

**MEMORANDUM**

October 18, 2021

TO: Government Operations and Fiscal Policy Committee  
FROM: Dr. Costis Toregas, Council IT Adviser  
SUBJECT: Oversight Worksession: Technology and Enterprise Business Solutions (TEBS)  
PURPOSE: Briefing on FY22 department initiatives

Expected Participants:

Gail Roper, Chief Information Officer, Technology and Enterprise Business Solutions (TEBS)  
Shayna Taqi, Chief Change Officer, TEBS  
Skyler Grubbs, Acting Change Manager, TEBS  
Joe Webster, Chief, Office of Broadband Programs, TEBS  
Allison Dollar, Chief Budget Officer, TEBS  
Julie Knight, Analyst, Office of Management & Budget (OMB)

**Background**

Due to the ongoing COVID-19 pandemic, the Council's FY22 budget review process included a consent calendar approval of several department/office budgets with the plan that those departments/offices would be scheduled for a Committee oversight review session in the Fall of 2021. This is one such review.

This year, the TEBS budget provided \$44,642,174 to various important purposes (see © 1). This worksession will give the Committee a chance to hear from TEBS leadership and understand some of the major accomplishments as well as challenges ahead.

**Purpose**

The purpose of these oversight sessions is to provide the Committees with an opportunity to meet with Department/Office Directors; receive updates on key programs or initiatives; and review any relevant pending or performance data.

## **Potential Topics of Discussion**

TEBS has been in the forefront of providing digital services support to departments and residents alike in a time of pandemic; expansion of services in this unprecedented time of COVID and plans for future consolidation of such expansion will be one of the primary topics to review.

In addition, the Digital Equity initiative that is the emphasis of the Committee and full Council this year has also been in the forefront of TEBS efforts, and a report will also be provided regarding the way that technology is used to promote racial equity goals.

Continuing the shift to cloud-based operations and using partnerships with industry as a way to promote a safer and more effective platform for the increasingly digital work element of the County will also be a major topic of the presentation and discussion.

### **This packet contains:**

- © 1-2            FY22 TEBS Budget Highlights
- © 2-20            TEBS Presentation to GO Committee



# 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
<b>General Fund</b>	<b>\$43,328,778</b>	<b>\$44,642,174</b>	<b>3.03%</b>
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%
<b>Total Expenditures</b>	<b>\$43,328,778</b> <b>165.25 FTEs</b>	<b>\$44,642,174</b> <b>166.25 FTEs</b>	<b>3.03%</b> <b>1.0%</b>

## 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.



FY 21 Accomplishments

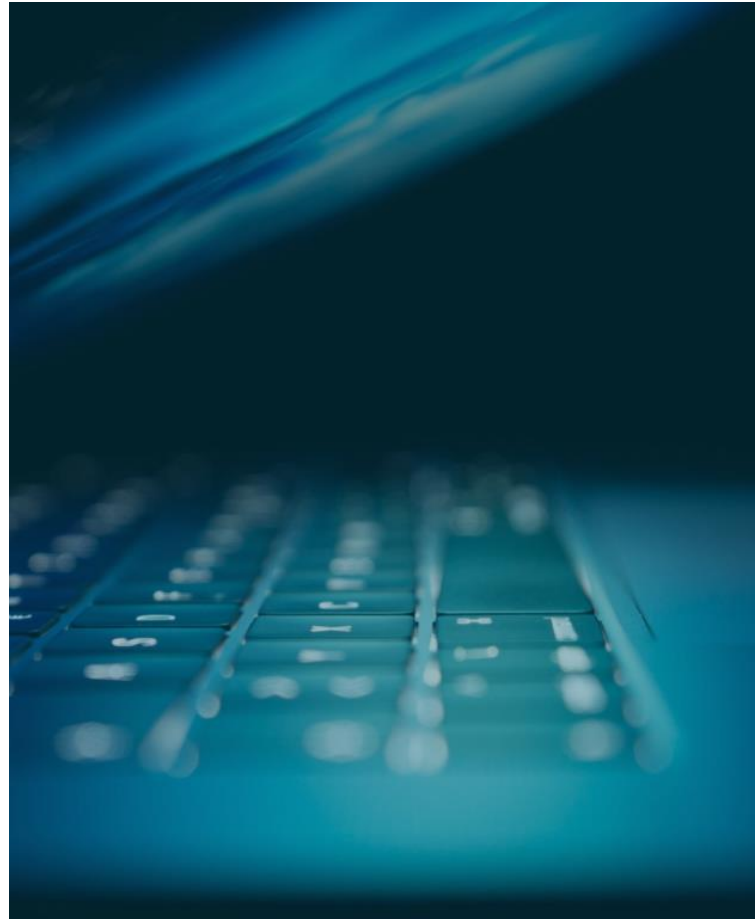
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FY 22 Roadmap

TODAY'S

# AGENDA

- ▲ TEBS Introduction
- ▲ FY21: COVID Support
- ▲ FY21: The MC311 Project
- ▲ FY21: Other Acheivements
- ▲ Current Status + Future Plans





## MISSION

We are the new TEBS! Our mission is to be **responsive, collaborative, and innovative** in providing technology solutions to facilitate the delivery of a wide range of services in all branches of government. We strive to provide solutions and consultative services in a cost-effective, timely, and high-quality fashion. Ultimately, we seek to improve the quality of County services.



