Technology Services

MISSION STATEMENT

The mission of the Department of Technology Services is to use information technology to enable our employees to provide quality services to our citizens and businesses, deliver information and services to citizens at work, at home, and in the community, and increase the productivity of government and citizens.

BUDGET OVERVIEW

The total approved FY12 Operating Budget for the Department of Technology Services is $25,649,440, a decrease of $720,840 or 2.7 percent from the FY11 Approved Budget of $26,370,280. Personnel Costs comprise 53.5 percent of the budget for 128 full-time positions and two part-time positions for 101.6 workyears. Operating Expenses and Capital Outlay account for the remaining 46.5 percent of the FY12 budget.

In addition, this department's Capital Improvements Program (CIP) requires Current Revenue funding.

LINKAGE TO COUNTY RESULT AREAS

While this program area supports all eight of the County Result Areas, the following are emphasized:

❖ *A Responsive, Accountable County Government*

❖ *Safe Streets and Secure Neighborhoods*

DEPARTMENT PERFORMANCE MEASURES

Performance measures for this department are included below, with multi-program measures displayed at the front of this section and program-specific measures shown with the relevant program. The FY11 estimates incorporate the effect of the FY11 savings plan. FY12 and FY13 targets assume the approved FY12 budget and FY13 funding for comparable service levels.

ACCOMPLISHMENTS AND INITIATIVES

❖ *Leveraged enterprise software distribution tools and patch management solutions to deploy over 525,000 patches to address computer security vulnerabilities. Effectively administered enterprise computer help desk contract providing solutions for over 30,000 calls for service while meeting or exceeding all critical contract service level agreements (SLA's).*

❖ *Supported the implementation of Oracle eBusiness; Phase IA – Financials – on-time and on-budget. Technology Services played a key role in the development of the technical requirements and architectural implementation to achieve the go-live delivery of the Oracle eBusiness solution. DTS designed, built and supported the infrastructure allowing the functional teams to implement the system.*

❖ *DTS supported the Chief of Police's technology priority project for the implementation of pilot in-car video systems. In addition to aiding in the physical vehicle solution, DTS offered services in the development of the data infrastructure to capture and manage videos.*

❖ *The Telecom Division provided the requested advancements in the use of IP telephony for the agent "soft phone" application, chosen by the project sponsor. Additionally, Telecom facilitated the on-time implementation of the phone network changes to pulse the 3-1-1 digits from the local exchange carrier and achieved a documented first of pulsing the 3-1-1 digits from the three major cellular carriers, making Montgomery County's implementation the first ever launch with both wired and wireless 311 forwarding capabilities.*

❖ *Voice over IP Expansion – DTS continues to demonstrate leading edge solution deployment for voice requirements using Voice over IP (VoIP). During this past year, VoIP solutions created an optional "soft phone" service for remote capability for the MC311 call center. VoIP was also used to implement phone services to 5 fire station and 3 recreation facilities. VoIP allows the county to leverage the capabilities of data based solutions that will eventually lead to full unified communications (voice, video and data) in the same technology.*

❖ *FiberNet Expansion – DTS continues the progress of the backbone communications to new and transitioned facilities. In addition to the 13 new sites that were added to the system, 32 existing facilities were migrated to the robust communication network. Additionally, FiberNet configuration was collaboratively created to carry Montgomery College's internet service provider signal, avoiding additional operational costs.*

❖ *Successfully deployed the new Case Management System for the State's Attorney's Office (SAOCMS) in production. This new system automates many manual processes and allows users to realize processing efficiencies by entering case information one time only and have that information systemically populated on predefined.*

❖ *Provide funding for major IT systems for Enterprise Resource Planning (ERP) and continued support for the County's enterprise IT systems for software and hardware maintenance, and software licenses.*

❖ *Productivity Improvements*

- *Improved the department's project request review process (CIO Approval Process) to consider money saving alternative solutions (build vs. buy, cloud computing) and streamlined the review and disposition of project requests.*

- *Initiated process re-engineering to implement new IT applications to include a paperless eFAX and Imaging records archive solution at low cost to increase efficiency and improve data management while reducing staff time.*

- *Migrated nearly all Security Team services to outsourced Cloud-based offerings to improve service and uptime while decreasing staff time needed for system maintenance and upgrades. Additionally, started pilot to investigate a potential migration of enterprise services to commercial cloud opportunities.*

- *Developed several new and innovative customer-facing web solutions including the H1N1 Vaccination Appointment system, Vehicle Accident Report system, and Contract Search system. Provided extensive technical implementation support and GIS web services solutions for new enterprise applications including MC311, ERP and MCTime.*

PROGRAM CONTACTS

Contact Helen Ni of the Department of Technology Services at 240.777.2807 or John Cuff of the Office of Management and Budget at 240.777.2762 for more information regarding this department's operating budget.

