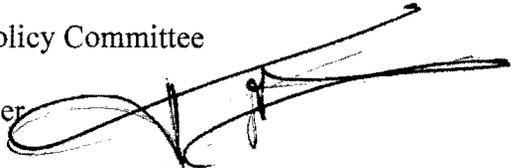


Worksession

MEMORANDUM

March 3, 2011

TO: Government Operations and Fiscal Policy Committee

FROM: Dr. Costis Toregas, Council IT Adviser 

SUBJECT: **CIP Amendments:** General Government – Technology Services

Expected to attend:

Mike Ferrara, Executive Director of Enterprise Projects, Office of the CAO
Mike Knuppel, Chief Technology Officer, DTS
John Cuff, OMB

Other executive branch officials will be available to comment on project status as appropriate.

Summary of staff recommendations to the GO Committee:

1. **Endorse IJIS modification to extend \$345,000 to FY12 and recommend its acceptance by the full Council.**
2. **Ensure that matching cash commitment of \$1.6m for the ARRA grant is not in the CIP portion of FiberNet, but is forthcoming in the Executive's FY12 Recommended Operating Budget portion of the FiberNet internal budget.**
3. **Retain expected savings of \$5m and \$15m from ERP business process reengineering changes until further analysis is performed on OMB estimates.**

Overview

There are four technology-related projects for Montgomery County Government (MCG) in the CE's Capital Improvement Program (CIP):

1. Technology Modernization (TechMod)
2. FiberNet
3. Public Safety System Modernization (PSSM)
4. Integrated Justice Information System (IJIS)

Of these, only IJIS has a minor expenditure change (no change in scope but in the completion time) needing an explicit recommendation by the Committee and Council approval. However, given the importance of each project, as well as the magnitude of the financial commitment the County is making to improved service delivery through the use of technology, each project team has prepared an update for the GO Committee.

Project Summary

1. TechMod

The Committee reviewed the three projects making up TechMod (Enterprise Resource Planning, MC311, and MCTime) on February 7, 2011. ©1-2 is the current Project Description Form (PDF) which shows the continued commitment of resources and priority to this important project. The Executive branch presentation, including project status, financial detail, and projected timeframes is shown on ©3-12.

A question regarding expected Operating Budget Impact savings of \$5m and \$15m savings arose during Committee discussions. The business process re-engineering changes made possible through ERP are expected to provide significant savings that will recur over time. Since the County is currently in a cutback mode for reasons other than changes in business process, it is important to track, document, and implement these ERP-based changes separately, as their implementation will improve citizen-facing, as well as internal, processes significantly, and at lower cost.

The Executive branch will be answering this question during the March 7, 2011 worksession.

2. FiberNet

FiberNet is a long-term infrastructure project which provides broadband connectivity to MCG and all other tax-supported agencies. ©13 is the PDF in the CIP, and ©14-27 provide an update and address issues raised by Council staff relating to current issues. Executive branch staff and other users will be available to address questions.

The inclusion of an ARRA grant for \$14m as a mechanism to fund much-needed construction of additional connections brings up the issue of a requirement for a cash match of \$1,852. It does not appear that this cash match is in the CIP program (as no changes are being proposed to the PDF established and approved last year), so it should be clarified during the Worksession that the match will be included in the OB transmittal expected on March 15, 2011.

It should be noted in the context of collaboration imperatives across agencies that this project has a well-working governance model that permits all six tax-supported agencies to receive the benefits of a common technology infrastructure. The governance mechanism for FiberNet was created through a charter within the Interagency Technology Policy Coordinating Committee (ITPCC) in 2002 and permits each agency to participate at the technical and service delivery levels. MCG is the manager of the effort through the Department of Technology Services (DTS).

As technology evolves and resources grow scarcer, FiberNet can become even more vital, offering a platform on which Shared Services such as common e-mail systems, common office, security, and back up applications can be offered to all agencies. In addition, the possible role of private industry as a

partner in providing the technical aspects of infrastructure can be further reviewed and evaluated as a possibly more efficient model of delivery, allowing the County to focus on applications.

3. PSSM

The PSSM project addresses vital elements for the public safety community:

- > radios and their required maintenance, including rebanding (changing frequencies to accommodate state and federal mandates) and replacement;
- > Computer Aided Dispatch (CAD), which includes call receipt, dispatch, and station alerting; and
- > radio infrastructure (antennas and associated network hardware and software).

On November 22, 2011, the PDF for PSSM was modified significantly to address the first item (radio replacement and rebanding) through the addition of \$19m, which permitted the County to take advantage of an additional \$3.5m agreement from the FCC and telecommunications industry (Spring/Nextel). The current PDF is shown on ©28-29. The executive branch will be in a position to review the current status of the project (summarized on ©30-42) as well as the answers to questions raised by Council staff on ©43-48.

The project team now in place is taking advantage of lessons learned during the development of the successful ERP effort within TechMod and includes all major users in a manner that allows needs to be identified early on and incorporated in the project design. It is expected that quarterly reviews and financial updates will be provided to the Committee.

New radios were purchased in FY11 in what appears to be a very successful manner and at prices below expectations, so, in fact, more radios were accommodated than originally conceived. The new radios will improve interoperability and be in a position to work with the expected new infrastructure, which is part of PSSM future implementations.

4. IJIS

The IJIS System is a complex effort to interlink several important agencies in the justice system and allow interoperability of information and linkages of functions and outcomes. The project spans many years, and it appears that new developments will continue to be pursued as operations improve through its use. The new PDF is shown on ©49, while the responses to council staff questions are on ©50-57.

Staff recommends approval of the request to shift \$345,000 to FY13.

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

January 11, 2010
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	80,209	19,745	32,659	27,805	17,095	10,710	0	0	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	0	0	0	0	0	0	0	0	0	0	0
Total	80,209	19,745	32,659	27,805	17,095	10,710	0	0	0	0	0

FUNDING SCHEDULE (\$000)

Current Revenue: General	42,086	14,524	10,802	16,760	11,462	5,298	0	0	0	0	0
Land Sale	2,634	2,634	0	0	0	0	0	0	0	0	0
Short-Term Financing	35,489	2,587	21,857	11,045	5,633	5,412	0	0	0	0	0
Total	80,209	19,745	32,659	27,805	17,095	10,710	0	0	0	0	0

OPERATING BUDGET IMPACT (\$000)

Maintenance				37,573	6,036	8,527	11,336	11,674	0	0
Productivity Improvements				-20,000	0	0	-5,000	-15,000	0	0
Net Impact				17,573	6,036	8,527	6,336	-3,326	0	0

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 being launched through this project are Enterprise Resource Planning (ERP), 311/Constituent Relationship Management (CRM), and related Business Process Review (BPR). ERP will modernize our Core Business Systems to improve the efficiency, effectiveness, and responsiveness of the County Government. The ERP project will provide needed upgrades to the County's financial, procurement, human resource, and budgeting systems and will streamline existing business processes. Business Process Review is occurring as part of ERP requirements analysis and planning. The first phase of this project, MTime, the implementation of electronic time reporting, is well underway. A new 311/CRM system will combine advanced telephony, internet, and computer technology with constituent-focused business processes. Residents will ultimately be able to call one number to access County government services and built-in tracking and accountability features will assure that every call receives a timely response. Completion of Phase I of the current MC311 (CRM) will include 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.

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 current core business systems (ADPICS, FAMIS, BPREP, and HRMS) were ranked as Priority #1, which means "obsolete or vulnerable critical system in immediate risk of failure." These at-risk systems will be replaced with a state of the art ERP system which will provide a common database supporting financials, procurement, budget, and HR/payroll, and will include 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. A customer-oriented 311/CRM system is needed as a single one-stop-shop phone number and intake system to meet this growing demand. The current cost estimate is based on detailed review of integrator, staffing, hardware, and software costs.

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

OTHER

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

CRM

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

APPROPRIATION AND EXPENDITURE DATA

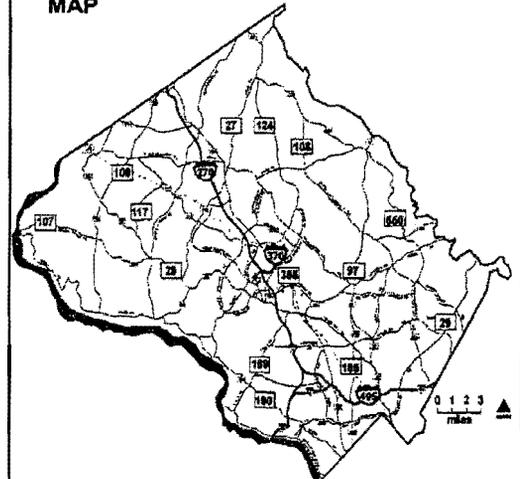
Date First Appropriation	FY07	(\$000)
First Cost Estimate		
Current Scope	FY08	85,464
Last FY's Cost Estimate		80,209
Appropriation Request	FY11	11,462
Appropriation Request Est.	FY12	4,538
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		64,209
Expenditures / Encumbrances		51,019
Unencumbered Balance		13,190
Partial Closeout Thru	FY08	0
New Partial Closeout	FY09	0
Total Partial Closeout		0

COORDINATION

MCG efforts must be coordinated with the recent implementation of a new Financial Management System by MCPS and efforts by other agencies to ensure data transportability and satisfy reporting needs between agencies. Project staff are drawing on the implementation experiences of MCPS, WMATA and governments with functions and components similar to MCG 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
All MCG Departments and Offices

MAP



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

including:

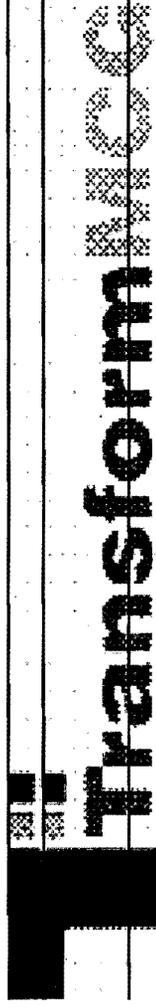
Case Management
Events Management
Field Services
Grants Management
Help Desk Solutions
Point of Sales
Resident Issue Tracking System
Work Order Processing System

ERP

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. Operating Budget Impact revised in FY13 and FY14 to reflect Council productivity targets.



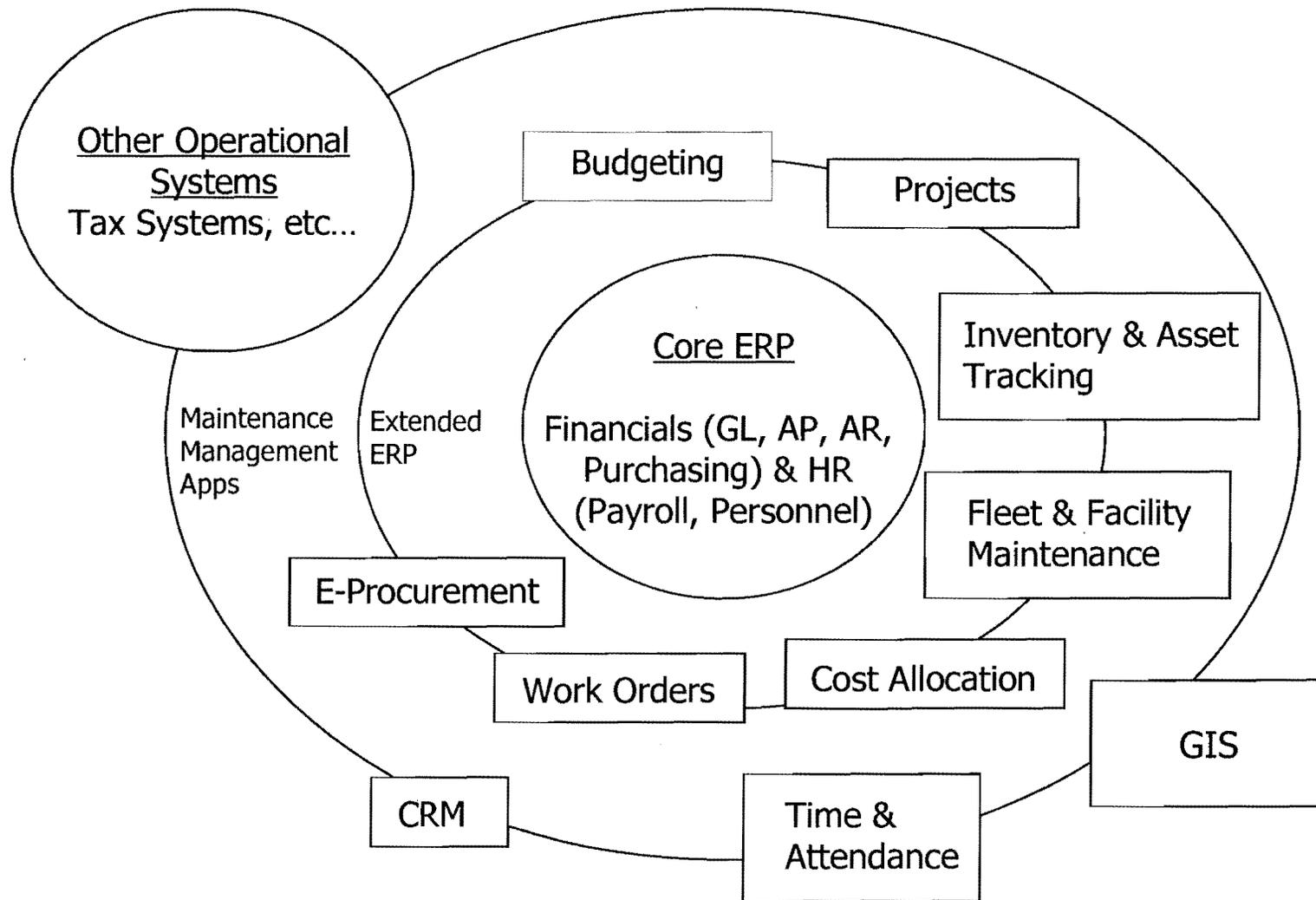
Initiatives for a More Responsive & Accountable
Montgomery County Government

Technology Modernization Project

GO Briefing

February 7, 2011

Elements of Enterprise Resource Planning (ERP)



* Source – GFOA (modified)

Montgomery County Technology Modernization (Tech Mod)

❖ Tech Mod is currently comprised of 3 major components:

- ▶ **ERP: Enterprise Resource Planning**
- ▶ **MC311: Non-Emergency customer support and issue tracking using a 311 phone number**
- ▶ **MCtime: Electronic Time Reporting**

Description of Tech Mod Projects

- ❖ **ERP** – The County is hampered with inefficient business processes, outdated, AT RISK systems, and lack of information to address difficult policy and fiscal challenges. ERP systems use technology to improve decision making and implement “best practice” operational efficiency through information integration and process improvements, including centralization, information sharing, and elimination of data/process duplication.
- ❖ **MC311** - To meet the objective of developing programs that provide greater responsiveness and accountability in meeting the needs of a very diverse County, we have established a single phone number (311) for constituents to call for non-emergency service requests and a back-office system to track responses and completion of work requests.
- ❖ **Mctime** - Replaces the labor intensive, error prone manual process of handling thousands of paper timesheets every two weeks, with an automated solution that will enable more efficient business processes and accurate accounting of compensatory and overtime hours.

