Chapter 7

Office of the Chief Technology Officer

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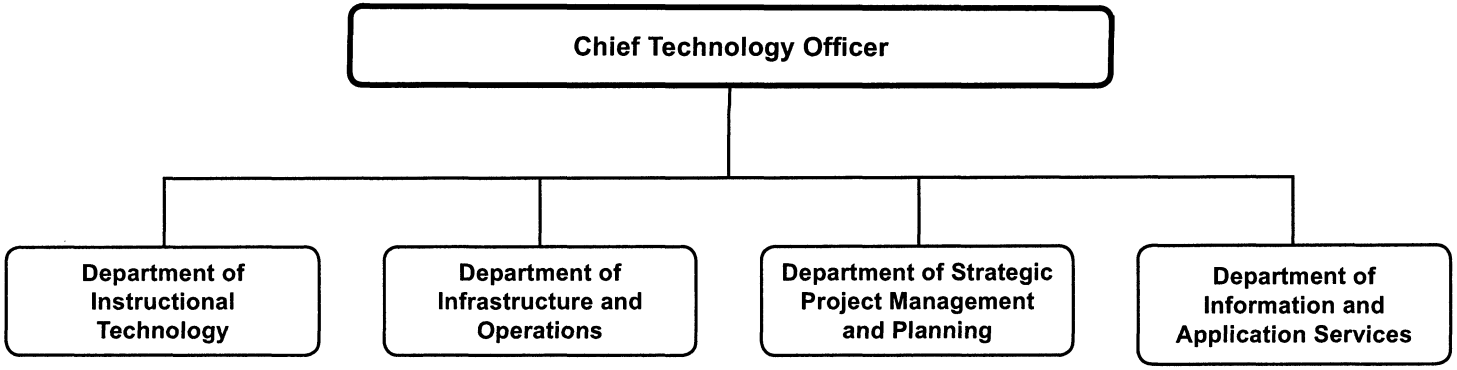
Office of the Chief Technology Officer
Summary of Resources
By Object of Expenditure

OBJECT OF EXPENDITURE	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	FY 2012 BUDGET	FY 2012 CHANGE
POSITIONS					
Administrative	17.000	15.000	15.000	15.000	
Business/Operations Admin.	15.000	14.000	14.000	14.000	
Professional	20.800	24.000	24.000	22.200	(1.800)
Supporting Services	120.800	114.800	114.800	113.800	(1.000)
TOTAL POSITIONS	**173.600**	**167.800**	**167.800**	**165.000**	**(2.800)**
01 SALARIES & WAGES					
Administrative	$2,218,384	$1,993,175	$1,993,175	$2,018,283	$25,108
Business/Operations Admin.	1,495,878	1,474,849	1,474,849	1,492,533	17,684
Professional	2,212,057	2,682,623	2,682,623	2,526,433	(156,190)
Supporting Services	9,419,936	9,135,271	9,135,271	9,070,791	(64,480)
TOTAL POSITION DOLLARS	**15,346,255**	**15,285,918**	**15,285,918**	**15,108,040**	**(177,878)**
OTHER SALARIES					
Administrative					
Professional	126,317	189,863	189,863	97,993	(91,870)
Supporting Services	159,409	447,370	447,370	390,229	(57,141)
TOTAL OTHER SALARIES	**285,726**	**637,233**	**637,233**	**488,222**	**(149,011)**
TOTAL SALARIES AND WAGES	**15,631,981**	**15,923,151**	**15,923,151**	**15,596,262**	**(326,889)**
02 CONTRACTUAL SERVICES	**8,360,864**	**8,374,295**	**8,374,295**	**7,976,941**	**(397,354)**
03 SUPPLIES & MATERIALS	**592,964**	**449,940**	**449,940**	**499,243**	**49,303**
04 OTHER					
Staff Dev & Travel	209,070	195,954	195,954	201,374	5,420
Insur & Fixed Charges	40,572	31,920	31,920		(31,920)
Utilities	3,444,667	3,049,336	3,049,336	3,036,955	(12,381)
Grants & Other	398,306	543,665	543,665	540,000	(3,665)
TOTAL OTHER	**4,092,615**	**3,820,875**	**3,820,875**	**3,778,329**	**(42,546)**
05 EQUIPMENT	**1,669,722**	**1,077,310**	**1,077,310**	**1,035,414**	**(41,896)**
GRAND TOTAL AMOUNTS	**$30,348,146**	**$29,645,571**	**$29,645,571**	**$28,886,189**	**($759,382)**

Office of the Chief Technology Officer—Overview



F.T.E. Positions 165.0

(*In addition, there are 18.5 Capital Budget positions, and a 0.5 Retirement Fund position shown in Department of Information and Application Services chart on Page 7-41)

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Office of the Chief Technology Officer

Chief Technology Officer	1.0
Supervisor (O)	1.0
Assistant to the Associate Superintendent (N)	1.0
Instructional Specialist (B–D)	2.0
Fiscal Specialist II (25)	1.0
IT Systems Specialist (18-25)	4.0
Administrative Services Manager 1 (17)	1.0
Copy Editor/Adminstrative Secretary (17)	1.0
Fiscal Assistant III (16)	1.0
Secretary (12)	1.0

Division of Technology Support

F.T.E. Positions 14.0

Office of the Chief Technology Officer—411

Sherwin Collette, Chief Technology Officer 301-279-3581

Mission

The mission of the Office of the Chief Technology Officer (OCTO) is to provide high-quality technology systems and services essential to the success of every student. The office is committed to excellence in providing technology solutions to support teachers, engage students, and assist in the effective business operations of Montgomery County Public Schools (MCPS). These solutions are reflective of the requirements and priorities of our stakeholders, are developed following best practices for project management, and are implemented with continuous collaboration and communication.

The office is dedicated to creating an organizational culture of respect, where individuals are aware and understand the impact of their behavior and decisions on others and have an awareness, understanding, and tolerance of other interests, viewpoints, cultures, and backgrounds.

Major Functions

OCTO is comprised of four departments and two divisions—the Department of Information and Application Services (DIAS), which provides expert recommendations for the integration of state-of-the-art technology into student and administrative practices and support services; the Department of Instructional Technology (DIT), which provides on-site, centralized, and Web-based professional development to school and office staff on skills and strategies needed; the Department of Strategic Project Management and Planning (DSPMP), which leads the strategic visioning and planning for the use of technology in MCPS based on quality and secure standards, coordinates statewide educational technology efforts, and manages technology-related federal programs; the Department of Infrastructure and Operations (DIO), which manages the technical enterprise configurations for information systems and provides the operational support for administrative data and reports; and two divisions that provide technology support and innovations. The office supports instruction and student achievement by designing and developing innovative approaches and strategic technologies in support of *Our Call To Action: Pursuit of Excellence*, the strategic plan for MCPS; the *Maryland Educational Technology Plan for the New Millennium: 2007–2012*; and the *No Child Left Behind Act of 2001* (NCLB). OCTO develops technology systems with a commitment to customer satisfaction and to the delivery of high-quality products and services. Staff is committed to providing support that is responsive to the needs of the MCPS user community.

DIAS supports student and business technologies by providing leadership, collaboration, and coordination of OCTO initiatives through the development, implementation, and continuous improvement of MCPS technology solutions. These MCPS student, administrative, and operational services allow schools and offices to collect essential data; make decisions and plans based on data analysis; disseminate accurate, current, and timely information; and conduct efficient daily management and support operations.

DIT supports building the capacity of administrative, teacher, and support service professional staff by providing leadership and program management for the implementation of new technologies in schools and offices. DIT staff supports 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.

DSPMP oversees the use of effective project management and quality assurance processes and tools for OCTO. DSPMP staff provides leadership, collaboration, and coordination to ensure that information technology projects and systems are developed and implemented based on MCPS end-user and reporting requirements and are consistent with industry-standard project management, quality assurance, and information technology security processes and practices. Staff in the department works with project managers in each OCTO department and division to share and implement project management best practices that result in success.

DIO manages the enterprise-wide technical systems and facilitates the implementation of effective, secure, and reliable hardware and software solutions for the entire school system. The DIO staff provides operational support for administrative data and reports.

The divisions providing technology support and modernization facilitate the effective use of technology as an everyday tool within MCPS for the benefit of all users including students, teachers, parents, staff, and the local and worldwide learning community. The responsibilities of these divisions are closely aligned with the Technology Modernization (Tech Mod) Program, funded through the Capital Improvements Program (CIP) that refreshes technology in schools and offices. The Division of Technology Support provides on-site technical support to staff in schools and offices, Help Desk services, and customer relationship management. The Division of Technology Innovation oversees field installation and project management, research and development, strategic and tactical planning of the capital program for technology refreshment, coordination of statewide educational technology efforts, and management of technology-related federal programs. The Division of Technology Innovation also manages the Title II-D Educational Technology grant, which supports the innovative use of technology in classroom instruction and student learning, such as Middle School Reform technology, technology magnet programs, and professional development for information technology system support employees. This division continuously cultivates strategic partnerships with vendors that focus on improving product and service prices, quality, and on-time delivery.

The office provides services through five organizational areas—information security, quality assurance, software testing, applications development, and systems architecture and operations management.

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Sherwin Collette, Chief Technology Officer 301-279-3581

Trends and Accomplishments

Responding to the demands for accountability and a rigorous instructional program as set forth by the Board of Education (BOE) and the NCLB legislation requires technology systems that are highly responsive to the need for actionable information to support continuous improvement in teaching and learning. *Our Call to Action: Pursuit of Excellence* calls for improvements in how the school system measures the performance of the organization and how educators analyze performance data to make decisions that will improve student success. Technology systems such as myMCPS save teachers time while providing access to comprehensive data to guide instruction. Innovative technologies, such as interactive white boards, student response systems, and expanded wireless capabilities focus on engaging students while developing critical thinking and problem-solving skills. The need for highly responsive access to network-based resources; the expectation that systems will be intuitive, user-friendly, and safe; and the ability to deploy new systems rapidly all have a major impact on OCTO and its priorities. New networked technology solutions are essential elements of the infrastructure needed to increase productivity and enhance learning by making use of anytime, anywhere access to electronic information and communication. Online and e-learning technologies offer increasing possibilities for delivering instruction and expanding student and staff learning opportunities. Initiatives such as electronic grade books, computer-based assessments, and information systems for parents illustrate the need for forward-thinking and rapid implementation of technology environments to support and sustain innovative instructional programs.

The growing school and office dependence on quality technology solutions requires the continuous improvement of automated information systems and the supporting infrastructure. The ever-increasing need for accurate and timely information that enhances school and office productivity requires MCPS staff to evaluate new strategies to deliver student and business technology solutions. As MCPS technology infrastructure grows in size and complexity, coordination and standardization of components become key concerns. Processes through which technology projects are designed and implemented are slated for continuous improvement.

OCTO accomplishments in FY 2011 focused on continued support of improved process management practices. The office's focus was on improving collaboration and listening and learning from stakeholders.

Efforts to continuously increase the quality of services provided to all MCPS technology users focused on expanding the ability to meet increasing customer requests accurately and in a timely manner. In FY 2011, the office implemented innovative technology solutions for the 21st century interactive classroom, provided leadership for the design and implementation of online curriculum delivery, and expanded project and process management practices in collaboration with systemwide initiatives.

The office supported the use of 21st century interactive technologies to transform teaching and learning. Using the stimulus funding set aside for Universal Design for Learning, interactive white boards, student response systems, and netbook mobile carts were installed in all classrooms in four elementary schools. The division also supported the administration of the Maryland Measures of Student, Teacher, and School Administrator Literacy Assessment to gather baseline data.

The Tech Mod Program, which replaces four-year-old computers in schools, was delayed one year due to the fiscal crisis, creating a five-year replacement cycle through FY 2012. A project was continued that refurbished and repaired 9,021 computers in 64 schools, three alternative sites, and one special education school that had been anticipating the replacement of their four-year-old computers in FY 2011. These schools included four high schools, one middle school, and 58 elementary schools. Also, the division supported the installation of technology for six schools with construction projects, including three modernized schools and three schools with an addition.

Office staff supported the federal application processes for E-Rate telecommunication rebates totaling approximately $1.8 million for FY 2010.

The security of the network also was improved by introducing dedicated and redundant firewall appliances at the core of the network. These appliances not only increase the security necessary to protect the critical data provided by MCPS network resources, but increased the reliability of this function through the real-time redundancy.

The office upgraded the MCPS e-mail system to Exchange 2007 to take advantage of increased protection of data for security and to optimize our investment for future growth. This upgrade also provides better integration with the MCPS intranet portal, myMCPS. The department also modified the structure of the MCPS network (Active Directory) to accommodate newly modernized schools and support the OCTO strategy of moving to a more efficient network design with a single domain.

For the elementary schools that are not yet scheduled to be connected to the Montgomery County Fibernet, the Telecommunications team continues to provide improved wide-area network connections to elementary schools using Virtual Private Network technology. Eight more elementary schools were added to the MCPS network using this technology. Internet availability continued to be over 99 percent overall.

