Technology Innovation and Leadership

Program Description

This budget includes funding for the Office of the Chief Technology Officer (OCTO) and the Department of Instructional Technology (DIT) and their department's Innovative Technology Unit. The Office of the Chief Technology Officer leads the organization in the integration of content, pedagogy, and technology transforming teaching and learning for the digital age. OCTO defines and promotes a vision to create and sustain a world class 21st century online community. This evolving community fosters collaboration, communication, professional development, and ubiquitous access to information that connects parents, students, and staff in a real-time interactive experience that drives excellence in education. OCTO works closely with internal and external stakeholders to provide technology solutions that are reflective of their needs and are highly responsive in providing actionable information to support continuous improvement in teaching and learning. DIT identifies and plans for innovative technologies that excite our customers and stakeholders giving them a way to energize teaching and engage students in their learning; integrates rigorous project management practices, infusing quality management and quality assurance disciplines for decision making to deliver desired results in new areas of effort; promotes dependable, secure, repeatable, and reliable operational work processes that are responsive to customer needs; and creates a technology plan for teaching and learning in a digital age.

Technology Innovation and Leadership has a number of program components. The major functions and activities include the following:

- Leading officewide and districtwide initiatives that foster impactful integration of technology, content, and instructional practices, including but not limited to inquiry, differentiation, and assessment as, of, and for learning
- Providing leadership and expertise in conceptualizing and enabling state-of-the-art technology solutions that modernize instructional and administrative practices, facilitating just-in-time professional development, and engaging stakeholders in communities of practice
- Collaborating with stakeholders to implement and track results for the objectives, strategies, and initiatives
- Developing the MCPS Strategic Technology Plan in accordance with the Maryland State Department of Education and E-rate requirements
- Providing direction, establishing priorities, and modeling quality management principles for effective and efficient project and process management within OCTO and across MCPS
- Visioning, planning, and creating models for the implementation of innovative instructional technologies that transform teaching and learning
- Building the capacity of staff through the Professional Growth Systems and career advancement opportunities

Technology Innovation and Leadership

(continued)

- Ensuring delivery of quality technology products and services, with high levels of customer satisfaction and acceptance, implementing the disciplines and practices of contemporary application life cycle management
- Driving successful product deployment through planned quality strategies and test-driven development resulting from ongoing verification, validation, and acceptance of work products
- Procuring services and ensuring compliance with the E-Rate program for rebates for eligible telecommunication services

Number of Students Served: All MCPS students are directly or indirectly served by this program.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2014 is \$5,151,707. Significant changes in the budget that impact the program's functions and operations are as follows.

Program Realignment

In FY 2013, there is a budget neutral reorganization within OCTO that is designed to better serve and support schools and offices. As a result, 8.0 positions and \$719,515 are realigned from this program budget to other OCTO program budgets.

Program Efficiencies and Reductions

There is a reduction of a 1.0 supervisor position and \$125,676. The supervisor responsibilities will be distributed to other staff members in the program. Also, there is a reduction of a vacant 1.0 fiscal assistant III position and \$62,566, and a reduction of \$53,994 budgeted for supporting services part-time salaries. Current staff will have to prioritize and create efficiencies to support additional service requests.

Program Funding

For FY 2014, it is projected that this program will be funded entirely by local funds.

Crosswalk to Other Budget Documents

More detailed information about this program can be found in the *Superintendent's Recommended FY 2014 Operating Budget and Personnel Complement* as follows:

Office of Chief Technology Officer: Page 9-4 Department of Instructional Technology: Page 9-24

TECH. INNOVATION & LEADERSHIP

Description	FY 2013 Current	FY 2014 Request	FY 2014 Change
01 Salaries & Wages			
Total Positions (FTE)	12.000	10.000	(2.000)
Position Salaries	\$1,072,747	\$877,305	(\$195,442)
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends			
Professional Part Time			
Supporting Services Part Time Other	68,301		(68,301)
Subtotal Other Salaries	68,301		(68,301)
Total Salaries & Wages	1,141,048	877,305	(263,743)
02 Contractual Services Consultants			
Other Contractual	536,862	540,012	3,150
Total Contractual Services	536,862	540,012	3,150
03 Supplies & Materials Textbooks Media			
Instructional Supplies & Materials			
Office	21,680	17,399	(4,281)
Other Supplies & Materials	4,099	8,380	4,281
Total Supplies & Materials	25,779	25,779	
4 Other			
Local/Other Travel	36,276	37,251	975
Insur & Employee Benefits			
Utilities	3,036,955	3,036,955	
Miscellaneous	634,405	634,405	
Total Other	3,707,636	3,708,611	975
5 Equipment			
Leased Equipment	27,723		(27,723)
Other Equipment			
Total Equipment	27,723		(27,723)
Grand Total	\$5,439,048	\$5,151,707	(\$287,341)