The three programs work in concert to improve constituent-facing and back-office functions.

Tech Mod Fiscal Update

	Budget	Expenditures	Remaining Balance
ERP	\$ 60,462,000	\$ 46,060,000	\$ 14,402,000
MC311	11,405,000	11,405,000	-
MCtime	1,993,000	1,879,000	114,000
Infrastructure	6,349,000	4,863,000	1,486,000
Total	\$ 80,209,000	\$ 64,207,000	\$ 16,002,000
As of January 24, 2011			

Accomplishments

❖ MC311:

- ▶ Simultaneous launch of the portal with launch of Customer Service Center
- ▶ CSC has received more than 365,000 calls since public launch
- ▶ Significant improvement in CSC performance through training and coaching of supervisory staff resulted in meeting or exceeding most performance goals within first four months after launch. Consistently achieving performance goals with established and sound business processes for continual improvement
- ▶ Replacement of the DOT Highway Service Request system
- ▶ Replacement of the DEP OSCAR solid waste system, Feb 2011

Accomplishments

- ❖ Phase 1A Financials went live July 6, 2010
 - ▶ *Modules* (General Ledger, Accounts Payable, Purchasing, Projects and Grants, and Accounts Receivable)

- ❖ Phase 1B HCM /Payroll went live January 3, 2011
 - ▶ *Modules* (Payroll, Labor Distribution, Core HR, iRecruitment, Oracle Advanced Benefits, Pension, Employee Self Service, Manager Self Service)
 - ▶ Executed 11,000 employee pay checks on January 14th
 - Less than 1% error rate
 - ▶ Oracle e-business servers supporting approximately 11,000 users

- ❖ Integration with MCTime

- ❖ Data Warehouse / Business Intelligence
 - ▶ Deployed first phase November 2011

Where Are We Going

- ❖ Budget System (Hyperion) go-live July 2011
 - ▶ Planning
 - ▶ Workforce Planning
 - ▶ Performance Scorecard

- ❖ Data Warehouse / Business Intelligence
 - ▶ Consistent Data source
 - ▶ Dashboard Reporting
 - Statistics
 - Performance
 - Trends
 - ▶ Deploying various reporting tools

Where Are We Going

- ❖ Work Orders and Inventory go-live February 2012
 - ▶ Planning and Design

- ❖ Property Tax Assessment replacement
 - ▶ Planning phase

- ❖ Department of Liquor Control Supply Chain implementation
 - ▶ Order Management
 - ▶ Warehouse Management
 - ▶ iStore

Fibernet -- No. 509651

Category **General Government**
 Subcategory **Technology Services**
 Administering Agency **Technology Services**
 Planning Area **Countywide**

Date Last Modified
 Required Adequate Public Facility
 Relocation Impact
 Status

May 14, 2010
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	2,420	1,814	206	400	200	200	0	0	0	0	0
Land	4	4	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	12,011	11,881	0	130	65	65	0	0	0	0	0
Construction	4,543	41	1,811	2,691	250	2,441	0	0	0	0	0
Other	20,735	20,735	0	0	0	0	0	0	0	0	0
Total	39,713	34,475	2,017	3,221	515	2,706	0	0	0	0	0

FUNDING SCHEDULE (\$000)

Cable TV	28,627	23,964	1,442	3,221	515	2,706	0	0	0	0	0
Contributions	86	86	0	0	0	0	0	0	0	0	0
G.O. Bonds	8,900	8,325	575	0	0	0	0	0	0	0	0
PAYGO	2,100	2,100	0	0	0	0	0	0	0	0	0
Total	39,713	34,475	2,017	3,221	515	2,706	0	0	0	0	0

DESCRIPTION

This project provides for the planning, design, and installation of a Countywide fiber optic cable-based communication network with the capacity to support voice, data, and video transmissions among Montgomery County Government (MCG), Montgomery County Public Schools (MCPS), Montgomery College (MC), Maryland National Capital Park and Planning Commission (M-NCPPC), Housing Opportunities Commission (HOC) and Washington Suburban Sanitary Commission (WSSC) facilities. FiberNet is also the communications backbone for the Public Safety Radio and Public Safety Mobile Data Systems (collectively, PSCS), and future technology implementations. FiberNet has an estimated useful life of at least 20 years. Upgrades and replacements to electronic components in the core and at user sites will be required periodically.

COST CHANGE

Reduce FY11 expenditures and funding by \$1.5M. Expenditures and funding for years FY13 through FY16 have yet to be determined and the future needs will be re-evaluated periodically.

JUSTIFICATION

FiberNet is a critical infrastructure asset serving every agency, the fiber plant for Asynchronous Transfer Mode Systems (ATMS), and the dedicated and redundant communications links for the PSCS/800 MHz system. As of September 1, 2009, 289 user sites are on-net and receiving critical services from FiberNet. In FY07, the Department of Technology Services (DTS) completed the re-engineering of FiberNet (now referred to as FiberNet II) to directly support Ethernet connections. This provides a core network that is technologically newer, faster and less expensive on a per-site basis. The Interagency Technology Policy Coordination Committee (ITPCC) focus during the first three years of the CIP is adding the remaining MCPS elementary schools to FiberNet. DTS, in cooperation with ITPCC and its Information Technology Advisory Group (ITAG) workgroup, continues to refine the master implementation schedule. MCG, MCPS, MC, M-NCPPC, HOC and WSSC will require substantially increased communication services and bandwidth among their facilities. The County will provide fiber optic services to those facilities for which leased telecommunications services cannot meet current or projected demand as cost effectively as FiberNet. Studies include: FiberNet Master Plan; RAM Comm. Mar 1995; FiberNet Eval. Rpt., TRW, Sept 1997; FiberNet Proj. Cost Est., ARINC, Apr 1998; FiberNet Proj. Cost-Benefit Analysis, ARINC, Oct 1998; FiberNet Strategic Plan, PrimeNet, Jun 2002; FiberNet Strategic Direction, ITAG, Nov 2003; FiberNet service level agreement, Jan 2005.

OTHER

DTS is responsible for project management, network operations, and maintenance of electronics; Department of Transportation (DOT) for installation and maintenance of the fiber optic cable. Comcast, at DTS's direction, also provides fiber used in FiberNet. Sites installed to date include MCG departments/offices, PSCS sites, MC campuses, MCPS high schools/middle schools/administrative facilities, M-NCPPC sites, HOC sites and WSSC sites including the headquarters building in Prince Georges County. The municipalities of Takoma Park, Gaithersburg and Rockville are on FiberNet as well as several cultural centers including American Film Institute (AFI), Strathmore, the Convention Center and Black Rock. Sites have been, and will continue to be, installed in a priority order based on the expected cost savings/avoidance; current and future connectivity needs; and availability of fiber optic cable to an area. Approximately \$3 million is necessary to build out the cable plant to support ATMS field devices, and is not reflected in the expenditures and funding displayed in the FY11-16 CIP. This need will be captured in the future in accordance with fiscal capacity and project schedules.

FISCAL NOTE

FiberNet maintenance is supported by a grant from the franchise agreement with the County's cable service provider. The original grant amount of \$1.2 million/yr is increased by the CPI each year. For this reason the Operating Budget Impact is \$0.

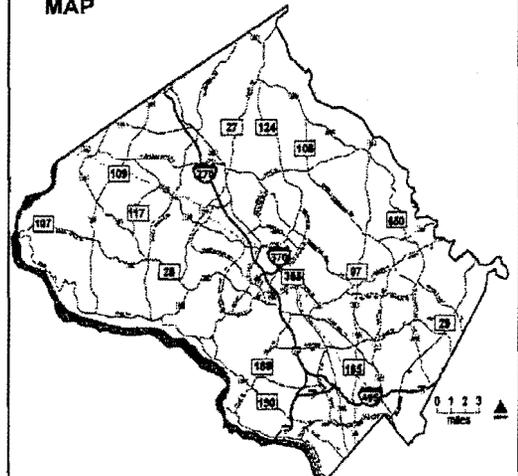
APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY96	(\$000)
First Cost Estimate		
Current Scope	FY11	39,713
Last FY's Cost Estimate		42,557
Appropriation Request	FY11	515
Appropriation Request Est.	FY12	2,706
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		36,492
Expenditures / Encumbrances		35,066
Unencumbered Balance		1,426
Partial Closeout Thru	FY08	0
New Partial Closeout	FY09	0
Total Partial Closeout		0

COORDINATION

Department of Technology Services
 Department of Transportation
 Advanced Transportation Management System Project
 Montgomery County Public Schools
 M-NCPPC
 Montgomery College
 HOC
 WSSC
 Comcast
 Public Safety Radio System
 Information Technology Policy Coordination Committee (ITPCC)
 ITPCC CIO Subcommittee
 Interagency Technology Advisory Group (ITAG)

MAP



FiberNet Overview

*Presented By
Dept of Technology Services
Updated -- March 7, 2011*



Montgomery County, Maryland

Network Advantages of FiberNet

- Speed/Bandwidth
- Security/Redundancy
- Public Safety Communications
- Remote Management, Monitoring & Support
- Continuity of Operations/Disaster Recovery
- Fulcrum for Consolidating Agency Assets
- Cost-Effective Service

➤ ***FiberNet Is a Critical Infrastructure Asset***

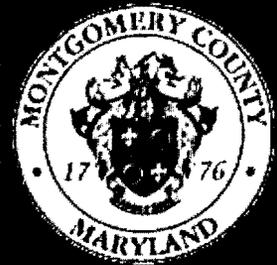


Montgomery County, Maryland

High-Bandwidth Applications Enabled

- VOIP Telephony
- Video Streaming
- Secure Intra/Inter-Agency Communications (including State of Maryland)
- Database Access
- Video Conferencing
- Production Quality Live Video Broadcasting

➤ ***FiberNet Enables Reliable, Responsive, & Cost-Effective Enterprise Services***



Montgomery County, Maryland

Future Applications Enabled by FiberNet

- Information-Rich Applications at All MCPS Sites
- Telework Centers/Tele-Presence
- Traffic Signaling/Traffic Cameras
- WSSC Pumping Station Monitoring
- HOC/Public Housing Broadband Services
- Continuation of Strategic Deployment

➤ ***FiberNet Is a Robust, Cost-Effective, Future-Proof Network***



Montgomery County, Maryland

Alternatives to FiberNet

- Verizon T-1 service
 - Not a Long-Term, Viable Solution
 - Limited Bandwidth (1.544 Mb)
 - \$900,000 per year cost to MCG
 - \$750,000 per year cost to MCPS
 - Being eliminated by FiberNet
- Wireless: Not a Cost-Effective Solution
 - Wi-Max – No Spectrum available to License
 - 802.11 Network – Cost Prohibitive for Large Scale Deployment
 - FiberTower product offering more expensive than T1 with 4 Mb/s speeds
- Cable Modem: Useful Short-Term Solution
 - Currently using on a trial basis
 - \$1,500/site/year; savings \$5,700/site/year
 - 16/4 MB will not support bandwidth-rich application

➤ ***FiberNet Is a Proven, Best Practice, Long-Term, Cost-Effective Solution***





DEPARTMENT OF TECHNOLOGY SERVICES

Isiah Leggett
County Executive

E. Steven Emanuel
Chief Information Officer

MEMORANDUM

March 2, 2011

TO: Dr. Costis Torgas, Council IT Advisor

FROM: E. Steven Emanuel, Chief Information Officer

SUBJECT: Fibernet – Responses to Analyst Questions

Pursuant to the discussion on Wednesday, February 23rd and your email of Thursday, February 24th with specific questions for the upcoming Government Operations Committee meeting on Monday, March 7, 2011, the Executive Branch is pleased to provide the detailed responses to the questions to be included in the packet and discussed at the session.

The responses, included in the attachment provided, have been developed by the members and subject matter experts participating in the Public Safety Systems Modernization effort. Additionally, at your suggestion, a brief, high level overview presentation on the Fibernet program history is also being included.

