

Technology Innovation and Leadership

Program Description and Alignment with the Strategic Plan

This budget includes funding for the Office of the Chief Technology Officer (OCTO), the Department of Strategic Project Management and Planning, management and planning staff and activities in the Division of Technology Innovation, and staff and grant activities in Title II-D. The Department of Strategic Project Management and Planning provides vision, management, support, and facilitative leadership within OCTO. OCTO works closely with internal and external stakeholders to support an effective instructional program, providing quality products and services to its customers—staff, students, and parents. OCTO collaborates with stakeholders to implement and track results for the objectives, strategies, and initiatives contained in the Montgomery County Public Schools (MCPS) strategic plan, *Our Call to Action: Pursuit of Excellence*, and to develop the MCPS three-year strategic technology plan, as mandated by the Maryland State Department of Education (MSDE).

The work of the office aligns with *Our Call to Action: Pursuit of Excellence*, Goal 2: Provide an Effective Instructional Program, and Goal 5: Provide High-Quality Business Services that are Essential to the Educational Success of Students.

Major Program Components

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

- Providing leadership and vision for technology-related strategic planning for schools and offices aligning with MCPS and MSDE strategic plans
- Supporting technology-enabled learning communities and facilitating classroom collaboration solutions
- Maintaining an effective, proactive organization that supports district initiatives, advises the chief operating officer, and provides all MCPS staff with the information they need to improve student achievement
- Providing direction, establishing priorities, and modeling quality principles
- Building understanding of the “big picture,” providing clear direction, and aligning units’ efforts to support system goals
- Incorporating innovative technology models into the classroom to enhance teaching and learning
- Implementing the job-banding organizational model that facilitates career advancement opportunities for supporting services employees
- Empowering staff to exercise leadership and to make data-driven decisions at the appropriate organizational level
- Applying industry best practices in the management of technology programs and projects

Technology Innovation and Leadership

(continued)

- Ensuring delivery of quality technology products and services through the implementation of industry-accepted software development life-cycle best practices for quality assurance and testing of software solutions
- Assisting in software development projects by verifying that applications conform to specified requirements and validating that the applications function properly
- Procuring services and ensuring compliance with the federal program for rebates for eligible telecommunication services

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

Program Funding

For FY 2012 it is projected that this program will be funded entirely by local funds.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2012 is \$7,491,993. Changes in the budget are a result of budget reductions. There is a reduction of \$142,159 budgeted for contractual maintenance for school software. Software maintenance funding has been included in the Capital Improvements Program as it supports the technology modernization program. In addition, the funding for the Title II D–Enhancing Education Through Technology grant project has been discontinued in FY 2011. As a result, there is a reduction of \$154,242 and a 0.8 instructional specialist position.

Crosswalk to Other Budget Documents and to the MCPS Strategic Plan

More detailed information about these units and their budgets can be found in the *Superintendent's Recommended FY 2012 Operating Budget and Personnel Complement* as follows:

Office of the Chief Technology Officer: Page 74

Department of Strategic Project Management and Planning: Page 7-29

Division of Technology Innovation: Page 7-30

Information on the MCPS strategic plan strategies and initiatives related to this program can be found beginning on Page 19 of the 2010-2015 *Our Call to Action: Pursuit of Excellence* document.

TECH. INNOVATION & LEADERSHIP

Description	FY 2011 Current	FY 2012 Request	FY 2012 Change
01 Salaries & Wages			
Total Positions (FTE)	25.800	25.000	(.800)
Position Salaries	\$2,281,576	\$2,245,193	(\$36,383)
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends			
Professional Part Time	9,900		(9,900)
Supporting Services Part Time	68,301	68,301	
Other			
Subtotal Other Salaries	78,201	68,301	(9,900)
Total Salaries & Wages	2,359,777	2,313,494	(46,283)
02 Contractual Services			
Consultants	7,124	7,124	
Other Contractual	1,449,486	1,316,962	(132,524)
Total Contractual Services	1,456,610	1,324,086	(132,524)
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials	16,000	1,000	(15,000)
Office	31,879	20,974	(10,905)
Other Supplies & Materials	28,182	28,182	
Total Supplies & Materials	76,061	50,156	(25,905)
04 Other			
Local Travel	6,984	6,792	(192)
Staff Development	153,418	153,418	
Insurance & Employee Benefits	31,920		(31,920)
Utilities	3,049,336	3,036,955	(12,381)
Miscellaneous	543,665	540,000	(3,665)
Total Other	3,785,323	3,737,165	(48,158)
05 Equipment			
Leased Equipment	68,578	67,092	(1,486)
Other Equipment			
Total Equipment	68,578	67,092	(1,486)
Grand Total	<u>\$7,746,349</u>	<u>\$7,491,993</u>	<u>(\$254,356)</u>

