

GO COMMITTEE #2
March 31, 2014

Worksession

MEMORANDUM

March 27, 2014

TO: Government Operations and Fiscal Policy Committee
FROM: Dr. Costis Toregas, Council IT Adviser *CT*
SUBJECT: Overview – Agencies' FY15 Information Technology Programs and Budgets

ITPCC CIO Subcommittee Membership

Mujib Lodhi, Washington Suburban Sanitary Commission (WSSC) (Chair)
Donna Schena, Montgomery College (MC)
Sonny Segal, Montgomery County Government (MCG)
Henry Mobayeni, Maryland-National Capital Park and Planning Commission (M-NCPPC)
Scott Ewart, Housing Opportunities Commission (HOC)
Sherwin Collette, Montgomery County Public Schools (MCPS)

Gary Thomas, ITPCC Staff

Summary of Staff Recommendations

1. The Committee should review the individual agency presentations and provide comment on the importance of collaboration and support for Open Data and Cyber Security initiatives in all agencies as priorities for FY15.
2. Support the ITPCC efforts to develop a practical process that recognizes the "Red" and "Yellow" priority systems now in existence, and incorporate needed actions in an approach which ensures the management of the commensurate risk associated with not fulfilling them. This mechanism should be provided to the Committee in time for the FY16 budget discussions.
3. Request that Open Data policies in each agency be explicitly targeted for action by the relevant policy-setting bodies in 2015.
4. Hold a summer study session to explore benefits and barriers to developing an Enterprise IT Strategic Plan and subsequent action steps.

Background

Each of the agency members of the Interagency Technology Policy and Coordination Committee (ITPCC) has provided a uniform program and budget overview from their FY15 budget submissions. These detailed slides offer an Enterprise-wide IT investment snapshot for the County as a whole, and are on ©1-93. Individual agency submissions can be found using the following index:

AGENCY	©
MCG	1
MCPS	17
MC	31
M-NCPPC	45
WSSC	60
HOC	83

Agency Summaries

As in prior years, an effort has been made to provide a sense of scale for the overall investment of the County in technology and provide comparisons across agencies and along a multi-year continuum. Table 1 provides a summary of FY15 dollar investments excerpted from the individual submissions of each agency, and an Enterprise total of these investments. Both Operating and Capital (for FY15) budget allocations are shown, thus providing an important, integrated view of total County investments. In some instances, comparability among data points may be hindered by the use of different definitions, but the aggregate picture should still provide a sense of the Enterprise IT investment.

Table 1. FY15 Montgomery County Proposed Investment in Technology (in \$m)

	Operating Budget	Capital Budget	Total FY15
MCG¹	40.3	34.5 ²	74.8
MCPS	26.5	22.1	48.6
MC	27.2	13.4	40.6
M-NCPPC	5.3		5.3
WSSC	40.2		40.2
HOC	2.9	1.3	4.2
Totals	142.4	71.3	213.7

Notes:

¹ The totals do not include the investment in IT made by MCG in departments other than DTS. In FY09, that was estimated to be at least \$18.1 million. No estimate is available for other years.

² Includes IJIS, FiberNet, and Public Safety System Modernization. TechMod has been added at \$8.7m for FY15 and modifies the CIP figure provided by DTS, even though it is programmed outside of DTS - this gives a more accurate picture of Enterprise spending on IT for MCG.

To review the time trend of IT investments across the agencies, Table 2 is offered, which summarizes total resources requested in each of the last four years and compares these numbers to the FY15 requests (Operating Budget combined with CIP allocations in FY15).

Table 2. FY11-14 total requests and FY15 Submissions for OB and CIP (where available) in agency IT operations (in \$m)

	FY15	FY14	FY13	FY12	FY11
MCG ^{1,2}	74.8	92.7	79.7	52.8	58.4
MCPS	48.6	48.1	49.1	48.0	47.7
MC	40.6	38.2	35.9	43.4	45.8
M-NCPPC	5.3	3.4	3.3	4.9	5.9
WSSC	40.2	30.0	20.7	19.3	19.3
HOC	4.2	4.3	3.1	2.6	2.9
Totals	213.7	216.7	191.8	171.0	180.0

Notes:

¹ The totals do not include the investment in IT made by MCG in departments other than DTS. In FY09, that was estimated to be at least \$18.1 million. No estimate is available for other years.

² Includes TechMod, IJIS, FiberNet, and Public Safety System Modernization.

Table 3 provides a summary of the personnel complement requested by agencies to operate the technology enterprise for all County agencies. In cases where position information was not available, full-time equivalent figures were used.

Table 3. Position Summaries by Agency

Positions (except where noted)	2015	2014	2013	2012	2011
MCG	135	135	130	126	135
MCPS	177	182	179	184 FTE	171.6
MC	196	192	197	202	279
M-NCPPC	24	32	32.6	32.2 WY	37.4
WSSC	111	124	94	73	72
HOC	16	12	12	12	12
Totals	659	677	644.6	626.2	707

Note: FY15 numbers include contractor positions when made available

Staff Observations

1. The current and future benefits arising from FiberNet usage, a cross-agency asset currently funded by MCG, are outlined in each of the six agency submissions at the request of the Committee. It is obvious that the FiberNet investment allows all agencies to benefit in practical ways, and enables each agency to both reduce costs and provide higher levels of service in the connectivity arena.

2. The timing of these individual agency IT budget displays comes after several of the individual IT budgets have been vetted and incorporated in the agency-wide budgets for the ITPCC agencies. If the Committee wishes to impact technology practices through budget management principles, a **coordinated IT Enterprise budget review** should be **timed earlier** in the year (before agency budgets are reviewed by their cognizant policy bodies) so that there would be time for the **creation of cross-agency strategies**.

The ITPCC CIO Subcommittee has accepted this challenge of cross-agency strategies and has been meeting to develop a true Enterprise strategy. A forthcoming project in Enterprise-wide strategic planning is in the 2015 ITPCC Workplan and can lay the foundation for this goal. The Committee may want to focus on this issue of harmonizing strategic IT plans across agencies to further collaboration in a subsequent summer study session.

3. The Open Data Bill 23-12, enacted by the Montgomery County Council on December 4, 2012 and effective March 18, 2013, applies to MCG programs and data sets. The Committee may want to ask the CIOs present on March 31 to give an indication of how each of their agencies approaches the topic of Open Data and what are differences caused by laws or other barriers that may make a truly Countywide Open Data initiative difficult.



Montgomery County Government

FY15 IT Budget Overview

Presentation to the GO Committee

March 31, 2014

- Enterprise Technology Model
- Approach and Priorities
- Key Initiatives and new Technologies
- Accomplishments
- Awards
- DTS Organization
- Budget Summary
- Major Enterprise IT Systems Report
- FiberNet – Existing & Future Benefits

- Enterprise Technology Strategic Plan (ETSP)
 - Using Department input the Enterprise Technology Strategic Plan is updated
- Cyber Security Strategic Plan (CSSP)
 - Using Department input the Cyber Security Strategic Plan is created
- Enterprise Architecture (EA)
 - Using the ETSP as a guide the Enterprise Architecture is updated
- Metrics
 - Enterprise Service delivery is monitored and improved through IT Metrics

Approach and Priorities

- Support the County Business Objectives as communicated in the ESTP
- Maintain an Enterprise Architecture with a core focus on a strong portfolio of Enterprise IT Services
- Support ongoing Enterprise Projects
- Support new Enterprise Initiatives like openGovernment
- Leverage Innovative Approaches and Technologies to offset and balance continuing resource limitations

Key Initiatives and New Technologies

- Cyber security
- Public Safety System Modernization (PSSM)
- Cloud e-mail and office productivity / collaboration
- ERP & MC311
- openMontgomery
 - dataMontgomery, engageMontgomery, mobileMontgomery
- Mobile computing support (devices, WiFi, HelpDesk etc.)
- PC replacements & Win7 Operating System upgrade
- DCM contract re-compete
- FiberNet expansion
- Cable franchise renewal
- Social Media and CCM Video Enhanced Search



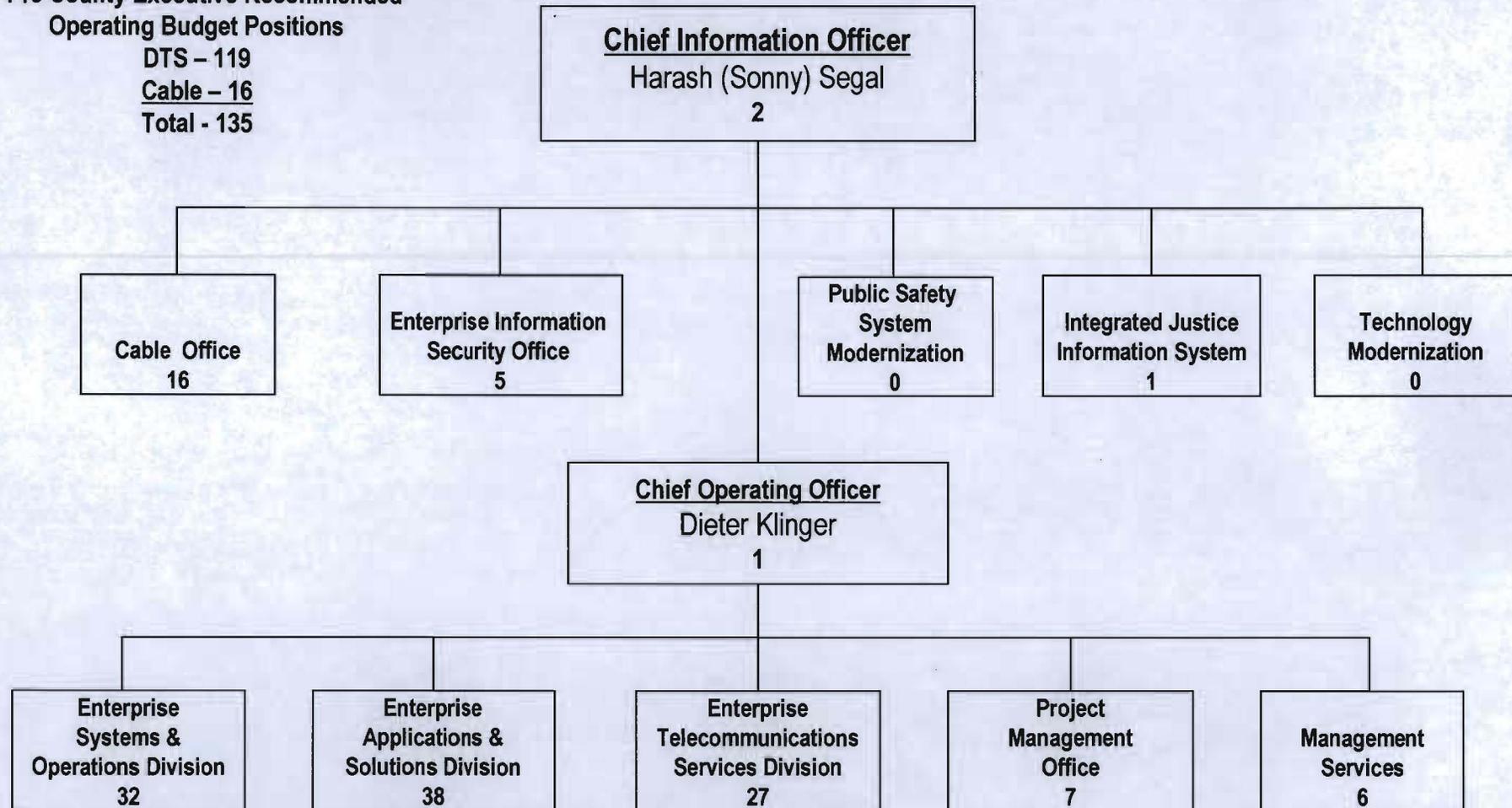
Accomplishments

- Expanded Enterprise Identity Management system to support employees, retirees, volunteers, partners, and citizens for greater application access and improved security.
- Developed and deployed improved and Enterprise Resource Planning (ERP) Business Intelligence (BI) tools. Provided technical support for ERP Hyperion budgeting, Oracle Learning Management, and Oracle Performance Management modules.
- Provided technology infrastructure and led the transition of technology services to numerous new County facilities.
- Supported implementation of ERP Oracle Warehouse Management and Transportation Management modules.
- Provided project management, development, application engineering, systems engineering and quality assurance support for the Public Safety Systems Modernization (PSSM) program.
- Implemented a new cloud based constituent message and publication delivery system.
- Introduced a new method to provide urgent notifications if the County e-mail system is not available.
- Introduced a new service that offers easy access to Cable shows for residents with Smart-phones and other Mobile devices.
- Continued upgrade and expansion of wireless access points in County facilities, expanding access to mobile devices both for employees and visitors.
- Implemented ERP Self Service for Retirees and other Agencies.

