

Worksession

MEMORANDUM

November 27, 2013

TO: Government Operations and Fiscal Policy Committee

FROM: Dr. Costis Toregas, Council IT Adviser

SUBJECT: Semi-Annual Review – Interagency Technology Policy and Coordination Committee (ITPCC)

Expected to attend:

Jerry Johnson, WSSC General Manager and Chair, ITPCC
Mujib Lodhi, WSSC Chief Information Officer and Chair, CIO Subcommittee, ITPCC
Gary Thomas, ITPCC Staff
Members of the ITPCC and CIO Subcommittee

Staff Recommendations:

1. ITPCC provide status of Open Data policy statements in agencies other than Montgomery County Government (which already has one) in the next worksession.
2. Ask OMB and the Executive to consider requesting a supplemental appropriation to fund the Interagency web search capability project at the earliest possible time.
3. Provide a briefing of the impact of ARRA FiberNet investments on end user services in the next worksession.
4. Request that the upcoming CIP program include an explicit reference to the High Risk IT Systems report of the ITPCC and indicate a mechanism that can reduce this risk.
5. Request discussion of a series of options that would organize long-term funding vehicles for ITPCC projects (through the ITF or ITPCC NDA) and a commensurate pipeline of projects mutually agreed upon by ITPCC stakeholders in the next worksession.

Discussion

The legislation that created the ITPCC foresees semi-annual reports to the Council through the GO Committee so that progress against desired outcomes can be reviewed and new ideas regarding interagency coordination discussed. To facilitate the discussion, the FY13-14 Work Plan (on ©1-2) is used by ITPCC Chair Jerry Johnson in his summary report dated November 13, 2013 to GO Committee Chair Navarro (on © 3-9).

The Work Plan has five major elements and several sub-elements. Staff analysis of the comments provided by the ITPCC Chair is provided below (referencing section and circle number).

1.0 Expanded Access to Data and Information

1.1 Interagency Open Data Initiative ©3

There is welcome progress on this important topic that aligns well with the Open Data policy initiatives of the Council. However, there is still progress to be made on the policy front across the agencies. Montgomery County Government established a legislative mandate for open data; it is now being implemented. While other agencies are collaborating at the technical level and preparing to release one or more data sets in the open data platform, it is not clear whether the policy bodies of each agency are considering a legislative or administrative strategy to provide support for open data. Such clear direction to the agency CIOs would be helpful so that they know their initiatives are within the boundaries of their policy leaders.

Hackathons are being held throughout the community, many with the participation of several agencies. These hackathons, which encourage the general public to access and make use of the open data platform, deserve to be supported and promoted within all agencies.

To help this effort along, an inventory of actual data sets currently shared on the Open Data portal should be made available to the Committee in its next meeting, along with indications of barriers to such release and identifying the role that the Committee could play to overcome them.

1.2 Interagency Web Search ©4

This new project that has been scoped and is ready for implementation should be supported by all agencies. The notion of a one-stop search window where information from all six agencies can be made available to residents should be an obvious extension of the County's commitment to transparency and openness. The ITPCC should provide a funding strategy for GO support at the earliest possible time. Recent trends in revenues overall may signal the availability of funds to support this effort within FY14.

1.3 GIS Data Visualization Project ©5

This project has already been funded through a transfer of funds to M-NCPPC, showing Council support for expanding the use of GIS in practical, user-friendly devices such as smart phones and tablets. The Food Council pilot is a well-chosen area where technology can provide direct and immediate assistance.

1.4 Social Media Pilot for “Learning Community”

This project is not referenced in the ITPCC report, yet is an important way that residents, visitors, and businesses in Montgomery County can see visible linkages and receive support from government agencies. The next Work Plan should target explicit movement for this project and outcomes that begin to impact the public in 2014 and beyond.