TECH. INNOVATION & LEADERSHIP

CAT	DESCRIPTION	10 Mon	FY 2011 CURRENT	FY 2012 REQUEST	FY 2012 CHANGE
1	Chief Technology Officer		1.000	1.000	
1	Q Director II		1.000	1.000	
1	P Director I		1.000	1.000	
1	O Supervisor		1.000	1.000	
1	O Supervisor		1.000	1.000	
1	N Asst. to Assoc Supt		1.000	1.000	
1	N Coordinator				
3	BD Instructional Specialist		2.000	2.000	
2	BD Instructional Specialist		.800		(.800)
3	BD Instructional Specialist				
1	25 IT Systems Specialist		4.000	4.000	
1	25 Fiscal Specialist II		1.000	1.000	
1	25 IT Systems Specialist		1.000	1.000	
1	25 Technical Analyst		1.000	1.000	
1	25 IT Systems Specialist		1.000	1.000	
1	18 IT Systems Technician				
11	18 IT Systems Technician		1.000	1.000	
1	17 Copy Editor/Admin Sec		1.000	1.000	
1	17 Admin Services Manager I		1.000	1.000	
1	16 Fiscal Assistant III		1.000	1.000	
1	16 Administrative Secretary III		1.000	1.000	
1	15 Administrative Secretary II				
1	15 Administrative Secretary II		1.000	1.000	
1	15 Fiscal Assistant II		1.000	1.000	
1	14 Administrative Secretary I				
11	13 Fiscal Assistant I		1.000	1.000	
1	12 Secretary		1.000	1.000	
Total Positions			25.800	25.000	(.800)

Instructional Technology

Program Description and Alignment with the Strategic Plan

This budget includes funding for the Department of Instructional Technology in the Office of the Chief Technology Officer. In support of the Montgomery County Public Schools (MCPS) strategic plan, *Our Call to Action: Pursuit of Excellence*, the team 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:

- Providing technology consultation services to school leadership
- Conducting staff training on technology use on systemwide applications to support teaching and learning
- Supporting school improvement plans with proven technologies
- Providing leadership and program management for the implementation of the Technology for Curriculum Mastery (TCM)
- Collecting feedback on systems and providing it to the appropriate department and/or division
- Managing the Center for Technology Innovation
- Supporting the educational technology policy in all schools and the Technology Modernization Program

Major Program Components

Instructional technology has a number of program components. The mission of the Department of Instructional Technology (DIT) is to: assure the successful integration of technologies that enhance teaching, student achievement, and workforce excellence; facilitate the identification of needs that can be addressed through technology; and explore emerging educational technologies. The department accomplishes its mission by:

- Providing technology consultation services to school leadership
- Conducting staff training on technology use on systemwide applications to support teaching and learning
- Supporting school improvement plans with proven technologies
- Collecting feedback on systems and providing it to the appropriate department and/or division
- Collaborating with MCPS offices and schools to identify needs for which technology solutions can be applied
- Reviewing software and online services

Instructional Technology (continued)

- Developing, distributing, and supporting interactive distance learning
- Deploying new technologies to schools to increase teacher capacity
- Managing the Center for Technology Innovation
- Supporting the instructional implementation of the Technology Modernization

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

- Data-driven decision making
- Integrating 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 delivery of instruction, the administration of assessments, and monitoring of student progress. Specific TCM technologies this department manages include:

- Reading 3D (K-2 primary reading assessment)
- MAP-R (3-10 adaptive reading assessment)
- Achievement Series (6–12 automated scoring and reporting of formative and summative assessments)
- United Streaming (K–12 digital teaching and learning resources)
- OnDemand (development platform for online learning)

Number of Students Served: Not Applicable

Instructional Technology (continued)

Program Funding

For FY 2012 it is projected that this program will be funded by local funds.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2012 is \$2,389,043. Changes in the budget are a result of reductions. There is a reduction of a 1.0 instructional specialist position and \$62,200. The instructional specialist position offers technology training to teachers and provides direct technology support to schools. These duties and responsibilities will be distributed to other instructional specialists on the team. Also there is a reduction of \$66,977 budgeted for training stipends. Teachers will be encouraged to attend voluntary training sessions and use school-based resources such as Grade Book Advisors for new technologies.

