

Worksession

MEMORANDUM

March 14, 2013

TO: Government Operations and Fiscal Policy Committee
FROM: Dr. Costis Toregas, Council IT Adviser *CTM*
SUBJECT: Update - Technology Modernization Fiscal Reviews

At the table:

Mike Ferrara, Executive Director of Enterprise Projects, Office of the County Executive
Karen Plucinski, Acting Manager, ERP
Mary Cichello Beck, Budget Manager, Office of Management and Budget
Joe Beach, Director, Department of Finance
George Griffin, Director, Department of Liquor Control
Uma Ahluwalia, Director, Department of Health & Human Services
Dieter Klinger, Chief Operating Officer, Department of Technology Services

Available for questions:

Stuart Venzke, Chief Operating Officer, Department of Health & Human Services
Jhason Abuan, Chief, Information Technology, Department of Finance

Staff Recommendations:

1. Receive financial report and address the points on p. 3 of this memo.
2. Understand that modifications to the project to accommodate increased scope may be included in the FY14 CIP budget adjustments to be released on March 15, 2013; these will be addressed during the CIP section of the upcoming budget worksessions.

Background

The Technology Modernization (TechMod) project is a Capital Improvements Program (CIP) project that allows a multi-year approach to plan for, launch, and implement complex computer systems that have the ability to streamline and significantly improve the basic operations of County government. The Project Description Form (PDF) for this project from the FY13-18 CIP program is on ©1-2. Since the first appropriation in FY08, the project has invested more than \$113m in these complex projects, with good results. Unlike many jurisdictions where either the budget or the quality of the implementation

suffered under the strain of multiple stresses, Montgomery County has been almost unique in its history of successful progress.

Several projects make up the TechMod “portfolio”:

- ERP, which integrates financial, HR, and Procurement systems into a single effective approach;
- MC311, which has consolidated multiple call centers into a single, effective place for residents to look for information and assistance;
- MCTime, which has automated the cumbersome and error-prone time record system for all departments;
- Infrastructure, which provides the technology underpinnings (servers, routers, cabling, major common systems, etc.) for all projects; and
- P-TechMod, which stands for Process Technology Modernization of the multiple HHS systems into a single unified enterprise-wide way to serve the clients.

The Committee reviews progress of these projects periodically. However, the Committee has also requested that a fiscal review of the TechMod project be undertaken periodically, given the magnitude of investment and complexity of tasks. The last such review was conducted on September 20, 2013. This is the final FY13 fiscal review for TechMod.

Executive Branch Submission

To provide the required project update, the Executive has provided briefing materials on ©3-9, and appropriate staff will be at the worksession to walk the Committee through the current status. In the addition to the ongoing projects included within the TechMod program (Enterprise Resource Planning or ERP and Process and Technology Modernization within DHHS or PTM), two additional efforts are being coordinated within the same management and funding strategy:

- ERP within Liquor Control (©3); and
- ERP within Tax Assessment (©7).

It is important to note that including these two major efforts within TechMod ensures benefits of both efficiency and effectiveness for the County. Efficiency benefits come about since the same governance and oversight structure is used, and because the licensing, programming support and long term maintenance costs are standardized around the same technology and vendor contracting platforms. Effectiveness is assured because the synergies and interoperability benefits rising from coordinated use of similar processes and resources will allow for better citizen support and faster internal work flows. As the two new projects were not included in the current TechMod framework from the financial point of view, it is anticipated that a new financial strategy will be a part of the March 15 CIP final adjustment announcements by the County Executive. If that is the case, the Committee will have a chance to review the details of the new funding request during the upcoming FY14 budget discussions.

Fiscal Review

This worksession is concentrating on the fiscal side of evaluating progress made against stated goals and adequacy of resources to proceed in an adequate manner. To understand the changes in the fiscal picture, a comparison between the current fiscal matrix (© 9) and the one provided in the September 20, 2012 review is provided in table format below.

