

Worksession

MEMORANDUM

March 22, 2012

TO: Government Operations and Fiscal Policy Committee

FROM: Dr. Costis Toregas, Council IT Adviser

SUBJECT: Interagency Technology Policy and Coordination Committee (ITPCC) work plan

ITPCC Principals

Dr. Joshua P. Starr, ITPCC Chair and Superintendent, MCPS
Tim Firestine, CAO, Montgomery County Government
Dr. DeRionne P. Pollard, President, Montgomery College
Francoise Carrier, Chair, M-NCPPC
Jerry Johnson, General Manager, WSSC
Stacy Spann, Executive Director, HOC
Steve Farber, Council Staff Director

Summary of Staff Recommendations

1. Accept the letter dated March 22, 2012 from ITPCC Chair Dr. Joshua P. Starr, updating the Committee on the ITPCC work effort and challenges in FY12.
2. Request that the ITPCC identify technology projects in the FY13 Operating Budget that require or could be assisted by collaborative action, and submit them to the Committee for joint consideration and funding before final agency and departmental decisions are made. The community calendar spanning all six agencies is one such project that does not appear to be progressing after the positive review made by the GO Committee in the winter of FY12.
3. Request that the ITPCC and the Executive provide a suggested explicit response and a budget mechanism that recognizes the "Red" and "Yellow" priority Major IT Systems now in existence totaling \$242m over the next six years, and incorporate needed actions in an approach that manages the commensurate risk associated with not fulfilling them. This request was also made during the FY12 budget process, but no response has been forthcoming from the ITPCC or from the Executive.
4. Schedule an additional ITPCC worksession in early summer to review and approve the FY13 ITPCC work program, as requested by Dr. Starr.

Background

The Chair of the Interagency Technology Policy and Coordination Committee (ITPCC), Dr. Joshua P. Starr, has provided the Committee Chair with an overview of ITPCC's accomplishments in FY12 and several ideas that may contribute to a work program for FY13. A letter summarizing this important work is on © 1-7, while a Program and Budget overview are included on © 8-40.

Staff suggests that the Committee review the letter, identify desired work elements for FY13 that can help the Committee carry out its work in the IT arena across all agencies, and schedule an additional discussion with the ITPCC principals in June 2012, when final recommendations can be made regarding ITPCC's work program. The current budget impact for the ITPCC FY13 work plan is minimal, as the ITPCC recommended budget is \$4,250 for miscellaneous expenses; Council staff expect to recommend its approval during the FY13 operating budget discussions on April 16, 2012. If significant additional resources are found to be required to carry out this work plan, they can be handled through a supplemental appropriation request at that time, possibly through the currently dormant Interagency Technology Fund (ITF).

At the policy level represented by the ITPCC principals, there are four possible directions that can be pursued:

1. Initiate budget reviews and approvals for new technology projects that span multiple agencies through the GO Committee and provide funding and support mechanisms that organize resources and administrative coordination through ITPCC. An example of such a collaborative approach is FiberNet, a broadband infrastructure project that is funded through the MCG budget, directed by a multi-agency group within the ITPCC, and yet impacts and is used by all six agencies. The Committee asked the CIO Subcommittee to consider such interagency projects in its last meeting, but no recommendations have been presented so far.
2. The Major IT Systems profile maintained by ITPCC currently shows a total of \$242 million needed to fix systems at risk over the next six years. This number is simply too large, and the priority code (Red or Yellow) too high to ignore again. There must be a coordinated approach by ITPCC and a budget strategy suggested by the Executive branch that makes an effort to reduce this number over time. The ITPCC leadership should consider ways to do this and promulgate a solution.
3. There have been several discussions between the technology leadership of the six ITPCC member agencies and the Committee over the use of technology to promote collaboration and a unifying focus on the citizen rather than on individual agencies. The last discussion on this topic revolved around the use of Cloud technology and the concept of a community calendar that would present activities of all six agencies to the residents, visitors, and businesses of Montgomery County in a unified manner. It is not apparent that such a project is being realistically considered by ITPCC. If the Committee believes in the desirability of the idea, the workplan review is an excellent opportunity to explore ways to move this agenda (and other similar, cross-cutting projects) forward.
4. The Interagency Technology Fund (ITF) is a dormant fund that was established by Council action more than 10 years ago to provide an interagency funding vehicle that can support projects that span more than one budget review process and cognizant policy decision makers. The ITF can stimulate new ideas from all six agencies and be seen as an incentive for cross-agency collaboration in the IT arena. As resources permit, the Committee should consider restoring this important Fund and ensuring its broadest possible use for sponsoring interagency projects. The ITPCC CIO Subcommittee was asked to provide interagency project ideas worthy of funding, and such ideas could provide the stimulus for replenishing and re-energizing the ITF.



MONTGOMERY COUNTY PUBLIC SCHOOLS

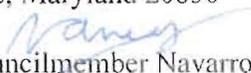
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MARYLAND

March 22, 2012



The Honorable Nancy Navarro, Chair
Government Operations and Fiscal Policy Committee
Montgomery County Council
Stella B. Werner Council Office Building
100 Maryland Avenue, 6th Floor
Rockville, Maryland 20850


Dear Councilmember Navarro:

The Interagency Technology Policy and Coordination Committee (ITPCC) is pleased to provide the following updates regarding the activities of the Fiscal Year (FY) 2012 work program.