TECH. INNOVATION & LEADERSHIP

CAT		DESCRIPTION	10 Mon	FY 2013 CURRENT	FY 2014 REQUEST	FY 2014 CHANGE
1		Chief Technology Officer		1.000	1.000	
1	Q	Director Schl Support & Improv				
11	0	Supervisor		1.000		(1.000)
1	0	Supervisor				
1	0	Supervisor				
1	Ν	Asst. to Assoc Supt		1.000	1.000	
1	K	Supervisor		1.000	1.000	
3	BD	Instructional Specialist				
1	25	IT Systems Specialist				
1	25	Fiscal Specialist II		1.000	1.000	
1	25	IT Systems Specialist				
1	25	Technical Analyst				
1	25	IT Systems Specialist				
1	25	IT Systems Specialist		3.000	3.000	
1	17	Admin Services Manager I		1.000	1.000	
1	16	Administrative Secretary III		1.000	1.000	
1	16	Fiscal Assistant III		1.000	1.000	
1	16	Administrative Secretary III				
1	15	Fiscal Assistant II		1.000		(1.000)
1	12	Secretary				
	Tota	al Positions		12.000	10.000	(2.000)

Instructional Technology

Program Description

This budget includes funding for the Department of Instructional Technology (DIT) in the Office of the Chief Technology Officer (OCTO). DIT serves as a point of contact for administrators, teachers, and supporting services staff while providing technology consultation and professional development. Major functions and activities of this program include the following:

- Designing, developing, delivering, and evaluating situated, job-embedded professional development to support teaching and learning with school-based instructional and leadership staff.
- Designing, developing, delivering, and evaluating centralized and Web-based professional development on systemwide applications to support workforce excellence, business applications, and technologies that support teaching and learning.
- Providing technology consultation services to school leadership.
- Supporting school improvement plans with proven technologies.
- Providing leadership and program management for the Technology for Curriculum Mastery (TCM) initiative.
- Collecting feedback on systems and providing it to the appropriate department and/or division.
- Managing the Center for Technology Innovation (CTI).
- Supporting the educational technology policy in all schools and the Technology Modernization Program.

The mission of DIT is to support excellence in teaching and learning, facilitate collaborative learning communities, and support operational excellence that enhances the management of the business of education. This is accomplished by building the capacity of administrative, instructional, and support services staff through high-quality, differentiated, and situated/jobembedded professional development to support the implementation of new and existing technologies in schools and offices. The department accomplishes its mission by doing as follows:

- Providing technology consultation services to school leadership
- Collaboratively working with school leadership to support school improvement plans with technology strategies
- Collecting feedback on systems and providing it to the appropriate department and/or division
- Facilitating and enhancing professional learning communities with the use of Web-based technologies
- Collaborating with MCPS offices and schools to identify needs for which technology solutions can be applied
- Developing, distributing, and supporting interactive distance learning.
- Creating a learning environment at CTI for the delivery of a wide array of instructional and business applications

Instructional Technology

(continued)

- Supporting the instructional implementation of the Educational Technology Policy in all schools and the Technology Modernization Program.
- Using the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) instructional system design model to assure highly aligned, results-oriented professional development
- Developing school and office staff's skills and strategies needed for data-driven decision making, integrating technology into instructional and management practices including *myMCPS*, assessment technologies, communications applications, curriculum and course management platforms, instructional applications, and electronic resources
- Employing a situated, job-embedded approach to professional development when working with school staff to increase technological pedagogical content knowledge as it relates to individual teacher's implementation of the curriculum
- Supporting the use of 21st century interactive classroom technologies to create and strengthen inclusive, diverse community-centered classrooms that foster a culture of inquiry, respect, and risk taking so that all students are empowered to participate as full citizens in meaningful learning communities
- Deploying new technologies to schools to increase teacher capacity

The department provides on-site, centralized, and Web-based training to school and office staff on skills and strategies including the following:

- Data-driven decision making
- Integration of technology into instructional and management practices
- Assessment technologies
- Communications applications
- Curriculum and course management platforms
- Instructional applications and electronic resources

The department develops online training modules utilizing state-of-the-art tools and methodologies, translation of application functions into MCPS business practices, and research and development of the latest instructional tools and software. The department consults with school leadership and identifies targeted, exemplary technology integration practices; helps identify hardware, software, and electronic resources to support the school improvement objectives; and provides support and training to media specialists, media assistants, and other school staff. The department meets with specific user groups to assure technologies are in alignment with instructional and business practices as well as identifying areas to which technologies need to be developed.

TCM combines curriculum, instruction, and assessment with effective technology to increase the achievement of all students as measured by the Maryland School Assessment. TCM provides tools and processes to improve, support, and streamline the work of teachers and principals in the

Instructional Technology

(continued)

delivery of instruction, the administration of assessments, and monitoring of student progress. Specific TCM technologies this department manages include the following:

- Reading 3D (K–2 primary reading assessment)
- Measures of Academic Progress–Reading (MAP-R) (3–10 adaptive reading assessment)
- Achievement Series (6–12 automated scoring and reporting of formative and summative assessments)
- Discovery Education (DE) Streaming (K–12 digital teaching and learning resources)

Number of Students Served: All MCPS students are directly or indirectly served by this program.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2014 is \$2,122,421. Significant changes in the budget that impact the program's functions and operations are as follows.

Program Realignment

In FY 2013, there is a budget neutral reorganization within the Office of the Chief Technology Officer that is designed to better serve and support schools and offices. As a result, 2.0 positions and \$179,157 are realigned from other OCTO program budgets to this program budget.