	Budget In \$m (including FY13 appropriation)	Expenditures (including encumbrances) as of 8/31/12	Expenditures (including encumbrances) as of 1/31/13	Expenditures Sept 2012 through Jan 2013	Remaining Balance
ERP	65,658,390	60,878,300	63,090,100	2,211,800	2,568,290
MC311	11,874,990	11,874,990	11,874,900	0	90
MCTime	1,992,780	1,992,780	2,077,300	84,520	(84,520)
Infrastructure	10,638,840	8,704,000	8,882,300	178,300	1,756,540
HHS	3,235,000	184,800	2,977,900	2,793,100	257,100
Total	93,400,000	83,634,870	88,902,500	5,267,720	4,497,500

Staff observes the following from this comparison:

1. The 5 month expenditure rate (between August 31, 2012 and January 31, 2013) of \$5.2m gives a rough average of \$1.05m per month, assuming no expansion in scope and an even expenditure rate, or an ESTIMATED expenditure requirement of $5 \times \$1.05m = \$5.2m$. In addition, two new and extremely worthwhile projects (DLC and Tax Assessment) will come online. While Tax Assessment is already included in the project plans, the DLC effort has to be newly integrated. There is only \$4.5m remaining in the balance. Therefore, a project amendment is likely to be included in the March 15, 2013 Budget submission by the Executive. It is important to differentiate project increases in current projects and new costs due to expanded scope in this future analysis so that the Committee understands project cost controls and proper management oversight are in place.
2. MC311 shows with virtually no funds remaining in the budget line as it has now fully transferred to the PIO budget as an operational item; the funds needed to support this project will be analyzed during the PIO operating budget worksession. However, the MC311 contribution to the costs related to the overall maintenance of the ERP system may be shown in the TechMod budget. This point of standing up and funding, in a sustainable manner, the long term operational support team for all ERP projects has not been clarified and needs further review at the appropriate time.
3. MCTime is an operational system and costs should not appear in the CIP budget; the \$84,520 item should be explained in more detail to ensure that this item is properly a CIP item.
4. The HHS project appears to be expending resources at a rate beyond the capacity built in the budget. An average monthly expense rate of \$.6m would indicate the need for \$2.8m over the remainder of the Fiscal Year, yet there is only \$.3m left. Is this an indication of under-budgeting or new unanticipated expenses in the first part of the year? Or is the encumbrance sufficient to carry the project through?

Technology Modernization -- MCG -- No. 150701

Category
Subcategory
Administering Agency
Planning Area

General Government
County Offices and Other Improvements
County Executive
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

March 14, 2012
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY11	Est. FY12	Total 6 Years	FY13	FY14	FY15	FY16	FY17	FY18	Beyond 6 Years
Planning, Design, and Supervision	113,565	60,805	18,851	33,909	13,688	11,104	8,667	450	0	0	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0
Other	56	0	56	0	0	0	0	0	0	0	0
Total	113,621	60,805	18,907	33,909	13,688	11,104	8,667	450	0	0	0

FUNDING SCHEDULE (\$000)

Current Revenue: General	65,140	37,549	4,040	23,551	8,955	7,961	6,635	0	0	0	0
Federal Aid	1,059	0	0	1,059	352	389	264	54	0	0	0
Land Sale	2,634	2,634	0	0	0	0	0	0	0	0	0
Short-Term Financing	44,788	20,622	14,867	9,299	4,381	2,754	1,768	396	0	0	0
Total	113,621	60,805	18,907	33,909	13,688	11,104	8,667	450	0	0	0

OPERATING BUDGET IMPACT (\$000)

Maintenance				33,786	225	2,015	3,037	9,503	9,503	9,503
Productivity Improvements				-3,782	-33	-33	-929	-929	-929	-929
Net Impact				30,004	192	1,982	2,108	8,574	8,574	8,574

