

City of Birmingham, Alabama
Summary of the Information Technology Strategic Plan
Prepared on January 30, 2003, last update on August 18, 2003

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Section 5 Information Technology Strategies

5.1 Introduction

The primary business objective of this Information Technology Strategy is to develop long-term solutions that will meet current and future technology needs of the City of Birmingham staff and citizens. This document includes goals and recommendations based upon our review of the leading government technology organizations in the county.

One recommendation stands above all the rest. That is the simple fact that on-going strategic planning of technology is a requirement in today's world. With technology evolving so quickly it is important that the City plan, prioritize, and manage its technology investments wisely in order to maximize their value.

5.2 Vision

The vision is to implement and maintain an enterprise architecture that is stable, secure, yet able to evolve as technology changes. This architecture is one that will benefit not only City personnel, but also the citizens of Birmingham, by increasing the availability of information and the ability to process that information. This will provide a foundation that will support all existing legacy data, make that data available as necessary through a cleaner, more user-friendly interface, while seamlessly integrating new data and new applications as they are developed, all with the necessary high level of security and fault tolerance of a large municipality's data infrastructure.

5.3 Technology Goals and Strategies for the City

Twenty-one (21) specific infrastructure and application initiatives (5.3.1 – 5.3.21)

- 5.3.1 eGovernment/Internet Technologies
- 5.3.2 Credit Card Payments through Internet Technologies
- 5.3.3 Migration from mainframe environment to client server and Internet based environments
- 5.3.4 Pilot New Technology Architecture before Implementation
- 5.3.5 Business Process Reengineering
- 5.3.6 Information Systems Development Environment
- 5.3.7 Shared Data vs. Stove Pipe Systems
- 5.3.8 Infrastructure Strategy
- 5.3.9 Physical Hardware Replacement Strategy
- 5.3.10 Physical Wired Infrastructure
- 5.3.11 Infrastructure Backbone
- 5.3.12 Wide Area Network Communications
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- 5.3.14 Wireless Infrastructure
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- 5.3.16 Network Storage
- 5.3.17 Network Server Operating System
- 5.3.18 Enterprise Instant Messaging
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- 5.3.21 Portable Computing

5.4 Change Control and Configuration Management

With the pace of technology evolution it is imperative that the City invests the necessary resources to design and implement change control and configuration management across the enterprise. **Recommendation:** The City should develop and implement an infrastructure hardware/software and an information systems change control methodology for all systems.

5.5 Security Policies

It is more important than ever before that enterprise wide computer security policies and procedures be implemented across the enterprise. The growing threat of virus, denial of service, worms, and other electronic attacks on the electronic infrastructure requires a priority response, even in tough financial times.

Recommendation: Complete infrastructure assessments programs called Quick Start from MicroSoft, Corp for security, workflow, electronic mail, desktop support standards, and legacy application documentation then reevaluate and install improved security policies and procedures.

5.6 Business Continuity/Disaster Recovery

The City must be prepared to continue operations should the data center in City Hall become unavailable through either a natural or man made disaster.

Recommendation: The City must develop both business continuity and disaster recovery plans for the enterprise. These should not be considered as IMS projects only; they must involve the key business leaders in each department.

5.7 Password(s) and Remote Access Security

To provide reasonable, yet effective security restrictions on accessing the City's information systems. **Recommendation:** The City needs to develop and implement consistent password security practices across all enterprise technology systems.

5.8 Governance

To provide enterprise level executive leadership representing the impact of technology in all areas of the organization. **Recommendation:** In order to become a leading government technology organization the City should follow the successful pattern implemented in corporate America and other government organizations by creating a Chief Information Officer (CIO) organization office that reports directly to the Mayor.

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5.9 Enterprise Technology Management Committee

In addition to having a Chief Information Officer, the most successful government entities usually have an effective enterprise level technology management committee. Many organizations make the mistake of having technology committees that are tactical based vs. strategic based. It is important to ensure that the correct participants are involved in an enterprise technology committee. **Recommendation:** Establish a department head committee that meets regularly and establishes IT investment criteria. Establish IT strategic project priorities, standards enforcement, and result matrixes that measures IT investment outcome.

5.10 IMS Organization Restructuring

To maximize the value of the IMS organization in providing the necessary technology leadership to the City. **Recommendation:** In reviewing the existing organization chart for IMS it is clear that its structure is not maximized to support today's technology. In order to provide enterprise leadership, the following new offices should be created: Computer Security, Research and Development, Technology Strategic Planning, Quality Assurance, and Training and Learning.

5.11 Recommended IMS Positions and Training

To insure that IMS has the necessary staff and that the staff has the necessary skills to maintain the infrastructure and information systems of the City. **Recommendation:** In order for the IMS staff to continue to operate existing legacy information systems, while at the same time implementing new technology, will simply require more resources for an indefinite period of time.