



Technology Services

APPROVED FY21 BUDGET

\$43,328,778

FULL TIME EQUIVALENTS

165.25

 GAIL M. ROPER, CHIEF INFORMATION OFFICER/DIRECTOR

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 consultative services in a cost effective, timely, and high quality 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; securely enabling County employees to provide quality services and information to internal entities, residents, and businesses; and enhancing project management to improve contract management and overall performance.

- DTS is collaborative as it provides expert consultative service to partner 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 FY21 Operating Budget for the Department of Technology Services is \$43,328,778, a decrease of \$544,386 or 1.24 percent from the FY20 Approved Budget of \$43,873,164. Personnel Costs comprise 53.54 percent of the budget for 167 full-time position(s) and two part-time position(s), and a total of 165.25 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 46.46 percent of the FY21 budget.

Additional support for DTS programs is provided and detailed in the Cable Television Communications Fund.

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**

INITIATIVES

- ★ Segregation of Duties (SoD) controls will be implemented in Oracle Enterprise Business Systems (EBS) to minimize the risk of fraudulent activities and inadvertent errors. Implementing SoD software that integrates with Oracle EBS and contains predefined business rules will automate the process and allow implementation of robust SoD control.
- ★ Support enhancement of telework tools and coordination with OHR, to expand telework training and Microsoft Teams incentives, innovative training, and performance evaluation dashboards, to double County telework capacity and achieve the telework goals.

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 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 FY20 estimates reflect funding based on the FY20 Approved Budget. The FY21 and FY22 figures are performance targets based on the FY21 Approved Budget and funding for comparable service levels in FY22.

PROGRAM DESCRIPTIONS

Enterprise Applications and Solutions (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. 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 Departments improve processes and automate workflows and approvals to minimize output variability, improve service quality, and reduce processing times. EPS also provides Departments with extensive training in the Enterprise productivity tool sets (e.g., Office365, OneDrive, SharePoint). 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 FY18	Actual FY19	Estimated FY20	Target FY21	Target FY22
Number of websites and web applications supported ¹	N/A	334	345	357	369
Number of Open Data datasets published	46	50	50	50	50
Number of IT help desk requests	38,247	37,424	37,716	38,093	38,494
Percent of customers satisfied with the IT help desk	99%	99%	99%	99%	99%
Percent of IT help desk requests resolved on the first call	97.0%	96.0%	97.0%	97.0%	97.0%

¹ Data for this measure not collected prior to FY19

FY21 Approved Changes	Expenditures	FTEs
FY20 Approved	8,567,629	44.75
Increase Cost: Software Maintenance	100,100	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.	(50,499)	(1.00)
FY21 Approved	8,617,230	43.75

☀ Enterprise Resource Planning (ERPD)

The Enterprise Resource Planning Division (ERPD) is responsible for providing system support and enhancements to County government operations for financial management, human capital management, budgeting, procurement, and supply chain management. The enterprise-wide operations supported by ERPD use Oracle eBusiness Suite (EBS) and Oracle Business Intelligence Enterprise Edition (OBIEE) including six modules in Human Capital Management (including recruitment and benefits), fifteen modules in Financials and Supply Chain (including accounts payable, accounts receivable, procurement, iStore, and order/warehouse management) and four modules in Compensation/Payroll. ERPD services include database and hardware maintenance; operational activities required for critical business processes; application development for fixes, modifications and enhancements; functional analysis and support for application and business processes; troubleshooting and resolution of production problems; control of application access; interfaces with other systems; and change management services throughout the County. Technical and analytical support is centralized in ERPD due to the tight integration and dependencies of the modules. ERPD partners with key stakeholder departments (Department of Finance, Office of Human Resources, Alcohol Beverage Services, Procurement, Department of General Services, Office of Management & Budget) to deliver continuous improvements to enterprise-wide financial and administrative operations.

