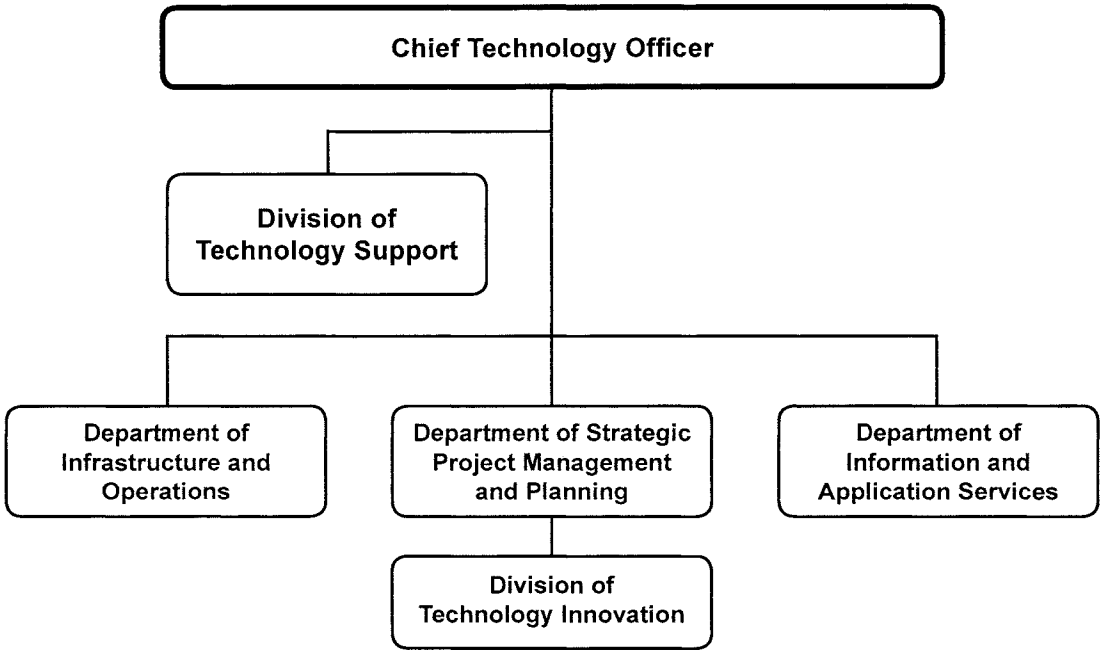
Chapter 8
Office of the Chief Technology Officer

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

OBJECT OF EXPENDITURE	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	FY 2010 BUDGET	FY 2010 CHANGE
POSITIONS					
Administrative	21.000	17.000	17.000	17.000	
Business/Operations Admin.	17.500	16.500	15.000	15.000	
Professional	6.000	6.000	6.000	4.700	(1.300)
Supporting Services	121.050	116.300	117.800	115.800	(2.000)
TOTAL POSITIONS	**165.550**	**155.800**	**155.800**	**152.500**	**(3.300)**
01 SALARIES & WAGES					
Administrative	$2,106,010	$2,241,295	$2,249,662	$2,223,404	($26,258)
Business/Operations Admin.	613,923	1,782,849	1,537,107	1,519,336	(17,771)
Professional	603,718	627,293	627,293	571,246	(56,047)
Supporting Services	9,818,698	8,717,616	8,954,991	9,268,155	313,164
TOTAL POSITION DOLLARS	**13,142,349**	**13,369,053**	**13,369,053**	**13,582,141**	**213,088**
OTHER SALARIES					
Administrative					
Professional	11,121	9,500	9,900	9,900	
Supporting Services	511,845	462,852	462,852	503,167	40,315
TOTAL OTHER SALARIES	**522,966**	**472,352**	**472,752**	**513,067**	**40,315**
TOTAL SALARIES AND WAGES	**13,665,315**	**13,841,405**	**13,841,805**	**14,095,208**	**253,403**
02 CONTRACTUAL SERVICES	**8,126,207**	**8,248,265**	**8,249,276**	**7,058,124**	**(1,191,152)**
03 SUPPLIES & MATERIALS	**621,525**	**807,892**	**813,044**	**731,438**	**(81,606)**
04 OTHER					
Staff Dev & Travel	138,506	348,252	333,014	209,653	(123,361)
Insur & Fixed Charges	40,046	21,610	31,650	31,920	270
Utilities	3,593,070	3,248,254	3,248,254	3,248,254	
Grants & Other	604,248	602,013	601,682	599,573	(2,109)
TOTAL OTHER	**4,375,870**	**4,220,129**	**4,214,600**	**4,089,400**	**(125,200)**
05 EQUIPMENT	**1,469,792**	**1,761,368**	**1,761,368**	**1,835,878**	**74,510**
GRAND TOTAL AMOUNTS	**$28,258,709**	**$28,879,059**	**$28,880,093**	**$27,810,048**	**($1,070,045)**

Office of the Chief Technology Officer—Overview



F.T.E. Positions 152.5

(*In addition, there are 17.5 Capital Budget positions, and a 0.5 Retirement Fund position shown in Chapter 7, Department of Financial Services.)

Office of the Chief Technology Officer

Chief Technology Officer	1.0
Supervisor (O)	1.0
Assistant to the Associate Superintendent (N)	1.0
Coordinator (N)	1.0
Fiscal Specialist II (25)	1.0
IT Systems Specialist II (18-25)	4.0
Administrative Services Manager 1 (17)	1.0
Fiscal Assistant III (16)	1.0
Administrative Secretary II (15)	1.0
Administrative Secretary I (14)	1.0

F.T.E. Positions 13.0

Office of the Chief Technology Officer—411/441/965

Sherwin Collette, Chief Technology Officer 301-279-3581

Mission

The mission of the Office of the Chief Technology Officer (OCTO) is to provide technology systems and services essential to the success of every student. The office is committed to excellence in providing the highest quality 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, based on the awareness and understanding of the impact of the office's work on the behavior and decisions of others.

Major Functions

OCTO is comprised of three departments and two divisions—the Department of Strategic Project Management and Planning, leading the strategic visioning and planning for the use of technology in MCPS based on quality and secure standards, coordinating statewide educational technology efforts, and managing technology-related federal programs; the Department of Information and Application Services, providing expert recommendations for integration of state-of-the-art technology into student and administrative practices and support services; the Department of Infrastructure and Operations, managing the technical enterprise configurations for information systems and providing the operational support for administrative data and reports; and two divisions providing 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 *No Child Left Behind Act of 2001* (NCLB). These technology systems are developed with commitment to customer satisfaction, delivery of high-quality products and services, and support that is responsive to the needs of the MCPS user community.

The Department of Strategic Project Management and Planning oversees the use of effective project management and quality assurance processes and tools for OCTO providing 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 practices that lead to successful results.

Staff in the Department of Information and Application Services works to support 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.

The Department of Infrastructure and Operations manages the enterprise-wide technical systems and facilitates the implementation of effective, secure, and reliable hardware and software solutions for the entire school system. Staff in the department works to provide 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) project funded through the Capital Improvements Program (CIP) that refreshes technology in schools and offices. The Division of Technology Support provides onsite 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 project for technology refreshment, coordination of statewide educational technology efforts, and management of technology related federal programs. This division 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.

Trends and Accomplishments

Responding to the demands for accountability and a rigorous instructional program set forth by the Board of Education and in *No Child Left Behind* (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 tools can 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 tools 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 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 must be slated for continuous improvement. As part of the ongoing refreshment of school-based technology, requirements gathering for the FY 2009–2014 Technology Modernization project plan for the CIP were completed.

OCTO accomplishments in FY 2009 focused on continued support of improved project 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.

New processes were initiated to manage the increasing number of vendors offering technology products and services and to ensure timely and cost effective delivery of services. Office staff supported the procurement of technology equipment, software, and services funded through the $18.8 million Tech Mod program and completed the federal application processes for E-Rate telecommunication rebates totaling approximately $1.8 million for FY 2008. Another major accomplishment of the office was negotiating a settlement of $204,554 in credits for over-billed telecommunication services.

During FY 2009, several major systems were migrated from the legacy mainframe equipment onto newly designed systems (student systems, financial management, budget, accounting, and procurement) to eliminate the costs of maintaining the legacy equipment and software. Migration of the remaining printing and other batch programs from the mainframe to more up-to-date platforms allowed for the removal of the aging and out-of-date mainframe system.

The MCPS WAN continues to carry additional Internet Protocol (IP) services throughout MCPS with the addition in FY 2009 of IP-based building-wide security cameras in 12 secondary schools, 39 visitor management systems in elementary and middle schools, and building access control in 26 elementary schools. The information provided by these systems traverses the MCPS local area and wide-area networks providing critical information to both MCPS safety and security staff and the Montgomery County Police.

In FY 2009, databases for student systems applications, the myMCPS portal, and the human resources information system were upgraded to the latest and most efficient versions that allow for faster access to data for students and staff. The implementation of the first phase and prototype of the enterprise portal, myMCPS, provides access to reports and instructional applications, including the High School Assessment Bridge Plan for Academic Validation, Curriculum Archive, the Professional Development Online system, and MCPS news and emergency notifications. Within myMCPS, the Next Generation Data Warehouse provides dashboards for the strategic target data points for school administrators and staff.