The enterprise portal, myMCPS, received a major upgrade providing users a dynamic, interactive, and customizable environment enabling school and office staff the ability to contribute to and participate in social networking and professional development. The enhanced features empower staff to create and share instructional content with the MCPS 21st century professional learning community. Rich feature sets included video libraries, content personalization, and discussion boards to accelerate the communication of ideas across groups. The reporting platform also has been streamlined to provide improved student achievement monitoring to reflect the ongoing development of the elementary integrated

curriculum and standards-based grading and reporting. The Business Center was added to the myMCPS portal to provide administrators with a consolidated repository for information vital to the day-to-day operations of their buildings. It contains resources necessary for district operations including a document library, financial reports, calendar of important events, and staffing reports.

The implementation of the Web-based Funding Accountability and Transparency application allows public access to MCPS financial information about payments made, in compliance of the Maryland State House of Representatives, House Bill 841.

The recent enhancement to the CIP application enabled improved management and maintenance of enrollment projection data that impacts school boundaries. The application also was enhanced to improve projection of both general education and special education students in alignment with hours-based staffing.

The Human Resources Information System (HRIS) has been enhanced to provide event-driven e-mail notification, such as personnel changes and professional certification renewal notices. Additionally, HRIS receives continuous upgrades to fulfill Board of Education policy and regulation changes as well as Maryland state and federal government mandated changes, such as mandated benefit and tax changes.

The implementation of the Web-based solution Human Resources Online (HRO) automates and continuously improves the development and management of human resources processes and facilitates efficient transactional integration between personnel-based systems. Integration between HRO and the *my*MCPS portal will enable staff to manage their personnel data and automate former paper-based transactions.

In FY 2010, of the 102,371 requests logged by the system, the MCPS Help Desk opened 46,694 tickets and closed 30,372 requests at first contact. In addition, they processed another 24,460 tickets that were submitted by other MCPS staff via the Web for a total of 71,154 tickets handled by the eight-member team.

In FY 2010, the Technology Services and Support team closed 996 emergency and high priority requests handling 75 percent of emergencies and 72 percent of high-priority requests within the 12-hour Service Level Agreement (SLA) performance measure. The TSS team also handled 2,478 normal priority calls, meeting the three-day SLA performance measure 66 percent of the time. The total number of requests of all priorities for this time period was 3,658.

In FY 2011, the office received funding to lead a competitive grant under Title II-D—Enhancing Education through Technology under the NCLB. This grant funds a statewide consortium for administering and analyzing results of the Maryland Measures for Student, Teacher, and School Administrator Technology Literacy. The division applied for and received funding to lead a second competitive grant under Title-D. This grant funds a statewide consortium developing online professional development modules based on the Maryland Teacher Technology Standards. Division staff, funded through the Title II-D Educational Technology allocation, supported the critical thinking program in seven participating schools.

Major Mandates

- The NCLB and the state's *Bridge to Excellence in Public Schools Act* mandate data collection and distribution that require up-to-date infrastructure and equipment in all schools, as well as access to system information.
- *Our Call to Action: Pursuit of Excellence* focuses on an accountability framework for measuring past performance and evaluating where continued change needs to be made, as well as requiring access to and use of a variety of technological applications and services that help provide an effective instructional program and create a positive work environment in a self-renewing organization.
- The NCLB requires the administration of state-mandated tests including the Maryland School Assessment in Grades 3–8 and 10; the High School Assessments; the Independence Mastery Assessment Program for students in the fundamental life skills curriculum; and the IDEA Proficiency Test for students in the English for Speakers of Other Languages program.
- The *Maryland Educational Technology Plan for the New Millennium: 2007–2012* presents technology objectives and targets in the areas of student learning, professional development, administrative productivity and efficiency, universal access, and research and evaluation. This plan includes a number of local school system targets that are to be achieved by 2012, including the development and implementation of data management systems, integrated student information systems, curriculum/content management systems, and learning management systems. It also includes the development of processes and strategies to provide electronic communication with educators, students, parents, and the community, and the use of electronic information and communication tools by all staff to improve management and operational efficiency.
- The *Telecommunications Act of 1996* (Section 954h.B) and Federal Communications Commission Order 9-57 stipulate that requests for Universal Service Program discounts (E-Rate) must be based on an approved technology plan that includes clear goals and strategies for integrating telecommunications services and Internet access into the school district's educational program, a professional development strategy, a needs assessment, a sufficient budget for acquisition and maintenance, and a program evaluation.
- The NCLB requires that programs funded through Title II-D, Enhancing Education Through Technology, must be based on an approved technology plan, must comply with state and federal laws and regulations, and must ensure timely and meaningful consultation with nonpublic school officials during the design and implementation of programs.

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- The *Children's Internet Protection Act* requires that school systems receiving NCLB Title II-D funding or E-Rate discounts for Internet services must have policies and use technology protection measures that address issues related to the safety and security of minors and adults while using the Internet and electronic communication.
- Activities funded through Title V, Innovative Education Programs, must comply with state and federal laws and regulations; and OCTO must plan for participation of children enrolled in nonpublic schools.
- The Board of Education Policy IGS, *Educational Technology*, requires that MCPS staff and students be provided with easy, equitable access to technology tools.
- Expectations of the Maryland Core Learning Goals and alignment with the Maryland High School Assessments and Maryland School Assessments require a modern infrastructure for delivery of online tests and courses.

Strategies

- Realign organizational structure to effectively support the district's priorities
- Transform the organizational culture
- Define and adopt a customer engagement and relationship model and process
- Develop a next-generation information technology workforce by building staff capacity
- Strengthen operational coherence and risk management through appropriate stakeholder governance
- Build understanding and support for development of a teaching and learning networked community using Web 2.0 systems
- Ensure students and staff can access, generate, and use data
- Provide technologies that engage students, encourage critical-thinking and problem-solving skills in support of our rigorous curriculum
- Provide strategic leadership for all technology initiatives being implemented throughout the school system
- Create a multiyear technology road map identifying strategic plans for school-based software and hardware technologies, telecommunications, network operating systems, and support systems firmly based in industry standards and instructional research
- Provide support for systemwide initiatives by maintaining a technology infrastructure that provides a platform capable of supporting modern technological hardware and software tools
- Support the development and implementation of integrated information technology systems to improve products, resources, and services; providing technical support and instruction to ensure that these systems are fully utilized and meet customer needs
- Implement technologies to support expansion of anytime, anywhere professional development and student learning
- Model effective implementation of the professional growth system for all OCTO staff to enhance their abilities to support program strategies and new technologies skills
- Collaborate with other offices and departments to understand their needs and to provide effective services to schools
- Collaborate with private businesses and other school districts to gain knowledge of best practices
- Consult with education, business, community, and government groups to ensure that programs and services are appropriate to prepare students for higher education and the workplace of the future
- Use Baldrige and Six Sigma for performance excellence and assessment of results to guide organizational improvements
- Build relationships that increase customer loyalty and satisfaction
- Improve project management through implementation of effective strategies for chartering projects, team effectiveness, and organizational alignment
- Improve all key work processes to optimize performance
- Cultivate strategic partnerships with vendors that focus on improving product and service prices, quality, and on-time delivery

Budget Explanation Office of the Chief Technology Officer—411

The FY 2012 request for this office is $6,415,177, a decrease of $121,455 from the current FY 2011 current budget. An explanation of this change follows

Continuing Salary Costs—$20,704
There is an increase of $20,704 for continuing salary costs to reflect step or longevity increases for current employees.

Realignment—$0
Realignments are budgeted to address priority spending needs in this office. There are decreases for the alerting system of $12,381 and lease/purchase equipment of $1,486 and increases for contractual maintenance of $11,749 and local travel of $2,118.

Reductions—($142,159)
There is a reduction of $142,159 budgeted for contractual maintenance for school software. The school software maintenance has been included in the FY 2012 Capital Improvement Program budget as it supports the technology modernization program.

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Office of Chief Technology Officer - 411

Sherwin Collette, Chief Technology Officer

Description	FY 2010 Actual	FY 2011 Budget	FY 2011 Current	**FY 2012 Request**	FY 2012 Change
01 Salaries & Wages					
Total Positions (FTE)	13.000	14.000	14.000	**14.000**	
Position Salaries	$1,067,180	$1,256,461	$1,256,461	**$1,277,165**	$20,704
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		68,301	68,301	**68,301**	
Other					
Subtotal Other Salaries	2,490	68,301	68,301	**68,301**	
Total Salaries & Wages	1,069,670	1,324,762	1,324,762	**1,345,466**	20,704
02 Contractual Services					
Consultants		7,124	7,124	**7,124**	
Other Contractual		1,379,410	1,379,410	**1,249,000**	(130,410)
Total Contractual Services	442,346	1,386,534	1,386,534	**1,256,124**	(130,410)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		14,520	14,520	**14,520**	
Other Supplies & Materials		1,099	1,099	**1,099**	
Total Supplies & Materials	18,273	15,619	15,619	**15,619**	
04 Other					
Local Travel		182	182	**2,300**	2,118
Staff Development		151,621	151,621	**151,621**	
Insurance & Employee Benefits					
Utilities		3,049,336	3,049,336	**3,036,955**	(12,381)
Miscellaneous		540,000	540,000	**540,000**	
Total Other	3,982,485	3,741,139	3,741,139	**3,730,876**	(10,263)
05 Equipment					
Leased Equipment		68,578	68,578	**67,092**	(1,486)
Other Equipment					
Total Equipment	52,979	68,578	68,578	**67,092**	(1,486)
Grand Total	$5,565,753	$6,536,632	$6,536,632	**$6,415,177**	($121,455)

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Office of Chief Technology Officer - 411

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CAT		DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
1		Chief Technology Officer		1.000	1.000	1.000	**1.000**	
1	O	Supervisor		1.000	1.000	1.000	**1.000**	
1	N	Asst. to Assoc Supt		1.000	1.000	1.000	**1.000**	
1	N	Coordinator		1.000				
3	BD	Instructional Specialist			2.000	2.000	**2.000**	
1	25	IT Systems Specialist		4.000	4.000	4.000	**4.000**	
1	25	Fiscal Specialist II		1.000	1.000	1.000	**1.000**	
1	17	Copy Editor/Admin Sec				1.000	**1.000**	
1	17	Admin Services Manager I		1.000	1.000	1.000	**1.000**	
1	16	Fiscal Assistant III		1.000	1.000	1.000	**1.000**	
1	15	Administrative Secretary II		1.000	1.000			
1	14	Administrative Secretary I		1.000	1.000			
1	12	Secretary				1.000	**1.000**	
	Total Positions			**13.000**	**14.000**	**14.000**	**14.000**	

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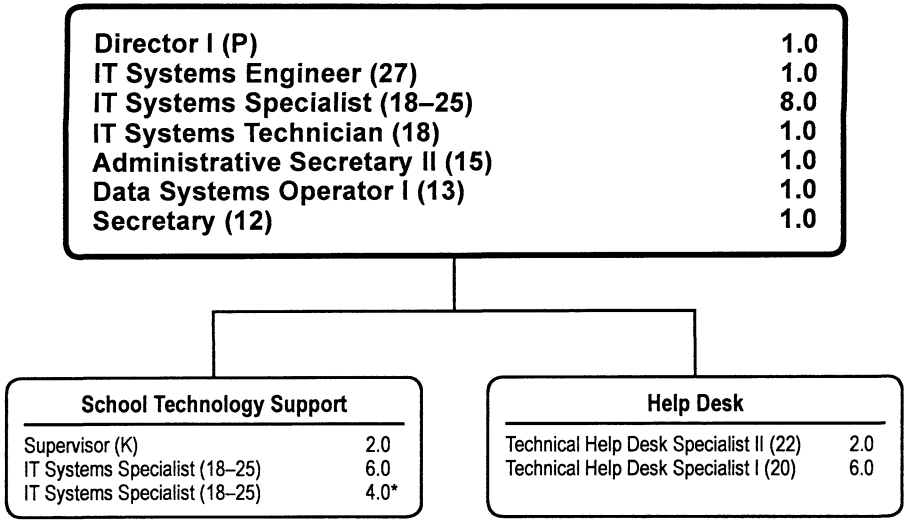
Division of Technology Support



F.T.E. Positions 30.0

(*In addition, there are 4.0 Capital Budget positions shown on this chart)

Division of Technology Support—422/423/424

Shelley Beddingfield, Director I 240-632-6970

Mission

The mission of the Division of Technology Support (DTS) is to provide technical assistance to schools and offices while maintaining the operational readiness of new and existing hardware and software.

Major Functions

The DTS provides technical assistance to staff in all Montgomery County Public Schools (MCPS) schools and offices through the services of the School Technology Support Team, Help Desk, Technical Services and Support Team, and the Customer Relationship Manager.