FiberNet

On September 1, 2010, the state of Maryland received an *American Recovery and Reinvestment Act of 2009* (ARRA) grant in the amount of \$158.4 million. Of this amount, \$115.2 million was targeted for broadband connectivity projects within the state. Representing the combined interests and grant-winning efforts of Maryland's central counties, Howard County was made a sub-grantee to the state in the amount of \$72.0 million. As the grant administrator, Howard County has taken the project management lead in representing nine participating central Maryland local government entities. Collectively, this effort is referred to as the Inter-County Broadband Network (ICBN) Project. Montgomery County is a participant and a major beneficiary.

The ARRA grant benefits Montgomery County with funds to provide fiber connections to 108 new sites valued at an estimated \$16.8 million. This translates into the construction of approximately 140 miles of new high-capacity fiber-optic infrastructure, the connecting of the remaining schools in Montgomery County Public Schools (MCPS), and the connecting of 21 Housing Opportunity Commission (HOC) sites. A recent addition to the project is the inclusion of fiber connections to all Montgomery College sites.

Montgomery County will not receive grant monies directly. Rather, Howard County has programmed \$14 million for construction on the Montgomery County FiberNet, and Montgomery County has a matching requirement of \$2.8 million. The county's match comprises a cash match of \$1.6 million and an in-kind match of \$1.2 million. All ARRA funded sites must be completed by August 31, 2013. An additional 60 non-ARRA-funded sites currently are planned in FY 2014–2018 for the FiberNet Project once ARRA construction is completed. At the conclusion of FY 2018, 510 sites currently are estimated for FiberNet connectivity.

Office of the Superintendent of Schools

850 Hungerford Drive, Room 122 ♦ Rockville, Maryland 20850 ♦ 301-279-3381

ARRA activities for FY 2012 have progressed from intensive utility make-ready projects and route engineering aspects to an aggressive construction phase that currently is under way. By the end of March 2012, an estimated 25 miles of construction will be completed. Approximately 10.8 miles of construction must be completed each month to remain on schedule. The project is on schedule and on budget and is expected to be successfully completed.

Several areas will require additional focus in FY 2013. Increasing the size of the FiberNet network entails the need for sufficient resources to manage and maintain it over the long-term. The Information Technology (IT) Advisory Group identified and discussed the need to restore Network Operating Center (NOC) capabilities sufficient to provide the around-the-clock monitoring and reliability that will be required by network users. Resources are requested in the FY 2013–2018 FiberNet Project to determine requirements that must be met for the agencies, evaluate alternative methods for provisioning NOC capability, select a solution that will meet agency requirements, and request the resources to meet the needs. Additional staff resources are needed to support and operate the network and are requested beginning in FY 2013. Agency Memorandum of Understanding and Service Level Agreements will need to be updated and rewritten to reflect the post-ARRA FiberNet network. Core network component replacements and upgrades are inevitable for FiberNet, and the next major core upgrade is expected to be required in 2016–2017. ITPCC encourages the County Council and the Office of Management and Budget (OMB) to implement an appropriate mechanism to reserve and provide funds for future core upgrades and replacement. The cable franchise agreement with Comcast will be renegotiated in FY 2013 with implications for funding to support the FiberNet Project in future years. The ARRA grant requirements for Montgomery County (after the end of the project) will need to be determined and incorporated into ongoing operations. Agencies will need to turn their focus from infrastructure buildout to leveraging this technology for the highest and best uses of this resource.

FiberNet is the critical infrastructure that underpins emergency communications countywide; provides the reliable and high-speed connectivity required by nearly all of our voice, data, and video communications within government; and enables efficient citizen and business interactions with government services and information resources. FiberNet is built to meet the demands of the future with the capability of making governmental IT services and communications easier to implement, easier to secure, and easier to fund at lower costs than available in the commercial markets. It is county-owned, controlled, managed, and operated. It is focused on meeting our agency requirements in the most efficient manner. It is governed within the interagency governance framework adopted by ITPCC and reviewed for opportunities for enhancements and improvements enabled by technology innovations. It is our network and represents one of the most successful interagency technology efforts of recent years.

IT Asset Management

The ITPCC *Policy Guidelines for Replacement of PC System* (December 2010) provided updated interagency guidelines for personal computer (PC) replacements and identified the risks and

consequences emerging from deferred replacements over the last several fiscal years.¹ This is a critical funding and program issue since Microsoft support of the Windows XP operating system and the Office 2003 productivity suite is scheduled to end on April 8, 2014. There are approximately 70,000 PCs deployed in the ITPCC agencies of Montgomery County with many operating beyond recommended useful lifecycles. The status of replacements in the agencies will be updated and available for use in the upcoming FY 2014 budget cycle.

The information provided by each agency for the Council in the ITPCC Program and Budget Overview materials contains a detailed look into accomplishments, issues, strategic priorities, the health of major IT systems, and risks and consequences associated with major IT systems. Many systems have not been sufficiently funded for years and present increasing risks to agencies. In November 2009, the county's automated traffic control system, which was long overdue for replacement, experienced a major failure. The failure resulted in major countywide traffic congestion for two days and provided insight into consequences and disruption to public services that may result from system failures caused by overdue replacement or key upgrades for major technology infrastructure.

The following table summarizes the current agency estimates of the fiscal resources required for replacements and upgrades for major IT systems as reported in February 2012.

