

GO COMMITTEE #1
March 31, 2014

Worksession

MEMORANDUM

March 27, 2014

TO: Government Operations and Fiscal Policy Committee
FROM: Dr. Costis Toregas, Council IT Adviser *CT*
SUBJECT: Workplan - Interagency Technology Policy and Coordination Committee (ITPCC)

ITPCC Principals

Jerry Johnson, Washington Suburban Sanitary Commission (WSSC) (Chair)
Dr. Joshua Starr, Montgomery County Public Schools (MCPS)
Dr. DeRionne Pollard, Montgomery College
Timothy Firestine, Montgomery County Government
Francoise Carrier, Maryland-National Capital Park and Planning Commission (M-NCPPC)
Stacy Spann, Housing Opportunities Commission (HOC)

ITPCC CIO Subcommittee Membership

Mujib Lodhi, WSSC (Chair)
Donna Schena, Montgomery College
Sonny Segal, Montgomery County Government
Henry Mobayeni, M-NCPPC
Scott Ewart, HOC
Sherwin Collette, MCPS

Gary Thomas, ITPCC staff

Summary of Staff Recommendations

1. Review 2015 work program and "pipeline" of projects, and add projects of interest to the Committee and the Council.
2. Direct Council staff to target specific Committee discussions in order to ensure that resource commitments are made during the budget process within each agency, and collectively through the ITPCC allocations, so that this well-focused program moves forward in 2015.

Background

The ITPCC Principals Chair has conveyed by letter to the GO Chair his overview of the 2014 ITPCC accomplishments and the targets for 2015 execution. Attached on ©1-7 is the review, and on ©8-9 is an illustrative "pipeline" of projects requested by the Committee in the last ITPCC Worksession. The Workplan

aligns with the 2 year Plan already reviewed by the Committee last year, and each of the categories are in areas of Committee interest. Funding for the Workplan has been a challenge for two reasons: the major economic downturn of the last few years; and also the difficulty of budgeting for cross-agency projects. As the economic downturn is abating, the first part of the difficulty is being overcome, but the second is still a challenge. For this reason, earlier this year the Committee suggested that the Executive branch include an explicit allocation in the range of \$250,000 to \$500,000 to fund priority projects through the ITPCC in the 2015 Cable Plan. This will be discussed in the Committee meeting on April 7, 2014; the Executive has made no such recommendation.

Highlights of the Workplan

The Workplan has 5 major elements, with projects in each.

1. Access to Data and Information

One project is moving to completion (GIS Data Visualization). Another (Interagency Web Search Capability, \$97,000) is ready to move to implementation, but the Executive has not included it in his actionable projects in the 2015 Operating Budget. The Committee may want to address this during the budget discussions of both DTS and the ITPCC NDA for Council action. A third (Interagency Open Data Initiative Pilot) is moving forward; the Committee will remember that a request is pending for articulation of Open Data policies in each of the Agencies beyond MCG.

2. Strengthening the County Digital Infrastructure

FiberNet II is a major connectivity platform that allows high speed interaction among hundreds of agency buildings, schools, and housing units across the County. With the help of a federal ARRA grant, this network expanded considerably, and the Montgomery College developments added to the robustness of the network. There will be a Network Operating Center (NOC) funded through the MCG CIP (already approved by the Council following positive review of the GO Committee) so the FiberNet system will continue to develop into a world class network.

3. Exploring Strategies for Sustaining IT Assets and Investments

The Red-Yellow-Green chart of major systems across agencies has become a signature outcome of the ITPCC. This next year, there are expectations of engaging OMB and other fiscal agencies to internalize and routinize the way these major systems are maintained and replaced. With over \$500 million of systems at risk, this action should be welcomed.

4. Managing Risks and Ensuring Continuity of Operations

The initial successful step in this area was to fund (through the Interagency Technology Fund process) a project of deploying Continuity of Operations Planning modules in all organizations. Now the focus is shifting to cyber security, a major concern of everyone. Penetration testing is contemplated in a coordinated and planned manner - and the timing is absolutely on target, given the increase of cyber attacks in industry, government, and academia.

5. Strategic Visioning and Planning

A strategic visioning retreat held at an outside location this year will be repeated next year, to continue and push the boundaries of collaborative thinking and actions in technology deployment.