The elementary school (ES) Online Achievement and Reporting System (OARS) project has expanded to include 24 selected schools for Grades 1 through 3. ES OARS has been updated to allow teachers to use newly established measurement topics for grading and reporting. Grading and reporting data collected in ES OARS are interfaced with the Online Administrative Student Information System (OASIS) to produce new standards-based report cards based on measurement topics. Secondary OARS has completed a pilot with the Edison Center to accommodate grade collection and reporting for students with dual enrollment.

The implementation of the Applicant Tracking System (ATS) enables the electronic handling of MCPS recruitment needs from posting positions to hiring. It serves both internal and external applicants. This system provides for efficiency and is fully compliant with the Office of Federal Contract Compliance Programs, Uniform Guidelines on Employee Selection Procedures, and Equal Employment Opportunity guidelines. ATS integrates with the HRIS system and Fortis Document Management System.

In FY 2008, 102,760 requests for services and support were opened in the Unicenter Service Desk (USD) issue tracking system by MCPS staff in schools and offices as compared to 101,426 FY 2007.

The Technology Modernization project provided for the refreshment of technology in 45 schools, installing 9,341 computers and related systems in 10 high schools, 12 middle schools, 20 elementary schools, and 3 special schools. Also, the division supported the installation of technology for ten schools with additions. Because of the demand for a lower student-to-computer ratio and funding that remains at a 5:1

student-to-computer refreshment ratio, a program for upgrading older computers was initiated for Tech Mod schools with specific program needs. Under this upgrade program, 2,007 computers were removed from schools and offices, sent to the Tech Mod Recycle Center to be upgraded and re-imaged, then reinstalled in schools for student programs such as Fastt Math and Read 180. To address the digital divide, 5,763 computers were donated to local community centers and programs. All remaining old computers taken out of schools and offices are sold to an asset recovery firm to avoid disposal fees of $10 per unit.

In FY 2009, the office applied for and received funding to lead a competitive grant under Title II-D Enhancing Education Through Technology under the NCLB. This grant funds a state-wide consortium for developing lessons and professional development to support student and teacher technology literacy. Office staff funded through Title II-D educational technology participated in the implementation of the critical thinking framework in seven schools participating in a partnership program with Promethean.

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 (MSA) in Grades 3–8 and 10; the High School Assessments; the Independence Mastery Assessment Program (IMAP) for students in the fundamental life skills curriculum; and the IDEA Proficiency Test (IPT) for students in the English for Speakers of Other Languages (ESOL) 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, the development of processes and strategies to provide electronic communication with educators, students, parents, and the community, 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.
- 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 MCPS Board of Education Policy, IGS, *Educational Technology,* December 8, 1993, 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 2010 request for this office is $5,811,731, a decrease of $434,541 from the current FY 2009 budget of $6,246,272. An explanation of this change follows.

Continuing and Negotiated Salary Costs—($1,649)
There are no negotiated salary changes for employees in this unit. As a result of the serious economic outlook and budget projections, MCPS and the employee organizations are in renegotiations with regard to salaries for FY 2010. There is a decrease of $1,649 in continuing salary costs. Step or longevity increases for current employees are offset by reductions for staff turnover.

Realignment—($464,193)
The budget includes various budget neutral realignments for FY 2010 within the budget of the Office of Chief Technology Officer. In addition, to realign the budget with program needs, contractual maintenance funds of $366,587 are realigned from this office to the Department of Information and Application Services and $97,606 into the Department of Infrastructure and Operations.

Other—$68,301
An additional $68,301 is added to this budget for the student database system for Special Education and Student Services.

Reductions—($37,000)
Training support—($30,000)
Travel out—($7,000)

Budget Explanation IDEA—Early Intervening Services Project—965

As a requirement for receiving funds under the *Individuals with Disabilities Act,* MCPS is required to reserve 15 percent of its federal allocation to provide comprehensive early intervening services to students in groups that are significantly over-identified for special education services

Project's Funding History

Sources	FY 2009 Projected 7/1/08	FY 2009 Received 11/30/08	FY 2010 Projected 7/1/09
Federal	$123,438	$123,438	$123,438
State			
County			
Total	$123,438	$123,438	$123,438

Office of Chief Technology Officer - 411/441

Sherwin Collette, Chief Technology Officer

Description	FY 2008 Actual	FY 2009 Budget	FY 2009 Current	**FY 2010 Request**	FY 2010 Change
01 Salaries & Wages					
Total Positions (FTE)	23.000	13.000	13.000	**13.000**	
Position Salaries	$1,259,670	$1,184,310	$1,184,310	**$1,182,661**	($1,649)
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		27,528	27,528	**95,829**	68,301
Other					
Subtotal Other Salaries	298	27,528	27,528	**95,829**	68,301
Total Salaries & Wages	1,259,968	1,211,838	1,211,838	**1,278,490**	66,652
02 Contractual Services					
Consultants		7,124	7,124	**7,124**	
Other Contractual		865,363	865,363	**482,168**	(383,195)
Total Contractual Services	427,176	872,487	872,487	**489,292**	(383,195)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		15,000	15,000	**18,150**	3,150
Other Supplies & Materials		23,173	23,173	**23,173**	
Total Supplies & Materials	20,890	38,173	38,173	**41,323**	3,150
04 Other					
Local Travel		2,432	2,432	**2,432**	
Staff Development		238,001	238,001	**160,621**	(77,380)
Insurance & Employee Benefits					
Utilities		3,248,254	3,248,254	**3,248,254**	
Miscellaneous		540,000	540,000	**540,000**	
Total Other	4,163,135	4,028,687	4,028,687	**3,951,307**	(77,380)
05 Equipment					
Leased Equipment		52,650	52,650	**11,617**	(41,033)
Other Equipment		42,437	42,437	**39,702**	(2,735)
Total Equipment	61,461	95,087	95,087	**51,319**	(43,768)
Grand Total	$5,932,630	$6,246,272	$6,246,272	**$5,811,731**	($434,541)

Office of Chief Technology Officer - 411/441

Sherwin Collette, Chief Technology Officer

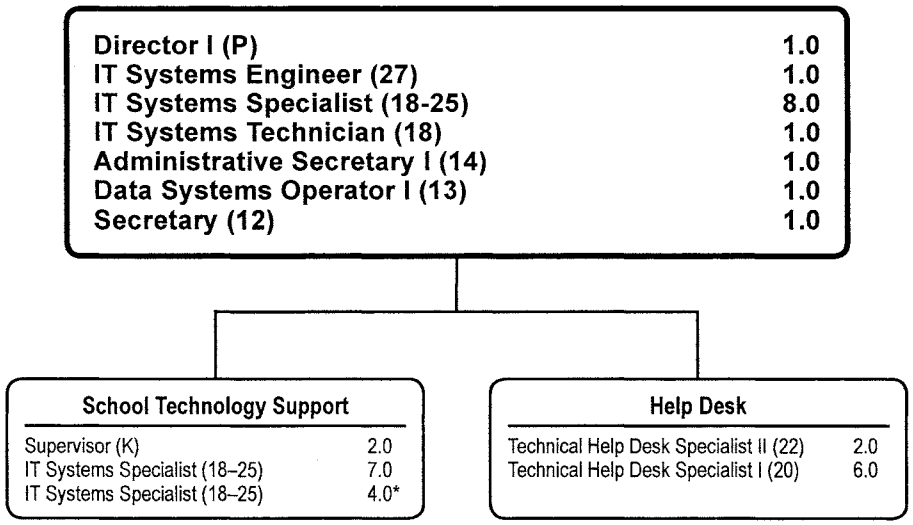
CAT		DESCRIPTION	10 Mon	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	**FY 2010 REQUEST**	FY 2010 CHANGE
1		Chief Technology Officer		1.000	1.000	1.000	**1.000**	
2	Q	Director II		1.000				
1	P	Executive Assistant		1.000				
1	P	Executive Director		1.000				
1	O	Supervisor		4.000	1.000	1.000	**1.000**	
1	N	Asst. to Assoc Supt			1.000	1.000	**1.000**	
1	N	Coordinator			1.000	1.000	**1.000**	
1	27	IT Systems Engineer		1.000				
1	25	IT Systems Specialist		4.000	4.000	4.000	**4.000**	
1	25	Technical Analyst		2.000				
1	25	Fiscal Specialist II		1.000	1.000	1.000	**1.000**	
1	19	Admin Services Manager II		1.000				
1	18	IT Systems Technician		1.000				
1	17	Copy Editor/Admin Sec		1.000				
1	17	Admin Services Manager I			1.000	1.000	**1.000**	
1	16	Fiscal Assistant III		1.000	1.000	1.000	**1.000**	
1	15	Administrative Secretary II		2.000	1.000	1.000	**1.000**	
2	15	Administrative Secretary II		1.000				
1	14	Administrative Secretary I			1.000	1.000	**1.000**	
	Total Positions			**23.000**	**13.000**	**13.000**	**13.000**	

IDEA - Early Intervening Services - 965

Sherwin Collette, Chief Technology Officer

Description	FY 2008 Actual	FY 2009 Budget	FY 2009 Current	**FY 2010 Request**	FY 2010 Change
01 Salaries & Wages					
Total Positions (FTE)					
Position Salaries					
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages					
02 Contractual Services					
Consultants					
Other Contractual		123,438	123,438	**123,438**	
Total Contractual Services	123,438	123,438	123,438	**123,438**	
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office					
Other Supplies & Materials					
Total Supplies & Materials					
04 Other					
Local Travel					
Staff Development					
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other					
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$123,438	$123,438	$123,438	**$123,438**	

Division of Technology Support



F.T.E. Positions 31.0

(*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 is to provide technical assistance to schools and offices while maintaining the operational readiness of new and existing hardware and software.

