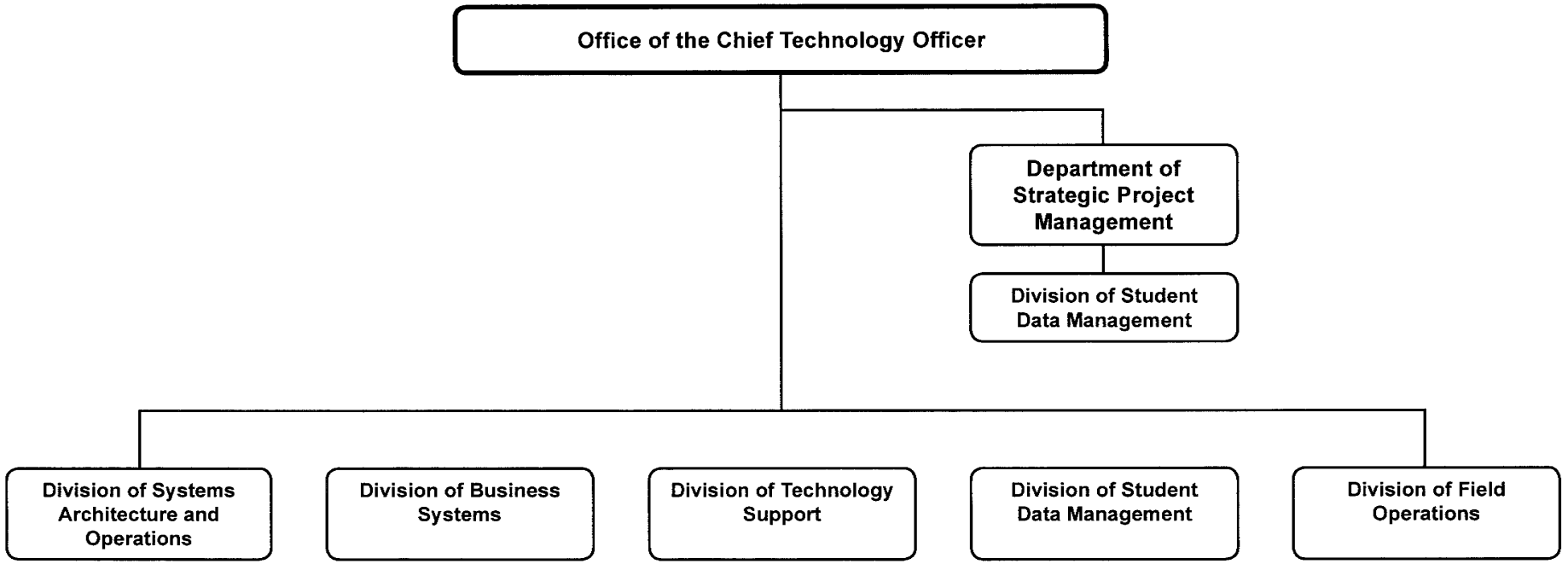
Chapter 5
Office of the Chief Technology Officer

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

OBJECT OF EXPENDITURE	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	FY 2009 BUDGET	FY 2009 CHANGE
POSITIONS					
Administrative	20.000	21.000	21.000	18.000	(3.000)
Professional	5.500	6.000	6.000	6.000	
Supporting Services	139.800	138.300	138.550	136.550	(2.000)
TOTAL POSITIONS	**165.300**	**165.300**	**165.550**	**160.550**	**(5.000)**
01 SALARIES & WAGES					
Administrative	$2,267,346	$2,662,165	$2,662,165	$2,398,561	($263,604)
Professional	522,877	578,753	589,170	632,668	43,498
Supporting Services	9,777,569	10,679,429	10,706,131	10,804,490	98,359
TOTAL POSITION DOLLARS	**12,567,792**	**13,920,347**	**13,957,466**	**13,835,719**	**(121,747)**
OTHER SALARIES					
Administrative					
Professional	56,538	11,330	11,330	34,500	23,170
Supporting Services	496,636	378,324	378,324	437,852	59,528
TOTAL OTHER SALARIES	**553,174**	**389,654**	**389,654**	**472,352**	**82,698**
TOTAL SALARIES AND WAGES	**13,120,966**	**14,310,001**	**14,347,120**	**14,308,071**	**(39,049)**
02 CONTRACTUAL SERVICES	**6,353,518**	**8,924,330**	**8,924,410**	**8,395,549**	**(528,861)**
03 SUPPLIES & MATERIALS	**617,082**	**693,880**	**718,967**	**832,612**	**113,645**
04 OTHER					
Staff Dev & Travel	209,083	236,633	243,411	349,652	106,241
Insur & Fixed Charges	27,481	42,074	48,369	48,369	
Utilities	3,148,801	3,263,193	3,263,193	3,248,254	(14,939)
Grants & Other	707,373	534,420	538,666	610,008	71,342
TOTAL OTHER	**4,092,738**	**4,076,320**	**4,093,639**	**4,256,283**	**162,644**
05 EQUIPMENT	**1,323,227**	**1,515,976**	**1,515,976**	**1,761,368**	**245,392**
GRAND TOTAL AMOUNTS	**$25,507,531**	**$29,520,507**	**$29,600,112**	**$29,553,883**	**($46,229)**

Office of the Chief Technology Officer—Overview



F.T.E. Positions 160.5

(*In addition, there are 17.5 Capital Budget positions, and 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)	2.0
Assistant to the Associate Superintendent (N)	1.0
Coordinator (N)	1.0
Fiscal Specialist II (25)	1.0
IT Systems Specialist II (18-25)	3.0
Administrative Services Manager 1 (17)	1.0
Fiscal Assistant III (16)	1.0
Administrative Secretary II (15)	1.0

F.T.E. Positions 12.0

Office of the Chief Technology Officer—411/965

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 reflect the requirements and priorities of our stakeholders, are developed following best practices for project management, and 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

The OCTO is comprised of one department and five divisionsóthe 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, coordinates statewide educational technology efforts, and manages technology-related federal programs;two divisions providing technology support and modernization, Field Operations and Technology Support; and three divisions supporting student and business technologies, Student Data Management, Business Systems, and Systems Architecture and Operations.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 program and project management processes 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.The department manages technology grants: Title V-A Innovative Programs and Title II-D Educational Technology. These grants support 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 employees.The department continuously cultivates strategic partnerships with vendors that focus on improving product and service prices, quality, and on-time delivery.

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, parents, and staff.The responsibilities of these divisions are closely aligned with the Technology Modernization (Tech Mod) project funded through the Capital Improvements Program that refreshes technology in schools and offices. They provide telecommunications systems, field installation and project management, research and development, on-site technical support to schools and offices, Help Desk services, and customer relationship management. These divisions support instruction and student learning by designing, developing, delivering, supporting, and evaluating technology in schools and offices.

The divisions supporting student and business technologies lead the collaboration, and coordination necessary to ensure that information technology systems are developed and implemented based on MCPS end user and reporting requirements consistent with systems engineering best practices. These divisions provide services through two organizational areasóapplications 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 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 in 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 assessment, 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 stu-

dent 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 Capital Improvements Program (CIP) were completed.

