



FY22 Operating Budget: Committee Consent Calendar

GO Committee #10A

May 6, 2021

Department/Office: Department of Technology and Enterprise Business Solutions (formerly DTS)

Staff: Dr. Costis Toregas, IT Council Adviser

1. Staff Recommendation

Council staff recommends approval of the FY22 Office of Department of Technology and Enterprise Business Solutions (prior DTS) budget as submitted by the County Executive.

2. Summary of FY22 Recommended Budget

The County Executive's complete FY22 Recommended Operating Budget for TEBS is attached at ©1-12.

Department of Technology and Enterprise Business Solutions	FY21 Approved	FY22 CE Recommended	Change from FY21 Approved
General Fund	\$43,328,778	\$44,642,174	3.03%
Personnel Costs	\$23,197,318 165.25 FTEs	\$23,240,424 166.25 FTEs	0.2% 1.0 FTEs
Operating Costs	\$20,131,460	\$21,401,750	6.3%
Total Expenditures	\$43,328,778 165.25 FTEs	\$44,642,174 166.25 FTEs	3.03% 1.0%

3. Summary of FY22 Recommended Changes/Adjustments

General Fund - With Service Impact

- An increase of \$500,000 for FiberNet2 maintenance to renew infrastructure
- An increase of \$557,072 for new software license costs for Varonis, Oracle and Netmotion
- A decrease of \$315,100 for the termination of 51 Monroe Street lease no longer needed

General Fund - No Service Impact

- An increase of \$366,890 for FY21 Compensation Adjustment
- An increase of \$113,495 for FY22 Compensation Adjustment
- An increase of \$284,000 for CAD on-site support
- A shift of \$210,000 from the CEX Office for Chief Digital Officer
- An increase of \$212,898 for software licencing and subscriptions
- A Motor Pool adjustment of \$29,221

4. Suggested Discussion Items for Fall Overview Session

- The organizational structure of TEBS is still evolving; internal organizational strategies are being deployed and senior management positions such as Chief Technology Officer, Change Management Manager and Chief Digital Officer are being recruited. In addition, the potential of re-centralizing IT function from other smaller departments in County Government is on the table. The final reorganization decisions of TEBS should be included in the Fall review recommended in Observation #6.
- Metrics for the department are being re-evaluated and new ones are being currently defined. Once this process is complete, it will be easier for the Committee to measure progress towards articulated goals.
- Racial Equity is being tracked, and structures such as Senior Planet and MoCoNet are expressly targeted towards vulnerable populations that can be strengthened with IT.
- As requested by the Committee, the e-rate funding potential is being explored as a way to reduce expenses on the Operating Budget side by bringing federal support dollars; MCPS is not yet comfortable with the e-rate program being applied to their broadband needs, and this is where ITPCC can be helpful.
- A Cloud Readiness Assessment has been performed, preparing the way for future major system migrations to the cloud. The major enterprise software systems such as ERP and MC311 are approaching end-of-life conditions, so this focus on new platforms available to the County is proper and to be supported.
- A Committee review of performance and accomplishments in the Fall 2021 timeframe is recommended.

Consent Item

MEMORANDUM

May 3, 2021

TO: Government Operations and Fiscal Policy Committee

FROM: Dr. Costis Toregas, Council IT Adviser

SUBJECT: Technology and Enterprise Business Solutions (TEBS) (formerly Department of Technology Services (DTS)) FY22 Operating Budget

PURPOSE: FY22 Operating Budget Consent Calendar Decision regarding Technology and Enterprise Business Solutions (TEBS)

Council Staff recommendation: **Approve TEBS \$44,642,174 operating budget for FY22 as recommended by the County Executive.**

Council Staff Summary Observations

1. The organizational structure of TEBS is still evolving; internal organizational strategies are being deployed and senior management positions such as Chief Technology Officer, Change Management manager and Chief Digital Officer are being recruited. In addition, the potential of re-centralizing IT function from other smaller departments in County Government is on the table. The final reorganization decisions of TEBS should be included in the Fall review recommended in Observation #6.
2. Metrics for the department are being re-evaluated and new ones are being currently defined. Once this process is complete, it will be easier for the Committee to measure progress towards articulated goals.
3. Racial Equity is being tracked, and structures such as Senior Planet and MoCoNet are expressly targeted towards vulnerable populations that can be strengthened with IT.
4. As requested by the Committee, the e-rate funding potential is being explored as a way to reduce expenses on the Operating Budget side by bringing federal support dollars; MCPS is not yet comfortable with the e-rate program being applied to their broadband needs, and this is where ITPCC can be helpful.
5. A Cloud Readiness Assessment has been performed, preparing the way for future major system migrations to the cloud. The major enterprise software systems such as ERP and MC311 are

approaching end-of-life conditions, so this focus on new platforms available to the County is proper and to be supported.

6. A Committee review of performance and accomplishments in the Fall 2021 timeframe is recommended.

Council staff requested answers to the following questions; TEBS answers are in *italics*.

POLICY QUESTIONS

1. Please provide the new “Updated Performance Metrics” or a timeline for their delivery to the Committee.

As a part of the comprehensive reorganization, the Department of Technology Services (DTS) is working with CountyStat and the Office of Management and Budget (OMB) to develop meaningful program performance measures to be reflected in the FY23 budget publication.

2. Racial Equity is a high priority for the Council; please provide answers to the following questions (it is understood that other Executive branch entities may be asking for the same information).
 - a. Does your department use quantitative and qualitative data to track program access and/or service outcomes for different population groups?