Major Functions

The Division of Technology Support provides technical help to staff in all Montgomery County Public Schools (MCPS) sites 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 two 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 events that require technical assistance. They also participate in project management that supports school initiatives. The certified hardware repair group is deployed to kindergarten through Grade12 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 viable remote access tools and industry best practice approaches to continually improve its customer service to schools and offices.

The Help Desk team provides one central location for MCPS staff seeking 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 specialists attend ongoing training to resolve basic network issues, support new application inquiries, and respond to productivity software questions related to office software use such as the Microsoft Office suite of products. 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. The Help Desk collaborates with appropriate staff and departments to create Service and Operations Level Agreements that specifically outline a comprehensive support plan for all MCPS enterprise applications.

The Technical Services and Support (TSS) team is responsible for maintaining equipment in nonschool-based offices and providing technical support of audiovisual equipment in schools. TSS support for nonschool-based offices includes onsite equipment repair and software upgrades, support for office relocations, and maintenance of equipment that is no longer under warranty. Staff provides integration services, preventative maintenance, network administration, and desktop image development. This team also provides technical support and equipment for MCPS meetings and activities. The staff manages the Instructional Equipment Replacement program for audiovisual equipment in the schools and meets with principals of new and modernized schools to assist with the planning and acquisition of new audiovisual equipment.

The Customer Relationship Manager (CRM) works in partnership with school-based staff and a cross-section of MCPS office personnel to gather requirements for new projects, collaborates with the Office of the Chief Technology Officer's staff to ensure alignment between Central Office and end user needs, and provides data that informs the quality of service to schools and offices.

The CRM is responsible for extracting data from the Unicenter Service Desk (USD) tool to design customized reports for schools and Central Office requests for information. As projects are implemented, the CRM routinely 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 USD. The CRM also is tasked to facilitate meetings to outline the Operations Level Agreement model that identifies the industry-standard approach to developing support plans and process mapping. The CRM delivers direct support to the classroom through the design of customized reports that allow administrators and designated staff to analyze and manage technology issues in their schools and lays the groundwork for collaborative work with the ITSS during scheduled visits.

Trends and Accomplishments

In FY 2008, 102,760 requests for services and support were opened in the USD issue tracking system by MCPS staff in schools and offices as compared to 101,426 FY 2007.

In FY 2008, of the 102,760 requests logged by the system, the MCPS Help Desk opened 43,113 tickets of which they closed 39,999 or 93 percent at first contact. In addition, they processed another 19,000 tickets that were submitted by other MCPS staff via the Web for a total of 62,113 tickets handled by this 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. The Help Desk team continuously works to improve customer service by collaborating with other OCTO teams and by incorporating user feedback into daily operations. They participate in the development of customized support plans and Service and Organization 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 and regularly updates the Help Desk website that provides users with timely solutions to frequently asked questions.

In FY 2009, ITSS staff provided an average of 7.5 hours of support to each school per week. ITSS staffing is based on a geographical team model with primary and backup assignments for each school. This model provides onsite support for over 90 percent of all elementary schools each week. The STS team also provides frontline support for the emergency telecommunication system by contacting all school-based sites on a weekly basis to ensure effective operation and usability of the Nextel direct phones. Results are recorded and reported weekly.

In FY 2008, the TSS team closed 884 emergency priority requests handling 90 percent within the 12-hour Service Level Agreement (SLA). The TSS team also handled 2,520 normal priority calls meeting the three-day SLA and performance measure 80 percent of the time. The total number of requests for this time period was 3,404.

In FY 2009, the Customer Relationship Manager worked with cross-functional teams to establish and monitor Organization Level Agreements (OLAs) that support priority initiatives. The CRM uses Crystal Reports software to provide performance statistics on projects such as the Instructional Management System (IMS); the Online Administrative Student Information System (OASIS); the Online Achievement Reporting System (OARS), the electronic grade book used to report and maintain student records; Edline, the parent communication tool; MAP-R, the measurement accountability reading system; and the Professional Development Online (PDO) system. The CRM was assigned project management lead to upgrade the three USD issue tracking systems used by OCTO, the Employee and Retiree Service Center, and the Information Office Call Center. The upgrade to the OCTO system expanded the user base from several hundred users to 30,000 potential users and allows the MCPS end-user community to more easily submit, track, and resolve technology problems. During the design and implementation of the upgrade, efficiencies were introduced to improve the delivery of services to customers. Phase 2 of this project will improve efficiency of support by decreasing the amount of time taken to resolve issues; this phase will introduce a self-service knowledge base for MCPS staff and will integrate the issue tracking software with the Help Desk phone system.

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.

Strategies

- Provide technology support for instructional programs and other system-wide 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.
- 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.
- 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 on-site and remote technical support.
- Ensure technical readiness in schools.

Performance Measurements

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 2 hours).

FY 2008 Actual	FY 2009 Estimate	FY 2010 Recommended
93%	93%	95%

Explanation: This measure is an indication of the timeliness of problem resolution by Help Desk staff within the Service Level Agreement.

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

The FY 2010 request for this division is $2,525,128, a decrease of $36,727 from the current FY 2009 budget of $2,561,855. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$75,168
There are no negotiated salary changes for employees in this unit. As a result of the serious economic outlook and budget projections, MCPS and the employee organizations are in renegotiations with regard to salaries for FY 2010. There is an increase of $75,168 in continuing salary costs to reflect step or longevity increases for current employees.

Reductions—($111,895)
Help desk assistant position—($49,291)
There is a reduction of a 1.0 help desk assistant position and $49,291

Other Reductions—($62,604)
Contractual services—($24,091)
Office supplies—($4,500)
Software—($4,760)
Instructional computers—($10,000)
Local travel—($2,485)
Furniture and equipment—($10,859)
Equipment lease/purchase- ($5,909)

Division of Technology Support - 422/423/424

Shelley Beddingfield, Director I

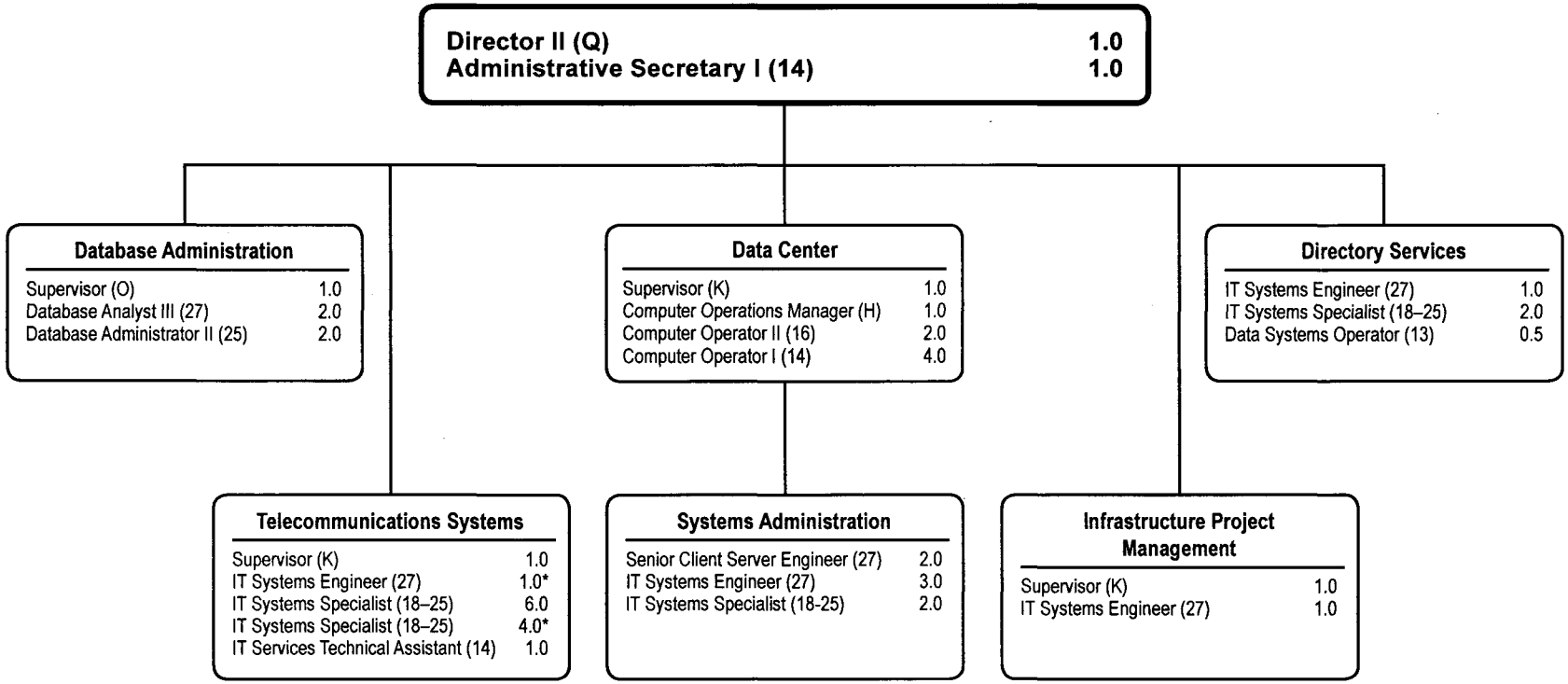
Description	FY 2008 Actual	FY 2009 Budget	FY 2009 Current	**FY 2010 Request**	FY 2010 Change
01 Salaries & Wages					
Total Positions (FTE)	32.000	32.000	32.000	**31.000**	(1.000)
Position Salaries	$2,252,482	$2,431,800	$2,431,800	**$2,457,677**	$25,877
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries	455				
Total Salaries & Wages	2,252,937	2,431,800	2,431,800	**2,457,677**	25,877
02 Contractual Services					
Consultants					
Other Contractual		47,941	47,941	**23,850**	(24,091)
Total Contractual Services	35,325	47,941	47,941	**23,850**	(24,091)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		17,192	17,192	**12,692**	(4,500)
Other Supplies & Materials		29,522	29,522	**14,762**	(14,760)
Total Supplies & Materials	32,925	46,714	46,714	**27,454**	(19,260)
04 Other					
Local Travel		7,132	7,132	**4,647**	(2,485)
Staff Development		1,395	1,395	**1,395**	
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	7,329	8,527	8,527	**6,042**	(2,485)
05 Equipment					
Leased Equipment		16,014	16,014	**10,105**	(5,909)
Other Equipment		10,859	10,859		(10,859)
Total Equipment	10,106	26,873	26,873	**10,105**	(16,768)
Grand Total	$2,338,622	$2,561,855	$2,561,855	**$2,525,128**	($36,727)

