYSTEM PRICE	\$47,000.00

Notes to Pricing

1. This proposal is submitted to the City of Paso Robles Police Department by Executive Information Services, Inc. This proposal will expire on March 31, 2006, unless extended by Executive Information Services, Inc. All prices are based on sole source procurement.
2. Unless contractually negotiated otherwise, system price is based on a payment schedule of twenty five (25) percent upon contract execution, balance of hardware price on date of delivery, and balance of contract price upon delivery of individual components.
3. All prices are FOB Destination. Sale prices quoted are exclusive of any state, local, use, or other applicable taxes. Hardware prices do not include shipping charges, which will be added to the invoice. Software is delivered via the Internet and is exempt from sales tax in most states.
4. Software pricing quoted is for a fully paid license for specified use on a single networked computing system and is supplied subject to execution of a separate licensing and non-disclosure agreement which prohibits distribution, re-sale, or other disclosure outside of contracting agency.
5. All computing hardware not specifically itemized herein, operating systems, database management systems, facility modifications, communications circuits, and network components are the responsibility of the City.
6. Installation includes application software installation on user supplied computing platform, all table configuration, end-user training, network configuration, and similar activity. Installation also includes general network design consulting, network configuration, and installation and/or configuration of operating system software; including the Windows operating system and Microsoft SQL Server database management system.
7. All software includes a 12-month warranty from date of installation or regularly scheduled use. This is implemented as a normal service contract, which provides unlimited telephone consulting, minor software, updates, and periodic on-site visits for remedial maintenance and follow up training and consulting. Optional service packages are available, including full facilities management with dedicated on-site systems personnel. On going support for the mobile digital system, after warranty expires, is currently \$3,000.00 per year. Maintenance prices are subject to change.

RESOLUTION NO. 07-

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
EL PASO DE ROBLES AUTHORIZING THE CHIEF OF POLICE TO ENTER INTO
A CONTRACT WITH EXECUTIVE INFORMATION SERVICES FOR INSTALATION OF
MOBILE DIGITAL COMPUTER INTRASTRUCTURE AND AUTHORIZING THE
HIRING OF AN ADDITIONAL INFORMATION TECHNOLOGY TECHNICIAN II.**

WHEREAS, the City Council of El Paso de Robles Police Department has a plan for extending digital information into the police patrol units via Mobile Digital Computers (MDC); and

WHEREAS, the Police Department has identified and set aside grant funds to complete an MDC project; and

WHEREAS, the Police Department recommends installation of MDC infrastructure by Executive Information Services as a sole-source contract as this is the current provider of the CAD / RMS software the Department operates; and

WHEREAS, the Police Department recommends additional Information Technology staff to assist in project management, implementation and ongoing maintenance to the MDC project as well as growing IT demands citywide; and

WHEREAS, the Police Department has grant monies set aside to fund all costs associated with the procurement of equipment, service contracts and added personnel required to successfully complete the MDC project;

NOW, THEREFORE, BE IT HEREBY RESOLVED that the City Council of the City of El Paso de Robles does authorize the Chief of Police to enter into a contract with Executive Information Services in the amount of \$47,000 for installation of the appropriate Mobile Digital Computer network support hardware, MDC workstation configuration and other associated services, and also authorizes the addition of an Information Technology Technician staff person for the immediate and long term needs of this project and citywide IT support needs;

BE IT FURTHER RESOLVED by the City Council of the City of El Paso de Robles that a one time budget appropriation from "grant fund reserves" in the amount of \$147,000, is hereby approved and allocated as follows:

- \$47,000 to #117-210-5224-136 (EIS contract)
- \$ 5,000 to #117-210-5454-136 (IT computer)
- \$95,000 inter-fund transfer from COPS Fund #117-000-5899-000 to General Fund #100-000-4899-000
- \$95,000 to #100-130-51XX-120 as one time for appropriation for IT staff position for FY 2008 from General Fund (resources transferred from COPS Fund.

APPROVED AND ADOPTED by the City Council of the City of El Paso de Robles this 6th day of March, 2007 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Frank R. Mecham, Mayor

Attest:

Deborah Robinson, Deputy City Clerk