If there are any additional questions or clarification required, please don't hesitate to ask.

Cc: Sherwin Collette, CIO, MCPS
Scott Ewart, CIO, HOC
Mitsuko Herrera, Cable Administrator
Dick Leurig, ITPCC, CIO Chair
Henry Mobayeni, CIO, MNCPPC
Mike Russell, AVP Information Technology, MC
Gary Thomas, ITPCC

Attachments

Office of the CIO

101 Monroe Street, 13th Floor, Rockville, Maryland 20850
240 777-2900 FAX 240 777-2831

19

**Fibernet – Analyst Questions
For GO Committee Meeting – March 7, 2011**

I. Comprehensive Funding Picture

Could you provide a comprehensive funding picture?

The Cable Fund is the primary source of FiberNet funding. Appropriations from the Cable Fund may be distinguished between those funds appropriated to FiberNet's Operating and Management (O&M) Budget and those funds appropriated to FiberNet's CIP. Additional funding for FiberNet O&M budget was created as a condition of settlement of franchise compliance issues related to the transfer of a cable franchise to Comcast and this funding requirement expires when the Comcast franchise expires in June 2013. There are additional restrictions on the uses of cable public, educational, and government capital grants that are specific to capital asset additions to FiberNet.

There is a secondary funding source that comes from County approved construction CIP projects. DTS is provided the funding information and is not aware of the source of these funds as to General Revenue, grants or County Bonds. Recent additions to FiberNet that were funded by construction CIP funds include the Public Safety Headquarters Building, the Family Justice Center and the soon to open HHS Clinic on Rollins Avenue in Rockville. DTS fully expects the MCPD to use grant funding to place fiber into the Lakeforest Transit Center to approve the surveillance cameras at that location. Another soon to open construction CIP funded site will be the new MCPS Data Center at 45 West Gude Avenue. FiberNet refers to these types of sites as being "self funded".

A cross walk between the Cable Plan budget and FiberNet's assignment of these funds to major operating and CIP components is shown as Appendix A to this document.

II. ARRA Grant

Can you please provide an explicit description of the ARRA grant?

Montgomery County is the beneficiary of an ARRA grant that has been awarded to a consortium of counties and jurisdictions within the State of Maryland. The primary grantee, the State, was aided in the development of the application by the supporting jurisdictions and submitted under the "One Maryland" proposal. The State is the primary grant recipient and the Inter-County Broadband Network ("ICBN") consortium of 10 central Maryland counties and cities is a sub-recipient. Howard County is the administrative lead for the ICBN.

The ARRA grant provides Montgomery County with the ability to fund construction valued at an estimated \$14 million. Montgomery County will own and operate the sites constructed with ARRA funding. The grant will fund construction to extend FiberNet to an additional 109 sites. Federal funding will flow directly to the State, and the State will make the ICBN portion of this funding available to Howard County. Vendors will be directed and supervised by individual jurisdictions, but all bills will be submitted to, and payment made by, Howard County. Thus, no direct funding will flow through Montgomery County or the Cable Fund. The State and Howard County will have administrative responsibility for all federal accounting, auditing and compliance reporting requirements.

Eighty-two percent of these new sites are elementary schools. In approximately one-third of these schools, more than half of the children are eligible for free and reduced meals. The addition of these schools will substantially complete the original vision of FiberNet as described, fourteen years ago. For the last two years, due to the national fiscal conditions, FiberNet's CIP has gone mostly unfunded for the addition of new sites. This grant represents a tremendous opportunity to the County. An additional seventeen percent of sites are Housing Opportunities Commission sites, in which residents earn less than \$10,000 per year or less than 60% of the County's median income. Coupled with high-speed broadband, these sites offer an additional opportunity to provide technology and work force development training to the County's most economically vulnerable residents.

Any delay or complication in realizing the grant benefits will jeopardize the addition of these remaining, critical sites. There are two major, stringent requirements on the Montgomery County (and the

**Fibernet – Analyst Questions
For GO Committee Meeting – March 7, 2011**

other recipients) that need to be well understood and integrated into the County's budget decisions. These are:

1. The ARRA grant exists within very tight time limits. The grant was awarded on September 1, 2010 and all work must be completed by August 31, 2013. All unspent funds remaining from the grant on that date revert to the US Treasury. Before any work may begin, the grant requires the completion of an Environmental Assessment. That assessment is scheduled to be completed in the first quarter of 2011. FiberNet has begun the design phase of this project in anticipation the County fulfilling the matching requirements of the ARRA grant.
2. There are two matching requirements from Montgomery County. The first is an in-kind match valued at \$1.1 million. The second is a cash match of \$1.6 million. If these funds are not identified, appropriated and applied to this project per the terms of the grant, these 109 sites will not be built. The ARRA grant required a minimum 20 percent match, but to be competitive, a 30 percent match was suggested. The One Maryland match was approximately 26 percent and additional sites were added within Montgomery County because of Montgomery County's ability and commitment to meet portion of the matching requirement. In written transmittals to the National Telecommunications and Information Administration (NTIA) on October 15, 2009, Montgomery County Government and the County Council represented their support and commitments to the One Maryland Broadband Plan's application for these grant funds. Each entity recognized the benefits that would accrue to the County should the grant be awarded. Each also recognized the matching funds requirement and committed to honoring the match.

Under the grant rules, the County must expend matching funds at a pace that equals or exceeds use of federal funds, *i.e.*, at least 20 percent of on-going costs must be paid for using matching funds. In the FTY11 CIP, there is no funding for ARRA-related construction. Thus, to receive the benefit of \$14 million in construction over the next two fiscal years, the County must include an additional \$1.6 million in the CIP in FY12 and FY13 at a rate that is proportional to the rate it expects to spend federal ARRA funding.

There are additional performance requirements that must be met. The grant requires deliverables including route maps, network designs and construction documents certified by a professional engineer. Montgomery County is required to comply with the ARRA grant planning, design and reporting requirements including financial and construction auditing.

The ARRA grant is envisioned to extend broadband access into communities to improve educational services, cross the digital divide and improve business opportunity. There are requirements in the grant to foster public-private partnerships by making part of the built network available to the private sector. How this will play out in Montgomery County is yet to be determined.

Planning meetings have started with the Howard County Project Team to work through the grant's technical and reporting requirements. FiberNet has submitted a site list containing all of the locations that will be added to FiberNet using ARRA Grant funding. FiberNet has developed route maps for all of the grant sites and has begun the process of gaining access to the power and telephone poles that need to be licensed. Pending completion of the required Environmental Assessment, FiberNet has begun the planning and design work that is permissible under the terms of the grant.

One of the goals coming out of the ARRA project is the creation of an inter-governmental private network covering all of the central Maryland counties, cities, municipalities and the State. This network is referred to as the Inter-County Broadband Network (ICBN) and will interconnect and interoperate with networkMaryland and a future State-operated 700 MHz public safety communications network. This project is in its infancy and takes a backseat to the primary goal of the ARRA project – adding new sites to each government's private network.

**Fibernet – Analyst Questions
For GO Committee Meeting – March 7, 2011**

III. Current Users & Uses of FiberNet

Because we have new CMs on the GO (Riemer), could you also re-state the current users and major uses of FiberNet today?

The following table lays out the major users of FiberNet by Agency. The Table III.a shows the distribution of sites by agency. An **On Net** site is a fully functional, production FiberNet location.. A **Pipeline** site is in some phase of construction. Table III.b shows the services provided by FiberNet to the agencies.

Table III.a

FiberNet Sites by Agency & Status		
Agency	Status	Total
HOC	On Net	8
HOC Total		8
Montgomery College	On Net	4
	Pipeline	1
Montgomery College Total		5
MCG	On Net	195
	Pipeline	8
MCG Total		203
MCPS	On Net	104
	Pipeline	27
MCPS Total		131
M-NCPPC	On Net	14
M-NCPPC Total		14
WSSC	On Net	1
	Pipeline	1
WSSC Total		2
Grand Total		363

Delivered services over FiberNet include the following. FiberNet provides selected services for the cities of Rockville, Gaithersburg and Takoma Park.

**Fibernet – Analyst Questions
For GO Committee Meeting – March 7, 2011**

Table III.b

FiberNet Delivered Services	
Agency	Service
Housing Opportunities Commission (HOC)	Data Services Telephony Internet Service Provider
Montgomery County Government (MCG)	Data Services NCRNet Connection Public Safety Radio State of Maryland Link Telephony Video Conferencing Internet Service Provider
Montgomery County Public Schools (MCPS)	Data Services Internet
Maryland-National Capital Park and Planning Commission (M-NCPPC)	Data Services Public Safety Radio Video Conferencing Internet Service Provider
Montgomery College	Data Services Internet Video Conferencing
WSSC	Data Services

IV. Public-Private Partnerships

You should be prepared for a discussion of privatization and/or Public Private Partnership mode of providing broadband connectivity. To the degree you have explored this option, and drew conclusions, they would be most welcome to add to my packet.

***Public-private partnership (PPP)** describes a government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies. (Wikipedia, Definition Public-private partnership, http://en.wikipedia.org/wiki/Public%E2%80%93private_partnership)*

FiberNet originally started as a Department of Transportation project in the early 1990's to develop the Advanced Traffic Management System (ATMS). The current approved FiberNet project (No. 509651) includes references to the studies and planning documents that guide the current project implementation. Nearly half of FiberNet capacity from the physical fiber plant perspective is dedicated to supporting ATMS

**Fibernet – Analyst Questions
For GO Committee Meeting – March 7, 2011**

(Automated Traffic Management System) and over the last two years the Traffic Signaling System Modernization project has moved signal operations to FiberNet in a hybrid fiber/copper network.

The ITPCC believes that the Department of Technology Services (DTS) implementation and operation of the FiberNet project continues to effectively and adequately utilize PPP relationships where they make sense with the private and public sectors. It further has exemplified the benefits to the County where broadband emerging capabilities are achieved at lower costs. FiberNet has leveraged franchise agreements to utilize the networks of companies like Comcast, RCN, FiberGate and FiberTech. FiberNet has also partnered with Atlantech Online, Inc., to provide Internet access to the County Government and citizens visiting County facilities, Silver Spring and Bethesda WiFi HotSpots. The following tables highlight these relationships

The following Table IV.a outlines the dark fiber provider for all of the current FiberNet sites including those in the construction pipeline. There are 326 site on FiberNet and thirty-seven in the construction pipeline.

Table IV.a

Dark Fiber Provider	Status	Total
COMCAST	On Net	137
	Pipeline	29
COMCAST Total		166
FiberGate	On Net	1
Fibertech	On Net	1
Montgomery County Government (MCG)	On Net	187
	Pipeline	8
MCG Total		195
Grand Total		363

**Fibernet – Analyst Questions
For GO Committee Meeting – March 7, 2011**

Table IV.b outlines the services or assets provided to Montgomery County Government by a private sector corporation doing business in the County.

Table IV.b

Private Company	Service or Asset	Benefit/County Cost	Cost Implications
Comcast	Adding FiberNet sites by connecting them through the Comcast fiber optic network	FiberNet is able to leverage Comcast's investment in its private network to add sites to FiberNet. / The County pays Comcast the marginal cost to add the site. This cost is often 50% of the County's cost to add the same site.	There are 137 sites on FiberNet via the Comcast fiber network. There are another 29 sites in the construction pipeline with Comcast. If the Comcast franchise did not provide for this benefit and the benefit had been monetized and used to build sites, there would probably be 100 fewer sites on FiberNet today.
RCN	Provides 200 Mgb/second connection to the Internet as a part of the franchise agreement	This service provides citizen access to County Internet based applications and staff access to the Internet/ no explicit cost to MCG	The annual market price for a 200 Mgb/s connection is on the order of \$30,000 to \$40,000 per year.
FiberTech	DTS has connected County sites to FiberNet using FiberTech dark fiber	This service is provided as part of the franchise agreement/ no explicit cost to MCG	Estimated build cost for this fiber \$50,000 to \$100,000
FiberGate	DTS has connected the County Government over a fiber link to the State of Maryland	This service is provided as part of the franchise agreement/ no explicit cost to MCG	Lease cost for this fiber \$40,000 per year
Atlantech Online, Inc	Internet access for Montgomery County Government, Silver Spring and Bethesda WiFi Networks and various WiFi Hot-Spots around the County in recreation centers and indoor swimming pools.	These services are provided as a result of services FiberNet provides to MCPS and Montgomery College in carrying their traffic to AOI's network for Internet access/ no monetary cost to County	The annual market price for a 200 Mgb/s connection is on the order of \$30,000 to \$40,000 per year
RCN & AOI	Internet connectivity provided by RCN and AOI permits Montgomery County to have two independent links to the Internet. In the case of a single link failure County Internet traffic will fail over to the other link automatically.	Redundant Internet connectivity/no cost to County	none

**Fibernet – Analyst Questions
For GO Committee Meeting – March 7, 2011**

Prospectively, in one of the largest Public Private Partnerships (PPP) for Montgomery County, FiberNet is the beneficiary of the Federal ARRA Grant awarded to the Maryland in September 2010. This will result in significant completion of the FiberNet network by August 13, 2013, based on the successful planning, adjoined funding and implementation. This grant opportunity will provide for fiber optic connections to all remaining 89 Montgomery County Elementary Schools, the Takoma Park Library and 19 Housing Opportunity Commission sites---109 sites in all. The estimated value of this grant for the FiberNet project is \$10-14 million. This significant effort will place an unprecedented burden on County staffing resources until project completion.