2.1 FiberNet Buildout ©5

The importance of secure and broadband connectivity between government facilities in the County is ever-critical. The completion of the ARRA construction grant brought major expansion to the physical plant (some 102 sites were added), but it is not clear what the real service impact of this expansion is currently or will be in the future. The ITPCC should provide an update on the impact to the end users of this \$14 million addition to FiberNet and identify needed adjustments.

Already, the creation of a new Network Operations Center, and the development and adoption of Service Level Agreements guiding the quality expectations of all FiberNet users, are identified by the ITPCC Chair as immediate next steps. There is a new 6-year Capital Improvements Project for FiberNet under development to pave the way for such needed mechanisms, and the Committee should be receiving a first look at these requirements in the January 15, 2014 release of the CIP plan by the Executive.

2.2 Mobile Systems and Apps ©6

This element has great potential to link the Open Data Initiative to active, service-oriented developments within agencies. The ITPCC should be encouraged to share early thoughts, and to support pilot developments of apps that can help bring the promise of Open Data to residents in the governmental service sector.

3.1 Asset Management ©6

In the chart on page 7, it appears that there are some \$99 million of projects that fall in the Red zone (Red=obsolete or critical systems applications in immediate risk of failure) in FY13 and FY14. It is not clear how many of these critical systems are actually being worked on, or whether they are identified within a future funding plan. A discussion clarifying this point should provide the Committee with some assurance that the immediate risk is being well managed.

In addition, the Committee may want to engage the Executive branch in an effort to align Red High Risk projects within the County CIP program across agencies.

4.1 COOP Development ©8

This project appears to be complete and should be dropped from the ITPCC Work Plan that will cover the next timeframe of 2015-2016.

4.2 Cybersecurity working group ©8

Reading the update, the desired outcome of this working group is not clear. As all agencies currently have a cyber security element in their operations, an ITPCC contribution could well explore shared contracting of external support, harmonized cyber security messaging across agencies, or training modules for technical staff. The next Work Plan should include detail on the outcome of this element.

5.1 Strategic Visioning ©8

The visioning effort by the CIO subcommittee is a welcome first step in the process of defining long-term goals for the ITPCC. The Committee has already requested an early listing of potential projects that the ITPCC and its CIO Subcommittee might undertake, so that a long-term funding stream might be supported. Did this visioning effort provide a beginning point towards creating such a “pipeline” of projects? And how might the policy leadership of the ITPCC (the agency principals) also provide their own perspectives as to needed interagency efforts where technology could play a role? The creation of a strategic plan for IT across agencies could provide a mechanism to organize such a pipeline of projects across agencies and engage stakeholders at all levels, well before the time to develop discrete budget proposals for individual projects. It is Council staff understanding that the CIO leadership is already engaged in such an undertaking, which should be supported by the Committee.

Finally, the role of the Committee itself in provided suggestions and policies that may shape future ITPCC direction and projects should be explored; this semi-annual review can begin the process, followed by an explicit GO Committee worksession regarding Committee input into the 2015-2016 ITPCC Work Plan that could change the Committee role from reactive to participative.

Beyond the Semi-annual Report, there are two systemic issues that Council staff wants to bring to the attention of the Committee.

Long-term Funding

An ITPCC project pipeline would require a consistent and available source of funding that is not project-specific. The Committee has created the Interagency Technology Fund (ITF) as a way to do this, and recently directed a \$97,000 appropriation to be made so that the GIS Visualization Project could proceed. Additional contributions to the ITF should be made throughout the budget process but are not currently programmed.

In addition, there is an ITPCC Non-Departmental Account (NDA) within the Operating Budget that could be used as a mechanism to distribute funds to those organizations executing ITPCC projects.

A consistent mechanism for long-term funding of the ITPCC is not yet defined, and should be the focus of a concrete proposal for the FY15 budget.