The School Technology Support (STS) Team consists of three groups—first- and second-level Information Technology Support Specialists (ITSS) and certified computer repair staff. The ITSS group is responsible for network administration, server, workstation and printer maintenance and repair, as well as software installation and upgrades. Their work assignment includes all elementary schools and five special schools. This group routinely partners with administrators, teachers, media specialists, and central office staff to prepare for distance learning, online testing, and other events that require technical assistance. They also participate in project management in support of school initiatives. The certified hardware repair group is deployed to kindergarten through Grade 12 locations to troubleshoot, diagnose, and repair hardware that is no longer under warranty. The workload of the STS Team is monitored through the Unicenter Service Desk (USD) issue tracking system, which allows the supervisors to more effectively adjust resource allocation needs. Although USD is the major source of requests for service and support, the team also receives communications through e-mail, telephone, routine and emergency site visits, and internal requests for more advanced help to resolve a problem. The STS Team works proactively to identify industry best practices to improve customer service.

The Help Desk Team provides one central location for MCPS staff to seek information and immediate resolution to technical problems. Requests for service are received by telephone, e-mail, and the USD issue tracking system. The Help Desk supports a wide range of technology infrastructure, hardware, and over 100 school- and office-based and enterprise-wide applications. Help Desk specialists attend ongoing training preparing them to resolve basic network issues, support new application inquiries, and respond to software questions, including questions about the Microsoft Office Suite. This team also attends operations and applications training to ensure that the most current information available is shared with MCPS staff. The Help Desk team routinely researches and collaborates with other technologists in order to post useful information and timely solutions to frequently asked questions on the Help Desk website and a self-service database, Knowledge Tools. The Help Desk collaborates with appropriate staff and departments to create Service and Operation Level Agreements that specifically outline a comprehensive support plan for all MCPS enterprise applications.

The Technical Services and Support (TSS) Team is responsible for computer software and hardware support in non-school-based offices. Support includes integration services, application deployment, network administration, computer image support, and on-site equipment repair and upgrades. They maintain a parts database and inventory for both warranty and non-warranty maintenance of supported equipment. The team sets up and provides technical support for computers and multimedia equipment used for MCPS meetings and activities. Audio Visual (AV) equipment support includes maintaining an equipment pool for all of MCPS, collaborating with school and media center staff on establishing AV standards and addressing AV needs, and providing warranty repair of equipment purchased from the AV bid list. TSS staff also collaborates with the Procurement Office and Instructional Television staff in reviewing and making recommendations on all multimedia equipment.

The Customer Relationship Manager (CRM) is responsible for extracting data from the USD issue tracking system to design customized reports for schools and central office requests for information. As projects are implemented, the CRM provides daily statistics that reflect the level of success of critical initiatives. The CRM serves as a subject matter expert, application administrator, and project manager for upgrades to the USD issue tracking system. The CRM facilitates meetings to outline the Operation Level Agreement model that identifies the industry-standard approach to developing support plans and process maps.

Trends and Accomplishments

The division tracks, manages, and resolves requests for support through the Unicenter Service Desk (USD) issue tracking system. In Fiscal Year (FY) 2010, 102,371 requests for services and support were opened in USD by MCPS staff in schools and offices. This represents an increase of 8,158 requests as compared to 94,213 in FY 2009.

In FY 2010, of the 102,371 requests logged by the system, the MCPS Help Desk opened 46,694 tickets and closed 30,372 requests at first contact. In addition, they processed another 24,460 tickets that were submitted by other MCPS staff via the Web for a total of 71,154 tickets handled by the eight-member team. The team leaders of the Help Desk are proactive in using the issue-tracking software to spot trends. They routinely use this information to provide first-level troubleshooting before escalating an issue to second-level support staff, usually resolving the customer's problem within the Help Desk without escalation. The Help Desk team continuously works to improve customer service by collaborating with other Office of the Chief Technology Officer (OCTO) teams and by incorporating user feedback into daily operations. They participate in the development of customized support plans and service and operation level agreements that are essential to the seamless delivery of service to our customers. This team periodically meets with various project teams to prepare training documents and assist in training designated staff on new enterprise applications. The Help Desk maintains the Help Desk website and provides

Division of Technology Support—422/423/424

Shelley Beddingfield, Director I 240-632-6970

users with timely solutions to frequently asked questions. This year a new self-service tool, Knowledge Tools, has been introduced that provides the MCPS user community with access to rich resources containing answers to many questions and requests.

In FY 2010, STS staff resolved 39,241 reported problems. Results from customer service satisfaction survey indicate that ITSS staff met or exceeded customers' expectations for the services and information provided 95 percent of the time. ITSS staffing is based on a geographical team model with primary and back-up assignments for each school. This model provides on-site support for over 90 percent of all elementary schools each week. The team established a "Lifeboat" system to rapidly deploy replacement servers to schools, restoring access to technology and minimizing downtime.

In FY 2010, the TSS team closed 996 emergency and high-priority requests, handling 75 percent of emergencies and 72 percent of high-priority requests within the 12-hour Service Level Agreement (SLA) performance measure. The TSS team also handled 2,478 normal priority calls, meeting the 3-day SLA performance measure 66 percent of the time. The total number of requests of all priorities for this time period was 3,658.

In FY 2010, the CRM worked with a cross-functional team to adapt an enterprise application to track and manage requests from schools and the Office of School Performance for support related to curriculum, instruction, and assessment. The CRM analyzes data provided by the issue-tracking database to provide performance statistics on projects such as the myMCPS Web portal; the Online Administrative Student Information System; the electronic grade book used to report and maintain student records; Edline, the parent communication tool; and Measures of Academic Progress—Reading, the measurement accountability reading system. Under the direction of the CRM, phase two of the USD issue-tracking system upgrade project gave employees a more intuitive web interface with the USD issue tracking system and gave MCPS staff the ability to find answers to many of their questions in the Knowledge Tools database.

Major Mandates

- *Our Call to Action: Pursuit of Excellence* identifies technology as a critical learning tool in schools. Access to and use of a variety of technological applications and services are essential to an effective instructional program and help to create a positive work environment in a self-renewing organization. Specific strategies/initiatives include refreshing hardware and software and network infrastructure through the Technology Modernization project and providing testing support of innovative technologies.
- The federal *No Child Left Behind Act of 2001* and the state's *Bridge to Excellence in Public Schools Act* require up-to-date infrastructure and equipment in all schools.
- The federal *No Child Left Behind Act of 2001* requires the administration of state-mandated tests including the Maryland School Achievement Assessment (MSA), Independence Mastery Assessment Program (IMAP), and the IDEA Proficiency Test (IPT).
- Expectations of the Maryland Core Learning Goals and alignment with the Maryland High School Assessments and Maryland School Assessments require a modern infrastructure for delivery of online tests and courses.
- The MCPS Board of Education policy, IGS, Educational Technology, requires that MCPS staff and students be provided with easy, equitable access to technology tools.

Strategies

- Provide technology support for instructional programs and other systemwide initiatives by maintaining an infrastructure that provides a platform capable of supporting modern technological hardware and software tools
- Participate in strategic planning for the creation of a multiyear technology road map, identifying strategic plans for school-based software and hardware technologies, telecommunications, network operating systems, and a support system firmly based in industry standards and instructional research
- Support the technology modernization project providing access to high-capability computers with Web connectivity in schools and the community
- Support the development and implementation of integrated information technology systems to improve products, resources, and services. Provide technical support and instruction to ensure that these systems are fully used and meet customer needs
- Provide just-in-time support for the MSA, IMAP, and the IPT tests
- Develop management strategies and align resources and services to accomplish the OCTO strategic plan; involve customers and stakeholders in decisions on the use of resources
- Work collaboratively with other OCTO teams to assess and respond to customer needs and provide ongoing technical and operational support to schools
- Increase DTS staff involvement in strategic planning and continuous improvement efforts through timely communications and participation in cross-functional work groups in schools and offices
- Support administrative and instructional computers and provide solutions to technical problems in a timely, efficient, and reliable manner
- Respond to customer needs by monitoring performance, including the turnaround time for repairs and service, and the number and types of requests submitted to the Help Desk
- Coordinate and provide computer integration services, software installation, and outreach to assess complex problems and address staff training needs
- Increase user independence and skills in their ability to resolve and prevent technology-related problems through just-in-time help and expanded knowledge tools through self-help systems

Division of Technology Support—422/423/424

Shelley Beddingfield, Director I 240-632-6970

- Provide accurate and timely information to customers.
- Support the development and implementation of new applications through ensuring access to reliable technology, assisting in training, and providing onsite and remote technical support
- Ensure technical readiness in schools

Performance Measures

Performance Measure: Percentage of phone requests both opened and closed by the Help Desk staff on first customer contact (as measured by closure in USD issue tracking system within two hours).

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
65%	67%	68%

Explanation: This measure is an indication of the timeliness of problem resolution by Help Desk staff within the Service Level Agreement. NOTE: A change in Help Desk processes significantly reduced the number of duplicate requests for support. While this change resulted in better service for our end-users, it reduced the percent of tickets "closed at the first contact."

Performance Measure: Percentage of customers who are satisfied with the timelines of service received from an MCPS hardware technician.

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
96.5%	98%	99%

Explanation: This measure is an indication of the timeliness of problem resolution by the MCPS hardware staff servicing non-warranty equipment K–12.

Performance Measure: Percentage of customers who indicate satisfaction with the level of knowledge demonstrated by their ITSS.

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
95.8%	97%	99%

Explanation: This measure reflects the level of customer satisfaction with the services provided by the assigned technologist.

Budget Explanation Division of Technology Support—422/423/424

The FY 2012 request for this division is $2,486,948, an increase of $60,161 over the current FY 2011 budget. An explanation of this change follows.

Continuing Salary Costs—$60,712

There is an increase of $60,712 for continuing salary costs to reflect step or longevity increases for current employees.

Realignment—($551)

Realignments are budgeted to address priority spending needs in this division. There are realignments decreasing lease/purchase equipment by $5,092, local travel by $808 and supplies by $100 to increase funds for contractual maintenance by $6,000. In addition, there is a realignment of $551 for local travel from this division to the Division of Technology Innovation.

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Division of Technology Support - 422/423/424

Shelley Beddingfield, Director I

Description	FY 2010 Actual	FY 2011 Budget	FY 2011 Current	**FY 2012 Request**	FY 2012 Change
01 Salaries & Wages					
Total Positions (FTE)	31.000	30.000	30.000	**30.000**	
Position Salaries	$2,375,285	$2,361,176	$2,361,176	**$2,421,888**	$60,712
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries	20,517				
Total Salaries & Wages	2,395,802	2,361,176	2,361,176	**2,421,888**	60,712
02 Contractual Services					
Consultants					
Other Contractual		23,850	23,850	**29,850**	6,000
Total Contractual Services	-1,439	23,850	23,850	**29,850**	6,000
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		10,152	10,152	**10,152**	
Other Supplies & Materials		14,762	14,762	**14,662**	(100)
Total Supplies & Materials	28,204	24,914	24,914	**24,814**	(100)
04 Other					
Local Travel		5,247	5,247	**3,888**	(1,359)
Staff Development		1,495	1,495	**1,495**	
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	14,573	6,742	6,742	**5,383**	(1,359)
05 Equipment					
Leased Equipment		10,105	10,105	**5,013**	(5,092)
Other Equipment					
Total Equipment	6,955	10,105	10,105	**5,013**	(5,092)
Grand Total	$2,444,095	$2,426,787	$2,426,787	**$2,486,948**	$60,161

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Division of Technology Support - 422/423/424

Shelley Beddingfield, Director I

CAT	DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
	422 Division of Technology Support						
1	P Director I		1.000	1.000	1.000	**1.000**	
1	27 IT Systems Engineer		1.000	1.000	1.000	**1.000**	
11	25 IT Systems Specialist		8.000	8.000	8.000	**8.000**	
11	18 IT Systems Technician		1.000	1.000	1.000	**1.000**	
1	15 Administrative Secretary II		1.000	1.000	1.000	**1.000**	
11	13 Data Systems Operator		1.000	1.000	1.000	**1.000**	
1	12 Secretary		1.000	1.000	1.000	**1.000**	
	Subtotal		**14.000**	**14.000**	**14.000**	**14.000**	
	423 Help Desk						
1	22 Technical Help Desk Spec II		1.000	1.000	1.000	**1.000**	
3	22 Technical Help Desk Spec II		1.000	1.000	1.000	**1.000**	
1	20 Technical Help Desk Spec I		2.000	2.000	2.000	**2.000**	
3	20 Technical Help Desk Spec I		4.000	4.000	4.000	**4.000**	
	Subtotal		**8.000**	**8.000**	**8.000**	**8.000**	
	424 School Technology Support						
11	K Supervisor		2.000	2.000	2.000	**2.000**	
11	25 IT Systems Specialist		7.000	6.000	6.000	**6.000**	
	Subtotal		**9.000**	**8.000**	**8.000**	**8.000**	
	Total Positions		**31.000**	**30.000**	**30.000**	**30.000**	

Department of Instructional Technology

Director II (Q)	**1.0**
Administrative Secretary III (16)	**1.0**

Technology Consulting Team

Instructional Specialist (B–D)	17.2
Administrative Secretary I (14)	1.0

F.T.E. Positions 20.2

Department of Instructional Technology—435

John Burke, Director II 240-314-2250

Mission

The mission of the Department of Instructional Technology (DIT) is to ensure 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.