From its inception, FiberNet was conceived as primarily a private, County owned, County operated, and County controlled network. This is a best practice that has been demonstrated nationally. Outsourcing pieces of it, or selling FiberNet and subsequently leasing back services was never developed as a viable consideration. There is no known operating model currently available to make this transition while guaranteeing the uninterrupted delivery of services throughout the County. The DTS team has been intensely involved with obtaining the ARRA Grant, and subsequently engaged in “make ready” preparations for utilizing the available ARRA funds when Howard County, who administers the grant, gives the order to proceed with implementations.

Although defining the “requirements” for a study of PPP is formally stated in the ITPCC work plan for FY11, ITAG discussions to date have been inconclusive regarding the best and appropriately strategic approach needed to respond to this alternative. At this point, the ITPCC needs to develop a rationale, with accompanying business analysis, statement of requirements and cost benefit analysis to develop a recommendation to identify an alternative strategy for a Public Private Partnership arrangement, relative to FiberNet and broadband service provisioning. Once an expert evaluation addressing this strategic change commences, this study outcome will need to include a level of detail that sufficiently includes specific deliverables, advantages and proven PPP models that will fully justify a change to County’s current Fibernet delivery strategy.

Fibernet – Analyst Questions
 For GO Committee Meeting – March 7, 2011

FiberNet O&M and CIP Budgets for FY11		
	O&M Component	FY11
1	FiberNet I Maintenance	\$94,500
2	FiberNet II Maintenance	\$100,000
3	Optical Fiber Plant Maintenance-DOT	\$198,000
4		\$392,500
5	Support Personnel - Contracted	\$600,000
6	Support Personnel - MCG-DTS	\$193,118
7	Support Personnel - MCG-DOT	\$46,000
8		\$839,118
9	Hub Infrastructure	\$80,500
10	Site Infrastructure	\$25,000
11		\$105,500
12	Total O&M Budget	\$1,337,118
Item	FiberNet new site construction	FY11
13	ATMS new construction	\$100,000
14	FiberNet new site construction	\$0
15	Fiber plant relocation	\$50,000
16		
17	Fiber cost estimation fund	\$25,000
18	Backbone, OTN Cross Connect & Feeder Capacity Increases	\$135,000
	Subtotal	\$310,000
	Cross Charging & Consulting	FY11
19	DoT Construction	\$140,000
20	FiberNet II	\$0
21	Subtotal	\$140,000
Item	Infrastructure	FY11
22	Hub Improvements	\$50,000
23	Security Improvements	\$15,000
24	FiberNet III Upgrade	
25	Subtotal	\$65,000
26	Totals	\$515,000
	Cable Plan	FY11
27	H. FIBERNET	
28	FiberNet - Personnel Charges for DTS (6)	193
29	FiberNet - Operations & Maintenance (DTS) (1,2,5,9,10)	900
30	FiberNet - Personnel Charges for DOT (7)	46
31	FiberNet - Operations & Maintenance (DOT) (3)	198
32	FiberNet O&M SUBTOTAL	1,337
33	FiberNet-CIP (26)	515
34	FiberNet SUBTOTAL from Cable Plan	1,852

Public Safety System Modernization -- No. 340901

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

November 19, 2010
No
None.
On-going

jc

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	3,266	0	0	3,266	925	945	895	501	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	3,264	0	0	3,264	125	725	1,345	1,069	0	0	0
Other	45,979	2,947	96	42,936	20,936	11,000	11,000	0	0	0	0
Total	52,509	2,947	96	49,466	21,986	12,670	13,240	1,570	0	0	0

FUNDING SCHEDULE (\$000)

Federal Aid	3,343	2,947	96	300	300	0	0	0	0	0	0
G.O. Bonds	3,840	0	0	3,840	200	800	1,420	1,420	0	0	0
Short-Term Financing	45,326	0	0	45,326	21,486	11,870	11,820	150	0	0	0
Total	52,509	2,947	96	49,466	21,986	12,670	13,240	1,570	0	0	0

OPERATING BUDGET IMPACT (\$000)

Maintenance				2,408	48	0	680	500	680	500
Net Impact				2,408	48	0	680	500	680	500

DESCRIPTION

This project will provide for phased upgrades and modernization of computer aided dispatch (CAD) and voice radio systems used primarily by the County's public safety first responder agencies including Police, Fire and Rescue, Sheriff, Corrections and Rehabilitation and Emergency Management and Homeland Security. The modernization will include replacement of the current CAD system, replacement of mobile and portable radios, and voice radio communications infrastructure. The initial phase includes the CAD replacement, station alerting system replacement and the acquisition of the P-25 standard radio devices. A subsequent phase would include the replacement of the radio infrastructure, estimated at approximately \$50M. The current project includes \$1.7M for planning and design of the radio infrastructure replacement.

The previously approved Fire Station Alerting System Upgrades project (#451000) was transferred to this project in order to coordinate the upgrades with the new CAD system. The alerting system upgrades will modernize the fire station alerting systems at 32 existing stations, maintaining the ability to notify fire and rescue stations of emergencies. The alerting system, including audible and data signals, is essential for the notification of an emergency and the dispatch of appropriate response units from the county.

As voice, data and video are beginning to converge to a single platform, this project will provide a pathway to a modern public safety support infrastructure that will enable the County to leverage technology advances and provides efficient and reliable systems for first responders. This project will follow the methodologies and strategies presented in the Public Safety Systems Modernization (PSSM) plan completed in July 2009.

COST CHANGE

Cost change is due the accelerated purchase of P-25 compliant radios in order to meet immediate re-banding requirements without having to implement a radio "loaner" program and to take advantage of a "Partial Payment in Lieu of Rebanding" payment of \$3.3 million proposed by Sprint/Nextel. This PILR program will be operationally more efficient than the loaner program; will result in the county having public safety radios with update options that will comply with future FCC requirements. Funding associated with the FY14 purchase of radios has been deleted and will be re-evaluated.

JUSTIFICATION

The Public Safety Systems require modernization. The CAD system is reaching the end of useful life and does not meet the County's current operational requirements, impacting the response time of first responders to 9-1-1 calls. The CAD Roadmap Study, completed in March 2009, recommended replacement of the system to address existing shortcomings and prepare for the next generation 9-1-1 systems. Manufacturer's support for the voice radio system has begun to be phased out December 31, 2009. Beyond that date the manufacturer will only continue to provide system support on an "as available" basis, but will not guarantee the availability of parts or technical resources.

The CAD modernization will initiate with a detailed planning phase that will include the use of industry experts to assist in both business process analysis and developing detailed business and technical requirements for the new CAD system. Utilizing external consultants for this process will allow the County to incorporate lessons learned and best practices from other jurisdictions.

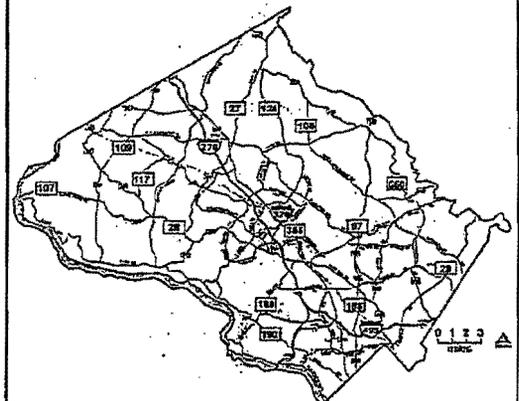
As more of the County's regional partners migrate to newer voice technologies, it will affect interoperable voice communications. To ensure that the County

APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY09	(\$000)
First Cost Estimate	FY11	52,509
Current Scope		
Last FY's Cost Estimate		54,863
Appropriation Request	FY11	2,434
Appropriation Request Est.	FY12	12,670
Supplemental Appropriation Request		19,552
Transfer		0
Cumulative Appropriation		3,043
Expenditures / Encumbrances		2,947
Unencumbered Balance		96
Partial Closeout Thru	FY08	0
New Partial Closeout	FY09	0
Total Partial Closeout		0

COORDINATION

Public Safety Steering Group
Department of Technology Services
Department of Police
Montgomery County Fire and Rescue Service
Sheriff's Office
Department of Correction and Rehabilitation
Office of Emergency Management and Homeland Security
Department of Transportation
Department of Liquor Control
Montgomery County Public Schools (MCPS)
Maryland-National Park and Planning Commission (M-NCPPC) Park Police
Washington Metropolitan Area Transit Authority (WMATA)



Public Safety System Modernization -- No. 340901 (continued)

maintains reliable and effective Public Safety (voice, radio) communications for the operations of its first responders and to sustain communications interoperability for seamless mutual aid among its regional partners, the County needs to commence planning and implementation of a program to upgrade and modernize its portable and mobile radio units and subsequently the communications infrastructure. Acceleration of the public safety radio purchases and increased funding is needed to take advantage of a "Partial Payment In Lieu of Re-Banding" offer from Sprint/Nextel toward the financing of new, upgraded, P-25 compliant public safety radios. Upgrading from the Model 5000 to the APX 7000 Model and accelerating the purchase of the public safety radios will support Public Safety communications interoperability Countywide as well as meet the Federal Communications Commission (FCC) mandated 800 MHz frequency rebanding requirements for nationwide public safety radio frequency interoperability. In addition, by accelerating the purchase of the public safety radios to FY11, the County will avoid the significant operational challenges of installing loaner radios and subsequent re-installation of the original re-programmed radios after the frequency modifications have been made. Further a third replacement would be required when the County acquired new radios.

The fire station alerting system upgrades were identified as a need under Section 5 of the MCFRS Master Plan (adopted by the County Council in October 2005) and detailed in the Station Alerting and Public Address (SA/PA) System for Fire/Rescue Stations, Rev 1, 2006. This project allows for the continuous and seamless functioning of the alerting systems within each fire station. A preliminary survey by DTS of existing conditions at all stations revealed system wide concerns, including inadequate spare parts inventory and lack of available maintenance support for alerting systems.

OTHER

Conditions: FY11 appropriation for this project must be used as follows:

Not more than \$300,000 for planning for public safety radio infrastructure replacement

Not more than \$550,000 for planning for CAD replacement

Not more than \$75,000 for planning and \$125,000 for construction of station alerting.

\$20.936 million is appropriated in FY11 to purchase P-25 compliant radios that will allow the county to complete the immediate re-banding within the 800 MHz frequency as required by the Federal Communication Commission. The radio replacement program must include the M-NCPPC Montgomery County Park Police.

The Executive must provide the Council with an updated radio inventory after the re-banding program is implemented, the new public safety radios have been assigned, and radios currently used by public safety staff are reassigned to non-public safety programs.

New radio infrastructure will be planned to open up the competitive environment and will demonstrate the ability to accept multiple vendors. The future purchase of public safety radios (other than to replace broken equipment) must be able to be supported by a P25 Phase-2 compliant infrastructure.

The use of State of Maryland infrastructure and purchase options will be aggressively pursued in order to minimize costs to Montgomery County.

The Executive must provide the Council with quarterly written updates beginning in January 2011 on the Public Safety Modernization project that include information on progress in planning, implementation, and spending for all components of the project.

The CAD procurement request must reflect the County's interest in maintaining the station altering functionality at the current level or better through the CAD system.

Funds appropriated for this project must not be used to purchase or implement a new CAD system or radio infrastructure until the Executive provides the Council with a detailed proposal and accurate cost estimates for the total project scope.

The RFP for CAD replacement will include replacement of the following systems: CAD, mapping, and the existing Law Enforcement Records Management and Field Reporting systems. In addition, replacement of the following systems will be considered for inclusion in the CAD replacement RFP: Fire Station Altering, ProQA, False Alarm Reduction Section, Paging, and Fire House records management.

Coordination with participating department/agencies and regional partners will continue throughout the project.

FISCAL NOTE

Funding in FY09 includes Urban Area Security Initiative (UASI) grant funding of \$2.055 million and Fire Act grant funding of \$988,000. Funding in FY11 includes UASI funding of \$300,000.

Estimated costs for the elements to be funded in the current phase of the project are: CAD replacement \$23.340 million; station altering system \$3.489 million; planning for radio infrastructure replacement \$1.701 million.



Public Safety Systems Modernization Program (PSSM)

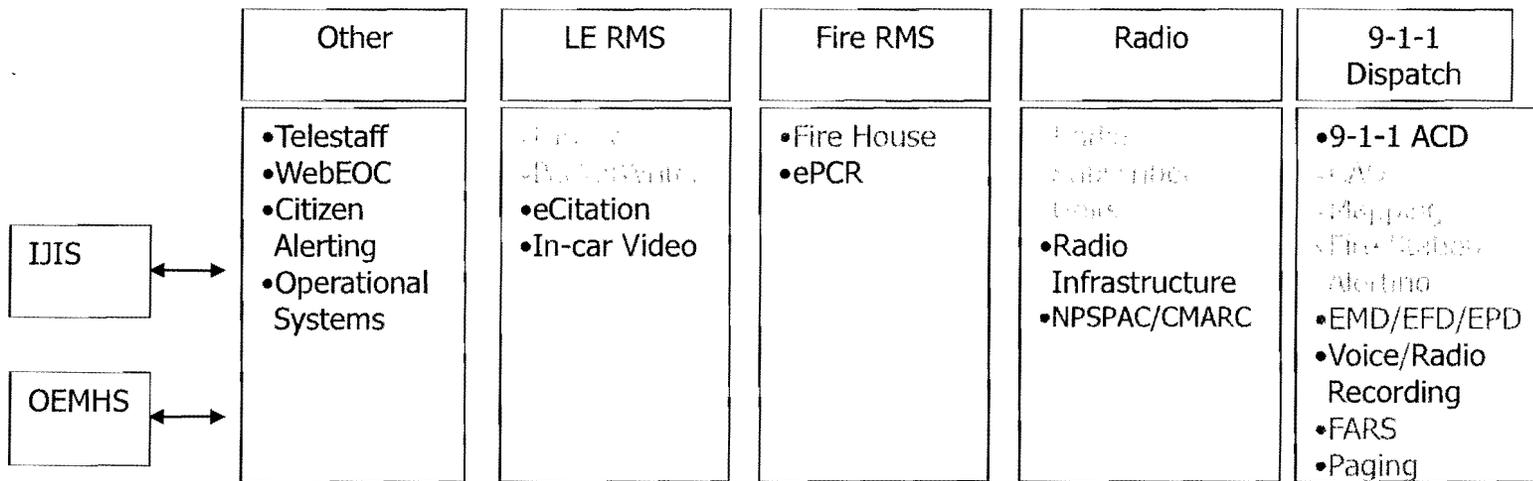
GO Committee Briefing
March 07, 2011

Elements of Public Safety Systems Modernization

P S S M Framework

Fibernet / County Wireless / Commercial Wireless

Applications (WebEOC, JGIS, etc.)