Yes. Senior Planet Montgomery tracks and reports quantitative and qualitative data. Demographic data related to race and income are being collected in the multiweek courses, although transitioning from in-person to the Zoom online platform has made efforts to collect survey data more challenging. The multiweek courses were relaunched in Q2 FY21; the multiweek course survey results will be utilized to better inform Senior Planet Montgomery services.

Additionally, qualitative measures will be adopted from the newly developed Affordability and Accessibility program. Also, the County has analyzed Census data (see discussion below) to better prioritize resource deployment.

- b. Which community residents will potentially benefit the most from your program proposal or be burdened by your program proposal?

Low-income residents who live in affordable housing developments will benefit the most from the County’s digital equity programs. Residents with special needs also benefited from the Main Street Apartments project. The Office of Broadband Programs (OBP) is working with the County’s Racial Equity Officer and the Office of the County Attorney to determine how the County may lawfully prioritize expanding residential MoCoNet broadband service to the affordable housing developments with the greatest number of persons in the racial, age, and income groups who statistically have the lowest rate of Internet usage or lack broadband service. We have also had some preliminary conversations with Montgomery County Public Schools (MCPS) to gain insight.

c. How does the program promote racial equity?

OBP has analyzed the 2019 U.S. Census American Communities Survey (ACS) data. Of the 133,819 households that reported no home broadband, 28,325 of these families have a household income of less than \$50,000 and 64,593 have a household income of less than \$75,000. The Office of Racial Equity reported that the median income for Black households was \$62,000, and \$66,000 for Latin households, compared to \$119,000 for White households. Furthermore, Black children have a poverty rate of more than 6 times White children. Moreover, ACS data showed that the percentage of Latin and Black households without home broadband (26% and 23%, respectively) is almost twice as high as the percentage of White and Asian households without home broadband (13%). Therefore, delivering free broadband to affordable housing developments where units are reserved for families earning 80 percent to 40 percent of the County median household income (\$108,000) should provide more broadband service to low income Black and Latin families, who statically are more likely to qualify for income-based affordable housing and who statistically are less likely to have home broadband service.

Moreover, OBP is also working on a regional analysis to prioritize deployment of in person digital equity technology training (when public health conditions permit) and MoCoNet broadband infrastructure and internet service deployment. ACS data also illustrates that among the seven Public Use Microdata Areas (PUMAs) in the County, Latino residents in four PUMAs lack home broadband at significantly higher rates and similarly Black residents in two of the PUMAs.

Households with in-home broadband by race and PUMA:

- West Central – Germantown & Montgomery Village: Latinos 31%*
- East Central – Wheaton, Aspen Hill & Glenmont: Blacks 31%, Latinos 27%*
- Southeast – Takoma Park, Silver Spring: Blacks 30%, Latinos 26%*
- Central – Rockville, Gaithersburg, N. Potomac: Latinos 30%*

3. What is the TEBS vision for the use of IT in a post-COVID environment? And is there new legislation or funding needed to provide for this new vision?

Yes, the Federal Communication Commission's (FCC) E-Rate program makes telecommunications and information services more affordable for K-12 schools and libraries. With funding from the Universal Service Fund (fcc.gov/general/universal-service-fund), E-Rate provides discounts for telecommunications, Internet access, and internal connections to eligible schools and libraries. The department will need support moving this forward with the Montgomery County Public Schools (MCPS), since MCPS has been reluctant to pursue any E-Rate funding opportunities with FiberNet.

DTS believes E-Rate funding could provide a significant net funding opportunity for the County.

The American Rescue Plan Act also includes \$7.1 billion to expand the E-Rate program to allow schools and libraries to provide broadband and computers for students and patrons at home. The federal rules are being drafted and OBP filed comments with the Federal Communications Commission to recommend support for the types of programs Montgomery County is working to implement.

OBP is also working with Montgomery County Public Libraries (MCPL) to determine how MCPL can leverage E-Rate funding to fund broadband services provided at MCPL locations, expand outdoor Wi-Fi to an additional ten locations (CARES Act funding was used to expand outdoor Wi-Fi at ten locations), and support computers and home Internet for patrons.

4. For several years now the Committee has been asking for a review of the current federated IT system that sees potential duplication of effort and lack of coordination by having IT teams and budgets inside major County departments. Is there a plan for moving towards a more centralized environment under TEBS leadership, especially in a time of cloud computing and the need for centralized cybersecurity operations?

Yes, we have just begun to refocus on this issue as we extrapolate the most challenging areas in which to prioritize. We recommend that the enterprise operating structure be evaluated regularly, during the strategic planning cycle, and if there are reasons to believe that benefits of restructuring could increase value, a business case for change should be put together. These efforts should seek to achieve one or more of the following benefits:

- *Increase competitive advantage or growth.*
- *Reduce costs.*
- *Reduce risk.*
- *Better execute strategy.*

5. The Change Management capability within TEBS is helpful to all County departments; how is that capacity made known and provided to them? Can there be more pressure placed to use this excellent resource rather than to have it ignored as an optional one?

The Office of Change Management has recently been positioned in the Office of the CIO. The individual that will provide leadership will be hired in the next few weeks. The next step in the process is to develop the organization's strategic goals as a consultative organization within DTS.

6. Are there plans to refresh or replace the aging ERP system? Are any elements for this needed effort included in the FY22 budget?

