

Worksession

MEMORANDUM

November 3, 2015

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:

ITPCC CIO Subcommittee Members:

Henry Mobayeni, M-NCPPC (Chair)

Sherwin Collette, MCPS

Mujib Lodhi, WSSC

Carl Whitman, Montgomery College

Sonny Segal, Montgomery County Government

Ken Goldstraw, HOC

Gary Thomas, ITPCC staff

OMB representative

Summary of Staff Recommendations:

1. Suggest projects of interest to the Committee and the Council to be undertaken in the ITPCC FY17-18 work program. These may include:

- Development of an Enterprise Strategic Plan for IT use across all agencies.
- Strengthening of common cybersecurity programs and practices across agencies; a subcommittee of the CIO Committee of ITPCC is considering this possibility, and their report with implementation targets should be requested before the FY17 budget cycle begins for cross-agency funding consideration.
- Creation of a County broadband strategy that takes advantage of all agency resources and needs.
- Acceleration of public Wi-Fi deployment in all agency properties.
- Utilization of excess Data Center capacity in specific agencies using FiberNet as a transport vehicle to provide cost-effective solutions for backup services of individual agencies.

2. Request that Open Data strategies for publishing agency data in the County Open Data portal be accelerated in each agency, and an Open Data policy be explicitly considered for action by the relevant policy-setting bodies in FY17, using the MCG example carried out 4 years ago.
3. Encourage the ITPCC Principals to consider a facilitated joint planning session before the FY17 budget, to guide CIO program decisions for the FY17-18 Work Plan.
4. Request the creation of an ITPCC project “pipeline” in time for the FY17 budget discussion, and encourage OMB to consider new ways to fund cross-agency projects by utilizing the Interagency Technology Fund (ITF) or other mechanisms that might permit the funding of ITPCC efforts while ceding the ultimate authority for the project selection to the ITPCC principals.

Background

The Interagency Technology Policy and Coordination Committee (ITPCC) is a unique institution; it brings together all six agencies, both at the highest policy level and at the technology level, to jointly consider strategies that optimize the deployment and use of information technology for all County residents, visitors, and businesses. Given the stovepipe nature of the budget development and implementation cycle within agencies, the utility of a single entity that can speak of solutions that cross administrative boundaries is essential, both today and in the future. The enabling legislation for ITPCC is provided on ©1-2.

Recent challenges in the deployment of FiberNet and its operational elements have underlined the importance of the communication channels provided by the ITPCC and its two-tier management structure: the Principals and the CIO subcommittee. Now that the FiberNet issues have been resolved and a good strategy is laid for the implementation of an industry-class broadband system, it is time to return to the broader potential of ITPCC and for the Committee members to contribute to the upcoming two year Work Plan.

The worksession will be divided into two parts: a review of the status of the FY15-16 Work Plan status, and a dialogue to begin the FY17-18 ITPCC Work Plan deliberations.

FY15-16 ITPCC Work Plan status and Council Staff comments

On August 8, 2014, the ITPCC approved the FY15-16 Work Plan (see ©12-13).

The ITPCC Principals Chair has conveyed by letter to the GO Chair (on ©3-15) his overview of the FY15 ITPCC accomplishments and the targets for FY16 execution. Funding for the Work Plan has been a challenge for two reasons: 1) the major economic downturn of the last few years; and 2) 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 FY15, the Council agreed with the recommendation of this Committee to provide \$125,000 as an initial contribution to the Interagency Technology Fund (ITF) from which the ITPCC can draw to fund specific high-value projects that impact all agencies. This allocation enabled the funding of a cybersecurity assessment in all agencies beyond MCG (which had already undertaken this assessment). This support did not prove possible in FY16, so no new projects were started. What follows is the status of the Work Plan projects.

The Work Plan has 5 major elements, with projects in three of them this year to date:

1. **Access to Data and Information**

Three projects were actively pursued and will be completed within FY16:

- a. GIS Data Visualization Pilot
- b. Interagency Web Search Capability Pilot
- c. Interagency Open Data Initiative Pilot

The first two projects were completed and show clear evidence of the usefulness of the ITPCC in creating a climate of innovation that encourages cross-agency collaboration and solutions. The outcomes are already available to County staff and residents alike, and enable a cross-agency sharing of information in a way that helps everyone tackle complex issues.