Interoperability (MCCIP)

Linkage to State, COG, and other outside agencies

- METERS
- Linx
- JJIS

CIP - Planned
CIP - Proposed
CIP - Not Funded

**Montgomery County Public Safety Systems
Modernization (PSSM) Program**

**❖ PSSM is currently comprised of four (4)
major components:**

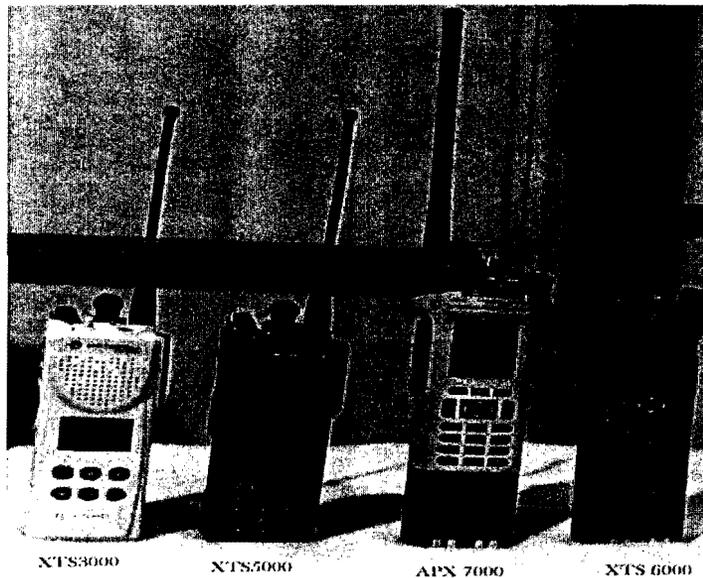
- ▶ **Radio Acquisition and Rebanding**
- ▶ **Computer Aided Dispatch (CAD)**
- ▶ **Station Alerting**
- ▶ **Radio Infrastructure**

Description of PSSM Projects

- ❖ **Radio Acquisition and Rebanding** – on August 6, 2004, the Federal Communications Commission (FCC) issued a Report and Order that modified its rules governing the 800 MHz band. The stated purpose of the order was to reconfigure the 800 MHz band to eliminate harmful interference to public safety radio communications systems in the band. The requirement levied upon Montgomery County and all other public safety radio licensees, nationwide, operating in the 800 MHz band is to change the frequencies of all transmitters, receivers, subscriber units, and the backbone infrastructure.



Radio Delivery



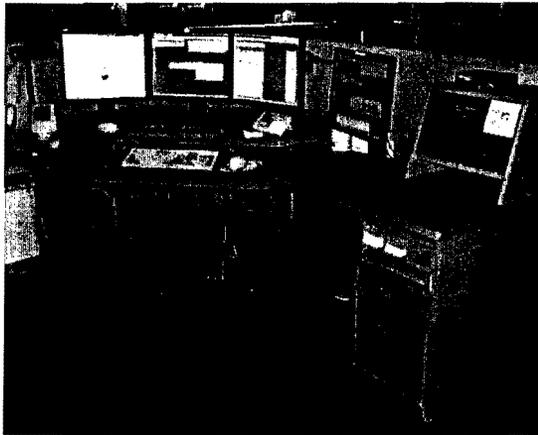
Portable Radio "Line-Up"



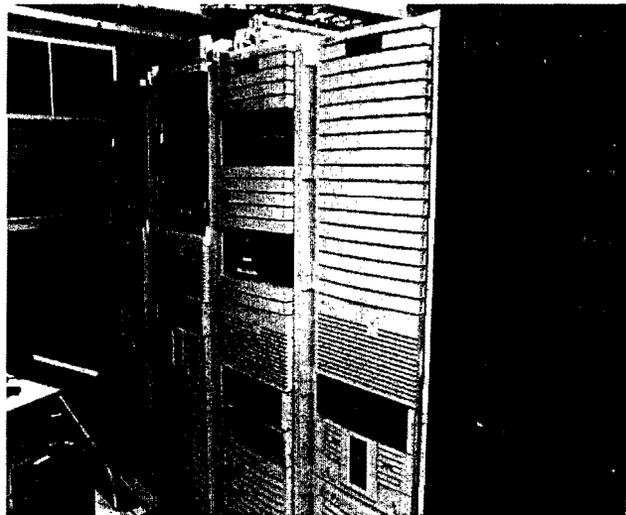
XTL 6500 Mobile

Description of PSSM Projects

- ❖ **Computer Aided Dispatch (CAD)** – The dispatch process is a multi-faceted process that involves first the systematic interview of persons accessing the 9-1-1 system. CAD is the decision support scaffolding for the dispatch process. An effective CAD will be able to collate disparate bits of data in multiple formats, including GIS data, call type and response plan data, quickly turning those individual data points into a visually and spatially coherent format that reduces the information processing needs of dispatcher and call takers allowing them to engage in higher order thinking and the exercise of judgment and discretion.



CAD Dispatcher Console



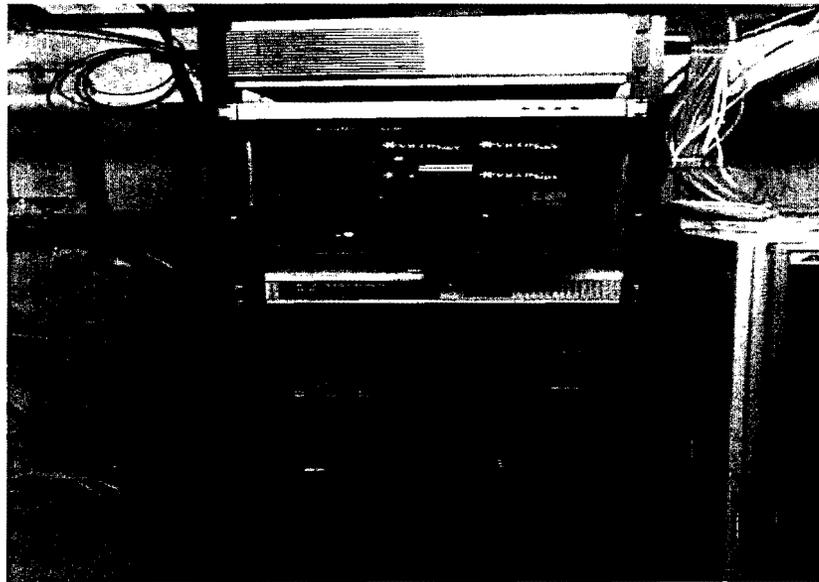
CAD Servers



MDT 5

Description of PSSM Projects

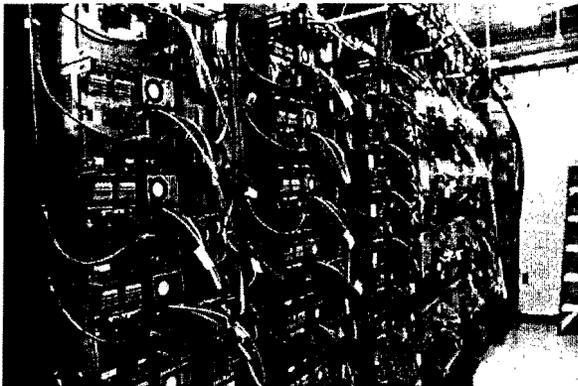
- ❖ **Station Alerting** – The purpose of this project is to provide a turn-key system replacement of fire station alerting components. This alerting system is a critical part of the 911 systems and public safety response, and is a requirement specified in the National Fire Protection Association (NFPA) 1221 Standard. This is a technology lifecycle replacement that is required in order to bring the Fire and Rescue Department's station alerting system to a technical level that will permit integration with the selected Public Safety Computer Aided Dispatch System.



Germantown Fire Station - New Alerting System

Description of PSSM Projects

- ❖ **Radio Infrastructure** – develop and implement a reasonable and feasible solution infrastructure that provides a countywide, secure, coordinated, real-time voice and data communications that can overcome adjoining jurisdictional and organizational boundaries. This interoperable radio system will facilitate the sharing of emergency response and recovery information among system users and will significantly enhance not only operations during major events, but also will improve public safety during day-to-day routine operations.



Infrastructure



Antenna Site



Channel Bank 7

PSSM Program Dashboard

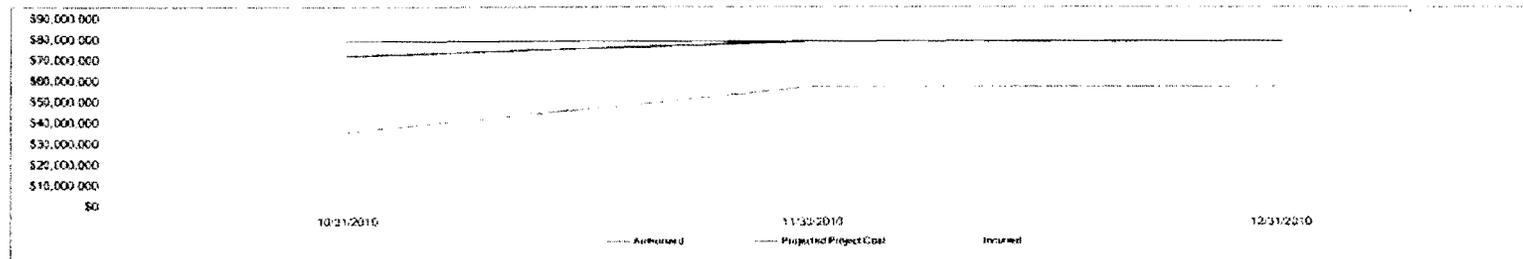
❖ MCG Enterprise Dashboard

- ▶ The PSSM Program will utilize the Enterprise Dashboard
- ▶ Currently Under Construction for this Program

MCG IT Initiative DASHBOARD Status Date: December 31, 2010

Initiative	# of Projects	% Complete	Actual Start	Projected End	% Schedule Variance	Schedule	Authorized	Incurred to Date	Estimate To Complete	Projected Project Cost	% Projected Project Variance	Budget	Issues	Risk	Scope	Overall Status
TechMod	5	43%	9/1/08	3/2/12	5%		\$60,879,647	\$45,588,413	\$15,291,236	\$60,879,649	0.0%					
ERP (Phase IA and IB) - Core Finance, Core HR and Self Service	1	61%	8/10/09	3/30/11	32%		\$60,403,030	\$45,285,074	\$15,117,958	\$60,403,032	0.0%					
ERP (Phase IC) - Budget*	1	29%	8/16/10	7/1/11	0%		\$0	\$0	\$0	\$0	0.0%					
ERP (Phase IIA) - Finance Self Service, Assets Management, Inventory	1	9%	9/1/10	3/2/12	0%		\$0	\$0	\$0	\$0	0.0%					
ERP (Phase IIB) - Learning Management*	1	0%	3/1/11	7/30/11	0%		\$0	\$0	\$0	\$0	0.0%					
MTime Deployment (Phase 3 of 3)	1	93%	9/1/08	2/28/11	0%		\$476,617	\$303,338	\$173,278	\$476,617	0.0%					
LIS Program	2	49%	12/31/08	1/15/13	0%		\$13,367,000	\$11,733,000	\$1,634,000	\$13,367,000	0.0%					
SAD Gang & Domestic Violence Data Base	1				0%											
Conversions	1	49%	12/31/08	1/15/13	0%											
CRIMS	1				0%											
Public Safety Systems Modernization	3	55%	3/31/09	7/1/11	0%		\$3,717,375	\$2,946,000	\$771,375	\$3,717,375	0.0%					
UASB/Fire Acta Radio Grants	1	91%	3/31/09	7/1/11	0%		\$2,946,000	\$2,946,000	\$0	\$2,946,000	0.0%					
NPSPAC Interoperable Communications	1	13%	9/10/10	2/28/11	0%		\$581,375	\$0	\$581,375	\$581,375	0.0%					
eJustice Server Upgrade	1		1/3/10	3/31/10	0%		\$190,000	\$0	\$190,000	\$190,000	0.0%					
Departmental Initiatives	2	85%	3/2/09	11/30/10	0%		\$1,010,165	\$225,177	\$784,657	\$1,009,634	0.0%					
Voice Mail Replacement	1	89%	5/29/10	5/4/11	-18%		\$847,825	\$63,168	\$784,657	\$847,825	0.0%					
DOT Snowplow Tracking App Upgrade	1	100%	8/12/10	12/30/10	-13%	Y	\$162,340	\$162,009	\$0	\$162,009	-0.2%					
MCG	12						\$78,974,187	\$60,492,590	\$18,481,268	\$78,973,858	0.0%					