Division of Technology Support - 422/423/424

Shelley Beddingfield, Director I

CAT	DESCRIPTION	10 Mon	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	**FY 2010 REQUEST**	FY 2010 CHANGE
	422 Division of Technology Support						
1	P Director I		1.000	1.000	1.000	**1.000**	
11	K Supervisor		1.000				
1	27 IT Systems Engineer		1.000	1.000	1.000	**1.000**	
11	25 IT Systems Specialist		6.000	8.000	8.000	**8.000**	
3	25 IT Systems Specialist		1.000				
11	18 IT Systems Technician			1.000	1.000	**1.000**	
1	14 Administrative Secretary I		1.000	1.000	1.000	**1.000**	
11	13 Data Operator I		1.000	1.000	1.000	**1.000**	
1	12 Secretary		1.000	1.000	1.000	**1.000**	
	Subtotal		**13.000**	**14.000**	**14.000**	**14.000**	
	423 Help Desk						
11	K Supervisor		1.000				
11	25 IT Systems Specialist		8.000				
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**	
11	18 IT Systems Technician		1.000				
1	18 Technical Help Desk Asst		1.000	1.000	1.000		(1.000)
	Subtotal		**19.000**	**9.000**	**9.000**	**8.000**	**(1.000)**
	424 School Technology Support						
11	K Supervisor			2.000	2.000	**2.000**	
11	25 IT Systems Specialist			7.000	7.000	**7.000**	
	Subtotal			**9.000**	**9.000**	**9.000**	
	Total Positions		**32.000**	**32.000**	**32.000**	**31.000**	**(1.000)**

Department of Infrastructure and Operations



F.T.E. Positions 35.5

(*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 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 six units: Database Administration, Data Center, Telecommunication Services, System Administration, Directory Services, and Infrastructure Project Management. All six units work collaboratively to ensure that Montgomery County Public Schools (MCPS) technology systems are designed and operated in the most efficient manner possible.

The Database Administration unit is responsible for creating, maintaining, backing up and recovering, and monitoring enterprise databases [e.g., Online Administrative Student Information System (OASIS), 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 Telecommunication Services unit designs, installs, and supports local and wide-area networks (LAN/WAN) 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 WAN, which is implemented by connections through several carriers, including the county's fiber-optic network (FiberNet). The connection to the Internet and county government, the security firewall, the intrusion detection/prevention equipment, and the Internet protocol (IP) 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 Systems Administration unit designs systems architecture for new or upgraded applications; and installs, manages, and supports enterprise servers which 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. 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.

The Directory Services unit is responsible for systemwide user account management for the network and all application systems such as the student data system, financial management system, and human resources to enable appropriate access for MCPS users. The unit also manages the operation of the MCPS e-mail system and is responsible for all e-mail system upgrades and implementations.

The Infrastructure Project Management unit 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 timely manner, the Infrastructure Project Management team coordinates the work efforts of the technical resources and subject matter experts for department projects. The unit manages the service contracts and vendor relationships during the life of the project. The Infrastructure Project Management unit ensures that project documentation is kept in an accessible place and that quality assurance processes are created, documented and communicated for maximum efficiency.

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 implementation of hardware upgrades for the newly expanded student data system; completion of the implementation of an automated network user account management system, a system to allow for single sign-on of user accounts to multiple systems with the integration of the myMCPS portal; expansion of the enterprise storage management and backup solution to include remote backups for schools; and wide-scale upgrades in hardware and software versions. In addition, the department also provided large-scale printing services for both student and business systems, including approximately 137,000 report cards per reporting period and 1,500 employee paychecks 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 department upgraded the central domain controller servers to the latest software version. This upgrade provides the ability to make more efficient modifications in the network structure as organizational changes occur. The MCPS e-mail system also was upgraded to the most current version, providing users with additional capabilities, better redundancy and additional disaster recovery capabilities. The Systems Administration unit designed and implemented a more efficient method to update applications by centralizing the storage of the applications.

Planned upgrades for the MCPS Data Center continued during FY 2009 in collaboration with the Department of Facilities Management by developing comprehensive plans for a modernized central computer facility to meet industry standards. A short-term power upgrade was implemented to accommodate the increasing electrical requirements of the Data Center. With ever-increasing technology demands, the trend shows a steady increase in power consumption, presenting a challenge for an aging infrastructure. An additional emergency generator was installed to accommodate the increased electrical needs so that storms and other unpredictable causes of power outages do not affect the operations of mission critical computer resources such as e-mail, web services, student data systems, online instructional programs and financial systems. In addition, the high speed printers and scanners were moved to existing available space in the Carver Educational Services Center both to make room for additional data center equipment and also to provide a cleaner environment for the operations of the servers. Implementation of the server consolidation program continued through FY 2009, including the implementation of a virtual server environment to reduce the number of production servers. This program seeks to reduce the number of disparate hardware servers by consolidating systems on more reliable and consistently managed hardware.

Several major systems were migrated from the legacy mainframe equipment onto newly designed systems (student systems, financial management, budget, accounting, and procurement) to eliminate the costs of maintaining the legacy equipment and software. Migration of the remaining printing and other batch programs from the mainframe to more up-to-date platforms allowed us to remove the aging and out-of-date mainframe system.

In FY 2009, databases for student systems applications, the myMCPS portal and the human resources system were upgraded to the latest and most efficient versions that allow for faster access to data for students and staff.

The growing school and office reliance on wired and wireless networks requires reliable WAN/LAN connections. The ever-increasing need for additional bandwidth requires MCPS to continually evaluate new telecommunications technologies including participation in the county FiberNet. As the MCPS information technology infrastructure grows in size and complexity, coordination and standardization of components become key concerns. Processes through which technology projects are designed and implemented must be slated for continuous improvement.

Using virtual private network (VPN) technology with Internet connections, the Telecommunications Services team was able to provide redundancy, improve reliability and increase bandwidth for 40 elementary schools. Montgomery County FiberNet installations continued in FY 2009 with installations completed at 12 additional elementary schools bringing the total number of MCPS locations to 85 schools and offices. Internet service for the entire MCPS enterprise was augmented with a second connection which provides increased availability and faster performance. Internet availability continued to be over 99 percent.

Telephone systems were installed on time as scheduled in four elementary schools, one middle school, and one high school. Nearly 2,000 work requests for moves, adds, and changes for schools and administrative offices were completed in FY 2009. The Telecommunication unit continued its management of the cell phone and data device programs which includes emergency phones in portable classrooms and school emergency kits.

The MCPS WAN continues to carry additional IP services throughout MCPS with the addition of IP-based building-wide security cameras in 12 secondary schools, 39 visitor-management systems in elementary and middle schools, and building access control in 26 elementary schools in FY 2009. The information provided by these systems traverses the MCPS LAN/WAN providing critical information to both MCPS safety and security staff and the Montgomery County Police.

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.

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

Cary Kuhar, Director II 301-279-3581

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.
- Implement an upgrade to the enterprise e-mail system.
- 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.
- 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.
- Plan and implement an enterprise backup scheduling solution for Unix systems.
- Monitor, plan, and implement improvements for enterprise data storage systems to support the production server environment.
- Maintain consistent environmental controls in the Data Center.
- Work with staff and industry representatives to design, implement, and maintain, an IP-based, closed-circuit video surveillance solution Including building-wide cameras in secondary schools and a renovated dispatch center.
- 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.
- Conduct server consolidation and migration to standardized network operating systems.
- Facilitate and support server configuration management for optimum performance.

Performance Measures

Performance Measure: Percent of uptime for the WAN

FY 2008 Actual	FY 2009 Estimate	FY 2010 Recommended
99.72%	99.85%	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 2008 Actual	FY 2009 Estimate	FY 2010 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—446/433/447/448/451/452/453

The FY 2010 request for this department is $6,647,848, an increase of $146,026 from the current FY 2009 budget of $6,501,822. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$151,995
There are no negotiated salary changes for employees in this unit. As a result of the serious economic outlook and budget projections, MCPS and the employee organizations are in renegotiations with regard to salaries for FY 2010. There is an increase of $151,995 in continuing salary costs to reflect step or longevity increases for current employees.