Recent Accomplishments

OCTO accomplishments in FY 2008 focused on developing a high performing office that consistently executes the priorities of our customers and facilitates an ongoing customer engagement and relationship management process. In FY 2007, OCTO launched the Montgomery County Association of Administrative and Supervisory Personnel Technology Advisory Group and continued participation in the Middle School Reform Steering Committee and Grading and Reporting Implementation Team.

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.

Evaluation of work processes led to the continuous improvement in the accuracy and timeliness of invoice payments and the required reporting for federally-funded programs. In FY 2008, invoices for telecommunication services were monitored for accuracy for approximately $3.3 million in payments. Additionally, the office managed $3.7 million in federal program funds passed through MSDE and applied for telecommunication rebates of $3.4 million for E-Rate, the federal "Education-Rate," from the Schools and Libraries Universal Services Program.

During FY 2008, MCPS completed migration of its 30-year-old legacy systems to a state-of-the-art environment consistent with industry standards. Plans continued for a modernized central computer facility designed to meet industry standards and provide for robust and reliable operations of technology systems,

In support of the MCPS Board of Education Policy, IKA, *Grading and Reporting,* a new electronic grade book was implemented in Grades 1 and 2 in selected schools currently implementing standards-based grading and reporting tools. Full implementation of the electronic grade book for selected secondary schools was completed in FY 2008. Staff also provided project management, infrastructure, and data management for the implementation of the new special education system, Encore. The data warehouse system functionality was expanded to include self-service reporting for identified users in the schools and central office. Data support was provided for Middle School Integrated Reform Initiative, through the development of data provisioning processes and the administration of new classroom management technologies. The Professional Development Online (PDO) system was expanded to increase system functionality for managing professional development for all staff.

Ongoing efforts to improve the quality of services resulted in streamlining and automating financial systems so that users are able to conduct their work more efficiently. Phase II of the new Financial Management System (FMS) was implemented adding mileage and travel expense reimbursements, invoice payment, vendor inquiry of payments and orders, student online fee payment, and the school activity funds management to the existing services.

In FY 2008, the MCPS disaster recovery plan that ensures the continuous operation of mission-critical systems in the event of a lengthy interruption of services due to storms, fires, or other disasters was expanded to include additional mission-critical enterprise systems. Disaster recovery plans for school-level technology systems were finalized.

School-based technology systems were refreshed with the installation of over 9,000 computers and related instructional software in 11 high schools, 11 middle schools, 22 elementary schools, and 3 special centers as part of the Technology Modernization (Tech Mod) program. This included the opening of Arcola Elementary School and the completed renovations of Parkland Middle School, Richard Montgomery High School, and College Gardens Elementary School. In support of Middle School Reform, 14 middle schools were equipped with 21st Century Innovative classroom technology and building-wide wireless capability. Staff collaborated with other MCPS offices to align technology refreshment for computers received through Tech Mod, grants, and programs to improve availability of technology in support of instructional programs.There were over 101,400 requests for services and support from schools and offices opened using the Web-based Unicenter Service Desk (USD) system. This represents a 15 percent increase in use of USD to request support for technology applications, hardware repairs, and user support. The Help Desk resolved over 77 percent of the requests at first contact.

In FY 2008, OCTO received funding to lead two competitive grants under Title II-D Enhancing Education Through Technology under the *NCLB*. One of the grants funds a statewide consortium for developing high school technology proficiency standards and the second is a partnership with all 24 school districts in the state to establish a consistent statewide measure for determining technology literacy by the end of Grade 8.

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 system-wide 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 ianytime, anywhereî 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 department 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 2009 request for this office is $6,236,153 an increase of $1,093,551 from the current FY 2008 budget of $5,142,602. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$16,062
The negotiated agreements with employee organizations increase the salary costs of employees in this office by $57,228. There is a decrease of $41,166 in continuing salary costs. Step or longevity increases for current employees are offset by reductions for staff turnover.

Realignments—$1,006,720
FY 2008 Reorganization—$847,029
The Office of the Chief Technology Officer has reorganized for FY 2008 to flatten the management structure of the office. As a result of this reorganization the budget for the Office of the Chief Technology Officer is increased by a 1.0 supervisor and 3.0 IT systems specialist positions and $451,459, and $525,527 in program supplies, software, consultants, contractual services, lease/purchase, and equipment from other units within the office. There is a realignment of a 1.0 supervisor position and $129,957 from this office to the Office of School Performance.

FY 2009 Realignments—$159,691
The budget includes realignments for FY 2009. There are a number of realignments among and between the units under the Office of the Chief Technology Officer to fund higher priority programs. There are realignments from other units totaling $159,691 to increase funding for contractual services for telecommunications and staff training support.

Other—$390,248
An additional $385,128 is budgeted for a projected rate change for contractual maintenance for security software. There is also an increase in supporting services part-time funding of $5,120 to provide support for security account administration.

Reductions—($319,479)
Executive Director Position—($115,973)
Reductions are necessary in the budget to fund higher priority program needs. There is a reduction of a 1.0 executive director position and $115,973. This position has remained vacant this year and other department staff has absorbed the workload.

Administrative Secretary—($68,607)
There is a reduction of a 1.0 administrative secretary and $59,389. This position has remained vacant this year and other department staff has absorbed the workload.

Administrative Services Manager—($70,512)
There is a reduction of a 1.0 administrative services manager and $59,389. This position has remained vacant this year and other department staff has absorbed the workload.

Contractual Services—($64,387)
There is a reduction in contractual services for FY 2009 of $64,387 for the usage and data protection monitoring system for web and email filtering.

Budget Explanation IDEA—Early Intervening Services—965

As a requirement for receiving funds under the *Individuals with Disabilities Act,* MCPS is now 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. There is a decrease of $92,562 in contractual services from the grant and funds are shifted to the Division of Student Data Management.

Project's Funding History

Sources	FY 2008 Projected 7/1/07	FY 2008 Received 11/30/07	FY 2009 Projected 7/1/08
Federal	$216,000	$216,000	$123,438
State			
County			
Total	$216,000	$216,000	$123,438

Office of Chief Technology Officer - 411

Sherwin Collette, Chief Technology Officer

Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	12.000	11.000	11.000	**12.000**	1.000
Position Salaries	$1,121,304	$1,094,304	$1,094,304	**$1,175,529**	$81,225
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time		1,830	1,830		(1,830)
Supporting Services Part Time		19,823	19,823	**26,190**	6,367
Other					
Subtotal Other Salaries	5,113	21,653	21,653	**26,190**	4,537
Total Salaries & Wages	1,126,417	1,115,957	1,115,957	**1,201,719**	85,762
02 Contractual Services					
Consultants		7,124	7,124	**7,124**	
Other Contractual		138,446	138,446	**865,363**	726,917
Total Contractual Services	37,012	145,570	145,570	**872,487**	726,917
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		25,000	25,000	**15,000**	(10,000)
Other Supplies & Materials		642	642	**23,173**	22,531
Total Supplies & Materials	23,115	25,642	25,642	**38,173**	12,531
04 Other					
Local Travel		8,047	8,047	**2,432**	(5,615)
Staff Development		75,833	75,833	**238,001**	162,168
Insurance & Employee Benefits					
Utilities		3,263,193	3,263,193	**3,248,254**	(14,939)
Miscellaneous		468,658	468,658	**540,000**	71,342
Total Other	3,851,547	3,815,731	3,815,731	**4,028,687**	212,956
05 Equipment					
Leased Equipment				**52,650**	52,650
Other Equipment		39,702	39,702	**42,437**	2,735
Total Equipment	39,258	39,702	39,702	**95,087**	55,385
Grand Total	$5,077,349	$5,142,602	$5,142,602	**$6,236,153**	$1,093,551