MCG IT Initiative Budget



* Project Schedule is not baselined

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PSSM CIP Fiscal Information

EXPENDITURE SCHEDULE – Appropriated Funds

Project Name:	Public Safety System Modernization 340901 Revised after Council Changes October 26, 2010											
	Total	Thru FY09	Est FY10	6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years	
Planning, Design, Super.:												
Radio Infrastructure Ping	\$ 1,701	\$ -	\$ -	\$ 1,701	\$ 300	\$ 450	\$ 450	\$ 501	\$ -	\$ -	\$ -	
CAD Planning	\$ 1,340	\$ -	\$ -	\$ 1,340	\$ 550	\$ 420	\$ 370	\$ -	\$ -	\$ -	\$ -	
Station Alerting Planning	\$ 225	\$ -	\$ -	\$ 225	\$ 75	\$ 75	\$ 75	\$ -	\$ -	\$ -	\$ -	
Total Planning, Design,	\$ 3,266	\$ -	\$ -	\$ 3,266	\$ 925	\$ 945	\$ 895	\$ 501	\$ -	\$ -	\$ -	
Construction:												
Radio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CAD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Station Alerting	\$ 3,264	\$ -	\$ -	\$ 3,264	\$ 125	\$ 725	\$ 1,345	\$ 1,069	\$ -	\$ -	\$ -	
Total Construction	\$ 3,264	\$ -	\$ -	\$ 3,264	\$ 125	\$ 725	\$ 1,345	\$ 1,069	\$ -	\$ -	\$ -	
Other:												
Radios	\$ 23,979	\$ 2,947	\$ 96	\$ 20,936	\$ 20,936	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CAD - procurement	\$ 18,000	\$ -	\$ -	\$ 18,000	\$ -	\$ 9,000	\$ 9,000	\$ -	\$ -	\$ -	\$ -	
CAD - deployment	\$ 4,000	\$ -	\$ -	\$ 4,000	\$ -	\$ 2,000	\$ 2,000	\$ -	\$ -	\$ -	\$ -	
Subtotal CAD	\$ 22,000	\$ -	\$ -	\$ 22,000	\$ -	\$ 11,000	\$ 11,000	\$ -	\$ -	\$ -	\$ -	
Station Alerting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Other	\$ 45,979	\$ 2,947	\$ 96	\$ 42,936	\$ 20,936	\$ 11,000	\$ 11,000	\$ -	\$ -	\$ -	\$ -	
check total	\$ 52,509	\$ 2,947	\$ 96	\$ 49,466	\$ 21,986	\$ 12,670	\$ 13,240	\$ 1,570	\$ -	\$ -	\$ -	
					5,875	5,875	0	0	0	0		
					353	353	0	0	0	0		
					<i>(Park Police radios included)</i>							

FUNDING SCHEDULE

Project Name:	Public Safety System Modernization 340901 Revised after Council changes October 26, 2010										
	Total	Thru FY09	Est FY10	6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Federal Aid	\$ 3,343	\$ 2,947	\$ 96	\$ 300	\$ 300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G.O. Bonds	\$ 3,840	\$ -	\$ -	\$ 3,840	\$ 200	\$ 800	\$ 1,420	\$ 1,420	\$ -	\$ -	\$ -
Short Term Financing	\$ 45,326	\$ -	\$ -	\$ 45,326	\$ 21,486	\$ 11,870	\$ 11,820	\$ 150	\$ -	\$ -	\$ -
Total	\$ 52,509	\$ 2,947	\$ 96	\$ 49,466	\$ 21,986	\$ 12,670	\$ 13,240	\$ 1,570	\$ -	\$ -	\$ -

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Accomplishments

❖ Overall:

- ▶ Delivered the Strategic Plan for the Public Safety Systems Modernization (PSSM) Program
- ▶ Delivered the Confidential Montgomery County Public Safety Information Technology Architecture Document
- ▶ Establishment and Commencement of the PSSM Executive Steering Committee

❖ Radio Acquisition and Rebanding:

- ▶ Completed the Acquisition of the Mobile and Portable Radios
- ▶ 4850 Portable and Mobile Radios Delivered Plus Accessories
- ▶ All radios are the Newest Generation and P25 Compliant
- ▶ Partnership with Motorola in the planning, technical support and implementation.

Accomplishments

❖ CAD:

- ▶ Delivered the Montgomery County Computer Aided Dispatch Roadmap Study
- ▶ Established Governance Structure
- ▶ Initiated Requirements Gathering and Review

❖ Station Alerting:

- ▶ Germantown Fire Station Installed and Implemented

❖ Radio Infrastructure:

- ▶ Delivered the Montgomery County Communications Interoperability Strategic Plan (MCCIP)

Where Are We Going

- ❖ Overall
 - ▶ Complete PSSM Program Charter
 - ▶ Complete Detailed Resource Staffing Plan
- ❖ Radio Acquisition and Rebanding
 - ▶ Monitor Project Progress
 - ▶ Continued Participation in the Monthly National Capital Region (NCR) Status Meetings
- ❖ CAD
 - ▶ Develop Comprehensive Requirements
 - ▶ Review Business Processes
 - ▶ Align Requirements – Business Processes
 - ▶ Determine Acquisition Approach and Execute
 - ▶ Participation in the Statewide CAD Program for Design Options, Integration, and Business Process Solution Alternatives

Where Are We Going

❖ Station Alerting

- ▶ Continue Discovery of Solutions that Support PSSM “Modular Integration”
- ▶ Review Recent Implementations to Build Comprehensive Requirements
- ▶ Determine Acquisition Approach and Execute

❖ Radio Infrastructure

- ▶ Participation with Regional Interoperability Forums for Requirements and Technology Direction
- ▶ Active Participation with State Infrastructure Replacement for Joint Ventures and Common Needs
- ▶ Review and Monitor Recent Implementations to Build Comprehensive Requirements
- ▶ Continue to Build Fiscal Estimates for Future Executive Recommendations



DEPARTMENT OF TECHNOLOGY SERVICES

Isiah Leggett
County Executive

E. Steven Emanuel
Chief Information Officer

MEMORANDUM

March 2, 2011

TO: Dr. Costis Toregas, Council IT Advisor

FROM: E. Steven Emanuel, Chief Information Officer

SUBJECT: Public Safety Systems Modernization – Responses to Analyst Questions



Pursuant to the discussion on Wednesday, February 23rd and your email of Thursday, February 24th with specific questions for the upcoming Government Operations Committee meeting on Monday, March 7, 2011, the Executive Branch is pleased to provide the detailed responses to the questions to be included in the packet and discussed at the session.

The responses, included in the attachment provided, have been developed by the members and subject matter experts participating in the Public Safety Systems Modernization effort. Additionally, at your suggestion, a brief, high level overview presentation on the PSSM program is also being included.

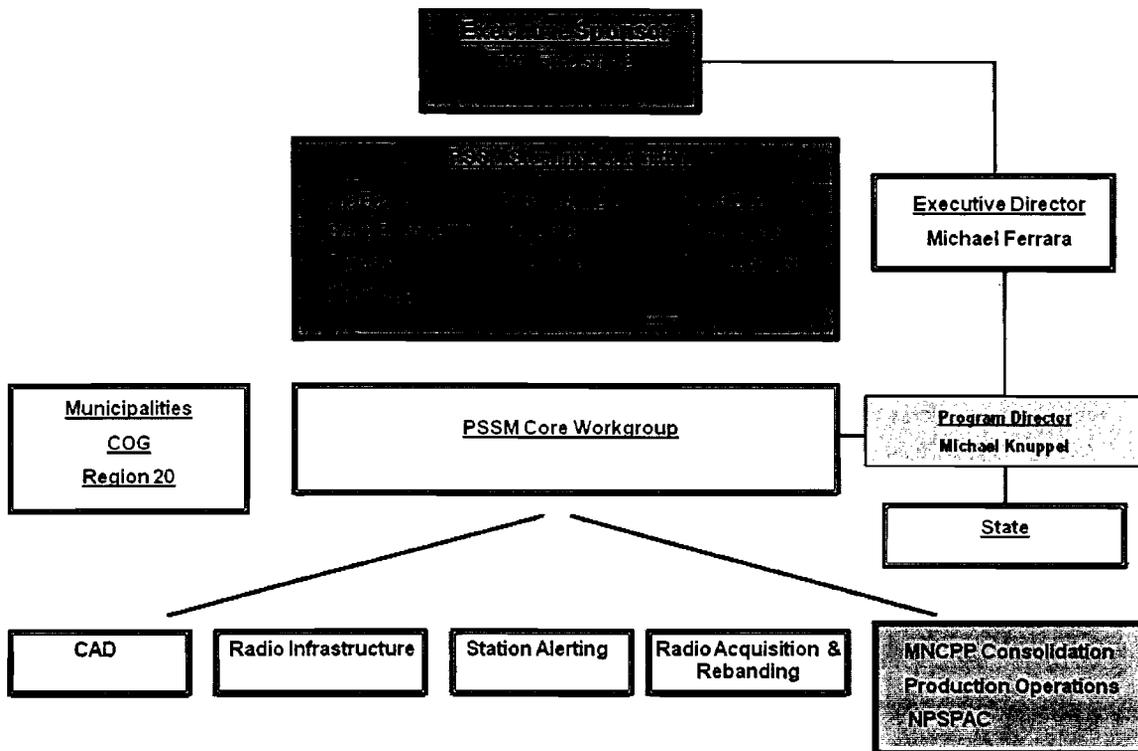
If there are any additional questions or clarification required, please don't hesitate to ask.

Cc: Richard Bowers, Fire Chief
Thomas Manger, Chief of Police
Chris Voss, Director, Office of Emergency Management & Homeland Security
Arthur Wallenstein, Director, Dept of Corrections
PSSM Workgroup Members

Attachments

1. There are 3 major systems making up PSSM: Radio (Replacement and Rebanding), CAD and Infrastructure. In addition, there are two finite-time external issues affecting the project: the Rebanding of radios and the Park Police/Police CAD consolidation project. Given that this project may cost over \$100m according to the latest estimates in the PDF, and given the complexity of the technologies and interoperability issues involved, it is essential to provide strong and unambiguous project leadership. Please provide a clear description of the PSSM project management team, the responsibilities and costs associated with this team.

Response:



PSSM Executive Steering Committee (ESC)

The Montgomery County Government PSSM Executive Steering Committee will meet regularly during the program life cycle to understand overall project status, address escalated and out of scope issues, and others as deemed appropriate.

The goal of the PSSM ESC is to provide leadership to the PSSM Work Group, Program Directors, and to the community. Its members will set the program priorities; have the authority and responsibility to make all funding, resource and policy decisions to ensure the success of the project.

Responsibilities include:

- Make decisions which can change the project organization, scope, or funding
- Remove obstacles which may impact the successful outcome of the project
- Champion the need for change (e.g., policies, processes, and support systems)
- Resolve escalated issues in a timely manner
- Ensure successful completion of each phase of the project
- Ensure adherence to Montgomery County Government decision and reporting protocol
- Ensure formal project reviews and quality assurance

- Ensure that adequate resources are available

PSSM Workgroup

The PSSM Workgroup will take prime responsibility for providing guidance to ensure the chosen solutions will provide the appropriate functionality needed to serve Montgomery County Government and its Citizens.

Responsibilities include:

- Communicate and update the PSSM Executive Steering Committee
- Provide program leadership for the project
- Ensure the appropriate project-managers, project team members and subject matter experts (SMEs) are identified and available to fulfill their project responsibilities
- Assist in the development of detailed project work plans
- Escalate decisions to the PSSM Executive Steering Committee when decision criteria is beyond the accountability of the workgroup members, when business process changes are in conflict with current practices or when scope, resources or funding issues create a barrier for the successful advancement of the projects.
- Identify, assess, justify and make recommendations for any solution customizations identified
- Review project progress and monitor the projects for deviation from contractual scope, timelines, funding, intent, etc.

Montgomery County Government's System Development Life Cycle (SDLC) process establishes the foundation for making the development and operations of technology applications a consistent and repeatable process. By following the established SDLC, the County can expect application development projects will result in a high quality system that meets or exceeds customer expectations, reaches completion within time and budget projections, provides value to the organization and can be operated and maintained in a predictable, efficient manner.

2. **When do you expect to be in a position to issue an RFP for the CAD system? Given the shift of resources and attention to the Radio replacement and rebanding in FY11, it is important to know when the CAD resources need to be allocated.**

Response:

Over the next 6 months, the County will be validating business requirements, as well as, comparing our requirements against other jurisdictions and against other recent CAD RFPs and contracts. We are also researching the current state and direction of the CAD software industry. This will enable the County to determine the most appropriate acquisition method for procuring a new CAD system. We expect to be ready to make the acquisition approach decision by the first quarter of FY12 and issue a RFP or begin contract bridge process at that time. The project team still expects to begin the implementation phase by the second half of FY12.

3. **Please give a summary of the recent radio procurement carried out under the \$21m allocation (and \$3m rebanding settlement) in FY2011. Did the vendor agree to reduce their profit margins, or did the County accept lesser scope? Which user goals were not met?**

Response:

The original goal in combining rebanding needs with the radio replacement program was to replace 4186 Portable and Mobile models (XTS/XTL 3000 Public Safety Radios plus needed accessories) identified in the FCC mandated rebanding analysis with the Council's recent appropriation of \$20.9M.