DESCRIPTION

This project provides for the replacement, upgrade, and implementation of IT initiatives that will ensure ongoing viability of key processes, replace outdated and vulnerable systems, and produce a high return in terms of customer service and accountability to our residents. Major new IT systems that have been completed through this project include the Enterprise Resource Planning (ERP) Financial and Human Resources modules, foundation phase of the 311/Constituent Relationship Management (CRM), Electronic Time reporting (MCTime), and related Business Process Review (BPR). Planning activities for the Department of Health and Human Services (HHS) technology modernization of key systems and processes are well underway. The Budgeting module of the ERP system (Hyperion) and additional self service functionality is being implemented now and the workforce component of the Hyperion System has already been completed. The ERP project was implemented to modernize our Core Business Systems to improve the efficiency, effectiveness, and responsiveness of the County Government. The ERP project has provided needed upgrades to the County's financial, procurement, human resource, payroll, and budgeting systems and has streamlined existing business processes. Additional BPR is needed to continue the alignment of County business processes with the new system and related enterprise impacts and to maximize the return on the County's IT investment. The 311/CRM system combined advanced telephony, internet, and computer technology with constituent-focused business processes. Residents are now able to call one number to access County government services. The 311/CRM system includes built-in tracking and accountability features to assure that every call receives a timely response. In addition, the 311/CRM system produces information on County efficiency and effectiveness in responding to requests for information and service requests. This information is used by the Chief Administrative Officer, CountyStat, and operating departments to track and improve performance and customer service. Completion of Phase I of the current MC311 (CRM) included developing an automated service request processing system for the County's Department of Transportation including converting the systems currently used for leaf pick-up, snow removal, tree issues, and street light outages. Phase II of the Technology Modernization project will include modernization of the County's Tax Assessment Billing System. This system is used to annually calculate and bill County residents for County and municipal property taxes, solid waste fees, water quality fees, WSSC fees, and other fees, taxes, and related credits. The HHS technology modernization involves the product identification and modification and implementation of an enterprise Health and Human Services system that includes the following components: intake and eligibility; common client index; document imaging and electronic records; case management and billing capabilities for health and human services; a portal for legacy and enterprise systems; a data warehouse; and self-service kiosks for use by clients and partner agencies.

COST CHANGE

Increase due to the continuation of staff and contractual resources to complete the remaining project components, provide ongoing system upgrades and modifications, provide the next stage of enterprise wide BPR and improvements, and implement the next phase of project improvements including implementation of the Health and Human Services system.

JUSTIFICATION

According to a 2004 ranking of major existing technology systems based on their current health and relative need for upgrade or replacement, the County's then current core business systems (ADPICs, FAMIS, BPREP, and HRMS) were ranked as Priority #1, which means "obsolete or vulnerable critical system in

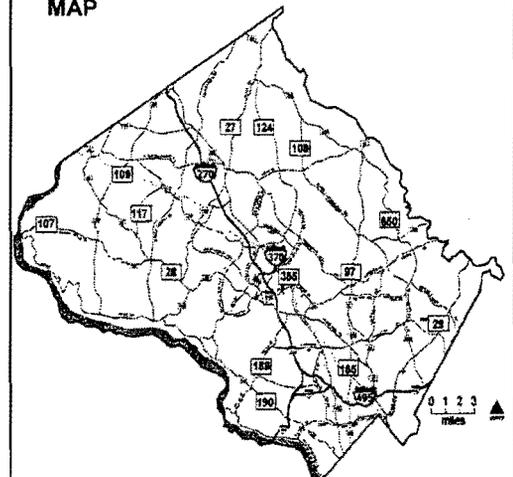
APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY07	(\$000)
First Cost Estimate	FY13	113,621
Current Scope		
Last FY's Cost Estimate		80,979
Appropriation Request	FY13	12,421
Appropriation Request Est.	FY14	11,104
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		80,979
Expenditures / Encumbrances		70,114
Unencumbered Balance		10,865
Partial Closeout Thru	FY10	0
New Partial Closeout	FY11	0
Total Partial Closeout		0

COORDINATION

MCG efforts are coordinated with applicable agencies during the project planning, requirements gathering, and requests for proposal (RFP) phases.
 Offices of the County Executive
 Office of the County Council
 Department of Finance
 Department of Technology Services
 Office of Procurement
 Office of Human Resources
 Office of Management and Budget
 Department of Health and Human Services
 All MCG Departments and Offices
 Maryland Department of Human Resources
 Maryland Department of Health and Mental Hygiene

MAP



Technology Modernization -- MCG -- No. 150701 (continued)

immediate risk of failure." These at-risk systems were replaced with a state of the art ERP system which provides a common database supporting financials, procurement, budget, and HR/payroll, and includes system-wide features for security, workflow, and reporting, and up-to-date technology architecture. Montgomery County seeks to set a national standard for accountability and responsiveness in governance and the delivery of services to its residents and businesses.