- National Association of Counties – 2013 Achievement Awards
 - ASK the CIO
 - Bike Share Research Tool
 - OpenMontgomery
- The Center for Digital Government
 - Montgomery County ranks Number One in the Nation in 2013 Digital Counties Survey
- Public Technology Institute
 - OpenMontgomery

Department of Technology Services

FY15 County Executive Recommended
Operating Budget Positions
DTS – 119
Cable – 16
Total - 135





Budget Summary

- **Operating Budget**
 - *FY14 Operating (PSP):* **\$38.7M**
 - *FY15 CE Recommended Operating (PSP):* **\$40.3M**

- **Capital Improvement Program Budget**
 - *FY15 CE Recommended (CIP):* **\$25.8M**
 - *FY15-20 Total Programmed (CIP):* **\$186.4M**

Operating Budget includes DTS and DCM NDA budgets, and selected CABLE program costs

CIP Budget includes the following projects: FiberNet , Integrated Justice Information System (IJIS), and Public Safety System Modernization (PSSM) Programs.



Major Enterprise IT Systems Report

FY15--Operational Health and Replacement Priority of Existing Major IT Systems									
Priority	System Name	Status	Life	Age	Upgraded	Total 6-Yr.	Full Repl-Cost	CIP PDF #	NOTES
1	Public Safety Modernization	--	--	--	2010	\$28,557,000	\$109,708,000	340901	Full Repl-Cost includes prior FYs
--	(MCG) CAD	Red	10	13	2001	--	--		Part of PSSM
--	(MCG) PS Radio System	Red	12	12	2002	--	--		Part of PSSM
--	(FRS) Station Alerting System	Red	10	32	1982	--	--		Part of PSSM
2	(MCG) Office 365 Upgrade	--	--	--	2003	\$6,000,000	--		Upgrade planned in 2014
--	(MCG) MS Office/Outlook	Red	5	12	2002	--	--		Part of Office 365 upgrade
--	(MCG) MS Exchange	Red	5	11	2003	--	--		Part of Office 365 upgrade
--	(MCG) SMS	Red	5	11	2003	--	--		Part of Office 365 upgrade
3	(MCG) Fibernet	Red	20	7	2007	\$15,907,000	\$61,057,000	509651	Full Repl-Cost includes prior FYs
4	(OHR) Occ. Health Mgt.	Red	3	12	2002	\$275,000	\$275,000		
5	(CCT) Case Management	Red	15	30	2002	\$6,200,000	\$6,200,000		Part of IJIS, awaiting State system
6	(MCPD) IDMS Digital Imaging	Red	5	9	2005	\$240,000	\$240,000		
7	(DOT) Crew Day Card	Red	10	16	2000	\$150,000	\$150,000		Replacement timing is TBD.
8	(DOT) Highway Inventory	Red	10	16	2000	\$150,000	\$150,000		Replacement timing is TBD.
9	(DOT) Tree Manager	Red	8	13	2001	\$24,000	\$155,000		Replacement timing is TBD.
10	(DLC) Trace	Red	4	12	2002	\$0	\$250,000		Replacement timing is TBD.

Estimate Only. Not a formal budget plan.



Major Enterprise IT Systems Report

FY15--Operational Health and Replacement Priority of Existing Major IT Systems								
Priority	System Name	Status	Life	Age	Upgraded	Total 6-Yr.	Full Repl-Cost	NOTES
1	Public Safety Modernization	--	--	--	2011	--	--	
--	(MCPD) Field Reporting	Yellow	7	8	2006	--	--	Potential replacement in PSSM
--	(MCPD/SHF) Records Mgt	Yellow	7	7	2008	--	--	Potential replacement in PSSM
2	Technology Modernization	--	--	--	2010	\$9,117,000	\$113,621,000	Full Repl-Cost includes prior FYs
--	(FIN) Tax Assessment	Yellow	10	1	2014		\$1,000,000	Replacement in April 2014
--	(OHR) IVR	Yellow	3	11	2003	--	--	Potential for replacement by ERP
--	(OMB) Budget Publication	Yellow	7	21	2004	--	--	Potential for Open Data in 2014
--	(DLC) APPX	Yellow	18	19	2008	--	--	Scheduled for replacement in 2014
3	(REC/CUPF) Permit/Registration	Yellow	--	--	2014	\$3,776,240	\$4,000,000	Full replacement cost is estimated
--	(CUPF) CLASS - Fac Schedule	Yellow	12	16	2012	--	--	
--	(REC) Registration, POS, Sched	Yellow	12	21	2012	--	--	
4	(FIN) MUNIS	Yellow	8	15	2008	\$917,138	\$1,034,108	Target SaaS conversion in 2014
5	(MCG) PBX System	Yellow	20	15	2006	\$6,600,000	\$5,000,000	Telephone System
6a	(MCG) PS Mobile replacement	Yellow	4	9	2008	\$9,600,000	\$9,600,000	Reflects 25% replacement annually.
6b	(MCG) Network Infrastructure	Yellow	10	12	2008	\$3,000,000	\$3,000,000	annually.
6c	(MCG) Servers/Storage	Yellow	5	10	2008	\$6,000,000	\$7,600,000	annually.
6d	(MCG) MS Windows	Yellow	5	11	2003	\$300,000	\$550,000	years
7a	(MCG) ePayment Systems	Yellow	5	12	2009	\$1,000,000	\$1,000,000	Replacement timing is TBD.
7b	(MCG) Legally Mandated Apps	Yellow	5	9	2009	\$750,000	\$750,000	Replacement timing is TBD.
8	(FRS) Firehouse Software	Yellow	8	10	2008	n/a	n/a	Replacement timing is TBD.
9a	(MCPD) Webboard	Yellow	8	13	2000	\$60,000	\$60,000	
9b	(MCPD) Chameleon	Yellow	10	10	2004	\$70,000	\$60,000	Animal Services Management System
9c	(MCPD) Crime INTEL	Yellow	10	10	2004	\$25,000	\$25,000	Gang Information
10	(OCA) Case Management System	Yellow	8	7	2014	\$225,000	\$165,000	Replacement estimated in 2015.
11a	(ECM) Financial Disclosure	Yellow	10	10	2004	\$200,000	\$200,000	Replacement timing is TBD.
11b	(FRS) Core Business Systems	Yellow	5	9	2010	\$1,500,000	\$1,500,000	Replacement timing is TBD.
11c	(PIO) Public Information Center	Yellow	3	8	2008	\$500,000	\$500,000	Replacement timing is TBD.

Estimate Only. Not a formal budget plan.





Major Enterprise IT Systems Report

FY15--Operational Health and Replacement Priority of Existing Major IT Systems								
Priority	System Name	Status	Life	Age	Upgraded	Total 6-Yr.	Full Repl-Cost	NOTES
--	Technology Modernization	--	--	--	2010	--	--	
--	(OMB) BASIS	Green	10	19	2003	--	--	Potential replacement by ERP system
--	(DHHS) AVATAR	Green	15	10	2008	--	--	Potential replacement by ERP system
--	(MCG) MC Time	Green	20	7	2012	--	--	Enterprise Time & Attendance System
--	(MCPD/FRS) Telestaff	Green	10	5	2009	--	--	Enterprise Scheduling System
--	(MCG) ERP / Oracle Financials	Green	20	3	2010	--	--	New Enterprise Financial System
--	(MCG) CRM / Siebel	Green	20	3	2010	--	--	MC311
--	IJIS Program	--	--	--	2013	\$0	\$15,567,000	FYs
--	(DOCR) CRIMS / CJCMS	Green	12	3	2013	--	--	
--	(MCG) Juvenile Justice - JJIS	Green	8	11	2009	--	--	
--	(SAO) Case Management	Green	10	3	2013	--	--	
--	(MCG) Enterprise GIS	Green	5	8	2006		\$1,000,000	
--	(MCG) Mainframe	Green	8	11	2003		\$1,000,000	
--	(MCG) Modular Messaging	Green	15	3	2011		\$850,000	2011.
--	(MCG) eGov Web Portal	Green	5	2	2012		\$3,000,000	
--	(MCG) Content Mgt Sys	Green	5	11	2003		\$1,000,000	
--	(MCG) RemedyForce	Green	10	1	2013	\$720,000	\$750,000	
--	(OMB) eBudget	Green	10	1	2013		\$50,000	(WordPress)
--	(FIN) Tax Assessment	Green	10	1	2014		\$50,000	Replacement in April 2014
--	(DOT) Transit CAD AVL	Green	9	6	2008	\$400,000	\$7,600,000	
--	(DOT) Bus Scheduling	Green	10	5	2009	\$320,000	\$250,000	Legacy replacement completed in 2009
--	(DOT) ATMS	Green	9	10	2004	\$12,048,000	\$50,000	CIP Project
--	(DOT) Traffic Signal System Mod	Green	12	2	2012	\$8,952,000	\$50,000	FYs
--	(DOT) Storm Operations Map	Green	10	7	2011		\$50,000	
--	(DPS) Permit System	Green	21	2	2012		\$50,000	2012.



Major Enterprise IT Systems Report

FY15--Operational Health and Replacement Priority of Existing Major IT Systems								
Priority	System Name	Status	Life	Age	Upgraded	Total 6-Yr.	Full Repl-Cost	NOTES
--	(LIB) Integrated Lib System	Green	12	15	2007		\$50,000	
--	(LIB) Internet Session Mgt	Green	8	10	2007		\$50,000	
--	(ECM) Lobbying Registration	Green	10	1	2013		\$50,000	
--	(DGS) FASTER System	Green	20	11	2011		\$300,000	
--	(DHHS) Homeless Mgt	Green	15	8	2010	\$414,000	\$50,000	(Service Point system)
--	(DHHS) Client Record System	Green	15	11	2010		\$50,000	
--	(MCPD) In-Car Video	Green	5	5	2009		\$50,000	
--	(MCPD) E-Tix	Green	5	5	2011		\$50,000	Hardware upgrade in 2011.
--	(MCPD) RAFIS	Green	7	7	2012		\$50,000	Updated in 2012 via grant funding.
--	(MCPD) Evidence System	Green	5	8	2010		\$50,000	
--	(MCPD) LPR System	Green	5	4	2011		\$50,000	
--	(MCPD) Executive Dashboard	Green	7	4	2011		\$50,000	
--	(MCPD) Cry Wolfe	Green	10	1	2014		\$220,000	False Alarm Reporting
--	(MCPD) BODE-DNA	Green	10	2	2013		\$25,000	DNA Case Management
--	(MCPD) CODIS	Green	10	1	2014		\$60,000	Combined DNA Index System
--	(MCPD) IAPRO-Blueteam	Green	10	2	2013		\$60,000	Internal Affairs Tracking System
--	(MCPD) SafeSpeed	Green	10	3	2012		\$1,000,000	Red light and Speed Reduction
--	(FRS) FireApp	Green	TBD	2	2014		\$50,000	
--	(FRS) ePCR	Green	TBD	4	2013		\$50,000	
--	(DLC) POS System	Green	12	3	2010	\$210,000	\$50,000	
--	(DHCA) Code Enforcement	Green	TBD	18	2012		\$50,000	underway.
--	(DHCA) House Loan Admin	Green	TBD	16	n/a		\$50,000	
--	(DHCA) Rental Lic. & Reg.	Green	TBD	5	2009		\$50,000	
--	(DHCA) MPDU	Green	TBD	16	n/a		\$50,000	

Estimate Only. Not a formal budget plan.