Program Funding

For FY 2014, it is projected that this program will be funded entirely by local funds.

Crosswalk to Other Budget Documents

More detailed information about this program can be found in the Superintendent's Recommended FY 2014 Operating Budget and Personnel Complement as follows:

Department of Instructional Technology: Page 9-24

INSTRUCTIONAL TECHNOLOGY

Description	FY 2013 Current	FY 2014 Request	FY 2014 Change
01 Salaries & Wages			
Total Positions (FTE)	20.200	20.200	
Position Salaries	\$2,065,558	\$2,077,431	\$11,873
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends		21,000	21,000
Professional Part Time			
Supporting Services Part Time Other	6,693		(6,693)
Subtotal Other Salaries	6,693	21,000	14,307
Total Salaries & Wages	2,072,251	2,098,431	26,180
02 Contractual Services			
Consultants			
Other Contractual	3,407	3,407	
Total Contractual Services	3,407	3,407	
03 Supplies & Materials			·
Textbooks			
Media			
Instructional Supplies & Materials	12.000	42.000	
Office Other Supplies & Materials	12,000	12,000	
Total Supplies & Materials	40.000	40.000	
Total Supplies & Materials	12,000	12,000	
04 Other			
Local/Other Travel	8,583	8,583	
Insur & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	8,583	8,583	
05 Equipment			
Leased Equipment			
Other Equipment			
Total Equipment			
Grand Total	\$2,096,241	\$2,122,421 	\$26,180

INSTRUCTIONAL TECHNOLOGY

CAT		DESCRIPTION	10 Mon	FY 2013 CURRENT	FY 2014 REQUEST	FY 2014 CHANGE
1	Q	Director II				
3	Q	Director II		1.000	1.000	
3	BD	Instructional Specialist		17.200	17.200	
1	16	Administrative Secretary III				
2	16	Administrative Secretary III		1.000	1.000	
1	14	Administrative Secretary I				
2	14	Administrative Secretary I		1.000	1.000	
	Tota	al Positions		20.200	20.200	

Technology Support

<u>Program Description</u>

This budget includes funding for the functions and activities of the Division of Technology Support and the elementary, middle, and high school budgets. The Technology Support Program is focused on providing the day-to-day support needed for technology to be a reliable educational and business tool in schools and offices. The division provides first-level Help Desk and network administration services. Network operational support and second-level technical assistance to school-based and non-school-based staff are performed through the services of the School Technology Support Team and the Technical Services and Support Unit. The division also provides data management and enterprise service-level agreements facilitated by the Customer Relationship Manager. The division also is responsible for the administration, maintenance, and enhancement of four call-tracking systems that monitor requests for service and support to schools and offices.

Information technology systems specialists (ITSSs) provide onsite support for schools and offices. The ITSS responds to staff requests for technical services; maintains, monitors, and upgrades the hardware configurations and software applications that support kindergarten through Grade 12 programs and initiatives; administers network systems; supports network security; installs and monitors the use of software applications such as student assessments; and installs and maintains peripherals, including handheld devices used for security and reading assessment. The ITSS also assists staff in the basic use of products and applications that support instructional initiatives such as the 21st Century Interactive Classroom technology and other teaching and learning tools and applications accessible through the *myMCPS* portal.

Certified computer repair technicians provide hardware repair and software support to all schools and non-school-based offices, and maintain non-warranty instructional workstations and peripherals.

The Help Desk provides users with a central point of service to request information and resolutions for technology-related problems. The Help Desk uses the Unicenter Service Desk (USD) system, a Web-based application that allows users to enter and monitor their requests for support. The USD system also provides a mechanism for gathering information on customer satisfaction and provides a self-help option to search for answers to common questions through an integrated knowledge-based module. As an added customer support option, the Help Desk staff posts useful information and common solutions on the Help Desk web page.

The Technology Support Program has a number of components. The major functions and activities that support the use of technology in schools and offices include the following:

• Supporting and maintaining local area networks, computers, servers, and hardware and software needs in schools and offices

Technology Support

(continued)

- Ensuring the successful deployment of technologies, such as the 21st Century Interactive Classrooms that support student teaching and learning
- Supporting the administration of local-area networks to provide continuity in technology-based instructional programs and to ensure uninterrupted access to the data stored by teachers, principals, school-based staff, and central services administrators
- Assisting in the administration and support of the educational and business applications used in schools and offices, such as the Online Administrative Student Information System (OASIS), Financial Management System (FMS), Unicenter Service Desk (USD) systems, and the *myMCPS* portal
- Ensuring that all software used in schools and offices is licensed for legal use on MCPS-owned equipment
- Administering computer security requirements, performing security risk assessments, and providing first-level response to security breaches or events
- Providing day-to-day Help Desk services that supply reliable information on technology issues to schools and offices
- Providing technical assistance, hardware and software recommendations, and on-site configuration set up for audio-visual presentations in schools and offices
- Resolving technology problems reported through the Help Desk as a single point of contact for communication and support
- Capturing data on Help Desk issues, allowing technology support staff to analyze trends and make data-driven decisions on improving products and services
- Deploying staff to maintain and replace equipment in schools and offices

Number of Students Served: All MCPS students are directly or indirectly served by this program.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2014 is \$10,528,731. Significant changes in the budget that impact the program's functions and operations are as follows.