One of DTS's strategic priorities is to address core business systems that are old and expensive to maintain. DTS plans to identify and address overly complex systems, targets for emerging cyber threats, and advance to SaaS services that better meet the County's need. DTS will choose the modernization approach that will have the highest effect and value for the County.

DTS completed a Cloud Readiness Assessment to set the foundation for Montgomery County's cloud solutions. The results of the assessment have been operationalized and a tactical plan for recommendations is underway. DTS believes that it is highly probable that the next generation ERP solution will be cloud based.

MANAGEMENT QUESTIONS

1. There is a DPS cloud application included in the FY22 request; is there coordination with TEBS? And where in the FY22 request are the resources to undertake this project?

Yes, the coordination and partnership with the Department of Permitting Services (DPS) began last year. The new Project Management Office will establish the Project Charter to determine

resources. The licensing costs are held within the DPS budget.

2. Please provide updates on Chief Data Officer, Chief Digital Officer and Chief Technology Officer positions.

- Chief Data Officer- This position is currently assigned to the PSSM project through FY22.
- Chief Digital Officer- In recruitment
- Chief Technology Officer- Josephine Tao is currently acting in this role. DTS plans to open the Chief Technology Officer position for recruitment in early FY22.

3. Please provide a comprehensive organizational Chart of the new organization, including names of those in charge of Divisions

See attached TEBS Org chart.

4. Please provide Training Plan detail; are there plans to include staff outside of TEBS?

The Office of Change Management will create a centralized IT training catalog in FY22 to provide comprehensive IT training opportunities to the organization. The training opportunities will focus on Microsoft applications, Oracle Finance and HCM responsibilities, and other IT-related training such as Personal Identifiable Information (PII). The training framework will include:

- A blended learning training strategy for Microsoft offerings that includes certification pathways for advanced level applications
- A single point of reference for all DTS offered training (learning pathways)
- Feedback from each department, in addition to Council staff. The feedback will be utilized to evolve training offerings accordingly
- Evaluative tools to quantify success measures and inform Montgomery
- County's training strategy

5. The OCIO is shown adding 31 positions in FY22; please provide their intended utilization.

See Attached CIO Office Org Chart.

6. The FiberNet development and operations have traditionally been presented and approved by the ITPCC principals. Has that been done for FiberNet3 plans?

FiberNet is the backbone network that connects and provides voice, video, data, and internet services to 564 County and agency locations. This includes state and local governments, educational networks, Interagency Technology Policy and Coordination Committee (ITPCC) agencies, and 265 Montgomery County Government facilities including 49 Fire & Rescue Stations, 17 police stations, 24 Public Libraries, and 18 HHS & Health Clinics.

ITPCC agencies have been engaged and consulted regarding the design, architecture, planning, and implementation of FiberNet3 (please see the response to the next question for a description of FiberNet3). Without exception, all agencies have been extremely supportive of the FiberNet3 upgrade and implementation. MCPS, as FiberNet's largest "ITPCC customer", has been particularly appreciative of FiberNet3's increased bandwidth and capabilities as their migration to FiberNet3 was expedited from a planned, 90+ day summer period to a very compressed 18-day project beginning March 24 and concluding April 10th. This effort involved a dozen-plus key

MCPS and MCG staff members working all hours of the day, evenings, and weekends to take advantage of a more than 10-fold increase in FiberNet’s core bandwidth, thus avoiding severe bandwidth issues that would have resulted from an unprecedented surge in network demands driven by MCPS’s hybrid return to school model.

OPERATIONS QUESTIONS

1. Provide a transition staging plan for FiberNet3.

FiberNet is currently being upgraded from “FiberNet2” (its current, 15-year old platform) to “FiberNet3”. FiberNet will be , more resilient and responsive. FiberNet3 has 10-times more capacity than FiberNet2 and has been engineered to enable current County communication requirements as well as growing demand for cloud and Internet access services. Once planned connectivity is completed to an Equinix data center in Ashburn, Virginia (scheduled to be completed in late 2021 pending related procurement efforts), FiberNet3 will also have direct connectivity to Tier 1 cloud and internet service providers and will provide more reliable services at a lower costs.

The Office of Broadband Programs has begun migrating department and agency sites over to the new and improved network and has successfully migrated 230 sites to date, including 219 of 230 (95%) Montgomery County Public School (MCPS) sites, which satisfied their sudden exponential bandwidth requirements and alleviated MCPS’s connectivity concerns as schools started to become operational. . The remaining department and agency sites are all targeted to be completed by the end of this calendar year. The next steps during FY22 and beyond involve upgrading network equipment that has reached the end of its useful life.

2. Can you define MoCoNet?

MoCoNet is Montgomery County’s residential broadband program for low-income residents. In the current stage, FiberNet is partnering with affordable housing organizations (such as the Housing Opportunities Commission, Arlington Partnership for Affordable Housing, Montgomery Housing Partnership, Victory Housing, etc.) to extend FiberNet connectivity to affordable housing developments. Digital equity supports are being added to FY22 criteria in consultation with the Office of Racial Equity and the Office of the County Attorney.

3. Are there expansion plans for the TEAMS platform? And how will users’ reactions to date be incorporated?

The Teams platform and functionality is established by the Microsoft Corporation. General feedback on TEAMS functionality is typically related to training.

Attachments

Budget pages

Organizational charts (2)

© pages

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Technology Services

RECOMMENDED FY22 BUDGET

\$44,642,174

FULL TIME EQUIVALENTS

166.25

 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 fashion to reduce service times, avoid inflated costs, reduce information security risk, and improve the quality of County services through automation-assisted process improvement. The department facilitates business and reengineering processes to improve legacy workflow and streamline services to our customers.