The third project (Open Data Initiative) is not moving as quickly as has been hoped. Perhaps the lack of sufficient demand for data from all agencies might explain the slow pace of implementation. The small number of data sets published is a promise of the potential of Open Data, but more can and should be done.

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. The expansion of the physical plant made possible through the ARRA grant is complete, and now the time has come to incorporate the new capacity in the operations plan. Already, thanks to decisive action by this Committee and the full Council in January, a fully configured, industry-strength Network Operations Center (NOC) is under development, so the FiberNet system can continue to offer world class network services to all agencies and future governmental clients.

3. **Exploring Strategies for Sustaining IT Assets and Investments**

The Red-Yellow-Green chart of the health of major systems across agencies has become a signature outcome of the ITPCC. The status for each agency appears in a single display and gives an advance look at future challenges. This report is vital to the Committee's understanding of the status of high impact systems and the need for remedial action over time. The next update will be provided in April 2016.

4. **Managing Risks and Ensuring Continuity of Operations**

The results from the cybersecurity assessment undertaken through the ITF-designated program sponsorship will now lead to penetration testing in a coordinated and planned manner, and the timing is absolutely crucial, given the increase of cyber attacks in industry, government, and society at large. The Committee is aware of the detailed plans from the recent October 22, 2015 closed session with relevant agencies.

5. **Strategic Visioning and Planning**

The ability to think "outside the box" and with no external pressures or major challenges to be addressed immediately is important. The ITPCC CIOs have planned a retreat to think

strategically and create the element of trust and collaboration so vital to the ITPCC's impact and benefits. A similar dialogue could be considered for the ITPCC principals, given the overwhelming technology intrusion and impact in all walks of life and all institutions.

FY17-18 ITPCC Work Plan deliberations

The FY17-18 ITPCC Work Plan will include unfinished projects from the prior two-year plan, as well as new ones found to have merit when evaluated against interagency benefits. There are two ways the Committee can impact this deliberation:

1. By providing ideas and priority projects reflecting community needs that cross agency boundaries. Examples of such needs include:
 - Development of an Enterprise Strategic Plan for IT use across all agencies.
 - Creation of a County broadband strategy that takes advantage of all agency resources and needs.
 - Strengthening of common cybersecurity programs and practices across agencies; a subcommittee of the CIO Committee of ITPCC is considering this possibility, and their report with implementation targets should be requested before the FY17 budget cycle begins for cross-agency funding consideration.
 - Acceleration of Public Wi-Fi deployment in all agency properties.
 - Utilization of excess Data Center capacity in specific agencies and FiberNet as a transport vehicle to provide cost effective solutions for back up services of individual agencies.
2. By promoting the establishment of a process with the heads of each agency in their capacity as members of the ITPCC Principals group to develop suggestions for additional programs of an interagency nature. The opportunity to think and plan collaboratively around technology for a few hours could help the Principals form a series of ideas for future implementation through the ITPCC Work Program. This discussion could be assisted by an external facilitator so that ideas could flow freely and "outside the box". Such an open and cross-agency dialogue could indeed provide an opportunity for technology-inspired cross-agency projects that could strengthen service delivery and present a seamless government face to all residents, visitors, and businesses of the County. The CIOs would also benefit from a sharper, more focused direction of where the Principals as a group might see fertile areas of combined activity for technology projects.

Resolution No.: 12-1758
Introduced: July 19, 1994
Adopted: July 26, 1994

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Councilmember Praisner

Subject: Reconstitution of Interagency Technology Policy and Coordination Committee

Background

1. The County Council recognizes the importance of all forms of technical innovation, especially those rapidly changing electronic technologies such as computer mapping, telecommunications, and automated information services.
2. The County Council established the Interagency Technology Coordination Committee by resolution on July 27, 1984.
3. The efforts of the Interagency Technology Coordination Committee and its subcommittees since 1984 fostered the coordination of county computer systems, information processing and purchase of computer hardware and software, and the committee provided valuable budget recommendations to the County Council.
4. The Council desires that these activities continue to expand to keep pace with the need for planning and coordination, especially in the areas of computer mapping and telecommunications, with their emerging opportunities for interagency linkage and economies of scale.