Washington Suburban Sanitary Commission

14501 Sweitzer Lane • Laurel, Maryland 20707-5901

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March 26, 2014

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 update regarding the status of the FY 2013-14 work program. In June 2012, the ITPCC adopted a two year workplan consisting of a portfolio of 11 projects intended to better align interagency technology efforts to improve how our residents live, work, and learn in a digital Montgomery County. The project portfolio is arrayed along five 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.

Eight projects will be completed by the end of FY14 as planned. Two projects are ready to proceed and will be performed in FY15. The Interagency Web Search Capability project requires appropriation action, and the Major IT Systems Planning and Funding Strategies project will be re-engaged with OMB in FY15. One project, the Social Media Communications pilot, was deferred at the project sponsor's request and may be re-considered during the next workplan cycle.

The agencies have been actively engaged in development of a recommended FYs15-16 ITPCC workplan, and on March 21, 2014 the CIO Subcommittee endorsed the draft project proposals for presentation to the ITPCC Principals. There may be additional changes, but the draft plan is attached for your reference. As in prior years, ITPCC will recommend the final FYs 15-16 workplan once the final FY15 Budget appropriation actions are completed.

The Honorable Nancy Navarro
March 26, 2014
Page 2

Access to Data and Information

The Access to Data and Information Program contains projects that will improve and simplify access to an expanding repository of data, information, and tools that may be used to enhance access to services and information consistent with the goals of Open Government.

The Interagency Open Data Initiative Pilot Project site is ready to publish agency data sets provided to DTS when accompanied by a signed dataMontgomery Dataset Publication Agreement. Agencies are concurrently reviewing the draft Open Data Partnership Agreement that defines roles and responsibilities of the participating parties; signed agreements are expected before the end of FY14. This will enhance the availability of raw, open data sets from the ITPCC agencies by efficiently utilizing the experiences, tools, processes and procedures, and support from the Montgomery County Government Department of Technology Services (MCG-DTS) dataMontgomery initiative using the cloud-based Socrata platform. Participating agencies will now have the capability to utilize the MCG dataMontgomery application to publish open data sets.

The Interagency Web Search Capability Project is currently deferred but ready for implementation upon approval of a funding request for \$97,000. The project will now be performed in FY15. This will support expanded license capacity for the Google Site Search tool to accommodate the additional requirements for all ITPCC agencies, and for professional services assistance needed for this specific project. The 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. This project will strengthen citizen access to information currently contained within agency websites that current search solutions do not easily reveal.

The GIS Data Visualization pilot project is nearing completion. It will establish a common County cloud-based portal for web-based GIS applications using ESRI ArcGIS Online cloud services. The beta site is now operational and being populated with data. Portal customization, training plans, and license distribution to agency users is underway. This project will provide a centralized location for a public facing Interagency GIS portal web page, where data viewer applications, or simply raw data, can be discovered and used. This project is expected to "go live" by June 30, 2014.

The Honorable Nancy Navarro
March 26, 2014
Page 3

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 II 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 was completed on August 31, 2013. ARRA added 133 miles of new high capacity fiber optic infrastructure connected to 102 new sites including Montgomery County elementary schools and 21 Housing Opportunity Commission (HOC) sites. Final site testing and validation, and work at the hub sites to integrate the ARRA fiber into the FiberNet and maintain the operational integrity of FiberNet as designed is underway. Site activations for the MCPS and HOC sites are expected to be completed by the start of the fall 2014 school year.

The FiberNet Service Level Agreement (SLA) draft and FiberNet Network Operations Center (NOC) recommendation of the FiberNet ITAG were considered by the CIO Subcommittee on March 21, 2014. Five out of six agencies affirmed the SLA as presented, with MCPS reserving approval until the FiberNet NOC solution issue is resolved. Without a NOC, the FiberNet will continue to operate as a "best effort" network, which presents some unacceptable levels of risk to core business functions in the agencies. For FiberNet to move from a "best effort" network to what is needed for support of interagency core business needs, and to attract other potential inter-jurisdictional and Intercounty uses, the FiberNet NOC issue must be resolved. The recommended NOC solution will require \$580,000 and 5.0 WYs in FY15 in the DTS budget.

The FiberNet Network Operating Center (NOC) recommendations were approved by both ITAG and CIOs by unanimous vote. The FiberNet NOC will be co-located within the existing MCG-DOT Traffic Management Center (TMC) that has operated and monitored the Montgomery County Automated Traffic Management System (ATMS) over FiberNet for nearly two decades.