- DTS is responsive by providing measurable 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 partners including 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 community digital equity initiatives.

- DTS is innovative as it identifies and implements technology solutions to address business needs that enhance value and enable continuous measurable improvement.

BUDGET OVERVIEW

The total recommended FY22 Operating Budget for the Department of Technology Services is \$44,642,174, an increase of \$1,313,396 or 3.03 percent from the FY21 Approved Budget of \$43,328,778. Personnel Costs comprise 52.06 percent of the budget for 168 full-time position(s) and two part-time position(s), and a total of 166.25 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 47.94 percent of the FY22 budget.

Additional support for DTS programs are 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 are emphasized:

- ❖ **Thriving Youth and Families**
- ❖ **An Affordable, Welcoming County for a Lifetime**
- ❖ **Effective, Sustainable Government**

INITIATIVES

- ★ The Device Client Management (DCM) program intends to complete the replacement of up to 3,000 devices, primarily laptops, for eligible employees. Increase funding to allow the County to establish a 5-year PC replacement policy in contrast to the current 6.5-year policy.
- ★ Create a DTS training strategic plan and associated role-based learning paths, create training content, adopt vendor-based content, and manage the registration process to increase skills, knowledge, and adoption towards strategic priorities departmentally and organizationally. The plan encompasses Microsoft, Oracle, DTS Internal and other IT training portfolios, including training required during IT projects or implementations.
- ★ Implement FiberNet3, a third-generation network design which impacts the speed in which digital information travels. FiberNet3 builds on the long-term success of County-owned fiber optic communications infrastructure to provide critical infrastructure for next generation communications and access to cloud services. Planned upgrades address emerging and long-term needs including: essential equipment and technology refreshes, an increased capacity to support growing bandwidth demands, and design enhancements to expand the breadth of service offerings. FiberNet3 upgrade objectives include: increased capacity access; flexible transport services over Montgomery County Public Libraries and Dense Wavelength Division Multiplexing (DWDM) technology; Tier IV data center connection; more resilient internet services; direct connections to cloud-based service; enhanced quality of service for critical unified communications (VOIP, Video); support for new customer technologies and emergency demand; and growth opportunities for the County.
- ★ Provide Change Management support on enterprise IT projects or implementations that are new or currently in progress.
- ★ Lead business process re-engineering efforts in departmental and enterprise-wide projects and initiatives to increase efficiencies and better support our residents.
- ★ Develop internal training to prevent data leakage, or the transmission of private or sensitive data with unauthorized parties. This training will prepare users to utilize controls and permissions in the MCG data sharing platforms (OneDrive, SharePoint, Teams) to specify user access and prevent unauthorized data access.

INNOVATIONS AND PRODUCTIVITY IMPROVEMENTS

- ★ Developed several constituent-facing web applications aimed at providing resources to residents and small businesses impacted by the COVID-19 pandemic. Established a strategy to keep the network up during high volume response by applicants.
- ★ Established the necessary infrastructure and support to swiftly migrate the organization to a telework environment in support of business continuity during the COVID-19 emergency efforts. Established necessary security and 24/7 help desk support during the critical transition with little to no interruptions in revenue collection or business operations.

- ★ Partnered with the Department of Permitting (DPS) to begin a business re-engineering strategy to upgrade their permitting system to include a cloud-based solution with enhanced functionality for permit processing and customer service.
- ★ Renegotiated and consolidated the Microsoft Enterprise Agreement (EA). The Microsoft EA provides a comprehensive agreement combining software and services to support Montgomery County's Telework strategic initiatives including improved security, licensing, and required infrastructure for recovery efforts.
- ★ To answer the technology needs of the County vaccine distribution program, DTS delivered a pre-registration system to allow County residents and workers to input critical information to determine their tier for vaccination. The system provided a virtual phone agent to automatically address inquiries in both English and Spanish, resolving approximately sixty percent of incoming calls before reaching a human; email and text notifications to keep pre-registrants informed of their vaccination status; and a user-friendly solution to allow public health resources to efficiently manage the large amount of data to process vaccinations.
- ★ Managed the development and implementation of web-based, mobile-friendly, COVID-19 testing, and notification solution, which provides an end-to-end service allowing a County resident, worker or employee to register, test and be notified of test results within a 24-48 hour window. Over 10,000 tests have been conducted via this Microsoft solution.

PROGRAM CONTACTS

Contact Michele Crane of the Department of Technology Services at 240.777.2845 or Felica Hyatt of the Office of Management and Budget at 240.777.2763 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 FY21 estimates reflect funding based on the FY21 Approved Budget. The FY22 and FY23 figures are performance targets based on the FY22 Recommended Budget and funding for comparable service levels in FY23.

PROGRAM DESCRIPTIONS

★ Digital Transformation

The Office of Digital Transformation provides a strategic digital vision for the County to meet its priority objectives, enhance the value of services provided to stakeholders, and lower the overall cost of service delivery. The Office of Digital Transformation is responsible for ensuring that the enterprise's business strategy is optimal, given the current and evolving digital realities, opportunities, and threats. The Chief Digital Officer leads the Office of Digital Transformation and champions the use of information, data, and technology in improving the business model design of County stakeholders, innovating upon all aspects of the business, and creating business success for Montgomery County.