SUMMARY Multiyear Cost Projections by Risk Categories FYs 2013–2018

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total 6-Yr.	Repl.-Cost
RED	50,194,000	54,514,000	26,736,000	9,218,000	5,498,000	4,950,000	151,110,000	287,108,222
YELLOW	12,858,272	12,927,674	26,206,739	14,064,766	14,494,846	10,018,945	90,571,242	141,031,696
GREEN	13,255,973	16,194,473	14,986,948	14,337,006	14,259,058	14,093,312	87,126,770	202,810,098
TOTAL	76,308,245	83,636,147	67,929,687	37,619,772	34,251,904	29,062,257	328,808,012	630,950,016

Risk Key

Red = Obsolete or vulnerable critical systems/applications in immediate risk of failure

Yellow = Aging or vulnerable critical systems likely to need major upgrade or replacement in the next three to six years

Green = Stable systems expected to require only routine maintenance or minor upgrade over the next three to six years

The estimated value of the installed county investment for major IT systems currently is more than \$600 million. Approximately 46 percent or \$287.1 million of this inventory is in need of immediate replacement or major upgrade. Additional systems that currently are monitored closely or are in preliminary planning for replacement during the six-year planning period total an estimated \$141 million. The total estimated replacement cost for systems at risk across the ITPCC agencies is more than \$428 million. The estimated six-year cost for systems at risk is \$241.7 million. Details for specific systems within agencies may be found in the detailed budget materials provided by each agency.

¹ Policy Guidelines for the Replacement of PC Systems, ITPCC formally adopted on February 7, 2011.

Cross-Agency Resource Sharing (CARS) Initiative in FY 2012

The ITPCC continues to support the Cross-Agency Resource Sharing Initiative (CARS) that was established on June 30, 2010. In December 2010, the CARS IT Work Group was tasked to examine several projects—Mobile Data/Voice Communication Contract Consolidation (MCPS as project lead); IT Help Desk Services Consolidation (Montgomery College as lead); and Joint Use and Data Center Consolidation (Montgomery County Government Technology Services as lead). The Geographic Information Systems (GIS) Strategic Plan (Maryland-National Capital Park and Planning Commission as lead) was funded by the Interagency Technology Fund (ITF) and is coordinated within that effort.

The IT Help Desk Services Consolidation and Mobile Data/Voice Communications Contract Consolidation projects were completed and final reports issued to the Chief Information Officer (CIO) Subcommittee and to the CARS Executive Committee in November 2011. Neither project revealed significant cost-savings through consolidation.

The IT Help Desk Work Group did not identify opportunities for substantial cost-savings or cost reductions in the short-term due to several factors that included the following: 1) multiple business verticals—each agency has a distinct focus and serves a unique constituency; 2) existing outsourced contracts—three of the agencies have existing outsourced contracts that do not expire for two to three years; 3) budget allocation—there is currently no budget allocated to design and implement a consolidated Help Desk—consultant resources will be required to conduct a feasibility study and design, and to implement a consolidated model; and 4) agencies currently have diverse enterprise application portfolios and infrastructures, making it difficult to achieve cross-agency synergy. The CIO Subcommittee received the report and concluded that pursuit of a consolidated IT Help Desk is not likely to result in cost-savings and could result in degraded levels of service.

The Mobile Data/Voice Communications Contract Consolidation Work Group did not find that contract consolidation across agencies will produce savings. They concluded the following: 1) all agencies already are operating under common contracts with the three main mobile device vendors—there is no need to pursue consolidating contracts since the pricing is similar; 2) there may be some efficiencies found within agencies to consolidate accounts per provider within each agency; 3) centralized warehousing of mobile devices was discussed; however, given that end users are located throughout the county, one location was not feasible for providing satisfactory customer service; and 4) there likely would be facility costs involved in centrally warehousing and servicing devices, in addition to salary costs for two additional staff since no staff can be cut from any agency. The CIO Subcommittee was briefed and concurred with the findings. Agencies agreed to seek efficiencies through internal administrative review and process change where possible.

The CARS Joint Use/Data Center Consolidation Project still is under way. Last fall, a Business Impact Analysis (BIA) for the Executive Branch was initiated by the Office of Emergency

Management and Homeland Security (OEMHS) using existing contract resources through a partnership with the University of Maryland (UMD) and Towson University, with the intent to develop a baseline for use by all agencies.

The Executive Branch BIA project is still ongoing. Initial findings and a draft report are being reviewed. A final report and recommendations are expected in the near future. The final report and recommendations will be provided to the ITPCC CIO Subcommittee for its work in evaluating the feasibility and opportunities of joint use and data center consolidations.

ITF

On March 11, 2008, the County Council unanimously approved creation of the ITF in Resolution No. 16-475. In November 2008, OMB advised that new project submissions would not be considered due to declining revenues. In FY 2010, the formal designation of funding reserves for the ITF program was removed and the funds redirected to meet other county priorities. The ITPCC and the CIO Subcommittee remain committed to the interagency objectives and outcomes desired from the ITF, but funding will be required for any new projects. The two remaining ITF projects will be closed out at the end of FY 2012 and are transitioning to an ongoing operational status.