Action

The County Council for Montgomery County, Maryland, approves the following resolution:

The Interagency Technology Coordination Committee is hereby reconstituted with broader responsibilities as the Interagency Technology Policy and Coordination Committee.

This Committee shall have the following general duties and responsibilities:

- (a) to promote and enhance the coordination of technological innovation among and within the various agencies of government in Montgomery County, with particular emphasis on electronic technologies relating to telecommunications, computer mapping, and automated information systems.
- (b) to create a communication vehicle by which the various agencies of government can assist the County Council and each other to develop sound and efficient public policies to evaluate alternative uses of these technologies as they proliferate and become more important to the cost and operations of government.
- (c) to facilitate the coordinated implementation of such countywide policies through the mutual development of practical plans, proposals, and recommendations concerning individual agency expenditures for electronic hardware, software, equipment, and related issues.
- (d) to provide a discussion forum for the sharing and evaluation of information pertaining to such new technologies, including their various economic, social, and operational costs and benefits.

This Committee shall begin fiscal year 1995 with the following specific duties and responsibilities:

- To recommend, by September 30, the appropriate relationship between the ITPCC and the Technology Innovation Fund Committee.
- To recommend a procedure for the selection of the ITPCC Chairperson and the Chairpersons of the subcommittees.
- To develop a proposed committee work program for fiscal year 1995, based on perceived needs and priorities.
- To review this work program with the Management and Fiscal Policy Committee within three months from the adoption of this resolution, and to maintain general liaison with the Council through its MFP Committee and thereafter.
- To request the commitment of resources from each member agency sufficient to show significant progress in implementing this work program, with an approximate schedule of meetings of the full committee, and such similar meetings of the subcommittees as are necessary to accomplish the objectives of the work program.
- To recommend joint ventures to research and implement automation solutions, such as document imaging.
- To recommend a standard data collection spreadsheet that can collect the costs of all computing, telecommunications, and GIS activities of all agencies into standard classifications.
- To recommend a mechanism for soliciting appropriate non-agency, private sector support and input in these efforts.

The Committee shall be composed of the following government officials:

- The Montgomery County Chief Administrative Officer
- The Superintendent of Montgomery County Public Schools
- The President of Montgomery College
- The Chairman of the Montgomery County Planning Board
- The General Manager of the Washington Suburban Sanitary Commission
- The Staff Director of the Montgomery County Council, who shall serve as an ex officio, non-voting member

Initially, there shall be established also three standing subcommittees, called respectively the GIS Subcommittee, the Telecommunications Subcommittee and the Computer Subcommittee, which shall take direction from the Interagency Technology Coordination Committee, and which shall be composed of one member from, and designated by, each of the voting agencies represented on the Interagency Coordination Committee.

The Chairman of the Montgomery County Planning Board shall be the Chairperson of the Committee for FY95 and shall be responsible for the normal duties of a committee chairman, including the appointment of chairs to subcommittees, and such other tasks as may be appropriate from time to time.

The funds placed in the Montgomery County Department of Information Systems and Technology (DIST) FY95 budget shall be used to provide appropriate support to the Committee and its subcommittees.

This is a correct copy of Council action.

Kathleen A. Freedman, CMC
Secretary of the Council



MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIR

October 29, 2015

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 update the status of the FYs15-16 work program adopted on August 8, 2014 (Attachment A). The plan consists of a portfolio of projects that are consistent with ITPCC program priorities and mission that aligns interagency technology efforts to improve how our residents live, work, and learn in a digital Montgomery County. This strategy is arrayed along five program areas: (1) Expanded Access to Data and Information; (2) Strengthening the County Digital Infrastructure; (3) Exploring Strategies for Sustaining IT Assets and Investments; (4) Managing Risks and Ensuring Continuity of Operations; (5) and Strategic Visioning and Planning.

This update will focus primarily on our work since our previous update encompassing three major program areas of our work plan: expanded access to data and information; strengthening the County digital infrastructure; and managing risks and ensuring continuity of operations.

GIS Data Visualization Pilot Project

<http://gismontgomery.maps.arcgis.com/home/>

The pilot project is now operational. Through the ITPCC, the council granted a special appropriation for the creation of a GIS portal project, sponsored by the M-NCPPC Planning Department. The gisMontgomery project is a web-based GIS portal designed to host interagency GIS data and applications using ESRI ArcGIS Online (AGO) cloud services. This site fills a needed role in providing a central location from which GIS data and web applications from various County agencies can be found and used by the public as well as by

county staff. This application dramatically improves and expands citizen and employee access to GIS data, applications, and tools.