Realignment—$97,606
The budget for this department includes various budget neutral realignments for FY 2010. In addition, to align budgeted funds with program needs, a realignment of $97,606 from the Office of the Chief Technology Officer into this department is necessary.

Reductions—($103,575)
Contractual Maintenance—($4,901)
There is a reduction of $4,901 in contractual maintenance as a result of a new copier initiative. Overall, the net reduction for the copier initiative is $868,633, and there are other increases and reductions in other parts of the budget.

Other Reductions—($98,674)
Equipment lease/purchase- ($33,674)
Consultants—($50,000)
Program supplies—($15,000)

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

Cary Kuhar, Director II

Description	FY 2008 Actual	FY 2009 Budget	FY 2009 Current	**FY 2010 Request**	FY 2010 Change
01 Salaries & Wages					
Total Positions (FTE)	38.500	35.500	35.500	**35.500**	
Position Salaries	$3,345,520	$2,917,082	$2,917,082	**$3,069,077**	$151,995
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		39,394	39,394	**32,110**	(7,284)
Other		43,460	43,460	**34,328**	(9,132)
Subtotal Other Salaries	70,601	82,854	82,854	**66,438**	(16,416)
Total Salaries & Wages	3,416,121	2,999,936	2,999,936	**3,135,515**	135,579
02 Contractual Services					
Consultants		128,371	128,371	**61,500**	(66,871)
Other Contractual		1,422,671	1,422,671	**1,502,844**	80,173
Total Contractual Services	1,426,072	1,551,042	1,551,042	**1,564,344**	13,302
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		5,566	5,566	**5,566**	
Other Supplies & Materials		537,063	537,063	**473,348**	(63,715)
Total Supplies & Materials	384,219	542,629	542,629	**478,914**	(63,715)
04 Other					
Local Travel		4,718	4,718	**4,328**	(390)
Staff Development		44,130	44,130	**10,494**	(33,636)
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	39,545	48,848	48,848	**14,822**	(34,026)
05 Equipment					
Leased Equipment		1,359,367	1,359,367	**1,454,253**	94,886
Other Equipment					
Total Equipment	1,040,717	1,359,367	1,359,367	**1,454,253**	94,886
Grand Total	$6,306,674	$6,501,822	$6,501,822	**$6,647,848**	$146,026

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

Cary Kuhar, Director II

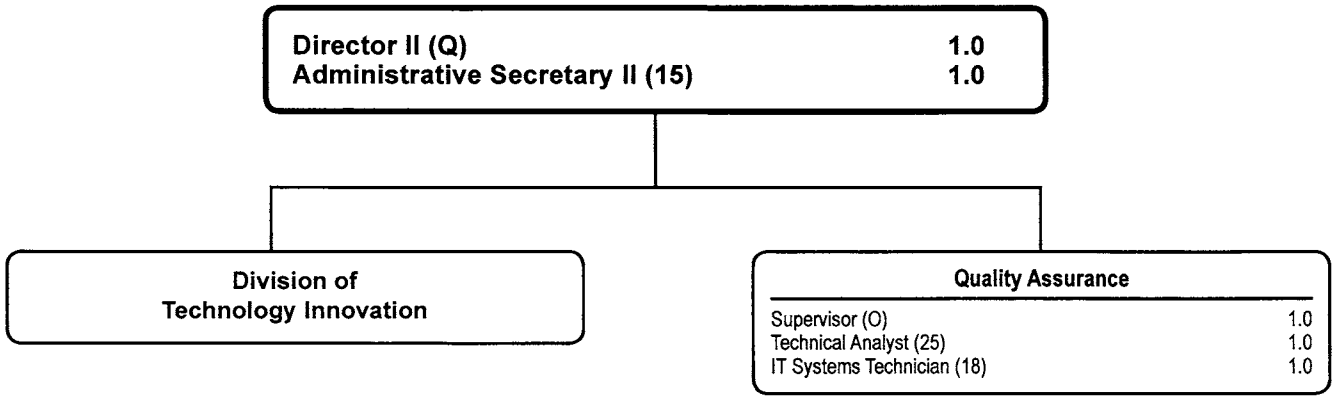
CAT		DESCRIPTION	10 Mon	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	**FY 2010 REQUEST**	FY 2010 CHANGE
	446 Department of Infrastructure & Ops							
1	Q	Director II			1.000	1.000	**1.000**	
1	P	Director I		1.000				
1	14	Administrative Secretary I		1.000	1.000	1.000	**1.000**	
	Subtotal			**2.000**	**2.000**	**2.000**	**2.000**	
	431 Division of Field Operations							
1	P	Director I		1.000				
1	14	Administrative Secretary I		1.000				
	Subtotal			**2.000**				
	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**	
11	25	IT Systems Specialist		4.000	4.000	4.000	**4.000**	
11	18	IT Systems Technician		2.000				
11	14	IT Services Technical Asst		1.000	1.000	1.000	**1.000**	
11	13	Fiscal Assistant I		1.000				
	Subtotal			**9.000**	**8.000**	**8.000**	**8.000**	
	447 Database Administration							
1	O	Supervisor			1.000	1.000	**1.000**	
1	K	Supervisor		1.000				
1	K	Database Analyst III		2.000	2.000			
1	27	Database Analyst III				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	1.000	1.000	**1.000**	
1	H	Computer Operations Mgr		1.000	1.000	1.000	**1.000**	
1	27	Sr Client Server Engineer		2.000				
1	27	IT Systems Engineer		2.000				
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			**12.000**	**8.000**	**8.000**	**8.000**	
	451 Directory Services							
1	K	Supervisor		1.000				
1	27	IT Systems Engineer		2.000	1.000	1.000	**1.000**	
1	25	IT Systems Specialist		5.000	2.000	2.000	**2.000**	

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

Cary Kuhar, Director II

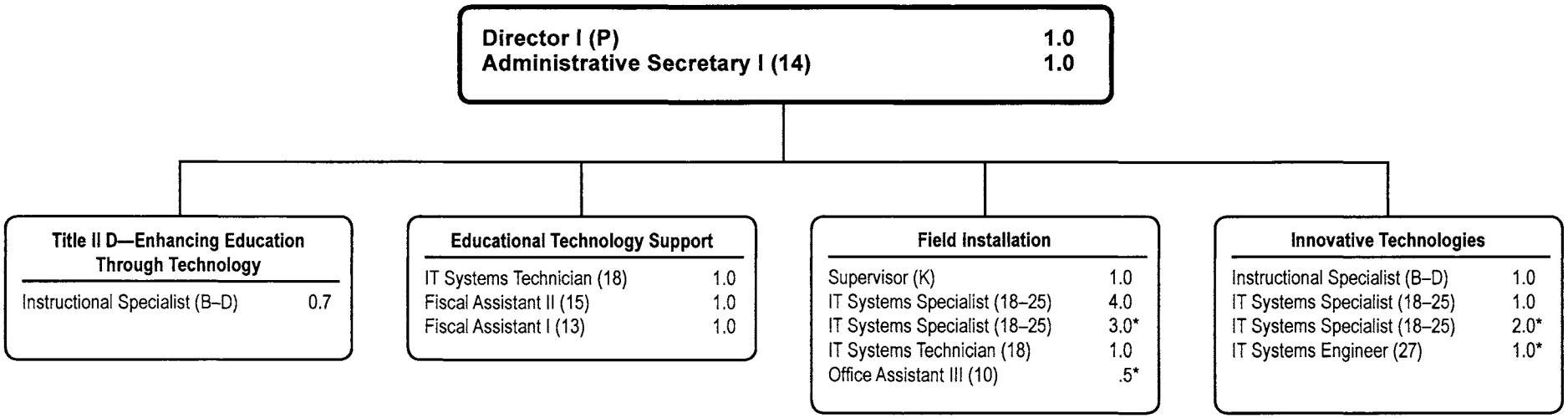
CAT	DESCRIPTION	10 Mon	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	**FY 2010 REQUEST**	FY 2010 CHANGE
	451 Directory Services						
1	13 Data Operator I		.500	.500	.500	**.500**	
	Subtotal		**8.500**	**3.500**	**3.500**	**3.500**	
	452 Systems Administration						
1	27 Sr Client Server Engineer			2.000	2.000	**2.000**	
1	27 IT Systems Engineer			3.000	3.000	**3.000**	
11	25 IT Systems Specialist			2.000	2.000	**2.000**	
	Subtotal			**7.000**	**7.000**	**7.000**	
	453 Infrastructure Project Management						
1	K Supervisor			1.000	1.000	**1.000**	
1	27 IT Systems Engineer			1.000	1.000	**1.000**	
	Subtotal			**2.000**	**2.000**	**2.000**	
	Total Positions		**38.500**	**35.500**	**35.500**	**35.500**	

Department of Strategic Project Management and Planning



F.T.E. Positions 5.0

Division of Technology Innovation



F.T.E. Positions 13.7

(*In addition, there are 6.5 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 is to implement innovative 21st Century technologies that support students' active engagement in learning, establish and support project management and quality assurance practices for all Office of Chief Technology Office (OCTO) programs and services, and create a strategic plan for the use of technology in teaching and learning.

Major Functions

The Department of Strategic Project Management and Planning 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 tools 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 MCPS classrooms. This unit supports the implementation of interactive white board technologies in secondary schools, the installation of Middle School Reform technologies such as wireless mobile laptop labs, and the piloting of enterprise software solutions. To refresh 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. The unit oversees a program to upgrade older computers in schools as part of their Tech Mod refreshment. 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 provides centralized distribution of software updates, service packs, and virus definition files.