The Office of Digital Transformation is responsible for Geographic Information Systems, Employee Productivity Services, Web and Mobile Applications, Infrastructure and Cloud Services, Data Services, and Enterprise Resource Planning which includes Human Capital Management, Payroll/Comp/BI, Security and System Administration, and Financials.

Program Performance Measures	Actual FY19	Actual FY20	Estimated FY21	Target FY22	Target FY23
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Technology Services

General Government 40-3

Program Performance Measures	Actual FY19	Actual FY20	Estimated FY21	Target FY22	Target FY23
Number of websites and web applications supported ¹	334	373	402	429	456
Number of Open Data datasets published	50	32	35	35	35
Number of IT help desk requests	37,424	63,516	64,786	66,082	67,404
Percent of customers satisfied with the IT help desk	99%	99%	98%	98%	98%
Percent of IT help desk requests resolved on the first call	96%	90%	90%	90%	90%

¹ Data for this measure not collected prior to FY19

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	8,617,230	43.75
Shift: Chief Digital Officer from Office of the County Executive	210,000	1.00
Increase Cost: Software Maintenance for Oracle, Gov Delivery, Verint/ForeSee, and Pictometry	168,898	0.00
Enhance: Oracle License Expansion	76,000	0.00
Decrease Cost: Lapse ERP Functional Business Analyst	(132,877)	0.00
Eliminate: ERP Offices, 51 Monroe Street Lease Terminated	(315,100)	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.	4,647,423	7.00
FY22 Recommended	13,271,574	51.75

Note(s): The Department is currently reviewing and updating all program performance measures as a part of their comprehensive reorganization and updates will be reflected in the FY23 budget.

☀ OBP Fibernet (GF)

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 MCPS, Montgomery College, Housing Opportunities Commission, M-NCPPC, and WSSC Water. This program operates and maintains FiberNet, provides new applications over FiberNet, expands FiberNet infrastructure to new locations, operates a 24 hour/365 days a year Network Operations Center, and is upgrading the third generation of FiberNet (FiberNet3). Investments in FiberNet staffing and operations will help prevent and shorten network outages, avoid degradation in public safety communications, speed the ability to add new services (including applications relying on Cloud services, deployment of robust public WiFi, and broadband capacity for education), and provide an operational foundation to earn revenue through FiberNet services provisioning and infrastructure leasing.

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	0	0.00
Enhance: FiberNet2 Maintenance to mitigate aging equipment failures	500,000	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.	2,251,562	13.00
FY22 Recommended	2,751,562	13.00

☀ OBP Infrastructure Modernization

Infrastructure Modernization: The Enterprise Systems and Operations Division (ESOD) designs, implements, and maintains a secure and reliable data center, server and cloud infrastructures for over 600 County business systems and approximately 12,000 County users including ongoing patching and remediation of the servers to maintain and improve functionality and security.

ESOD manages the infrastructure for enterprise-wide systems for the Enterprise Resource Planning (ERP), MC311, MCTime

and the Public Safety (911) Data System. This includes operating and managing the following enterprise systems: data centers, cloud-based solutions, identity management systems, file and print systems, records management systems, and office productivity/collaboration.

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	0	0.00
Decrease Cost: Lapse Technology Expert	(279,066)	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.	4,329,994	20.50
FY22 Recommended	4,050,928	20.50

Note(s): *The Department is currently reviewing and updating all program performance measures as a part of their comprehensive reorganization and updates will be reflected in the FY23 budget.*

OBP Telecommunications Solutions

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; ensures that communication 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 FiberNet fiber optic network and related broadband services. 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 MCPS, MC, HOC, M-NCPPC, and WSSC Water.

As a result of the FY22 DTS reorganization which consolidates infrastructure initiatives and management, OBP will now also lead the following programs:

The Infrastructure Modernization Enterprise Systems and Operations Division (ESOD) designs, implements, and maintains a secure and reliable data center, server and cloud infrastructures for over 600 County business systems and approximately 12,000 County users, including ongoing patching and remediation of the servers to maintain and improve functionality and security. ESOD manages the infrastructure for enterprise-wide systems for the Enterprise Resource Planning (ERP), MC311, MCTime and the Public Safety (911) Data System. This includes operating and managing the following enterprise systems - data centers, cloud-based solutions, identity management systems, file and print systems, records management systems, and office productivity/collaboration.

The Telecommunication Solutions Enterprise Telecommunications and Services Division (ETSD) provides integrated communications services and solutions for County government departments and agencies, including MC311. ETSD is responsible for the programming, operation, and maintenance of the County's telephone system and related services such as 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 largely support public safety departments.

Program Performance Measures	Actual FY19	Actual FY20	Estimated FY21	Target FY22	Target FY23
Number of telecom service requests	2,377	1,920	1,500	1,500	1,400
Average number of workdays to complete telecom service requests	12.5	10.3	8.0	8.0	6.0
Percent of time public safety radio system is fully operational	99.819%	100.000%	98.900%	98.900%	98.900%

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	4,715,635	18.00
Increase Cost: CAD On-Site Support	284,000	0.00
Enhance: Netmotion VPN Maintenance	17,500	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.	3,361,327	7.00
FY22 Recommended	8,378,462	25.00

Note(s): The Department is currently reviewing and updating all program performance measures as a part of their comprehensive reorganization and updates will be reflected in the FY23 budget.

