




Technology Services

APPROVED FY20 BUDGET

\$43,873,164

FULL TIME EQUIVALENTS

167.25

 H. N. (SONNY) SEGAL, CHIEF INFORMATION OFFICER

MISSION STATEMENT

The mission of the Department of Technology Services (DTS) is to be responsive, collaborative, and innovative in providing technology solutions and services to facilitate the delivery of a wide range of services in all branches of government. The department strives to provide its solutions and services in a cost effective, timely, high quality, and secure manner to reduce service times, avoid cost, reduce information security risk, and improve the quality of County services through automation-assisted process improvement.

- DTS is responsive by providing solutions and services to internal and external partners, customers and constituents, when and where they are needed; and securely enabling County employees to provide quality services and information to internal entities, residents, and businesses.
- DTS is collaborative as it partners with internal customers, external agencies, and the public and private sectors to increase the productivity of County government, businesses, and residents; and, to assist with technology-enabled economic, workforce development, and digital equity initiatives.
- DTS is innovative as it identifies and implements technology solutions to business needs that enhance value and enable continuous measurable improvement.

BUDGET OVERVIEW

The total approved FY20 Operating Budget for the Department of Technology Services is \$43,873,164, an increase of \$1,701,199 or 4.03 percent from the FY19 Approved Budget of \$42,171,965. Personnel Costs comprise 54.78 percent of the budget for 174 full-time position(s) and two part-time position(s), and a total of 167.25 FTEs. Total FTEs may include seasonal or temporary positions and may also reflect workforce charged to or from other departments or funds. Operating Expenses account for the remaining 45.22 percent of the FY20 budget.

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

COUNTY PRIORITY OUTCOMES

While this program area supports all seven of the County Executive's Priority Outcomes, the following is emphasized:

 **Effective, Sustainable Government**

DEPARTMENT PERFORMANCE MEASURES

Performance measures for this department are included below (where applicable), with multi-program measures displayed at the front of this section and program-specific measures shown with the relevant program. The FY19 estimates reflect funding based on the FY19 Approved Budget. The FY20 and FY21 figures are performance targets based on the FY20 Approved Budget and funding for comparable service levels in FY21.

Measure	Actual FY17	Actual FY18	Estimated FY19	Target FY20	Target FY21
Multi-Program Measures					
Average customer satisfaction rating (1-4) on the yearly internal customer survey of County managers	3.23	3.24	TBD	TBD	TBD

ACCOMPLISHMENTS

- ✓ Awarded the "Large Digital Counties Award" from the Center for Digital Government and NACo; six NACo awards; and six Public Technology Institute awards.
- ✓ Responded to 32,000+ IT Help Desk calls and tickets.
- ✓ Improved customer experience on County websites by implementing "responsive design" which enables websites to adjust to tablet and cellphone screens.
- ✓ Reduced vulnerabilities through aggressive software patching, computer re-imaging, and internet blocking.
- ✓ Published the FiberNet Master Plan which identifies the strategic needs of each County agency; planned and in-progress projects; and priority capital investments.
- ✓ Conducted the first Interagency Technology Policy and Coordination Committee (ITPCC) Cyber Security Awareness Month.
- ✓ Improved information security for all County data stored on OneDrive and SharePoint.
- ✓ Implemented a cyber security dashboard to easily share status updates and issues with County departments.
- ✓ Improved access to public Wi-Fi by upgrading wireless infrastructure in County facilities.

INNOVATIONS AND PRODUCTIVITY IMPROVEMENTS

- ★ The Employee Productivity Solutions Team (EPS) developed SharePoint solutions to improve collaboration and workflow automation and trained department "champions" to scale the practice.
- ★ Improved customer experiences for Department of Liquor Control (DLC) licensees by improving the iStore interface.
- ★ Implemented technology solutions, including scanning and voice picking, to improve speed and accuracy in the DLC warehouse.
- ★ Implemented workflow changes in the employee appraisal process to achieve efficiencies and workforce satisfaction.

PROGRAM CONTACTS

Contact Helen Ni of the Department of Technology Services at 240.777.2807 or Alison Dollar of the Office of Management and Budget at 240.777.2769 for more information regarding this department's operating budget.

