FY 2011 – 2015
Technology Investment Plan
Executive Summary

What is the TIP?

The Technology Investment Plan (TIP) is the City's Five (5)-Year Plan for significant Information Technology (IT) Capital Investment, Replacement and Refresh required for all citywide infrastructure and Enterprise Application environments.

- It is updated based on citywide priorities, continuous business realignment, technology development and adherence to the most current, best practices.
- All CTO departments submit Form A describing TIP projects and asset replacement/refresh requirements; identifying anticipated return on investment (ROI) and potential impact to operating budgets (i.e. savings, maintenance, FTEs);
- Planning all necessary annual budgetary requirements.

The TIP resembles the City's Capital Improvement Plan (CIP) in terms of organization and recognizes, as does the CIP, that significant asset refresh and upgrades and technology shifts are cyclical and generally occur over the economic life of the assets.

The TIP presents planned appropriations by department to be submitted for Council Approval. Technology projects adhere to similar CIP project phasing including Assessment, Design and Implementation.
OVERSIGHT: Who manages the TIP?

Technology Steering Committee (TSC)

Information Technology Department
Richard Lewis, Chief Information Officer & TSC Chair
Earl Lambert, Deputy Director; Citywide Chief Technology Officer
Gary Morris, Deputy Director; Citywide Infrastructure
Thomas Sorley, Deputy Director; Citywide Radio Communications
Mark Strinetti, Assistant Director; ITO Chief Technology Officer

CTO Departments
- Aviation
- Fire
- Health and Human Services
- Houston Emergency Center
- Library
- Planning and Development
- Police
- Public Works and Engineering
- Municipal Courts Administration
- Non-CTO or Other Departments / Divisions *

Chief Technology Officers (CTOs)
- Matt Hyde
- Patrick Plummer
- Vernen Hunt
- Ali Garda
- Ronald Stause
- Max Samfield
- David Morgan
- Olga Soerke
- Rex Billings
- Mark Strinetti

* 3-1-1 Online Service Requests, Affirmative Action and Contract Compliance, City Secretary, Convention & Entertainment, Finance, APA, General Services, Inspections, Human Resources, Information Technology, Legal, Parks and Recreation and Solid Waste Management

PROPOSED JULY 2010

What Guides the TIP?

VISION
To be an information technology organization recognized for collaborative partnerships, proactive leadership, strategic innovation, and quality customer service.

MISSION
To improve the quality of services to our customers (citizens and employees) on a daily basis through cross-functional framework while minimizing operating expenses and improving the City’s business processes.

VALUES
- Professional focus and initiative
- Invest in our employees
- Reward success and value lessons learned
- Expect high levels of productivity and excellence
- Operate with integrity to build trustful relationships and dependability

Reactive Structure
- Improve infrastructure, core business processes and provide effective citywide management structure
  - Emphasize system simplicity
  - Standardize enterprise architecture to reduce complexity
  - Executive accountability
  - Plan annual replacement requirements

Efficiency
- Align IT resources with City business objectives and balance effectiveness / efficiency to:
  - Reduce operating cost
  - Limit growth to the workforce
  - Improve services to citizens / employees

Security
- Continuously strengthen IT security through Network Re-Design, Hardware/Software Enhancements, Multi-Layering Approaches, Policy and Procedures, and in the future, MantraIC Training/Testing, Incident Response, Regular Performance Assessments and Random Audits

Transparency
- Introducing the new ITPM System
  - Allows CTOs to Enter and Update TIP form as Online
  - Provides Direct Access to Employees and Citizens
  - Expedite Annual Budget Propagation and Revised Processes
  - Fulfills state and Federal requirements
  - Provides an Automated Change Management System

PROPOSED JULY 2010
How is the TIP Funded?

**MAJOR FUNDING SOURCES**

**Equipment Acquisition Funds (EAF)**
- The EAF portion of the TIP is short-term general obligation debt serviced by property tax revenue as part of the annual budget. EAF involves the following 8 General Fund departments:
  - IT Consolidated EAF
  - Municipal Courts Admin (MCAD)
  - Houston Police (HPD)
  - Houston Fire (HFD)
  - Houston Emergency Center (HEC)
  - Public Works & Engineering (PWE)
  - Houston Public Library (HPL)
  - Health & Human Services (HHS)
  - Information Technology (IT)
  - Planning & Development (PD)

**Enterprise, Special Revenue and Grant Funds**
- The Enterprise, Special Revenue and Grant portions of the TIP primarily use current revenue or prior year resources for technology investments from the departments/funds listed below:
  - Enterprise:
    - Aviation (HAS)
    - PW&E (Public Utilities)
    - Convention & Entertainment Facilities (CEF)
  - Special Revenue:
    - PW&E (Building Inspection)
    - PW&E (Storm Water)
    - Municipal Courts Admin (Technology Fund)
    - Houston Emergency Center (HEC)
  - Grants:
    - Houston Public Library (HPL)
    - Housing & Community Development (HCD)
    - Health & Human Services (HHS)

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**Executive Summary**

**Tier 1 – All Funding Sources**

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## INFORMATION TECHNOLOGY DEPARTMENT

### Tier 1 TIPs – EAF PROJECTS

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### CITY OF HOUSTON Technology Investment Plan

#### Major Ongoing Citywide TIP Projects

**Case Management System (CSMART)**

- **Description:** Design and implement a new custom CMS in-house to manage 1.2m cases processed annually by Houston Municipal Courts based on a Service Oriented Architecture and Microsoft development tools. ($155m)

- **Benefits:**
  - Automate labor intensive work
  - Reduce citizen and officer time spent in court
  - Increase Revenues
  - Control long-term system maintenance costs
  - Decrease system downtime

**Records Management System (RMS) and MDS “Office in Vehicle”**

- **Description:** Decommission the mainframe/data center and move to a cloud server environment. Deploy new generation technologies in vehicles providing electronic transmission of documents, i.e., reports, citations, etc., to increase productivity, efficiency, and improve public safety to citizens.

- **Mobile Data Strategy (MDS):** Leverages commercial air card technologies and the City’s evolving broadband wireless capabilities to provide significantly more data to field officers. ($45m)

**Radio Communications System**

- **Description:** The existing Radio systems have reached the end of their useful life and must be replaced. This project will replace existing radio systems with a reliable, effective, and efficient “state of the art” system to improve Citywide communications, provide for inter-agency operability between City, County, Regional, State and Federal agencies. ($120m)

**Automated Time and Attendance System (ATAS)**

- **Description:** The ATAS will allow the City to centralize and track the attendance and pay for all City employees. It will fully automate time and attendance and includes the software licensing, system hosting, application development and implementation services. Deliverables include Multiple TIA devices; Application Hosting, SAF Interface, Education/Training and ongoing maintenance. ($13m)

= ROI = $30.3m over 5 years