Crosswalk to Other Budget Documents and to the MCPS Strategic Plan

More detailed information about these units and their budgets can be found in the *Superintendent's Recommended FY 2012 Operating Budget and Personnel Complement* as follows:

Office of the Chief Technology Officer: Page 7-3

Department of Instructional Technology: Page 7-17

Information on the MCPS strategic plan strategies and initiatives related to this program can be found beginning on Page 19 of the 2010–2015 *Our Call to Action: Pursuit of Excellence* document.

INSTRUCTIONAL TECHNOLOGY

Description	FY 2011 Current	FY 2012 Request	FY 2012 Change
01 Salaries & Wages			
Total Positions (FTE)	21.200	20.200	(1.000)
Position Salaries	\$2,333,637	\$2,236,467	(\$97,170)
Other Salaries			
Summer Employment			
Professional Substitutes	43,988	43,988	
Stipends	135,975	54,005	(81,970)
Professional Part Time			
Supporting Services Part Time	22,500	8,100	(14,400)
Other			
Subtotal Other Salaries	202,463	106,093	(96,370)
Total Salaries & Wages	2,536,100	2,342,560	(193,540)
02 Contractual Services			
Consultants			
Other Contractual	8,000	4,000	(4,000)
Total Contractual Services	8,000	4,000	(4,000)
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials			
Office		32,000	32,000
Other Supplies & Materials			
Total Supplies & Materials		32,000	32,000
04 Other			
Local Travel	9,090	10,483	1,393
Staff Development			
Insurance & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	9,090	10,483	1,393
05 Equipment			
Leased Equipment			
Other Equipment			
Total Equipment			
Grand Total	\$2,553,190	\$2,389,043	(\$164,147)

INSTRUCTIONAL TECHNOLOGY

CAT	DESCRIPTION	10 Mon	FY 2011 CURRENT	FY 2012 REQUEST	FY 2012 CHANGE
1	Q Director II		1.000	1.000	
3	BD Instructional Specialist		18.200	17.200	(1.000)
1	16 Administrative Secretary III		1.000	1.000	
1	14 Administrative Secretary I		1.000	1.000	
	Total Positions		21.200	20.200	(1.000)

Technology Support

Program Description and Alignment with the Strategic Plan

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 nonschool-based staff are performed through the services of the School Technology Support Team and 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.

This program is in alignment with the Montgomery County Public Schools (MCPS) strategic plan, *Our Call to Action: Pursuit of Excellence*, Goal 2: Provide an Effective Instructional Program, and Goal 5: Provide High-quality Business Services that are Essential to the Educational Success of Students. Computers, software, and network access are essential tools in supporting teaching and learning and providing business services. The mission of the technology support staff is to provide access to technology and ensure that it is available and reliable for users.

Information technology systems specialists (ITSS) 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 nonschool-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 resolution of 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

Technology Support

(continued)

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 Customer Relationship Manager (CRM) works with school and nonschool-based staff to provide trend data on new initiatives and outcomes from targeted data points that inform the usefulness of existing programs.

Major Program Components

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
- 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 office 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), 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
- Providing trend data through customized reports generated by the CRM
- Deploying staff to maintain and replace equipment in schools and offices

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

Technology Support (continued)

Program Funding

For FY 2012, it is projected that this program will be funded entirely by local funds.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2012 is \$11,207,859. There is an increase of \$296,658 for contractual services to support the library circulation system. There also is an increase of \$163,935 for annual maintenance and support for the student scheduling program.