The motivated negotiating teams of the vendor and County were able to achieve the following results:

- 4850 Portable and Mobile models APX 6000, 6500, 7000 Radios plus accessories

For Law Enforcement, the purchase strategy allowed for rebanding to take place without using loaner radios. This enables the County to avoid multiple touches of the same vehicle, which was estimated to be \$6.3M. From a functionality standpoint, Law Enforcement has increased the availability of encryption capabilities while also increasing interoperability capabilities with all radios having 700MHz, P25 and Time Division Multiple Access (TDMA – Standard by which radios can share radio frequency space in rapid succession) while continuing to access 800MHz capabilities. A few ancillary radios (i.e. backup radios at dispatch consoles, security services and the radios used for recording/logging) were not replaced due to funding constraints, and will have to be addressed in the future. Some features that could have been used on the current system were not purchased. Should these features be incorporated into our new County infrastructure (OTAR, OTAP, IV&D, GPS – see note below) the radios will need software flash updates at a later time as part of the infrastructure replacement project.

Fire and Rescue Services purchased the number and type of subscriber units as described to the Council. The current acquisition will require FRS to set limits on the assignment of mobile radios to Chief and Staff vehicles. The portable subscriber unit feature sets do not fully meet FRS long-term operational goals for resiliency and interoperability. It will be necessary to purchase enhancements for a portion of the portable subscriber units. VHF licenses and encryption will need to be purchased for 844 subscriber units to meet interoperability and resiliency goals. FRS will need to replace 526 Motorola XTS5000 portable subscriber units, which will be at end of life in January 2016.

In summary, the County was able to purchase 664 (4850 – 4186) additional radios at a re-negotiated discount rate of 10% more than the current contract discount rate. As a result of the discounts, strategic negotiations and active vendor participation, the County Public Safety radio replacement exceeded the minimum requirement for rebanding and summarily reduced the remaining end of life radios, anticipated to be replaced in FY14.

Acronym Notes:

- **OTAR (Over-the-Air-Rekeying)** - the method of changing or updating encryption keys in a two-way radio system over the radio channel
- **OTA (Over-the-Air Programming)** - the methods for distributing new software updates to devices or provisioning handsets with the necessary settings with which to access services
- **IV&D (Integrated Voice and Data)** – the technology that integrates data transmission over radio frequency while ensuring voice transmission prioritization so data does not interfere with voice calls
- **GPS (Global Positioning System)** – the space based solution that provides reliable location and time information in all weather and at all times and anywhere on the earth when there a reasonably unobstructed line of sight to space satellites

4. **Now that the state has announced their radio and CAD plans and chosen vendors, how does it change the County plans? Are there opportunities for cost reduction in the long term, and for the radio infrastructure piece?**

Response:

The County has active representation on the State Interoperability Executive Committee (SIEC) and Practitioner Steering Committee (PSC) workgroups. On July 10, 2008, Governor O'Malley signed an

Executive Order formally establishing Maryland's Statewide Interoperability Executive Committee and its Practitioner Steering Committee.

The SIEC is comprised of senior elected and appointed officials from State, county, and municipal governments, selected and confirmed by the Governor. The SIEC is responsible for providing policy-level advice regarding public safety communications interoperability, and for promoting the efficient and effective use of resources for matters related to public safety communications and interoperability. Montgomery County currently has a representative on the SIEC.

The PSC was established at the request of the Governor to provide recommendations and advice to the SIEC and the Governor's Office of Homeland Security (GOHS) on all matters pertaining to communications interoperability including assessment, acquisition, standardization, planning, management, use, and oversight of communications. The PSC is comprised of senior communications practitioners from all fields of public safety. These individuals represent state, county, and municipal governments, as well as non-governmental organizations. The Executive Order established the following three permanent subcommittees within the PSC to provide the subject matter expertise required to implement public safety communications and interoperability projects: 1) Administrative and Budgetary Support Subcommittee, 2) Technical Subcommittee, and 3) Operations Subcommittee. Montgomery County currently has members on the PSC committee.

As a result of the inclusion of State, Local and Municipal partners on these committees, there are new opportunities for the County to identify partnerships as well as redundant components in the planning of the County's infrastructure solution. At the present time, site surveys and architectural plans for the State's solution are in development. As the projects begin to converge, project timelines and needs drive decisions, the County's project will be positioned to take advantage of infrastructure investments made by the State and vice versa. While the County's infrastructure plans currently fall behind the State's project, there are potential savings opportunities, but since the County's requirements have not been finalized, the extent of any potential savings opportunities cannot be confirmed.

5. **CAD is the project that FY12 CIP focuses on. Please explicitly describe the preparations for Business Process Reengineering, and the degree to which the Police and Fire agencies understand and are willing to support BPR. The experiences from ERP using a Change management team approach may be relevant but not yet visible in the project documents. If you can estimate cost savings from this BPR, please provide them as a range.**

Response:

The PSSM executive steering committee has endorsed the goal of a "non-customized" implementation for the next CAD system, and the project team has started to share this vision with all the stakeholders. The Project team has begun and will continue to engage stakeholders in the review, comparison, and validation of business requirements. They will also be part of the review of the current industry standards for CAD systems and how those systems have been implemented in other jurisdictions. Some specific examples are.

- Attending CAD vendor demonstrations
- Attending National CAD symposium
- Reviewing operations at jurisdictions with current generation CAD systems
- Reviewing CAD specifications and identifying business process adaptations

This approach will give stakeholders insight into alternatives to "business as usual" and give them the ability to make positive contributions to the process of business process improvements. We also expect to glean insight into the operational effects that Next Generation 9-1-1 will have on our business processes.

The Project team will also work closely with the TechMod change management team to learn best practices they found and to leverage the County's investment in change management. During the implementation phase, the project team expects to be employing the communications and training that have been found to best suited to the public safety dispatching environment.

The project team does not have any estimates of potential cost avoidance/savings. Given that the project is in initial stages of the business process reviews.

6. **The CAD project includes the Park Police. Please spell out how they are involved in the early stages of process description and analysis, and what voice they have in project decisions.**

Response:

The Park Police Chief is a member of the PSSM Executive Steering Committee. Park Police is also engaged at the workgroup level. Given the goal of a "non-customized" implementation for the next CAD system, it is expected that like the other agencies, the Park Police will have to participate in business process reengineering. Given the recent discussions about Communications Consolidations, all stakeholders have a better understanding of where Park Police requirements vary from those of the other Law Enforcement agencies. Some of these capability gaps will be easily filled, as they are standard in the newer generation CAD systems.

7. **Clarify the \$50m radio replacement infrastructure status and state why it is not currently in the 6 year CIP program as an anticipated expense.**

Response:

The PSSM Workgroup continues to build fiscal estimates for future Executive recommendations.

8. **The majority of requested funds (more than 90%) come from Short term financing. How will this be repaid and when?**

Response:

The Department of Finance expects to execute two, maybe three short-term financings to fund the cost of the radios and the infrastructure associated with the public safety modernization projects. Those short-term financings will be repaid semi-annually, over five years, out of the County's general fund. Repayment of these short-term loans is currently budgeted for in the Debt Service budget.

9. **A reminder that the PSSM PDF foresees quarterly update memos to the GO Committee; we will treat your answers to these questions as the first such report, and expect similar reports irrespective of GO worksession schedules so we can meet the spirit and letter of the PDF.**

Response:

The Executive branch concurs with this recommendation and agrees that this program, due to the high visibility and impact should be expected to provide these interim updates. This reporting confirms the Executives commitment to transparency in government.

Integrated Justice Information System -- No. 340200

Category
Subcategory
Administering Agency
Planning Area

General Government
Technology Services
Technology Services
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

January 04, 2011
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY10	Rem. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	1,200	0	800	400	0	400	0	0	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	14,467	8,787	3,280	2,400	500	1,555	345	0	0	0	0
Total	15,667	8,787	4,080	2,800	500	1,955	345	0	0	0	0

FUNDING SCHEDULE (\$000)

Current Revenue: General	10,287	3,407	4,080	2,800	500	1,955	345	0	0	0	0
Federal Aid	5,380	5,380	0	0	0	0	0	0	0	0	0
Total	15,667	8,787	4,080	2,800	500	1,955	345	0	0	0	0

OPERATING BUDGET IMPACT (\$000)

Program-Staff				1,200	0	0	300	300	300	300
Net Impact				1,200	0	0	300	300	300	300

DESCRIPTION

The Integrated Justice Information System (IJIS) will facilitate the exchange of data about criminals and criminal activity between Montgomery County agencies, the State of Maryland, and the Federal government. IJIS will simplify the steps for users to access data such as warrant and criminal background checks, while maintaining proper security and automatically exchanging data between appropriate agencies and systems. IJIS will be designed, implemented, and maintained to provide timely and appropriate data to field personnel in a clear and effective manner. Most field personnel will log on via a secure web site and view a simple menu of reports to access the data appropriate to their job function (e.g., a criminal background check on prisoners about to be released). IJIS will also be capable of routing data and/or warnings to the appropriate systems and personnel when certain events occur (e.g., if a person in the custody of the County is listed on a warrant from another jurisdiction). IJIS will link different data systems that are required to exchange data (e.g., arrest data between the Police department, the State of Maryland, the Courts, the Department of Correction and Rehabilitation, and the Federal Bureau of Investigation). The implementation of the Food Services and Time Scheduling modules of the Corrections and Rehabilitation Information Management System (CRIMS) will provide for an integrated Food Services solution allowing the easy identification of offenders requiring specialized diets based on, for example, medical needs. The Time Scheduling module will allow for the integration to MCTime, allowing for end-to-end scheduling and payroll activities.

ESTIMATED SCHEDULE

Estimated completion date for project is FY13.

JUSTIFICATION

IJIS will directly improve the delivery of public safety services to the estimated one million residents of Montgomery County and facilitate easier data transfers between Montgomery County and both the State and Federal public safety agencies. Criminal justice agencies in Montgomery County have embarked upon major business process changes by introducing the use of open and flexible information technology systems. Currently criminal justice agencies utilize a single system to hold criminal justice-related data known as the Criminal Justice Information System (CJIS). CJIS has reached the end of its useful life, especially with respect to changes to data structure and functionality. As new systems go on-line, data must still be exchanged between all the criminal justice agencies (e.g., outstanding arrest warrants, warnings about former prisoners if they are picked up in an arrest after their incarceration, domestic violence information, etc.). If this data is not exchanged properly, the lives of public safety personnel and the general public could be endangered. An interagency project team has developed a detailed design and business process analysis for an Integrated Justice Information System (IJIS) that will ensure that criminal justice agencies can accomplish their individual mission goals, while still exchanging data that is vital to the public's safety.

FISCAL NOTE

Defer current revenue of \$345,000 in FY12 to FY13 for fiscal capacity.

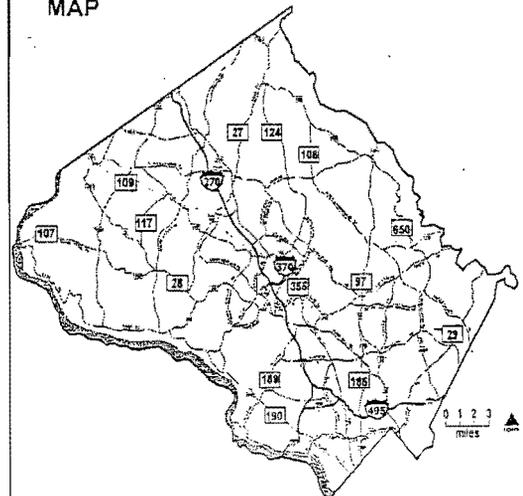
APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY02	(\$000)
First Cost Estimate		
Current Scope	FY11	15,667
Last FY's Cost Estimate		15,667
Appropriation Request	FY12	1,955
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		13,367
Expenditures / Encumbrances		11,428
Unencumbered Balance		1,939
Partial Closeout Thru	FY09	0
New Partial Closeout	FY10	0
Total Partial Closeout		0

COORDINATION

Department of Technology Services
Criminal Justice Coordinating Commission
and member agencies
Office of Management and Budget
Office of Intergovernmental Relations
State of Maryland
United States Department of Justice
Public Safety Communications Systems
project team

MAP





DEPARTMENT OF TECHNOLOGY SERVICES

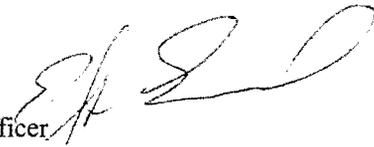
Isiah Leggett
County Executive

E. Steven Emanuel
Chief Information Officer

MEMORANDUM

March 2, 2011

TO: Dr. Costis Torgas, Council IT Advisor

FROM: E. Steven Emanuel, Chief Information Officer 

SUBJECT: Integrated Justice Information System – Responses to Analyst Questions

Pursuant to the discussion on Wednesday, February 23rd and your email of Thursday, February 24th with specific questions for the upcoming Government Operations Committee meeting on Monday, March 7, 2011, the Executive Branch is pleased to provide the responses to the questions to be included in the packet and discussed at the session.

The responses, included in the attachment provided, have been developed by the members and subject matter experts participating in the Integrated Justice Information System (IJIS) effort. Based on the orientation of the questions, we are responding in the form of a brief, high level overview presentation on the IJIS program. Staff will be present at the session to answer any additional questions about the presentation or project.

If there are any additional questions or clarification required, please don't hesitate to ask.