The Educational Technology Support unit oversees federal and state telecommunication and educational technology programs and grants. 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. A position funded under the Title II-D Educational Technology allocation coordinates the integration of the critical thinking model into the 21st Century Classroom initiative.

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. Professional staff in this unit also 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 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 Department of Strategic Project Management and Planning oversees the use of effective project management and quality assurance processes and tools throughout OCTO. This is accomplished by standardizing the use of effective project management practices, implementing a strong customer engagement and relationship model, and managing the project portfolio to deliver the right solutions at the right time. Staff in the department works with project managers in each OCTO department and division to share and implement project management practices that lead to successful results.

The Quality Assurance Unit assists software development and technology projects by verifying that products and services conform to specified requirements and validating that the solution aligns with customer expectations. Staff assists in the preparation of project plans; develops standard policies, practices, and procedures; employs requirements management, tests management, activity tracking, configuration management and version control tools; and establishes methods and facilities to be used in collecting, maintaining, and retaining quality assurance records. The unit supports OCTO's focus on being a test-driven organization to ensure the delivery of high quality, reliable solutions. Staff guides projects in the development and use of testing procedures and automated testing tools, as well as plans, monitors, and documents the software testing process.

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 Six Sigma methodologies.

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 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 2009, the Department of Strategic Project Management and Planning continued its support of improved project management practices. The department's focus was on improving collaboration and listening and learning from stakeholders. Additionally, the department worked to build the capacity of staff in the Office of the Chief Technology Officer to use industry best practices for information technology project management. The quality assurance unit coordinated testing of major systems being developed for use in schools and offices and continued support of quality assurance tools in use by technology staff. Standardized project management practices helped facilitate improved performance and result in the delivery of technology solutions and services.

Department staff also represented OCTO on the Integrated Reform Initiative for middle school reform project directors' team, Job-Banding Career Advancement Work Group, and the Supporting Services Professional Growth System Implementation Team. Staff participated on the Baldrige Award writing team and in Six Sigma projects focused on continuous improvement.

The Division of Technology Innovation supported the implementation of Educational Technology for 21st Century Learning, the school system's strategic technology plan. This plan sets forth comprehensive goals and objectives for the use of technology to support student learning. Interactive white boards and student response systems were installed in 65 percent of all secondary schools to create a more engaging learning environment for students. As the school system rolled out Phase II of the Middle School Reform Initiative, nine middle schools received wireless capability and mobile laptop carts to increase student access to technology.

The Technology Modernization project provided for the refreshment of technology in 45 schools, installing 9,341 computers and related systems in 10 high schools, 12 middle schools, 20 elementary schools, and 3 special schools. Also, the division supported the installation of technology for ten schools with additions. Because of the demand for a lower student to computer ratio and funding that remains at a 5:1 student to computer refreshment ratio, a program for upgrading older computers was initiated for Tech Mod schools with specific program needs. Under this upgrade program, 2,007 computers were removed from schools and offices, sent to the Tech Mod Recycle Center to be upgraded and re-imaged, then reinstalled in schools for student programs such as Fastt Math and Read 180. To address the digital divide, 5,763 computers were donated to local community centers and programs. All remaining old computers taken out of schools and offices are sold to an asset recovery firm to avoid disposal fees of $10 per unit.

The Division also initiated new processes to manage the increasing number of vendors offering technology products and services and to ensure timely and cost effective delivery of services. Division staff supported the procurement of technology equipment, software, and services funded through the $18.8 million Tech Mod program and completed the federal application processes for E-Rate telecommunication rebates totaling approximately $1.8 million for FY 2008.

In FY 2009, the Division applied for and received funding to lead a competitive grant under Title II-D—Enhancing Education Through Technology under the *No Child Left Behind Act*. This grant funds a state-wide consortium for developing lessons and professional development to support student and teacher technology literacy. Division staff funded through the Title II-D Educational Technology participated in the implementation of the critical thinking framework in seven schools participating in a partnership program with Promethean.

Another major accomplishment of the division was negotiating a settlement of $204,554 in credits for over-billed telecommunication services. Invoicing problems are common for telecommunication vendors and the credits received from the vendor reflect improved staff processes for reviewing invoices.

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

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

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 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 Six Sigma 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 2008 Actual	FY 2009 Estimate	FY 2010 Recommended
87%	90%	94%

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.

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 2008 Actual	FY 2009 Estimate	FY 2010 Recommended
99.99%	100%	100%

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

Budget Explanation Department of Strategic Project Management and Planning—421

The FY 2010 request for this department is $609,917, a decrease of $181,005 from the current FY 2009 budget of $790,922. An explanation of this change follows.

Continuing and Negotiated Salary Costs—($17,615)
There are no negotiated salary changes for employees in this unit. As a result of the serious economic outlook and budget projections, MCPS and the employee organizations are in renegotiations with regard to salaries for FY 2010. There is a decrease of $17,615 in continuing salary costs. Step or longevity increases for current employees are offset by reductions for staff turnover.

Reductions—($163,390)
1.0 IT system specialist position—($73,844)
There is a reduction of a 1.0 IT system specialist position and $73,844.

Other Reductions—($89,546)
Contractual services—($89,000)
Program supplies—($546)

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

The FY 2010 request for this division is $1,121,005, a decrease of $37,345 from the current FY 2009 budget of $1,158,350. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$8,999
There are no negotiated salary changes for employees in this unit. As a result of the serious economic outlook and budget projections, MCPS and the employee organizations are in renegotiations with regard to salaries for FY 2010. There is an increase of $8,999 in continuing salary costs to reflect step or longevity increases for current employees.

Realignment—($2,000)
The budget includes various budget neutral realignments for FY 2010 within the Division of Technology Innovation. In addition, there is a realignment of $2,000 from this division into the Department of Information and Application Services.

Reductions—($44,344)
There is a reduction of $44,344 for supporting services part-time salaries.

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

The FY 2010 request for this grant program is $183,272, and there is no change from the current FY 2009 budget of $183,272.

Project's Funding History

Sources	FY 2009 Projected 7/1/08	FY 2009 Received 11/30/08	FY 2010 Projected 7/1/09
Federal	$182,238	$183,272	$183,272
State			
County			
Total	$182,238	$183,272	$183,272

Dept. of Strategic Project Management and Planning - 421/997

Doreen M. Heath, Director II

Description	FY 2008 Actual	FY 2009 Budget	FY 2009 Current	**FY 2010 Request**	FY 2010 Change
01 Salaries & Wages					
Total Positions (FTE)	3.750	6.000	6.000	**5.000**	(1.000)
Position Salaries	$318,395	$583,357	$583,357	**$491,898**	($91,459)
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	318,395	583,357	583,357	**491,898**	(91,459)
02 Contractual Services					
Consultants					
Other Contractual		147,401	147,401	**81,228**	(66,173)
Total Contractual Services	172	147,401	147,401	**81,228**	(66,173)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		4,215	4,215	**4,215**	
Other Supplies & Materials		30,125	30,125	**29,579**	(546)
Total Supplies & Materials	28,499	34,340	34,340	**33,794**	(546)
04 Other					
Local Travel		473	473	**1,200**	727
Staff Development		1,728	1,728	**1,797**	69
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	47,858	2,201	2,201	**2,997**	796
05 Equipment					
Leased Equipment		23,623	23,623		(23,623)
Other Equipment					
Total Equipment		23,623	23,623		(23,623)
Grand Total	$394,924	$790,922	$790,922	**$609,917**	($181,005)

Dept. of Strategic Project Management and Planning - 421/997

Doreen M. Heath, Director II

CAT	DESCRIPTION	10 Mon	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	**FY 2010 REQUEST**	FY 2010 CHANGE
1	Q Director II		1.000	1.000	1.000	**1.000**	
1	O Supervisor			1.000	1.000	**1.000**	
3	BD Instructional Specialist		1.000				
1	25 IT Systems Specialist			1.000	1.000		(1.000)
1	25 Technical Analyst			1.000	1.000	**1.000**	
3	22 Technical Help Desk Spec II		.750				
1	18 IT Systems Technician			1.000	1.000	**1.000**	
1	15 Administrative Secretary II		1.000	1.000	1.000	**1.000**	
	Total Positions		**3.750**	**6.000**	**6.000**	**5.000**	**(1.000)**

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

Melissa J. Woods, Director I

Description	FY 2008 Actual	FY 2009 Budget	FY 2009 Current	**FY 2010 Request**	FY 2010 Change
01 Salaries & Wages					
Total Positions (FTE)	12.000	13.000	13.000	**13.000**	
Position Salaries	$1,024,588	$1,010,031	$1,010,031	**$1,019,030**	$8,999
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		44,344	44,344		(44,344)
Other					
Subtotal Other Salaries	7,586	44,344	44,344		(44,344)
Total Salaries & Wages	1,032,174	1,054,375	1,054,375	**1,019,030**	(35,345)
02 Contractual Services					
Consultants					
Other Contractual		33,479	33,479	**34,399**	920
Total Contractual Services	20,377	33,479	33,479	**34,399**	920
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials		4,635	4,635	**4,635**	
Office		6,000	6,000	**6,000**	
Other Supplies & Materials		47,083	47,083	**44,163**	(2,920)
Total Supplies & Materials	19,437	57,718	57,718	**54,798**	(2,920)
04 Other					
Local Travel		10,778	10,778	**10,430**	(348)
Staff Development		2,000	2,000	**2,348**	348
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	11,445	12,778	12,778	**12,778**	
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment	1,380				
Grand Total	$1,084,813	$1,158,350	$1,158,350	**$1,121,005**	($37,345)