PROGRAM DESCRIPTIONS

Enterprise Systems and Operations (ESOD)

This program designs, implements and maintains a secure and reliable computer-based hardware, software, and data infrastructure for County business systems and County staff. The Division manages enterprise-wide systems including Enterprise Resource Planning (ERP), MC311, MCTime, enterprise messaging system, enterprise directory system, enterprise file and print system, enterprise image archiving, enterprise anti-malware systems, mainframe system, and hundreds of enterprise servers (web, application, database). ESOD manages and provides support for the Public Safety Data System. ESOD also operates the enterprise data center, a 24-hour-a-day service supporting enterprise and department servers, the mainframe and network control center equipment.

Program Performance Measures	Actual FY09	Actual FY10	Estimated FY11	Target FY12	Target FY13
Number of Unscheduled Minutes Identified Information Technology Systems are Out of Service[1]	2,039	745	775	775	775
Number of Email Messages Sent and Received by County Email Account Holders (in millions)[2]	71.6	75.0	80.0	85.0	85.0
Number of Email Messages Filtered or Blocked from Entering County Email Account Holders Inboxes (in millions)[3]	265.2	280.0	295.0	310.0	310.0

[1] Two major mainframe/network outages occurred in FY08 and FY09, which contributed to the higher numbers of out-of-service minutes for actual FY08 and actual FY09.

[2] Number of messages sent versus received is approximately the same and ratio has not changed with growth of messages

[3] The number of messages blocked has increased dramatically and is projected to increase at a faster pace than legitimate messages.

FY12 Approved Changes	Expenditures	WYs
FY11 Approved	**11,138,680**	**37.0**
Increase Cost: MC311 System Administrator Support	220,000	0.0
Increase Cost: Kronos Workforce Timekeeper Software Upgrade	191,000	0.0

	Expenditures	WYs
Increase Cost: MC311 Database Administrator Support	180,000	0.0
Increase Cost: Annualization of Personnel Costs	132,350	0.0
Increase Cost: Tech Mod - Diskeeper, Oracle, and Siebel Software Maintenance	86,300	0.0
Increase Cost: Public Safety Communications System - CAD, Mobile Cop, and Netmotion Software Maintenance	48,000	0.0
Increase Cost: Tech Mod - Windows Server Licenses	40,000	0.0
Increase Cost: Proofpoint Appliance Hardware Replacement and Software Maintenance	26,500	0.0
Increase Cost: Blackberry and IBM Software Maintenance	13,600	0.0
Increase Cost: Munis Property Tax Billing Software Maintenance	5,700	0.0
Decrease Cost: Oracle Identity Maintenance	-50,000	0.0
Decrease Cost: Mainframe Disaster Recovery, Hardware Maintenance, and Software Licensing	-190,000	0.0
Decrease Cost: Mainframe Operations Service Support	-802,810	-9.0
Miscellaneous adjustments, including restoration of employee furloughs, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting more than one program	1,250	0.0
FY12 Approved	**11,040,570**	**28.0**

Enterprise Telecommunications and Services (ETSD)

This program provides reliable, modern, and integrated communications services to enable network data, voice and other solutions for County Government departments and Agencies. PBX Telecommunications Services is responsible for the programming, operation and maintenance of the County's PBX telephone network and all associated adjuncts, i.e., Voicemail, IVR, and Cabling infrastructure. Radio Communications Services is responsible for the operation and maintenance of the County's 800 MHZ radio and mobile communications systems which predominantly supports public safety agencies. Network Services is responsible for providing Wide Area Network (WAN) management and design services to County government, FiberNet connectivity to other agencies, and wireless connectivity. Some costs associated with FiberNet/WAN are charged to the Cable Fund in accordance with the cable franchise provision to support installation, construction, operations, and maintenance of the County's FiberNet and associated network equipment.