Program Realignment

In FY 2013, there is a budget neutral reorganization within the Office of the Chief Technology Officer that is designed to better serve and support schools and offices. As a result, 2.0 positions and \$172,695 are realigned from this program budget to other OCTO program budgets.

Program Efficiencies and Enhancements

There is a reduction of \$92,925 for student scheduling materials. OCTO is continuing to streamline and find efficiencies to provide resources for student scheduling.

Technology Support

(continued)

Program Funding

For FY 2014, it is projected that this program will be funded entirely by local funds.

Crosswalk to Other Budget Documents

More detailed information about this program can be found in the *Superintendent's Recommended FY 2014 Operating Budget and Personnel Complement* as follows:

Division of Technology Support: Page 9-12

Department of Instructional Technology: Page 9-24

TECHNOLOGY SUPPORT

Description	FY 2013 Current	FY 2014 Request	FY 2014 Change
01 Salaries & Wages			
Total Positions (FTE)	119.000	119.000	
Position Salaries	\$9,546,800	\$9,536,436	(\$10,364)
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends			
Professional Part Time			i :
Supporting Services Part Time Other			
Subtotal Other Salaries			
Total Salaries & Wages	9,546,800	9,536,436	(10,364)
02 Contractual Services			
Consultants			
Other Contractual	495,378	516,912	21,534
Total Contractual Services	495,378	516,912	21,534
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials	10 152	10.152	
Office Other Supplies & Materials	10,152 546,489	10,152 452,727	(93,762)
Total Supplies & Materials	556,641	462,879	(93,762)
04 Other			
Local/Other Travel	7,703	6,728	(975)
Insur & Employee Benefits			
Utilities			
Miscellaneous			****
Total Other	7,703	6,728	(975)
05 Equipment			
Leased Equipment	5,776	5,776	
Other Equipment			
Total Equipment	5,776	5,776	
Grand Total	\$10,612,298	\$10,528,731	(\$83,567)

TECHNOLOGY SUPPORT

CAT		DESCRIPTION	10 Mon	FY 2013 CURRENT	FY 2014 REQUEST	FY 2014 CHANGE
1	P	Director I		1.000	1.000	
11	K	Supervisor		1.000	1.000	
11	K	Supervisor		1.000	1.000	
1	27	IT Systems Engineer		1.000	1.000	
3	25	IT Systems Specialist		34.000		(34.000)
3	25	IT Systems Specialist			34.000	34.000
3	25	IT Systems Specialist		31.000	24.000	(7.000)
3	25	IT Systems Specialist			7.000	7.000
3	25	IT Systems Specialist		25.000	25.000	
11	25	IT Systems Specialist		8.000	8.000	
11	25	IT Systems Specialist		5.000	5.000	
1	25	IT Systems Specialist				
1	22	Technical Help Desk Spec II		1.000	1.000	
3	22	Technical Help Desk Spec II		1.000	1.000	
1	20	Technical Help Desk Spec I		2.000	2.000	
3	20	Technical Help Desk Spec I		4.000	4.000	
11	18	IT Systems Technician		1.000	1.000	
11	18	IT Systems Technician				
1	15	Administrative Secretary II		1.000	1.000	
1	15	Fiscal Assistant II				
11	13	Data Systems Operator		1.000	1.000	
11	13	Fiscal Assistant I				
1	12	Secretary		1.000	1.000	
	Tot	al Positions		119.000	119.000	

Enterprise Infrastructure and Operations

Program Description

This budget includes the funding for programs, functions, and activities of the Department of Infrastructure and Operations (DIO), which includes the Information Assurance and Risk Management Unit. Staff collaborates with stakeholders to implement and track results for the objectives, strategies, and initiatives to provide an effective instructional program. Staff supports instruction and student learning by designing, developing, delivering, supporting, and evaluating technology solutions for schools and offices.

This program provides the infrastructure technology components that ensure secure, districtwide, high-availability access to MCPS-networked resources which support real-time collaboration and operational effectiveness. Following industry-standard technology methodologies, staff provides network availability via local-area, wide-area, and wireless networks and cellular and landline telephones. MCPS resources supported through the network include e-mail, calendaring, centralized file servers, *myMCPS*, and database administration for application information systems, such as student information, financial information, and human resources. This program supports the production operations of student attendance and enrollment reports, payroll, and report cards.

The major functions and activities of the Department of Infrastructure and Operations include the following:

- Facilitating the implementation and operation of effective and reliable systemwide hardware and software solutions including e-mail, database management, and data center systems.
- Providing and managing user network accounts, single sign-on, and access control of network resources.
- Providing operational support for the efficient delivery of administrative data and reports, such as bulk printing and distribution of report cards and critical reports, and maintaining electronic availability of MCPS data and systems (e.g., the Financial Management System, Human Resources Information System, and Online Administrative Student Information System).
- Administering telecommunication systems, including basic phone services and equipment, wireless voice and data services, data connections, and Internet services.
- Monitoring and continuously improving the quality and efficiency of the server and telecommunication systems using planned refresh programs, targeted system modifications, and updates.
- Monitoring and responding continuously to network security threats and vulnerabilities, using up-to-date technology solutions.
- Ensuring uninterrupted and continuous secure access to MCPS data and information systems.
- Collaborating with other county agencies to ensure cyber safety awareness for parents, students, and community members.