FiberNet – Existing Benefits

- Higher Capacity enabling high band applications (i.e., security cameras, WiFi)
- Increased network redundancy and more reliable connections (less outages)
- Reduction of leased line costs
- Increased COOP capabilities
- Improved Disaster Recovery capabilities
- Telephone services for the County, including MC311
- Backhaul for public safety radio communications
- Extensive video services for the court (internal communications, communications with the State and video arraignment)
- DOT traffic management, signal monitoring and traffic camera feeds
- Video transmission between local cable stations and live television transmission capability from all FiberNet locations
- HHS access to State DMHS databases
- Access to State systems
- NCRNet applications



FiberNet - ITPCC Uses

County-Provided Technology Infrastructure & Services for ITPCC Members	Wide Area Network Connectivity	Internet Access	Disaster Recovery Service	Video Connectivity	Telephony & Wi-Fi	Public Safety Communications	Local Loop Cost Elimination
Housing & Opportunities Commission	✓	✓					✓
Montgomery College	✓	✓		✓			✓
Montgomery County Government	✓	✓	✓		✓	✓	✓
Montgomery County Public Schools	✓	✓	✓	✓	✓		✓
Maryland-National Capital Park & Planning Commission	✓	✓	✓		✓	✓	✓
Washington Suburban Sanitation Commission	✓		✓				

FiberNet – Future Benefits

- Enable economic development by expanding high speed, highly reliable, lower cost Internet access to business parks.
- Elimination of copper and coaxial wiring costs in future buildings by utilizing fiber and wireless connectivity for provision of computer and telephone services.
- Wi-Fi in economic development areas
- Inter-county video distribution (e.g., statewide town hall meetings and live television coverage of the General Assembly)
- Virtual Computing
- Expanded broadband-based training in libraries and job training center (reducing senior isolation, on-line job application and resumes)
- Bio-tech connectivity between Great Seneca science corridor and medical institutions and universities (e.g., Johns Hopkins in Baltimore)
- Cable television distribution to County, school and Montgomery College offices and classrooms.



Montgomery County Public Schools
ROCKVILLE, MARYLAND

Office of the Chief Technology Officer

FY 2015 IT Budget Overview

ITPCC Presentation to MFP Committee

(A)



Strategic Perspective

MCPS Mission

Every student will have the academic, creative problem solving, and social emotional skills to be successful in college and career.

Core Competencies:

- Academic Excellence
 - Demonstrate readiness for post-secondary study and/or the workforce so that all students are prepared for success upon high school graduation
- Creative Problem Solving
 - Clearly articulate thoughts, ideas, and information using oral, written, and nonverbal communication
 - Use a variety of instructional resources and technology to enhance learning
- Social Emotional Learning
 - Value and respect diversity and differences
 - Enhance their social awareness, including collaboration, empathy, and relationship-building skills



Strategic Perspective

Office of the Chief Technology Officer Mission

To provide high-quality technology systems and services essential to the success of every student.

Priorities

- Developing the virtual community center for accessing and sharing digital curriculum, lessons, student performance data, and instructional and professional development resources.
- Integrating interactive and innovative classroom technologies to transform teaching and learning, and creating teacher learning communities for cultivating their knowledge and proficiencies.
- Developing and enhancing student progress monitoring and performance—real-time.
- Modernizing critical human capital and operations management systems in alignment with updated business processes and priorities.
- Fostering anywhere, anytime collaborative communities.



Strategic Perspective

FY 2014 Information Technology Accomplishments

- ❑ **FiberNet:** Currently all secondary schools are connected to the FiberNet system providing faster and more reliable WAN and Internet connectivity. By the end of June 2014, 113 of 133 MCPS elementary schools will be connected to the system.
- ❑ **Engaging Classroom Technology:** Interactive learning structures including whiteboard solutions and mobile technologies were integrated in classrooms in support of creating an environment that will encourage teaching and learning for the 21st century.
- ❑ **Real-time Reporting & Analytics :** The new system provides users with greater visibility into all student data. Reports are aligned with the school support and improvement framework and support monitoring and analysis of the performance targets set for the strategic planning framework districtwide milestones.
- ❑ **myMCPS Portal:** Development, refinement, and expansion of our K-12 parent and student portal within the myMCPS learning community to enable students and parents to view key information about courses, assignments, announcements, their grades, attendance, and test scores.
- ❑ **Technology Modernization:** The technology refreshment and improvement program was redesigned with greater emphasis on mobility in learning through integration of mobile technologies and anytime, anywhere access and leveraging virtual solutions.



IT Assessments – Internal and External Environments

Opportunities

- ❑ Developing appropriate infrastructure to support greater connectivity to digital resources
- ❑ Modernizing critical human capital and financial management systems
- ❑ Providing comprehensive knowledge management and analytical support solutions
- ❑ Ensuring a safe and secure computing enterprise
- ❑ Connecting parents and students in the myMCPS virtual learning community
- ❑ Enable a powerful and flexible infrastructure that supports anytime and anywhere access
- ❑ Facilitate access to timely and relevant resources to tailor instructional choices for students

Challenges

- ❑ Meeting the increasing expectation and demand for IT solutions with decreasing resources
- ❑ Managing aging hardware through the 5-year refreshment of technology investment in schools.
- ❑ Maintaining current with the changing landscape of technology
- ❑ Modernizing enterprise systems to provide effective solutions for network infrastructure and central information management facilities
- ❑ Ensuring a secure IT environment that addresses evolving threats both internally and externally
- ❑ Engaging staff, students and parents through myMCPS, creating a more engaging community building experience.



Operational and Functional Perspective: Health of Existing IT Systems

Priority	System Name	Status	Life	Age	Upgraded	FY15	FY16	FY17	FY18	FY19	FY20	Total 6-Yr.	>6-Yr.	Full Repl-Cost
1	CATV/ITV	Red	4-6	22	2003	50,000	50,000	50,000	50,000	50,000	50,000	300,000		1,000,000
2	Telephony	Red	7-10	14	2005	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	19,500,000		10,000,000
3	Budget Management System 7-10	Red	7-10	12	2001	-	700,000	140,000	140,000	140,000	140,000	1,260,000		700,000
4	Transportation Information Mgmt Sys	Red	7-10	10	2002	50,000	150,000	15,000	15,000	15,000	15,000	260,000		650,000
5	Financial Management System	Red	7-10	6	2013	1,744,000	1,544,000	344,000	344,000	344,000	344,000	4,664,000		15,000,000
6	Mass Communiations (Connect Ed)	Red	4-6	9	2005	337,000	307,000	307,000	307,000	307,000	307,000	1,872,000		1,526,000



Operational and Functional Perspective: Health of Existing IT Systems

Priority	System Name	Status	Life	Age	Upgraded	FY13	FY14	FY15	FY16	FY17	FY18	Total 6-Yr.	>6-Yr.	Full Repl-Cost
1	Human Resources Information System	Yellow	7-10	11	2012	686,000	8,434,800	4,345,200	1,300,000	467,000	467,000	15,700,000		12,780,000
4	Unicenter Service Desk	Yellow	3-5	9	2011	75,438	75,438	75,438	75,438	79,210	83,170	464,132		100,000
5	WAN / LAN/ISP	Yellow	4-7	7	2007	2,376,162	2,296,984	2,420,083	2,362,524	2,433,400	2,433,400	14,322,552		23,298,186
6	Network Operating System	Yellow	4-6	7	2007	1,561,800	1,752,000	1,366,200	1,426,400	1,469,192	1,513,268	9,088,860		13,889,610
7	Food Services Management System	Yellow	7-10	5	2009	126,788	133,127	139,783	146,772	151,176	155,711	853,356		400,000
8	Textbook Manager (Destiny/Follett)	Yellow	7-10	1	2013	520,000	111,447	111,447	111,447	111,447	111,447	1,077,235		520,000

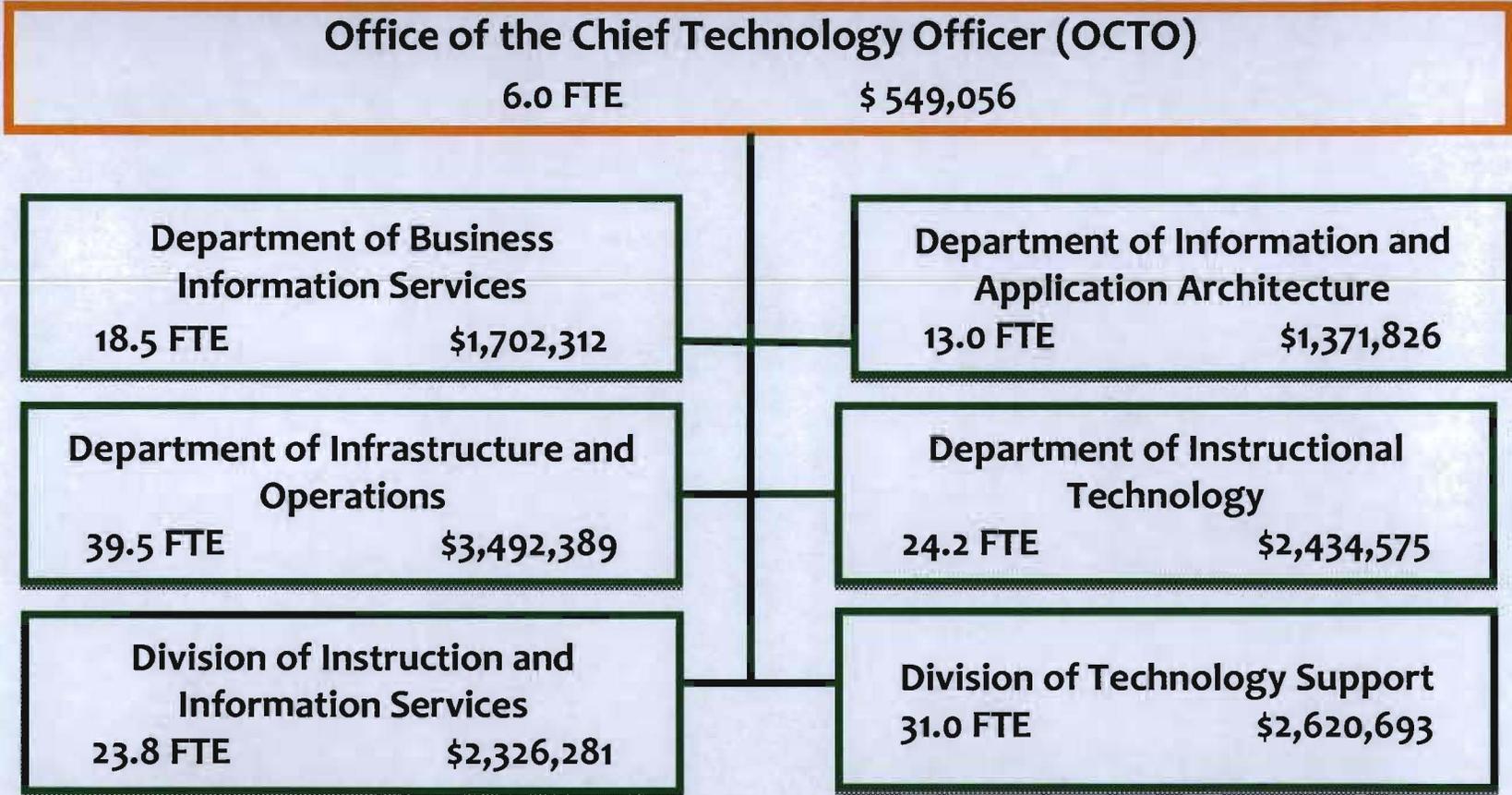


Operational and Functional Perspective: Health of Existing IT Systems

Priority	System Name	Status	Life	Age	Upgraded	FY13	FY14	FY15	FY16	FY17	FY18	Total 6-Yr.	>6-Yr.	Full Repl-Cost
1	Evaluation & Selection Database	Green	4-6	5	2009	10,000	10,000	200,000	10,000	10,000	10,000	250,000		200,000
2	Library Circulation System	Green	7-10	2	2012	96,628	96,628	96,628	96,628	96,628	96,628	579,768		799,750
3	Professional Development Online System	Green	7-10	8	2006	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000		525,000
4	Pinnacle Electronic Gradebook	Green	4-6	3	2011	108,000	108,000	108,000	108,000	108,000	108,000	648,000		1,200,000
5	Data Warehouse	Green	4-6	0	2014	130,000	130,000	130,000	130,000	130,000	130,000	780,000		600,000
6	ATS-Applicant Tracking System	Green	4-6	2	2012	203,000	203,000	223,300	223,300	223,300	223,300	1,299,200		919,590
7	Enterprise Backup System	Yellow	7	5	2014	260,399	260,399	260,399	268,211	268,211	268,211	1,585,830		243,000
8	Identity Manager	Green	4-6	6	2013	124,500	77,175	81,033	85,085	87,638	90,267	545,697		600,000
9	Data Center Infrastructure	Green	10	2	2012	768,973	1,443,773	501,973	891,973	891,973	891,973	5,390,638		12,716,000
10	IT Perimeter Security	Green	3-5	11	2012	616,711			622,878			1,239,589		700,000
11	Scheduling System	Green	4-6	1	2013	247,000	247,000	247,000	247,000	247,000	247,000	1,482,000		360,000
12	Retirement System	Green	3-5	1	2013	354,000	354,000	354,000	354,000	354,000	354,000	2,124,000		3,000,000



OPERATIONAL AND FUNCTIONAL PERSPECTIVE



Operating Budget: 156.0 FTE

CIP: 20.5 FTE

Retirement Fund: 0.5 FTE

TOTAL: 177.0 FTE

Contractual/Termed: 20FTE

Part Time Staff: 58



BUDGET REQUEST PERSPECTIVE

FY 2015 IT Budget Summary

- ❑ The FY 2015 Operating Budget request for IT is \$26,488,817 or 1.05% of the total MCPS budget request.
- ❑ The FY 2015 Requested Capital Improvement Program budget for Technology Modernization is \$22,088,000.