Program Performance Measures	Actual FY09	Actual FY10	Estimated FY11	Target FY12	Target FY13
Average Number of Workdays to Complete Telecom Requests (in workdays) [1]	6.97	8.30	8.50	9.00	9.00

[1] To compensate for the proposed decrease of 1 Telecom Specialist position and 1 Communications Technician position in FY11; modifications to the SLA process will be done to increase the service request completion time to 10 business days, which should enable the workload to be managed in a timely manner.

FY12 Approved Changes	Expenditures	WYs
FY11 Approved	**4,350,350**	**12.0**
Decrease Cost: Bi-Directional Amplifier for New Rockville District Courthouse	-7,130	0.0
Reduce: Public Safety Radio Maintenance	-253,000	0.0
Miscellaneous adjustments, including restoration of employee furloughs, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting more than one program	450	0.0
FY12 Approved	**4,090,670**	**12.0**

Enterprise Applications and Solutions (EASD)

This program delivers and maintains solutions through core business, web based applications and geographic information services; and provides oversight for the Desktop Computer Modernization (DCM) program and the County's Help Desk. The Application Development and Integration team supports the County's electronic government initiative to include website management. Electronic government seeks to provide cost-effective services at greater convenience to residents and employees through the use of modern web technologies. The Enterprise System Services team is responsible for supporting the enterprise software applications which are used throughout the County Government (e.g. ERP, BPREP, Tax Assessment). This includes applications maintenance, upgrades, phase out and replacement; and ensuring applications are adapted to conform to changes in the County's hardware and software environment. The Geographic Information Systems team designs and implements applications for County departments, designs and develops custom maps and web-based mapping applications, maintains the accuracy and currency of the Montgomery County Street Centerlines database and the Geographic Base Files (GBF/DIME) and related data layers, and participates in the development and maintenance of the enterprise planimetric and property databases. The Information Technology Help Desk Services team provides IT support directly to departments and employees.

Program Performance Measures	Actual FY09	Actual FY10	Estimated FY11	Target FY12	Target FY13
Average Number of Seconds to Serve a Web Page (in seconds)	0.61	0.47	0.46	0.44	0.44
Percent of DTS Help Desk Requests that are Resolved on the First Call (%)	95.2	98.0	95.5	95.5	95.5

FY12 Approved Changes	Expenditures	WYs
FY11 Approved	**5,070,430**	**34.3**
Increase Cost: GIS Software Maintenance	5,000	0.0
Eliminate: Computer-Based Training Sofware License Maintenance	-10,000	0.0
Eliminate: Web Accessibility Maintenance	-25,000	0.0
Decrease Cost: Human Resources Management System PC Software Licenses Will Be Replaced by ERP system in July 2011	-115,000	0.0
Miscellaneous adjustments, including restoration of employee furloughs, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting more than one program	-1,250	0.0
FY12 Approved	**4,924,180**	**34.3**

Enterprise Services and Strategic Planning Office (ES&SPO)

This program provides leadership and strategies for the development and delivery of County technology solution planning and implementation for both County staff and residents. The Office acts as the first step to improving project return on investment (ROI) and fosters a successful project outcome through the establishment and use of a strong Project Management Methodology (PMM). The Office manages both Enterprise Architecture and Enterprise Strategic Planning to ensure cost-effective Countywide IT investment. The Project Management Office (PMO) is responsible for reviewing and prioritizing new project requests for the Department, reviewing all technology funding requests for County Departments, maintaining the IT Initiative Dashboard of technology projects, developing and maintaining the project management standards across projects, and providing contract management support services for the Department. Additionally, project managers in this Office are responsible for managing major multi-million dollar cross-deparatmental projects (including Technology Modernization, Integrated Justice, and numerous Department initiatives). Project Management certification is encouraged to promote continuous growth and demonstration of project management best practices.