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

Melissa J. Woods, Director I

CAT	DESCRIPTION	10 Mon	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	**FY 2010 REQUEST**	FY 2010 CHANGE
	425 Division of Technology Innovation						
1	P Director I		1.000	1.000	1.000	**1.000**	
1	25 IT Systems Specialist		1.000				
11	18 IT Systems Technician		1.000				
1	15 Fiscal Assistant II		2.000				
1	14 Administrative Secretary I			1.000	1.000	**1.000**	
	Subtotal		**5.000**	**2.000**	**2.000**	**2.000**	
	427 Education Technology Support						
11	18 IT Systems Technician			1.000	1.000	**1.000**	
1	15 Fiscal Assistant II			1.000	1.000	**1.000**	
11	13 Fiscal Assistant I			1.000	1.000	**1.000**	
	Subtotal			**3.000**	**3.000**	**3.000**	
	428 Innovative Technologies						
3	BD Instructional Specialist			1.000	1.000	**1.000**	
1	25 IT Systems Specialist			1.000	1.000	**1.000**	
	Subtotal			**2.000**	**2.000**	**2.000**	
	434 Field Installation						
3	K Supervisor		1.000	1.000	1.000	**1.000**	
3	27 IT Systems Engineer		1.000				
1	25 IT Systems Specialist		4.000	4.000	4.000	**4.000**	
1	18 IT Systems Technician		1.000	1.000	1.000	**1.000**	
	Subtotal		**7.000**	**6.000**	**6.000**	**6.000**	
	Total Positions		**12.000**	**13.000**	**13.000**	**13.000**	

Title II D - Enhancing Education Though Technology - 918

Melissa J. Woods, Director I

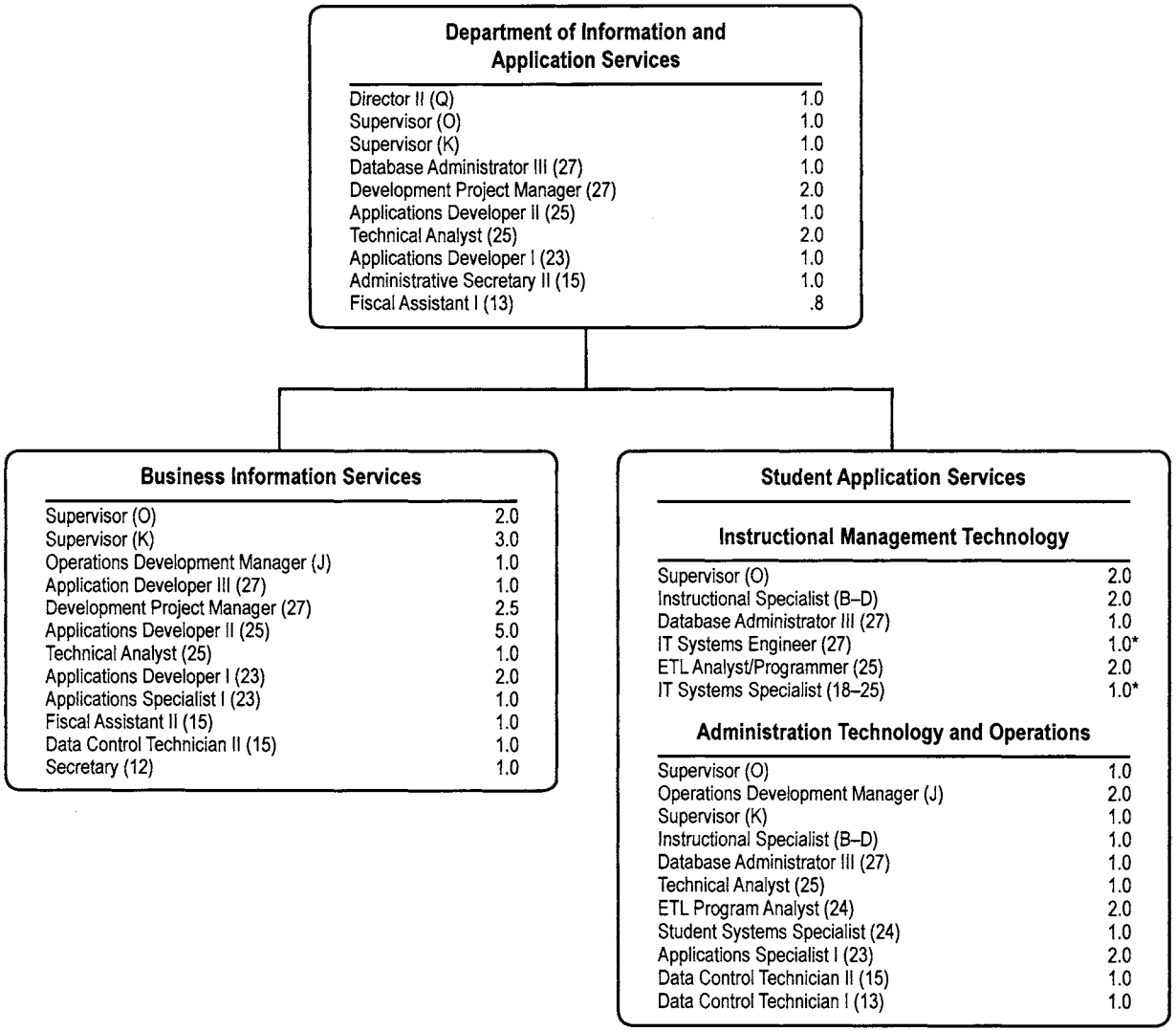
Description	FY 2008 Actual	FY 2009 Budget	FY 2009 Current	**FY 2010 Request**	FY 2010 Change
01 Salaries & Wages					
Total Positions (FTE)		1.000	1.000	**.700**	(.300)
Position Salaries		$83,400	$83,400	**$85,239**	$1,839
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends		3,000			
Professional Part Time		6,500	9,900	**9,900**	
Supporting Services Part Time					
Other					
Subtotal Other Salaries	11,121	9,500	9,900	**9,900**	
Total Salaries & Wages	11,121	92,900	93,300	**95,139**	1,839
02 Contractual Services					
Consultants					
Other Contractual		23,172	24,183	**24,183**	
Total Contractual Services	233,395	23,172	24,183	**24,183**	
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials		20,753	15,000	**15,000**	
Office			10,905	**10,905**	
Other Supplies & Materials					
Total Supplies & Materials	118,682	20,753	25,905	**25,905**	
04 Other					
Local Travel			2,460	**2,460**	
Staff Development		17,698			
Insurance & Employee Benefits		21,610	31,650	**31,920**	270
Utilities					
Miscellaneous		6,105	5,774	**3,665**	(2,109)
Total Other	32,476	45,413	39,884	**38,045**	(1,839)
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$395,674	$182,238	$183,272	**$183,272**	

Title II D - Enhancing Education Though Technology - 918

Melissa J. Woods, Director I

CAT	DESCRIPTION	10 Mon	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	**FY 2010 REQUEST**	FY 2010 CHANGE
3	BD Instructional Specialist			1.000	1.000	**.700**	(.300)
	Total Positions			**1.000**	**1.000**	**.700**	**(.300)**

Department of Information and Application Services



F.T.E. Positions 54.3
(*In addition, there are 2.0 Capital Budget positions shown on this chart and a 0.5 position is charged to the Trust Fund in Chapter 7, Department of Financial Services.)

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 facilitate collection, management, analysis, and reporting in support of *Our Call to Action: Pursuit of Excellence.*

Major Functions

DIAS collaborates with all 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 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.

The department empowers offices and schools with support systems which allow them to conduct effective operations and management through decision-making and planning based on data analysis. The school-based administrative application systems include the Online Administrative Student Information System (OASIS), classroom management systems, MCPS data warehouse, special education services tracking system, Online Achievement and Reporting System (OARS), and Incident Reporting System (IRS). Office-based systems include the Human Resource Information System (HRIS), Professional Development Online (PDO), Retirement, Applicant Tracking System (ATS), Financial Management System (FMS), Materials Management, Transportation Informational Management System (TIMS), Connect-ED, Capital Improvements Program (CIP), and Document Imaging.

Based on ongoing customer requirements and priorities, the department designs, develops or purchases, and implements new system-wide, office-based, and school-based administrative databases and applications. Staff provides enhancements to information systems as mandated by state and federal regulations or deemed necessary by MCPS. DIAS works with software vendors and staff in schools and offices to establish, operate, maintain, and enhance the delivery of information and decision support systems. Functions include development, implementation, and maintenance of systems that may include components for data integration, workflow, personalized websites (portal), data collection, ad hoc querying, publications, and reporting.

myMCPS (portal) is designed to be an integrated web-based portal that facilitates communication, collaboration, and access to applications, dashboards and reports, and information services such as Curriculum Archive, OASIS, Outlook Web Access, and MCPS news and emergency notifications. OASIS is the source system for managing all student administrative information including enrollment, attendance, report cards and transcripts, scheduling, and course management. OASIS provides an easy and accurate method to collect student administrative data through the development of user-friendly applications and the procurement of industry-leading software. OARS is composed of an enterprise electronic grade book to facilitate 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 next generation 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. HRIS integrates personnel, payroll, and employee benefits functions that allow for effective management of information and resources. FMS integrates supply chain, finance, and budgeting functions. It adds value to overall business operations by providing accurate, timely, comprehensive, and accessible information; and by supporting data-driven decision-making and accountability. FMS also streamlines business processes and provides flexibility, adaptability, and reliability. ATS is a web-based solution that automates the hiring process for MCPS-based position vacancies. These student and business solutions 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 information technology systems, including identifying, developing, and implementing industry standards management solutions, and software applications necessary to meet the requirements of schools and offices. The emergence of new technologies and the widespread availability of networked technology provide MCPS staff and students greater access to information for the efficient and effective monitoring of instruction and management of schools and offices.