Major Functions

The department accomplishes its mission by working closely with school leadership to support school improvement plans with technology strategies; designing, developing and delivering high-quality technology professional development on systemwide applications to support teaching and learning; collaborating with Montgomery County Public Schools (MCPS) offices and schools to identify needs for which technology solutions can be applied; and developing, distributing, and supporting interactive distance learning. The department provides leadership and program management for the implementation of new technologies in schools to increase teacher capacity by saving valuable time. The department manages the Center for Technology Innovation, which is the school system's primary technology training facility for all staff. The department supports the instructional implementation of the Educational Technology Policy in all schools and the Technology Modernization Program.

The department provides on-site, centralized, and Web-based professional development to school and office staff on 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. Staff in the department develops online training opportunities using state-of-the-art technology solutions and methodologies, translates application functions into MCPS business practices, and researches and develops the latest instructional resources and software. The department collaborates with school leadership and identifies targeted, exemplary technology integration practices. Staff also helps identify hardware, software, and electronic resources to support school improvement objectives, and provides support and training to administrators and instructional and support staff. The department also supports 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.

Trends and Accomplishments

Educational technology has evolved from being viewed solely as a tool to support direct instruction and provide valuable resources to students to include solutions to effectively provide meaningful information about student performance that guides instructional and school improvement decisions. New technologies, such as myMCPS and the Instruction Center make it possible to:

- Assess student progress on a regular basis
- Efficiently score and report results in a timely manner to help teachers and administrators make real-time decisions
- Provide a tailored instructional program to students
- Allocate human and capital resources quickly to achieve desired results

While there is a wide variety of technology solutions for many of the work-related tasks and functions required in a school system, it is imperative to continually receive feedback regarding the time-saving value and effectiveness of these solutions. The mission of the department has been crafted to meet the challenges of the dynamic nature of technology and the unique needs of MCPS.

Each school receives direct support from a team of instructional technology specialists to provide technology-based strategies and professional development on those technologies to support school improvement plan goals. The department provides project management on three assessment technologies: the MCPS Assessment Program—Primary Reading 3D; Measure of Academic Progress—Reading; and Achievement Series. Project management also is provided for Discovery Education Streaming which provides schools with access to a vast on-demand video library to support instruction.

Major Mandates

- The National Educational Technology Plan 2010 recommends the following actions:
  - Provide pre-service and in-service educators with preparation and professional learning experiences powered by technology that close the gap between students' and educators' fluencies with technology and promote and enable technology use in ways that improve learning, assessment, and instructional practices
  - Transform the preparation and professional learning of educators and education leaders by leveraging technology to create career-long personal learning networks within and across schools, pre-service preparation and in-service educational institutions, and professional organizations
  - Use technology to provide access to the most effective teaching and learning resources, especially where they are not otherwise available and to provide more options for all learners at all levels
- Title II Part D of the *No Child Left Behind Act of 2001* has as its primary goal to "improve student academic achievement through the use of technology in elementary schools and secondary schools" which includes:
  - All students being technologically literate by the time they finish the 8th grade
  - The effective integration of technology resources and systems with teacher training and curriculum development to establish research-based instructional methods

Department of Instructional Technology—435

John Burke, Director II 240-314-2250

- The Maryland Instructional Leadership Framework developed by the Maryland State Department of Education (MSDE) and adopted by the MSDE states in outcome 6 that school leadership will "use technology and multiple sources of data to improve classroom instruction."
  - The MCPS strategic technology plan, Educational Technology for 21st Century Learning, includes the following: Goal 1: Students will use technology to become actively engaged in learning; Goal 2: School staff will address the digital divide through equitable access to technology; Goal 3: Staff will improve technology skills through professional development; and Goal 4: Staff will use technology to improve productivity and results.

Strategies

- Ensure the successful integration of technologies that support teaching, learning, and workforce excellence by embedding instructional and achievement technologies within school improvement plan strategies and activities; provide instructional leaders with look-fors and monitoring tools; and develop anywhere/anytime professional development materials
- Develop relationships with school-based and central office staff to facilitate the identification of needs that can be addressed through technology and formalize user feedback channels to application development/deployment teams

Performance Measurements

Performance Measure: Mastery of Training Outcomes

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
87%	90%	93%

Explanation: Percentage of attendees reporting mastery of all stated training session outcomes as indicated on post training survey.

Performance Measure: Center of Technology Innovation Satisfaction

FY 2010 Actual*	FY 2011 Estimate	FY 2012 Recommended
79%	85%	90%

Explanation: Percentage of guest instructors that rate their experience as excellent as reported via online survey.

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*Excellent = 79% Very Good = 17% Good = 4%
Fair = 0% Poor = 0%

Budget Explanation Department of Instructional Technology—435

The FY 2012 request for this department is $2,389,043, a decrease of $164,147 from the current FY 2011 current budget. An explanation of this change follows.

Continuing Salary Costs—($34,970)
There is decrease of $34,970 for continuing salary costs. Step or longevity increases for current employees are offset by reductions for staff turnover.

Realignment—$0
Realignments are budgeted to address priority spending needs in this department. There are realignments decreasing supporting services part-time salaries by $14,400, stipends by $14,993, and contractual maintenance by $4,000 to increase funds for instructional materials by $32,000 and local travel by $1,393.

Reductions—($129,177)
There is 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 stipends. Teachers will be encouraged to attend voluntary training sessions and use school-based resources such as Grade Book Advisors for new technologies.

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Dept. of Instructional Technology - 435

John L. Burke, Director II

Description	FY 2010 Actual	FY 2011 Budget	FY 2011 Current	**FY 2012 Request**	FY 2012 Change
01 Salaries & Wages					
Total Positions (FTE)	20.000	21.200	21.200	**20.200**	(1.000)
Position Salaries	$2,005,269	$2,333,637	$2,333,637	**$2,236,467**	($97,170)
Other Salaries					
Summer Employment					
Professional Substitutes		43,988	43,988	**43,988**	
Stipends		135,975	135,975	**54,005**	(81,970)
Professional Part Time					
Supporting Services Part Time		22,500	22,500	**8,100**	(14,400)
Other					
Subtotal Other Salaries	113,651	202,463	202,463	**106,093**	(96,370)
Total Salaries & Wages	2,118,920	2,536,100	2,536,100	**2,342,560**	(193,540)
02 Contractual Services					
Consultants					
Other Contractual		8,000	8,000	**4,000**	(4,000)
Total Contractual Services	1,232	8,000	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	33,719			**32,000**	32,000
04 Other					
Local Travel		9,090	9,090	**10,483**	1,393
Staff Development					
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	7,913	9,090	9,090	**10,483**	1,393
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$2,161,784	$2,553,190	$2,553,190	**$2,389,043**	($164,147)

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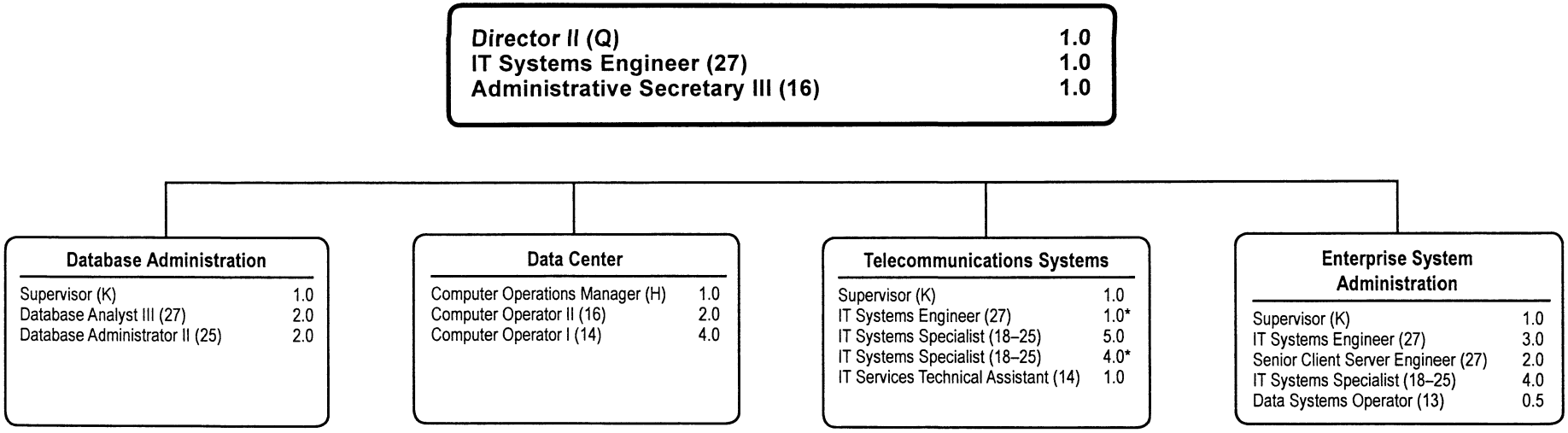
Dept. of Instructional Technology - 435

John L. Burke, Director II

CAT	DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
1	Q Director II		1.000	1.000	1.000	**1.000**	
3	BD Instructional Specialist		17.000	18.200	18.200	**17.200**	(1.000)
1	16 Administrative Secretary III		1.000	1.000	1.000	**1.000**	
1	14 Administrative Secretary I		1.000	1.000	1.000	**1.000**	
	Total Positions		**20.000**	**21.200**	**21.200**	**20.200**	**(1.000)**

Department of Infrastructure and Operations



F.T.E. Positions 32.5

(*In addition, there are 5.0 Capital Budget positions shown on this chart.)

Department of Infrastructure and Operations—446/431/432/433/436/447/448/451/452/453/

Cary H. Kuhar, Director II 301-279-3581

Mission

The mission of the Department of Infrastructure and Operations is to manage the enterprise-wide technical systems—including the data center, network connections and telephones—and to facilitate the implementation of effective, secure, and reliable hardware and software solutions. This department also is responsible for providing the operational support for administrative data and reports aligned with *Our Call to Action: Pursuit of Excellence.*

Major Functions

The department accomplishes its mission through four units—Database Administration, Data Center, Telecommunication Services, and Enterprise Systems Administration. All four units work collaboratively to ensure that Montgomery County Public Schools (MCPS) technology systems are designed and operated in the most efficient manner possible. The director's office manages major projects within the Department of Infrastructure and Operations and provides collaborative support to the other departments' project teams. To ensure that these services are provided in an effective, efficient, and systemic manner, the Infrastructure Project Management Unit coordinates the work efforts of the technical resources and subject matter experts for department projects, following the shared project and process management methods that are common to all Office of the Chief Technology Officer project teams. The director's office ensures that project documentation is kept in an accessible place and that quality assurance processes are created, documented, and communicated for maximum efficiency.

The Database Administration Unit is responsible for creating, maintaining, backing up and recovering, and monitoring enterprise databases (Online Administrative Student Information System, online student look-up, period-by-period attendance, grading and reporting, financial management system, payroll, and retirement) for effective use in an operational environment. This includes all student and business systems.

The Data Center operates, monitors, and provides technical support for the MCPS central servers and related equipment (high-speed printers and scanners) to allow 24-hour access to essential student and administrative databases and to run applications, including payroll, student attendance and enrollment, retirement, asset management, financial management, report cards, and online materials ordering application systems. The unit is responsible for maintaining the data center facility with round-the-clock sensors for power, temperature, humidity, fire, and other mechanical functions.

The Telecommunication Services Unit designs, installs, and supports local- and wide-area networks which include wiring in schools, central office, and field offices. The unit maintains all telephone systems, both wired and cellular, including school and office voice mail systems, data transmission lines, and voice circuits. The Telecommunication Services Unit supports converged telephony which combines voice, data, and video on data circuits. Telephony specialists evaluate current system needs while reviewing telecommunications trends. To improve MCPS telecommunications capabilities, staff is responsible for researching, planning, expanding, and modernizing existing systems as both technology and location needs evolve. The unit monitors and maintains the MCPS wide-area network (WAN), which is implemented by connections through several carriers, including the county's fiber-optic network. The connection to the Internet and county government, the security firewall, the intrusion detection/prevention equipment, and the Internet protocol security video solution for secondary schools, along with the data wiring at new and modernized construction projects— including the telephone and cable television distribution systems, also are the responsibility of this unit.