Program Performance Measures	Actual FY09	Actual FY10	Estimated FY11	Target FY12	Target FY13
Project Budget Performance (% over baseline)	NA	-1.9	0	0	0
Project Schedule Performance (average days past baseline)	NA	6.0	6.6	5.6	5.6

FY12 Approved Changes	Expenditures	WYs
FY11 Approved	**2,458,960**	**9.4**
Eliminate: Contractor Support for Criminal Justice Information System (CJIS).	-156,000	0.0
FY12 Approved	**2,302,960**	**9.4**

Office of the Chief Information Officer (CIO)

This program provides technology leadership, allocation of resources, setting policy and guiding all programs of the Department and County government Information Technology initiatives including Technology Modernization Program and Public Safety Systems Modernization Program. The Office is responsible for assisting Departments with creating process efficiencies and aligning their IT needs with the overall County enterprise strategy.

The Management Services is responsible for centralized administrative support functions in the areas of budgeting and financial processing, human resources management, procurement, facilities management, front desk support and event planning.

The Enterprise Information Security Office (EISO) provides enterprise risk assessments, data security consulting, policy/procedure development, and sensitive data architecture design to the County government. These services also include identifying and managing the tools required to protect the County from data security threats provide security training to County employees through an Enterprise Security Awareness Training program, and rapidly respond to incidents that may affect the confidentiality, integrity, and/or availability of the County's information assets and data. Additionally, the EISO is responsible for oversight in various enterprise information security compliance mandates, such as the Health Insurance Portability and Accountability Act (HIPAA) of 1996, the Payment Card Industry Data Security Standards (PCI DSS).

Program Performance Measures	Actual FY09	Actual FY10	Estimated FY11	Target FY12	Target FY13
IT Security: Average Security Vulnerabilities per Device	NA	29.96	28.00	28.00	28.00
Internet Browse Time - Hours By Risk Class - Business Usage[1]	123,638	180,000	TBD	TBD	TBD
Internet Browse Time - Hours By Risk Class - Potential Personal Use	110,150	150,000	TBD	TBD	TBD
Internet Browse Time - Hours By Risk Class - Bandwidth Loss	36,970	45,000	TBD	TBD	TBD
Internet Browse Time - Hours By Risk Class - Security Risk	3,744	5,000	TBD	TBD	TBD
Internet Browse Time - Hours By Risk Class - Legal Liability	36	40	TBD	TBD	TBD

[1] The methodology for Internet Browse Time is being redeveloped.

FY12 Approved Changes	Expenditures	WYs
FY11 Approved	**3,351,860**	**13.8**
Decrease Cost: Verizon Point to Point T1 Replacement	-37,150	0.0
Decrease Cost: Verizon Frame Relay Replacement	-50,430	0.0
Miscellaneous adjustments, including restoration of employee furloughs, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting more than one program	26,780	4.1
FY12 Approved	**3,291,060**	**17.9**

BUDGET SUMMARY

	Actual FY10	Budget FY11	Estimated FY11	Approved FY12	% Chg Bud/App
COUNTY GENERAL FUND					
EXPENDITURES					
Salaries and Wages	13,368,360	10,835,930	11,162,110	10,744,190	-0.8%
Employee Benefits	3,903,139	3,530,560	3,590,060	2,972,090	-15.8%
County General Fund Personnel Costs	*17,271,499*	*14,366,490*	*14,752,170*	*13,716,280*	*-4.5%*
Operating Expenses	10,412,235	11,883,490	11,354,410	11,812,860	-0.6%
Capital Outlay	0	120,300	0	120,300	—
County General Fund Expenditures	*27,683,734*	*26,370,280*	*26,106,580*	*25,649,440*	*-2.7%*
PERSONNEL					
Full-Time	163	138	138	128	-7.2%
Part-Time	2	2	2	2	—
Workyears	137.0	106.5	106.5	101.6	-4.6%