Office of Chief Technology Officer - 411

Sherwin Collette, Chief Technology Officer

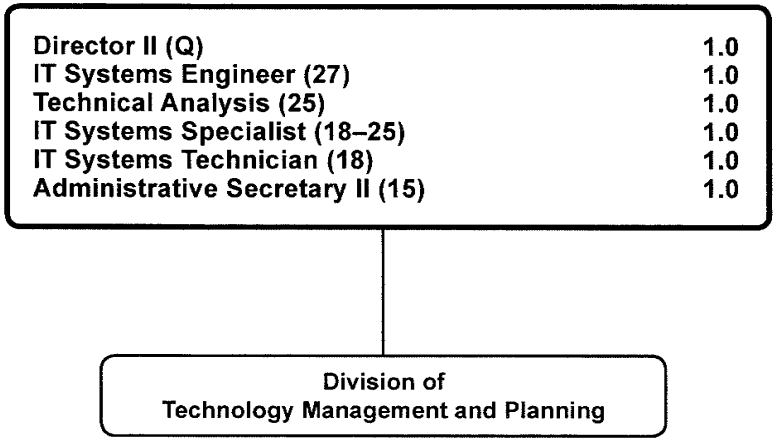
CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
1	Chief Technology Officer		1.000	1.000	1.000	**1.000**	
1	P Executive Assistant		2.000	1.000	1.000		(1.000)
1	P Executive Director		1.000	1.000	1.000		(1.000)
1	O Supervisor		2.000	2.000	2.000	**2.000**	
1	N Asst. to Assoc Supt					**1.000**	1.000
1	N Coordinator					**1.000**	1.000
1	25 IT Systems Specialist					**3.000**	3.000
1	25 Fiscal Specialist II		1.000	1.000	1.000	**1.000**	
1	19 Admin Services Manager II		1.000	1.000	1.000		(1.000)
1	17 Copy Editor/Admin Sec		1.000	1.000	1.000		(1.000)
1	17 Admin Services Manager I					**1.000**	1.000
1	16 Fiscal Assistant III		1.000	1.000	1.000	**1.000**	
1	15 Administrative Secretary II		2.000	2.000	2.000	**1.000**	(1.000)
	Total Positions		**12.000**	**11.000**	**11.000**	**12.000**	**1.000**

IDEA - Early Intervening Services - 965

Sherwin Collette, Chief Technology Officer

Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 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		216,000	216,000	**123,438**	(92,562)
Total Contractual Services	216,000	216,000	216,000	**123,438**	(92,562)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office					
Other Supplies & Materials					
Total Supplies & Materials	55,218				
04 Other					
Local Travel					
Staff Development					
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other					
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$271,218	$216,000	$216,000	**$123,438**	($92,562)

Department of Strategic Project Management and Planning



F.T.E. positions 6.0

Department of Strategic Project Management and Planning—421

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

Mission

The Department of Strategic Project Management and Planning was created as a Center of Excellence for project management. The center provides the knowledge, processes, and tools needed to consistently meet customer expectations for high quality, reliable technology solutions. The focus is to develop a common language and practices that engage customers and stakeholders and empower project teams. The department ensures projects are aligned with the strategic technology plan and focused on delivering the right solutions at the right time.

Major Functions

The Department of Strategic Project Management and Planning leads the integration of project management, strategic technology planning, and continuous improvement processes throughout the Office of the Chief Technology Officer (OCTO). The department oversees the use of effective project management processes and tools and supports continuous collaboration and communication with customers in delivering technology solutions. This is accomplished by standardizing the use of effective project management practices, implementing a strong customer engagement and relationship model, and incorporating continuous improvement processes for performance excellence. Among the responsibilities of this new department are developing strategic technology plans that focus on educational program needs, incorporating Malcolm Baldrige Educational Criteria for Performance Excellence and Six Sigma methodologies for continuous improvement into OCTO, and building the capacity of staff to operate as high performing teams.

The department consists of the Division of Technology Management and Planning (DTMP) and Quality Assurance team. DTMP leads the design of the Montgomery County Public School's (MCPS) strategic technology plan to identiFY technology solutions and systems that support the MCPS strategic plan, directs strategic and tactical planning for the Technology Modernization project funded through the Capital Improvements Program (CIP), participates in the development of statewide technology programs, and applies for funding and coordinates educational technology grant programs. The Title II-D Enhancing Education Through Technology and Title V Innovative Programs grants support the innovative use of technology in classroom instruction and student learning, such as Middle School Reform technology, technology magnet school programs, and professional development for information technology systems support employees. The division also manages the application and reimbursement program of the Schools and Libraries Universal Service E-Rate discount program. This program provides discounts to schools on eligible telecommunications and Internet related costs under the Telecommunications Act of 1996.

The Quality Assurance team ensures that industry standard processes, tools, and best practices in project management are shared and used consistently in the planning, execution, and deployment of technology solutions. The team advances system testing processes to veriFY and validate that customers' needs are met with solutions that work reliably and address identified requirements.

Trends and Accomplishments

Providing 21st Century technology solutions that support teaching and learning is at the heart of the mission of OCTO and this department. Responding to the demands for accountability and student achievement requires the ability to quickly transform student data into actionable information easily accessible by teachers. 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. The need for immediate access to network-based resources, the expectation that systems will be user-friendly and safe, and the ability to deploy new systems rapidly all have a major impact on this department and its planning.

Students, teachers, and the community have an expectation that technology solutions will be available to meet their information and communication needs. However, many of the systems that have supported educational and business processes are at the end of their life cycle. Mainframe applications developed in the 70's and 80's no longer can serve the needs of a digital society. The need to retool educational technology systems has accelerated. And, while the systems introduced in the 70's have evolved over the years, the expectation for new technology solutions is that they can be purchased off the shelf and delivered instantly.

The demand for faster, better, and cheaper solutions that meet customer expectations require 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.

Trends Accomplishments

In FY 2008, the department led the implementation of a project management framework establishing a project governance model and project management system to use within OCTO. The project governance model clearly defines responsibilities for strategic, tactical, and operational decision-making required throughout projects. The governance model creates a structure for collaboration and communication between educational and technical staff to achieve desired results. The project management system defines five project phases and establishes tollgates between each phase. The tollgates provide a process for progress review and timely decision-making throughout the project. Rigor and standardization have been added to processes and tools including those associated with soliciting and incorporating stakeholder feedback, procuring technology systems, and implementing change management. Use of these processes and tools helps ensure a common understanding throughout the organization of how projects are managed and establishes a common project management language that supports collaboration and communication. These changes facilitate

improved performance and results in the delivery of technology solutions and services.

