

Briefing on Recent Audits of Communication and Information Services

Presentation to Finance, Audit and Accountability Committee



City of Dallas
Office of the City Auditor
Monday, April 9, 2007





Mainframe Computing

- **Mainframe Operating Systems, Security and Operations – *January 5, 2007***
(Follow-Up to Report Issued in November 2004)
- **Mainframe Utilization – *March 30, 2007***

Memorandum



CITY OF DALLAS


Audit # A07-005

DATE: January 5, 2007

TO: Honorable Mayor and Members of the City Council

SUBJECT: Follow-up Report of the Audit of the City's Mainframe Operating Systems, Security and Operations Issued November 2004

We conducted this follow-up review under the authority of Chapter IX of the City Charter and according to applicable government auditing standards. We included tests of records and reviews of program guidelines and procedures that we considered necessary under the circumstances. Our objective was to determine whether management had implemented the original audit's recommendations or had taken other acceptable actions to remedy the control weaknesses identified in the original audit report.



**Follow-Up Report of the Audit of the City's
Mainframe Operating Systems, Security and Operations
Issued in November 2004**

Issues Addressed

- Physical and Logical Security
- Operations



**Follow-Up Report of the Audit of the City's
Mainframe Operating Systems, Security and Operations
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- **Physical and Logical Security**
 - 1 Finding
 - 16 Recommendations
 - Implemented – 4
 - Partially Implemented – 4
 - Not Implemented – 8



**Follow-Up Report of the Audit of the City's
Mainframe Operating Systems, Security and Operations
Issued in November 2004**

■ Operations

- 4 Findings
- 10 Recommendations
 - Implemented – 1
 - Partially Implemented – 1
 - Not Implemented – 8



**Follow-Up Report of the Audit of the City's
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Operations

■ Key Findings

- Operating inefficiencies and service gaps
- Inadequate software development controls
- Lack of effective strategic planning
- Preventive maintenance not adequate

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Operating Inefficiencies and Service Gaps

Recommendations

- Conduct analysis to align functional tasks to organizational hierarchical responsibilities in CIS *(Not Implemented)*
- Develop and implement plan to address outcome of above study *(Not Implemented)*

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Inadequate Software Development Controls

Recommendations

- Adopt software review process in Capability Maturity Model Integration Software (CMMI-SW)
(Not Implemented)
- Use software measurement tools *(Not implemented)*

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Lack of Effective Strategic Planning

Recommendations

- Fund backup LINC programmer *(Not Implemented)*
- Adopt GAO principles for workforce planning *(Not Implemented)*
- Empower Information Technology Executive Committee (ITEC) regarding technology strategic planning *(Implemented)*

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Preventive Maintenance Not Adequate

Recommendations

- Renew support and maintenance agreements for emergency Uninterruptible Power Supply back-up systems *(Not Implemented)*
- Enforce testing provisions of the fire suppression system maintenance contract *(Not Implemented)*
- Identify and remove unused cabling *(Partially Implemented)*



CITY OF DALLAS

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Office of the City Auditor

Audit Report

AUDIT OF MAINFRAME UTILIZATION

(Report No. A07-009)

March 30, 2007

City Auditor

Craig D. Kinton, CPA



Audit of Mainframe Utilization
March 30, 2007

Finding

Management has not routinely measured and monitored the performance and utilization of the mainframe

Audit of Mainframe Utilization
March 30, 2007

Recommendations

- Gather and report performance and utilization measurements
- Measure and monitor the effectiveness of mainframe operations
- Determine appropriate computational and operational environment for mainframe applications
- Develop and implement plan integrating mainframe operations into service delivery strategy

Audit of Mainframe Utilization
March 30, 2007

Management's Responses

- CIMS software installed to provide periodic reporting
(completed February 2007)
- Data collection programs installed to measure disk usage, CPU transactions, CPU hours, etc.
(completed February 2007)
- Job monitoring programs installed
(completed February 2007)
- CIS to develop timeline for migrating legacy applications from mainframe to client/server platforms
(due September 30, 2007)



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Physical and Logical Security

Closed Session Discussion

*(Pursuant to security related sections of the
Texas Government Code, Chapter 551.076, T.O.M.A.)*

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