Interagency Project Development Driven by Needs Outside the ITCC Process

There are several technology-based projects recently discussed in different Council Committees that have explicit interagency character, yet are not contained within the ITPCC process and mechanisms. Examples include the Right-of-Way discussions between Transportation and WSSC, the possible expansion of the MC311 system to municipalities and agencies, and the single park registration system across recreation, parks, and CUPF. These discussions show the inherent interagency work for IT, and suggest that ITPCC should be ready to facilitate these discussions and provide opportunities for efficient deployment of shared solutions.

Interagency Technology Policy and Coordination Committee
FY 2013-2014 Work plan
Digital Citizenship/Digital Montgomery

1.0 Access to Data and Information

1.1 Interagency Open Data Initiative

This project will identify how data from across the agencies can be shared efficiently to make better use of information resources to improve services and access to information. The ITPCC member agencies will develop a pilot project that assesses the feasibility of leveraging and expanding the initial MCG Open Data Initiative to include appropriate interagency data; identify and define project requirements, processes, and potential data sets for initial use in an interagency open data environment; create a formal project plan identifying tasks, milestones, and deliverables; and develop a roadmap for future expansion of the pilot project.

1.2 Interagency Web Search Capability

This project will strengthen citizen access to information contained within agency web sites that current search solutions do not easily reveal. The feasibility and implications of leveraging the MCG solution for web crawling and indexing outside agency site information, and a solution for presentation of the data will be assessed. A pilot project to test and assess the viability and benefits for wider use will be developed.

1.3 GIS Data Visualization Project

As part of the broader Digital Community and open data initiative, data visualization, web and mobile device applications that leverage Montgomery County's GIS resources and infrastructure will be examined. The project will examine how to make GIS information and applications available. The existing GIS Policy Group will be utilized for this effort.

1.4 Interagency Social Media Communications Pilot

This pilot project would provide a structured examination of the potential uses for social media tools through the creation of a limited scope, special interest group application/project to explore benefits and issues associated with broader utilization of social media tools [LinkedIn, Google+, Facebook, Twitter, etc.] to create and reinforce a 'learning community', enhance communication and information sharing between interagency staff on topics of interagency interest and collaboration initiatives and evaluate the feasibility for expanded uses beyond the pilot phase.

2.0 Strengthening IT Infrastructure

2.1 FiberNet II Buildout

In the final phase of the large scale buildout of the FiberNet network through August 31, 2013, the focus will be to maximize the Federal ARRA grant funds and complete connection of all identified sites; to identify long-term operational support and service requirements agreements; and to assess and document budgetary requirements to sustain the FiberNet infrastructure and operations. This includes priority efforts that will:

- Coordinate the FiberNet Hub Fiber Distribution Center Rebuild for all existing FiberNet Hubs to accommodate new ARRA fiber and existing fiber.

- Determine FiberNet service level requirements of each agency and create a new FiberNet
- Service Level Agreement (SLA)
- Negotiate and execute MOUs for each agency utilizing FiberNet
- Develop a Network Operating Center (NOC) solution for FiberNet that meets agency requirements and recommend solutions to ITPCC
- Document the FiberNet optical plant using OSOInsight
- Comply with the ARRA Grant requirements for open access

2.2 Interagency Mobile Systems/Devices and Applications

Interagency expertise will be coordinated to determine the feasibility of leveraging and sharing applications, application development expertise, management of legal issues, and sharing policy guidelines related to the mobile computing and the use of non-agency issued technology in the workplace.

3.0 Sustainable Plan for Managing IT Assets

3.1 IT Asset Management-Health and Replacement Priority of Major IT Systems

Focus will be maintained on updating the health and replacement priority for major IT systems, including risk assessments for presentation to the Council in FY13.

3.2 Major IT Systems Planning and Funding Strategies

The CIO Staff Subcommittee will examine content, organization, and presentation of information regarding the IT infrastructure health of major systems, risks and consequences to the systems, fiscal requirements and strategies, and coordination with established budget and planning processes to enable and improve resource allocation decisions for this critical infrastructure.