Enterprise Infrastructure and Operations

(continued)

Numbers of Students Served: All MCPS students are directly or indirectly served by this program.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2014 is \$5,998,257. Significant changes in the budget that impact the program's functions and operations are as follows.

Program Realignment

In FY 2013, there is a budget neutral reorganization within the Office of the Chief Technology Officer (OCTO) that is designed to better serve and support schools and offices. As a result, 8.0 positions and \$690,681 are realigned from other OCTO program budgets to this program budget. In FY 2014, there is a realignment of \$38,386 budgeted for the lease/purchase of equipment from the Student Date Services program budget to this program budget.

Program Efficiencies and Reductions

There is a reduction of \$225,486 budgeted for the lease/purchase of equipment. The final payment obligation for storage servers will be satisfied in FY 2013. Also, there is a reduction of \$16,697 budgeted for contractual maintenance. Some equipment maintenance costs have been reduced due to renegotiation of contracts.

Program Funding

For FY 2014, it is projected that this program will be funded entirely by local funds.

Crosswalk to Other Budget Documents

More detailed information about this program can be found in the *Superintendent's Recommended FY 2014 Operating Budget and Personnel Complement* as follows:

Department of Infrastructure and Operations: Page 9-30

ENTERPRISE INFASTRUCTURE/OPER.

39.500	39.500	
\$3,510,470	\$3,430,689	(\$79,781)
·		l
		l
		Í
		l
		l
29,729	29,729	l
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		-
41,560	41,560	l
3,552,030	3,472,249	(79,781)
70.500		(45.000)
		(15,000)
1,686,913	1,637,279	(49,634)
1,763,413	1,698,779	(64,634)
· ·	· ·	
254,229	254,229	
10,196	9,935	(261)
***************************************	~	
10,196	9,935	(261)
707,669	563,065	(144,604)
707,669	563,065	(144,604)
\$6,287,537	\$5,998,257	(\$289,280)
	29,729 11,831 41,560 3,552,030 76,500 1,686,913 1,763,413 3,400 250,829 254,229 10,196 707,669	29,729     29,729       11,831     11,831       41,560     41,560       3,552,030     3,472,249       76,500     61,500       1,686,913     1,637,279       1,763,413     1,698,779       3,400     250,829       254,229     254,229       10,196     9,935       707,669     563,065       707,669     563,065

# **ENTERPRISE INFASTRUCTURE/OPER.**

CAT		DESCRIPTION	10 Mon	FY 2013 CURRENT	FY 2014 REQUEST	FY 2014 CHANGE
1	Q	Director II		1.000	1.000	
1	Q	Director Schl Support & Improv				
1	0	Supervisor		1.000	1.000	
1	K	Supervisor		1.000	1.000	
1	K	Supervisor		1.000	1.000	
1	Н	Computer Operations Mgr		1.000	1.000	
1	27	IT Systems Engineer		1.000	1.000	
1	27	Database Analyst III		2.000	2.000	
1	27	Sr Client Server Engineer		2.000	2.000	
1	27	IT Systems Engineer		3.000	3.000	
1	25	IT Systems Specialist		6.000	6.000	
11	25	IT Systems Specialist		4.000	4.000	
1	25	Database Administrator II		2.000	2.000	
1	25	IT Systems Specialist		2.000	2.000	
11	25	IT Systems Specialist		2.000	2.000	
11	18	IT Systems Technician		1.000	1.000	
1	16	Administrative Secretary III		1.000	1.000	
1	16	Computer Operator II Shift 2		1.000	1.000	
1	16	Computer Operator II Shift 3		1.000	1.000	
11	14	IT Services Technical Asst		1.000	1.000	
1	14	Computer Operator I Shift 1		2.000	2.000	
1	14	Computer Operator I Shift 2		1.000	1.000	
1	14	Computer Operator I Shift 3		1.000	1.000	
11	13	Fiscal Assistant I		1.000	1.000	
1	13	Data Systems Operator		.500	.500	
	Tota	al Positions		39.500	39.500	

## **Technology Modernization**

### **Program Description**

This budget includes the funding for programs, functions, and activities in the Field Installation Unit within the Division of Technology Support and the Innovative Technologies Unit within the Department of Instructional Technology in the Office of the Chief Technology Officer.

The Technology Modernization (Tech Mod) Program, funded through the Capital Improvements Program, provides the framework for the school district's hardware, software, and network infrastructure. The mission of the Tech Mod Program is to make technology a reliable, everyday tool engaging students, encouraging critical thinking and problem solving, supporting a rigorous curriculum, and providing access to data for decision making. Up-to-date technology enhances student learning opportunities, ensures accessibility for all students, provides immediate access to formative assessment results for teachers, and supports the communication of information on student progress to parents. Technology also is critical for the reporting required under *No Child Left Behind Act of 2001* and the implementation of state online testing strategies.

