

Washington Metropolitan Area Transit Authority

IT Peer Review Findings

Presented to the Board of Directors:

Planning & Development Committee

by

Business Planning and Project Development

June 1, 2006



Purpose

To explain the findings and recommendations of the IT Peer Review



Attendees of WMATA IT Peer Review

- Suzanne Peck–CTO, Government of the District of Columbia
- Alisoun Moore–CIO, Montgomery County, Maryland
- Wanda Gibson–CIO, Fairfax County, Virginia
- Dan Tangherlini–Interim General Manager, WMATA
- Takis Salpeas–Deputy Assistant General Manager, WMATA
- Edward Thomas–Assistant General Manager, WMATA
- J. Roderick Burfield–Deputy Assistant General Manager IT, WMATA
- Adams Young–Acting Assistant Chief Technology Officer, WMATA



Information Technology Capability Pyramid

GOAL 4: ENTERPRISE-WIDE SERVICES AND INFORMATION

Service **Oriented** Architecture

Enterprise Information **Management**

Regional Business **Interoperability**

Regional Government **Interoperability** E-Government **Enterprise Applications**

GOAL 3: ENTERPRISE-WIDE APPLICATIONS

Property and Facilities Management **Applications**

Transportation Operations

Other **Applications**

Fleet Asset Management Management **Applications Applications**

Human Resources **Applications**

Customer Services Applications

Financial **Applications**

Procurement Applications

Public Safety Applications

GOAL 2: FOUNDATION OF INFORMATION TECHNOLOGY INFRASTRUCTURES

Geographic Information Systems

> IT/Network **Operations** Center

Telecommunications

Data Center Operations and Consolidation

Wide Area Network

Wireless Communications

Voice Radio **Communications**

Seat Management and Enterprise Licensing

Email Messaging

Enterprise IT Security

Data Warehousing

Network Modernization

E-Government Infrastructure

Document Management

GOAL 1: ESTABLISHMENT OF INFORMATION TECHNOLOGY OPERATIONS

Strategic Planning (Business and IT)

Management Infrastructure

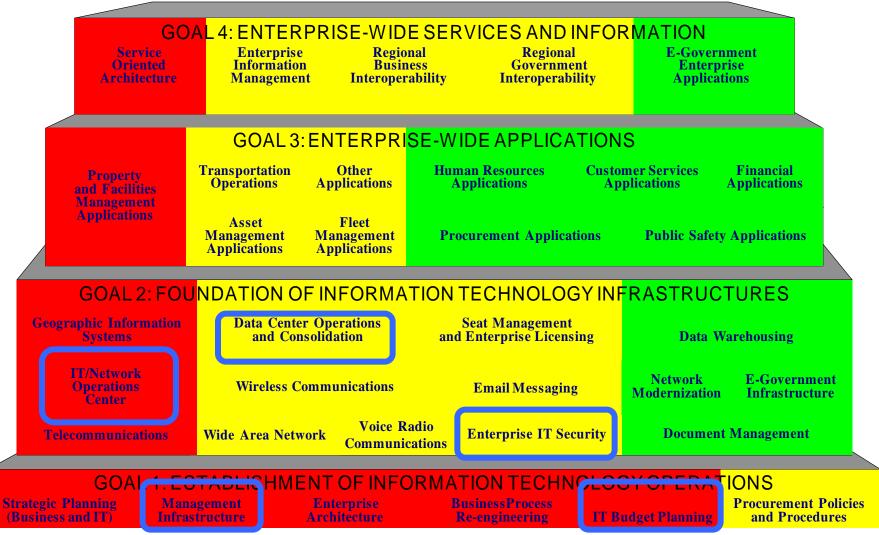
Enterprise Architêcture **BusinessProcess** Re-engineering

IT Budget Planning

Procurement Policies and Procedures



SHORT-TERM INITIATIVE AREAS Information Technology Capability Pyramid





Short-Term Initiatives-Recommended

Enhanced CIO Authority (Management Infrastructure)

- Establish CIO member of WMATA executive committee
- Report to General Manager
- Establish IT purchase approval in CIO office

IT Investment Review Board (IT Budget Planning)

- Form an IT Investment Review Board, a steering committee of business leaders
- Define responsibilities that include prioritizing and monitoring all major IT investments, developing an IT strategic plan, and guiding the development of concept of operations plans for major IT programs

IT/Network Operations Center

- Establish primary and backup NOCs
- Acquire network, system and application monitoring tools

Data Center Operations and Consolidation

- Test capabilities of remote data centers regularly
- Establish high-reliability configurations across data centers
- Consolidate mainframe applications to a common operating system release