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-high-speed 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 as well as 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, 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 FY19	Actual FY20	Estimated FY21	Target FY22	Target FY23
Total Senior Planet Montgomery participants ¹	811	552	10,354	4,900	2,000
Unique new Senior Planet Montgomery participants ²	275	496	N/A	N/A	300
Percent of Senior Planet Montgomery participants who rated the quality of their instruction "high" or "very high"	91%	91%	94%	90%	90%
Percent of Senior Planet Montgomery participants whose quality of life improved	82%	71%	83%	80%	80%

¹ Senior Planet Montgomery switched from in-person to online digital equity programs in response to COVID-19 on March 23, 2020. FY20 stats are through the third quarter only, and fourth quarter data are combined with FY21 because virtual participation is so different from in-person. Unique participant data is not available via Zoom yet; FY21 and FY22 figures include all virtual participants.

² Senior Planet Montgomery switched from in-person to online digital equity programs in response to COVID-19 on March 23, 2020. FY20 stats are through the third quarter only, and fourth quarter data are combined with FY21 because virtual participation is so different from in-person. Unique participant data is not available via Zoom yet.

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	478,058	1.00
Increase Cost: Older Adult Technology Services (OATS) Contract	2,340	0.00

FY22 Recommended Changes	Expenditures	FTEs
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	89	0.00
FY22 Recommended	480,487	1.00

Note(s): The Department is currently reviewing and updating all program performance measures as a part of their comprehensive reorganization and updates will be reflected in the FY23 budget.

☀ Office of the Chief Information Officer

The Office of the Chief Information Officer (OCIO) prioritizes the enterprise agenda for technology strategy. The OCIO focuses on strategic business outcomes which include alignment with the business goals of the organization, IT Strategy and Planning, the IT project portfolio IT Project Management Office (PMO), IT performance measurement, IT organizational change management, the One Face Forward initiative, IT methodologies and trend decisions, IT vendor management, and finance and budgeting. The OCIO remains focused on dealing with vendor relationships, identifying, and introducing new ways of doing business including an emphasis on consultative services to departments. The OCIO is strategic in engaging with business executives and the political body. The OCIO defines policy development that protects and defines data security by working closely with the Chief Information Security Officer.

Program Performance Measures	Actual FY19	Actual FY20	Estimated FY21	Target FY22	Target FY23
Percent of systems and applications with risk assessment performed in past three years	0%	0%	0%	0%	1%
Average security vulnerabilities per device	10.7	9.3	9.1	8.8	8.5

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	4,504,345	9.00
Enhance: Varonis Software License/Maintenance	463,572	0.00
Increase Cost: Qualys Software and iBoss VPN Maintenance	20,000	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.	2,515,203	32.00
FY22 Recommended	7,503,120	41.00

Note(s): The Department is currently reviewing and updating all program performance measures as a part of their comprehensive reorganization and updates will be reflected in the FY23 budget.

☀ Project Management

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	0	0.00
Increase Cost: Socrata Software Maintenance (dataMontgomery and spendingMontgomery)	4,500	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.	764,000	5.00
FY22 Recommended	768,500	5.00

Note(s): The Department is currently reviewing and updating all program performance measures as a part of their comprehensive reorganization and updates will be reflected in the FY23 budget.

☀ Strategic Partnerships

The Office of Strategic Partnerships supports innovation by bridging the gap between County departmental business partners and technology solution providers to accomplish quick and agile solutions that address longstanding technological or work processes facing departments. The Chief Technology Officer oversees this office and manages business process reengineering and maintains a consulting relationship with all department partners. The Office of Strategic Partnerships directs the planning to ensure alignment of required goals to support enterprise business demands. This Office focuses on envisioning how departmental technology and business needs can be better supported to improve service to our customers. This office pushes technology services from an administrative, back-office function to a strategic partner for departments in innovating service to citizens.

The Office of Strategic Partnerships manages MC311 Applications Support, Enterprise Services, and Employee Productivity Services. This office will also manage the deployment and governance of low code platforms to meet aggressive delivery timetables of applications and for faster iterative updates, while deploying to the customer or public end-users.

Program Performance Measures	Actual FY19	Actual FY20	Estimated FY21	Target FY22	Target FY23
Number of enterprise resource planning (ERP) work orders completed	736	708	736	750	950
Enterprise resource system availability	99.9794%	100.0000%	98.9800%	99.9800%	99.9800%
Success rate for business intelligence data refreshes ¹	91.7684%	98.0000%	99.0000%	99.0000%	99.0000%
Number of business intelligence data models published	100	90	100	105	115

¹ Data for this measure not collected prior to FY19

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	8,182,124	31.50
Increase Cost: ZylImage Software Maintenance	13,000	0.00
Increase Cost: ShareGate Subscription	11,000	0.00
Decrease Cost: Lapse Technology Expert (POS012591, Gr 32)	(139,533)	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.	(629,050)	(22.50)
FY22 Recommended	7,437,541	9.00

Note(s): The Department is currently reviewing and updating all program performance measures as a part of their comprehensive reorganization and updates will be reflected in the FY23 budget.

REALIGNED PROGRAMS

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

Enterprise Systems and Operations

Program Performance Measures	Actual FY19	Actual FY20	Estimated FY21	Target FY22	Target FY23
Average monthly Enterprise Service Bus data transfers	256,071	271,477	298,625	328,487	361,336
Enterprise applications system availability ¹	99.986%	99.992%	99.993%	99.994%	99.995%

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

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	13,000,150	37.00

FY22 Recommended Changes	Expenditures	FTEs
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	(13,000,150)	(37.00)
FY22 Recommended	0	0.00

 OBP FiberNet

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	1,594,555	10.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	(1,594,555)	(10.00)
FY22 Recommended	0	0.00

Note(s): The Department is currently reviewing and updating all program performance measures as a part of their comprehensive reorganization and updates will be reflected in the FY23 budget.