After the formal FY15 project kickoff meeting on August 19, 2014, the gisMontgomery Guide to Best Practices for Publishing Content to ArcGIS Online documentation for County users was developed and disseminated. A Montgomery County Food Council web application leveraging the new food inspections dataset was delivered, 75 County staff from 23 agencies, departments, and municipalities were provided training in the use of the portal, and 44 of those staff members who did not already have a license were issued a new license for this portal; currently, 73 interagency staff are now registered with the gisMontgomery portal. The portal currently contains 85 different map services comprising over 200 different mapping layers that were supplied to it by the ITPCC agencies and the City of Rockville. An additional 25 different web applications have also been registered to the portal.

Since going live, regular site administration has been performed to authorize new County staff licensing, and approve new data and application submissions. A final report will be presented by the close of FY16 detailing findings from this pilot project, and make recommendations for the continuing operations of this program. These include topics on establishment of interagency administrators and governance, improving the administration interface, branding the portal, and future training.

The annual licensing cost of \$10,000 for the portal is included in the M-NCPPC Planning Department's proposed FY17 budget. This would extend the portal through February 2018. In addition to this, an additional \$10,000 is recommended for consultant services to enhance the public user experience and to develop an enhanced administrative interface to be used by interagency administrators.

The ITPCC would like to thank M-NCPPC for accepting the leadership role of project sponsor, and particularly acknowledge the extraordinary accomplishment of Christopher McGovern, Project Manager, in successfully developing this application and greatly enhancing public access to GIS data and information for our digital citizens. The ITPCC appreciates and highly recommends continued Council support in providing the resources needed to continue operation and enhancement of this important interagency program.

Interagency Web Search Capability Project

The Interagency Web Search Capability project is now operational and available on the County Web site at www.montgomerycountymd.gov. This project has successfully improved and greatly expanded citizen and employee access to data, information, and tools. Simply

type search criteria in the search box and enter; initial search results may then be refined through use of 16 additional filters and use of refined search parameters to provide further granularity in the search query process. Results are now truly interagency in nature, providing a true 'one-government' view. This project successfully developed and tested a solution for searching across agency websites rather than searching each site separately, thus presenting the digital citizen with a more comprehensive view of information they are seeking.

The Web Search project team re-convened on September 4, 2014, reviewed the project scope and tasks, updated the schedule, and confirmed the planned deliverables. The process of procuring the required Google Site Search capability for the interagency project was completed in late December 2014. The Google Site Search Engine was configured to crawl applicable Agency web sites between January and March 2015. A review of the application prototype by the project team was completed on March 20, 2015. Technical back-end elements were examined to improve overall performance and content delivery from agency sites. In May 2015, the team implemented a responsive, user-friendly, Interagency Search Form/Results application prototype for public facing interface design and functionality. The *Web Content Search and Discovery Guide* that provides recommendations, best practices, and guidelines for improving content discovery was completed and provided to agencies on July 20, 2015. On October 13, 2015, the new County web site interface, along with the interagency search tool solution, went live. Training and technical assistance for agency Google Site Search Administrators will be provided as necessary. Measurement of site utilization has commenced and will be tracked. A searchMontgomery video is being developed and will be available on the site to help orient new users to the enhanced capabilities by December 2015. A searchMontgomery 'Search Tips' web page is also being developed to further assist users with structuring queries to improve search results.

To continue providing true interagency web search capabilities enabled by this project, annual operating budget support of \$85,000 is required for future years and is highly recommended by the ITPCC.

Interagency Open Data Pilot Project

The Interagency Open Data Pilot project is currently resolving several technical issues associated with automating agency file updates to ensure publication of the most current data possible within Socrata. This project has tested the feasibility of enhancing the availability of open data sets from the ITPCC agencies by efficiently leveraging and utilizing the experiences, tools, processes and procedures, and support from the Montgomery County Government Department of Technology Services (MCG-DTS) dataMontgomery initiative.