PROGRAM DESCRIPTIONS

☀ Enterprise Systems and Operations Division (ESOD)

The Enterprise Systems and Operations Division (ESOD) designs, implements, and maintains a secure and reliable data center and server and cloud infrastructures for County business systems, County staff, contractors, suppliers, and volunteers. The Division manages infrastructure for enterprise-wide business systems including Enterprise Resource Planning (ERP), MC311, and MCTime. ESOD operates enterprise data centers and manages enterprise cloud-based solutions, office productivity, collaboration systems, the enterprise directory and identity management systems, enterprise file and print systems, enterprise image archiving and records management, and hundreds of enterprise and department servers (web, application, and database), including ongoing patching and remediation of the servers to maintain and improve functionality and security of the County IT infrastructure. ESOD manages and provides support for the Public Safety Data System and multiple aspects of the 911 operations. ESOD also manages the Enterprise Services Bus (ESB) that serves as the County's data highway for easy systems interfacing and secure, very high-speed data transfers between enterprise and department systems, with both internal systems and external systems, including the many systems participating in the open data program.

Program Performance Measures	Actual FY17	Actual FY18	Estimated FY19	Target FY20	Target FY21
Enterprise applications system availability (%) ¹	99.997	99.970	99.997	99.997	99.997
Number of Enterprise Service Bus data transfers (monthly average)	209,620	205,023	210,000	215,000	220,000

¹ Enterprise Applications System Availability is the availability of the following applications: ERP's Oracle EBS system, ERP's Oracle EBS self-service system, MC311 system, MC311 self-service system, MCG Internet Portal, Department of Recreation's Class system

FY20 Approved Changes	Expenditures	FTEs
FY19 Approved	12,407,859	42.00
Enhance: Off-site data center capacity	120,000	0.00
Decrease Cost: Lapse two Sr. IT Specialists and one Technology Expert	(340,517)	0.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	721,182	(4.00)
FY20 Approved	12,908,524	38.00

☀ Enterprise Telecommunications and Services Division (ETSD)

The Enterprise Telecommunications and Services Division (ETSD) provides reliable, modern, and integrated communications services and solutions for County government departments and agencies including MC311. PBX Telecommunications Services is responsible for the programming, operation, and maintenance of the County's telephone system and related services, e.g., voicemail, call distribution. Radio Communications Services is responsible for the operation and maintenance of the County's 800 MHZ radio and mobile communications systems and infrastructures which predominantly support public safety agencies.

Program Performance Measures	Actual FY17	Actual FY18	Estimated FY19	Target FY20	Target FY21
Average number of workdays to complete telecom requests	7.4	9.6	7.0	7.0	7.0

FY20 Approved Changes	Expenditures	FTEs
FY19 Approved	6,777,188	26.00

FY20 Approved Changes	Expenditures	FTEs
Decrease Cost: Lapse one Program Manager II and one Sr. IT Specialist	(218,580)	0.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	(1,699,308)	(8.00)
FY20 Approved	4,859,300	18.00

☀ Enterprise Applications and Solutions Division (EASD)

The Enterprise Applications and Solutions Division (EASD) delivers and maintains solutions through web-based applications, data services, and geographic information systems. EASD also provides oversight for the Device Client Management (DCM) program and the County's IT Help Desk. The Web and Mobile Applications Team supports the County's digital government initiatives including website management and openMontgomery. Digital government provides cost-effective services at greater convenience to residents and employees through the use of modern web technologies. The Data Services Team leads the County's Open Data program and oversees the execution of its implementation plan. The Geographic Information Systems Team designs and implements applications for County departments, designs and develops custom maps and web-based mapping applications, and maintains the accuracy and currency of the Montgomery County Street Centerlines database and related data layers. The Employee Productivity Solutions (EPS) Team is focused on helping the departments improve processes and automate workflows and approvals to minimize output variability, improve service quality, and reduce government processing times. The EPS also provides the departments with extensive training in the new productivity tools sets (e.g., Office365, OneDrive, SharePoint for collaboration). The DCM Team oversees the replacement of personal computers and manages software patching, distribution and enterprise anti-malware systems, including ongoing remediation of computers to maintain and improve security of the County IT infrastructure. In addition, the DCM Team administers the DCM and IT equipment maintenance contracts and provides general IT support directly to departments and employees through the County's IT Help Desk.