Program Performance Measures	Actual FY18	Actual FY19	Estimated FY20	Target FY21	Target FY22
Number of enterprise resource planning (ERP) work orders completed	708	736	775	850	850
Enterprise resource system availability	99.8960%	99.9794%	99.98%	99.98%	99.98%
Success rate for business intelligence data refreshes ¹	N/A	91.7684%	95%	98%	99%
Number of business intelligence data models published	90	100	107	112	117

¹ Data for this measure not collected prior to FY19

FY21 Approved Changes	Expenditures	FTEs
FY20 Approved	8,264,508	32.50
Increase Cost: Software Maintenance	30,000	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.	(112,384)	(1.00)
FY21 Approved	8,182,124	31.50

Enterprise Systems and Operations (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 FY18	Actual FY19	Estimated FY20	Target FY21	Target FY22
Average monthly Enterprise Service Bus data transfers	205,023	256,071	270,000	285,000	300,000
Number of systems operations service requests completed	4,800	6,170	6,500	6,800	6,800
Enterprise applications system availability ¹	99.970%	99.986%	99.997%	99.997%	99.997%
Average security vulnerabilities per server ²	N/A	1.7	1.6	1.5	1.4

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

² Data for this measure not collected prior to FY19

FY21 Approved Changes	Expenditures	FTEs
FY20 Approved	12,908,524	38.00
Increase Cost: Software Maintenance	197,811	0.00
Shift: Position and Funding to Procurement for Center-Led Initiative	(89,378)	(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.	(16,807)	0.00
FY21 Approved	13,000,150	37.00

Enterprise Telecommunications and Services (ETSD)

The Enterprise Telecommunications and Services Division (ETSD) provides integrated communications services and solutions for County government departments and agencies including MC311. Private Branch Exchange (PBX) Telecommunications Services is responsible for the programming, operation, and maintenance of the County's telephone system and related services, e.g., voicemail, automatic call distribution (ACD). 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 FY18	Actual FY19	Estimated FY20	Target FY21	Target FY22
Number of telecom service requests	2,366	2,377	2,200	2,200	2,200
Average number of workdays to complete telecom service requests	9.6	12.5	8.0	8.0	8.0
Percent of time public safety radio system is fully operational	99.99%	99.819%	100%	100%	100%

FY21 Approved Changes	Expenditures	FTEs
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FY21 Approved Changes	Expenditures	FTEs
FY20 Approved	4,859,300	18.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	(143,665)	0.00
FY21 Approved	4,715,635	18.00

OBP FiberNet

The DTS Office of Broadband Programs (OBP) is responsible for countywide broadband governance, planning, and execution, and management of the Cable Television Communications Plan (a special revenue fund). OBP operates four programs: ultraMontgomery, FiberNet, Community Technology, Community Engagement. The FiberNet is funded by both DTS and the Cable Television Communications Plan. See Cable Television Communications Plan, FiberNet (Cable Fund) for more program information. FiberNet is the County's critical infrastructure communications network that enables all email, video, Internet access, and Cloud services, and supports County voice telephony, access to County business systems, County e-payments and forms, transport of public safety communications, and broadband and networking for Montgomery County Public Schools, Montgomery College, Housing Opportunities Commission, Maryland-National Capital Park and Planning Commission, and the Washington Suburban Sanitary Commission.

FY21 Approved Changes	Expenditures	FTEs
FY20 Approved	0	0.00
Shift: Personnel Costs and Operating Expenses from the Office of the Chief Operating Officer (COO)	1,376,981	6.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	217,574	4.00
FY21 Approved	1,594,555	10.00

OBP ultraMontgomery

The DTS Office of Broadband Programs' ultraMontgomery program is a broadband economic development program designed to support cost-effective, competitive access to robust, reliable and secure broadband services and ultra-highspeed networks for businesses throughout Montgomery County. ultraMontgomery leverages business engagement and infrastructure partnerships to expand access to competitive broadband services in commercial buildings and commercial business centers, and to increase awareness of broadband network and data center assets available to support businesses in Montgomery County. Emphasis is placed on growing jobs in the biohealth, managed IT, cybersecurity, digital entertainment and advanced manufacturing industries and small business digital entrepreneurs. OBP's Digital Equity program is also part of ultraMontgomery. Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy and economy. ultraMontgomery operates the Senior Planet Montgomery Program to provide technology training to adults aged 60 years and older and works with other OBP programs to expand Internet access to rural areas, low-income households, and to support youth media empowerment and racial equity initiatives.