BUDGET REQUEST PERSPECTIVE

FY 2015 Information Technology Budget Overview

\$ 26,488,817 Operating Budget Request

22,088,000 Capital Budget Request

\$48,576,817 Total



BUDGET REQUEST PERSPECTIVE

FY 2009 – FY 2014 REDUCTIONS

FISCAL YEAR	REDUCTION
2009	\$1,606,555
2010	\$1,603,323
2011	\$1,119,967
2012	\$1,941,749
2013	\$1,434,727
2014	\$457,828
2015	\$196,733
TOTAL REDUCTION	\$8,360,882



Current Benefits of FiberNet

- Improve teaching and learning through the effective integration of technology.
- Develop and expand virtual communities and online learning to connect classrooms, cultivate relationships, and encourage resource sharing between and among students, teachers, staff, parents/guardians, and community partners.
- Expand the integration of management and analytic systems to support continuous improvement in learning outcomes, strengthening customer service delivery and user experiences.
- Expand partnerships and organize internal resources to ensure equitable access and participation in the MCPS digital community.

MONTGOMERY COLLEGE

ITPCC Program & Budget Overview

**Presentation to the
Government Operations and Fiscal Policy Committee
March 31, 2014**

Montgomery College

Mission, Vision, Values

Our Mission

We empower our students to change their lives, and we enrich the life of our community. We are accountable for our results.

Our Vision

With a sense of urgency for the future, Montgomery College will be a national model of educational excellence, opportunity, and student success. Our organization will be characterized by agility and relevance as it meets the dynamic challenges facing our students and community.

Our Values

Excellence * Integrity * Innovation * Diversity * Stewardship * Sustainability

Montgomery College IT Vision and Goals

IT Vision

The Office of Information Technology is a nationally recognized service organization that inspires collaboration and leverages every resource in support of the educational mission of Montgomery College.

IT Goals

Montgomery College will use information technology resources to:

- support teaching and learning to facilitate student success
- effectively and efficiently operate the College
- support development, growth and community initiatives

Montgomery College

FY14 Collegewide Support Outcomes

- Opened Phase II of the Rockville Campus Science Center, deploying approximately 381 computers and 19 ADA compliant Smart Instructor Workstations (SIWS)
- Created a Communication Toolkit to support web conferencing and audio conferencing
- Implemented Blackboard Collaborate enabling instructors to create virtual classrooms and meeting spaces
- Implemented the Blackboard Mobile application for use with mobile devices
- Partnered with the College's Office of Communications to brand and deploy 15 mobile device charging stations throughout the College
- Completed infrastructure enhancements improving network capabilities
- Implemented iPads in classrooms to support technology driven faculty innovations

Montgomery College

FY14 Initiatives

Key Services Redundancy Program

- Create redundancies for major IT infrastructure to eliminate single-points-of-failure and minimize major risks for network, servers, storage, databases, applications, and data center

Identity and Access Management

- Broaden the application of the My MC ID as the standard identity for all users with common sign-in and strengthened passwords
- Comply with the latest FERPA requirements to better secure student personally identifiable information with stronger authentication procedures
- Provision College technology resources to meet individual student needs and requirements

Montgomery College FY14 Initiatives

Active Directory

- Adopt Active Directory as the main controller for authentication, authorization, and policies

College Web Accessibility Audit

- Actively support and enable equal access to College web sites

Library Collaborative Media Project

- Upgrade and implement technology-enabled student collaborative spaces in campus libraries

Spam Filter

- Implement improved spam filtering software solution limiting the number of spam and phishing e-mails received

Montgomery College Strategic IT Assessments

Internal Environment

Strengths

- Dedicated and knowledgeable IT staff committed to fulfilling the mission of the College
- Integrated ERP system
- Centralized and consolidated IT services and support
- Enhanced IT planning and project management processes including a 2-year tactical plan

Challenges

- Maintaining knowledgeable and skilled workforce amidst dynamic, disruptive, and transformative technologies
- Assuring a cyber-aware user community
- Responding to increasing cyber security threats
- Prioritizing new initiatives

Montgomery College Strategic IT Assessments

External Environment

Opportunities

- Enhancing planning and strategic alignment with collegewide units
- Defining measureable outcomes associated with College goals
- Leveraging existing technologies to enhance business processes and services
- Partnering with the College community to encourage strategic thinking and planning for future technology needs
- Increasing partnerships and relations with county and state agencies and other higher education institutions

Challenges

- Maintaining technology that is state-of-the-market to serve an increasingly technology-oriented College community
- Ensuring a secure computing environment that addresses evolving cyber threats
- Ensuring compliance with regulatory requirements
- Ensuring a more sophisticated level of IT support to meet the demands of increased consumerization and adoption of technology

Montgomery College Operational and Functional Perspective

FYs15-20--Operational Health and Replacement Priority of Existing Major IT Systems
Agency Name: Montgomery College

Priority	System Name	Status	Life	Age	Upgraded	FY15	FY16	FY17	FY18	FY19	FY20	Total 6-Yr.	Est. Repl-Cost	CIP PDF #	NOTES
1	Disaster Recovery	Red				1,000	1,000	1,000	1,000	1,000	1,000	6000		076618	
1	Academic Student Applications	Yellow	5 years	Varies	2000-2013	1,200	1,200	1,200	1,200	1,200	1,200	7200	2,495,222	076617	
2	Network Infrastructure	Yellow	Varies	Varies	2011	1,200	1,200	1,200	1,200	1,200	1,200	7200	15,000,000	076619	
3	Network Operating System	Yellow	4 years	Varies	2008	600	600	600	600	600	600	3600	1,500,000	076619	
4	Email System	Yellow	8 years	8 years	2004	1,006	870	1,000	1,000	1,000	1,000	5876	1,948,000	856509	
--	Library System	Green	8 years	6 years	2007	150	150	150	150	150	150	900	428,000	076617	
--	Bookstore System	Green	5 years	6 years	2007	50	50	50	50	50	50	300	199,000	076617	
--	Network Operating Center (NOC)	Green	3-7 years	Varies	2000-2009	1,000	1,000	1,000	1,000	1,000	1,000	6000	20,000,000	076618	
--	Desktop Computer Repl/Upgrades	Green	5 years	Varies	2008	1,000	1,000	1,000	1,000	1,000	1,000	6000	12,000,000	856509	
--	Instructional Syst. Repl/Upgrades	Green	5 years	Varies	2008	2,000	2,000	2,000	2,000	2,000	2,000	12000	8,000,000	856509	
--	ERP, HR, SIS, Finance, Alum (Mnt)	Green	8 years	8+ years	2004	4,000	3,500	4,500	4,500	4,500	4,500	25500	7,292,000.00	856509	

Notes:

SUMMARY Multi-year Cost Projections by Risk Categories

	FY15	FY16	FY17	FY18	FY19	FY20	Total 6-Yr.	Est. Repl-Cost
RED	1000	1000	1000	1000	1000	1000	6000	0
YELLOW	4,006	3,870	4,000	4,000	4,000	4,000	23876	20,943,222
GREEN	8200	7700	8700	8700	8700	8700	50700	47,919,000
TOTAL	13206	12570	13700	13700	13700	13700	80576	68,862,222

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 2-6 years
- Green= Stable systems expected to require only routine maintenance or minor upgrade over the next 3-6 year

Montgomery College

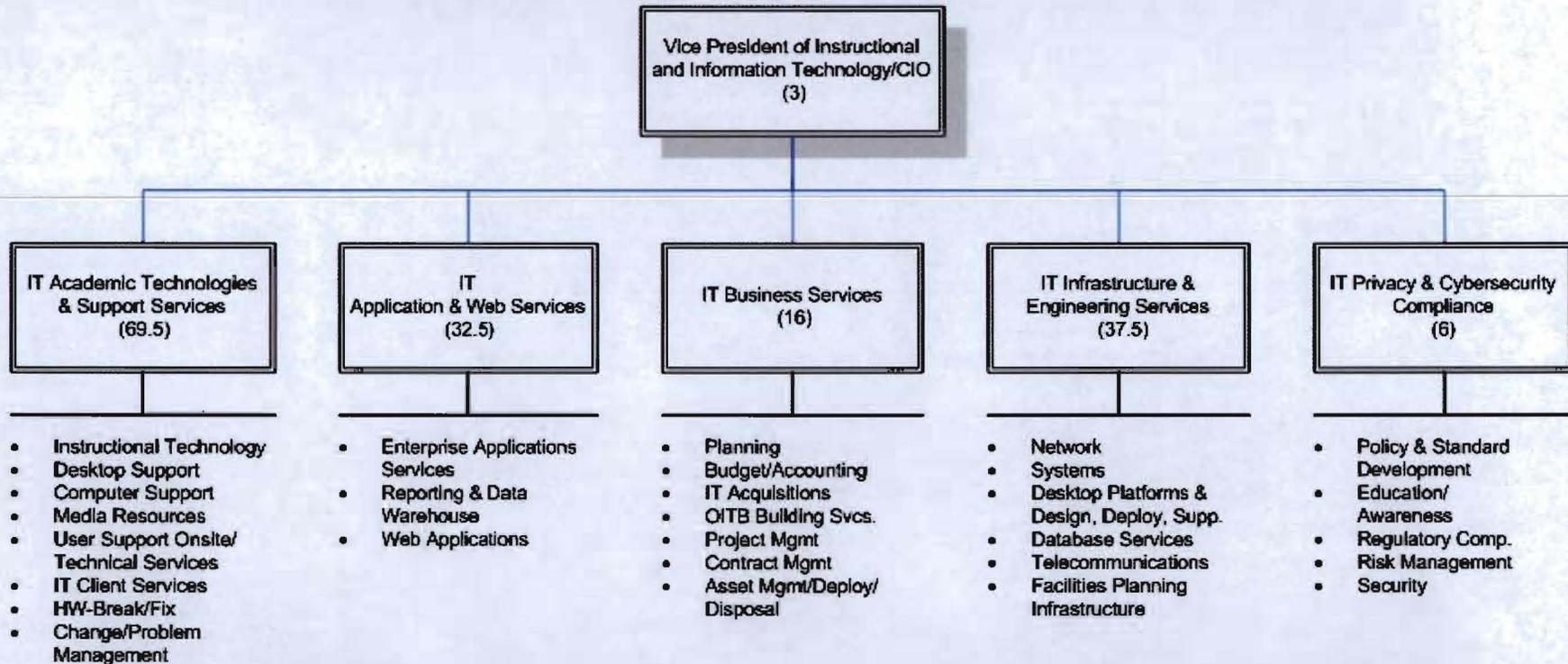
Operational and Functional Perspective

Health of Major IT Systems – Scoresheet Summary

Business Process vs. Major Systems Matrix	Finance	Student Information	Human Resources	Academic Applications	E-Mail	Library	Book Store
Disaster Recovery							
Academic Student Applications							
Network Infrastructure							
Network Operating System							
Email Systems							
Desktop Computer Repl/Upgrades							
Repl./Upgrade Instructional Systems							
NOC (Network Operating Center)							
ERP: HR, SIS, Finance, Alumni - Maintenance							
Library System							
Bookstore System							