## STRATEGIC PRIORITIES



**Improve** Service to the public through digital transformation



**Identify** an IT governance framework



**Address** core business systems that are outdated and costly to maintain



**Align** the IT project portfolio to encompass equity solutions



## TRANSFORMATION



**Reorganized** structurally and shifted focus to rapid delivery and consulting services.



**Elevated** Change Management.



**Focused** on business processes analysis before technology decisions.



**Emphasized** strategic alignment and fiscal accountability.



## MCG SUPPORT DURING COVID-19

Aligned to rapidly deliver, TEBS quickly enabled the transition from **30% to 100%** remote workers (excluding front line staff) with little to no service interruption.



### AN OPTIMAL TELEWORKFORCE

- Offered 24/7 Help Desk Support
- Developed online and instructor led training for Microsoft, telecommunications and telework
- Ensured secure connectivity and no loss of service
- Implemented the Federal Cares Act with Finance and OHR to provide various payroll, absence management, self-service, and notification configurations.



### A BETTER EQUIPPED STAFF

- Procured and provided more tech equipment to County employees
- Negotiated and received over \$250,000 from Microsoft to rapidly implement the COVID-19 technology
- Provided new software licenses and other enabling technology (i.e. SeamlessDocs) to transition County services, keeping staff and residents safe and productive.



## MCG & RESIDENT SUPPORT DURING COVID-19

Focused on innovation, teams were assembled to meet the demands of the organization and community in an agile fashion, relying on vendor relationships, low-code solutions, Artificial Intelligence (AI), and our ability to rapidly consult.

### 01 TESTING + REGISTRATION

- Provided test registration, scheduling, and result notifications to employees and residents.
- Developed and delivered in under 6 weeks with HHS, DGS, DOT & FRS
- Over 24K tests with results in 24-48 hours

### 02 CUSTOMER SUPPORT

- End-to-end MC311 business analysis, reducing call abandonment rate from 25% to 11% and hold times from 5 min to 2 min in just two months
- Implemented a website chat bot to help answer 311 calls
- Implemented a virtual agent that answered 60% of calls to the HHS Vaccine Help Line; held an 86% success rate.

### 03 COMMUNITY TECH NEEDS

- In just 11 days, upgraded 220 public schools (MCPS) with FiberNet3 to support virtual learning; increased bandwidth 10X
- Built applications for various grant programs with a total of \$47,120,779 grant funds awarded.

### 04 DATA & PUBLIC INFO

Designed, developed and currently supports:

- MCG COVID-19 Website; 12M pages views and 3.5M users in a year.
- Circuit Court COVID-19 Website
- 32 applications for CEX, Public Safety & HHS
- COVID Dashboards in Oracle Business Intelligence

# TEBS WORK WITH MC311 DURING COVID

Comprehensive Analysis. Immediate Results.





The **MC311 Business Process Reengineering Project** comprehensively identified opportunities to immediately improve customer service for our residents.



### PEOPLE

Reassigned employees and contractors to support 311 call center



### PROCESS

Facilitated process discussions between 311, HHS and CountyStat to shorten high volume call response and turnaround times



### TECHNOLOGY

Implemented a chatbot on the 311 website within two weeks to provide on demand answers to top questions.  
  
Provided MC311 technology to enable 100% remote operations.



### GOVERNANCE

Established a customer service governance framework to increase collaboration and cohesion towards organizational customer service.  
  
Kick-off meeting occurred August 16.

# MC311 Technology Enhancements



**Telecomm:** In Dec. 2020, added self-service options to the MC311 phone line to enable multi-layered call routing options for HHS & DEP.

**Result:** Residents are now prompted with options to hear case status and helpful information for top services like cash assistance.

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**Siebel CRM:** Improvements to outdated Siebel system (CRM) made to increase visibility into case status and reduce follow-up status inquiries.

**Result:** Call Center Representatives across the organization can now enter comments about the status of a service requests, which residents can view via the MC311 portal. Residents will be able to upload files and photos to their service request (in progress).

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**Low/No-Code Solutions:** To supplement limited CRM capabilities, the County's first website chatbot launched in January 2021. TEBS designed and introduced the bot persona (Monty) and added guided suggestions to common requests. 18 of 30 top requested services were also added.

**Result:** Quick and easy delivery! Additional self-service options + 24/7 resident support on their common questions. 112% increase in bot's ability to delivery accurate responses and 54% decrease in instances where the bot misunderstands resident questions.

## Why Governance?

**To further the return on investment!** The project led to business and self-service technology improvements. It also yielded drastic improvements in success metrics & resident experience:

- Avg. abandon rate (hang-ups) decreased from approximately 20% in January to less than 3% in March.
- Average hold times decreased from 5+ minutes in January to less than 1 minute in March.