Program Performance Measures	Actual FY17	Actual FY18	Estimated FY19	Target FY20	Target FY21
Percent of DTS Help Desk requests that are resolved on the first call	97.2	97.0	97.0	97.0	97.0
Open Data - Number of datasets published	47	46	50	50	50

FY20 Approved Changes	Expenditures	FTEs
FY19 Approved	7,201,244	36.75
Enhance: ESRI Enterprise Agreement	192,617	0.00
Decrease Cost: Lapse two Sr. IT Specialists and one Manager III	(352,300)	0.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	1,526,068	8.00
FY20 Approved	8,567,629	44.75

☀ Office of the Chief Operating Officer (COO)

The Office of the Chief Operating Officer (COO) provides operational leadership and strategies for the development and delivery of County government's technology solutions planning through the Project Management Office (PMO). The COO oversees the day-to-day operations of the Department's operating divisions in support of all enterprise and departmental systems and

infrastructures. The COO also manages Enterprise Architecture Planning functions to ensure cost-effective Countywide IT investment. The PMO reviews and provides input to the departments' technology funding requests; organizes and chairs regular meetings of the Technology Managers Operations Group (TOMG) comprised of departmental IT staff; provides IT project managers to cross-departmental projects; enunciates project management standards and best practices; encourages project management certification; and coordinates the activities of DTS' Account Managers that are assigned groups of user departments. The Management Services Team is responsible for department administrative support including budgeting and financial processing, human resources management, procurement, and facilities management.

FY20 Approved Changes	Expenditures	FTEs
FY19 Approved	2,800,013	18.50
Shift: 1.5 FTEs from the Public Safety Systems Modernization (PSSM) capital project	202,613	1.50
Decrease Cost: Lapse one IT Specialist III, one Sr. IT Specialist, and one Program Manager	(356,982)	0.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	1,493,595	4.00
FY20 Approved	4,139,239	24.00

Office of the Chief Information Officer (CIO)

The Office of the Chief Information Officer (CIO) manages the Department of Technology Services, provides technology leadership, develops technology and information security plans, provides policy direction, and oversees high value programs, initiatives, and organization units including the Enterprise Information Security Office (EISO), the Public Safety Systems Modernization (PSSM) Program, the Office of Broadband Programs; the Integrated Criminal Justice Information System (IJIS) Program Office; and the Enterprise Data Management initiative. In addition, the CIO chairs the County government's Information Technology Policy Advisory Committee (IPAC); represents the County on the CIO Subcommittee of the Council-appointed Interagency Technology Policy Coordinating Committee (ITPCC); represents the County at the regional level (e.g., Metropolitan Washington Council of Governments CIO Committee); represents the County at the State level (e.g., the Governor's technology related boards, and the Maryland Association of Counties (MACO) IT Affiliate); and, represents the County at the National level (e.g., the National Association of Counties and the Public Technology Institute).

The EISO governs enterprise information security risk management, data security assessments and audits, policy and procedure development, and sensitive data architecture design, provides security training to County employees through an Enterprise Security Awareness Training program, and rapidly responds to information security and privacy incidents that may affect confidentiality, integrity, and/or availability of the County's information assets and data. Additionally, the EISO is responsible for oversight in various information security compliance mandates, such as the Health Insurance Portability and Accountability Act (HIPAA), the Maryland Security and Protection of Information Act (SPIA), and various other State and Federal information security laws. The PSSM Program encompasses the modernization of the Computer Aided Dispatch (CAD) system, the Law Enforcement Records Management (LE-RMS) system, the Fire Station Alerting (FSA) system, and the mobile Radio Communications Infrastructure (RSI). The IJIS Program facilitates the exchange of criminal justice data between Montgomery County Agencies (e.g., Police, Sheriff, Corrections, State's Attorney's Office, Health and Human Services, District and Circuit Court), the State of Maryland, and the Federal Government. The IJIS Program Office is responsible for assisting departments with creating process efficiencies and aligning their information technology (IT) needs with the overall County enterprise strategy, State and Federal laws, and criminal justice management best practices. The Enterprise Data Management initiative is led by the Chief Data Officer (CDO) and ensures the County's structured and unstructured data is inventoried, cleansed, available, and

secured for use in business decision making, continuous service improvement, operational governance, planning, and transparency. Activities include data cataloging, normalization, architecting, securing, sharing, and analysis to facilitate County government efficiency through the institutionalization of data-driven decision-making. The CDO works closely with CountyStat, the County's performance management office to develop and institutionalize data analytics capabilities across the County and to market on-going comprehensive data analytics tools and techniques for specific outcomes. The CDO defines and oversees how the department captures, maintains, and applies data and information to support key processes.