Montgomery College

Operational and Functional Perspective



Total Number of Positions: 167 (F/T=162; P/T=5; Total FTE=164.5)
 Number of Contractors: 29

Montgomery College Budget Request

IT Budget Summary

	FY14 Approved	FY15 Requested
Total Operating Salaries & Expenses	\$27,730,186	\$27,228,447
Operating Salaries*	\$13,489,680	\$12,979,947
Total Capital Salaries & Expenses	\$13,444,000	\$13,444,000
Capital Salaries*	\$ 1,539,000	\$ 1,539,000
Total	\$41,174,186	\$40,672,447

IT budget includes all technology: Network Infrastructure, Hardware and Software, ERP and Applications, Classrooms and Labs, Web and Portals, IT Planning and PMO, Computer Support, Telecommunications, Operations, Media Resources, Cyber security

*Note: Salary figures include benefits package

Montgomery College FiberNet – Current Benefits

- Montgomery College is using FiberNet to enhance its existing services by providing dedicated bandwidth for selected WAN functions:
 - College's facilities network
 - Instructional television connection to the commercial vendor
 - College's instructional television broadcast to local cable provider
 - Until recently, FiberNet was used for the video conferencing solution, which was recently decommissioned
- FiberNet is being used as transport for Internet services

Montgomery College FiberNet – Planned Benefits

- Ability to use FiberNet to support back channel data center to data center communications:
 - Load balancing across data centers on Takoma Park/Silver Spring and Rockville Campuses
 - Regular back-ups and mirroring of data from Primary Data Center to Secondary Data Center
 - Redundant log collections
- Ability to provide Internet connectivity for the Germantown Campus once connected
- Potential opportunities to improve distributed services to campuses and sites using FiberNet
- Ability to offer College programs at other county locations (i.e. East County RSC) when connectivity is brought to those facilities and College expands its programs
- Global monitoring of campus security, life safety, building automation, and access control infrastructure

FY 2015 IT BUDGET OVERVIEW

Maryland-National Capital Park & Planning Commission

Montgomery County Planning and Parks Departments



Mission Statement

Planning Department

*To create **Quality of Place** through concepts of design, connectivity, diversity, design, and environment.*

Department of Parks

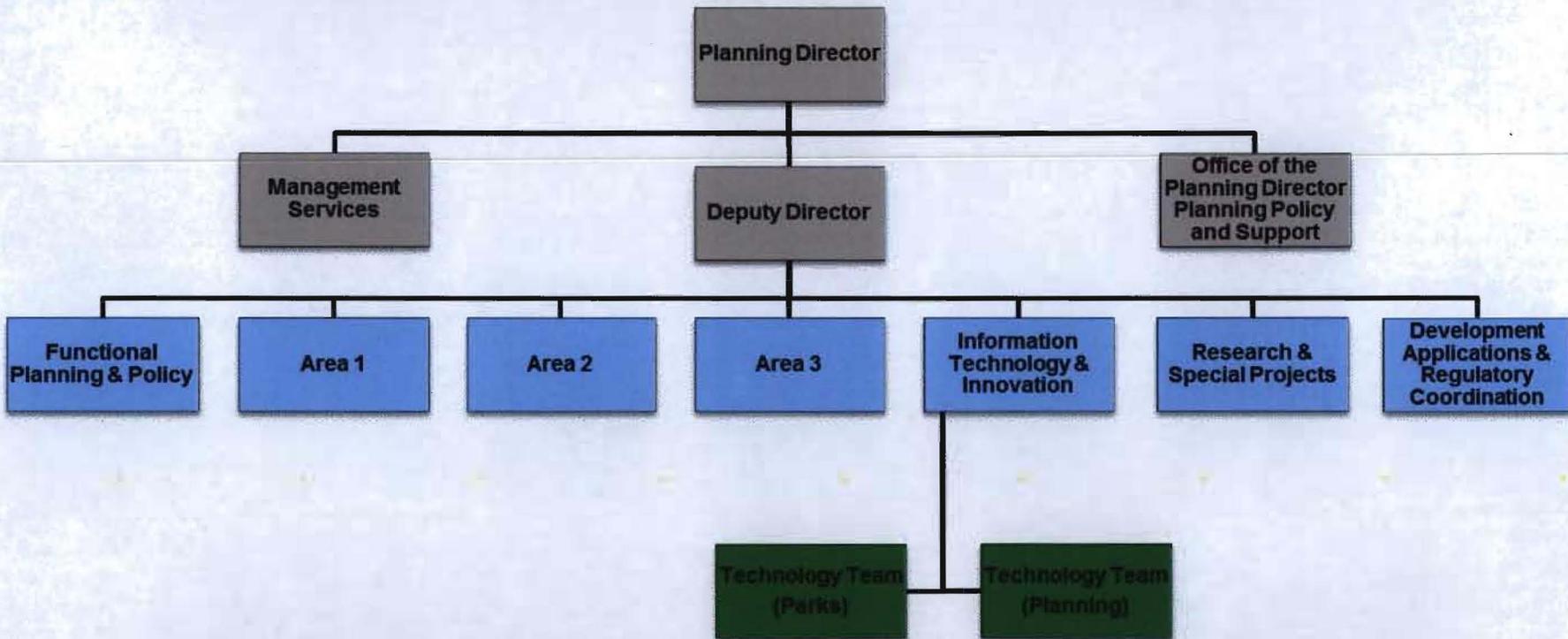
Protect and interpret our valuable natural and cultural resources; balance the demand for recreation with the need for conservation; offer a variety of enjoyable recreational activities that encourage healthy lifestyles; and provide clean, safe, and accessible leisure-time activities.

ITI Mission:

The mission of the Information Technology & Innovation Division (ITI) is to provide high quality infrastructure, applications, communications, support, and innovation by delivering IT products and services that enable the Planning Department and the Department of Parks to achieve their missions.

The Maryland-National Capital Park and Planning Commission

Montgomery County Planning Department **ORGANIZATIONAL OVERVIEW***



*** Planning and Parks Departments share technology services and support.**

External Environment

- Opportunities
 - Inter-agency collaboration improves IT planning and budgeting.
 - FiberNet: high-speed connectivity among facilities and County agencies improves productivity and is cost effective.
 - Launching a marketing campaign in Parks to increase customer hits to our web site.
 - ePlans (ProjectDox) launch for electronic plan review in both Parks and in Planning, allowing submission, review, and revisions through final approval.
- Challenges
 - Level of urgency and complexity for network security, virus protection, and disaster avoidance/recovery issues are accelerating.
 - Staying current with rapid changes in technology within budget.



Internal Environment

- Opportunities

- Refreshing the *IT Strategic Plan* will position the Departments to meet new demand through innovative technology.
- Instituting industry best practices will provide a reliable and secure network across the Departments.
- Coordinating IT support and services across the Departments will result in cost savings and efficiencies.

- Challenges

- Budget constraints require balancing the following:
 - Supporting aging installed base.
 - Replacing obsolete technology.
 - Planning for innovative technology.

IT Accomplishments FY 2014

Technology Enhancements

- ProjectDox/Hansen Integration. Electronic submission and review of two plan types, preliminary plans and site plans, is now required for all plans submitted in FY14 and going forward.
- GIS Strategic Plan implementation resulting in the county-wide update of Planimetrics and LiDAR. Delivery expected March 2014.
- GIS Visualization. Council approved and transferred special appropriation for start of GIS visualization project.
- Purchased a major Voice Over IP upgrade to be installed in 2014.
- Cloud Computing. Planning for the migration of Park Police from on-premises email to Microsoft cloud.
- Virtualization. Completed migration of legacy servers to virtualized environment.
- Information Technology & Innovation Division (ITI). The ITI Division was formed to provide the full range of applications support, infrastructure, and telecommunications in both departments, achieving cost savings and efficiency.

IT Accomplishments FY 2014

Training and Customer Support

- Continued ePlans training refresher sessions in both Departments, including training for developers/consultants who submit plans to our Agency.
- GIS training for staff on latest version ArcGIS 10.1.
- Videoconferencing training was conducted and promoted throughout the Commission as an effective means of conducting meetings and staff collaboration in both departments.
- Continued successful outsourcing for our IT Help Desk, riding Montgomery County's contract for desktop support services.



Strategic Directions for FY 2015

Themes

– ***Embracing the latest technologies for improved service:***

- GIS: publishing the GIS layers online using ESRI's latest Cloud technology, ArcGIS Online.
- Virtualization. Migrating legacy systems to a virtualized environment will achieve better service with lower costs.
- Mobility. Utilizing latest technology allows users to easily access IT resources regardless of location or time of day.

– ***Enhanced Outreach:***

- Enhance customer outreach with Social Media platform such as Facebook, Twitter, and YouTube integrated with our website.
- Enhance Connect With Parks website to provide one place for the public to determine how to best interact with Parks including social media, the e-newsletter, and a park search and project search feature.
- Ability to launch web apps to address public demand for hot topics in Parks and in Planning.



Strategic Directions for FY 2015

Maximizing Our Technology

- Empowering the Departments to **WP1**ze the latest on-line GIS web tools to create web sites to communicate subject matter expertise on projects and initiatives.
- Gain efficiency through CLOUD computing and server virtualization effecting agility in system testing, development, and deployment.
- Migrate legacy servers to virtualized environment to achieve efficiency and reduce costs.
- ePlans (ProjectDox). Upgrading ePlans to enable compatibility with public use of mobile devices.
- Improving VOIP with unified messaging, enhanced 911, and improved redundancy and disaster recovery.



Budget Perspective:

- Maintain current level of service.
- Meet PC replacement schedule to prevent obsolescence.
- Continued enhancement of virtualization and SAN infrastructure.



The Maryland-National Capital Park and Planning Commission

Proposed FY 2015 – Budget as Submitted by Commission

Technology	Planning	Parks
Personnel Services	\$2,071,010	\$953,543
Supplies & Materials	\$247,300	220,000
Other Svcs & Charges	\$966,500	\$866,480
Capital Outlay	0	0
Chargebacks	0	-53,000
Total Expenditures	\$3,284,810	\$1,987,023
Workyears*	15.90	8.10

* Workyear totals are before Chargebacks



FY14-Operational Health and Replacement Priority of Existing Major IT Systems
Agency Name:

Priority	System Name	Status	Life	Age	Upgraded	FY13	FY14	FY15	FY16	FY17	FY18	Total 6-Yr.	>6-Yr.	Full Repl-Cost	NOTES
1	SmartParks	Red	11	9	2008							0			replacement underway
2	Plant Management	Red	6	9								0			In-house developed
3	Avaya VOIP	Red	8	6	2008							0			Implementation is underway
4		Red										0			
5		Red										0			
6		Red										0			
7		Red										0			
8		Red										0			
9		Red										0			
10		Red										0			
1	Homeowner Association	Yellow	6	10	2013							0			In-house developed
3		Yellow										0			
4		Yellow										0			
5		Yellow										0			
6		Yellow										0			
7		Yellow										0			
8		Yellow										0			
9		Yellow										0			
10		Yellow										0			
1	Email Cloud	Green	5	3	2011							0		\$109,311	2011
2	GIS	Green	N/A	21	2013	55,000	55,000	55,000	55,000	55,000	55,000	330000		1,000,000	Web-based
3	SAN System	Green	8	4	2011	47000	47000	47000	47000	47000	47000	282000		480,000	
4	CAD RMS	Green	10	12	2009	23000	23000	23000	23000	23000	23000	138000			
5	VoicePrint	Green	10	5	N/A	2500	2500	2500	2500	2500	2500	15000		30,000	
7	ProjectDox	Green	10	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a			298000	maint
8	ParkPass	Green	10	8	2010	20,000	20,000	20,000	20,000	20,000	20,000	120,000			
9	Fuel Master	Green	10	4	n/a	40500	40500	40500	40500	40500	40500	243000			
10	Hansen	Green	10	14	2011	29000	29000	29000	29000	29000	29000	174000			
11	Avaya VOIP	Green	10	7	n/a	141000	149000	157000	165000	173000	173000	958000		1000000	site added
12	Network Infrastructure	Green	10	n/a	2011	30000	30000	30000	30000	30000	30000	180000		2000000	needed
13	Mobile data system	Green	15	13	2010	22000	22000	22000	22000	22000	22000	132000		300000	
15	Microsoft Office	Green	5	3	2011	n/a	n/a	n/a	n/a	n/a	n/a			300000	enterprise license
16	Faster	Green	10	9	2012	6000	6000	6000	6000	6000	6000	36000		150000	