Tax Assessment Billing System: The current system is over 30 years old, is only internally supported, and is used for the collection of over \$2 billion in revenues annually.

Health and Human Services: This technology modernization effort will ensure ongoing viability of key processes, replace outdated and vulnerable systems, create staff operating efficiencies and produce a high return in terms of customer service and accountability to our residents.

Related plans and studies include the Information Technology Interagency Funding and Budgeting Committee's report of September 30, 2003, and the MCG FY06 IT Budget Overview prepared by DTS.

OTHER

The Technology Modernization - MCG project is intended to serve as an ongoing resource for future IT modernization and related process engineering to the County Government's business systems beyond the currently defined project scope. Future projects may include the following:

CRM - Citizen Relationship Management

Phase II: This initiative will extend the service to municipalities in the County, and other County agencies (e.g. Board of Education, M-NCPPC, Montgomery College). This initiative will proceed based upon interest from these organizations and agreement on funding.

Creation of a Citizen Relationship Management (CRM) program which will develop or convert automated capabilities for all appropriate County services including:

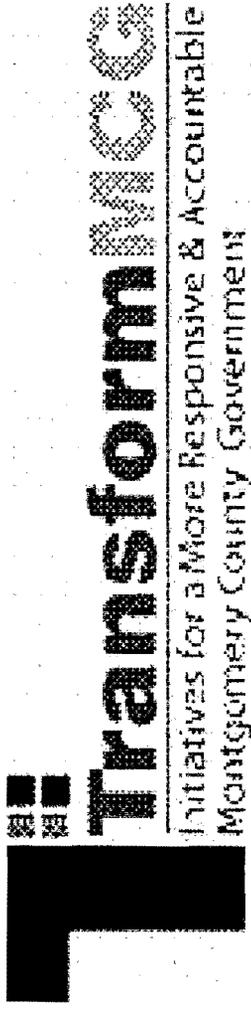
- Case Management
- Events Management
- Field Services
- Grants Management
- Help Desk Solutions
- Point of Sales
- Resident Issue Tracking System
- Work Order Processing System

- ERP - Enterprise Resource Planning
- Business Intelligence/Data Warehouse Development
- Loan Management
- Property Tax Billing and Collection
- Public Access to Contractor Payments
- Upgrade to Oracle E-Business/Kronos/Siebel
- Enhancements to comply with evolving Payment Card Industry (PCI) mandates

FISCAL NOTE

Project funding includes short-term financing for integrator services and software costs. The Operating Budget Impact (OBI) estimates provided above include the costs associated with supporting the Technology Modernization project after implementation including staff returning to their "home departments" from the project office to provide on-going support, knowledge transfer, and to serve as super users, and staff and contractors necessary to support the system, maintenance agreements with software vendors, and costs associated with the "Sustaining Organization" in FY16-18. Establishment of a sustaining organization is needed post implementation to resolve problems, facilitate communication across business processes because of the system integration, produce reports, and re-engineer business processes. The Government Finance Officers Association (GFOA) and Gartner (a premier IT consulting organization) recommend that organizations implementing an ERP also establish an enterprise business support structure (often called a sustaining organization or Enterprise Service Center) after project implementation to maintain, enhance, and focus on: business strategy, functional / technical expertise, software integration, technology, project management and continuous process improvement. Investing in a sustaining organization is key to fully exploiting the capabilities of the new ERP system.

Productivity Improvements achieved through this project include absorbing staffing reductions in the Information Technology, Fiscal, Budget, Administration, Clerical, Human Resource, and Financial Occupational classifications (FY08-12); termination of maintenance agreements for legacy systems; termination of the keypunching contract for the manual timesheet process; and other related savings. Total estimated savings related to this project through FY12 are estimated at over \$36 million including the reduction of over 320 full time equivalent positions in the County Government.