Program Performance Measures	Actual FY17	Actual FY18	Estimated FY19	Target FY20	Target FY21
IT Security - Average security vulnerabilities per device	17.7	12.9	10.0	8.0	7.0

FY20 Approved Changes	Expenditures	FTEs
FY19 Approved	4,648,365	9.00
Enhance: Contract staff - Integrated Justice Information System (IJS) maintenance and enhancements	100,000	0.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	(17,392)	0.00
FY20 Approved	4,730,973	9.00

☀ Enterprise Resource Planning Division (ERP)

The Enterprise Resource Planning Division (ERP) is responsible for providing critical business management support capabilities to County government's core business functions including financial management, human capital management, budgeting, procurement, supply chain management and enterprise change management. ERP provides this support through its use of the Oracle Corporation's E-Business Suite (EBS) and Oracle Business Intelligence Enterprise Edition (OBIEE) platforms customized for County use. The ERP partners with user departments and external stakeholders (e.g., suppliers and retail licensees) to meet operational needs, adapt to the ongoing and changing environment; reengineer business processes to improve efficiency; implement new initiatives; and stay abreast of platform enhancements and improvements to the County's ERP systems. ERP is comprised of business analysts and software developers required to develop complex solutions to drive continuous service delivery and improvement. Operations supported include those in the Department of Liquor Control (e.g. order management and warehouse functions).

Program Performance Measures	Actual FY17	Actual FY18	Estimated FY19	Target FY20	Target FY21
ERP Business Intelligence usage (number of queries)	239,988	236,073	230,000	220,000	210,000
ERP financial transactions (in millions)	312.0	316.2	320.0	325.0	330.0

FY20 Approved Changes	Expenditures	FTEs
FY19 Approved	8,137,296	32.50
Decrease Cost: Lapse one Sr. IT Specialist and one Functional Business Analyst	(189,655)	0.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	316,867	0.00
FY20 Approved	8,264,508	32.50

☀ Office of Broadband Programs (OBP)

The Office of Broadband Programs (OBP) is responsible for Countywide broadband governance, planning, implementation, and operations; encouraging broadband related economic development; and enabling digital equity initiatives. This Office leads the County Executive's ultraMontgomery initiative; manages the County's cable television and telecommunications franchise agreements and the Cable Revenue Fund; ensures that consumer cable and broadband services are of high quality; communications providers comply with safety and construction codes; enforces cable and broadband customer service requirements; promotes community and civic engagement through Public, Educational, and Government (PEG) programming utilizing multi-media platforms; and manages the County's fiber optic network and related broadband services.

The goals of the ultraMontgomery program are to grow knowledge-based jobs that rely on always-on, ultra high-speed broadband networks (e.g., in biohealth/bioscience, advanced technologies, cybersecurity, media, financial services, federal agencies, and research & development), encourage broadband abundance and innovation in the County, and to increase digital equity for all County residents, businesses, and entrepreneurs. Only ultraMontgomery is reflected below. Other OBP programs are detailed in the Cable Television Communications Plan section of this publication.

FY20 Approved Changes	Expenditures	FTEs
FY19 Approved	200,000	1.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	202,991	0.00
FY20 Approved	402,991	1.00

BUDGET SUMMARY

	Actual FY18	Budget FY19	Estimate FY19	Approved FY20	%Chg Bud/App
COUNTY GENERAL FUND					
EXPENDITURES					
Salaries and Wages	15,622,430	18,083,569	15,818,009	18,726,985	3.6 %
Employee Benefits	4,480,077	5,237,552	4,443,191	5,306,889	1.3 %
County General Fund Personnel Costs	20,102,507	23,321,121	20,261,200	24,033,874	3.1 %
Operating Expenses	21,039,382	18,730,544	20,094,026	19,718,990	5.3 %
Capital Outlay	0	120,300	120,300	120,300	—
County General Fund Expenditures	41,141,889	42,171,965	40,475,526	43,873,164	4.0 %
PERSONNEL					
Full-Time	176	174	174	174	—
Part-Time	2	2	2	2	—
FTEs	168.40	165.75	165.75	167.25	0.9 %
REVENUES					
Miscellaneous Revenues	(22,873)	0	0	0	—
County General Fund Revenues	(22,873)	0	0	0	—

FY20 APPROVED CHANGES

	Expenditures	FTEs
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FY20 APPROVED CHANGES