Notes:

SUMMARY Multi-year Cost Projections by Risk Categories

	FY13	FY14	FY15	FY16	FY17	FY18	Total 6-Yr.	>6-Yr.	Est. Full Repl-Cost
RED	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0

GREEN	416000	424000	432000	440000	448000	448000	2608000	0	5667311
TOTAL	416000	424000	432000	440000	448000	448000	2608000	0	5667311

Risk Key

- Red= QEF Rating 29-54; obsolete or vulnerable critical systems/applications in immediate risk of failure
- Yellow= QEF Rating 15-28; aging or vulnerable critical systems likely to need major upgrade or replacement in the next 3-6 years
- Green= QEF Rating 7-14; stable systems expected to require only routine maintenance or minor upgrade over the next 3-6 year

M-NCPPC - Montgomery County Parks and Planning FiberNet Use Today and Tomorrow

Locations currently utilizing FiberNet:

- Brookside Gardens Visitors Center
- Montgomery County Planning
- Montgomery County Parkside Headquarters
- Montgomery County Saddlebrook Park Police
- Shady Grove
- Cabin John Ice, Indoor Tennis, Maintenance Yard, and Headquarters
- Locust Grove
- South Germantown Recreation Center
- Meadowbrook Maintenance Yard
- Hillandale Park Office

Today's usage:

- FiberNet is the preferred backbone to the M-NCPPC WAN infrastructure.
- FiberNet provides increased connectivity speed, capacity, and reliability.
- Improved connection speeds for collaboration on cross-agency systems such as GIS and Hansen.

M-NCPPC - Montgomery County Parks and Planning FiberNet Use Today and Tomorrow

Moving forward with FiberNet:

- Continue to extend the FiberNet to thirteen non-Fibernet sites within M-NCPPC to achieve improved network connectivity and reduced costs.
- Begin to use FiberNet for SIP trunking for M-NCPPC VOIP phone system at a reduced cost and with more reliability.
- Elimination of costly and long-term commitments to Verizon for data circuits to the extent that FiberNet allows us to replace them.



**Washington Suburban
Sanitary Commission**

Interagency Perspectives: FY15 Program & Budget Overview

March 2014



Presented by:
Mujib U. Lodhi
WSSC Chief Information Officer

Strategic Perspective

WSSC Mission:

We are entrusted by our community to provide safe and reliable water, life's most precious resource, and return clean water to our environment, all in an ethically and financially responsible manner.

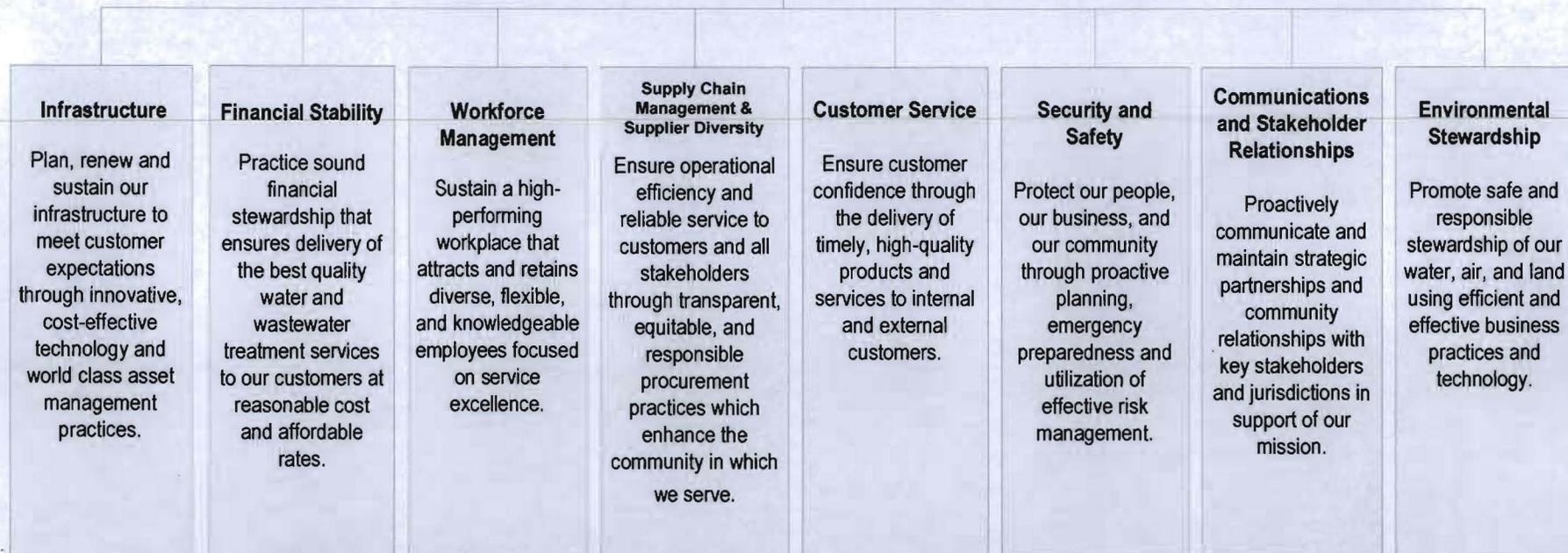


WSSC Vision:

- We will become the world class provider of safe, reliable water/wastewater services that protect the health, safety and quality of life for our community.
- Customers are delighted with our excellent products and services.
- Relationships with our customers, employees and business partners surpass expectations.
- Protect the environment through our efforts.
- Quality...always.

Strategic Perspective

Commission Strategic Priorities



NOTE:

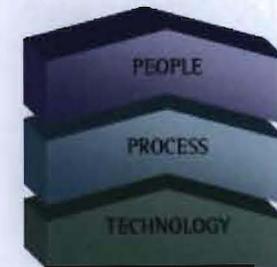
The Technology Priority was combined into the Infrastructure Priority.

The Regulatory Environment Priority was combined into the Communications and Stakeholder Relationships Priority.

IT Vision

Under the direction of the WSSC Strategic Plan and guidance of the General Manager, we will:

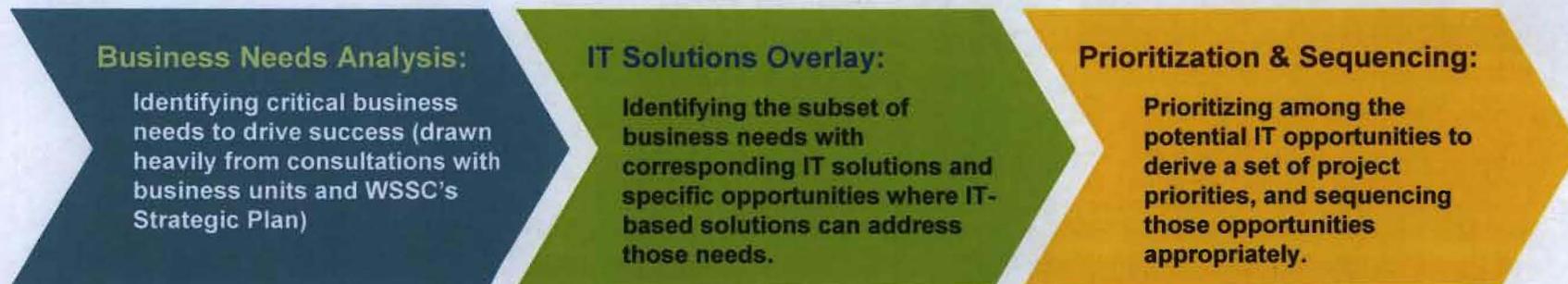
- Rise to a position of absolute leadership among public utilities in the creative use and application of IT, and leverage this investment to dramatically improve the customer service and organizational performance.
- Serve as a Change Agent to support redefinition of business processes so as to more effectively serve our customers.
- Strive to create new business value through innovative IT solutions to build a **Smart Utility**.



IT Strategic Plan: Planning Methodology

In FY13, lead by the General Manager and CIO, with the approval of the Commissioners, WSSC developed a 5-Year Strategic Plan.

- A business-driven plan, this Strategy hones in on specific opportunities where IT-based solutions can unlock the greatest business value.
- The planning approach can be summarized as follows:



Our IT Strategy

Strategic Themes Underlying Our IT Strategic Approach:

■ Invest in IT as Mission-Critical Infrastructure

- Upgrade “orphaned” & mainframe-based “legacy” systems
- Mitigate system performance risks
- Streamline business processes prior to automation
- Leverage mobile & online techs to increase efficiency & connectivity
- Leverage online technologies to better serve & engage stakeholders
- Improve info accuracy & transparency for customers

Our IT Strategy

■ Work Smarter

- Develop integrated tech solutions that cut across functional units
- Enhance 2-way info flows w/real-time technologies
- Harness the power of info w/business intelligence & predictive analytics
- Leverage IT for better tracking of business performance

■ Effectively Steward IT Resources

- Leverage “off the shelf” technologies, where appropriate
- Optimize existing systems, end-to-end
- Employ bridge solutions to alleviate “pain-points”, where appropriate

IT Project Portfolio & Sequencing

Low

IMPLEMENTATION INTENSITY

High

Platform

Ongoing, multi-year

- Docs & Business Process Management
- Dashboards
- Mobile Workforce
- GIS
- Contact Center Enhancements
- Master Data Management (MDM)

Short Term

<2 years

- HRIS Enhancements
- Construction Ops Management
- CIP Budget Management
- CIP Decision Support
- Retiree Payments Management
- Financial Reporting
- Fixed Assets
- Safety Management
- Stakeholder Management

Complex, multi-year

2++ years

- CSIS
- AMI
- Asset Management: Production
- Asset Management: Infrastructure
- AP / Purchasing / Inventory / Contracts
- Leak Detection
- Permitting

IT Strategy– Project Sequencing

	Time (yrs)	2012		2013				2014				2015				2016				2017		Beyond...		
		Jul	Oct	Jan	Apr																			
		FY 2013				FY 2014				FY 2015				FY 2016				FY 2017						
		Q1	Q2	Q3	Q4																			
Multi-Year	AM: Production	3	P	P	R	R																		
	Permitting	2.75	P	P	R	R																		
	AM: Infrastructure	3			P	P	R	R	R															
	CSIS	3						P	P	P	R	R	R											
	AP/PO/Inventory/CM	2.25								P	R	R												
	AMI	5 to 6													P	P	P							thru 2022
	Leak Detection	3																		P	R			thru 2019

P = Planning & Acquisition
R = Detailed Requirements

Note: Project timeline starts at contract execution

Short-Term	Project Name	Time (yrs)	2012		2013				2014				2015				2016				2017				
			Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr			
	Construction Ops Mgmt	2																							
	CIP Decision Support	2																							
	Financial Reports	1.25																							
	Fixed Asset	0.5																							
	CIP Budget Mgmt	1.25																							
	HRIS Enhancements	1																							
	Stakeholder Mgmt	0.75																							
	Retirement Payments	1																							
	Safety Mgmt	1																							

Platform	Project Name	Time (yrs)	2012		2013				2014				2015				2016				2017				
			Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr			
		Doc/Records/KM	ongoing																						
		Dashboard	ongoing																						
		Mobile Workfce	ongoing																						
		Contact Ctr BPR/ENH	ongoing																						
	MDM	ongoing																							
	GIS	ongoing																							