Technology Modernization Project

GO Briefing

March 18, 2013

**Montgomery County Technology Modernization
(Tech Mod)**

❖ Tech Mod

- ▶ **ERP: Department Liquor Control**
- ▶ **Department of Health and Human Services**
- ▶ **ERP: Tax Assessment**
- ▶ **ERP: Enterprise Resource Planning**

ERP: Department of Liquor Control

- ❖ Business Case
 - ❖ Replacing 14 year old Warehouse Management System
 - ❖ Seamless integration of all DLC business activities with County Enterprise
 - ❖ Significant operational efficiencies projected in customer service
 - ❖ Robust internet ordering for Licensees, mobile solution within warehouse and debit payment for warehouse transactions
 - ❖ Improves reliability and stability to DLC business operations
- ❖ Oracle modules
 - ❖ Integration with Oracle Financials
 - ❖ Warehouse Management
 - ❖ Transportation Management
 - ❖ Order Management
 - ❖ Cost Management
 - ❖ Advanced Pricing
- ❖ Contract Amendment with implementer – Ciber
 - ❖ \$5million
- ❖ Implementation February 2014 ⑤

Department of HHS modernization

- ❖ Enterprise Integrated Case Management (EICM) will help HHS transform from disjointed, inefficient, program-based silos to a more holistic, better integrated service delivery model
- ❖ Scope includes:
 - ▶ Common client index
 - ▶ Eligibility for County programs
 - ▶ Integration with state eligibility systems
 - ▶ Integrated case management
- ❖ Target platform is Oracle Human Services, consistent with County Enterprise standards
- ❖ Currently developing detailed requirements and detailed design, with deployment tentatively scheduled to begin Fall 2014

ERP: Tax Assessment System

- ❖ Legacy COBOL II application, built 1986
- ❖ Hosted on mainframe, target to sunset June 2013
- ❖ A data staging system fed from State and various other entities (DEP-SW, Municipalities, etc.)
- ❖ Collects, consolidates, compares, and formats data to be fed into the County's tax billing system (MUNIS)
- ❖ Key piece of IT infrastructure for maintaining \$1.5 billion in revenues (Real & Personal property tax for County & Municipalities; solid waste disposal fee; water quality fee, WSSC, DHCA, etc.)
- ❖ Under development in-house by Finance and DTS staff with input from stakeholders
- ❖ Objective is to upgrade system to improve reliability; maintenance; flexibility; & automate certain manual processes. (Web-Based App)
- ❖ Funding built into ERP \$500,000

ERP: Enterprise Resource Planning

- ❖ Workforce Performance Management (WPM)
 - ❖ Completed Phase I – Management Leadership Service, Public Safety Managers, General Salary Schedule Employees
- ❖ Enterprise Reporting
 - ❖ General Ledger Summary
 - ❖ Payroll Distribution and Overtime/Leave Summary Dashboards
 - ❖ Purchasing Summary and details
 - ❖ Labor Distribution Schedules
- ❖ Identity Management -Provisioning and management of multiple users
 - ❖ Retirees
 - ❖ External Learners
- ❖ Learning Management – March 2013
- ❖ Budgeting (Hyperion)
- ❖ ZyImage Integration

⑧

Tech Mod Fiscal Update

TECH MOD CIP PROJECT APPROPRIATION/EXPENDITURE THRU FY13

	Appropriation through FY12	FY13 Appropriation	Total thru FY13	Expenditures & Encumbrances thru Jan 2013	Funding Remaining to Cover Feb-Jun 2013
ERP	\$60,462,390	\$5,196,000	\$65,658,390	\$63,090,100	\$2,568,290
MC311	\$11,874,990	\$0	\$11,874,990	\$11,874,900	\$90
MCTIME	\$1,992,780	\$0	\$1,992,780	\$2,077,300	(\$84,520)
INFRASTRUCTURE	\$6,348,840	\$4,290,000	\$10,638,840	\$8,882,300	\$1,756,540
HHS	\$300,000	\$2,935,000	\$3,235,000	\$2,977,900	\$257,100
TOTAL	\$80,979,000	\$12,421,000	\$93,400,000	\$88,902,500	\$4,497,500