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DATE: February 21, 2007

TO: Honorable Mayor and City Council Members

FROM: City Manager's Office

SUBJECT: **APPROVAL TO APPROPRIATE COX COMMUNICATIONS GRANT FUNDS TO DEVELOP A REGIONAL COLLABORATIVE NETWORK (INET) SYSTEM LINKING THE OCEANSIDE UNIFIED HIGH SCHOOLS, TRI-CITY HOSPITAL, CITY OF OCEANSIDE NETWORK OPERATIONS CENTER, RECREATION CENTERS, RESOURCE CENTERS, EMERGENCY COMMAND CENTER AND KOCT AND AUTHORIZE THE PURCHASE OF HARDWARE AND SOFTWARE IN EXCESS OF \$50,000 TO ESTABLISH THE MAIN COMPONENTS OF THE SYSTEM**

**SYNOPSIS**

Staff recommends that the City Council approve the appropriation of the Cox Communications grant funds in the amount of \$520,000 to develop a regional collaborative network (iNet) system. These monies were part of the \$4.1 M received from Cox Communications as a result of the cable franchise revenue process and were identified specifically for this usage.

The proposed iNet system will provide microwave connectivity between the Oceanside Unified High Schools, Tri-City Hospital, City of Oceanside Network Operations Center, Oceanside Resource Centers, Oceanside Recreation Centers and KOCT to create a cooperative network between the listed sites. The system will support the City during a disaster such as an earthquake, fire or tsunami, as well as add enhanced communications during community events. The iNet system will also establish 'Hot Spots' known as WiFi areas to enable field personnel, e.g., inspectors to uplink data to the network from wireless devices, such as laptops, thereby saving staff time and budget funds.

Citizens of Oceanside provided feedback during the Cox Cable contract negotiations requesting better communication coverage and features to enhance Oceanside sporting events as well as other entertainment venues. They also requested better communications with Tri-City hospital, Mira Costa College and the Oceanside high schools. The iNet is the communications network tool to enable high-quality communications for the citizens of Oceanside.

## **BACKGROUND**

During the Cox Cable contract negotiations in 2002 the citizens of Oceanside were surveyed to determine their communication needs and expectations. The analysis of the citizens' input clearly conveyed that the citizens of Oceanside wanted better community communications which included sporting and other entertainment events as well as better communication with Tri-City Hospital, the high schools and Mira Costa College events.

Currently, the City of Oceanside does not have a cooperative wireless microwave network system that links all of the listed resources together to enable real-time data exchange. Additionally, it has been a goal of the City to be able to broadcast high school sports events for the citizens of Oceanside. The iNet is the means of delivering high-quality media viewing, as well as equally high-quality voice data to enable citizens of Oceanside to participate in community sports as well as other specified events.

An iNet is a media gateway in the next-generation multi technology network environment. An iNet connects multiple types of networks such as Internet, voice mail, multimedia, land-based telecommunications and mobile telecommunications into one centric network. Different types of transmissions are converted into a streaming data format that enables communication between the different types of technologies. This next generation iNet provides an advanced level of quality connectivity and media viewing to customers using the network. The iNet provides real-time response capability to all customers using the voice, video and data components of the system.

The iNet also provides the capability of conveying emergency response information during a local emergency via multiple types of devices such as personal computer, mobile telephone and television. Real-time emergency instructions may be conveyed to the citizens of Oceanside thereby assisting in evacuation or other critical notifications.

The iNet also provides communications between Tri-City Hospital, police and fire agencies to coordinate efforts during a disaster and provides the ability to communicate with the Oceanside Emergency Command Center to provide critical disaster recovery status.

The City desired an iNet and negotiated \$520,000, specifically for this effort as part of the \$4.1 M Technology Grant provided to the City from Cox Communications as part of the cable franchise negotiation efforts.

## **ANALYSIS**

The iNet network will connect the following Oceanside facilities through microwave technology:

1. El Camino High School
2. Oceanside High School
3. Tri-City Hospital
4. Water Treatment Facility – Emergency Command Center

5. Eight (8) Fire Stations
6. Police Station
7. Harbor Administration Center
8. Lifeguard Administration Center
9. Civic Center three (3) locations (North, South, East buildings)
10. City Operations Center
11. Two (2) Libraries
12. Information Technologies Annex
13. Beach Lock-up
14. Recreation Centers
  - a. Beach Community Recreation Center
  - b. Brooks Street Pool
  - c. Joe Balderrama Recreation Center
  - d. John Landes Recreation Center
  - e. Oceanside Aquatics Adventure Center
  - f. Marshall Street Pool
  - g. Melba Bishop Recreation Center
  - h. Senior Recreation Center
15. Resource Centers
  - a. Chavez Resource Center
  - b. Crown Heights Resource Center
  - c. Libby Lake Resource Center
  - d. Mesa Margarita Resource Center

The connectivity cost to wire the 35 facilities totals \$87,115, at a cost of \$1,989 per facility.