Department staff created a strategic technology plan that supports MCPS priorities. The strategic technology plan reflects the priorities contained in *Our Call to Action: Pursuit of Excellence*, as well as the requirements of students, teachers, principals, administrators, parents, and other stakeholders. This plan was a deliberate outgrowth of the effort to create the FY 2009–2014 Technology Modernization project plan for the CIP. For both of these long-term plans, extensive interviews were conducted with stakeholders to identiFY requirements, including students, parents, teachers, principals, administrators, supporting services staff, and educational program directors. The strategic technology plan describes the comprehensive vision and goals for technology In MCPS. The six-year Technology Modernization project plan describes the use of capital budget funds to refresh technology equipment, software, and infrastructure for schools and offices on a four-year cycle. In FY 2008, the Technology Modernization project provided for the refreshment of technology in 47 schools, installing 9,068 computers and related systems. Fourteen middle schools received interactive white boards, student response systems, and wireless capability as part of the Middle School Integrated Reform Initiative.

The department staff participated in various advisory groups for stakeholder collaboration. The Montgomery County Association of Administrative and Supervisory Personnel (MCAASP) Principal Advisory Group was launched. This advisory group consists of elementary, middle, and high school principal representatives, and it has provided valuable input and feedback on school-based technology requirements. Staff represented OCTO on the Integrated Reform Initiative for middle school reform project directors' team, Grading and Reporting Implementation Team, Job-Banding Career Advancement Work Group, and the Supporting Services Professional Growth System Implementation Team.

Department staff participated in three Six Sigma projects focused on continuous improvement key areas. The FY 2008 projects undertaken included change management, technology refreshment, and support processes.

DTMP 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. The division also supported procurement of technology equipment, software, and services funded through the $18.8 million Tech Mod program and the $3.3 million Telecommunication Services program. Administrative efforts provided MCPS with E-Rate telecommunication rebates totaling approximately $1.3 million for FY 2007.

In FY 2008, DTMP applied for and received funding to lead two competitive grants under Title II-D—Enhancing Education Through Technology under the *NCLB*. One of the grants funds a state-wide consortium for developing high school technology proficiency standards and the second is a partnership with all 24 school districts in the state to establish a consistent statewide measure for determining technology literacy by the end of Grade 8.

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, a 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.
- 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 *Children's Internet Protection Act* requires that school systems receiving funds from Title II 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 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 Web sites 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.

Performance Measures

Performance Measure: The percent of customers satisfied with their level of involvement in technology solutions implemented MCPS-wide.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
new	75%	85%

Explanation: This is a measure of customer perception based on responses received, indicating stakeholder satisfaction with the extent to which their input and feedback was solicited and incorporated into products and services by project teams

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

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
new	85%	90%

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.

Budget Explanation Department of Strategic Project Management and Planning—421

The FY 2009 request for this department is $743,571, an increase of $534,832 from the current FY 2008 budget of $208,739. An explanation of this change follows.

Continuing and Negotiated Salary Costs—25,887
The negotiated agreements with employee organizations increase the salary costs of employees in this department by $25,527. There is an increase of $360 in continuing salary costs to reflect step or longevity increases for current employees. Step or longevity increases for current employees are offset by reductions for staff turnover.

FY 2008 Reorganization—$508,945
The Office of the Chief Technology Officer has reorganized for FY 2008 to flatten the management structure of the office. As a result, the budget for the Department of Strategic Project Management and Planning is increased by a 1.0 IT systems engineer and $93,725, a 1.0 IT systems specialist and $70,327, a 1.0 IT systems technician and $65,048, and a 1.0 technology analysis and $86,919 that are realigned from other OCTO units. There are realignments from other units totaling $192,926 to increase contractual services ($116,029), contractual maintenance ($31,372), office supplies ($1,500), software supplies ($19,402), travel for staff development ($1,000), and $23,623 in lease/purchase.

Dept. of Strategic Project Mamagement and Planning - 421

Doreen M. Heath, Director II

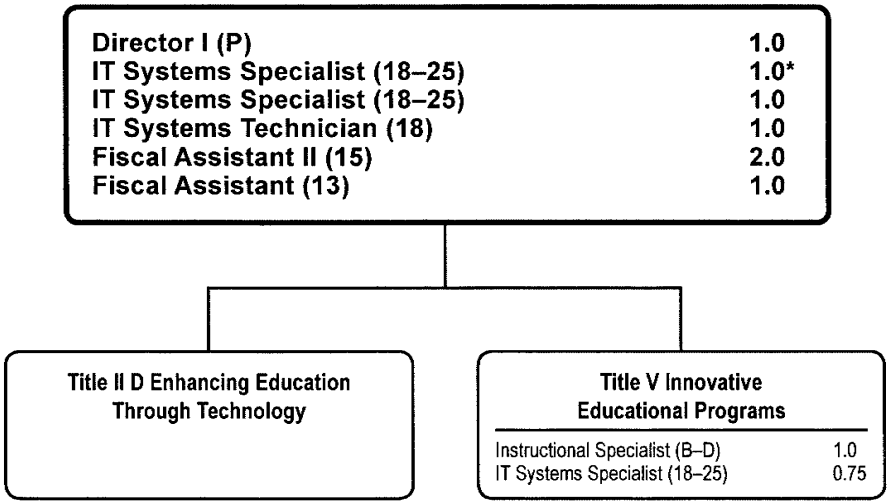
Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	2.000	2.000	2.000	**6.000**	4.000
Position Salaries	$171,198	$194,100	$194,100	**$536,006**	$341,906
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	171,198	194,100	194,100	**536,006**	341,906
02 Contractual Services					
Consultants					
Other Contractual				**147,401**	147,401
Total Contractual Services				**147,401**	147,401
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		2,715	2,715	**4,215**	1,500
Other Supplies & Materials		10,723	10,723	**30,125**	19,402
Total Supplies & Materials	2,950	13,438	13,438	**34,340**	20,902
04 Other					
Local Travel		473	473	**473**	
Staff Development		728	728	**1,728**	1,000
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	703	1,201	1,201	**2,201**	1,000
05 Equipment					
Leased Equipment				**23,623**	23,623
Other Equipment					
Total Equipment				**23,623**	23,623
Grand Total	$174,851	$208,739	$208,739	**$743,571**	$534,832

Dept. of Strategic Project Mamagement and Planning - 421

Doreen M. Heath, Director II

CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
1	Q Director II		1.000	1.000	1.000	**1.000**	
1	27 IT Systems Engineer					**1.000**	1.000
1	25 IT Systems Specialist					**1.000**	1.000
1	25 Technical Analyst					**1.000**	1.000
1	18 IT Systems Technician					**1.000**	1.000
1	15 Administrative Secretary II		1.000	1.000	1.000	**1.000**	
	Total Positions		**2.000**	**2.000**	**2.000**	**6.000**	**4.000**

Division of Technology Management and Planning



F.T.E. Positions 7.75

(*In addition, there is a 1.0 Capital Budget position shown on this chart)

Division of Technology Management and Planning—425/918/997

Melissa J. Woods, Director I 240-632-6980

Mission

The mission of the Division of Technology Management and Planning (DTMP) is to plan and monitor the educational technology services that are essential to the future success of our students. This division develops plans for creative educational technology solutions and monitors the cost effective use of resources.