The Field Installation and Innovative Technologies units design and install technology in schools. Staff works with schools to plan the integration, procurement, and installation of technology and to ensure technology readiness at the beginning of the school year. Beginning in Fiscal Year (FY) 2010, staff implemented a program to refurbish computers in schools whose technology is older than four years in response to the change from a four-year to a five-year replacement cycle put in place to address the current fiscal crisis.

To keep pace with the rapid advancement of technology, staff researches new and emerging technologies and works continuously with users in reassessing which technologies best meet their needs. Staff evaluates and tests new and emerging products and configurations prior to deployment to schools. Included in this role is the annual development of a desktop management strategy that provides a standardized interface for classes of users and ensures that security and anti-virus programs are operational and version updates and system patches are tested and applied.

The major functions and activities of the Tech Mod program include the following:

- Modernizing technology hardware, software, and the network throughout MCPS
- Researching new technologies and testing their usability with both standardized software and on the MCPS network
- Integrating 21st Century Interactive Classroom technologies for teaching and learning such as interactive white boards
- Configuring and testing the hardware and software involved in the adoption of new educational technology initiatives, including online assessments and testing
- Field-testing, procuring, installing, and maintaining the technology hardware and software used in schools and offices
- Modernizing and updating the school system's technology infrastructure and networks

## **Technology Modernization**

(continued)

Number of Students Served: All MCPS students are directly or indirectly served by this program.

### Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2014 is \$230,689. Significant changes in the budget that impact the program's functions and operations are as follows.

### Program Realignment

In FY 2013, there is a budget neutral reorganization within the Office of the Chief Technology Officer that is designed to better serve and support schools and offices. As a result, 2.0 positions and \$145,784 are realigned from this program budget to other OCTO program budgets.

## **Program Funding**

For FY 2014, it is projected that this program will be funded entirely by local funds.

### Crosswalk to Other Budget Documents

More detailed information about this program can be found in the Superintendent's Recommended FY 2014 Operating Budget and Personnel Complement as follows:

Department of Instructional Technology: Page 9-24

# TECHNOLOGY MODERNIZATION

Description	FY 2013 Current	FY 2014 Request	FY 2014 Change
01 Salaries & Wages			
Total Positions (FTE)	2.000	2.000	
Position Salaries	\$190,817	\$193,028	\$2,211
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends			
Professional Part Time			
Supporting Services Part Time Other			
Subtotal Other Salaries	·		
Total Salaries & Wages	190,817	193,028	2,211
02 Contractual Services			
Consultants			
Other Contractual	10,000	10,000	
Total Contractual Services	10,000	10,000	
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials			
Office Other Supplies & Materials	13,261	13,261	
Total Supplies & Materials	13,261	13,261	
04 Other			
Local/Other Travel	14,400	14,400	
Insur & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	14,400	14,400	
05 Equipment			
Leased Equipment			
Other Equipment			
Total Equipment			
Grand Total	\$228,478	\$230,689 	\$2,211

# **TECHNOLOGY MODERNIZATION**

CAT		DESCRIPTION	10 Mon	FY 2013 CURRENT	FY 2014 REQUEST	FY 2014 CHANGE
1	K	Supervisor				
3	K	Supervisor		1.000	1.000	
1	25	IT Systems Specialist				
1	25	IT Systems Specialist		1.000	1.000	
11	18	IT Systems Technician				
1	15	Fiscal Assistant II				
11	13	Fiscal Assistant I				
1	12	Secretary				
	Tot	al Positions		2.000	2.000	

#### **Student Data Services**

### Program Description

This budget includes the funding for programs, functions, development, and activities of the Division of Instructional and Informational Services as well as the Department of Information and Application Architecture. This program provides technology solutions that support the success of every student. Student data systems provide timely information on student and school progress for staff, parents, and community members to use when implementing and adjusting appropriate instructional improvement strategies.

Student data services include the following major components: *myMCPS* Operations and Administrative Student Systems and Operations. Each function includes the following core activities:

- Defining, planning, monitoring, and leading student services projects through consistent application of appropriate project management methodologies, best practices, effective evaluation and tracking, and other management techniques
- Optimizing time, budget, and resources within a project
- Maintaining software development standards and processes to ensure consistent practices are adhered to by development staff and contractual resources
- Maintaining currency of MCPS-developed software to align with industry standards to minimize risk of unsupportable software due to obsolescence
- Providing software engineering services and solutions to address requirements for data collection, management, and integration for use by schools, offices, and the community

The major functions and activities of the *myMCPS* Operations component include the following:

- Providing a Web-based portal that provides easy access through centers of information
- Delivering the infrastructure and framework for the Office of Curriculum and Instructional Programs to publish resources through a Web-based system
- Providing systems for the development and delivery of student assessments, score entry, and analysis of student performance
- Providing an online environment for teachers to obtain information and guidance on the delivery of traditional and standards-based instruction and for researching instructional strategies
- Providing an online environment for communication and collaboration within professional learning communities
- Providing an online environment for school and district administrators to access student, school, and staff performance and administrative information and resources
- Providing an online environment for classroom-to-home communication and collaboration
- Maintaining and improving the districtwide repository of data gathered from various information systems

#### **Student Data Services**

(continued)