The Continuity of Operations Plan (COOP) Automation Project now is integrated with Emergency Management operations. OEMHS successfully developed a COOP program management tool that now is integrated with the county's Web Emergency Operations Center (WebEOC) management system. This system is a Web-enabled crisis information management system widely used by various emergency response and management personnel across the country. The WebEOC tool automates the COOP planning, response, and recovery effort and is critical to the overall success of the county's effort to provide mission essential functions and services during times of disaster and extreme emergencies for the residents of Montgomery County. Over the past 11 months, 60 Montgomery County government organizations have started and/or completed their COOP in the new system. By the end of 2012, at least 100 continuity plans are expected to be completed.

Since May 2011, OEMHS has conducted a number of workshops where COOP program managers received training on the use of the COOP system and were given the opportunity to load their COOP information into WebEOC. A COOP control interface has been customized within WebEOC that allows the Emergency Management Group in the EOC to monitor and support all COOP activations and alternate facilities in the event an organization has to execute its continuity plan. With this COOP control interface, departments also have the capability to monitor the emergency event and receive updates for general announcements and significant events that may impact their COOP efforts. A partitioned, private library has been set up in WebEOC that allows all departments to maintain electronic copies of their COOP and other documents that may be needed to execute their plan. The COOP for County Government is now operational and will continue to expand as organizations complete their plans. It is supported by

OEMHS through staff consultations, monthly WebEOC drills, COOP workshops, WebEOC user classes, and other training classes.

The WebEOC is an Urban Area Security Initiative grant-funded system that is used by the National Capital Region and the Maryland Emergency Management Agency. Regional WebEOC administrators and OEMHS are working collaboratively to support ongoing development efforts. This support is funded by the WebEOC grant and is expected to run indefinitely.

The COOP solution developed in Montgomery County has been requested by and shared with multiple organizations around the United States to include the Transportation Security Administration, Harvard University, the Marine Corps at Camp Lejeune, and multiple county and state emergency management organizations in the states of California, Massachusetts, North Carolina, Oklahoma, Oregon, Texas, Virginia, and Washington.

The GIS Strategic Plan Project now is complete and is transitioning to an ongoing program status. The GIS Policy Group was designated formally on June 20, 2011, by the ITPCC. The first meeting of the group was held in September 2011 and provided an overview and orientation for new members. The most recent meeting was held on February 6, 2012, and several priorities were discussed at this meeting. A detailed survey to capture and document current GIS use was reviewed and will be deployed in 2012. Typical of many start-up efforts, initial progress has been slow and efforts to distribute a more comprehensive survey of agency GIS use still are under way. The policy group identified the need to select and prioritize interagency GIS-based initiatives that would yield the highest return on effort for the county. The goal is to task the Technical Advisory Committee with developing and deploying one of these initiatives as an interagency GIS demonstration project in FY 2013.

Summary

Buildout of FiberNet and full utilization of the ARRA funds will remain as the highest priority for FY 2013. Post-ARRA operational requirements will be identified for FiberNet and solutions will be recommended. Supporting the Cable Office renegotiation of the Comcast agreement will be important because the Cable Fund is currently the funding source for FiberNet. The OEMHS COOP Program will continue to evolve and integrate with requirements for emergency management across all agencies. The ITPCC provides a ready resource to assist with this program implementation. The interagency GIS program implementation will continue. PC replacement will continue and high-risk systems will be replaced with consideration of the impending April 2014 deadline replacement of Windows XP and Office 2003 systems. Efforts will continue to identify risks and consequences in the major IT systems inventory and seek resources to avoid major system failures.

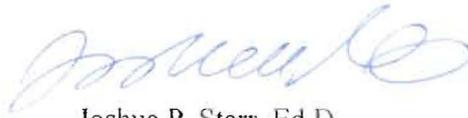
The ITPCC will continue to look for opportunities for interagency cooperation and efficient service delivery and will defer adoption of the annual work plan until after final budget action by

the County Council when the full impacts of the FY 2013 budget decisions are known. The ability to perform meaningful work on new initiatives must be considered in the context of the available agency resources at that time.

The imperative for seeking areas of common interagency cooperation and resource sharing is a well-known and ongoing focus for the ITPCC agencies. Agencies must act cooperatively and deliberately, utilizing the proper analysis and problem-solving methods that are well-known and practiced within the IT community. We must avoid wasting resources—staff, time, and money—and the distractions of pursuing unproductive innovations and “the whitepapers of the day.” These often promise easy implementation and benefits that cannot be realized in practice. As we emerge from the worst economic environment since the Great Depression, ITPCC looks forward to future collaborative efforts.

The members of the ITPCC thank the County Council for its continued support and welcome its input.

Sincerely,



Joshua P. Starr, Ed.D.
Superintendent of Schools
Chair, ITPCC

JPS:csa

Copy to:

Ms. Ervin
Mr. Riemer
Members of the Board of Education
Mr. Bowers
Dr. Lacey
Mr. Collette
ITPCC Principals
ITPCC CIOs

Interagency Technology Policy and Coordination Committee (ITPCC)

**Interagency Information Technology
Program and Budget Overview
March 26, 2012**

**Dr. Joshua P. Starr, Chair, ITPCC
Sherwin Collette, Chair, CIO Subcommittee**

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 - Maryland National Capital Parks and Planning Commission
 - Montgomery College
 - Washington Suburban Sanitary Commission
 - Housing Opportunities Commission