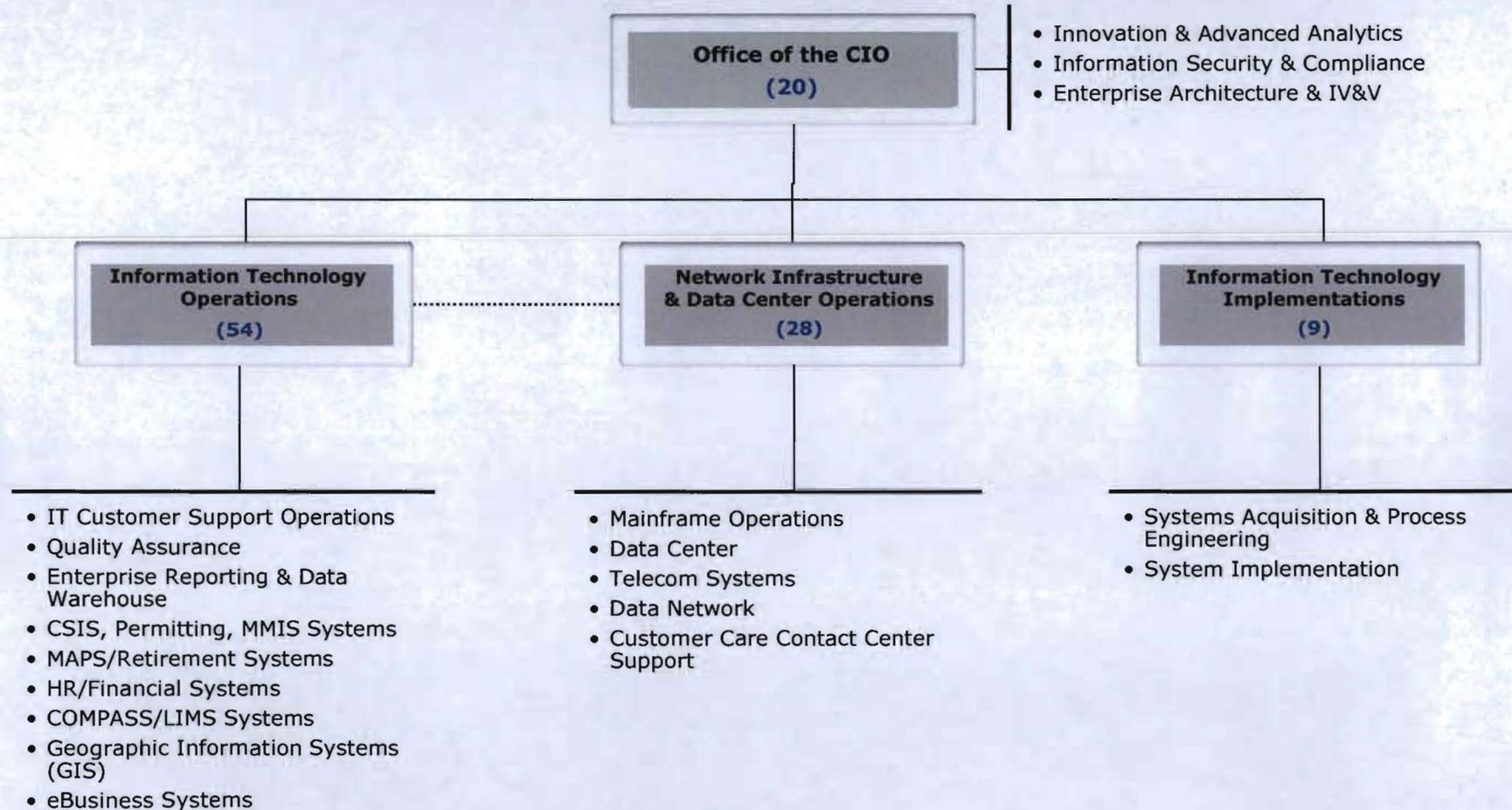
Implementation Approach

- Refine the system implementation approach to align with best practices
- Implement structures, processes and controls to ensure delivery readiness
- Retool an enterprise-wide, integrated IT Team to deliver on these objectives.
- Invest in our people resources through recruitment, skills development and performance management

Implementation Approach (continued)

- Institute a formalized governance structure to provide ongoing IT portfolio and project-level guidance
- Upgrade out IT infrastructure to keep pace with new technologies
- Accelerate technical and policy collaboration with County technology leaders

Implementation Approach: Integrated IT



Total Number of Positions: **111**
Number of Contractors: **45**

FY13 Achievements: Multi-Year Projects



■ Asset Management - Linear

- Increased efficiency for operations and maintenance management for all Depots and Radio Room
- Enhanced integration of Work Order management and GIS
- Increased search, alert, and reporting capability for all stakeholders
- Consistency of business processes across all Depots and interaction with the Radio Room
- More effective and efficient responses to emergency events



■ Asset Management – Production

- Increased efficiency for work management for all Plants
- Cleanup of Plant Asset information prior to migration to TEAMS
- Removal of risk of reliance on unsupported legacy software application
- Increased search, alert, and report capability for all stakeholders
- Consistency of business processes across all plants

■ Permitting Management System

- Improved Customer Service by minimizing need for customers to visit WSSC, simplifying applications process and providing online fee payment.
- Increased Operational Efficiency by standardizing and streamlining processes and reducing duplicate data entry
- Improved Reporting and Performance Measuring
- Improved Business Process Controls (both verification and authorization)
- Improved Data Integrity, Quality, Accountability, and Transparency



FY13 Achievements: Short Term Projects

■ Decision Support System

- Enable effective planning/managing of asset replacement strategies
- Provide a better means of assessing assets' health & predicting replacement timeframes
- Establish a single data repository for reporting
- Allow for asset management plans to be developed in-house

■ Construction Operations Management

- Rapid identification of project delays
- Effective and quick management decision making due to ease of dissemination/retrieval of information
- Streamline interaction between business groups resulting in improved operational efficiencies
- Potential reduction in overall costs

■ Financial Reporting (proof of concept)

- Mitigate risk by identifying technical and business challenges prior to implementation
- Help benchmark the performance of Oracle BI Applications
- Support better business decisions through flexibility to slice and dice data, filter, and drill down, in order to perform various analyses
- Easy information access, with the flexibility to slice and dice the data for analysis, filters, drill downs and guided analytic workflows



FY13 Achievements: Platform Projects

■ Master Data Management (MDM)

- More informed decisions derived from enterprise reporting and analytics.
- Operational efficiency and cost savings through the elimination of constant data cleanup efforts over time.
- Data governance process is institutionalized to avoid return to current poor state.
- Significant risk reduction when making IT system or application changes.

■ Enterprise GIS

- Ensures operational efficiency by enabling our workers to carry out the mission
- Improved communications, both internally and to the public
- Informed planning & decision-making based upon real-time data.

■ Mobile Workforce Management

- Improved operational efficiencies & productivity for field crew by allowing them to access and manage critical asset data directly from the field.
- Improved customer service and safety resulting from improved communications to address problems before they worsen.
- Enhanced mobility on the job by giving field crew the ability to transport laptops to various points offsite where vehicles may not be able to travel.



FY13 Achievements: **Mobile Initiatives**

■ **Fire Hydrant Inspection System**

- Increased process efficiency by 25-40% to overall process.
- Real time status of the inspection process.
- Elimination of the need for paper copies of the Firebook.
- Visual representation of the fire hydrant inspection process.
- Support for data integrity by allowing supervisors to verify location at time of inspection.

■ **HyLo – Hydrant Locator**

- Supports public safety through quicker decision-making for County firefighters

■ **Mobile App Enhancements**

- Reduced call volume and call-handling times within call center.
- Potentially faster repairs, dollars saved, & better service for the community.
- Reduced carbon footprint – less printing and travel costs
- Improved customer service, by providing more services through mobile devices.



FY13 Achievements: Other Small IT Projects

- IT Security Plan
- Disaster Response Plan (DRP)
- Commissioner Meeting Live Broadcasting
- Paperless eBilling Option
- Automated Attendant Solution
- Next Generation Phone System: Remote Sites
- Applicant Tracking System
- Audio/Visual Enhancements



FY14 IT Portfolio

Multi-Year

- Asset Management – Linear / Production Assets
- Permitting Management System
- Asset Management – Infrastructure
- CSIS – Customer Billing

Short-term

- Decision Support System
- Construction Ops Management (Portfolio Manager)
- Financial Reporting
- Fixed Assets
- Website Refresh
- CIP Budget Management

Platform

- GIS Architectural Refresh
- Enterprise Reporting Platform
- Contact Center Enhancements
- Master Data Management
- Mobile Workforce Management
- Records Inventory, Retention Schedule & Policy
- Windows 7 / Office 2010 Upgrade (*infrastructure*)
- IT Security & Compliance Infrastructure & Disaster Response Plan
- Network Infrastructure
- Microwave Radio Upgrade (*infrastructure*)

FY15 IT Proposed Portfolio

Multi-Year

Asset Management – Linear / Production Assets
Permitting Management System
Asset Management – Infrastructure
CSIS – Customer Billing
AP/PO/Inv/CM

Short-term

CIP Budget Management
HRIS/Payroll Enhancements
Stakeholder Management
LIMS Upgrade
Incident Report & Investigation Software Upgrade (IRIMS)
Website Refresh

Platform

GIS Architectural Refresh
Enterprise Reporting Platform
Contact Center Enhancements
Master Data Management
Mobile Workforce Management
Modular Data Center
Records Inventory, Retention Schedule & Policy
IT Security & Compliance Infrastructure & Disaster Response Plan
Network Infrastructure
Microwave Radio Upgrade (*infrastructure*)

Operational & Functional Perspective: Health of Major Existing IT Systems

Priority	System Name	Status	Age of System	Most Recent Upgrade	FY13-18 Total Cost
1	COMPASS (Production Assets)	Critical	21	2008	4,000,000
2	MMIS (Linear Assets)	Critical	19	2008	4,000,000
3	MAPS (AP / PO / Inventory / CM)	Critical	15	2008	3,500,000
4	Financial Reports	Critical	4	2010	1,000,000
5	CSIS (Customer Billing)	Critical	18	1999	30,000,000
6	Permitting Management System	Critical	19	2007	3,000,000
1	CIP Decision Support	Vulnerable	1	2013	1,000,000
2	Fixed Assets	Vulnerable	3	2011	400,000
1	Fleet Management System	Stable	3	2011	-
3	Employee Payroll	Stable	16	2007	-
4	Retirement Payroll	Stable	21	2008	500,000
5	OTL (Time / Labor)	Stable	16	2012	-
6	General Ledger	Stable	16	2012	-
7	HRIS (Human Resources)	Stable	9	2012	1,500,000
8	GIS (Geographic Info System)	Stable	4	2012	2,000,000

Status Key:

- Red** - Obsolete or vulnerable critical systems in immediate risk of failure.
- Yellow** - Aging/vulnerable critical systems likely to need major upgrade or replacement in the next 3-6 yrs.
- Green** - Stable systems expected to require only routine maintenance or minor upgrade over the next 3-6 yrs.

Budget Perspective

FY15 Budget Overview

- In FY15, the IT budget is 5.7% of the total WSSC operating budget of \$707.19 million.
 - The FY15 requested budget for the Information Technology Team is \$40.23 million which is an increase of 26.2% (\$8.37M) over the FY13 budget of \$31.86 million. This increase is primarily due to consulting support for the Enterprise Technology Initiatives outlined under the 2013 WSSC IT 5-Year Strategic Plan, as well as services required to build the Modular Data Center.
 - The FY15 budget is allocated as follows:
 - **Critical and/or Strategic Initiatives** \$ 16,916,000 (42.0%)
 - **Adjustment to Baseline** 454,500 (0.1%)
 - **Operational Baseline** 22,863,200 (56.9%)
- * **Baseline** refers to all costs associated with on-going, operational, maintenance, staff augmentation, and end-user support.
- * **Adjustment to Baseline** is defined as costs related to increased level of existing staff resources, augmentation & added maintenance to existing systems.
- * **Critical/Strategic Initiatives** refers to all costs associated with business projects and WSSC Annual Action Item priorities

Budget Perspective

FY13 – FY15 Budget Breakdown

	<u>FY13 Actual</u>	<u>FY14 Budget</u>	<u>FY15 Requested</u>
Salaries & Wages	7,205,483	10,981,600	11,091,400
Services By Others	9,676,423	9,588,500	12,598,800
Professional Services	4,257,333	8,395,500	13,259,200
Telephone & Comm Expenses*	2,116,363	1,955,700	2,081,900
Computer Equipment & Materials	255,049	264,100	557,700
Training	700	300,000	300,000
Other (Travel, Supplies, etc.)	403,621	373,000	344,700
TOTAL	23,914,972	31,858,400	40,233,700

* Covers organization-wide telephone, wireless, internet and related communication expenses.