This pilot project resulted in a massive knowledge transfer to all of the participating ITPCC agencies. Agency datasets are now published for some agencies, with the remaining datasets undergoing final technical adjustments to automate the data feeds across agencies, dataset edits, and final reviews. By December 2015 each agency is expected to have at least one data set (in some cases more) published on MCG's dataMontgomery web portal.

This project demonstrates the technical and program capability to expand the Montgomery County Open Data program to the ITPCC agencies. In the pilot phase, concerns were raised regarding potential liability from unintended consequences that could arise from publishing outside agency data to the County's dataMontgomery site. As a result, a Memorandum of Understanding has been drafted by MCG for use with any further expansion of non-MCG datasets on dataMontgomery.

Interagency Datasets currently published on dataMontgomery:

- Locations of HOC Offices (HOC)
- Elementary School Service Areas (MCPS)
- Middle School Service Areas (MCPS)
- High School Service Areas (MCPS)

Interagency Datasets scheduled for publication by December 31, 2015:

- Index of Historical Sites (M-NCPPC Planning)
- Master Plans (M-NCPPC Planning)
- Historic Preservation Sites (M-NCPPC Planning)
- Park Management Regions (M-NCPPC Parks)
- Park Facilities (M-NCPPC Parks)
- Montgomery County Parkland (M-NCPPC Parks)
- MC Credit Students (Montgomery College)
- Completed Work Orders (WSSC)

Technical issues associated with publishing certain agency data sets are currently being addressed and include establishing automated, versus manual file updates, so the data displayed is real-time and up to date. Some data sets are static, flat files, and out of date. DTS is also engaged in resolving technical issues associated with establishing working real-time connections between GIS servers, and associated Socrata software issues. When resolved, this will mean that if M-NCPPC updates a GIS file, the change will be reflected in real time in the Socrata Open Data application providing the user with accurate and current information.

Expanded publication of interagency data sets must be accomplished with reference to MCG open data set publication and scheduling priorities that are currently driven by the Montgomery County Government Open Data Implementation Plan (8/1/2014), and more specifically the dataMontgomery Dataset Publishing Plan approved by Council. This plan specifies the timeline and requirements to add over 500 new datasets from MCG departments in future years, and currently drives MCG Open Data priorities. Program expansion that includes publication of interagency data sets suggests some amendment of this plan or other agreed to changes, plus additional DTS resources to accommodate the increased program scope.

The ITPCC agencies will look to MCG-DTS experiences for additional guidance in developing agency open data policies as this effort unfolds. Completion of a final project report and formal pilot project closeout is currently targeted for December 2015 assuming that the technical issues are resolved and do not cause additional delay.

Agency Project Coordination System (APC)

The Agency Project Coordination system (APC), a cloud-based solution administered by WSSC, allows “near real-time” data sharing, analysis, and reporting capabilities that is critical to the planning, coordination and management of infrastructure projects within the public Right-of-Way. APC enables near-real-time data consolidation from various agencies which enhances the viewing and analysis of enterprise data to support strategic business goals. Construction activities or system outages are more efficiently coordinated and notifications delivered as close to real time as possible across various agencies. The technology solutions link multiple agencies and private sector businesses. Current participants to the APC program include: Washington Suburban Sanitary Commission, Montgomery County Departments of Permitting Services and Department of Transportation; Prince George’s Count: Departments of Permitting, Inspections, and Enforcement, and Department of Public Works and Transportation; Maryland State Highway Administration; several Municipalities including: City Of Gaithersburg, City of Takoma Park, College Park, Chevy Chase, Bowie, and Washington Gas.

As part of APC program, a Conflict Detection Application Prototype was released earlier this year to familiarize participating agencies with the concept of how a GIS-based application can be developed to identify and analyze project conflicts. Different agencies met and discussed various application requirements for Conflict Detection. These requirements are being finalized and the development of Projects Conflict Detection Application will start soon. This application will enable users to perform conflict detection analysis in real-time, generate

conflict reports, and facilitate communication between conflicting projects managers based on data being shared within APC program, further enhancing coordination and collaboration between different agencies.