ITPCC Principals and CIO Subcommittee Members

<u>Agency</u>	<u>Principal</u>	<u>CIO/CTO/Other</u>
Montgomery College	Dr. DeRionne P. Pollard	Dr. Mike Russell
Montgomery County Public Schools	Dr. Joshua P. Starr	Sherwin Collette
Montgomery County Government	Timothy Firestine	Dieter Klinger
Maryland National Capital Parks and Planning Commission	Francoise Carrier	Dr. Henry Mobayeni
Washington Suburban Sanitary Commission	Jerry Johnson	Mujib Lodhi
Housing Opportunities Commission	Stacy Spann	Scott Ewart
County Council	Steve Farber	Dr. Costis Toregas
ITPCC Manager	---	Gary Thomas

ITPCC Challenges

Collaboration, Coordination, Cross Agency Resource Sharing

- Identifying solutions that result in non-disruptive yet efficient improvements that support very diverse agency missions

Communications Infrastructure

- FiberNet construction—utilizing ARRA Grant funds; Information where and when needed; adding 108 sites by August 2013
- Broadband Technologies---plan for next generation requirements
- Wireless and Mobile Computing Services
- Cloud Computing and Virtualization innovations

IT Asset Management, Funding, and Resource Allocation

- Infrastructure upgrades and maintenance—managing risks and maintaining investments in IT infrastructure valued at \$600+ million
- Meeting business requirements with reduced resources
- Long Term Strategies—seeking efficiency, savings, cost avoidance, service enhancements

ITPCC Challenges

IT Security

- Disaster Recovery and Continuity of Operations (COOP)
- Responding to Dynamic Threat Environments
- Security Awareness and Prevention
- Compliance

Web Based Services and Emerging Technologies

- New technology trends—Mobile and Cloud Computing
- Increasing Customer Demands
- New Applications—enhanced Public/Employee Resources
- Open Government Initiatives

Legal and Regulatory Issues

- Privacy Protection
- Preventing Liability for Unauthorized Access and Disclosures of Information
- Accessibility Requirements
- HIPPA, PCI-Payment Card Industry Compliance, Electronically Stored Information (ESI)

ITPCC Work Program Priorities

- **FiberNet**
 - Construct fiber to 108 new sites by Aug. 2013 using federal ARRA Grant
 - Obtain adequate post-ARRA resources for long-term FiberNet operations support
 - Plan and Provision Core Equipment Upgrades
 - Add 60+ sites post-ARRA in FYs14-18
 - Seek highest and best uses of FiberNet
- **IT Asset Management**
 - Overcome Recession Impact—Replacements and Upgrades-PCs and Major IT Systems
- **Interagency Technology Fund (ITF)**
 - Support transition of COOP and GIS Policy Group to ongoing operational status
 - Restore ITF funding and initiate new projects
- **Support CARS Executive Committee**

Health of Interagency IT Systems Summary

SUMMARY Multi-year Cost Projections by Risk Categories-FYs 2013-18

	FY13	FY14	FY15	FY16	FY17	FY18	Total 6-Yr.	Repl.-Cost
RED	50,194,000	54,514,000	26,736,000	9,218,000	5,498,000	4,950,000	151,110,000	287,108,222
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Risk Key

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Green= Stable systems expected to require only routine maintenance or minor upgrade over the next 3-6 year

Conclusion

- An organization that fails to maintain information technology infrastructure and keep pace with innovation will not be able to achieve business objectives and meet customer requirements over the long term.

Montgomery County Public Schools FY 2012 Highlighted Accomplishments

- ❑ **myMCPS Parent Portal:** Created access for parents within the myMCPS learning community so that they can view student schedules, grades, course assignments, announcements, and sports and club activities.
- ❑ **myMCPS Student Portal:** Developed a K-12 student portal within the myMCPS learning community so that students can view key information about courses, assignments, announcements, their grades, attendance, and test scores. Students will have the ability to collaborate with one another within their class spaces, sharing documents and contributing to discussion boards.
- ❑ **Elementary Articulation Application:** Deployed an articulation solution for K-5 teachers so that they can easily access data about students, enter comments and instructional information, and group students for homerooms and courses for the next school year.
- ❑ **Technology Modernization:** Updated the technology infrastructure in 62 schools, three alternative sites, and one special education school to support engaging teaching and learning—including refurbishing and replacing 10,022 workstations

Montgomery County Public Schools FY 2012 Themes

- ❑ Developing staff capacity for integrating technology with content and pedagogy
- ❑ Creating technology enriched 21st century learning spaces
- ❑ Modernizing critical human capital and financial management systems
- ❑ Providing comprehensive knowledge management and analytical support solutions
- ❑ Ensuring a safe and secure computing enterprise
- ❑ Enabling self-service solutions that save staff time
- ❑ Supporting operational effectiveness that enhances business operations

Montgomery County Public Schools FY 2012 Budget Perspective

- ❑ Develop effective tools to support use of technology for teaching and learning by:
 - ❑ Incorporating 21st century skills through the use of technology
 - ❑ Providing greater access to digital curriculum content and instructional resources that meet the needs of all students
- ❑ Build capacity for staff members to share and incorporate best practices using technology
- ❑ Commit to equitable distribution of resources throughout our schools to allow greater access to technology to all students
- ❑ Facilitate dynamic online communities that allow increased community building, collaboration and sharing of knowledge
- ❑ Continue to create enterprise solutions to strengthen business systems

Montgomery County Public Schools FY 2012 Risks and Consequences: Major IT Systems