- Providing staff with analytical, statistical, graphical, and other business intelligence tools to monitor school improvement plan progress and data pertinent to the *Elementary and Secondary Education Act*
- Strengthening the ability of staff to develop reports from a variety of data sources (e.g., student data, human resources data, and financial data)
- Enabling staff to analyze performance trends by student demographics and by program, as well as analyzing school-level progress towards meeting standards and targets

The major functions and activities of the Administrative Student Systems and Operations component include the following:

- Providing the official "system of record" for all administrative student information
- Collecting, processing, and monitoring all student enrollment information
- Collecting, processing, reporting, and monitoring student course schedule information
- Supplying data to and capturing data from the online student grade book
- Producing student report cards and transcripts
- Producing district-level student data required as input for local, state, and federal reports
- Collecting student achievement data used to monitor progress toward program and graduation requirements
- Providing the official "system of record" for the collection and monitoring of student Individualized Education Programs (IEPs), special education services, and other student accommodations information

Numbers of Students Served: All MCPS students are directly or indirectly served by this program.

#### Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2014 is \$6,514,989. Significant changes in the budget that impact the program's functions and operations are as follows.

#### Program Realignment

In FY 2013, there is a budget neutral reorganization within the Office of the Chief Technology Officer (OCTO) that is designed to better serve and support schools and offices. As a result, 8.0 positions and \$839,275 are realigned from other OCTO program budgets to this program budget.

#### Program Efficiencies and Reductions

There is a reduction of \$13,836 budgeted for the lease/purchase of equipment. The final payment obligation for storage servers will be satisfied in FY 2013.

# **Student Data Services**

(continued)

# **Program Funding**

For FY 2014, it is projected that this program will be funded entirely by local funds.

# Crosswalk to Other Budget Documents

More detailed information about this program can be found in the *Superintendent's Recommended FY 2014 Operating Budget and Personnel Complement* as follows:

Division of Instructional and Informational Services: Page 9-18 Department of Information and Application Architecture: Page 9-41

# STUDENT DATA SERVICES

Description	FY 2013 Current	FY 2014 Request	FY 2014 Change
01 Salaries & Wages			
Total Positions (FTE)	37.800	37.800	
Position Salaries	\$3,779,031	\$3,761,826	(\$17,205)
Other Salaries			
Summer Employment			1
Professional Substitutes			
Stipends			
Professional Part Time			
Supporting Services Part Time Other	269,200	269,200	
Subtotal Other Salaries	269,200	269,200	
Total Salaries & Wages	4,048,231	4,031,026	(17,205)
02 Contractual Services			4005.040
Consultants	696,399	331,153	(365,246)
Other Contractual	1,727,014	2,092,260	365,246
Total Contractual Services	2,423,413	2,423,413	
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials	0.146	7 4 4 6	(2,000)
Office Other Supplies & Materials	9,146 49,562	7,146 51,562	(2,000) 2,000
Total Supplies & Materials		58,708	
Total Supplies & Materials	58,708	50,700	
04 Other			
Local/Other Travel	1,842	1,842	
Insur & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	1,842	1,842	
05 Equipment			
Leased Equipment	22,919		(22,919)
Other Equipment			
Total Equipment	22,919		(22,919)
Grand Total	\$6,555,113	\$6,514,989	(\$40,124)

# **STUDENT DATA SERVICES**

CAT		DESCRIPTION	10 Mon	FY 2013 CURRENT	FY 2014 REQUEST	FY 2014 CHANGE
1	Q	Director II		1.000	1.000	
1	Q	Director Schl Support & Improv			ļ	
1	Р	Director I		1.000	1.000	
1	0	Supervisor			İ	
2	0	Supervisor			1	
1	0	Supervisor		1.000	1.000	
2	0	Supervisor		2.000	2.000	
1	0	Supervisor		2.000	2.000	
1	K	Supervisor		1.000	1.000	
1	K	Supervisor		2.000	2.000	
1	J	Operations Development Manager		1.000	1.000	
2	BD	Instructional Specialist				
2	BD	Instructional Specialist		3.000	3.000	
1	27	Database Administrator III				
2	27	Database Administrator III				
1	27	Applications Developer III		1.000	1.000	
2	27	Database Administrator III		1.000	1.000	
1	27	Applications Developer III				
2	27	Database Administrator III		2.000	2.000	
1	27	Development Proj Manager				
2	25	Applications Developer II				
2	25	ETL Analyst/Programmer				
1	25	Applications Developer II		6.000	6.000	
2	25	Applications Developer II		1.000	1.000	
2	25	ETL Analyst/Programmer				
1	25	Technical Analyst		1.000	1.000	
1	25	Applications Developer II				
1	25	IT Systems Specialist		1.000	1.000	
2	25	ETL Analyst/Programmer		2.000	2.000	
1	25	Technical Analyst		1.000	1.000	
1	24	Student Systems Specialist		1.000	1.000	
1	23	Applications Specialist I		1.000	1.000	
1	23	Applications Developer I		1.000	1.000	
1	16	Administrative Secretary III		1.000	1.000	
2	16	Administrative Secretary III				
1	15	Administrative Secretary II		1.000	1.000	
1	15	Data Control Technician II		1.000	1.000	
1	13	Fiscal Assistant I		.800	.800	
1	13	Data Control Technician I		1.000	1.000	

#### **Business Information Services**

## Program Description

This budget includes the funding for technology programs, functions, and activities of the Department of Business Information Services (DBIS). The Business Information Services program provides high-quality business services that are essential to the educational success of students, and focuses on the implementation and support of effective administrative technologies that support the business of teaching and learning. Business Information Services staff collaborates with internal and external stakeholders, continuously engineering processes and business services that increase efficiency by organizing and optimizing resources for improved academic results and support for activities based on stakeholder input and state and federal regulations. Major systems include the Financial Management System (FMS), Human Resources Information System (HRIS), Professional Development Online (PDO), Human Resources Online (HRO), Applicant Tracking System (ATS), FORTIS document management, Connect-ED emergency notification and community outreach, capital planning, transportation, and retirement.