The Honorable Nancy Navarro
March 26, 2014
Page 4

It will require the addition of 5.0 WYs to provide for 7/24/365 monitoring and response to outages. Finally, compliance with ARRA Grant requirements for governance and management of open access fiber remains an unresolved and potentially complex issue that will require negotiated agreements between ICBN members in the future.

The Interagency Mobile Systems/Devices and Applications project represents work that examines how interagency expertise and other resources can be shared. WSSC and MCG-DTS are engaged in a joint project, the Agency Project Coordination System (APC), intended to streamline interagency project coordination efforts and processes through a common platform that will offer near real-time data sharing, analysis, and reporting capabilities critical to planning, coordination, and management of infrastructure projects within the public right-of-way. This effort will continue into FY15 where agencies will continue to 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 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 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.

The Major IT Systems Planning and Funding Strategies project was initiated when final FY14 CIP appropriations were published in 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 originally 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 FYs 2015-20 CIP, but was thwarted by projections of large funding shortfalls for both the CIP and Operating budgets for FY15. OMB recommended deferring this effort temporarily until the fiscal outlook improves and OMB is ready to continue with earlier work.

The Honorable Nancy Navarro
March 26, 2014
Page 5

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 that considered approved FY14 CIP funding in the tax supported agencies indicates that high risk major IT systems are currently programmed in the approved CIP but requires a further data integrity analysis, and interagency review to determine if any high risk major systems are missing. This deferred project will be attempted again in FY15.

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.

The Information Assurance and Risk Management project is increasingly important to a viable Digital Montgomery. The initial cybersecurity workgroup proposal was reviewed by the CIO Subcommittee in December 2013 and recommended for a significant scope change. The CIOs recommended that prior to aggressive penetration testing as a first step, the workgroup should research and recommend a standard security reference model against which agencies could assess levels of maturity for security and risk management programs, identify deficiencies, develop remediation plans, implement improvements, and then engage in testing. On March 21, 2014 the Security workgroup recommended approach was endorsed by the CIOs. A revised project plan will be developed by the workgroup and provide the basis for the FY15 workplan efforts.

Strategic Visioning and Planning

A CIO 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.

The Honorable Nancy Navarro
March 26, 2014
Page 6

The CIOs are recommending another retreat in FY15 as a prelude for additional strategic planning efforts anticipated for the FYs15-16 workplan.

FYs 2015-16 ITPCC Workplan

Agencies are still in the process of completing recommendations for the FYs 15-16 ITPCC Workplan for presentation to the ITPCC for approval. Attached you will find the latest draft workplan for your reference and comments. This will represent a significant work effort and will require funding for projects as they become ready for implementation.

ITPCC requests that Council give favorable consideration to providing an increase to designated fund reserves for Interagency Technology Fund (ITF) projects in FY15 if possible. In FY14 Council approved \$70,000 of designated reserves for ITF which was immediately used to fund the GIS Data Visualization project—the first ITF project funded since 2008. A designated reserve for ITF projects in the amount of \$500,000 would facilitate implementation of projects proposed in the FYs15-16 ITPCC Workplan.

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.

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)

Attachment

The Honorable Nancy Navarro
March 26, 2014
Page 7

cc: The Honorable Hans Riemer
The Honorable Cherri Branson
ITPCC Principals
ITPCC CIO Subcommittee

Interagency Technology Policy and Coordination Committee
[CIO DRAFT-as of March 21, 2014]--FY 2015-2016 Work plan

[NOTE: This draft, two-year, evolving work plan is subject to additional changes. It will require ITPCC review and approval and availability of funding sources as projects become ready for implementation. Final FY15-16 work plan approval by ITPCC will occur after appropriation decisions have been finalized by Council]

1.0 Digital Citizenship/Digital Montgomery--Access to Data and Information

• **Interagency Open Data Program**

This project will expand the capabilities developed in the pilot phase to enable any ITPCC agency to publish additional open data sets by leveraging the MCG-DTS dataMontgomery program. ITPCC agencies may formalize agency specific open data policies and expand open data set offerings. MCG-DTS will require 1.0 WYs, \$160,000 to support significant interagency open data expansion.