APC provides numerous benefits such as: near real-time information among Counties and Utilities on planned and on-going construction projects in County Rights-of-Way; prevention of unnecessary pavement cuts; ability to have a Geographical view of projects with visual detection of conflicts between construction projects; reduced the need to meet face to face every few weeks with different agencies resulting in both time and cost savings; enables State agencies, Counties, Municipalities, and Utilities to proactively resolve potential conflicts or overlaps in their proposed implementation schedules. APC is promoting consistency and transparency in the management of public planned infrastructure improvement activities and has encouraged many agencies to examine and improve their own data management systems to allow consistent and robust data sharing. So far, as many as 70 different projects have been coordinated or conflicts resolved by WSSC with Montgomery and Prince George's county governments, the Maryland State Highway Administration, and the City of Takoma Park Maryland. This project demonstrates the potential improved service delivery to ratepayers and taxpayers that may be achieved through a multi-agency, integrated, and coordinated effort.

Interagency Security Controls Maturity Benchmarking Study

This project study is essentially complete except for providing an executive briefing to ITPCC Principals. It provides insight into an important component of the interagency work program focused on management of risks and ensuring the continuity of operations. The CEB (Corporate Executive Board) Security Controls Maturity Benchmarking Service provided the participating ITPCC agencies with the capability to assess and map individual agency security maturity levels as measured against a standard security reference model (NIST 800-53).

Separate analyses were provided to each ITPCC agency, along with individual consultations between agency CIOs and the CEB analysts. Additionally, CEB findings were integrated in a manner that provides an aggregated interagency view of security maturity in the ITPCC agencies including identification of several common areas for potential focus, intended to enable decision makers to determine where to direct limited resources for enhanced security and risk reduction. The CIO Subcommittee considered the CEB findings and recommendations on May 27, 2015, noted that agency findings were very diverse and would be addressed separately in most cases. The CIOs tasked a workgroup to develop recommendations for the next phase to include in the interagency FYs17-18 work plan efforts. A joint ITPCC/CEB analyst presentation is anticipated for the next ITPCC meeting projected

for December 2015. ITPCC and CIO guidance will inform the next phase of what is potentially a multiyear project effort.

FiberNet Network Operations Center (NOC)-Update

The issue of funding, staffing, and implementing an FCAPS compliant NOC continues to dominate CIO discussions and activities. The approved ITPCC work plan for FiberNet includes establishing an industry standard network operations center (NOC) for FiberNet, the County owned and operated fiber optic network that provides high speed network infrastructure to the ITPCC agencies.

The NOC solution was recommended unanimously by the FiberNet Technical Advisory Group (ITAG) in 2013, and subsequently approved by the CIO Subcommittee and ITPCC, but ultimately not funded in the final FY15 budget action in May 2014. Subsequently, an attempt to secure the necessary funding through the regular supplemental budget process failed, and on December 2, 2014 the ITPCC Principals attempted to resolve the issues. The Principals did not emerge with a unanimous decision, and the issue was reported to the County Council. On January 27, 2015, the Council voted unanimously in support of a Special Supplemental Appropriation to fund FY15 startup costs of \$360,000 to establish a FiberNet NOC as described in the August 13, 2014 supplemental request justification from MCG CIO, Sonny Segal. Council also indicated that full funding for FY16 to continue implementation of the solution was expected. To monitor implementation progress, Council requested a monthly progress report from the Executive branch with the first report due on March 1, 2015. The latest available 2015 NOC implementation status report (October 1, 2015) may be found as Attachment B to this letter.

The newly contracted project manager for the NOC implementation met with the FiberNet Network Services Manager on March 18, 2015, signaling the start of implementation of the NOC solution. On May 20, 2015, DTS requested a freeze exemption to allow hiring of 4 NOC personnel. On May 22, 2015, OMB denied the \$176,000 request. On May 21, 2015 the Council approved the FY16 budget for the NOC at \$728,900, and also assumed availability of an additional \$176,000 unspent in FY15. These amounts were confirmed by OMB before the GO Committee on July 28, 2015. On September 21, 2015, 4 NOC Operators/certified engineers (contractual) were hired, and three existing DTS staff were assigned to NOC operations. The funding extension for the NOC Manager/Engineer (contractual) was approved just prior to the October 22, 2015 briefing to the GO Committee. NOC staffing now consists of 8.0 FTEs, with stand-up of a SLA based NOC Operations center expected by March 31, 2016. Integration/co-location with the Traffic Management Center (TMC) as originally envisioned is projected for December 2016 according to the latest status update.