Enterprise IT Security

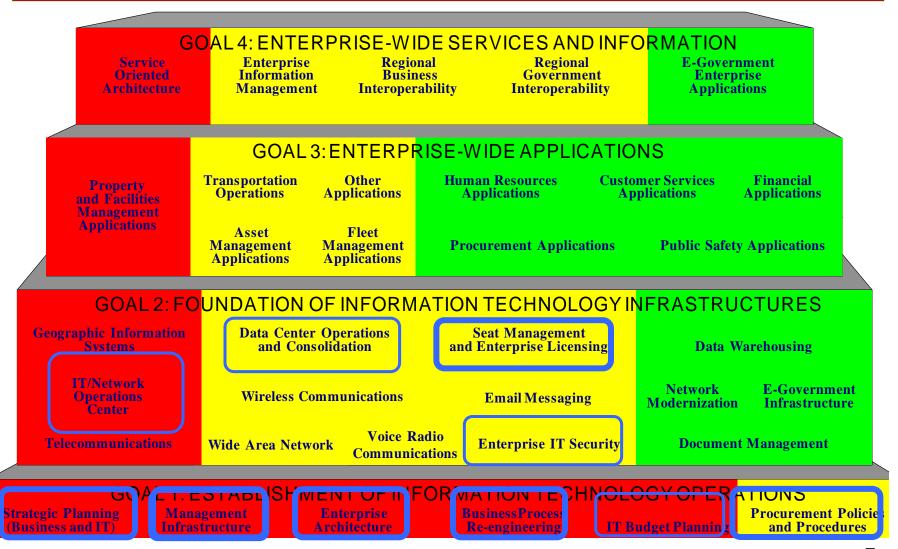
- Establish a Director of Enterprise IT security position
- Establish anti-virus team and obtain licenses for virus and spyware protection with automatic desktop updates
- Establish security policies for wireless access points

Initial Wins

- Select and successfully implement short-term IT projects
- Fill the IT project pipeline with monthly and major quarterly deliveries



MEDIUM-TERM INITIATIVE AREAS Information Technology Capability Pyramid





Medium-Term Initiatives-Recommended

Strategic Planning

- Conduct an enterprise IT strategic plan exercise every four years
- Establish phased goal areas (as defined by the pyramid) for all IT programs to organize the IT strategic plan

Project Management Office (Management Infrastructure)

 Create and govern IT project standards, monitor IT procurements and manage agency liaison officers who facilitate IT services

Enterprise Architecture

- Establish a Chief Enterprise Architect position
- Form an Architecture Review Board

Concept of Operations Planning (Business Process Re-Engineering)

 Establish a template for program planning that includes root cause analysis, heritage IT analysis, target architecture, hardware/software costing, etc.

IT Product Standards (Procurement Policies and Procedures)

 Establish a list of approved product standards including vendors, release version numbers and internal/external sourcing

Seat Management and Enterprise Licensing

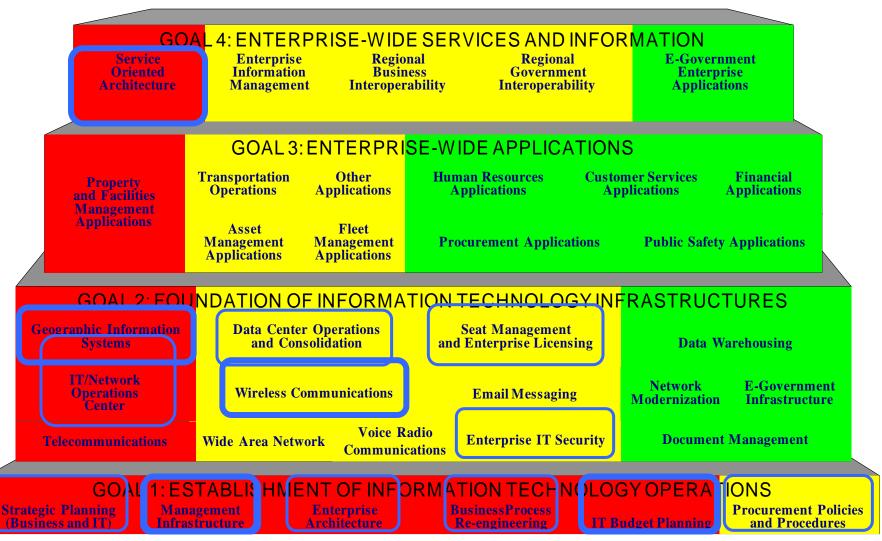
- Centralize control of all PC hardware and enterprise software licenses in the IT department
- Bring all WMATA divisions under Seat Management

Managed Services

 Evaluate and identify candidates for managed services using best practices to provide in-depth expertise that cannot be obtained through normal hiring practices