 Office of Strategy and Planning

FY22 Recommended Changes	Expenditures	FTEs
FY21 Approved	2,236,681	15.00
Multi-program adjustments, including negotiated compensation changes, employee benefit changes, changes due to staff turnover, reorganizations, and other budget changes affecting multiple programs.	(2,236,681)	(15.00)
FY22 Recommended	0	0.00

BUDGET SUMMARY

	Actual FY20	Budget FY21	Estimate FY21	Recommended FY22	%Chg Bud/Rec
COUNTY GENERAL FUND					
EXPENDITURES					
Salaries and Wages	15,998,223	18,237,306	15,480,888	18,473,840	1.3 %
Employee Benefits	4,509,054	4,960,012	4,026,121	4,766,584	-3.9 %
County General Fund Personnel Costs	20,507,277	23,197,318	19,507,009	23,240,424	0.2 %
Operating Expenses	21,669,291	20,011,160	22,330,891	21,341,450	6.7 %
Capital Outlay	0	120,300	120,300	60,300	-49.9 %
County General Fund Expenditures	42,176,568	43,328,778	41,958,200	44,642,174	3.0 %
PERSONNEL					
Full-Time	174	167	167	168	0.6 %
Part-Time	2	2	2	2	—
FTEs	167.25	165.25	165.25	166.25	0.6 %
REVENUES					
Other Charges & Fees	(20)	0	0	0	—
County General Fund Revenues	(20)	0	0	0	—

GRANT FUND - MCG

BUDGET SUMMARY

	Actual FY20	Budget FY21	Estimate FY21	Recommended FY22	%Chg Bud/Rec
EXPENDITURES					
Salaries and Wages	0	0	0	0	—
Employee Benefits	0	0	0	0	—
Grant Fund - MCG Personnel Costs	0	0	0	0	—
Operating Expenses	69,089	0	0	0	—
Grant Fund - MCG Expenditures	69,089	0	0	0	—
PERSONNEL					
Full-Time	0	0	0	0	—
Part-Time	0	0	0	0	—
FTEs	0.00	0.00	0.00	0.00	—
Grant Fund - MCG Revenues	0	0	0	0	—
DEPARTMENT TOTALS					
Total Expenditures	42,245,657	43,328,778	41,958,200	44,642,174	3.0 %
Total Full-Time Positions	174	167	167	168	0.6 %
Total Part-Time Positions	2	2	2	2	—
Total FTEs	167.25	165.25	165.25	166.25	0.6 %
Total Revenues	(20)	0	0	0	—

FY22 RECOMMENDED CHANGES

	Expenditures	FTEs
COUNTY GENERAL FUND		
	FY21 ORIGINAL APPROPRIATION	43,328,778 165.25
<u>Changes (with service impacts)</u>		
Enhance: FiberNet2 Maintenance to mitigate aging equipment failures [OBP Fibernet (GF)]	500,000	0.00
Enhance: Varonis Software License/Maintenance [Office of the Chief Information Officer]	463,572	0.00
Enhance: Oracle License Expansion [Digital Transformation]	76,000	0.00
Enhance: Netmotion VPN Maintenance [OBP Telecommunications Solutions]	17,500	0.00
Eliminate: ERP Offices, 51 Monroe Street Lease Terminated [Digital Transformation]	(315,100)	0.00
<u>Other Adjustments (with no service impacts)</u>		
Increase Cost: FY21 Compensation Adjustment	366,890	0.00
Increase Cost: CAD On-Site Support [OBP Telecommunications Solutions]	284,000	0.00
Shift: Chief Digital Officer from Office of the County Executive [Digital Transformation]	210,000	1.00
Increase Cost: Software Maintenance for Oracle, Gov Delivery, Verint/ForeSee, and Pictometry [Digital Transformation]	168,898	0.00
Increase Cost: FY22 Compensation Adjustment	113,495	0.00
Increase Cost: Motor Pool Adjustment	29,221	0.00
Increase Cost: Qualys Software and iBoss VPN Maintenance [Office of the Chief Information Officer]	20,000	0.00

FY22 RECOMMENDED CHANGES

	Expenditures	FTEs
Increase Cost: ZylImage Software Maintenance [Strategic Partnerships]	13,000	0.00
Increase Cost: ShareGate Subscription [Strategic Partnerships]	11,000	0.00
Increase Cost: Socrata Software Maintenance (dataMontgomery and spendingMontgomery) [Project Management]	4,500	0.00
Increase Cost: Older Adult Technology Services (OATS) Contract [OBP ultraMontgomery]	2,340	0.00
Decrease Cost: Print and Mail Adjustment	(4,641)	0.00
Decrease Cost: Retirement Adjustment	(95,803)	0.00
Decrease Cost: Lapse ERP Functional Business Analyst [Digital Transformation]	(132,877)	0.00
Decrease Cost: Lapse Technology Expert (POS012591, Gr 32) [Strategic Partnerships]	(139,533)	0.00
Decrease Cost: Lapse Technology Expert [OBP Infrastructure Modernization]	(279,066)	0.00
FY22 RECOMMENDED	44,642,174	166.25