Program Performance Measures	Actual FY18	Actual FY19	Estimated FY20	Target FY21	Target FY22
Total Senior Planet Montgomery participants	371	811	600	600	600
Unique new Senior Planet Montgomery participants	290	275	200	200	200
Percent of Senior Planet Montgomery participants who rated the quality of their instruction "high" or "very high"	92%	91%	90%	90%	90%
Percent of Senior Planet Montgomery participants whose quality of life improved	85%	82%	80%	80%	80%

FY21 Approved Changes	Expenditures	FTEs
FY20 Approved	0	0.00
Shift: Community Grants moved from the Community Grants Non Departmental Account to the Department's Base Budget.	70,000	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.	408,058	1.00
FY21 Approved	478,058	1.00

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	Actual	Estimated	Target	Target
	FY18	FY19	FY20	FY21	FY22
Percent of systems and applications with risk assessment performed in past three years	0%	0%	0%	1%	5%
Average security vulnerabilities per device	12.9	10.7	8.0	7.0	6.0

FY21 Approved Changes	Expenditures	FTEs
FY20 Approved	4,730,973	9.00
Increase Cost: Software Maintenance	103,967	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.	(330,595)	0.00
FY21 Approved	4,504,345	9.00

☀ 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.

FY21 Approved Changes	Expenditures	FTEs
FY20 Approved	4,139,239	24.00
Shift: Transfer Position to the Office of Management and Budget (OMB)	(221,450)	(1.00)
Shift: Personnel Costs and Operating Expenses to OBP FiberNet	(1,376,981)	(6.00)
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	(304,127)	(2.00)
FY21 Approved	2,236,681	15.00

REALIGNED PROGRAMS

Funding in the following programs has been realigned to other programs within this department.

☀ Office of Broadband Programs

FY21 Approved Changes	Expenditures	FTEs
FY20 Approved	402,991	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.	(402,991)	(1.00)
FY21 Approved	0	0.00

BUDGET SUMMARY

	Actual FY19	Budget FY20	Estimate FY20	Approved FY21	%Chg Bud/App
COUNTY GENERAL FUND					
EXPENDITURES					
Salaries and Wages	15,785,577	18,726,985	15,942,786	18,237,306	-2.6 %
Employee Benefits	4,449,367	5,306,889	4,522,862	4,960,012	-6.5 %
County General Fund Personnel Costs	20,234,944	24,033,874	20,465,648	23,197,318	-3.5 %
Operating Expenses	20,655,127	19,718,990	22,119,946	20,011,160	1.5 %
Capital Outlay	0	120,300	120,300	120,300	—
County General Fund Expenditures	40,890,071	43,873,164	42,705,894	43,328,778	-1.2 %
PERSONNEL					
Full-Time	174	174	174	167	-4.0 %
Part-Time	2	2	2	2	—
FTEs	165.75	167.25	167.25	165.25	-1.2 %
County General Fund Revenues	0	0	0	0	—