Major Functions

The DTMP leads the design of a strategic vision and plan for the use of technology in the Montgomery County Public Schools (MCPS), directs strategic and tactical planning of the capital project for technology refreshment, manages technology-related federal programs, and forms strategic partnerships with technology vendors. The division works in close collaboration with staff and stakeholders at the local and state level to ensure the right technologies are available to support student learning and staff efficiency.

The DTMP, in collaboration with the schools and other MCPS offices and departments creates the *MCPS Strategic Technology Plan* that is required under the state's *Bridge to Excellence Master Plan*. Revisions to the current strategic plan are underway to ensure the MCPS technology plan is aligned with the *Maryland Educational Technology Plan for the New Millennium: 2007–2012* and *Our Call to Action: Pursuit of Excellence*. The revised FY 2009–2014 strategic technology plan will outline agreed upon technology needs and affordable solutions to infusing technology into instruction, student learning, and business processes.

This division manages federal E-Rate and *No Child Left Behind* funding. The Schools and Libraries Universal Service E-Rate program provides rebates for eligible telecommunications, internal connection, and Internet-related costs under the *Telecommunications Act of 1996*. The *No Child Left Behind Act* of 2001 provides funding allocations and grants under Title V Innovative Programs and Title II-D Enhancing Education Through Technology (Educational Technology) that help support the school system's technology efforts.

The division continuously cultivates strategic partnerships with vendors that focus on improving product and service prices, quality, and on-time delivery. Through these partnerships, DTMP collaborates with vendors on specialized products and services at unique discount rates. Because of these individualized agreements, DTMP must monitor vendor invoices to ensure prices are discounted. This requires that division staff focus on improving the internal processes used to analyze and request payment of invoices.

Trends and Accomplishments

Due to reductions in federal funding for Title V-A Innovative Programs and Title II-D Educational Technology, staff numbers and program activities have had to be reduced. However, this rethinking of the use of grants has led to more creative uses as this division submits and seeks approval of it's applications for funding through the Maryland State Department of Education (MSDE). The Title V-A program now funds staff that support innovative uses of technology in classroom instruction and student learning, such as Middle School Reform technology and technology magnet programs. The Title II-D program is now providing innovative technologies for in-school pilots and professional development for information technology system support (ITSS) employees that support technology users and infrastructure in schools.

Other trends include managing the increasing number of vendors that are offering technology products and services and building strong partnerships to ensure our educational and business needs are met. 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 to analyze technology and telecommunication invoices to make sure they reflect the agreed-upon pricing.

Recent division accomplishments include gathering requirements and creating the FY 2009–20014 Technology Modernization project plan for the Capital Improvements Program (CIP). The Technology Modernization project provides over $18 million in funding each year for schools and offices to refresh their technology equipment, software, and infrastructure on a four-year cycle.

Another major accomplishment of the division was negotiating a settlement of $120,000 in credits for over-billed telecommunication services. Invoicing problems are common for the larger international telecommunication vendors whose services are regulated by both state and national communication commissions. Frequent rate changes negatively impact the accuracy of monthly invoices and require close monitoring of the bills received prior to payment. The FY 2007 credits received from the vendor reflect the significant improvement in how DTMP is working with vendors to ensure MCPS receives its services at the lowest possible rates.

DTMP also supported the rollout of technologies for Middle School Reform. Division staff funded through Title V-A Innovative Programs participated on the design team for Middle School Reform technology training and curriculum development. DTMP staff also procured the technology goods and services for the schools in Phase I of this reform effort and provided multiyear cost analyses for phasing in the remaining middle schools over the following three years. The division also supported procurement of technology equipment, software, and services funded through the $18.8 million Technology Modernization program and the $3.3 million telecommunication services program.

DTMP evaluation of work processes has led to continuous improvements in the accuracy and timeliness of invoice payments and required reporting for federally-funded programs. In FY 2008, the division monitored the accuracy of invoices for approximately $3.3 million in payments for telecommunication services. DTMP also managed $3.7 million in federal program funds passed through MSDE and applied

for telecommunication rebates of $3.4 million for E-rate, or the federal "Education-Rate," from the Schools and Libraries Universal Services Program.

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.
- 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, a 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.
- Activities funded through Title V, Innovative Programs, must comply with state and federal laws and regulations; and OCTO must plan for participation of children enrolled in nonpublic schools.
- The *Children's Internet Protection Act* requires that school systems receiving funds from Title II 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. The *Deleting Online Predators Act of 2006* requires schools and libraries receiving E-Rate universal service support to protect minors from commercial social networking Web sites and chat rooms.

Strategies

- Create a multiyear technology road map identifying strategic plans for school-based software and hardware technologies, telecommunications, network operating systems, and support system firmly based in industry standards and instructional research.
- Support the Technology Modernization project providing access to high capability computers in schools and offices.
- Apply Baldrige principles in developing management strategies and aligning resources and services to accomplish the OCTO strategic plan. Involve customers and stakeholders in decisions on the use of resources.
- Collaborate with the Office of Curriculum and Instructional Programs on the inclusion of technology as a tool to support instruction and student assessment.
- Improve project management through implementation of effective strategies for chartering projects, team effectiveness, and organizational alignment.
- Improve all key work processes to optimize performance.
- Provide employees with the knowledge, skills, and resources they need to excel.
- Ensure the department's products and services meet the needs of our customers and user community.
- Build relationships that increase customer loyalty and satisfaction.
- Cultivate strategic partnerships with vendors that focus on improving product and service prices, quality, and on-time delivery.

Performance Measures

Performance Measure: The percentage of telecommunication invoices that are approved for payment on time.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
84.1%	90%	95%

Explanation: This measure reflects the timeliness of payments and avoidance of late payment charges.

Performance Measure: The percentage of vendor agreements that align with the E-Rate program year.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
70.6%	100%	100%

Explanation: This measure reflects improvements in procurement processes. Agreements that are aligned with E-Rate program requirements improve the school system's eligibility for E-Rate rebates.

Budget Explanation
Division of Technology Management and Planning—425

The FY 2009 request for this division is $469,150, an increase of $55,373 from the current FY 2008 budget of $413,777. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$22,936
The negotiated agreements with employee organizations increase the salary costs of employees in this division by $21,992. There is an increase of $944 in continuing salary costs to reflect step or longevity increases for current employees.

FY 2008 Reorganization—$46,048
The Office of the Chief Technology Officer has reorganized for FY 2008 to flatten the management structure of the office. As a result, the budget for the Division of Technology Management and Planning is increased by a 1.0 fiscal assistant position and $46,048 that is realigned from the Division of Field Operations.

Reductions—($13,611)
Supporting Services Part-time—($13,611)
Reductions are needed in the budget to fund higher priority program needs. There is a $13,611 reduction in supporting services part-time for FY 2009.

Budget Explanation Title II Enhancing Education Through Technology—918

The FY 2009 request for this grant program is $230,587, resulting in no change from the current FY 2008 budget of $230,587.

Project's Funding History

Sources	FY 2008 Projected 7/1/07	FY 2008 Received 11/30/07	FY 2009 Projected 7/1/08
Federal	$204,491	$230,587	$230,587
State			
County			
Total	$204,491	$230,587	$230,587

Budget Explanation Title V Innovative Education Program—997

The FY 2009 request for this program is $225,187 resulting in no change from the current FY 2008 budget of $225,187.