	Expenditures	FTEs
COUNTY GENERAL FUND		
FY19 ORIGINAL APPROPRIATION	42,171,965	165.75
<u>Changes (with service impacts)</u>		
Enhance: ESRI Enterprise Agreement [Enterprise Applications and Solutions Division (EASD)]	192,617	0.00
Enhance: Off-site data center capacity [Enterprise Systems and Operations Division (ESOD)]	120,000	0.00
Enhance: Contract staff - Integrated Justice Information System (IJIS) maintenance and enhancements [Office of the Chief Information Officer (CIO)]	100,000	0.00
<u>Other Adjustments (with no service impacts)</u>		
Increase Cost: Restore One-Time Lapse Increase	1,243,125	0.00
Increase Cost: Software maintenance increases	521,629	0.00
Increase Cost: FY20 Compensation Adjustment	511,323	0.00
Shift: 1.5 FTEs from the Public Safety Systems Modernization (PSSM) capital project [Office of the Chief Operating Officer (COO)]	202,613	1.50
Increase Cost: Annualization of FY19 Personnel Costs	177,114	0.00
Increase Cost: Motor Pool Adjustment	54,200	0.00
Increase Cost: Retirement Adjustment	36,612	0.00
Decrease Cost: Lapse one Sr. IT Specialist and one Functional Business Analyst [Enterprise Resource Planning Division (ERPD)]	(189,655)	0.00
Decrease Cost: Lapse one Program Manager II and one Sr. IT Specialist [Enterprise Telecommunications and Services Division (ETSD)]	(218,580)	0.00
Decrease Cost: Lapse two Sr. IT Specialists and one Technology Expert [Enterprise Systems and Operations Division (ESOD)]	(340,517)	0.00
Decrease Cost: Lapse two Sr. IT Specialists and one Manager III [Enterprise Applications and Solutions Division (EASD)]	(352,300)	0.00
Decrease Cost: Lapse one IT Specialist III, one Sr. IT Specialist, and one Program Manager [Office of the Chief Operating Officer (COO)]	(356,982)	0.00
FY20 APPROVED	43,873,164	167.25

PROGRAM SUMMARY

Program Name	FY19 APPR Expenditures	FY19 APPR FTEs	FY20 APPR Expenditures	FY20 APPR FTEs
Enterprise Systems and Operations Division (ESOD)	12,407,859	42.00	12,908,524	38.00
Enterprise Telecommunications and Services Division (ETSD)	6,777,188	26.00	4,859,300	18.00
Enterprise Applications and Solutions Division (EASD)	7,201,244	36.75	8,567,629	44.75
Office of the Chief Operating Officer (COO)	2,800,013	18.50	4,139,239	24.00
Office of the Chief Information Officer (CIO)	4,648,365	9.00	4,730,973	9.00
Enterprise Resource Planning Division (ERPD)	8,137,296	32.50	8,264,508	32.50
Office of Broadband Programs (OBP)	200,000	1.00	402,991	1.00
Total	42,171,965	165.75	43,873,164	167.25

CHARGES TO OTHER DEPARTMENTS

Charged Department	Charged Fund	FY19 Total\$	FY19 FTE\$	FY20 Total\$	FY20 FTE\$
COUNTY GENERAL FUND					
Human Resources	Employee Health Self Insurance	395,325	0.00	395,325	0.00
Alcohol Beverage Services	Liquor	1,194,351	0.00	1,049,691	0.00
CIP	Capital Fund	754,012	4.50	504,731	3.00
NDA - Retiree Health Benefits Trust	Retirement Fund (ERS)	134,314	0.00	135,433	0.00
Total		2,478,002	4.50	2,085,180	3.00

FUTURE FISCAL IMPACTS

CC APPROVED (\$000S)

Title	FY20	FY21	FY22	FY23	FY24	FY25
COUNTY GENERAL FUND						
EXPENDITURES						
FY20 Approved	43,873	43,873	43,873	43,873	43,873	43,873
No inflation or compensation change is included in outyear projections.						
Elimination of One-Time Items Approved in FY20	0	(100)	(100)	(100)	(100)	(100)
Items recommended for one-time funding in FY20, including IJIS contractors, will be eliminated from the base in the outyears.						
Restore One-Time Lapse Increase	0	1,458	1,458	1,458	1,458	1,458
Restoration of one-time lapse adjustment in the budget development year						
Labor Contracts	0	225	225	225	225	225
These figures represent the estimated annualized cost of general wage adjustments, service increments, and other negotiated items.						
Subtotal Expenditures	43,873	45,456	45,456	45,456	45,456	45,456

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