The implementation of the first phase and prototype of the enterprise portal, myMCPS, provides access to reports and instructional applications, including the HSA Bridge Plan for Academic Validation, Curriculum Archive, PDO, MCPS news, and emergency notifications. Within myMCPS, the Next Generation Data Warehouse provides dashboards for the strategic target data points for school administrators and staff.

The elementary school (ES) OARS project has expanded to include 24 selected schools for grades 1 through 3. ES OARS has been updated allowing teachers to use newly established measurement topics for grading and reporting. Grading and reporting data collected in ES OARS are interfaced with OASIS to produce new standards-based report cards based on measurement topics. Secondary OARS has completed a pilot with the Edison Center to accommodate grade collection and reporting for students with dual enrollment.

The implementation of ATS enables the electronic handling of MCPS recruitment needs from posting positions to hiring. It serves both internal and external applicants. This system provides for efficiency and is fully compliant with the Office of Federal Contract Compliance Programs, Uniform

Guidelines on Employee Selection Procedures, and Equal Employment Opportunity guidelines. ATS integrates with the HRIS system and Fortis Document Management System.

New features within HRIS include the roll out of Lawson's portal for users to have web-access to HRIS and the sending of Tax Deferred Annuity (TDA) files to a common remitter changing the TDA interface process to send one set of TDA-related files to one vendor. The common remitter manages and disburses the individual TDA data to the TDA vendors. Enhancements include the establishment of an online human resources transaction process from ATS through HRIS (removal of paper effort) and the addition of payee to positive pay records.

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.

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 Board of Education 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.

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 Technology Consulting and Communications 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.*
- Provide 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.
- Increase the amount of information and power of reporting tools available to users.

Performance Measures

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

FY 2008 Actual	FY 2009 Estimate	FY 2010 Recommended
75%	90%	95%

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

Performance Measure: The percentage of schools using the portal to monitor student performance.

FY 2008 Actual	FY 2009 Estimate	FY 2010 Recommended
NA	100%	100%

Explanation: This measure indicates the percentage of schools that access the data warehouse on a regular basis to monitor student performance and achievement. This gives an indication of the usefulness of the data in the system and the usability of the system itself.

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

FY 2008 Actual	FY 2009 Estimate	FY 2010 Recommended
75%	85%	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

The FY 2010 request for this department is $10,787,709, a decrease of $526,453 from the current FY 2009 budget of $11,314,162. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$185,609
There are no negotiated salary changes for employees in this unit. As a result of the serious economic outlook and budget projections, MCPS and the employee organizations are in renegotiations with regard to salaries for FY 2010. There is

an increase of $185,609 in continuing salary costs to reflect step or longevity increases for current employees.

Realignment—$368,587
The budget includes various budget neutral realignments for FY 2010 under the Department of Information and Application Services. In addition, to realign the budget with program needs, there are realignments of $366,587 from the Office of the Chief Technology Officer and $2,000 from the Division of Technology Innovation into this budget.

Reductions—($1,080,649)
1.0 instructional specialist position—($68,123)
There is a reduction of 1.0 instructional specialist position and $68,123.

Other Reductions—($1,012,526)
Consultants—($158,000)
Contractual services—($257,950)
Contractual maintenance—($581,450)
Supporting services part-time salaries—($15,126)

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

Elton Stokes, Director II

Description	FY 2008 Actual	FY 2009 Budget	FY 2009 Current	**FY 2010 Request**	FY 2010 Change
01 Salaries & Wages					
Total Positions (FTE)	56.300	55.300	55.300	**54.300**	(1.000)
Position Salaries	$4,941,694	$5,159,073	$5,159,073	**$5,276,559**	$117,486
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		308,126	308,126	**340,900**	32,774
Other					
Subtotal Other Salaries	432,905	308,126	308,126	**340,900**	32,774
Total Salaries & Wages	5,374,599	5,467,199	5,467,199	**5,617,459**	150,260
02 Contractual Services					
Consultants		421,845	421,845	**548,345**	126,500
Other Contractual		5,027,460	5,027,460	**4,169,045**	(858,415)
Total Contractual Services	5,860,252	5,449,305	5,449,305	**4,717,390**	(731,915)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		10,000	10,000	**11,650**	1,650
Other Supplies & Materials		57,565	57,565	**57,600**	35
Total Supplies & Materials	16,873	67,565	67,565	**69,250**	1,685
04 Other					
Local Travel		7,501	7,501	**7,501**	
Staff Development		10,266	10,266		(10,266)
Insurance & Employee Benefits					
Utilities					
Miscellaneous		55,908	55,908	**55,908**	
Total Other	74,082	73,675	73,675	**63,409**	(10,266)
05 Equipment					
Leased Equipment		26,783	26,783	**312,148**	285,365
Other Equipment		229,635	229,635	**8,053**	(221,582)
Total Equipment	356,128	256,418	256,418	**320,201**	63,783
Grand Total	$11,681,934	$11,314,162	$11,314,162	**$10,787,709**	($526,453)

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

Elton Stokes, Director II

CAT	DESCRIPTION	10 Mon	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	**FY 2010 REQUEST**	FY 2010 CHANGE
	445 Department of Information & Application Svcs						
1	Q Director II			1.000	1.000	**1.000**	
1	P Director I		1.000				
2	O Supervisor		2.000				
1	O Supervisor		1.000	1.000	1.000	**1.000**	
1	K Supervisor				1.000	**1.000**	
1	J Operations Development Manager		1.000	3.000			
3	BD Instructional Specialist		4.000	1.000			
1	27 Applications Developer III			1.000			
2	27 Database Administrator III		2.000	2.000	1.000	**1.000**	
1	27 Development Proj Manager				2.000	**2.000**	
1	25 Applications Developer II			1.000	1.000	**1.000**	
2	25 ETL Analyst/Programmer		4.000	2.000			
1	25 Technical Analyst			2.000	2.000	**2.000**	
1	23 Applications Developer I			1.000	1.000	**1.000**	
2	15 Administrative Secretary II			1.000	1.000	**1.000**	
1	13 Fiscal Assistant I			.800	.800	**.800**	
	Subtotal		**15.000**	**16.800**	**11.800**	**11.800**	
	426 Instructional Management Technology						
1	O Supervisor			2.000	2.000	**2.000**	
3	BD Instructional Specialist			3.000	3.000	**2.000**	(1.000)
1	27 Database Administrator III			1.000	1.000	**1.000**	
1	25 Applications Developer II			2.000			
2	25 ETL Analyst/Programmer			2.000	2.000	**2.000**	
	Subtotal			**10.000**	**8.000**	**7.000**	**(1.000)**
	444 Division of Business Systems						
1	P Director I		1.000				
1	14 Administrative Secretary I		1.000				
	Subtotal		**2.000**				
	442 Administration Technology and Operations						
1	O Supervisor		2.000	1.000	1.000	**1.000**	
1	K Supervisor				1.000	**1.000**	
1	J Operations Development Manager		2.000		2.000	**2.000**	
3	BD Instructional Specialist		1.000		1.000	**1.000**	
1	27 Database Administrator III		1.000				
2	27 Database Administrator III				1.000	**1.000**	
1	25 Applications Developer II		4.000				
2	25 ETL Analyst/Programmer				2.000	**2.000**	
1	25 Technical Analyst		4.000	1.000	1.000	**1.000**	
1	24 Student Systems Specialist		1.000	1.000	1.000	**1.000**	
1	23 Applications Developer I		2.000				
1	23 Applications Specialist I		2.000	2.000	2.000	**2.000**	

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

Elton Stokes, Director II

CAT	DESCRIPTION	10 Mon	FY 2008 ACTUAL	FY 2009 BUDGET	FY 2009 CURRENT	**FY 2010 REQUEST**	FY 2010 CHANGE
	442 Administration Technology and Operations						
1	15 Data Control Technician II		1.000	1.000	1.000	**1.000**	
1	13 Fiscal Assistant I		.800				
1	13 Data Control Technician I		1.000	1.000	1.000	**1.000**	
1	12 Secretary		1.000				
	Subtotal		**22.800**	**7.000**	**14.000**	**14.000**	
	443 Business Information Services						
1	O Supervisor		1.000	2.000	2.000	**2.000**	
1	K Supervisor				3.000	**3.000**	
1	J Operations Development Manager		4.500	4.500	1.000	**1.000**	
1	27 Applications Developer III				1.000	**1.000**	
1	27 Development Proj Manager				2.500	**2.500**	
1	25 Applications Developer II		5.000	6.000	5.000	**5.000**	
1	25 Technical Analyst		2.000	3.000	1.000	**1.000**	
1	23 Applications Developer I		2.000	2.000	2.000	**2.000**	
1	23 Applications Specialist I		1.000	1.000	1.000	**1.000**	
1	15 Fiscal Assistant II			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**	
	Subtotal		**16.500**	**21.500**	**21.500**	**21.500**	
	Total Positions		**56.300**	**55.300**	**55.300**	**54.300**	**(1.000)**