Crosswalk to Other Budget Documents and to the MCPS Strategic Plan

More detailed information about these divisions and their budgets can be found in the *Superintendent's Recommended FY 2012 Operating Budget and Personnel Complement* as follows:

K-12 Budget: Page 1-3

Division of Technology Support: Page 8-12

Division of Technology Innovation, Field Installation Unit: Page 8-26

Information on the MCPS strategic plan strategies and initiatives related to this program can be found beginning on Page 19 of the 2010-2015 *Our Call to Action: Pursuit of Excellence* document.

TECHNOLOGY SUPPORT

Description	FY 2011 Current	FY 2012 Request	FY 2012 Change
01 Salaries & Wages			
Total Positions (FTE)	129.000	129.000	
Position Salaries	\$9,489,653	\$10,209,317	\$719,664
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends			
Professional Part Time			
Supporting Services Part Time	21,000		(21,000)
Other			
Subtotal Other Salaries	21,000		(21,000)
Total Salaries & Wages	9,510,653	10,209,317	698,664
02 Contractual Services			
Consultants			
Other Contractual	120,247	422,905	302,658
Total Contractual Services	120,247	422,905	302,658
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials			
Office	10,152	10,152	
Other Supplies & Materials	391,254	555,089	163,835
Total Supplies & Materials	401,406	565,241	163,835
04 Other			
Local Travel	5,247	3,888	(1,359)
Staff Development	1,495	1,495	
Insurance & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	6,742	5,383	(1,359)
05 Equipment			
Leased Equipment	10,105	5,013	(5,092)
Other Equipment			
Total Equipment	10,105	5,013	(5,092)
Grand Total	<u>\$10,049,153</u>	<u>\$11,207,859</u>	<u>\$1,158,706</u>

TECHNOLOGY SUPPORT

CAT	DESCRIPTION	10 Mon	FY 2011 CURRENT	FY 2012 REQUEST	FY 2012 CHANGE
1	P Director I		1.000	1.000	
11	K Supervisor		2.000	2.000	
1	27 IT Systems Engineer		1.000	1.000	
3	25 IT Systems Specialist		35.000	35.000	
3	25 IT Systems Specialist		38.000	38.000	
3	25 IT Systems Specialist		26.000	26.000	
11	25 IT Systems Specialist		8.000	8.000	
11	25 IT Systems Specialist		6.000	6.000	
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	
1	15 Administrative Secretary II		1.000	1.000	
11	13 Data Systems Operator		1.000	1.000	
1	12 Secretary		1.000	1.000	
Total Positions			129.000	129.000	

Enterprise Infrastructure and Operations

Program Description and Alignment with the Strategic Plan

This budget includes the funding for programs, functions, and activities of the Department of Infrastructure and Operations and the Information Assurance and Risk Management Unit. Staff collaborates with stakeholders to implement and track results for the objectives, strategies, and initiatives contained in the Montgomery County Public Schools (MCPS) strategic plan, *Our Call to Action: Pursuit of Excellence*. The work aligns with *Our Call to Action: Pursuit of Excellence*, Goal 2: Provide an Effective Instructional Program, and Goal 5: Provide High-quality Business Services that are Essential to the Educational Success of Students. 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.

Major Program Components

The major functions and activities of the Information Assurance and Risk Management Unit include the following:

- 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 cybersafety awareness for parents, students, and community members.

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.

Enterprise Infrastructure and Operations

(continued)

- 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 Student Information System).
- Administering telecommunication systems, including basic phone services and equipment, wireless voice and data services, data connections, and Internet services.
- Monitoring and improving continuously the quality and efficiency of the server and telecommunication systems using planned refresh programs, targeted system modifications, and updates.

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

Program Funding

For Fiscal Year (FY) 2012 it is projected that this program will be funded entirely by local funds.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2012 is \$5,964,047. Changes in the budget are a result of reductions. There is reduction of a 1.0 information technology system specialist position and \$72,252, and a reduction of \$89,852 budgeted for contractual maintenance. Some equipment maintenance contracts in the Data Center will be paid off in FY 2011. Also, some contracts for equipment and software maintenance have been renegotiated to lower costs.

Crosswalk to Other Budget Documents and to the MCPS Strategic Plan

More detailed information about these units and their budgets can be found in the *Superintendent's Recommended FY 2012 Operating Budget and Personnel Complement* as follows:

Department of Infrastructure and Operations: Page 7-22

Information on the MCPS strategic plan strategies and initiatives related to this program can be found beginning on Page 19 of the 2010–2015 *Our Call to Action: Pursuit of Excellence* document.