The Enterprise Systems Administration Unit designs systems architecture for new or upgraded applications and installs, manages, and supports enterprise servers that house the technology systems used by staff and students. The unit is responsible for the efficient operation of the systems as well as preventive security measures. The Enterprise Systems Administration Unit also is responsible for systemwide user account management for the network and all application systems such as the student data, financial management, and human resources systems to enable appropriate access for MCPS users. In addition, the unit manages the operation of the MCPS e-mail system and is responsible for all e-mail system upgrades and implementations. Enterprise-wide data backup solutions are managed by this unit, including backing up central data as well as remotely backing up school data. The unit ensures that systems can be recovered quickly in the event of mechanical failure or disaster.

Trends and Accomplishments

The continuing rapid advancement of technology requires staff to research new and emerging technologies, to work continuously with technology users in reassessing which technologies best meet instructional and administrative needs, and to plan how to modernize or replace aging and obsolete equipment and software. *Our Call to Action: Pursuit of Excellence* calls for the provision of a technology-rich environment that gives instructional leaders powerful tools to determine priorities and to measure success.

Recent departmental accomplishments include the deployment of a comprehensive user identity management system, which automates user account creations and deletions, as well as handles exceptions using workflows, manages password policies, provides compliance with audit requirements and provides users with password self-service. By automating these complicated tasks, this system minimizes human errors in managing user accounts and provides necessary audit reports. In addition to the initial creation of access privileges, this system helps to adapt dynamically to changes in business requirements.

In addition, the department also provided large-scale printing services for both student and business systems,

Department of Infrastructure and Operations—446/431/432/433/436/447/448/451/452/453/

Cary H. Kuhar, Director II 301-279-3581

including approximately 140,000 report cards per reporting period, and 1,500 employee paychecks and 22,000 timesheets per pay period (employee pay stubs are available electronically, eliminating the need for pay stub printing for employees using direct deposit). The Data Center staff takes great pride in continuing to meet every deadline for all large printing jobs.

The Enterprise Systems Administration Unit continued with implementation of the server consolidation program through FY 2011, including the expansion of a virtual server environment to reduce the number of production and test servers. This program seeks to reduce the number of disparate hardware servers by consolidating systems on more reliable and consistently managed hardware.

The department upgraded the MCPS e-mail system to Exchange 2010 to take advantage of increased protection of data for security and to optimize our investment for future growth. This upgrade also provides better integration with the MCPS intranet portal, myMCPS. The department also modified the structure of the MCPS network (Active Directory) to accommodate newly modernized schools and support our strategy of moving to a more efficient network design with a single domain.

Due to increased demand on the Internet bandwidth provided to the schools and administrative offices, the Internet bandwidth doubled in size, moving to 2 Gigabits per second (Gbps) of Internet bandwidth for all schools.

The Telecommunications Unit also increased the bandwidth capacity at the core of the network tenfold by migrating to speeds of 10 Gbps. This change was the result of the increased demand on the network from increased usage in the schools as well as new, bandwidth-intensive applications.

The security of the network was also improved by introducing dedicated and redundant firewall appliances at the core of the network. These appliances not only increase the security necessary to protect the critical data provided by our network resources, but increase the reliability of this function through the real-time redundancy.

In FY 2011, databases for student systems applications, the electronic grading system, and the myMCPS portal were upgraded to the latest and most efficient versions that allow for faster access to data for students and staff.

For the elementary schools that are not yet scheduled to be connected to Montgomery County Fibernet, the Telecommunications Unit continues to provide improved WAN connections to elementary schools using Virtual Private Network technology. Eight more elementary schools were added to the MCPS network using this technology. Internet availability continued to be over 99 percent overall.

New telephone systems were installed in eight elementary schools and administrative offices using Voice-over-IP (VoIP) capable phone systems. These VoIP systems provide additional services to the users, such as caller-ID and call forwarding, and significantly reduce the expenses of inside wiring by using either existing data lines or running one data line throughout a school as opposed to a large number of voice lines per handset. Over 4,800 work requests for moves, additions, and changes for schools and administrative offices were completed in FY 2011. The Telecommunications team continued its management of the cell phone and data device programs, refreshing phone equipment for emergency phones in relocatables and school emergency kits.

Major Mandates

- The federal *No Child Left Behind Act of 2001* and the state's *Bridge to Excellence in Public Schools Act* mandate data collection and distribution that require up-to-date infrastructure and equipment in all schools, as well as access to system information.
- *Our Call to Action: Pursuit of Excellence* strategies require up-to-date infrastructure and central services.
- Expectations of the Maryland Core Learning Goals and alignment with the Maryland High School Assessments and Maryland School Assessments require a modern infrastructure for delivery of online tests and courses.
- The MCPS Board of Education Policy IGS, Educational Technology, requires that all students and staff members have easy, equitable access to information and communication technologies.
- The *Maryland Educational Technology Plan for the New Millennium: 2007–2012* requires that schools be provided with networks, hardware/software, and technical services that support student and staff use of electronic information and communication resources in classrooms, media centers, and offices.

Strategies

- Control and manage user access rights and implement user account provisioning using the most cost-effective and efficient methods
- Develop a converged telecommunications strategic plan based on industry standards to guide MCPS in the modernization and expansion of its telecommunications system including telephony and data
- Consistently evaluate database use and performance, upgrading operating systems and hardware and software when necessary
- Monitor performance of the WAN, school servers, and Internet connectivity and ensure staff or vendors respond promptly to any problems
- Manage/maintain a sound virtual server testing environment for use by multiple systems
- Expand the virtual server environment to the production systems to more efficiently utilize servers for multiple applications
- Monitor the reliability, timeliness, and accuracy of enterprise computer products and services

Department of Infrastructure and Operations—446/431/432/433/436/447/448/451/452/453/

Cary H. Kuhar, Director II 301-279-3581

- Maintain up-to-date recommended firmware and software release levels for security and performance for all servers
- Work with MCPS staff and consultants to identify, develop, and implement industry-accepted network management procedures, best practices, and technical solutions
- Monitor, plan, and implement improvements for enterprise data storage systems to support the production server environment
- Maintain consistent environmental controls in the data center
- Adhere to systematic change control processes to ensure high-quality systems
- Maintain communication with school staffs regarding relocations and requirements for voice and data connections and computer setups
- Plan for a modernized central computer facility that meets industry standards
- Provide excellent customer service to all technology users by assisting in data migration needs, providing efficient turnaround on user requests, and planning for the unexpected
- Facilitate and support server configuration management for optimum performance

Performance Measures

Performance Measure: Percent of uptime for the WAN.

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
99.61%	99.90%	99.90%

Explanation: A measure of availability of switches, routers, and vendor supplied lines that provide access to schools, offices, and the ISP connection.

Performance Measure: Percentage of uptime for e-mail system.

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
99.9%	99.9%	99.9%

Explanation: This measure indicates the amount of time e-mail is available to end users, other than regularly scheduled maintenance hours.

Budget Explanation Department of Infrastructure and Operations—446/431/432/433/436/447/448/451/452/453

The FY 2012 request for this department is $5,964,047, a decrease of $51,009 from the current FY 2011 current budget. An explanation of this change follows.

Continuing Salary Costs—$10,177
There is an increase of $10,177 for continuing salary costs to reflect step or longevity increases for current employees.

Realignment—$100,918
There are various budget neutral realignments within this department for FY 2012. In addition, there is a realignment of $100,918 to this department to fund lease/purchase equipment from the Department of Information and Application Services.

Reductions—($162,104)
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 data center will be paid off in FY 2011, and also some contracts for equipment and software maintenance were renegotiated to lower costs.

CONTENTS

Dept of Infrastructure & Ops - 446/431/432/433/436/447/448/451/452/453

Cary Kuhar, Director II

Description	FY 2010 Actual	FY 2011 Budget	FY 2011 Current	**FY 2012 Request**	FY 2012 Change
01 Salaries & Wages					
Total Positions (FTE)	35.500	33.500	33.500	**32.500**	(1.000)
Position Salaries	$3,138,477	$2,866,856	$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	**29,729**	
Other		10,260	10,260	**14,899**	4,639
Subtotal Other Salaries	27,082	39,989	39,989	**44,628**	4,639
Total Salaries & Wages	3,165,559	2,906,845	2,906,845	**2,849,409**	(57,436)
02 Contractual Services					
Consultants		61,500	61,500	**61,500**	
Other Contractual		1,749,674	1,749,674	**1,797,903**	48,229
Total Contractual Services	1,514,727	1,811,174	1,811,174	**1,859,403**	48,229
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		3,400	3,400	**3,400**	
Other Supplies & Materials		313,754	313,754	**313,754**	
Total Supplies & Materials	404,689	317,154	317,154	**317,154**	
04 Other					
Local Travel		4,545	4,545	**4,145**	(400)
Staff Development		1,644	1,644	**1,811**	167
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	3,284	6,189	6,189	**5,956**	(233)
05 Equipment					
Leased Equipment		973,694	973,694	**932,125**	(41,569)
Other Equipment					
Total Equipment	1,569,686	973,694	973,694	**932,125**	(41,569)
Grand Total	$6,657,945	$6,015,056	$6,015,056	**$5,964,047**	($51,009)

CONTENTS

Dept of Infrastructure & Ops - 446/431/432/433/447/448/436/451/452/453

Cary Kuhar, Director II

CAT	DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
	446 Department of Infrastructure & Ops						
1	Q Director II		1.000	1.000	1.000	**1.000**	
1	27 IT Systems Engineer					**1.000**	1.000
1	16 Administrative Secretary III		1.000	1.000	1.000	**1.000**	
	Subtotal		**2.000**	**2.000**	**2.000**	**3.000**	**1.000**
	433 Telecommunications Systems						
11	K Supervisor		1.000	1.000	1.000	**1.000**	
1	25 IT Systems Specialist		2.000	2.000	2.000	**1.000**	(1.000)
11	25 IT Systems Specialist		4.000	4.000	4.000	**4.000**	
11	14 IT Services Technical Asst		1.000	1.000	1.000	**1.000**	
	Subtotal		**8.000**	**8.000**	**8.000**	**7.000**	**(1.000)**
	447 Database Administration						
1	K Supervisor		1.000	1.000	1.000	**1.000**	
1	27 Database Analyst III		2.000	2.000	2.000	**2.000**	
1	25 Database Administrator II		2.000	2.000	2.000	**2.000**	
	Subtotal		**5.000**	**5.000**	**5.000**	**5.000**	
	448 Data Center						
1	K Supervisor		1.000				
1	H Computer Operations Mgr		1.000	1.000	1.000	**1.000**	
1	16 Computer Operator II Shift 2		1.000	1.000	1.000	**1.000**	
1	16 Computer Operator II Shift 3		1.000	1.000	1.000	**1.000**	
1	14 Computer Operator I Shift 1		2.000	2.000	2.000	**2.000**	
1	14 Computer Operator I Shift 2		1.000	1.000	1.000	**1.000**	
1	14 Computer Operator I Shift 3		1.000	1.000	1.000	**1.000**	
	Subtotal		**8.000**	**7.000**	**7.000**	**7.000**	
	451 Enterprise System Administration						
1	K Supervisor					**1.000**	1.000
1	27 Sr Client Server Engineer					**2.000**	2.000
1	27 IT Systems Engineer		1.000	1.000	1.000	**3.000**	2.000
1	25 IT Systems Specialist		2.000	2.000	2.000	**2.000**	
11	25 IT Systems Specialist					**2.000**	2.000
1	13 Data Systems Operator		.500	.500	.500	**.500**	
	Subtotal		**3.500**	**3.500**	**3.500**	**10.500**	**7.000**
	452 Systems Administration						
1	27 Sr Client Server Engineer		2.000	2.000	2.000		(2.000)
1	27 IT Systems Engineer		3.000	2.000	2.000		(2.000)
11	25 IT Systems Specialist		2.000	2.000	2.000		(2.000)
	Subtotal		**7.000**	**6.000**	**6.000**		**(6.000)**
	453 Infrastructure Project Management						
1	K Supervisor		1.000	1.000	1.000		(1.000)