FY12 APPROVED CHANGES

	Expenditures	WYs
COUNTY GENERAL FUND		
FY11 ORIGINAL APPROPRIATION	**26,370,280**	**106.5**
Changes (with service impacts)		
Eliminate: Computer-Based Training Sofware License Maintenance [Enterprise Applications and Solutions (EASD)]	-10,000	0.0
Eliminate: Web Accessibility Maintenance [Enterprise Applications and Solutions (EASD)]	-25,000	0.0
Eliminate: Contractor Support for Criminal Justice Information System (CJIS). [Enterprise Services and Strategic Planning Office (ES&SPO)]	-156,000	0.0
Reduce: Public Safety Radio Maintenance [Enterprise Telecommunications and Services (ETSD)]	-253,000	0.0
Other Adjustments (with no service impacts)		
Increase Cost: Restore Personnel Costs - Furloughs	347,160	4.1
Increase Cost: MC311 System Administrator Support [Enterprise Systems and Operations (ESOD)]	220,000	0.0
Increase Cost: Kronos Workforce Timekeeper Software Upgrade [Enterprise Systems and Operations (ESOD)]	191,000	0.0
Increase Cost: MC311 Database Administrator Support [Enterprise Systems and Operations (ESOD)]	180,000	0.0
Increase Cost: Annualization of Personnel Costs [Enterprise Systems and Operations (ESOD)]	132,350	0.0
Increase Cost: Tech Mod - Diskeeper, Oracle, and Siebel Software Maintenance [Enterprise Systems and Operations (ESOD)]	86,300	0.0
Increase Cost: Public Safety Communications System - CAD, Mobile Cop, and Netmotion Software Maintenance [Enterprise Systems and Operations (ESOD)]	48,000	0.0
Increase Cost: Tech Mod - Windows Server Licenses [Enterprise Systems and Operations (ESOD)]	40,000	0.0
Increase Cost: Proofpoint Appliance Hardware Replacement and Software Maintenance [Enterprise Systems and Operations (ESOD)]	26,500	0.0
Increase Cost: Blackberry and IBM Software Maintenance [Enterprise Systems and Operations (ESOD)]	13,600	0.0
Increase Cost: Printing and Mail Adjustment	6,530	0.0
Increase Cost: Munis Property Tax Billing Software Maintenance [Enterprise Systems and Operations (ESOD)]	5,700	0.0
Increase Cost: GIS Software Maintenance [Enterprise Applications and Solutions (EASD)]	5,000	0.0
Increase Cost: Motor Pool Rate Adjustment	450	0.0
Decrease Cost: Bi-Directional Amplifier for New Rockville District Courthouse [Enterprise Telecommunications and Services (ETSD)]	-7,130	0.0
Decrease Cost: Verizon Point to Point T1 Replacement [Office of the Chief Information Officer (CIO)]	-37,150	0.0
Decrease Cost: Oracle Identity Maintenance [Enterprise Systems and Operations (ESOD)]	-50,000	0.0

	Expenditures	WYs
Decrease Cost: Verizon Frame Relay Replacement [Office of the Chief Information Officer (CIO)]	-50,430	0.0
Decrease Cost: Human Resources Management System PC Software Licenses Will Be Replaced by ERP system in July 2011 [Enterprise Applications and Solutions (EASD)]	-115,000	0.0
Decrease Cost: Retirement Adjustment	-134,850	0.0
Decrease Cost: Mainframe Disaster Recovery, Hardware Maintenance, and Software Licensing [Enterprise Systems and Operations (ESOD)]	-190,000	0.0
Decrease Cost: Group Insurance Adjustment	-192,060	0.0
Decrease Cost: Mainframe Operations Service Support [Enterprise Systems and Operations (ESOD)]	-802,810	-9.0
FY12 APPROVED:	**25,649,440**	**101.6**

PROGRAM SUMMARY

Program Name	FY11 Approved Expenditures	WYs	FY12 Approved Expenditures	WYs
Enterprise Systems and Operations (ESOD)	11,138,680	37.0	11,040,570	28.0
Enterprise Telecommunications and Services (ETSD)	4,350,350	12.0	4,090,670	12.0
Enterprise Applications and Solutions (EASD)	5,070,430	34.3	4,924,180	34.3
Enterprise Services and Strategic Planning Office (ES&SPO)	2,458,960	9.4	2,302,960	9.4
Office of the Chief Information Officer (CIO)	3,351,860	13.8	3,291,060	17.9
Total	**26,370,280**	**106.5**	**25,649,440**	**101.6**

CHARGES TO OTHER DEPARTMENTS

Charged Department	Charged Fund	FY11 Total$	WYs	FY12 Total$	WYs
COUNTY GENERAL FUND					
Cable Television	Cable Television	1,258,810	1.6	1,155,620	1.6
CIP	CIP	2,835,660	22.0	2,904,950	21.0
Total		**4,094,470**	**23.6**	**4,060,570**	**22.6**