CIOs continue to advocate for full implementation of an industry standard (FCAPS) compliant FiberNet NOC consistent with the operational model they approved. It is supported by Council at \$910,000 per year beginning in FY16, and through 2022, with the funding source as the non-tax supported Cable Fund. On October 22, 2015, MCG DTS CIO, Sonny Segal, presented an update on NOC implementation progress to the GO Committee, stating that 7/24 NOC monitoring capability was activated on October 1, 2015, and that funds for NOC staff will be encumbered up to \$700,000 as of November 1, 2015. Mr. Segal was pressed by Council for a detailed implementation plan that has been both reviewed and approved by the CIO Subcommittee. The CIO Subcommittee review of the draft detailed NOC implementation plan is scheduled for November 10, 2015, with a final, baselined NOC implementation plan (requested in MS Project software) expected to be completed and available for distribution by December 4, 2015.

FiberNet--Other

With NOC implementation again underway, implementation of other areas of the FY16 FiberNet work plan continue, including: development and review of the NOC Concept of Operations (CONOPS); developing a formal permanent staffing plan; defining roles and responsibilities; completing agency Service Level Agreements (SLAs); and documenting operating standards, and fully staffing and operating the FiberNet NOC. Progress continues on the FiberNet HUB upgrades needed to fully utilize ARRA fiber, with six out of twelve hubs completed. Approximately one hub is completed every 3 months. While lighting all remaining MCPS elementary schools remains among the highest priorities, delays may continue as MCPS completes some internal hardware upgrades to accommodate the 1 gb/sec capability enabled by the ARRA fiber. Detailed documentation of the FiberNet optical plant using OSPInsight continues, and detailed documentation associated with operational needs for NOC is being created in SharePoint.

On July 27, 2015, the CIO Subcommittee received a detailed briefing regarding the FYs17-22 FiberNet CIP recommendation, including associated operating budget support. It was learned at that time that the renewed Comcast Agreement still requires completion of MOUs with the municipalities and this could impact the distribution of resources for funding FiberNet in the six year period. Finalizing the FiberNet plan through 2022 cannot be completed until these agreements are finalized, and Cable Fund resources are finalized in the Cable plan. While the FiberNet plan presented in July is expected to remain essentially unchanged, final confirmation is not expected before November 30, 2015. We are anticipating significantly increased resources for capital expenditures through 2022, which creates many exciting opportunities for the future FiberNet.

If implementation continues without significant diversion of FiberNet resources to other areas, it is probable that FiberNet II can be completed as envisioned within the next 18-24 months, thus providing a robust and reliable technological base for FiberNet III and future initiatives that may be enabled by this County resource. As the ITPCC agencies indicated in their public testimony to Council on January 27, 2015, FiberNet is mission critical infrastructure to all of us, a major utility service for County digital communications, and a true nexus between effective service delivery and achieving our mission to improve how our residents live, work, and learn in a digital Montgomery County.

Summary

Finally, the CIO Subcommittee is currently engaged in developing the next two year work plan for ITPCC, and intends to have it ready by April 2016 for Council review and input.

The ITPCC remains committed to the interagency approach for technology where feasible, and remains constantly aware that the "taxpayer sees only one government." We continue to focus on outcomes of our work that improves how the County residents live, work, and learn in a digital Montgomery County. This is accomplished by the dedicated efforts of many staff across our agencies, and is reflected in the projects described above.

ITPCC will continue to pursue opportunities for interagency cooperation and efficient service delivery, and the members of the ITPCC thank the County Council for its continued support and welcome its input.

Sincerely,


Casey Anderson
Chair

Attachments

cc: The Honorable Hans Riemer
The Honorable Sidney Katz
ITPCC Principals
ITPCC CIO Subcommittee

**Interagency Technology Policy and Coordination Committee
ITPCC FYs 2015-2016 Work Plan**

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 through the MCG-DTS dataMontgomery program. ITPCC agencies may formalize agency specific open data policies and expand open data set offerings.

• **Interagency Web Search Capability Pilot**

This project was deferred in the previous work plan because of uncertain funding resources in FY14. It is fully ready for implementation. This project 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. Funding has now been approved for FY15.

• **Interagency GIS Data Portal**

The project will expand the availability and content 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.

• **Interagency Social Media Communications Pilot**

This pilot project will examine of potential uses for select social media tools through the creation of a limited scope test project within the CIO Subcommittee, or a project subgroup.