ENTERPRISE INFRASTRUCTURE/OPER.

Description	FY 2011 Current	FY 2012 Request	FY 2012 Change
01 Salaries & Wages			
Total Positions (FTE)	33.500	32.500	(1.000)
Position Salaries	\$2,866,856	\$2,804,781	(\$62,075)
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends			
Professional Part Time			
Supporting Services Part Time	29,729	29,729	
Other	10,260	14,899	4,639
Subtotal Other Salaries	39,989	44,628	4,639
Total Salaries & Wages	2,906,845	2,849,409	(57,436)
02 Contractual Services			
Consultants	61,500	61,500	
Other Contractual	1,749,674	1,797,903	48,229
Total Contractual Services	1,811,174	1,859,403	48,229
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials			
Office	3,400	3,400	
Other Supplies & Materials	313,754	313,754	
Total Supplies & Materials	317,154	317,154	
04 Other			
Local Travel	4,545	4,145	(400)
Staff Development	1,644	1,811	167
Insurance & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	6,189	5,956	(233)
05 Equipment			
Leased Equipment	973,694	932,125	(41,569)
Other Equipment			
Total Equipment	973,694	932,125	(41,569)
Grand Total	\$6,015,056	\$5,964,047	(\$51,009)

ENTERPRISE INFASTRUCTURE/OPER.

CAT	DESCRIPTION	10 Mon	FY 2011 CURRENT	FY 2012 REQUEST	FY 2012 CHANGE
1	Q Director II		1.000	1.000	
11	K Supervisor		1.000	1.000	
1	K Supervisor		1.000	1.000	
1	K Supervisor				
1	K Supervisor			1.000	1.000
1	K Supervisor		1.000		(1.000)
1	H 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		1.000	3.000	2.000
1	27 Sr Client Server Engineer		2.000		(2.000)
1	27 IT Systems Engineer		2.000		(2.000)
1	27 IT Systems Engineer		1.000		(1.000)
1	25 IT Systems Specialist		2.000	1.000	(1.000)
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	25 IT Systems Specialist		2.000		(2.000)
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	
1	13 Data Systems Operator		.500	.500	
	Total Positions		33.500	32.500	(1.000)

Technology Modernization

Program Description and Alignment with the Strategic Plan

This budget includes the funding for programs, functions, and activities in the Field Installation and Innovative Technologies Units within the Division of Technology Innovation.

In the Montgomery County Public Schools (MCPS) strategic plan, *Our Call to Action: Pursuit of Excellence*, Goal 2: Provide an Effective Instructional Program, notes that technology is an essential tool in supporting teaching and learning. 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 disabled 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 within the Division of Technology Innovation 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. In addition, technical training is provided to the technology support staff in schools and offices.

Major Program Components

The Tech Mod program has a number of components. The major functions and activities include the following:

- Modernizing technology hardware, software, and network throughout MCPS
- Researching new technologies and testing their usability with both standardized software and on the MCPS network

Technology Modernization

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- 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 maintaining the school system's technology infrastructure and networks.

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

Program Funding

For FY 2012, it is projected that this program will be funded entirely by local funds.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2012 is \$577,167. There are no significant program changes for FY 2012.

Crosswalk to Other Budget Documents and to the MCPS Strategic Plan

More detailed information about this division and its budget can be found in the *Superintendent's Recommended FY 2012 Operating Budget and Personnel Complement* as follows:

Division of Technology Innovation: Page 7-30

Information on the MCPS strategic plan strategies and initiatives related to this program can be found beginning on Page 19 of the 2010–2015 *Our Call to Action: Pursuit of Excellence* document.