Business Information Services includes the following major components: Human Capital Information Services and Business Operational Technology.

The major functions and activities of the Human Capital Information Services component include the following:

- Defining, planning, monitoring, and leading business projects through consistent application of appropriate project management methodologies, best practices, effective evaluation and tracking, and other management techniques.
- Optimizing time, budget, and resources within a business project.
- Collaborating with the Office of Human Resources and Development and the Employee and Retiree Service Center to maintain, enhance, and expand human resources data collection, management, and reporting to support informed and timely data-driven decisions.
- Develop applications which streamline operational processes and enhance productivity.
- Maintaining systemwide applications and administrative systems, including human resources, payroll, employee benefits, organizational development, and retirement to ensure continued business continuity.

The major functions and activities of the Business Operational Technology component include the following:

- Defining, planning, monitoring, and leading business projects through consistent application of appropriate project management methodologies, best practices, effective evaluation and tracking, and other management techniques.
- Optimizing time, budget, and resources within a business project.

#### **Business Information Services**

(continued)

- Identifying, maintaining, and continuously improving information technology solutions that address organizational business priorities.
- Purchasing or developing and implementing systemwide applications and administrative systems based on customer and reporting requirements, including transportation, budget and planning, logistics/materials management, and financial management applications.

Number of Students Served: All MCPS students are directly or indirectly served by this program.

### Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2014 is \$3,449,089. Significant changes in the budget that impact the program's functions and operations are as follows.

### Program Realignment

In FY 2013, there is a budget neutral reorganization within the Office of the Chief Technology Officer (OCTO) that is designed to better serve and support schools and offices. As a result, 6.0 positions and \$701,802 are realigned from this program to other OCTO programs. In FY 2014, there is a realignment of \$50,000 budgeted for consultant service from this program budget to other technology program budgets.

### Program Funding

For FY 2014, it is projected that this program will be funded entirely by local funds.

## Crosswalk to Other Budget Documents

More detailed information about this program can be found in the Superintendent's Recommended FY 2014 Operating Budget and Personnel Complement as follows:

Department of Business Information Services: Page 9-36

Department of Information and Application Architecture: Page 9-41

# **BUSINESS INFORMATION SERVICES**

Description	FY 2013 Current	FY 2014 Request	FY 2014 Change
01 Salaries & Wages			
Total Positions (FTE)	18.500	18.500	
Position Salaries	\$1,711,380	\$1,773,541	\$62,161
Other Salaries			
Summer Employment			·
Professional Substitutes			
Stipends			
Professional Part Time			
Supporting Services Part Time Other			
Subtotal Other Salaries			
Total Salaries & Wages	1,711,380	1,773,541	62,161
02 Contractual Services			(00.000)
Consultants	334,497	240,869	(93,628)
Other Contractual	1,374,729	1,418,357	43,628
Total Contractual Services	1,709,226	1,659,226	(50,000)
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials	0.504	2.450	(2.274)
Office Other Supplies & Materials	6,524 4,566	3,150 7,940	(3,374) 3,374
Total Supplies & Materials	11,090	11,090	
04 Other			
Local/Other Travel	5,232	5,232	
Insur & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	5,232	5,232	
05 Equipment			
Leased Equipment			
Other Equipment			
Total Equipment			
Grand Total	\$3,436,928	\$3,449,089 	\$12,161 

# **BUSINESS INFORMATION SERVICES**

CAT		DESCRIPTION	10 Mon	FY 2013 CURRENT	FY 2014 REQUEST	FY 2014 CHANGE
1	Q	Director II		1.000	1.000	
1	Q	Director Schl Support & Improv				
1	0	Supervisor				
1	0	Supervisor				
1	K	Supervisor		2.000	2.000	
1	K	Supervisor				
1	J	Operations Development Manager				
1	27	Applications Developer III		2.000	2.000	
1	27	Development Proj Manager		3.500	3.500	
1	27	Applications Developer III				
1	27	Development Proj Manager				
1	25	Applications Developer II		5.000	5.000	
1	25	IT Systems Specialist		1.000	1.000	
1	25	Technical Analyst		1.000	1.000	
1	25	Applications Developer II				
1	25	Technical Analyst				
1	16	Administrative Secretary III		1.000	1.000	
1	15	Fiscal Assistant II		1.000	1.000	
1	15	Data Control Technician II		1.000	1.000	
1	15	Fiscal Assistant II				
1	15	Data Control Technician II				
	Tot	al Positions		18.500	18.500	