Cc: Thomas Manger, Chief of Police
John McCarthy, State Attorney
Darren Popkin, Sherriff
Arthur Wallenstein, Director, Dept of Corrections
IJIS Workgroup Members

Attachments

Integrated Justice Information System (IJIS)

GO Briefing
March 7, 2011

Overview

Project Mission

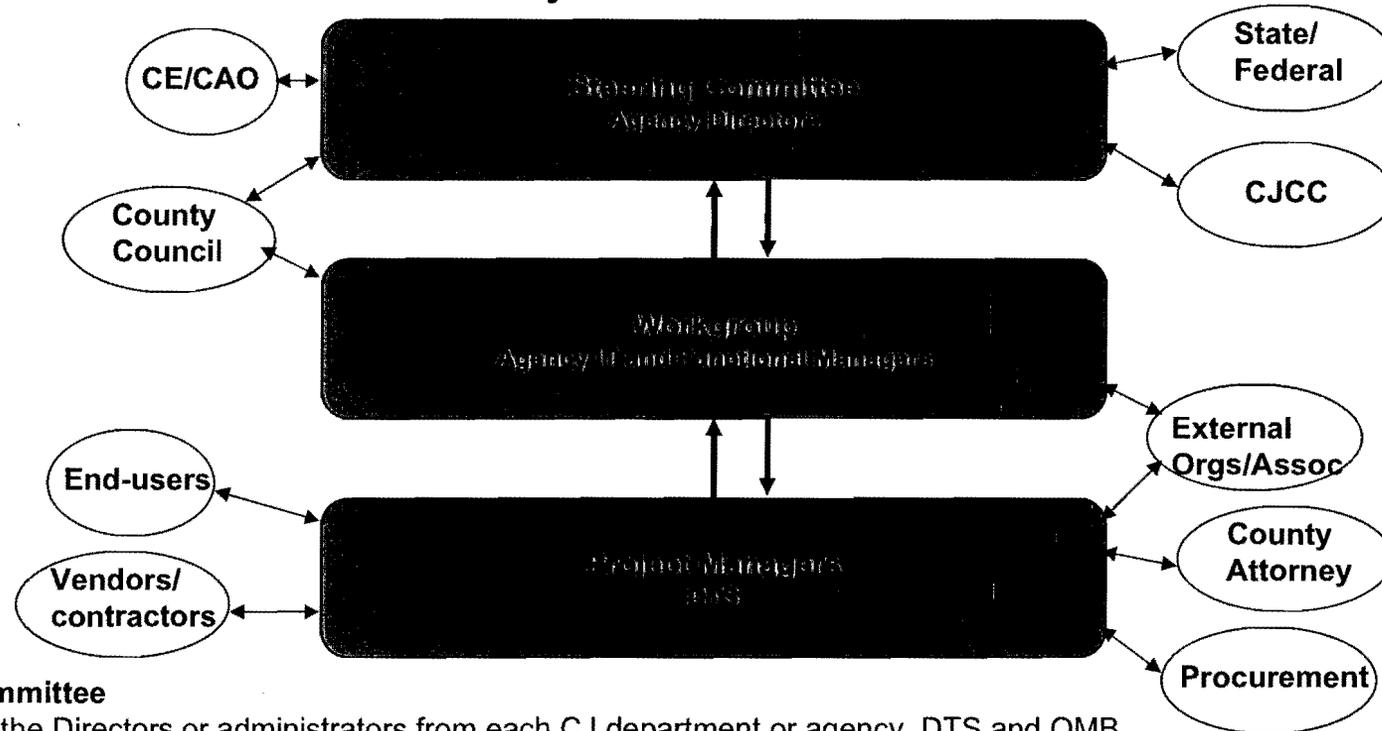
Integrated Justice Information System (IJIS) allows for electronic access and sharing of law enforcement and criminal justice data at various key decision points throughout the County's justice system processes. IJIS uses standard web-based technologies to provide a single user entry point to link together mission-critical information from various systems.

History of IJIS

In 2004 the Montgomery County Criminal Justice agencies embarked upon major business process changes to address:

- Introduction of open and flexible information technology systems to meet agency's records management needs
- Ceasing the design of systems around the needs of each organization
- Consolidating system integration and data sharing under a single IJIS umbrella
- Creating an enterprise based objective to allow agencies to coordinate and share information regardless of their distributed applications

Tiered Governance Structure and Primary Points of Contact



Steering Committee

- Made up of the Directors or administrators from each CJ department or agency, DTS and OMB
- Each member is working toward a system or has a need to share the criminal justice data
- Responsible for providing guidance on overall strategic direction for the Program and making major decisions regarding budget requests, scheduling, and relations with other state and local governments

Work Group

- Made up of stakeholders from each CJ department or agency, DTS and OMB
- Responsible for providing guidance on overall tactical direction for the program, defining program needs, researching market options, and collaborating on project planning details.

Project Managers

- Assigned for the IJIS Core and each component of the IJIS program.
- Responsible for directing the day-to-day tasks, schedules, resources and costs for their IJIS project.

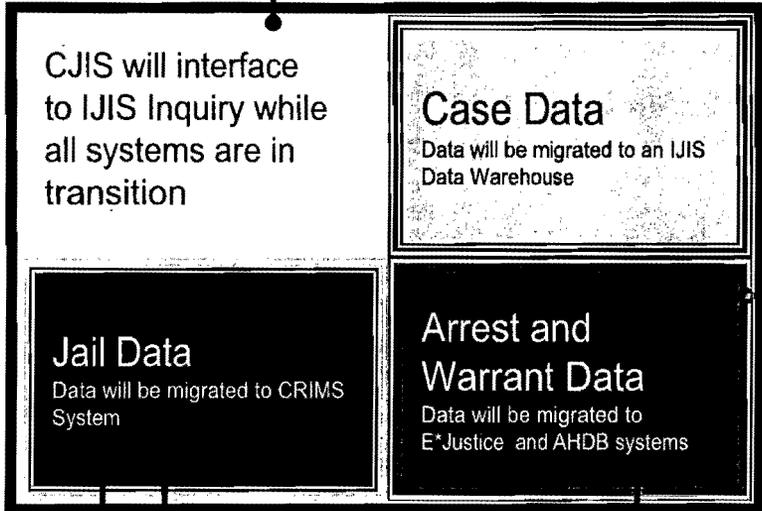
3/7/2011

IJIS GO Council Briefing

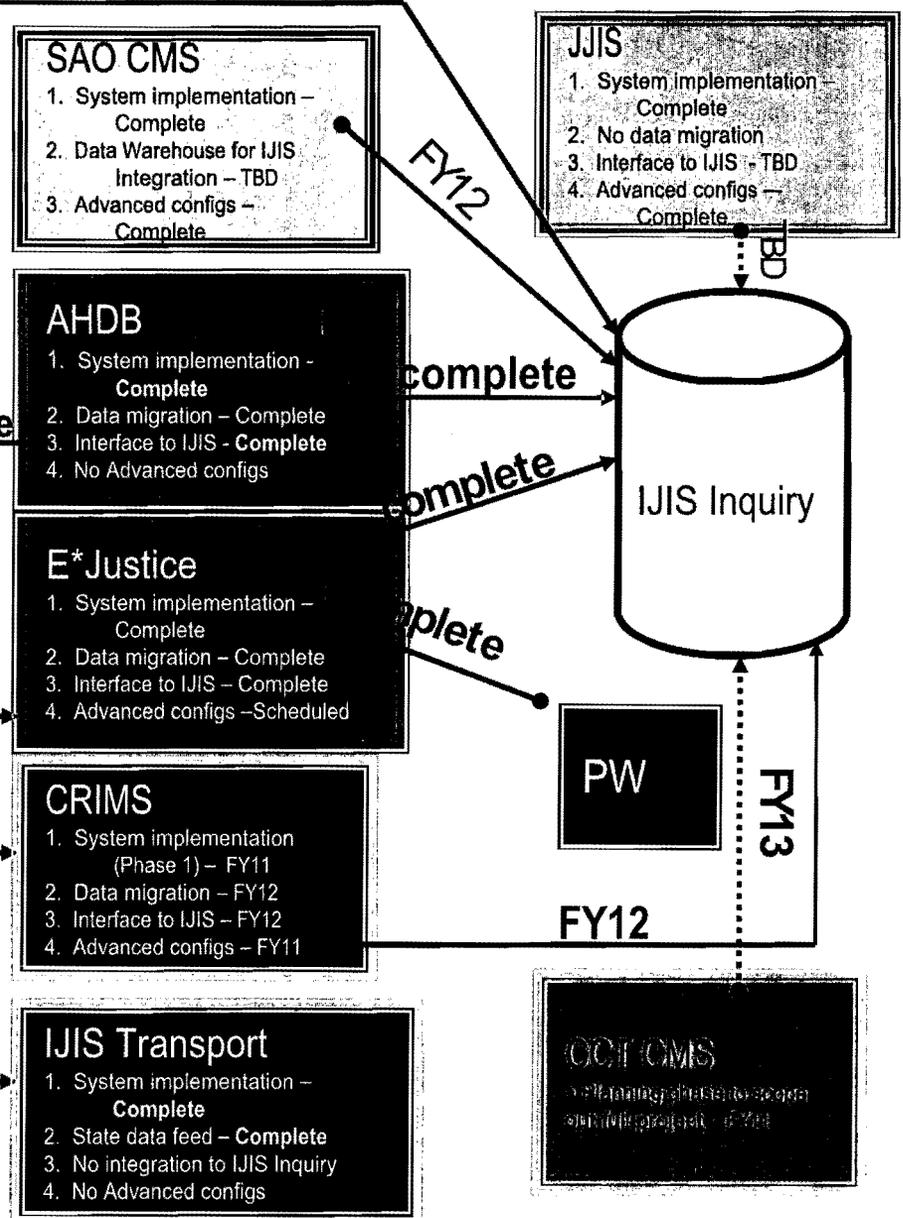
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IJIS Systems Overview



Data Migration Activities



CJIS Phase-Out costs savings – No maintenance costs exists due to age of system. Costs primarily associated with resources needed to provide operational and report writing support

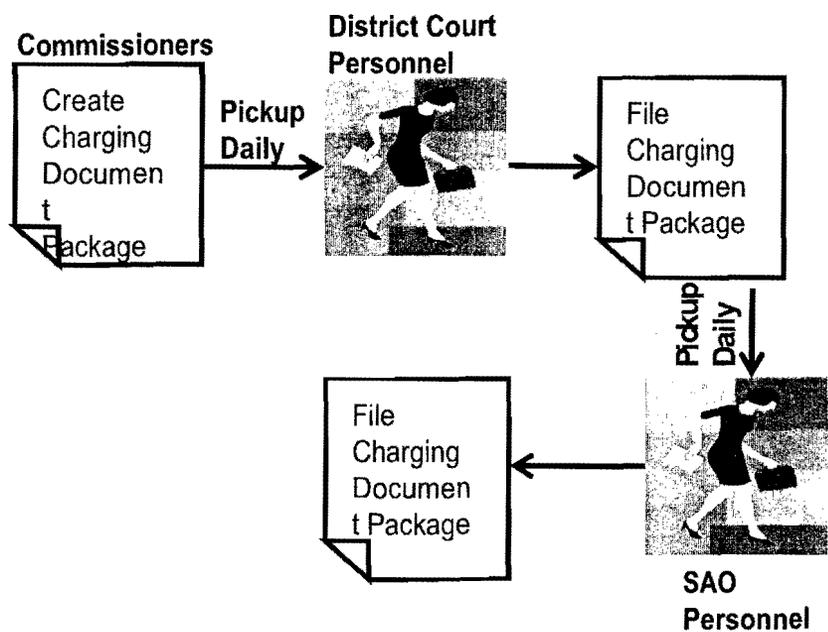
CURRENT CJIS SYSTEM

FUTURE IJIS SYSTEM (w/ Dates to Completion)

(5)

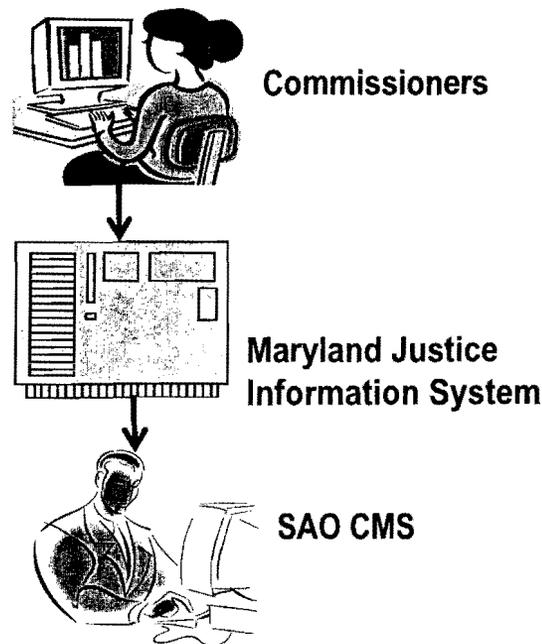
State's Attorney's Office Case Management System (SAO CMS) is LIVE

BEFORE



- Fully paper-based process
- Same information typed many times – prone to human error

AFTER



- Fully automated – daily State case feed – minimal typing
- Case changes provided automatically
- Defendant search and reporting enhanced
- New data sharing capability with other CJ depts.

\$1.95M Request Rationale

- **New System Implementations** 64%
 - Circuit Court Case Management System
 - State's Attorney's eDiscovery System
 - DOCR Food Services System

- **Contractors/Staff** 26%
 - Use of highly-skilled contractors providing cost avoidance of approx. \$500K annually

- **CJIS Data and Reports Migration** 10%
 - Criminal Justice Data must be moved and existing and new reports maintained to complete CJIS retirement

Probable 2013 Executive Appropriation Requests

Future Phase Considerations

- eDiscovery solution
- SAO Juvenile Module
- DOCR Time Scheduling System
- IJIS Inquiry Solution Upgrade
- PSS Interconnectivity