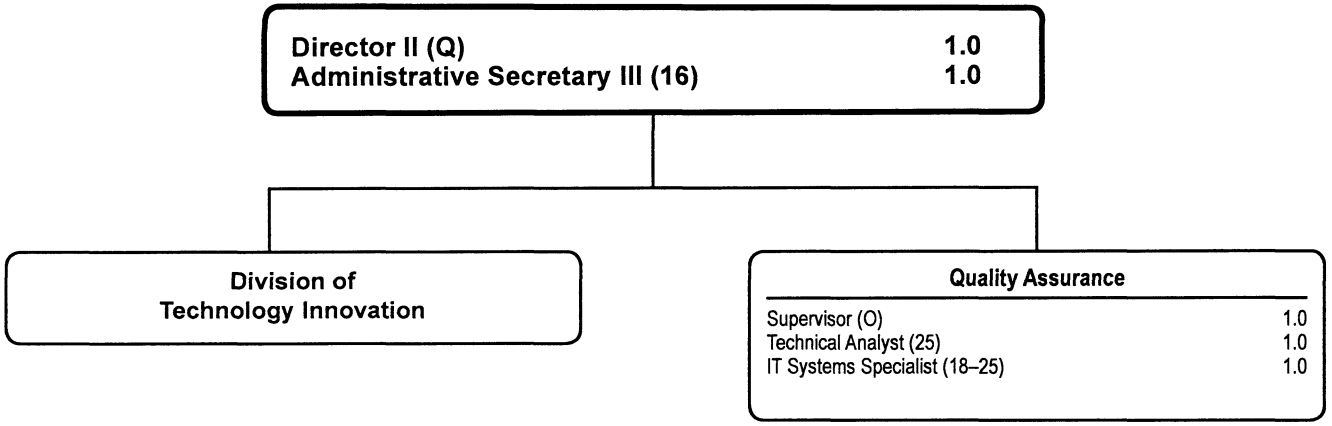
CONTENTS

Dept of Infrastructure & Ops - 446/431/432/433/447/448/436/451/452/453

Cary Kuhar, Director II

CAT	DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
	453 Infrastructure Project Management						
1	27 IT Systems Engineer		1.000	1.000	1.000		(1.000)
	Subtotal		**2.000**	**2.000**	**2.000**		**(2.000)**
	Total Positions		**35.500**	**33.500**	**33.500**	**32.500**	**(1.000)**

Department of Strategic Project Management and Planning



F.T.E. Positions 5.0

Division of Technology Innovation

Director I (P) 1.0
Administrative Secretary II (15) 1.0

Educational Technology Support	
IT Systems Specialist (18–25)	1.0
IT Systems Technician (18)	1.0
Fiscal Assistant II (15)	1.0
Fiscal Assistant I (13)	1.0

Field Installation	
Supervisor (K)	1.0
IT Systems Specialist (18–25)	3.0
IT Systems Specialist (18–25)	3.0*
Office Assistant III (10)	.5*

Innovative Technologies	
Supervisor (K)	1.0
Instructional Specialist (B–D)	1.0*
IT Systems Engineer (27)	1.0*
IT Systems Specialist (18–25)	1.0
IT Systems Specialist (18–25)	2.0*

F.T.E. Positions 12.0

(*In addition, there are 7.5 Capital Budget positions shown on this chart)

Department of Strategic Project Management and Planning—421/425/427/428/434/918/997

Doreen M. Heath, Director II 240-632-6960

Mission

The mission of the Department of Strategic Project Management and Planning (DSPMP) is to implement innovative 21st century technologies that support students' active engagement in learning, integrate effective practices for project and process management and quality assurance, and create a strategic plan for the use of technology in teaching and learning.

Major Functions

The DSPMP coordinates the functions and operations of the Division of Technology Innovation and oversees the use of effective project management and quality assurance processes and tools. Department staff provides the knowledge, processes, and resources needed to consistently meet customer expectations for high-quality, reliable technology solutions.

The Division of Technology Innovation consists of three units—Field Installation, Educational Technology Support, and Innovative Technologies.

The Field Installation Unit implements 21st century technologies in Montgomery County Public Schools (MCPS) classrooms. To update technologies in schools through the Technology Modernization (Tech Mod) Program, staff in this unit gathers requirements from stakeholders, works with school staff to plan the integration of hardware and software in schools, procures and installs the technology, and ensures its readiness at the opening of the school year. Staff also manages the donation of older technology to community groups. Additionally, the unit collects online data for updating and maintaining the asset management system and supports centralized distribution of software updates, service packs, and virus definition files.

The Educational Technology Support Unit is responsible for the installation of interactive white board technologies and the management of telecommunication and educational technology programs. Staff coordinates the installation of interactive white board technology meetings with principals and teachers to redesign classrooms for 21st century instructional practices. Staff applies for rebates for eligible telecommunications, internal connection, and Internet-related costs under the Schools and Libraries Universal Service E-Rate program funded under the *Telecommunications Act of 1996*. The unit also manages the allocation and grants under Title II-D Enhancing Education Through Technology (Educational Technology) that help support the school system's technology efforts, including student, teacher, and school administrator technology literacy.

The Innovative Technologies Unit conducts research and development for evolving and emerging technologies. Unit members continuously collaborate with schools and offices to understand interests and needs. The unit also cultivates strategic partnerships with vendors who focus on improving technology products, services, prices, quality, and on-time delivery. The unit oversees the testing of products and configurations prior to deployment to schools to ensure product reliability and effective ongoing operations in every school. Staff also keeps abreast of emerging technology trends and products and assesses their applicability in the educational environment. Educationally appropriate products are evaluated to determine if the product meets identified needs, and high-level tests are performed to assess compatibility with the MCPS technology infrastructure. The unit oversees a program to refurbish computers in schools where technology is four years old in response to the change from a four-year to a five-year replacement cycle that was put in place temporarily to address the fiscal crisis. Professional staff in this unit assists in defining the professional development needed to integrate interactive classroom technologies into teaching and learning.

Staff in this division also collaborates with the schools and other MCPS offices and departments to create a strategic plan for the use of technology in teaching and learning. The current plan, Educational Technology for 21st Century Learning, describes how MCPS will utilize technology in schools and classrooms through 2014. The Fiscal Year (FY) 2009–2014 strategic technology plan outlines agreed-upon technology needs and affordable solutions to infuse technology into instruction, student learning, and business processes. This plan is aligned with the *Maryland Educational Technology Plan for the New Millennium: 2007–2012* and *Our Call to Action: Pursuit of Excellence*.

The DSPMP oversees the use of effective project and process management tools that lead to successful results. This is accomplished by identifying and integrating effective practices, implementing and realizing a strong customer engagement model, and managing the project portfolio to deliver the right solutions at the right time. Staff provides skills and expertise in project and process management, change management, customer communication, product testing, effective team management, and other essential practices based on the nature of the work. The Office of the Chief Technology Officer (OCTO) is committed to delivering high-quality solutions that meet or exceed customer expectations. Among the practices that lead to successfully accomplishing this commitment are quality assurance and testing. Department staff provides leadership in the use of quality assurance tools and techniques that facilitate alignment of customer needs with technology solutions. Additionally, through the disciplines of technology testing and quality assurance, staff guides the planning and implementation of test protocols for products and services to verify their accuracy, performance, and usability in support of high-quality solutions.

The department also is responsible for operational process improvement. This is accomplished by incorporating continuous improvement processes for performance excellence, such as Malcolm Baldrige Educational Criteria for Performance Excellence and facilitating the use of process improvement methodologies.

Department of Strategic Project Management and Planning—421/425/427/428/434/918/997

Doreen M. Heath, Director II 240-632-6960

Trends and Accomplishments

Students, teachers, and the community have an expectation that technology solutions will be available to meet their information and communication needs. The ability to deploy new systems rapidly and the expectation that systems will be user friendly and safe have a major impact on this department and its planning. The need to retool educational technology is accelerating and customers rightly expect high-quality, reliable solutions. The demand for faster, better, and cheaper solutions that meet customer expectations requires exceptional skill in managing projects. The partnership of educational and technical experts to improve project outcomes requires the creation and use of a common language for the planning, execution, and delivery of projects. The challenge for the school system is how to use students' interest in technology to engage them in rigorous and relevant learning experiences. Innovative technologies, such as interactive white boards, student response systems, and expanded wireless capabilities, now focus on engaging students while developing critical-thinking and problem-solving skills.

Other trends include managing relationships with the increasing number of vendors that are offering technology products and services and building strong partnerships to meet the school system's educational and business needs. In addition, while most vendors will agree to provide school districts with special discount rates, implementing the individualized payment schedules included in these agreements is typically a challenge for vendor billing departments. This increases the need for staff in this department to analyze technology and telecommunication invoices to make sure they reflect the agreed-upon pricing.

In FY 2010, the DSPMP implemented innovative technology solutions for the 21st century classroom, provided leadership for the design and implementation of online curriculum delivery, and expanded project and process management practices in collaboration with systemwide initiatives.

The Division of Technology Innovation supported the use of 21st century technologies to transform teaching and learning. Using the stimulus funding set aside for Universal Design for Learning, interactive white boards, student response systems, and netbook mobile carts were installed in all classrooms in four elementary schools. The division also supported the administration of the Maryland Measures of Student, Teacher, and School Administrator Literacy Assessment to gather baseline data.

The Tech Mod Program, which replaces four-year-old computers in schools, was delayed one year due to the fiscal crisis, creating a five-year replacement cycle through FY 2012. A project was continued that refurbished and repaired 9,021 computers in the 64 schools, three alternative sites, and one special education school that had been anticipating the replacement of their four-year-old computers in FY 2011. These schools included four high schools, one middle school, and 58 elementary schools. Also, the division supported the installation of technology for six schools with construction projects, including three modernized schools, and three schools with an addition.

Division staff supported the federal application processes for E-Rate telecommunication rebates totaling approximately $1.8 million for FY 2010.

The division received funding to lead a competitive grant under Title II-D—Enhancing Education through Technology under the *No Child Left Behind Act of 2001*. This grant funds a statewide consortium for administering and analyzing results of the Maryland Measures for Student, Teacher, and School Administrator Technology Literacy. The division applied for and received funding to lead a second competitive grant under Title-D. This grant funds a statewide consortium developing online professional development modules based on the Maryland Teacher Technology Standards. Division staff, funded through the Title II-D Educational Technology allocation, supported the critical thinking program in seven participating schools.

Project management leadership for the enhanced Instruction Center within myMCPS, formerly known as Online Learning Community, was provided by staff in the Department of Strategic Project Management and Planning. The first phase of this effort resulted in the delivery of the Curriculum Archive, which provides staff with access to curriculum documents for professional use from any Internet-accessible location, documents organized by grade, subject or course, contents searchable by keyword, and materials in PDF format and in Microsoft Word, where available, to allow for adaptation of student materials, as needed. The user community has embraced this powerful tool positively, remarking consistently on how intuitive and easy it is to use. This year the Integrated Kindergarten Curriculum became available through the myMCPS portal and was quickly adopted by instructional staff. The second phase continued the development of the online interactive learning community and resulted in the deployment of the myMCPS Instruction Center, enhancing the current myMCPS by creating an environment with curriculum-related collaboration and communication, user-friendly features, job-embedded training, and integrated curriculum and professional development resources.

The integration of project management and quality assurance best practices facilitated improved performance and results in the delivery of technology solutions and services. Introduction of the Agile/Scrum methodology for software development and the standardization on the use of Microsoft's Team Foundation Services suite of software development tools were key focuses for project managers, development team members, and product owners. The process for testing major systems was reviewed and enhanced, resulting in a significant increase in product quality and reliability as well as improved efficiency and effectiveness of project staff and resources. Project management courses were offered three times during the year and attended by staff from across MCPS. The four courses focus on developing a basic skill set and common language for delivering

Department of Strategic Project Management and Planning—421/425/427/428/434/918/997

Doreen M. Heath, Director II 240-632-6960

projects in an educational setting. Courses are available for use with individual project teams.

Staff actively participated in the North Star program with the American Productivity and Quality Center, which focused on integrating process management practices in education across the county. Staff collaborated on the development and field test of process management training with the Department of Transportation. In partnership with the Office of Curriculum and Instructional Programs, the Support to Schools Project was designed and field tested, providing a coordinated and collaborative process to manage requests for support from schools and the Office of School Performance that is timely, efficient, and equitable.

Major Mandates

- *Our Call to Action: Pursuit of Excellence* identifies technology as a critical learning tool in schools. Access to and use of a variety of technological applications and services are needed to help provide an effective instructional program and create a positive work environment in a self-renewing organization. Technology initiatives include supporting the system of shared accountability, reorganizing the assets for school support, and broadening the concept of literacy.
- The MCPS Board of Education Policy IGS, *Educational Technology*, requires that staff and students be provided with easy, equitable access to technology tools.
- The *Telecommunications Act of 1996* (Section 954h.B) and Federal Communications Commission Order 9-57 stipulate that requests for Universal Service Program discounts (E-Rate) must be based on an approved technology plan that includes clear goals and strategies for integrating telecommunications services and Internet access into the school district's educational program, a professional development strategy, needs assessment, sufficient budget for both acquisition and maintenance, and program evaluation.
- Programs funded through Title II-D Enhancing Education Through Technology, must be based on an approved technology plan, must comply with state and federal laws and regulations, and must ensure timely and meaningful consultation with nonpublic school officials during the design and implementation of programs.
- The Children's Internet Protection Act requires that school systems receiving funds from Title II or E-Rate discounts for Internet services have policies and use technology protection measures that address issues related to the safety and security of minors and adults while using the Internet and electronic communications.
- The Deleting Online Predators Act of 2006 requires schools and libraries receiving E-Rate universal service support to protect minors from commercial social networking websites and chat rooms.