4.0 Continuity of Operations and Risk Management

4.1 COOP Development—Adding Agencies

The CIO Staff Subcommittee will assess the requirements and options for extending interagency planning using best in class tools such as MCG Office of Emergency Management and Homeland Security (OEMHS)'s COOP Automation Solution that won PTI's and NACO's 2012 awards.

4.2 Information Assurance and Risk Management

To strengthen our preparedness and ability to plan for and respond to evolving and emerging risks, the Security SIG will be transitioned to a formal workgroup and tasked with providing information on specified topics in FY13-14 that should help to strengthen agencies' cyber security plans, estimate resource requirements, and identify categories of risk management controls.

5.0 Strategic Visioning and Planning

5.1 IT Strategic Visioning Retreat

The CIO Staff Subcommittee will plan a day-long interagency group retreat to engage in long range strategic visioning and priority setting for interagency information technologies and solutions as it relates to digital citizenship in a digital Montgomery County.

APPROVED by ITPCC, June 26, 2012



Washington Suburban Sanitary Commission

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November 13, 2013

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

RE: Interagency Technology Policy and Coordination Committee (ITPCC)

Dear Chair Navarro:

The Interagency Technology Policy and Coordination Committee (ITPCC) is pleased to offer this semi-annual update regarding the activities of the FY 2013-14 work program. With the increased focus on open government and empowerment of digital citizenship, the ITPCC adopted a multiyear workplan that is intended to better align interagency technology efforts to improve how our residents live, work, and learn in a digital Montgomery County. The current portfolio of projects is arrayed along five broad program areas: Expanded Access to Data and Information; Strengthening the County Digital Infrastructure; Exploring Strategies for Sustaining IT Assets and Investments; Managing Risks and Ensuring Continuity of Operations; and Strategic Visioning and Planning.

Expanded Access to Data and Information

The Expanded Access to Data and Information Program contains several projects that focus on improving and simplifying access to an expanding repository of data, information, and tools that can be used to enhance access to services and information consistent with the goals of Open Government.

The Interagency Open Data Initiative Project (1.1) will enhance the availability of raw, open data sets from the ITPCC agencies by efficiently sharing the experiences, tools, processes and procedures, and lessons learned from the Montgomery County Government Department of Technology Services (MCG-DTS) dataMontgomery Initiative using the cloud-based Socrata platform. The project will provide participating agencies with the capability to utilize the MCG dataMontgomery application to publish open data sets.

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Agencies have selected their candidate data sets for publication and are finalizing agency-specific governance and dataset approval documentation. Agency and MCG-DTS technical contacts have initiated the technical implementation steps that will interface agency datasets with the non-public test/development website as we enter the testing, validation, and approval phases that are the final steps before we 'go live' with interagency dataset publication to the dataMontgomery site. In November, MCG-DTS and the agencies will initiate development of Service Level Agreements (SLA) that will define ongoing roles and responsibilities after the pilot phase. The participating agencies are expected to have at least one open data set ready for publication to the test area in December 2013. We anticipate this project will be completed by June 2014 as planned.

The Interagency Web Search Capability Project (1.2) will strengthen citizen access to information currently contained within agency websites that current search solutions do not easily reveal. This project will test a solution for searching across agency websites rather than searching each site separately, and present the digital citizen with a more comprehensive view of information they are seeking. The feasibility and implications of leveraging the MCG Google Site Search solution for web crawling and indexing outside agency site information will be explored through this pilot project that will test and assess the viability of the solution, and determine the support costs and benefits of this approach.

On November 6, 2013, this project was submitted to OMB for a supplemental appropriation to the Department of Technology Services (the project sponsor), in the amount of \$97,000. It supports expanded license capacity for Google Site Search to accommodate the additional requirements for all ITPCC agencies, and for professional services assistance needed for this specific project. On November 7, 2013 OMB advised that due to fiscal uncertainty associated with second quarter FY14 budget projections, and the estimated fiscal resources that may be available in FY15, they could not recommend the project to the Executive at this time. This project is consistent with the broader objectives of open government, and more specifically with the strategic objectives of the approved FY13-14 ITPCC Workplan. This project is ready for immediate implementation when funding is approved.