2.0 Strengthening IT Infrastructure

• **FiberNet II Buildout**

Specific priorities include:

- Implement the FiberNet plan as reflected in the approved FYs15-20 FiberNet CIP.
- Complete the scheduled Hub Fiber Distribution Center Rebuild for FiberNet Hubs to accommodate new ARRA fiber and existing fiber.
- 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.
- 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 to produce revenue and other benefits to the County; identify 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 Project]**
An evolving and expanded effort resulting from the joint MCG/WSSC Right of Way project initiative in FY14 is proposed for FYs 15-16.

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. This project may include on-the-job training (OJT) components, work-study (WS), internships, 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 staff 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. The 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.
- **Interagency FiberNet 5-year Strategic Plan**
Develop scope and requirements for an interagency 5-year FiberNet Strategic Plan for Montgomery County. The last FiberNet Strategic plan was completed in 2002.
- **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.

[Recommendation approved unanimously by CIO Subcommittee, May 30, 2014]

APPROVED by ITPCC: August 8, 2014



DEPARTMENT OF TECHNOLOGY SERVICES

Isiah Leggett
County Executive

Harash (Sonny) Segal
Chief Information Officer

MEMORANDUM

October 1, 2015

TO: Nancy Navarro, Chair
Government Operations and Fiscal Policy Committee
Montgomery County Council

FROM: H. N. Sonny Segal, Director *HS*
Department of Technology Services

SUBJECT: Status Report on the Implementation of the FiberNet Network Operations Center (NOC)

The purpose of this memorandum is to provide an update on the status of the efforts to implement a NOC, as requested in your memorandum dated February 3, 2015.

This month's accomplishments include: 1) continued review of the initial set of draft Standard Operations Procedures (SOPs) as related to NOC; 2) arrival & training of four NOC operators (network engineers); 3) continued review of draft Service Level Agreements (SLA) by ITPCC agencies; 4) continued implementation of the SharePoint site to host a myriad of NOC operation functions on to a standards-based electronic repository; and, 5) assignment of a NOC phone number (240) 777-2999. The following table provides the update to the timeline of major target milestones.

| No. | Milestone | Target Completion Date | Issues/Comments |
|-----|-------------------------------|------------------------|---|
| 1. | Project Manager retained | March 20, 2015 | PM reported and working 4/20/15. |
| 2. | NOC logistics completed | July 31, 2015 | Started building FiberNet network configuration data repository using SharePoint Team site. NOC space staged in COB Data Center, operator workstations installed and connected to the FiberNet Network Management System (NMS). Ongoing configuration of NMS continuing. |
| 3. | NOC staff retained | August 13, 2015 | Four NOC operators/engineers started 9/21/15. Three DTS staff assigned to NOC. |
| 4. | Phase I - Ramp-up completed | September 21, 2015 | NOC personnel startup training (NMS) conducted. |
| 5. | Concept of Operation document | July 15, 2015 | Completed. |

| No. | Milestone | Target Completion Date | Issues/Comments |
|-----|--|------------------------|--|
| 6. | Phase 2 - 24x7 Operation implemented | October 1, 2015 | 24x7 monitoring, call taking starts 10/1/15 at 0600 hours. |
| 7. | SLAs negotiated | October 31, 2015 | In review by ITPCC agencies. |
| 8. | Phase 3 - Full 24x7, SLA based operation implemented | March 1, 2016 | Focus on fault, configuration and change management. |
| 9. | Phase 4 - TMC integration accomplished | December 1, 2016 | FY17 activity. |

The following table summarizes the status of the FY16 NOC funds on September 30, 2015.

| Item | Amount (\$) |
|--------------------------|-------------|
| FY16 Appropriated Amount | \$728,900 |
| Encumbered Amount | \$457,560 |
| Unencumbered Balance | \$271,340 |

I look forward to providing the next status update in the first week of November.

cc: Timothy L. Firestine, Chief Administrative Officer
Jennifer Hughes, Director, Office of Management and Budget
Fariba Kassiri, Assistant Chief Administrative Officer
Dieter Klinger, Chief Operation Officer, DTS
Max Stuckey, Chief, Telecommunications Division, DTS
John Castner, Manager, Network Services, DTS