FY21 APPROVED CHANGES

	Expenditures	FTEs
COUNTY GENERAL FUND		
FY20 ORIGINAL APPROPRIATION	43,873,164	167.25
<u>Other Adjustments (with no service impacts)</u>		
Shift: Personnel Costs and Operating Expenses from the Office of the Chief Operating Officer (COO) [OBP FiberNet]	1,376,981	6.00
Increase Cost: FY21 Compensation Adjustment	286,805	0.00
Increase Cost: Annualization of FY20 Compensation Increases	225,140	0.00
Increase Cost: Software Maintenance [Enterprise Systems and Operations (ESOD)]	197,811	0.00
Increase Cost: Software Maintenance [Office of the Chief Information Officer (CIO)]	103,967	0.00
Increase Cost: Software Maintenance [Enterprise Applications and Solutions (EASD)]	100,100	0.00
Shift: Community Grants moved from the Community Grants Non Departmental Account to the Department's Base Budget. [OBP ultraMontgomery]	70,000	0.00
Increase Cost: Software Maintenance [Enterprise Resource Planning (ERP)]	30,000	0.00
Increase Cost: MLS Pay for Performance (Increase to Base Pay)	6,993	0.00
Increase Cost: Print and Mail Adjustment	62	0.00
Shift: Position and Funding to Procurement for Center-Led Initiative [Enterprise Systems and Operations (ESOD)]	(89,378)	(1.00)
Decrease Cost: Elimination of One-Time Items Approved in FY20	(100,000)	0.00
Decrease Cost: Motor Pool Adjustment	(109,770)	0.00
Shift: Transfer Position to the Office of Management and Budget (OMB) [Office of the Chief Operating Officer (COO)]	(221,450)	(1.00)
Decrease Cost: Retirement Adjustment	(273,881)	0.00
Decrease Cost: Council Compensation Adjustment	(311,415)	0.00

FY21 APPROVED CHANGES

	Expenditures	FTEs
Decrease Cost: Annualization of FY20 Personnel Costs	(459,370)	0.00
Shift: Personnel Costs and Operating Expenses to OBP FiberNet [Office of the Chief Operating Officer (COO)]	(1,376,981)	(6.00)
FY21 APPROVED	43,328,778	165.25

PROGRAM SUMMARY

Program Name	FY20 APPR Expenditures	FY20 APPR FTEs	FY21 APPR Expenditures	FY21 APPR FTEs
Enterprise Applications and Solutions (EASD)	8,567,629	44.75	8,617,230	43.75
Enterprise Resource Planning (ERP)	8,264,508	32.50	8,182,124	31.50
Enterprise Systems and Operations (ESOD)	12,908,524	38.00	13,000,150	37.00
Enterprise Telecommunications and Services (ETSD)	4,859,300	18.00	4,715,635	18.00
OBP FiberNet	0	0.00	1,594,555	10.00
OBP ultraMontgomery	0	0.00	478,058	1.00
Office of Broadband Programs	402,991	1.00	0	0.00
Office of the Chief Information Officer (CIO)	4,730,973	9.00	4,504,345	9.00
Office of the Chief Operating Officer (COO)	4,139,239	24.00	2,236,681	15.00
Total	43,873,164	167.25	43,328,778	165.25

CHARGES TO OTHER DEPARTMENTS

Charged Department	Charged Fund	FY20 Total\$	FY20 FTEs	FY21 Total\$	FY21 FTEs
COUNTY GENERAL FUND					
Human Resources	Employee Health Self Insurance	395,325	0.00	348,750	0.00
Alcohol Beverage Services	Liquor	1,049,691	0.00	1,073,967	0.00
CIP	Capital Fund	504,731	3.00	467,186	3.00
NDA - Retiree Health Benefits Trust	Retirement Fund (ERS)	135,433	0.00	135,623	0.00
Total		2,085,180	3.00	2,025,526	3.00

FUNDING PARAMETER ITEMS

CC APPROVED (\$000S)

Title	FY21	FY22	FY23	FY24	FY25	FY26
COUNTY GENERAL FUND						
EXPENDITURES						
FY21 Approved	43,329	43,329	43,329	43,329	43,329	43,329
No inflation or compensation change is included in outyear projections.						

FUNDING PARAMETER ITEMS

CC APPROVED (\$000S)

Title	FY21	FY22	FY23	FY24	FY25	FY26
Subtotal Expenditures	43,329	43,329	43,329	43,329	43,329	43,329