Major IT Systems	Replacement Cost	Impact
Budget Management System	\$275,000	All staff involved in budget development and management
Facilities Management Information System	\$148,000	Capital budget and planning processes and the staff responsible for overseeing will be more inefficient
Transportation Information Mgmt System	\$2,000,000	All schools - all students requiring transportation, including students receiving special services
Scheduling System	\$1,000,000	Student access to appropriate classes and course schedules will be hampered
Handheld Devices	\$1,250,000	Provide primary reading assessment for students and enable teachers to assess and differentiate instruction for students



Accomplishments

- Provided technical go-live support and assumed operation/system administration responsibilities for: Oracle EBS Financial and HCM Module, PeopleSoft Pension, iRecruitment, iAsset, and Employee Self-Service.
- Implemented phase 1 of the Corrections and Rehabilitation Information System (CRIMS), part of ongoing Integrated Justice Information System implementation (IJIS)
- Developed the Snow Map and 17 new Web applications for County departments increasing efficiency of business processes.
- Implemented a new enterprise voicemail system, enabling County employees to respond faster and more efficiently, even when working remotely.
- Completed deployment of 4,850 mobile and portable radios for public safety, to complete the FCC required re-banding effort. The radios have the capability to work on the new planned radio infrastructure implementation.
- Restarted desktop computer replacements and began roll-out of the Microsoft Windows 7 operating system.
- Initiated a major re-design of the County website, including adding support for mobile web devices.
- Expanded the Document Management System, adding Records Management to manage archived records.
- Implemented a new video archiving and streaming system, which enables multi-year archiving of CCM programming.



Accomplishments

- Provided significant support for American Recovery and Reinvestment Act broadband grant application. Valued at \$14 million, it will expand FiberNet to 80 elementary schools, HOC sites, and Montgomery College.
- Completed upgrade of County's remote access VPN solution, providing improved client support, support for Windows 7 and common handheld mobile devices.
- Implemented the mandatory user enrollment in Password self-service solution to allow County employees to change passwords themselves, any time from anywhere.
- Integrated the County's Image and Document Management System with the ERP Accounts Payable and Journal Entry / General Ledger voucher functions.
- Developed a solution and began move of voice circuits from leased lines to FiberNet that will save hundreds of thousands of dollars annually.
- Provided project management, development, and application engineering, systems engineering and quality assurance support. Delivering enhanced functionality resulting in increased productivity and outcomes.
- Initiated Open Government Data project, making detailed County data available on-line by anyone.
- Initiated Mobile Computing Pilot including plans to upgrade wireless access in County government facilities.



Major IT System Costs and Business Impacts

- Tech Mod: Technology Modernization
 - Replaces FAMIS, ADPICS, HRMS, BPREP, many others
 - Estimated Full Replacement Cost: \$104.8M
 - Business Impact: Legacy systems had reached end of the useful life. New systems designed to improve accountability, responsiveness and delivery of government services.
- PSSM: Public Safety System Modernization
 - Replaces CAD, PS Radio System & Station Alerting
 - Estimated Full Replacement Cost: \$108.0M
 - Business Impact: Legacy systems reaching the end of their useful life and unable to fully meet County's operational requirements.
- IJIS: Integrated Justice Information System
 - Replaces CJIS
 - Estimated Full Replacement Cost: \$15.7M
 - Business Impact: Legacy system reached the end of useful life and unable to fully meet County's operational requirements. New systems will directly improve delivery of public safety services in the County.
- Traffic Signal Modernization
 - Estimated Full Replacement Cost: \$35.8M
 - Business Impact: Legacy system is over 30 years old and dependent on dated technology. Failure can result is significant traffic congestion and delays to residents and commuters.



Key Initiatives and new Technologies

- ERP & MC311
- Public Safety System Modernization (PSSM)
- Integrated Justice Information System (IJIS)
- Open Government Data
- Web redesign and mobile apps framework
- Workforce collaboration and mobility tools (cloud, mobile devices)
- Identity Management
- Mainframe retirement
- FiberNet expansion
- Cable Franchise renewal
- Social Media and CCM Video Enhanced Search

Highlights

IT Accomplishments FY 2012

- ProjectDox. Work flow development has been completed. On schedule to go live in June 2012 for three application types.
- GIS Strategic Plan. GIS policy committee has been formed and continues to implement its work plan.
- Virtualization. Introduced virtualization in both departments to bring efficiency while reducing hardware, energy costs, and real estate costs.
- Cloud Computing. Migrated our legacy in-house email to Microsoft's online services in both departments.
- Help Desk. In collaboration with the Montgomery County government, we outsourced IT Help Desk to L3 for effective IT services to both departments.
- SAN. Implemented SAN technology as the foundation of virtualization in the departments.
- Provide coordinated IT services in both departments through a consolidated Technology Team unit.



Strategic Directions for FY 2013

Themes

Embracing the latest technologies for improved service:

- Virtualization. Migrating legacy systems to a virtualized environment will achieve better service with lower costs.
- Desktop deployment. Utilizing latest technology will increase productivity of IT staff and reduce downtime for end users.
- Cloud computing. Expanding use of cloud computing will maximize technology investment.

Outreach:

- In the Planning Department, provide public access to view on-line submission of development plan applications.
- Use technology to improve interaction with Parks customers through the Connect With Parks website and an on-line customer service portal to report problems in the parks.
- Continually improve public access to services and information.

Strategic Directions for FY 2013

Maximizing Our Technology

- Develop web-based land-use model for monitoring and analyzing development patterns.
- Gain efficiency through CLOUD computing and server virtualization.
- Migrate legacy servers to virtualized environment to achieve efficiency and reduce costs.