TECHNOLOGY MODERNIZATION

Description	FY 2011 Current	FY 2012 Request	FY 2012 Change
01 Salaries & Wages			
Total Positions (FTE)	6.000	6.000	
Position Salaries	\$505,685	\$536,606	\$30,921
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends			
Professional Part Time			
Supporting Services Part Time			
Other			
Subtotal Other Salaries	_____	_____	_____
Total Salaries & Wages	505,685	536,606	30,921
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 Travel	8,038	17,300	9,262
Staff Development			
Insurance & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	8,038	17,300	9,262
05 Equipment			
Leased Equipment			
Other Equipment			
Total Equipment	_____	_____	_____
Grand Total	\$536,984	\$577,167	\$40,183

TECHNOLOGY MODERNIZATION

CAT	DESCRIPTION	10 Mon	FY 2011 CURRENT	FY 2012 REQUEST	FY 2012 CHANGE
1	K Supervisor		1.000	1.000	
3	K Supervisor		1.000	1.000	
1	25 IT Systems Specialist		1.000	1.000	
1	25 IT Systems Specialist		3.000	3.000	
1	18 IT Systems Technician				
Total Positions			6.000	6.000	

Student Data Services

Program Description and Alignment with the Strategic Plan

This budget includes the funding for programs, functions, development, and activities of the Student Application Services Unit in the Department of Information and Application Services. 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. This program is in alignment with the Montgomery County Public Schools (MCPS) strategic plan, *Our Call to Action: Pursuit of Excellence*, Goal 2: Provide an Effective Instructional Program, and Goal 5: Provide High-quality Business Services that are Essential to the Educational Success of Students.

Major Program Components

Student and instructional technologies 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 on researching instructional strategies

Student Data Systems (continued)

- 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
- Providing staff with analytical, statistical, graphical, and other business intelligence tools to monitor school improvement plan progress and data pertinent to the *No Child Left Behind Act of 2001*
- 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 programs, as well as analyze school-level performance in 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 electronic student grade book
- Producing student report cards and transcripts
- Producing district-level student data required as input to 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 Program (IEP), special education services, and other student accommodations information

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

Program Funding

For FY 2012, it is projected that this program will be funded entirely by local funds.

Student Data Systems

(continued)

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2012 is \$6,218,070. Changes in the budget are a result of reductions. There is a reduction of \$206,552 budgeted for contractual services. Contractual services for the program will be consolidated and automated assessment subscription fees will be renegotiated to reduce costs.

Crosswalk to Other Budget Documents and to the MCPS Strategic Plan

More detailed information about this program and its budget can be found in the *Superintendent's Recommended FY 2012 Operating Budget and Personnel Complement* as follows:

Department of Information and Application Services, Student Application Services Unit:
Page 8–37

Information on the MCPS strategic plan strategies and initiatives related to this program can be found beginning on Page 19 of the 2010–2015 *Our Call to Action: Pursuit of Excellence* document.

STUDENT DATA SERVICES

Description	FY 2011 Current	FY 2012 Request	FY 2012 Change
01 Salaries & Wages			
Total Positions (FTE)	30.800	30.800	
Position Salaries	\$2,986,362	\$2,976,923	(\$9,439)
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends			
Professional Part Time			
Supporting Services Part Time	316,580	269,200	(47,380)
Other			
Subtotal Other Salaries	316,580	269,200	(47,380)
Total Salaries & Wages	3,302,942	3,246,123	(56,819)
02 Contractual Services			
Consultants	1,180,546	787,200	(393,346)
Other Contractual	2,260,566	2,101,278	(159,288)
Total Contractual Services	3,441,112	2,888,478	(552,634)
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials			
Office	7,800	9,146	1,346
Other Supplies & Materials	7,600	49,562	41,962
Total Supplies & Materials	15,400	58,708	43,308
04 Other			
Local Travel	5,293	1,842	(3,451)
Staff Development			
Insurance & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	5,293	1,842	(3,451)
05 Equipment			
Leased Equipment	24,933	22,919	(2,014)
Other Equipment			
Total Equipment	24,933	22,919	(2,014)
Grand Total	\$6,789,680	\$6,218,070	(\$571,610)