LONG-TERM INITIATIVE AREAS Information Technology Capability Pyramid





Long-Term Initiatives-Recommended

Personnel and Skill Sets (Management Infrastructure)

- Hire permanent skilled staff in PeopleSoft, IBM, AIX
- Transition skills required for two or more years to new or retrained WMATA employees

IT Budget Planning

- Adjust WMATA budget levels to conform to industry best practices
- Shift the ratio of operating capital budget toward operating funds after modernizations, such as the ITRP

Geographic Information Systems (GIS)

- Establish a unified GIS Center of Excellence to serve WMATA
- Coordinate WMATA's GIS data development closely with regional partners

Modernization of Metro Tunnel Radio Systems (Wireless Communications)

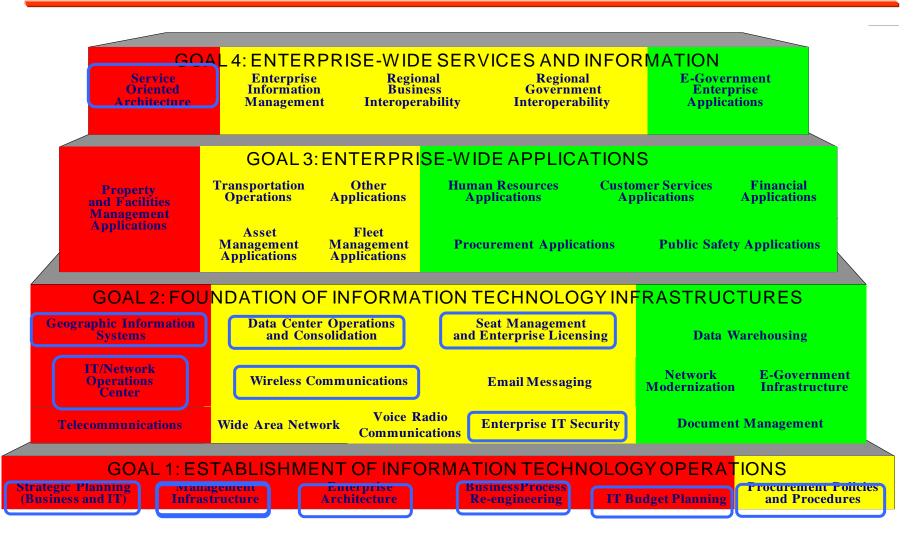
- Upgrade non-operational Bi-Directional Amplifiers
- Create a common integrated plan for improved public safety with area fire departments and commercial project representatives

Service Oriented Architecture

- Define a standard Enterprise Service Bus (ESB) for all integration projects, e.g. web Methods
- Establish an enterprise-wide service registry and repository in the infrastructure
- Identify high-value enterprise information services for enterprise integration

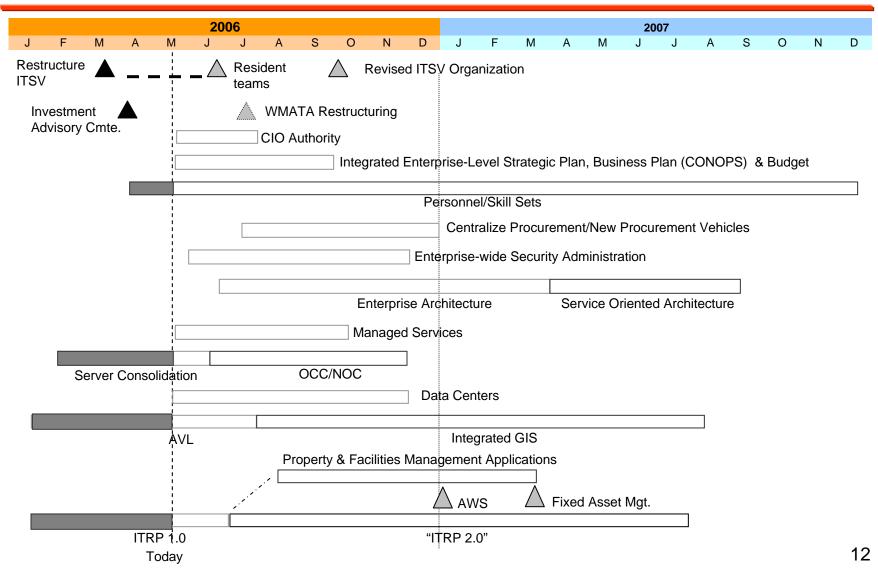


ALL INITIATIVE AREAS Information Technology Capability Pyramid





ITSV Restructuring Program—Major Milestones





Next Steps

- Complete ITSV Strategic Business Plan
- Brief Board Committee September 2006 on restructuring, staffing and funding