Budget Perspective:

- No new hires
- Priority Spending: meet PC replacement schedule
- Priority for Continued Efficiencies
 - eliminate overtime and technical training
 - cancel/reduce support and outsourcing of IT contracts

Montgomery College FY12 Highlighted Accomplishments

- Completed deployment of a Virtual Computer Lab (VCL) facility in a Montgomery College private cloud
- Increased cloud-based computing services to support enhanced governance and decision-making processes, talent management and Service Desk/contract management
- Implemented business analytics software, upgraded data warehouse and associated reporting tools to enhance College assessment efforts
- Supported desktop and Instructional system upgrades with FY11 CIP funding
- Reorganized the Office of Information Technology into an integrated, comprehensive service support model to leverage resources centrally and to provision service and support locally at the campus level

Montgomery College FY13 Themes

- Drive innovation through reliable and consistent services that provide relative advantage to students, faculty and staff
- Enhance collaboration with University System of Maryland and Maryland Association of Community Colleges IT providers
- Enhance a culture of continuous improvement through assessment and benchmarking against peer institutions
- Ensure business systems security and continuity (five nines network uptime)
- Enable cost reductions and cost containment through business process redesign
- Leverage existing technologies to meet mission critical programs and processes

Montgomery College FY13 Budget Perspective

- Make strategic, cost efficient investments in technology
- Create an agile IT operation by developing internal skill sets that assure the ability to innovate in a dynamic and complex environment
- Analyze deployment of technology across all campuses and use governance process to identify and prioritize IT budget allocations
- Evaluate the impact of anticipated budget reductions on IT services
- Continue to evaluate contracts for cost efficiency

Montgomery College

Risk and Consequences for Major IT Systems

- Disaster recovery and business continuity pose the single largest risk to the College's IT systems. An emphasis on redundant systems is needed to ensure that the College does not experience any extended system failures that would impact the classrooms, labs or administrative operations of the College.
- Academic Student Applications (financial aid, registration and classroom instruction) are on a continuous upgrade schedule. Any reduction in the College's Operating or CIP funding will negatively impact the College's ability to maintain the current versions of these necessary software applications.
- Any further reduction in staffing levels will begin to negatively impact hours of operation and service levels in both the academic and administrative areas.