Increased collaboration and planning across ALL customer facing departments is needed to:

- Prioritize efforts
- Effectively plan and prepare for surge events
- Identify enterprise-wide process improvements
- Simplify resident facing information
- Make cohesive budget and resource decisions and submittals





## Additional FY21 Accomplishments

TEBS focused on modernization of technology and policy to ensure the security of our County infrastructure.

- **Work with partners to host Disaster Recovery Forum** presented interactive forum to begin comprehensive approach to develop business continuity strategy for MCG.
- **Developed new security policies** to better secure County systems and data accessed via mobile devices.
- **Significantly improved security technologies and services** to defend IT systems from attack through the identification of threats and exposure to vulnerability, enabling effective response and remediation. Implemented two data loss prevention tools and procured Varonis software to prevent unauthorized activity in our sharing platforms. Completed the rollout of Multi-Factor Authentication (MFA) to enhance the security of County data and information systems.



## Additional FY21 Accomplishments



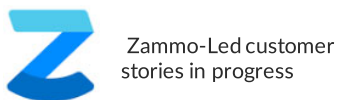
Senior Planet Montgomery Home Edition earns Best in Category for Information Technology; 311 Customer Service Process Improvements Achievement Award; Sugarland Broadband Project Achievement Award.



Microsoft AI-Led Campaign (Case Study), MC311 and HHS Virtual Agents - to be highlighted in the next Microsoft corporate conference, shared on Microsoft's blog, in media outreach and via social outreach.



Finalist in IDC Government Insights' Fourth Annual Smart Cities North America Award, MC311 and HHS COVID-19 Vaccination Chatbots.



Placed Sixth (6th) in the Top-Ten Ranking of the 2021 Digital Counties Survey.





# Current Status + Future Plans

DCM Updates. More on Infrastructure. TEBS Beyond COVID.

# Immediate Critical Infrastructure Challenges

- End of life equipment is causing business continuity and cyber security risks that need to be remediated.
- Downtime can be catastrophic to the County's operations, reputation, and image, and the collection of revenue. It can also impact public safety and erode the public trust.
- As high as 29% of organizations surveyed nationally by the Gartner Group target a recovery time objective (RTO) of one hour or less for all tiers of IT services. Our overarching goal is to work towards best practice RTO for Montgomery County's enterprise applications and infrastructure.
- This initiative with added investment will mitigate the risk of system and service unavailability or loss by documenting effective contingency solutions for the continuation of mission-critical systems and services.

## LACK OF INVESTMENT

A lack of investment in our infrastructure for over 15 years must be addressed to alleviate these stated challenges. Business Continuity becomes high priority.



Move the existing Avaya phone technology to the cloud to enable improved telecommunication services, reduce cost and increase organizational and technological efficiency.

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FiberNet3 connectivity to an Equinix Tier 4 data center in Ashburn, VA can provide a platform to greatly improve our access to cloud service providers, internet services, business continuity and cyber security capabilities if timely funding is provided. This will provide economic development opportunities for the County.

Equinix is a world-class, carrier-neutral data center operator and offers connectivity to thousands of cloud, SaaS, IaaS, and PaaS providers.

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Business continuity is an essential priority for Montgomery County based on recent observations. Recent audits and the state of business continuity investment, historical planning, and the enhanced need for highly visible system requirements.

TEBS is leading a Business Continuity/Disaster recovery innovation team with partnership across the organization, including Dr. Toregas as strategic cybersecurity advisor. This Innovation team is leading activities to develop a strategic, tactical plan to include clearly defined responsibilities, funding strategies, policy, and procedures to recover mission-critical business and technology systems and services in the event of an unexpected event.

# Infrastructure Modernization Opportunities

# Device Client Management (DCM) Updates



## Device Replacements

Targeting the replacement of est. 3,000 primary seat devices during FY22. As of October 1st, DCM is on-target (25% complete) with nearly 800 devices replaced. DCM policy supports the provisioning of laptops for most employees, rather than traditional desktop computers.

## Self-Service PC Replacement

To better support teleworkers an innovative on-line self-service PC replacement scheduling service allows eligible employees to pick up their new device at the replacement depot in a COVID-safe manner.

## Improved Automatic Call Distribution (ACD)

The IT Help Desk implemented a new Cloud-based Automatic Call Distribution (ACD) system that provides enhanced resilience and end-user support capabilities.

## Support on Apple MacBooks

DCM is piloting a program to support Apple MacBooks in addition to Windows devices including the exploration of enhanced mobile device management platforms for Apple devices.

# BEYOND COVID: TEBS FY22 ROADMAP



## CONTENT MANAGEMENT

An organizational content management framework to enable County mobile apps, website simplification and easier access to County Services as prioritized within the Customer Service Governance structure.



## COUNTY INFRASTRUCTURE

A comprehensive approach to County infrastructure, including Business Continuity, Disaster Recovery, discovery on next generation ERP & CRM Systems



## CONTINUED INNOVATION

Innovate. Innovate. Innovate!  
Turn to low/no-code technology to rapidly modernize and provide solutions to the organization in an agile and iterative manner.



# THANK YOU

**TEBS**  
TECHNOLOGY & ENTERPRISE  
BUSINESS SOLUTIONS