Project's Funding History

Sources	FY 2008 Projected 7/1/07	FY 2008 Received 11/30/07	FY 2009 Projected 7/1/08
Federal	$171,678	$225,187	$225,187
State			
County			
Total	$171,678	$225,187	$225,187

Division of Technology Management and Planning - 425

Melissa J. Woods, Director I

Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	6.000	5.000	5.000	**6.000**	1.000
Position Salaries	$378,580	$376,247	$376,247	**$444,403**	$68,156
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		30,182	30,182	**17,399**	(12,783)
Other					
Subtotal Other Salaries	486	30,182	30,182	**17,399**	(12,783)
Total Salaries & Wages	379,066	406,429	406,429	**461,802**	55,373
02 Contractual Services					
Consultants					
Other Contractual					
Total Contractual Services					
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		3,000	3,000	**3,000**	
Other Supplies & Materials					
Total Supplies & Materials		3,000	3,000	**3,000**	
04 Other					
Local Travel				**2,348**	2,348
Staff Development				**2,000**	2,000
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other				**4,348**	4,348
05 Equipment					
Leased Equipment					
Other Equipment		4,348	4,348		(4,348)
Total Equipment		4,348	4,348		(4,348)
Grand Total	$379,066	$413,777	$413,777	**$469,150**	$55,373

Division of Technology Management and Planning - 425

Melissa J. Woods, Director I

CAT		DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
1	P	Director I		1.000	1.000	1.000	**1.000**	
1	25	IT Systems Specialist		2.000	1.000	1.000	**1.000**	
11	18	IT Systems Technician		1.000	1.000	1.000	**1.000**	
1	15	Fiscal Assistant II		2.000	2.000	2.000	**2.000**	
11	13	Fiscal Assistant I					**1.000**	1.000
	Total Positions			**6.000**	**5.000**	**5.000**	**6.000**	**1.000**

Title II Enhancing Education Though Technology - 918

Melissa J. Woods, Director I

Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)					
Position Salaries					
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time		9,500	9,500	**9,500**	
Supporting Services Part Time					
Other					
Subtotal Other Salaries	56,538	9,500	9,500	**9,500**	
Total Salaries & Wages	56,538	9,500	9,500	**9,500**	
02 Contractual Services					
Consultants					
Other Contractual		170,204	170,231	**170,231**	
Total Contractual Services	31,927	170,204	170,231	**170,231**	
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials		6,800	25,266	**25,266**	
Office					
Other Supplies & Materials					
Total Supplies & Materials	971	6,800	25,266	**25,266**	
04 Other					
Local Travel					
Staff Development		11,870	17,698	**17,698**	
Insurance & Employee Benefits		760	760	**760**	
Utilities					
Miscellaneous		5,357	7,132	**7,132**	
Total Other	42,301	17,987	25,590	**25,590**	
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$131,737	$204,491	$230,587	**$230,587**	

Title V Innovative Education Programs - 997

Melissa J. Woods, Director I

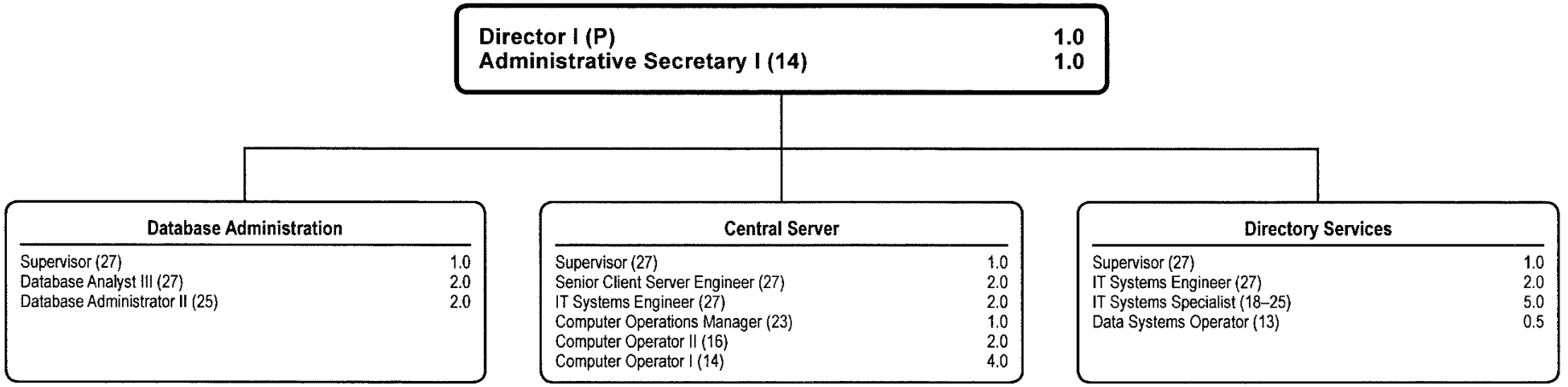
Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	1.000	1.500	1.750	**1.750**	
Position Salaries	$60,499	$111,659	$148,778	**$148,778**	
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	60,499	111,659	148,778	**148,778**	
02 Contractual Services					
Consultants					
Other Contractual		172	225	**225**	
Total Contractual Services		172	225	**225**	
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials		12,139	19,007	**19,007**	
Office		1,447	1,200	**1,200**	
Other Supplies & Materials					
Total Supplies & Materials	16,418	13,586	20,207	**20,207**	
04 Other					
Local Travel		450	1,400	**1,400**	
Staff Development					
Insurance & Employee Benefits		41,314	47,609	**47,609**	
Utilities					
Miscellaneous		4,497	6,968	**6,968**	
Total Other	59,277	46,261	55,977	**55,977**	
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$136,194	$171,678	$225,187	**$225,187**	

Title V Innovative Education Programs - 997

Melissa J. Woods, Director I

CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
3	BD Instructional Specialist		.500	1.000	1.000	**1.000**	
3	25 IT Systems Specialist					**.750**	.750
3	22 Technical Help Desk Spec II		.500	.500	.750		(.750)
	Total Positions		**1.000**	**1.500**	**1.750**	**1.750**	

Division of Systems Architecture and Operations



F.T.E. Positions 27.5

Division of Systems Architecture and Operations—446/447/448/451

Cary Kuhar, Director I 301-279-3581

Mission

The mission of the Division of Systems Architecture and Operations (DSAO) is to manage the technical enterprise configurations for information systems and to facilitate the implementation of effective, secure, and reliable hardware and software solutions. This division 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 division accomplishes its mission through three units: Database Management, Central Server, and Directory Services. The Database Management 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 Central Server Unit 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 Directory Services Unit is responsible for network systems architecture, server management and support in non-school-based offices, systemwide user account management, enterprise storage management, enterprise backup solutions, and management of the MCPS e-mail system.

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 division accomplishments include the implementation of hardware and database systems for the new Financial Management 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 an MCPS portal; expansion of the enterprise storage management and backup solution; and wide-scale upgrades in hardware and software versions. In addition, the division also provided large-scale printing services for both student and business systems, including approximately 137,000 report cards each reporting period and 1,500 employee paychecks per pay period. Employee pay stubs are now available electronically, eliminating the need for pay stub printing for employees using direct deposit. During FY 2008, the division upgraded the server equipment used by the Online Achievement and Reporting System (OARS), which went into production for all secondary schools in the fall of 2007.