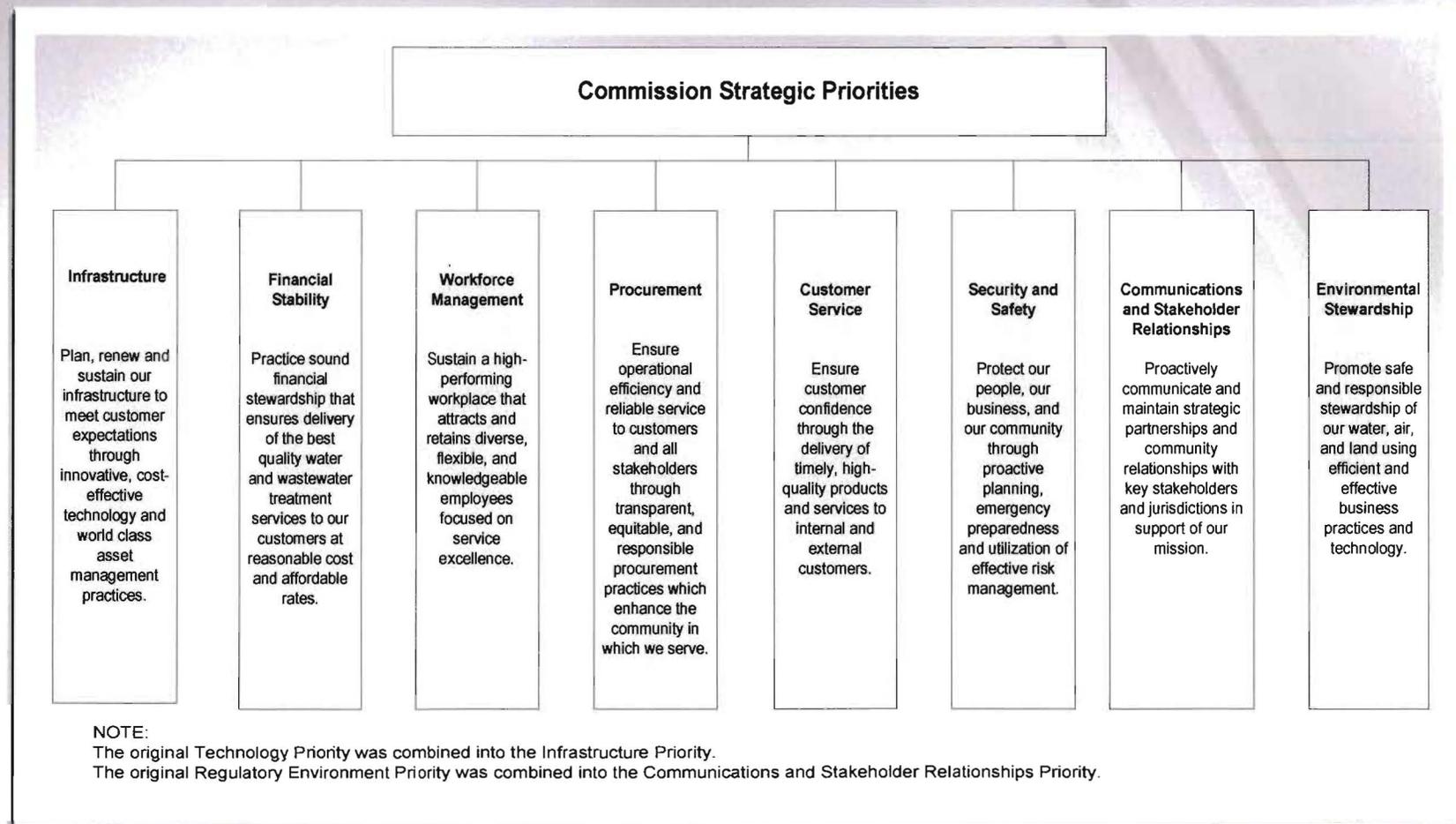


**Washington Suburban
Sanitary Commission**

Interagency Perspectives: FY13 Budget Overview

March 2012

Strategic Perspective

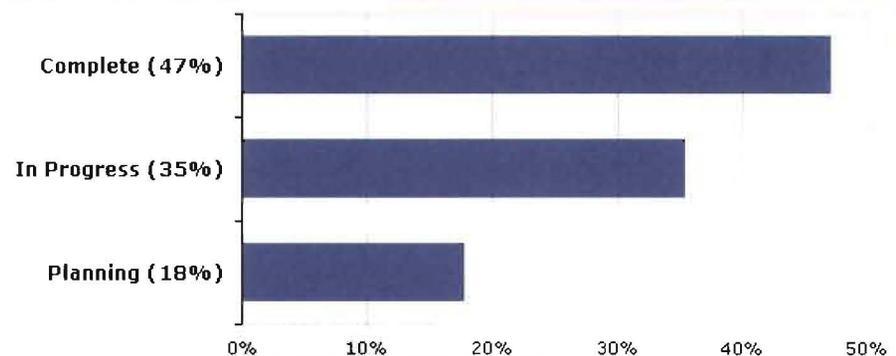


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Highlights: FY12 Accomplishments

- **Continual Improvement of Daily Operations**
 - Next Generation Phone System Rollout
 - GIS Architectural Refresh
 - Mainframe z/OS Upgrade
 - IT Service Management System Replacement
 - Windows 7 / Office 2010 Upgrade
 - Staff Hierarchy – Position Control
- **Caring for Customers**
 - ERP – Fleet Management
 - Decision Support System
 - Commissioner eBoardroom
 - GM Dashboard
 - WSSC Mobile App
- **Regulatory, Legal, and Compliance**
 - ePlan Review System
 - Cross Connection Updates Phase 2
 - SLMBE Compliance System
 - Permitting Management System
 - Same Sex Benefits
 - Microwave Radio Upgrade
 - Records Inventory, Retention Schedule & Policy

FY12 Accomplishments Status



FY13 Budget Perspective

- Permitting Management System
- Position Control (Supervisor / Staff Hierarchy)
- Master Data Management
- Total Enterprise Asset Management System (TEAMS)
- Windows 7 / Office 2010 Upgrade
- GIS Development (including Workorder Management)
- Next Generation Phone System - Remote Sites
- Microwave & Intra-site Communications
- Field Service Management
- Records Retention Schedule Implementation and Business Process Improvements
- Desktop Refresh (including Desktop Virtualization)
- Data Network Infrastructure (Hardware Refresh)
- Disaster Recovery Replication / High Availability implementation

IT Vision

Risks & Challenges

- Unsupported, outdated legacy systems
- Complex business processes
- Difficulty attracting technical talent to maintain legacy applications
- Undetected system issues and downtime
- Duplication of information across multiple systems

Consequences

- Increased maintenance and support costs
- Impact and delays to planned projects
- Quality of Service impacts due to outdated systems
- Decrease in operational efficiency and customer service delivery
- Legal impact of undetected problems



FY 2013 ITPCC Summary

Scott Ewart
Chief Information Officer
Housing Opportunities Commission



Housing Opportunities Commission Information Technology FY12 Accomplishments

- Completed document management conversion (over 725,000 documents converted)
- Launched iPad app and iPad's for Housing Choice Voucher (HCV) and Resident Services inspectors.
- Transitioned Work Order, Inventory and Public Housing inspections back to the agency Housing Enterprise System (4th quarter)
- Redesigning HOCCMC.ORG website (4th quarter)
- Upgrade HOC E-mail system to latest software version
- Upgrade entire thin client environment (CITRIX) to latest software version
- Began initial "Cloud" computer pilot program for property computer labs
- Launched property based websites to enhance leasing opportunities



Themes for FY2013

- **Continued improvement towards high availability and enhanced disaster recovery systems.**
- **Increased use of technology services to enhance customer support initiatives as well as improve productivity and efficiency.**
- **Continued replacement of older systems for more advanced systems that provide improved productivity for staff.**
- **Expand “Cloud” computing and continued evaluation of cross agency opportunities that provide cost savings for HOC.**
- **Participate more in all aspects of agency operations to ensure technology needs are addressed.**
- **Explore additional mobile opportunities within HOC operations**



Budget Perspectives for FY2013

- **Replacement of outdated equipment to ensure minimal downtime due to equipment failures**
- **Expansion of the document management system**
- **Continue HOCCMC.ORG website improvements through the use of interactive components**
- **Desktop operating system upgrades**