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 re-alignment, technology development and is
re-forecast to adhere to the most current, best practices

All CTO departments submit Form As 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 Stinnett, Assistant Director, ITD Chief Technology Officer

CTO Departments	Chief Technology Officers (CTOs)
Aviation	Matt Hyde
Fire	Patrick Plummer
Health and Human Services	Vernon Hunt
Houston Emergency Center	Al Garcia
Library	Ronald Stauss
Planning and Development	Max Samfield
Police	David Morgan
Public Works and Engineering	Olgilvie Gericke
Municipal Courts Administration	Rex Billings
Non-CTO or Other Departments / Divisions *	Mark Stinnett

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

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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 teamwork 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

Pro-active 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 Procedure, and in the future, Mandatory Training/Testing, Incident Response, Regular Performance Assessments and Random Audits

Transparency

" Introducing the New TIP IMPACT System "
Allows CTOs to Enter and Update TIP Form As Online
Provides Direct Online Access to Employees and Citizens
Expedites Annual Budget Preparation and Review Processes
Enables more Efficient and Comprehensive Reporting
Provides an Automated Change Management System

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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)

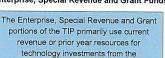Houston Emergency Center (HEC)

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 (C&EF)

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

FUND	Through 2009	Estimated 2010	2011	2012	2013	2014	2015	2011-2015	Total
1800 IT Consolidated EQ Acquisition Fund (EAF)	27,765	21,083	27,835	22,937	14,635	13,178	11,810	90,395	139,243
2002 Health-Special Revenue Fund	-	0	0	190	0	0	0	190	190
2207 MCAD-Tech Special Revenue Fund	-	102	25	0	0	0	0	25	127
2301 PWE-Building Inspection Fund	-	-	1,607	695	118	50	50	2,520	2,520
5040 PWE-Other Government-Grant Funded	-	0	3,750	0	0	0	0	3,750	3,750
8001 HAS-Revenue Fund (Enterprise)	1,818	1,818	3,458	1,141	1,141	1,141	1,141	8,022	11,658
8012 HAS-AIF Capital Outlay Fund (Enterprise)	604	661	3,255	212	212	212	212	4,103	5,368
8300 PWE-W & S System Operating Fund	-	0	2,671	1,655	865	765	765	6,721	6,721
8305 PWE-Combined Util. Sys. Fund (Enterprise)	-	0	8,981	8,280	4,228	531	542	22,561	22,561
Radio-Anticipated Grants	-	0	1,764	20,754	7,409	0	0	29,927	29,927
Radio-Existing CIPs	3,324	2,742	2,800	0	25,135	0	0	27,935	34,001
Radio-Existing Grants	12,993	11,400	23,389	0	0	0	0	23,389	47,782
Radio-General Fund PIBs	-	0	0	0	9,623	0	0	9,623	9,623
GRANT TBD-HPD Port Authority-Mobile Data Project	-	0	3,620	0	0	0	0	3,620	3,620
Grand Total:	46,504	37,806	83,155	55,864	63,366	15,877	14,520	232,781	317,091

