

Council Meeting of
August 21, 2007

Honorable Mayor and Members
of the City Council
City Hall
Torrance, California

Members of the City Council:

**SUBJECT: City Manager and Communications and Information Technology –
Authorize the appropriation of funds for the purchase and on-going
maintenance and replacement funding of a Wireless Local Area
Network System for the Torrance Airport.**

**Expenditure: \$35,000.00 (includes sales tax and shipping)
\$22,000 for annual costs; \$11,000 net additional
annual cost for a total of \$22,000**

RECOMMENDATION

The City Manager, Emergency Preparedness Team, and the Information
Technology Director recommend that City Council:

1. Authorize the purchase of a Ceragon 100Mbps Wireless Local Area Network system, not to exceed \$35,000 from FEAP # 570 - Alternate EOC Project; and
2. Authorize the budget allocation of \$11,000 for ongoing maintenance and replacement costs from the Airport Fund for a total first year expenditure not to exceed \$46,000.

Funding

Capital funding is available from FEAP # 570 - Alternate EOC Project. Partial annual funding of \$11,000 is budgeted in the Telecommunications Operations Program (\$7,200), Data Communications Operations Program (\$2,500). The additional annual funding required of \$11,000 requires an appropriation from the Airport Fund.

BACKGROUND

The Torrance Airport is currently served by two leased telecommunication circuits providing voice (i.e. telephone) and data network system access between the Airport and City Hall. Both circuits meet the minimum performance requirements for the existing noise abatement and airport operations.

The Airport is undergoing security perimeter upgrades (i.e. gate access cards, video surveillance). The approved upgrades will require a third, dedicated, leased circuit.

Based on an overall review of telecommunication at the Airport and its designation as the Alternate Emergency Operations Center (AEOC), it has been determined that the facility would be better served by moving from third party leased lines to a City-operated wireless system.

ANALYSIS

The Torrance Airport's combined voice and data requirements make it a prime location for a City-owned and operated Wireless Local Area Network (WLAN) communications link. The link would provide sufficient bandwidth to transport both the current and proposed voice and data network traffic. The current traffic is transported over two 1.544 Mbps circuits (e.g. T-1) and the proposed traffic would be transported over two, additional, T-1 circuits.

The proposed Ceragon 100 Mbps Licensed WLAN system provides a 100 Mbps Ethernet connection and two, separate, T-1 circuits. As opposed to an unlicensed system, the Ceragon system inherently offers certain FCC protections against radio frequency interference. The Ceragon's primary Ethernet connection would transport all current and proposed data network traffic. One of the wireless T-1 circuits would transport all current and proposed voice traffic. Surplus Ethernet bandwidth capacity will be available to support future applications or increased data traffic.

Based on the City's current lease rates, the proposed WLAN system, when fully populated with all current and proposed traffic, would break even before its 3rd year in service. Staff's break even analysis included recurring support costs and replacement costs. The analysis did not account for improved application performance or operational efficiencies.

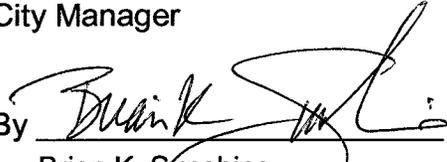
This purchase is exempt from formal bidding per the provisions of Torrance Municipal Code, Section 22.3.19, Exception; Computer and Networking Hardware and Software Purchases. "The provisions of this Article do not apply to contracts for the purchase of computer and networking hardware and software. The purchase of computer and networking hardware and software will be done pursuant to regulations and procedures established by the City Manager."

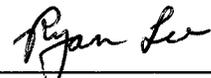
Ongoing costs have been reallocated among the Telecommunications Operations Program, Data Communications Operations Program and Airport Operations Program funds through the offset created by releasing the leased lines and applying those funds to the wireless network. The \$11,000 in additional annual funding is to cover additional operational costs, maintenance and to create a replacement fund.

It is recommended that the City Council authorize the purchase and installation of the Ceragon product to support the increasing demands for the Airport and other mission critical requirements.

Respectfully submitted,

LeRoy J. Jackson
City Manager

By 
Brian K. Sunshine
Assistant to the City Manager


for RICHARD SHIGAKI
Information Technology Director

CONCUR:


LeROY J. JACKSON
City Manager