Strategies

- Provide strategic leadership for project management and planning for all technology initiatives
- Build staff capacity through training and mentoring in project and process management
- Strengthen operational coherence and risk management through appropriate stakeholder governance
- Improve project management by implementing industry-standard best practices
- Improve communication and collaboration by defining and adopting a customer engagement and relationship model
- Model the use of Baldrige and process improvement methods for performance excellence and assessment of results to guide improvements
- Collaborate with recognized business leaders and school districts to gain knowledge of best practices
- Consult with education, business, community, and government groups to ensure programs and services are appropriate to prepare students for higher education and the workplace of the 21st century
- Cultivate strategic partnerships with vendors that focus on improving product and service prices, quality and on-time delivery
- Develop plans for providing technologies that engage students and encourage critical thinking and problem-solving skills in support of our rigorous curriculum
- Create a multiyear technology road map identifying strategic plans for school-based and office software and hardware technologies, telecommunications, network operating systems, and support systems based on industry standards and instructional requirements
- Collaborate with school staff to identify improvements in the implementation of the Tech Mod Program
- Provide quality assurance by implementing industry-standard best practices
- Improve quality of delivered technologies by implementing industry-standard best practices and tools

Performance Measures

Performance Measure: The percent of key projects following the established project management guidelines.

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
84%	90%	95%

Explanation: This measure indicates the percentage of project teams that have adopted the project management guidelines, which reflects the use of industry standard best practices. Key projects to be included in this measure are identified annually by OCTO leadership.

Department of Strategic Project Management and Planning—421/425/427/428/434/918/997

Doreen M. Heath, Director II 240-632-6960

Performance Measure: The percent of computers installed through the current year Technology Modernization program that are ready for use on the first day of school.

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
100%	100%	100%

Explanation: A measure of the quality of technology modernization installation procedures and the timeliness of resolving operational problems.

**Replacements delayed for one year due to fiscal crisis.*

Budget Explanation Department of Strategic Project Management and Planning—421

The FY 2012 request for this division is $589,811, an increase of $2,091 over the current FY 2011 budget. An explanation of this change follows.

Continuing Salary Costs—$2,091
There is an increase of $2,091 for continuing salary costs to reflect step or longevity increases for current employees.

Budget Explanation Division of Technology Innovation—425/427/428/434

The FY 2012 request for this division is $1,064,172, an increase of $59,433 over the current FY 2011 budget. An explanation of this change follows.

Continuing Salary Costs—$50,021
There is an increase of $50,021 for continuing salary costs to reflect step or longevity increases for current employees.

Realignment—$9,412
There are realignments of $8,861 from the Department of Information and Application Services and $551 from the Division of Technology Support to this division to fund local travel.

Budget Explanation Title II D—Enhancing Education Through Technology Project – 918

There is no budget request for the Title II D—Enhancing Education Through Technology grant project for FY 2012. The grant project has been discontinued in FY 2011.

Project's Funding History

	FY 2011 Projected 7/1/10	FY 2011 Received 11/30/10	FY 2012 Projected 7/1/12
Federal	$154,242	$0	$0
State			
Other			
County			
Total	$154,242	$0	$0

CONTENTS

Dept. of Strategic Project Management and Planning - 421

Doreen M. Heath, Director II

Description	FY 2010 Actual	FY 2011 Budget	FY 2011 Current	**FY 2012 Request**	FY 2012 Change
01 Salaries & Wages					
Total Positions (FTE)	6.000	5.000	5.000	**5.000**	
Position Salaries	$486,594	$501,038	$501,038	**$503,129**	$2,091
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	486,594	501,038	501,038	**503,129**	2,091
02 Contractual Services					
Consultants					
Other Contractual		65,728	65,728	**65,728**	
Total Contractual Services	183,880	65,728	65,728	**65,728**	
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		3,374	3,374	**3,374**	
Other Supplies & Materials		14,083	14,083	**14,083**	
Total Supplies & Materials	4,073	17,457	17,457	**17,457**	
04 Other					
Local Travel		1,700	1,700	**1,700**	
Staff Development		1,797	1,797	**1,797**	
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	2,506	3,497	3,497	**3,497**	
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$677,053	$587,720	$587,720	**$589,811**	$2,091

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Dept. of Strategic Project Management and Planning - 421

Doreen M. Heath, Director II

CAT	DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
1	Q Director II		1.000	1.000	1.000	**1.000**	
1	O Supervisor		1.000	1.000	1.000	**1.000**	
1	25 IT Systems Specialist		1.000	1.000	1.000	**1.000**	
1	25 Technical Analyst		1.000	1.000	1.000	**1.000**	
1	18 IT Systems Technician		1.000				
1	16 Administrative Secretary III		1.000	1.000	1.000	**1.000**	
	Total Positions		**6.000**	**5.000**	**5.000**	**5.000**	

CONTENTS

Division of Technology Innovation - 425/427/428/434

Jenny Skoda, Acting Director I

Description	FY 2010 Actual	FY 2011 Budget	FY 2011 Current	**FY 2012 Request**	FY 2012 Change
01 Salaries & Wages					
Total Positions (FTE)	13.000	12.000	12.000	**12.000**	
Position Salaries	$990,326	$951,484	$951,484	**$1,001,505**	$50,021
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	990,326	951,484	951,484	**1,001,505**	50,021
02 Contractual Services					
Consultants					
Other Contractual		12,234	12,234	**12,234**	
Total Contractual Services	9,237	12,234	12,234	**12,234**	
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials		1,000	1,000	**1,000**	
Office		3,080	3,080	**3,080**	
Other Supplies & Materials		26,261	26,261	**26,261**	
Total Supplies & Materials	59,105	30,341	30,341	**30,341**	
04 Other					
Local Travel		10,680	10,680	**20,092**	9,412
Staff Development					
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	30,234	10,680	10,680	**20,092**	9,412
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$1,088,902	$1,004,739	$1,004,739	**$1,064,172**	$59,433

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Division of Technology Innovation - 425/427/428/434

Jenny Skoda, Acting Director I

CAT	DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
	425 Division of Technology Innovation						
1	P Director I		1.000	1.000	1.000	**1.000**	
1	15 Administrative Secretary II		1.000	1.000	1.000	**1.000**	
	Subtotal		**2.000**	**2.000**	**2.000**	**2.000**	
	427 Educational Technology Support						
1	25 IT Systems Specialist			1.000	1.000	**1.000**	
11	18 IT Systems Technician		1.000	1.000	1.000	**1.000**	
1	15 Fiscal Assistant II		1.000	1.000	1.000	**1.000**	
11	13 Fiscal Assistant I		1.000	1.000	1.000	**1.000**	
	Subtotal		**3.000**	**4.000**	**4.000**	**4.000**	
	428 Innovative Technologies						
1	K Supervisor		1.000	1.000	1.000	**1.000**	
1	25 IT Systems Specialist		1.000	1.000	1.000	**1.000**	
	Subtotal		**2.000**	**2.000**	**2.000**	**2.000**	
	434 Field Installation						
3	K Supervisor		1.000	1.000	1.000	**1.000**	
1	25 IT Systems Specialist		4.000	3.000	3.000	**3.000**	
1	18 IT Systems Technician		1.000				
	Subtotal		**6.000**	**4.000**	**4.000**	**4.000**	
	Total Positions		**13.000**	**12.000**	**12.000**	**12.000**	

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Title II D - Enhancing Education Through Tech - 918

Jenny Skoda, Acting Director I

Description	FY 2010 Actual	FY 2011 Budget	FY 2011 Current	**FY 2012 Request**	FY 2012 Change
01 Salaries & Wages					
Total Positions (FTE)	.800	.800	.800		(.800)
Position Salaries	$95,273	$78,278	$78,278		($78,278)
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time		9,900	9,900		(9,900)
Supporting Services Part Time					
Other					
Subtotal Other Salaries	14,774	9,900	9,900		(9,900)
Total Salaries & Wages	110,047	88,178	88,178		(88,178)
02 Contractual Services					
Consultants					
Other Contractual		2,114	2,114		(2,114)
Total Contractual Services	183	2,114	2,114		(2,114)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials		15,000	15,000		(15,000)
Office		10,905	10,905		(10,905)
Other Supplies & Materials					
Total Supplies & Materials	30,560	25,905	25,905		(25,905)
04 Other					
Local Travel		2,460	2,460		(2,460)
Staff Development					
Insurance & Employee Benefits		31,920	31,920		(31,920)
Utilities					
Miscellaneous		3,665	3,665		(3,665)
Total Other	48,542	38,045	38,045		(38,045)
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$189,332	$154,242	$154,242		($154,242)

CONTENTS

Title II D - Enhancing Education Through Tech - 918

Jenny Skoda, Acting Director I

CAT	DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
2	BD Instructional Specialist			.800	.800		(.800)
3	BD Instructional Specialist		.800				
	Total Positions		**.800**	**.800**	**.800**		**(.800)**

Department of Information and Application Services

Department of Information and Application Services

Director II (Q)	1.0
Supervisor (O)	1.0
Supervisor (K)	1.0
Database Administrator III (27)	1.0
Development Project Manager (27)	1.0
Applications Developer III (27)	1.0
Applications Developer II (25)	2.0
Technical Analyst (25)	1.0
Applications Developer I (23)	1.0
Administrative Secretary III (16)	1.0
Fiscal Assistant I (13)	.8

Business Information Services

Supervisor (O)	2.0
Supervisor (K)	3.0
Operations Development Manager (J)	1.0
Application Developer III (27)	2.0
Development Project Manager (27)	2.5
Applications Developer II (25)	6.0
Technical Analyst (25)	1.0
Fiscal Assistant II (15)	1.0
Data Control Technician II (15)	1.0
Secretary (12)	1.0

Student Application Services

Instructional Technology Application Services

Supervisor (O)	2.0
Instructional Specialist (B–D)	2.0
Database Administrator III (27)	1.0
IT Systems Engineer (27)	1.0*
Application Developer II (25)	1.0
ETL Analyst/Programmer (25)	1.0
IT Systems Specialist (18–25)	1.0*

Administrative Student Systems and Operations

Supervisor (K)	1.0
Instructional Specialist (B–D)	1.0
Database Administrator III (27)	1.0
Application Developer II (25)	2.0
ETL Analyst/Programmer (25)	1.0
Technical Analyst (25)	1.0
Student Systems Specialist (24)	1.0
Applications Specialist I (23)	2.0
Data Control Technician II (15)	1.0
Data Control Technician I (13)	1.0

F.T.E. Positions 51.3
(*In addition, there are 2.0 Capital Budget positions shown on this chart and a 0.5 position charged to the Trust Fund.)

Department of Information and Application Services—445/426/442/443/444

Elton Stokes, Director II 301-279-3577

Mission

The mission of the Department of Information and Application Services (DIAS) is to plan, implement, and support quality technology solutions to execute the district's priorities in support of Our Call to Action: Pursuit of Excellence.

Major Functions

DIAS collaborates with offices, schools, and local government agencies to promote and support Montgomery County Public Schools (MCPS) and the initiatives of the Chief Technology Officer, by developing, implementing, and continuously improving MCPS knowledge management solutions. Based on goals and priorities, the department develops, purchases, implements, and supports complex solutions for students, parents, schools, and offices. These solutions enable: the collection and analysis of essential data; decision-making and planning; dissemination of accurate and timely information; and operational effectiveness that streamlines and enhances the management of teaching and learning, as well as MCPS compliance to state and federal regulations.

DIAS empowers offices and schools by provisioning the management and administration of student systems. The Online Administrative Student Information Systems (OASIS) is the source system for managing all student administrative information including enrollment, attendance, report cards and transcripts, scheduling, course management, and assessment information. OASIS consists of user-friendly applications that provide an easy and accurate method to collect student administrative data. The Special Education Individualized Education Program (IEP) module is a component of OASIS that greatly increases the efficiency of managing the special education process for families, schools, and central services administrators and enables creation of the electronic IEP. DIAS staff also manages the Online Achievement and Reporting System comprised of an electronic grade book and classroom-to-home communication solution, as well as electronic assessment systems to support timely delivery and reporting of assessments aligned to MCPS and Maryland state standards. The enterprise electronic grade book facilitates grading and reporting activities and policy alignment across the district and a classroom-to-home parent outreach component to securely communicate individual student achievement information from teachers to parents. The MCPS reporting solutions provide a breadth of current and historical reports to support both detail and summary-level analysis for strategic data-driven decision making.

DIAS also supports many solutions used to manage operational functions throughout the district. The Human Resource Information System (HRIS) integrates personnel, time and attendance, leave management, payroll, and employee benefit functions that allow for effective management of information and resources. The Professional Development Online system is used for managing and monitoring MCPS employee training. The Benefits Workstation is used to administer and manage employee pension benefits. MCPS Careers is a web-based solution that automates the hiring process for MCPS-based position vacancies. The Financial Management System integrates supply chain, finance, and budgeting functions. Connect-ED is used by schools and the central offices to effectively and efficiently communicate important information to students, staff, parents, and the community, such as student absences and school activities. The Transportation Information Management System supports the management of human and automotive resources utilized by MCPS. Fortis provides MCPS an electronic document management tool that dramatically increases access to information previously only available on paper, such as personal and student records.