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The GIS Data Visualization project (1.3) will develop a common County cloud-based portal for web-based GIS applications using ESRI ArcGIS cloud services; launch a demonstration project accessible via the GIS portal that will be designed for the pilot project; and enhance staff skills and expertise to utilize this technology. There are many agencies and departments in Montgomery County with various website and GIS data offerings. This project will provide a centralized location for a public facing GIS portal web page, powered by the interagency ArcGIS Online organization, where data viewer applications, or simply raw data, can be discovered and used. The test portal has been implemented, and was demonstrated to the Council's IT Advisor on October 29, 2013. Food Council requirements for their pilot application have been gathered and the application is under development. Interagency content providers will need to join the interagency portal. Existing and new agency license holders will be provisioned for this purpose. Basic training for users of these licenses will be provided. The ArcGIS portal interface requires customization and development to improve usability. Identification of an appropriate vendor solution for the customized interface design requirement is underway. This project remains on schedule for completion by June 30, 2014.

Strengthening the County Digital Infrastructure

A robust, agile, and resilient digital infrastructure is a necessity to support residents' access and participation in a digital Montgomery County. This program area incorporates projects designed to provide a high degree of accessibility, reliability, security, and capability to meet the long-term needs of a growing digital community. FiberNet is the critical infrastructure that underpins emergency communications countywide, the County traffic management system, and provides the reliable and high speed connectivity required by our voice, data, and video communications of all agencies.

The *Federal American Recovery and Reinvestment Act* (ARRA) funded construction ended on August 31, 2013. This major network upgrade will provide the essential high speed, high capacity, and network connectivity for our agencies into the foreseeable future. ARRA provided Montgomery County with approximately 140 miles of new high capacity fiber optic infrastructure, and adds 102 new sites to FiberNet including the connecting of most Montgomery County elementary schools and 21 Housing Opportunity Commission (HOC) sites. Significant work remains to be completed in FY14-15 to integrate the ARRA fiber into the FiberNet to maintain the operational integrity of FiberNet as designed. Funding to complete this work was approved in the amended FY 2014 Capital Improvements Program (CIP).

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FiberNet service level requirements were solicited from the agencies, and a draft Service Level Agreement is currently under review. A Network Operating Center (NOC) solution that will leverage existing County resources has been proposed, approved by the FiberNet Technical Advisory Group (ITAG), and approved by the CIO Subcommittee on September 24, 2013. Technical details are still being developed for this solution. Compliance with ARRA Grant requirements for governance and management of open access fiber remains an unresolved and potentially complex issue that will require a cooperative solution between ICBN members. Currently, final testing of ARRA installations, corrective actions to fix discovered issues, and final make ready to activate the sites is underway. ARRA funded sites are currently being activated and should be completed over the next three months and result in dramatic improvement of broadband resources for County agencies.

The Interagency Mobile Systems/Devices and Applications project (2.2) represents work that examines how interagency expertise and other resources can be shared. WSSC and MCG-DTS are engaged in a joint mobile applications development effort to enhance service delivery to citizens by delivering mobile applications to perform common citizen interactions, offering superior customer service, and achieving higher levels of operational efficiencies. Agencies will explore the feasibility of leveraging and sharing applications, expertise, and guidelines regarding mobile technologies.