PROGRAM SUMMARY

Program Name	FY21 APPR Expenditures	FY21 APPR FTEs	FY22 REC Expenditures	FY22 REC FTEs
Digital Transformation	8,617,230	43.75	13,271,574	51.75
Enterprise Systems and Operations	13,000,150	37.00	0	0.00
OBP FiberNet	1,594,555	10.00	0	0.00
OBP Fibernet (GF)	0	0.00	2,751,562	13.00
OBP Infrastructure Modernization	0	0.00	4,050,928	20.50
OBP Telecommunications Solutions	4,715,635	18.00	8,378,462	25.00
OBP ultraMontgomery	478,058	1.00	480,487	1.00
Office of Strategy and Planning	2,236,681	15.00	0	0.00
Office of the Chief Information Officer	4,504,345	9.00	7,503,120	41.00
Project Management			768,500	5.00
Strategic Partnerships	8,182,124	31.50	7,437,541	9.00
Total	43,328,778	165.25	44,642,174	166.25

CHARGES TO OTHER DEPARTMENTS

Charged Department	Charged Fund	FY21 Total\$	FY21 FTEs	FY22 Total\$	FY22 FTEs
COUNTY GENERAL FUND					
Human Resources	Employee Health Self Insurance	348,750	0.00	348,750	0.00
Alcohol Beverage Services	Liquor	1,073,967	0.00	1,156,817	0.00
CIP	Capital Fund	467,186	3.00	467,839	3.00
NDA - Retiree Health Benefits Trust	Retirement Fund (ERS)	135,623	0.00	135,623	0.00
Total		2,025,526	3.00	2,109,029	3.00

FUNDING PARAMETER ITEMS

CE RECOMMENDED (\$000S)

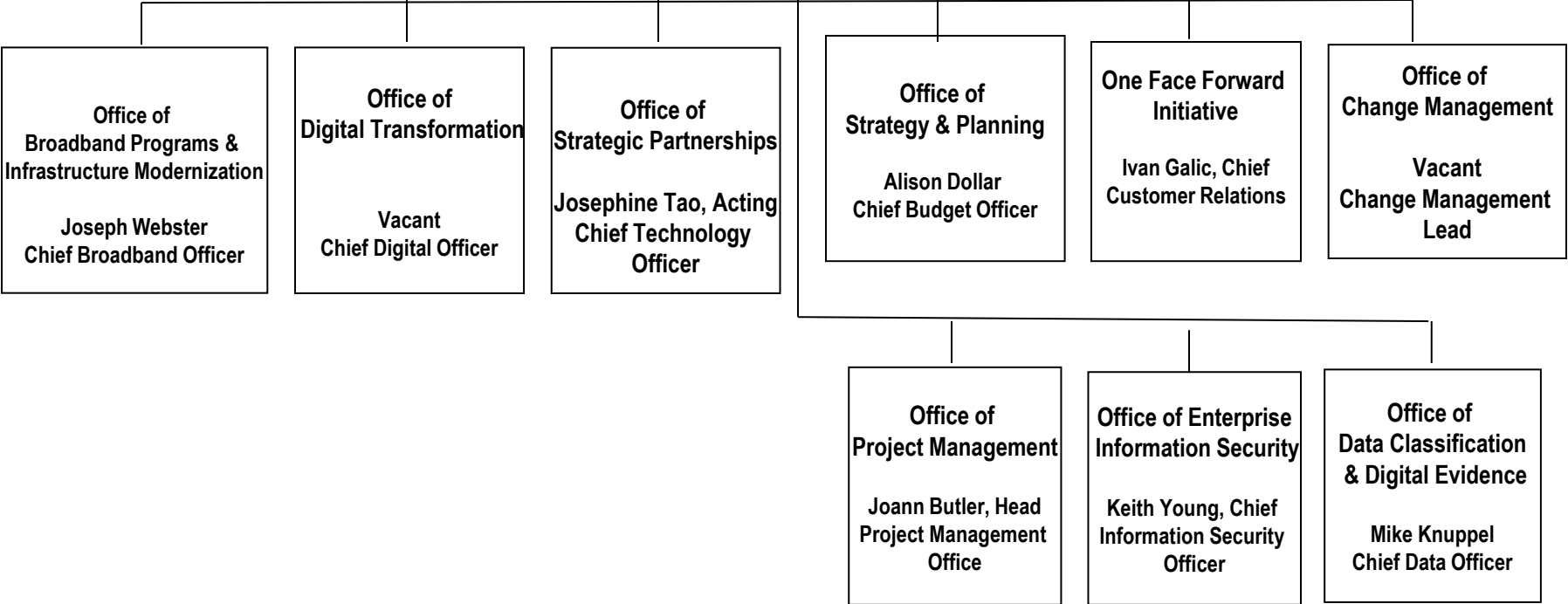
Title	FY22	FY23	FY24	FY25	FY26	FY27
COUNTY GENERAL FUND						
EXPENDITURES						
FY22 Recommended	44,642	44,642	44,642	44,642	44,642	44,642
No inflation or compensation change is included in outyear projections.						
Labor Contracts	0	333	333	333	333	333
These figures represent the estimated annualized cost of general wage adjustments, service increments, and other negotiated items.						
Subtotal Expenditures	44,642	44,975	44,975	44,975	44,975	44,975

Department of Technology Services



Chief Information Officer
Gail M. Roper
Director

Cheryl Bishop
Sr EAA





Department of Technology Services

Office of the Chief Information Officer

CIO = 46 positions

