



Office of the City Auditor

CONSENT CALENDAR

September 16, 2003

To: Honorable Mayor and Members of the City Council

From: Ann-Marie Hogan, City Auditor

Subject: Information Systems General Controls Audit

RECOMMENDATION

That Council request the City Manager to report back no later than February 17, 2004, regarding the implementation status of each of the Auditor's recommendations in the attached report, and to set a date for a follow up report to Council if any recommendations remain unimplemented at that time.

SUMMARY

A series of audits of the City's information technology was included in the Auditor's fiscal year 2003 audit plan, with the support of the City Manager and the Director of Information Technology. The attached Information Systems General Controls Audit was performed to evaluate the adequacy of physical controls, inventory controls, environmental controls, access security and recovery planning for the City's information systems. Audit fieldwork began on March 4, 2003, and concluded August 6, 2003. Some of the major concerns identified in the audit were:

- The City does not have a written security policy in place to provide guidelines on making specific decisions related to information systems security or to provide security procedures for users and system administrators to follow (Finding 1).
- Security controls to guard against unauthorized access to the City's information resources appear to be inadequate as evidenced by weak password protection (Finding 2), inadequate remote access controls (Finding 7), and terminated employees' user accounts not being removed or disabled (Finding 4).
- There is no disaster recovery plan for the network servers. In addition, backups for the network servers are not stored offsite (Finding 9).
- Activity logs or event logs are not reviewed regularly for possible security violations or system errors, reportedly due to limited staff resources. (Finding 6)
- Fire protection for the computer room at the Civic Center building is inadequate. The air conditioning in the room may not be functioning properly. (Finding 10)
- Critical computer equipment may be physically accessed by unauthorized City employees. (Finding 11.1 & Finding 11.2)
- The City has not yet completed a full and accurate inventory record of its computer equipment and software and there are no procedures in place to require departments to notify Information Technology of their computer equipment acquisitions. (Finding 12.1 and Finding 12.2)

FISCAL IMPACTS OF RECOMMENDATION

The audit did not look at the cost to implement the audit recommendations. We recommend immediate attention be given to establishing a Citywide security policy, to strengthening access controls, and to developing a disaster recovery plan for critical network servers.

CURRENT SITUATION AND ITS EFFECTS

The Department of Information Technology (IT) indicated that they have begun to take significant steps to improve security. Among them are drafting a comprehensive Network Security Plan, reviewing access rights for IT staff, deleting terminated user accounts, arranging off-site storage of backup tapes, and completing a desktop hardware inventory. Most recommendations are scheduled to be implemented no later than December 31, 2003, or earlier as specified in the report, except for the issuance of a written security policy that is scheduled to be drafted for management review by December 2003 and issued in final form by December 2004, the upgrade of the air conditioning in the computer room by May 2004 and the completion of the software inventory by November 2004.

RATIONALE FOR RECOMMENDATIONS

The fast growing information technology capabilities allow easy and convenient use of information systems to originate, process, store and communicate information. However, the ease and convenience come with new risks. Among these is the risk that valuable and confidential information may be lost, corrupted, misused or accessed by unauthorized persons. We must minimize this risk by developing a flexible security strategy that adapts to the changing environment to protect the City's information resources.

CONTACT PERSON

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Approved:

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