Note: Budget figures reflect ERP/Enterprise Technology Initiatives funding.

Budget Perspective

Fibernet Usage & Benefits for WSSC

- **Current:** Fibernet is currently used between our main office building and our Recovery Point site, which serves as backup link for High Availability.
- **Planned:** In the future, we expect other WSSC critical facilities to be connected through Fibernet to provide reliable communication services and High Availability.
 - Will enable our field crew to access critical systems to perform their day to day duties
 - Allow customers to interact with WSSC without interruptions.



FY15 Budget Review

Housing Opportunities Commission Mission Statement

MISSION:

To provide affordable housing and supportive services

VISION:

All families in Montgomery County live in decent, safe and sanitary housing, regardless of income.

Families and communities in Montgomery County are strengthened as good neighbors through supportive services.

Establish an efficient and productive environment that fosters trust, open communication and mutual respect.

Partner effectively and aggressively with advocates to maintain support for all the work of the Commission.

Housing Opportunities Commission Information Technology Mission Statement

General Charge:

The mission of Information Technology Division at the Housing Opportunities Commission is to connect staff effectively and responsibly to reliable information, computing, and telecommunications technologies in support of the Housing Opportunities Commission core mission.

Action Plan

To accomplish this mission, the Information Technology Division will:

- Provide and maintain a high quality, open architecture, service-based information technology infrastructure, and inform the staff of its availability and capabilities.
- Develop an on-going strategic planning process in information technology that will serve the staff and which will include specific objectives and activities.
- Provide the organizational structure and functions to ensure an orderly and economically sound development of the uses of information technology.

Housing Opportunities Commission

Information Technology

FY14 Accomplishments

- Transitioned Housing and Financial Software System (Yardi) to the “Cloud”
- Implemented a fleet management software system and installed tracking hardware in each HOC owned vehicle
- Expanded the Technology Employee Purchase Program (TEPP) in FY14. Employees able to obtain PCs, laptops, tablets and iPads and use at work through the agency BYOD initiative. Over 220 devices have been approved through TEPP.
- Expanded social media outreach to clients. HOC is now on Facebook, Twitter, LinkedIn, Google+, YouTube and a blog page for outreach.
- Improved the HOC website (www.hocmc.org) by adding responsive design for mobile devices and improved 508 compliance.
- Implemented a self service network password reset system for HOC employees. This system helps reduce the number of incoming help desk requests in FY14.
- Montgomery County Government began installation of FiberNet connections to HOC properties. HOC will utilize these connections to provide high speed internet access to HOC residents through the “Cloud” computer sites.
- Completed upgrade of all desktop Windows XP computers to Windows 7 or Windows 8. Support for Windows XP ends on April 8, 2014.

Strategic IT Assessment

Internal Environment

Strengths

- Dedicated staff that care about the mission and work of the agency;
- “Cloud” based systems providing an increased disaster recovery and mobile environments;
- Information Technology Help Desk call tracking system;
- Information Technology systems availability and support;
- Ability to develop in-house applications to support the tracking and reporting requirements of the agency;
- Agency support of Information Technology related initiatives.

Weaknesses

- The agency’s pay structure is not competitive with the open market making it difficult to retain quality staff;
- Procurement regulations often place time demands on technical staff which deflect staff resources from IT related tasks;

Strategic IT Assessment

External Environment

Opportunities

- Opportunity to use HOC as a resource to narrow the Digital Divide;
- Internet/Intranet technologies are providing improved communication methods both external and internal customers;
- Inter-operability of development tools allow for standardization which improves system support;
- Utilizing the ITPCCs vast knowledge and resources to improve overall Information Technology operations at HOC; and
- Utilize “Cloud” services to shift ongoing capital costs to operating funds and provide a high level of disaster recovery services.

Challenges

- HUD’s electronic reporting requirements place a burden on the agency to modify software, hardware and business processes;
- Continued core-business conversions to a standardized and supportable set of software systems;
- Training HOC staff and users during the rapid change of Information Technology growth; and
- Weak economy and difficult budget cycles threaten information technology initiatives.



Operational Health and Replacement Priority of Existing Major IT Systems

FYs15-20--Operational Health and Replacement Priority of Existing Major IT Systems
Housing Opportunities Commission

Priority	System Name	Status	Life	Age	Upgraded	FY15	FY16	FY17	FY18	FY19	FY20	Total 6-Yr.	Est. Repl-Cost	CIP PDF #	NOTES
1		Red										0			
2		Red										0			
3		Red										0			
4		Red										0			
5		Red										0			
6		Red										0			
7		Red										0			
8		Red										0			
9		Red										0			
10		Red										0			
1	E-Mail	Yellow	5	2	2017	0	0	60000	0	0	0	60000			migrating to hosted
2		Yellow										0			
3		Yellow										0			
4		Yellow										0			
5		Yellow										0			
6		Yellow										0			
7		Yellow										0			
8		Yellow										0			
9		Yellow										0			
10		Yellow										0			
--	Housing / Financial	Green	15	11	2013	20000	20000	20000	20000	20000	20000	120000			
--	Mortgage Finance	Green	10	4	2013	0	35000	0	25000	0	0	60000			
--	Document Imaging	Green	8	3	2013	0	20000	20000	20000	20000	20000	100000			
--	Virtualization System	Green	10	0		60000	60000	60000	60000	60000	60000	360000			maintenance
--	Telecommunications	Green	5	0	2019					250000		250000			service is provided
--	Fleet Management	Green	8	0	2014	5000		5000				10000			
--	Website	Green	5	2	2014	15000	0	5000	2000	0	0	22000			
--	Physical Servers	Green	3	0	2019	0	0	60000	0	0	0	60000			

Notes:

SUMMARY Multi-year Cost Projections by Risk Categories

	FY15	FY16	FY17	FY18	FY19	FY20	Total 6-Yr.	Est. Repl-Cost
RED	0	0	0	0	0	0	0	0
YELLOW	0	0	60000	0	0	0	60000	0
GREEN	100000	135000	170000	127000	350000	100000	982000	0
TOTAL	100000	135000	230000	127000	350000	100000	1042000	0

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 2-6 years
- Green= Stable systems expected to require only routine maintenance or minor upgrade over the next 3-6 year

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Housing Opportunities Commission Information Technology Strategic Directions

- ✦ **Themes**

- ✦ **Continue transition of appropriate services to the “Cloud”**

- ✦ Move HOC e-mail to the “Cloud”
 - ✦ Transition HOC properties to “Cloud” based telecommunications systems

- ✦ **Update technology related components**

- ✦ Replace and improve legacy networking equipment (wired and wireless)
 - ✦ Expand wireless capabilities at remote locations for staff and residents
 - ✦ Perform upgrades to core software systems adding additional functionality and features
 - ✦ Enhance video capture capabilities for use on new social media site

Housing Opportunities Commission Information Technology Strategic Directions

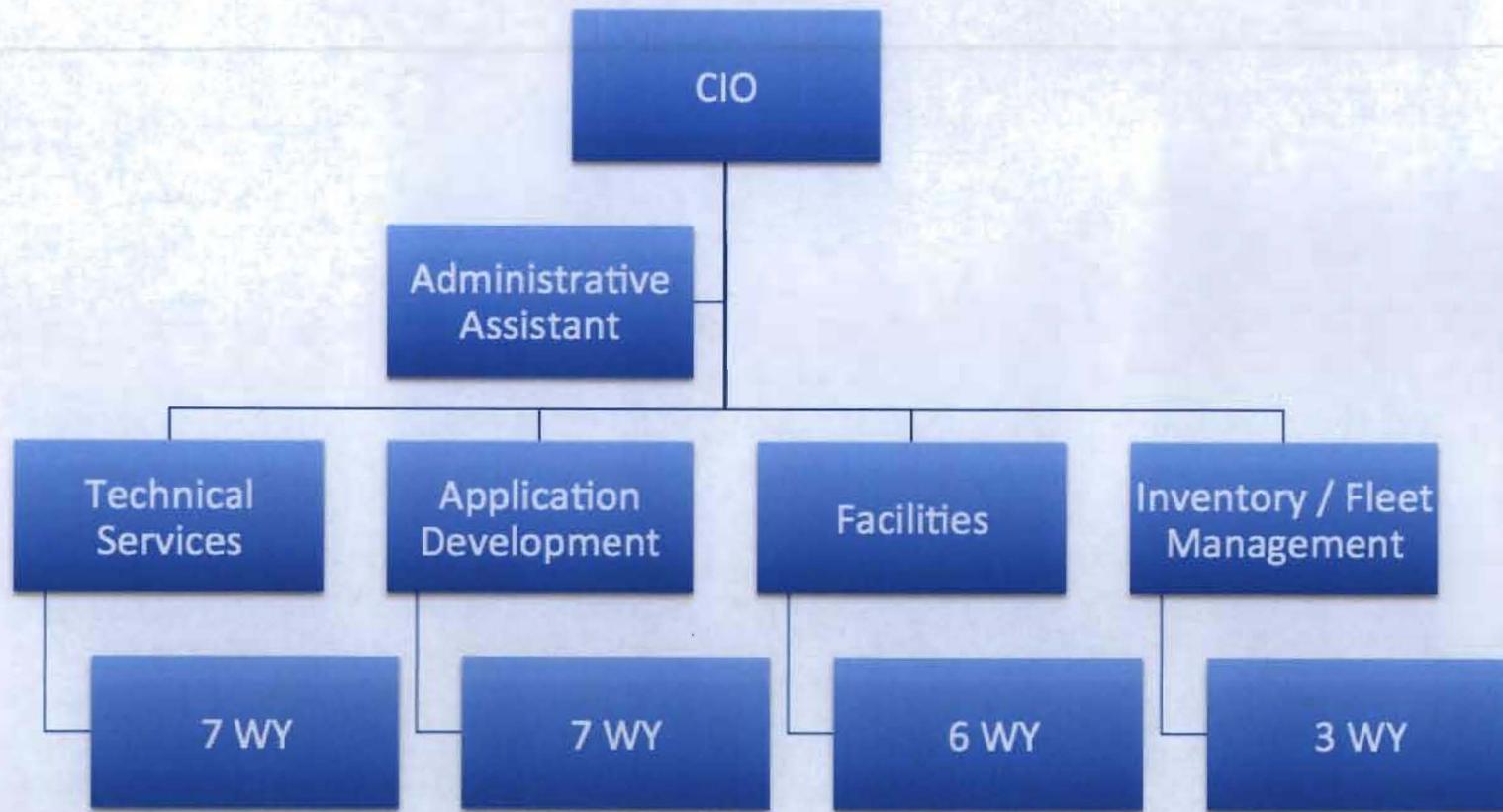
- + **Themes continued**

- + **New development and acquisition**

- + Expand and enhance the HOC Property Assessment Tool. Add Dashboard functionality for a visual representation of property related data.
 - + Develop mobile app for HOC clients
 - + Implement Human Resources recruitment and staff development system

Housing Opportunities Commission Information Technology Organization Chart

Information Technology Work Years – 15.5



Housing Opportunities Commission Information Technology FY15 Budget Overview

- The FY15 requested budget for the Information Technology Departments is \$4.23 million dollars. This request has not been approved by the HOC Board of Commissioners on the date of this presentation.

	FY12	FY13	FY14	FY15
Operating Budget	2.31m	2.50m	2.68m	2.92m
Capital Budget	0.25m	0.60m	1.58m	1.31m
Total Budget	2.56m	3.10m	4.26m	4.23m