Planned upgrades for the MCPS Data Center continued during FY 2008 with the procurement and installation of a replacement of two remaining 25-year-old air conditioning units. This year the division continued to collaborate with the Department of Facilities Management in 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. Implementation of the server consolidation program continued through FY 2008, including the implementation of a virtual server testing environment to reduce the number of test 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). Migration of the remaining printing and other batch programs from the mainframe to more up-to-date platforms continues to be a priority.

In FY 2008, databases for student systems applications, the retirement system, and the human resources system were upgraded to the latest and most efficient versions that allow for faster access to data for students, faculty, and staff. The division implemented a centralized disk and tape backup solution for most of the mission critical systems in the Data Center. The new backup system is not only faster, but also allows staff to maintain centralized control of backup operations with little or no downtime for the users.

Major Mandates

- The federal *No Child Left Behind Act of 2001* and the state's *Bridge to Excellence in Public Schools Act* mandate data collection and distribution that require up-to-date infrastructure and equipment in all schools, as well as access to system information.
- *Our Call to Action: Pursuit of Excellence* strategies require up-to-date infrastructure and central services.
- Expectations of the Maryland Core Learning Goals and alignment with the Maryland High School Assessments and Maryland School Assessments require a modern infrastructure for delivery of online tests and courses.
- The MCPS Board of Education Policy, IGS, Educational Technology, requires that all students and staff members have easy, equitable access to information and communication technologies.

- The Maryland Educational Technology Plan for the New Millennium: 2007–2012, requires that schools be provided with networks, hardware/software, and technical services that support student and staff use of electronic information and communication resources in classrooms, media centers, and offices.

Strategies

- Control and manage user access rights and implement user account provisioning using the most cost effective and efficient methods.
- Implement an upgrade to the enterprise e-mail system.
- Consistently evaluate database use and performance upgrading operating systems and hardware and software when necessary.
- Manage/maintain a sound virtual server testing environment for use by multiple systems.
- 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.
- 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.
- Relocate printing equipment from the Data Center to another location to create space for new systems and to prevent system failures from paper dust and toner.
- Plan for a modernized central computer facility that meets industry standards.
- Manage/facilitate the migration from the legacy mainframe environment to up-to-date Windows and Unix systems to retire the mainframe and its peripherals.
- 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.
- Expand the structure and use of the network directory to include schools going through the Technology Modernization Program.
- Facilitate and support server configuration management for optimum performance.

Performance Measures

Performance Measure: Percentage of enterprise database transactions that take less than one second to process.

	FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
Student	93%	94%	94%
Administrative	99%	99%	99%
Combined	97%	97%	97%

Explanation: This measure is an indication of the amount of time needed to process data transactions (that is, data entry or data requests).

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

FY 2007 Actual	FY 2008 Estimate	FY 2009 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
Division of Systems Architecture and Operations—446/447/448/451

The FY 2009 request for this division is $5,265,689, a decrease of $40,720 from the current FY 2008 budget of $5,306,409. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$70,752
The negotiated agreements with employee organizations increase the salary costs of employees in this division by $110,172. There is a decrease of $39,420 in continuing salary costs. Step or longevity increases for current employees are offset by reductions for staff turnover.

FY 2009 Realignments—($142,091)
There are a number of realignments among and between the units under the Office of the Chief Technology Officer to fund higher priority programs. There are realignments to other units totaling $142,091 that decrease the budget in this division. There are decreases of $122,578 in contractual services as a result of reduction of services for e-Trust that are no longer necessary, and $19,513 in contractual maintenance as a result of reduced number of Citrix software licenses needed.

Other—$190,215
An additional $76,689 is budgeted in contractual maintenance for the Microsoft Premier support and annual maintenance agreement. A projected rate change for contractual maintenance for the central server requires a budget increase of $85,736. There is also a projected rate change of $27,790 in lease/purchase for the Data Disaster Recover and SAN Storage agreement.

Reductions—($159,596)
Contractual Maintenance—($159,596)
Reductions are needed in the budget to fund higher priority program needs. There is a $159,596 reduction for FY 2009 in contractual maintenance related to mainframe hardware and software licensing.

Division of Systems Architecture & Operations - 446/447/448/451

Cary Kuhar, Director I

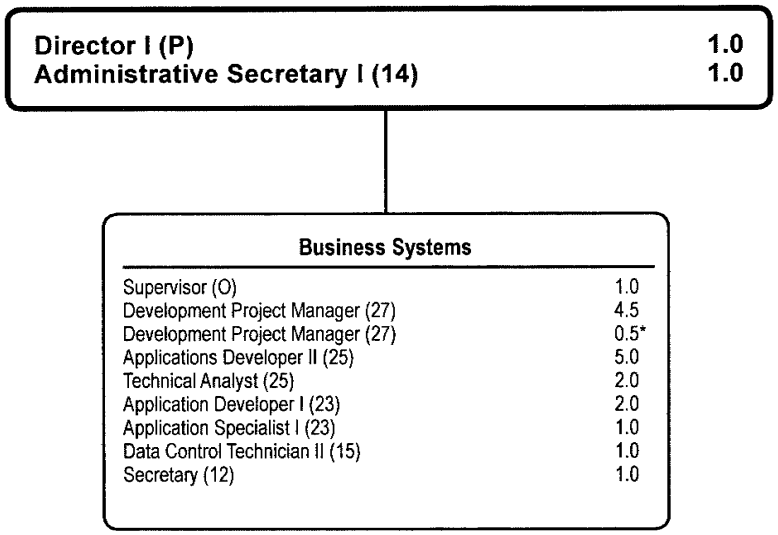
Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	30.000	27.500	27.500	**27.500**	
Position Salaries	$2,433,825	$2,196,533	$2,196,533	**$2,264,983**	$68,450
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		19,170	19,170	**20,124**	954
Other		26,850	26,850	**28,193**	1,343
Subtotal Other Salaries	44,543	46,020	46,020	**48,317**	2,297
Total Salaries & Wages	2,478,368	2,242,553	2,242,553	**2,313,300**	70,747
02 Contractual Services					
Consultants		210,457	210,457	**115,871**	(94,586)
Other Contractual		1,469,893	1,469,893	**1,192,148**	(277,745)
Total Contractual Services	1,599,747	1,680,350	1,680,350	**1,308,019**	(372,331)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		5,566	5,566	**5,566**	
Other Supplies & Materials		283,665	283,665	**266,473**	(17,192)
Total Supplies & Materials	272,161	289,231	289,231	**272,039**	(17,192)
04 Other					
Local Travel		2,056	2,056	**2,056**	
Staff Development		42,002	42,002	**42,002**	
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	3,930	44,058	44,058	**44,058**	
05 Equipment					
Leased Equipment		1,050,217	1,050,217	**1,328,273**	278,056
Other Equipment					
Total Equipment	957,857	1,050,217	1,050,217	**1,328,273**	278,056
Grand Total	$5,312,063	$5,306,409	$5,306,409	**$5,265,689**	($40,720)