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Tier 1 TIPs – EAF PROJECTS

Department	Through 2009	Estimated 2010	2011	2012	2013	2014	2015	2011-2015	Total
TIP - Fire									
99-10-12-0010 FIRE-Incident Command & Control System			200					200	200
99-10-12-0011 FIRE-E-Forms and Workflow System			100	50	25			175	175
99-10-12-0013 FIRE-Server Virtualization and Consolidation		110	50	50	50			150	260
99-11-12-0025 Desktop Refresh - FIRE	819	56	95	200	200	200	273	968	1,843
Total	819	166	445	300	275	200	273	1,493	2,478
TIP - Health and Human Services									
99-11-38-0016 Desktop Refresh - HEALTH	437	223	142	156	76			374	1,034
Total	437	223	142	156	76	0	0	374	1,034
TIP - Houston Emergency Center									
99-07-15-0011 HEC-CAD Upgrade/Replacement	357		400	1,500	1,500	1,500	1,100	6,000	6,357
99-11-15-0033 Desktop Refresh - HEC	207	22	24	149	87	87	87	434	663
Total	564	22	424	1,649	1,587	1,587	1,187	6,434	7,020
TIP - Library									
99-07-34-0001 Desktop Refresh - HPL	414	131	332	663	400	400	369	2,164	2,709
Total	414	131	332	663	400	400	369	2164	2,709
TIP - Planning and Development									
99-07-70-0001 PLANNING-EGIS	1,250	162	400	430	500	500	500	2,330	3,742
99-11-70-0010 Desktop Refresh - Planning	34	7	4	11	24	11	7	57	98
Total	1,284	169	404	441	524	511	507	2,387	3,840
TIP - Police									
99-07-10-0002 HPD-Mobile Data Strategy			1,500	6,000				7,500	7,500
99-07-10-0003 HPD-Neighborhood Protection Case (NPC) Mgmt System	226	200	725	200	200	200	225	1,550	1,976
99-07-10-0010 HPD-Records Mgmt System (RMS)	7,258	4,882	2,250	3,500	3,500	3,500	2,000	14,750	26,890
99-11-10-0050 Desktop Refresh - HPD	1,684	396	379	1,434	1,200	1,200	1,200	5,413	7,493
Total	9,168	5,478	4,854	11,134	4,900	4,900	3,425	29,213	43,859
TIP - Public Works and Engineering									
20-11-20-3000 Desktop / Laptop Refresh - PWE (ENT, SR, EAF)	157	18	74	140	140	140	140	634	809
Total	157	18	74	140	140	140	140	634	809
TIP - Municipal Courts Administration									
99-10-16-0016 MCAD-ICMS HW Replacement/Refresh		225	100	65				165	390
99-10-16-0017 MCAD-CSMART - Municipal Courts Management System	250	6,560	3,000	3,000	1,250			7,250	14,060
99-10-16-0026 MCAD-Self Service Payment Kiosks			110	100	100	40		350	350
99-11-16-0030 MCAD-Desktop Refresh	199	61	62	150	150	150	165	677	937
99-11-16-0032 MCAD-Collection Module			155					155	155
Total	449	6,846	3,427	3,315	1,500	190	165	8,597	15,892
TIP - Information Technology									
99-07-68-0001 IT-INFRA-UCS PBX	1,200	800	500	1,000	1,000	1,000	494	3,994	5,994
99-07-68-0002 IT-INFRA-Active Directory& Exchange Migration	6,962	3,166	1,426					1,426	11,554
99-07-68-0003 IT-Server Storage/SAN Asset Replacement	937	475	1,150	1,000	1,000	1,000	1,000	5,150	6,562
99-07-68-1001 IT-APPS-Call Center (3-1-1 Refresh)	1,633	520	1,000	250	250			1,500	3,653
99-09-09-6899 IT-INFRA-Network Replacement	300	625	1,000	1,000	1,000	1,500	1,500	6,000	6,925
99-09-65-0003 IT-APPS-ARA-1-Stop Permitting	697		500	300	200			1,000	1,697
99-09-68-1009 ITD-ERP-SAP Business Intelligence	1,143	1,664	915					915	3,722
99-10-68-2016 IT-INFRA-Data Center & Server Transformation		342	1,000	1,000	1,000	1,000	2,000	6,000	6,342
99-11-65-0010 Automated Time & Attendance System (Kronos)			8,354					8,354	8,354
99-11-68-1100 IT-INFRA-Desktop Refresh-ITD & NON-CTO Depts	1,601	438	1,888	589	783	750	750	4,760	6,799
Total	14,473	8,030	17,733	5,139	5,233	5,250	5,744	39,099	61,602
Grand Total:	27,765	21,083	27,835	22,937	14,635	13,178	11,810	90,395	139,243
Annual Citywide Standard IT A/R Refresh ONLY Total:	9,979	4,107	7,200	8,357	7,860	7,938	7,085	38,440	52,526

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MAJOR ONGOING CITYWIDE TIP PROJECTS

Case Management System (CSMART)

Design and implement a new custom CMS in-house to manage 1.2m new cases processed annually by Houston Municipal Courts based on a Service Oriented Architecture and Microsoft development tools. ($15-20m)

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

Radio Communications System

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)

Records Management System (RMS) and MDS "Office in Vehicle"

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

The 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)

Automated Time and Attendance System (ATAS)

The ATAS will allow the City to centralize and track the attendance and pay for all City employees. It will fully automated time and attendance and includes the software licensing, system hosting, application development and implementation services. Deliverables include Multiple T&A devices, Application Hosting, SAP Interface, Education/Training and ongoing maintenance ($13m)

ROI = $30.3m over 5 years

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