The Sun Wireless iNet backbone equipment; Dell computers and servers; Solana Technology hot spot equipment, Microsoft software and American Power conversion (APC) are sole source vendors. State government discount pricing is provided for these vendors. Contracts have not been awarded for the remaining listed vendors and equipment. The competitive bid process requesting five (5) bids from industry standard vendors will be utilized for the remaining equipment.

It is anticipated that the project will kickoff within thirty days from the date the City Council approves the use of the grant funds. From the kickoff date it is estimated the iNet implementation will take approximately six (6) months to complete. The six-month implementation time frame takes into account lead time required by vendors to deliver and install necessary software/hardware.

### **FISCAL IMPACT**

The \$520,000 in grant funds was placed into a non-departmental account in the General Fund account budgeted for the iNet project. The Financial Services Department must transfer the \$520,000 in grant funds to the correct account, which is Business Unit Number 604851, GA&P-COX I-Net Project. The \$520,000 is part of the

\$4.1 M Technology Grant from Cox Communications. All of these monies have been received. The \$520,000 simply needs to be appropriated in order for the funds to be expended.

The \$520,000 in Cox Communications grant funds are made available through December 31, 2007, and must be fully utilized to develop and support the iNet project. Any unused funds must be returned to Cox Communications.

KOCT will benefit from the grant funds by receiving \$62,091 worth of hardware and software to use to upgrade the KOCT system to more effectively communicate with the iNet system. The Information Technologies Division will purchase the equipment, have it installed and maintain ownership of the hardware and software purchased for KOCT's broadcasting use.

**COMMISSION/COMMITTEE REPORT**

Does not apply

**CITY ATTORNEY'S ANALYSIS**

Does not apply

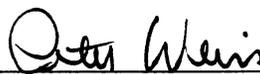
**RECOMMENDATION**

Staff recommends the City Council approve the appropriation of the Cox Communications grant funds in the amount of \$520,000 to develop and build the iNet collaborative network communications system; authorize the purchase of hardware and software in excess of \$50,000 through Sun Wireless, Dell Computers and Solana Technologies to establish the main components of the system; authorize the purchase of hardware and software in the amount of \$62,091 for KOCT's use to upgrade their broadcasting equipment.

PREPARED BY:

  
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SUBMITTED BY:

  
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**Reviewed By:**

Michelle Skaggs Lawrence, Deputy City Manager

Nita McKay, Financial Services Director

  
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## ATTACHMENT A

### iNET PROJECT COST

The following five lead vendors: Sun Wireless, Dell Computers, Solana Technologies, Microsoft and Endurance Technology will be utilized to provide hardware and software to develop the regional cooperative microwave network:

1. Sun Wireless – iNet backbone	\$ 86,734
2. Dell Computers – servers, computers	\$ 83,792
3. Solana Technologies – Hot Spot equipment	\$ 65,424
4. Microsoft – software	\$ 25,485
5. Endurance Technology – core network switch*	\$ 33,858
6. American Power Conversion (APC)	\$ 52,105
7. Air Conditioners/fire suppression systems*	\$ 34,929
8. Connectivity for 35 facilities */**	\$ 75,582
<b>Subtotal</b>	<b>\$457,909</b>

Hardware/Software for KOCT's Use:

1. Vbrick/PROVIDEA / 1 <sup>st</sup> year SUTA*	\$ 12,552
2. V/brick/PROVIDEA MP EG-2 encoder/decoder (2)/1 <sup>st</sup> year SUTA*	\$ 19,758
3. Will Burt Pneumatic System/heavy duty mast system includes labor*\$	24,242
4. Sony ½ inch 3CCD color camera/power supply/remote camera Controller/Pentax zoom lens with c-mount/outdoor housing*	\$ 5,539
<b>Total</b>	<b>\$ 62,091</b>
 <b>Grand Total</b>	 <b>\$520,000</b>

\* Reseller to be determined

\*\* Multiple vendors will be utilized