Information from the student and business systems and other information services are published in the myMCPS portal which provides end users the information they need in a single place. The myMCPS portal is designed to deliver a personalized user experience based on a user's roles and responsibilities in the school system. The portal facilitates team and peer group communication and collaboration; provides access to role-specific applications, data warehouse dashboards and reports; and offers information services, including the elementary integrated curriculum, teacher and student attendance data, and social networking features, such as wikis, discussion boards, and blogs. The MCPS data warehouse system, which organizes data from multiple sources, provides a breadth of current and historical data and tools to support both detailed and summary data analysis and strategic decision making.

These student and business solutions add value to overall district operations by providing accurate, timely, comprehensive, and accessible information. They enable MCPS to use information resources effectively for analyzing, planning, and monitoring organizational accountability to parents, students, staff, and the citizens of Montgomery County.

Trends and Accomplishments

To ensure that MCPS maintains its status as a world-class school system, DIAS must continue to expand and enhance the usefulness of key knowledge management solutions. This includes identifying, developing, and implementing industry-leading software solutions that best meet the requirements of schools and offices. The prevalence of social networking structures underpins important technology decisions as MCPS works to provide solutions that meet or exceed the expectations of 21st century learners and educators.

The enterprise portal, myMCPS, received a major upgrade providing users a dynamic, interactive, and customizable environment enabling school and office staff the ability to contribute to and participate in social networking and professional development. The enhanced features empower staff to create and share instructional content with the MCPS 21st century professional learning community. Rich feature sets include video libraries, content personalization, and discussion boards to accelerate the communication of ideas across groups. The reporting platform also has been streamlined to provide improved student achievement monitoring to reflect the ongoing development of the elementary integrated

Department of Information and Application Services—445/426/442/443/444

Elton Stokes, Director II 301-279-3577

curriculum and standards-based grading and reporting. The Business Center was added to the myMCPS portal to provide administrators with a consolidated repository for information vital to the day-to-day operations of their buildings. It contains resources necessary for district operations including a document library, financial reports, calendar of important events, and staffing reports.

OASIS has received continuous upgrades to fulfill Board of Education (BOE) policy, regulation, and procedural changes, as well as Maryland state and federal government mandated changes. These upgrades included modifications to student data reports in support of new state and federal compliance requirements which are tied to MCPS funding levels. These reports also support analysis of student educational growth which assists school and office staff in making better decisions. Additionally, OASIS now has the ability to enroll and manage summer school students which greatly improves the summer school registration process and the grading and reporting process for these students.

The Fortis Document Management System was enhanced with a Web interface which provides users with the ability to securely access documents without the need to install additional software. It also streamlined several business processes by reducing the number of required interactions between people and systems.

The implementation of the Web-based Funding Accountability and Transparency application allows public access to MCPS financial information about payments made in compliance of the Maryland State House of Representatives, House Bill 841.

The recent enhancement to the Capital Improvements Program application enabled improved management and maintenance of enrollment projection data that impacts school boundaries. The application also was enhanced to improve projection of both general education and special education students in alignment with hours-based staffing.

The Human Resource Information System (HRIS) has been enhanced to provide event-driven e-mail notification, such as personnel changes and professional certification renewal notices. Additionally, HRIS receives continuous upgrades to fulfill BOE policy and regulation changes, as well as Maryland state and federal government mandated changes, such as mandated benefit and tax changes.

The implementation of the Web-based solution Human Resources Online (HRO) automates and continuously improves the development and management of human resources processes and facilitates efficient transactional integration between personnel-based systems. Integration between HRO and the myMCPS portal enables staff to manage their personnel data and automate former paper-based transactions.

The recent modernization of the budget management system provides MCPS with a single, enterprise-level solution for budget formulation, execution, and distribution. The new system shortens budgeting and reporting cycles and enables monitoring and continuous measurement of performance against goals.

Major Mandates

- The federal No Child Left Behind Act of 2001 and the state's Bridge to Excellence in Public Schools Act mandate data collection and distribution.
- Our Call to Action: Pursuit of Excellence requires the continuous improvement of all school system processes and services and the provision of appropriate staff training.
- The MCPS BOE Policy IGS, Educational Technology, requires that all staff have easy, equitable access to appropriate information and communication technologies.
- The Maryland Education Technology Plan for the New Millennium: 2007–2012 requires that administrative applications for management and support of schools be provided and maintained.
- Our Call to Action: Pursuit of Excellence requires the collection and reporting of data on student and school performance.
- The Maryland State House of Representatives, House Bill 841, Montgomery County Public Schools - Funding Accountability and Transparency Act MC 930-09, requires that MCPS develops and operates a website that includes information on BOE payments.

Strategies

- Collaborate with other offices and units to continuously improve processes, services, and information technology systems
- Collaborate with the divisions of Technology Innovation and Technology Support and the Department of Instructional Technology to provide support for schools and offices utilizing administrative applications, including communication, staff training, and technical support
- Collaborate with the Department of Infrastructure and Operations and the Division of Technology Support to assess capability and plan for infrastructure readiness
- Enhance HRIS capabilities to meet analysis and reporting requirements of MCPS and external agencies and provide self-service capabilities in personnel, payroll, and benefits functions that give employees access to identified personal data
- Enhance student system capabilities and the student database to meet end-user needs and the analysis and reporting requirements of Our Call to Action: Pursuit of Excellence
- Support staff development opportunities to ensure that staff has the skills and knowledge to implement planned information technology systems
- Assess and examine new and emerging technologies to determine appropriateness in meeting identified needs of the organization
- Increase the availability of relevant information to users by implementing enhanced reporting tools

Department of Information and Application Services—445/426/442/443/444

Elton Stokes, Director II 301-279-3577

Performance Measures

Performance Measure: Percentage of users satisfied with the customer service provided by the department.

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
90%	95%	97%

Explanation: This is a measure of customer satisfaction with DIAS staff service.

Performance Measure: The percentage of software implemented without major defects.

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
NA	90%	92%

Explanation: This measure indicates the percentage of software implemented that performs without error based upon design specifications.

Performance Measure: The percentage of stakeholder-requested enhancements implemented for enterprise systems.

FY 2010 Actual	FY 2011 Estimate	FY 2012 Recommended
85%	90%	95%

Explanation: This measure indicates the percentage of user-requested enhancements that are implemented once approved by a recognized advisory group.

Budget Explanation Department of Information and Application Services—445/426/442/443/444

The FY 2012 request for this department is $9,976,991, a decrease of $390,214 from the current FY 2011 current budget. An explanation of this change follows.

Continuing Salary Costs—($73,883)
There is decrease of $73,883 for continuing salary costs. Step or longevity increases for current employees are offset by reductions for staff turnover.

Realignment—($109,779)
There a various budget neutral realignments within this department for FY 2012. In addition, there is a realignment of $109,779 from this department to the Department of Infrastructure and Operations to fund lease/purchase equipment for $100,918, and to the Division of Technology Innovation to fund local travel for $8,861.

Reduction—($206,552)
There is a reduction of $206,552 budgeted for contractual services. Programs will be consolidated to save resources and automated assessment subscription fees for Wireless Generation and the Northwest Evaluation Association will be reduced.

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Department of Information & Application Svcs - 445/426/442/443/444

Elton Stokes, Director II

Description	FY 2010 Actual	FY 2011 Budget	FY 2011 Current	**FY 2012 Request**	FY 2012 Change
01 Salaries & Wages					
Total Positions (FTE)	54.300	51.300	51.300	**51.300**	
Position Salaries	$5,187,851	$4,936,988	$4,936,988	**$4,863,105**	($73,883)
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		316,580	316,580	**269,200**	(47,380)
Other					
Subtotal Other Salaries	107,212	316,580	316,580	**269,200**	(47,380)
Total Salaries & Wages	5,295,063	5,253,568	5,253,568	**5,132,305**	(121,263)
02 Contractual Services					
Consultants		1,398,491	1,398,491	**1,217,200**	(181,291)
Other Contractual		3,666,170	3,666,170	**3,532,402**	(133,768)
Total Contractual Services	6,210,698	5,064,661	5,064,661	**4,749,602**	(315,059)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		10,950	10,950	**12,296**	1,346
Other Supplies & Materials		7,600	7,600	**49,562**	41,962
Total Supplies & Materials	14,341	18,550	18,550	**61,858**	43,308
04 Other					
Local Travel		5,493	5,493	**2,042**	(3,451)
Staff Development					
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	3,078	5,493	5,493	**2,042**	(3,451)
05 Equipment					
Leased Equipment		24,933	24,933	**31,184**	6,251
Other Equipment					
Total Equipment	40,102	24,933	24,933	**31,184**	6,251
Grand Total	$11,563,282	$10,367,205	$10,367,205	**$9,976,991**	($390,214)

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Department of Information & Application Svcs - 445/426/444/442/443

Elton Stokes, Director II

CAT	DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
	445 Department of Information & Application Svcs						
1	Q Director II		1.000	1.000	1.000	**1.000**	
1	O Supervisor		1.000	1.000	1.000	**1.000**	
1	K Supervisor		1.000	1.000	1.000	**1.000**	
1	27 Applications Developer III				1.000	**1.000**	
2	27 Database Administrator III		1.000	1.000	1.000	**1.000**	
1	27 Development Proj Manager		2.000	2.000	1.000	**1.000**	
1	25 Applications Developer II		1.000	1.000	2.000	**2.000**	
1	25 Technical Analyst		2.000	2.000	1.000	**1.000**	
1	23 Applications Developer I		1.000	1.000	1.000	**1.000**	
2	16 Administrative Secretary III		1.000	1.000	1.000	**1.000**	
1	13 Fiscal Assistant I		.800	.800	.800	**.800**	
	Subtotal		**11.800**	**11.800**	**11.800**	**11.800**	
	426 Instructional Technology Application Services						
1	O Supervisor		2.000	2.000	2.000	**2.000**	
2	BD Instructional Specialist			2.000	2.000	**2.000**	
3	BD Instructional Specialist		2.000				
1	27 Database Administrator III		1.000	1.000	1.000	**1.000**	
2	25 Applications Developer II				1.000	**1.000**	
2	25 ETL Analyst/Programmer		2.000	2.000	1.000	**1.000**	
	Subtotal		**7.000**	**7.000**	**7.000**	**7.000**	
	442 Administrative Student Systems and Operatio						
1	O Supervisor		1.000				
1	K Supervisor		1.000	1.000	1.000	**1.000**	
2	BD Instructional Specialist			1.000	1.000	**1.000**	
3	BD Instructional Specialist		1.000				
2	27 Database Administrator III		1.000	1.000	1.000	**1.000**	
1	25 Applications Developer II		2.000	2.000	2.000	**2.000**	
2	25 ETL Analyst/Programmer		2.000	1.000	1.000	**1.000**	
1	25 Technical Analyst		1.000	1.000	1.000	**1.000**	
1	24 Student Systems Specialist		1.000	1.000	1.000	**1.000**	
1	23 Applications Specialist I		2.000	2.000	2.000	**2.000**	
1	15 Data Control Technician II		1.000	1.000	1.000	**1.000**	
1	13 Data Control Technician I		1.000	1.000	1.000	**1.000**	
	Subtotal		**14.000**	**12.000**	**12.000**	**12.000**	
	443 Business Information Services						
1	O Supervisor		2.000	2.000	2.000	**2.000**	
1	K Supervisor		3.000	3.000	3.000	**3.000**	
1	J Operations Development Manager		1.000	1.000	1.000	**1.000**	
1	27 Applications Developer III		1.000	1.000	2.000	**2.000**	
1	27 Development Proj Manager		2.500	2.500	2.500	**2.500**	

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Department of Information & Application Svcs - 445/426/444/442/443

Elton Stokes, Director II

CAT	DESCRIPTION	10 Mon	FY 2010 ACTUAL	FY 2011 BUDGET	FY 2011 CURRENT	**FY 2012 REQUEST**	FY 2012 CHANGE
	443 Business Information Services						
1	25 Applications Developer II		5.000	5.000	6.000	**6.000**	
1	25 Technical Analyst		1.000	1.000	1.000	**1.000**	
1	23 Applications Developer I		2.000	2.000			
1	23 Applications Specialist I		1.000				
1	15 Fiscal Assistant II		1.000	1.000	1.000	**1.000**	
1	15 Data Control Technician II		1.000	1.000	1.000	**1.000**	
1	12 Secretary		1.000	1.000	1.000	**1.000**	
	Subtotal		**21.500**	**20.500**	**20.500**	**20.500**	
	Total Positions		**54.300**	**51.300**	**51.300**	**51.300**	