Exploring Strategies for Sustaining IT Assets and Investments

The IT Asset Management-Health and Replacement Priority of Major IT Systems project (3.1) was completed. This effort examined this infrastructure, assessed the health of critical systems, and reported the findings to the Council on April 16, 2013. The objective is to identify and estimate the resources required to upgrade and replace critical systems as we move forward. Information submitted by the agencies will provide input into future project work with OMB, County Council, and agency staff to inform resource allocation decisions and mitigate the risk of catastrophic system failures of outdated systems. A Fiscal Summary by Risk Category across 6-years (all agencies) appears below:

SUMMARY Multi-year Cost Projections by Risk Categories

	FY13	FY14	FY15	FY16	FY17	FY18	Total 6-Yr.	Est. Full Repl- Cost
Red	38,299,000	61,287,005	38,627,010	14,733,015	8,993,020	8,050,025	169,989,075	312,013,000
Yellow	13,409,884	10,614,105	9,476,467	22,238,062	9,456,132	9,423,318	74,617,967	84,690,126
Green	16,310,091	19,950,421	23,338,814	20,199,578	17,036,936	17,458,866	114,294,706	246,824,098
Total	68,018,975	91,851,531	71,442,290	57,170,655	35,486,088	34,932,209	358,901,747	643,527,224

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

The Major IT Systems Planning and Funding Strategies Project (3.2) was initiated when final FY14 CIP appropriations were published in July 2013. A major outcome needed from this project is to determine if there are any major IT Systems at high risk (i.e. Red systems) that are not programmed for remediation or replacement. The ITPCC worked with OMB in an attempt to revisit and revive the OMB budget process for planning and addressing major IT system replacements and upgrades for systems at highest risk. This process was started in 2007 but was suspended as a consequence of the Great Recession. In August 2013, OMB planned to re-issue guidelines to the agencies for requesting resources for the upcoming biennial CIP, but was thwarted by projections of large funding shortfalls for both the CIP and Operating budgets for FY15. Therefore, this project is delayed temporarily until the fiscal outlook improves and OMB is ready to continue with earlier work.

Future tasks for this project include determining how much funding is actually programmed in the approved CIP for identified high risk systems, determining what is not funded, calculating the gap, and framing more accurate views of the risks and consequences of these unmet requirements. A preliminary analysis conducted in October 2013 that considered approved FY14 CIP funding in the tax supported agencies seems to indicate that high risk major IT systems identified in project 3.1 above are currently programmed in the approved CIP. This analysis requires a further data integrity analysis, and interagency review to determine if any high risk major systems are missing.

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It is anticipated that this analysis will be completed in FY14. A future effort will be made to examine current practices and options for sustaining long-term investments in critical IT systems.

Managing Risks and Ensuring Continuity of Operations

Maintaining continuity of essential business operations in the face of major weather events, catastrophic system failures, or security incidents is fundamental to a healthy Digital Montgomery County. All agencies received a briefing from the Office of Emergency Management and Homeland Security (OEMHS) explaining the resources available and the procedure for engaging OEMHS in testing agency COOP plans, or in developing or refining existing agency plans that are integrated with Emergency Operations Center procedures. This project is complete and operational.

The Information Assurance and Risk Management project (4.2) is increasingly important to a viable Digital Montgomery. It is intended to strengthen our preparedness and ability to plan for and respond to emerging risks. The cybersecurity workgroup has been designated, and planning discussions are underway between the CIO Subcommittee and the project team.

Strategic Visioning and Planning

A strategic visioning retreat facilitated by Gartner Executive Programs was completed July 16, 2013. The strategic visioning and planning session provided the agencies with an opportunity to step back and engage in discussions about long-range visioning and planning on how to further align and organize our efforts to meet these future requirements of a digital county. This was the first interagency CIO retreat and strategic planning event in the history of ITPCC. It was well received and CIOs indicated a desire to continue these discussions.

Summary

The ITPCC remains committed to the interagency approach for technology where feasible and has not forgotten former Councilmember Marilyn Praisner's view that the "taxpayer sees only one government". The ITPCC will continue to promote and focus on digital citizenship and will continue to pursue opportunities for interagency cooperation and efficient service delivery.

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

Sincerely,



Jerry N. Johnson
General Manager/CEO, WSSC

Chair, Interagency Technology Policy and
Coordination Committee (ITPCC)

cc: The Honorable Valerie Ervin
The Honorable Hans Riemer
ITPCC Principals
ITPCC CIO Subcommittee