• **Interagency Web Search Capability Pilot**

Project is ready for implementation. This project was deferred in the previous work plan because of uncertain funding resources in FY14. It is intended to 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 Google Search solution for web crawling and indexing outside agency site information, and a solution for presentation of the data will be implemented. This pilot project, to test and assess the viability and benefits for wider use, will be implemented when requested funds of \$97,000 are approved.

• **Interagency GIS Data Portal**

The project will greatly expand the availability of GIS information and applications through the interagency GIS portal (gisMontgomery), developed in Phase I, and expand the offerings to a broad base of GIS users. It is intended to enhance the offerings to the broader Digital Community and openMontgomery initiatives, enhance GIS data visualization and access through a centralized interagency portal, and support web, mobile device, and other applications that leverage Montgomery County's GIS resources and infrastructure.

2.0 Strengthening IT Infrastructure

• **FiberNet II Buildout**

Specific priorities include:

- Complete the scheduled Hub Fiber Distribution Center Rebuild for FiberNet Hubs to accommodate new ARRA fiber and existing fiber; upgrade all sites to 1gig connections.
- Establish the FiberNet Network Operations Center (NOC) in coordination with the MCG-DOT Traffic Management Center (TMC) to provide 7/24/365 operational monitoring and outage responses for network operations that is necessary to meet Service Level Agreement reliability requirements for the network.
- Implement the FiberNet plan as reflected in the approved FYs15-20 FiberNet CIP, including completion of the Montgomery College network FiberNet reconfiguration and links buildout, and development of alternate links for use in FiberNet link failures.
- Complete and document agency and site specific details required by the FiberNet SLA.
- Continue to document the FiberNet optical plant using OSOInsight.

• **FiberNet II Utilization Study**

Perform a study to investigate and recommend the highest and best uses for the post-ARRA FiberNet II. Scope may include: identify any legal restrictions that constrain options to expand utilization beyond strictly MCG government use, identify potential conflicts other non-MCG entities; identify specific prohibited uses and constraints; identify specific opportunities for monetizing the asset; specify resources and other requirements needed to implement recommendations.

- **Interagency Mobile Systems Joint Application Development and Coordination**
Continue to build upon and coordinate interagency joint solution development to leverage knowledge, technical expertise, share applications, manage legal issues, and sharing policy guidelines related to mobile computing.
- **Agency Project Coordination (APC)**
Develop a standardized interagency data repository enabling GIS based applications that view current information about planned right-of-way construction and maintenance activities. Integrate and streamline interagency project coordination efforts and processes through a common platform offering direct links to near real-time data sharing with the County and utilities, analysis, and reporting capabilities essential to planning, coordination, and management of infrastructure projects within the public Right-Of-Way.

3.0 Sustainable Plan for Managing Interagency IT Assets

- **Interagency IT Human Asset Development**
Explore feasibility, develop scope, and develop requirements for a coordinated interagency human asset development project focused on technology. Project may include on-the-job training (OJT), work-study (WS), internship placements, and enhanced workforce training components in current and rapidly emerging areas of need.
- **Major IT Systems Planning and Funding Strategies**
The CIO Subcommittee will work with OMB and Council to re-engage this effort in FY15 to reduce the risks associated with fix on failure practices. Agencies desire to coordinate with established budget and planning processes to improve resource allocation decisions for sustainable upgrade and replacement strategies over the long term.

4.0 Interagency Risk Management--CyberSecurity, COOP, and Mutual Aid Coordination

- **Information Assurance and CyberSecurity**
Select an industry standard security reference model to enable agencies to map current security and risk management practices to a standard model and assess individual maturity levels of compliance, vulnerability, and risk; prioritize findings; determine remediation requirements; implement corrective action plans; test. Goal is to improve the level of organizational maturity in securing information and cyber assets, and to actively engage both technical and non-IT workforce elements in risk management.

5.0 Strategic Visioning and Planning

- **Interagency CIO IT Strategic Planning Retreat**
The CIO Staff Subcommittee will conduct its second 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.
- **Interagency FiberNet Strategic Plan/10-Year Roadmap**
Develop scope and requirements for an interagency FiberNet Strategic Plan for Montgomery County, and include a FiberNet Roadmap for the next ten years.
- **Digital Government/Digital Montgomery Roadmap**
Develop an Interagency IT Strategic Plan/Roadmap for Montgomery County utilizing professional services to create and publish a comprehensive 5-year plan (through 2020).