STUDENT DATA SERVICES

CAT	DESCRIPTION	10 Mon	FY 2011 CURRENT	FY 2012 REQUEST	FY 2012 CHANGE
1	Q Director II		1.000	1.000	
1	O Supervisor		2.000	2.000	
1	O Supervisor				
1	O Supervisor		1.000	1.000	
1	K Supervisor		1.000	1.000	
1	K Supervisor		1.000	1.000	
2	BD Instructional Specialist		2.000	2.000	
3	BD Instructional Specialist				
2	BD Instructional Specialist		1.000	1.000	
3	BD Instructional Specialist				
1	27 Database Administrator III		1.000	1.000	
2	27 Database Administrator III		1.000	1.000	
1	27 Applications Developer III		1.000	1.000	
2	27 Database Administrator III		1.000	1.000	
1	27 Development Proj Manager		1.000	1.000	
2	25 Applications Developer II		1.000	1.000	
2	25 ETL Analyst/Programmer		1.000	1.000	
1	25 Applications Developer II		2.000	2.000	
2	25 ETL Analyst/Programmer		1.000	1.000	
1	25 Technical Analyst		1.000	1.000	
1	25 Applications Developer II		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		2.000	2.000	
1	23 Applications Developer I		1.000	1.000	
2	16 Administrative Secretary III		1.000	1.000	
1	15 Data Control Technician II		1.000	1.000	
1	13 Data Control Technician I		1.000	1.000	
1	13 Fiscal Assistant I		.800	.800	
Total Positions			30.800	30.800	

Business Information Services

Program Description and Alignment with the Strategic Plan

This budget includes the funding for technology programs, functions, and activities of the Business Information Services Unit in the Department of Information and Application Services. The Business Information Services program aligns with Montgomery County Public Schools (MCPS) strategic plan, *Our Call to Action: Pursuit of Excellence*, Goal 5: Provide 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), capital planning, transportation, and retirement.

Major Program Components

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 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.

Business Information Services (continued)

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.
- 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.

Numbers of Students Served: Not Applicable

Program Funding

For FY 2012 it is projected that this program will be funded entirely by local funds.

Explanation of Significant Budget Changes

The total amount budgeted for this program for FY 2012 is \$3,758,921. There is a realignment of \$206,400 into this program budget for scheduled upgrades of the Financial Management System and the Human Resources Information System.

Crosswalk to Other Budget Documents and to the MCPS Strategic Plan

More detailed information about this unit and its budget can be found in the *Superintendent's Recommended FY 2012 Operating Budget and Personnel Complement* as follows:

Department of Information and Application Services, Business Information Services Unit:
Page 7–41

Information on the MCPS strategic plan strategies and initiatives related to this program can be found beginning on Page 19 of the 2010–2015 *Our Call to Action: Pursuit of Excellence* document.

BUSINESS INFORMATION SERVICES

Description	FY 2011 Current	FY 2012 Request	FY 2012 Change
01 Salaries & Wages			
Total Positions (FTE)	20.500	20.500	
Position Salaries	\$1,950,626	\$1,886,182	(\$64,444)
Other Salaries			
Summer Employment			
Professional Substitutes			
Stipends			
Professional Part Time			
Supporting Services Part Time			
Other			
Subtotal Other Salaries			
Total Salaries & Wages	1,950,626	1,886,182	(64,444)
02 Contractual Services			
Consultants	217,945	430,000	212,055
Other Contractual	1,405,604	1,431,124	25,520
Total Contractual Services	1,623,549	1,861,124	237,575
03 Supplies & Materials			
Textbooks			
Media			
Instructional Supplies & Materials			
Office	3,150	3,150	
Other Supplies & Materials			
Total Supplies & Materials	3,150	3,150	
04 Other			
Local Travel	200	200	
Staff Development			
Insurance & Employee Benefits			
Utilities			
Miscellaneous			
Total Other	200	200	
05 Equipment			
Leased Equipment		8,265	8,265
Other Equipment			
Total Equipment		8,265	8,265
Grand Total	\$3,577,525	\$3,758,921	\$181,396

BUSINESS INFORMATION SERVICES

CAT	DESCRIPTION	10 Mon	FY 2011 CURRENT	FY 2012 REQUEST	FY 2012 CHANGE
1	O Supervisor		2.000	2.000	
1	K Supervisor		3.000	3.000	
1	J Operations Development Manager		1.000	1.000	
1	27 Applications Developer III		2.000	2.000	
1	27 Development Proj Manager		2.500	2.500	
1	25 Applications Developer II		6.000	6.000	
1	25 Technical Analyst		1.000	1.000	
1	23 Applications Developer I				
1	23 Applications Specialist I				
1	15 Fiscal Assistant II		1.000	1.000	
1	15 Data Control Technician II		1.000	1.000	
1	12 Secretary		1.000	1.000	
Total Positions			20.500	20.500	