Division of Systems Architecture & Operations - 446/447/448/451

Cary Kuhar, Director I

CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
	446 Div. of Systems Arch. & Operations						
1	P Director I		1.000	1.000	1.000	**1.000**	
1	25 IT Systems Specialist		1.000				
1	22 Data Systems Specialist		1.000				
1	14 Administrative Secretary I		1.000	1.000	1.000	**1.000**	
	Subtotal		**4.000**	**2.000**	**2.000**	**2.000**	
	447 Database Administration						
1	27 Supervisor		1.000	1.000	1.000	**1.000**	
1	27 Database Analyst III		2.000	2.000	2.000	**2.000**	
1	25 Database Administrator II		2.000	2.000	2.000	**2.000**	
3	18 IT Systems Technician		1.000				
	Subtotal		**6.000**	**5.000**	**5.000**	**5.000**	
	448 Central Server						
1	27 Sr Client Server Engineer		2.000	2.000	2.000	**2.000**	
1	27 Supervisor		1.000	1.000	1.000	**1.000**	
1	27 IT Systems Engineer			2.000	2.000	**2.000**	
1	25 IT Systems Specialist		2.000				
1	23 Computer Operations Manager		1.000	1.000	1.000	**1.000**	
1	16 Computer Operator II Shift 2		1.000	1.000	1.000	**1.000**	
1	16 Computer Operator II Shift 3		1.000	1.000	1.000	**1.000**	
1	14 Computer Operator I Shift 1		2.000	2.000	2.000	**2.000**	
1	14 Computer Operator I Shift 2		1.000	1.000	1.000	**1.000**	
1	14 Computer Operator I Shift 3		1.000	1.000	1.000	**1.000**	
	Subtotal		**12.000**	**12.000**	**12.000**	**12.000**	
	451 Directory Services						
1	27 Supervisor		1.000	1.000	1.000	**1.000**	
1	27 IT Systems Engineer		2.000	2.000	2.000	**2.000**	
1	25 IT Systems Specialist		5.000	5.000	5.000	**5.000**	
1	13 Data Systems Operator I			.500	.500	**.500**	
	Subtotal		**8.000**	**8.500**	**8.500**	**8.500**	
	Total Positions		**30.000**	**27.500**	**27.500**	**27.500**	

Division of Business Systems



F.T.E. Positions 19.5

(*In addition, a .5 position is charged to the Retirement Trust Fund in Chapter 7, Department of Financial Services)

Division of Business Systems—444/443

Ricardo Salandy-Defour, Director I 301-279-3694

Mission

The mission of the Division of Business Systems (DBS) is to implement and support effective administrative information technology systems, provide expert recommendations for integration of state-of-the-art technology into administrative practices and support services, and provide mission-critical decision support technology as aligned with of *Our Call to Action: Pursuit of Excellence.*

Major Functions

The division works with other offices, schools, and local government agencies to promote and support Montgomery County Public Schools (MCPS) and Office of the Chief Technology Officer (OCTO) initiatives by developing, implementing, and continuously improving MCPS information technology systems. These include human resources information (personnel, payroll, and benefits), financial information, materials management, budget, and decision support systems that allow schools and offices to collect essential data, make decisions and plans based on data analysis, disseminate accurate and current information, and conduct efficient daily management and support operations.

Based on ongoing customer requirements and priorities, the division designs, develops or purchases, and implements new systemwide, 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. Tasks include development, implementation, and maintenance of systems that may include components, such as data warehousing, imaging, workflow, security, electronic data interchange, Inter/intranet, and ad hoc query and reporting. DBS staff evaluates and recommends application/tool solutions for software enhancements to improve the quality, productivity, and efficiency of MCPS information technology systems.

The Business Systems unit works with central and school office staff and vendors to develop or purchase and implement business applications supporting the operation and staff of MCPS. These business applications include human resources, retirement, transportation, logistics/materials management, applicant tracking, document imaging and financial systems. The Human Resources Information System (HRIS) integrates personnel, payroll, and employee benefits functions and allows for effective management of information and resources.

Trends and Accomplishments

To ensure that MCPS maintains its status as a world-class school system, the division continued to expand and enhance information technology development and support, including identifying, developing, and implementing industry standard database management systems, data warehouse solutions, and software applications necessary to meet the administrative and business requirements of schools and offices. The emergence of new technologies and the widespread availability of networked technology give MCPS staff greater access to information for the efficient and effective monitoring of instruction and management of schools and offices.

DBS migrated the eight-year-old HRIS from Sun Microsystems hardware to a more modern IBM system that includes both hardware and software. This migration provides added stability and better supportability of the HRIS payroll, benefits, and human resources needs.

DBS also implemented Phase 2 of the new Financial Management System, which includes iExpenses (online mileage and travel expense reimbursements), iReceivables (online invoice payments), iSupplier (vendor inquiry of payments and orders), iStore (student online fee payment), and the School Activity Funds pilot.

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 Educational 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 departments of Technology Modernization and Support and Technology Consulting and Communications to provide support for schools and offices using administrative applications, including communication, staff training, and technical support.
- Collaborate with the departments of Financial Services and Management, Budget and Planning to expand the Data Warehouse to include business and financial data.
- Collaborate with the Office of Human Resources to maintain, enhance, and expand human resources data in the data warehouse.
- Collaborate with the divisions of Systems Architecture and Operations and Field Operations to assess capability and plan for infrastructure readiness.
- Enhance HRIS capabilities to meet analysis and reporting requirements of MCPS and external agencies and to provide self-service capabilities in personnel, payroll, and

benefits functions that give employees access to identified personal data.

- Provide staff development opportunities to ensure that DBS staff has the skills and knowledge to implement planned information technology systems.

Performance Measures

Performance Measure: The level of customer satisfaction with implemented enterprise technology solutions.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
Exceeds expectations 88%	80%	85%

Explanation: This is a measure of customer perception based on responses received, indicating how well newly developed enterprise system components are helping to achieve desired project results.

Performance Measure: Percentage of high priority system requirements that are implemented on time for enterprise system development, upgrade, and maintenance projects.

FY 2007 Actual	FY 2008 Estimate	FY 2008 Recommended
80%	85%	90%

Explanation: This measures how well enterprise system projects are meeting the high priority needs of end users, including state, Board of Education, and system mandates.

Budget Explanation
Division of Business Systems—444/443

The FY 2009 request for this division is $3,702,632, a decrease of $632,231 from the current FY 2008 budget of $4,334,863. An explanation of this change follows.

Continuing and Negotiated Salary Costs—($15,471)
The negotiated agreements with employee organizations increase the salary costs of employees in this division by $84,640. There is a decrease of $100,111 in continuing salary costs. Step or longevity increases for current employees are offset by reductions for staff turnover.

FY 2008 Reorganization—$46,802
The Office of the chief Technology Officer has reorganized for FY 2008 to flatten the management structure of the office. As a result of this reorganization the budget for the Division of Business Systems is increased by a 1.0 secretarial position and $46,802 that is realigned from the Division of Technology Support.

Other—($577,490)
An additional $234,510 is budgeted for the annual maintenance increase for Lawson, Bottomline, Taxfactory, True Northlogic, Fortis and Vurve. Also an additional $80,000 is budgeted in consultants to support Vurve configuration. There is a decrease of $892,000 in contractual services for the Financial Management System implemented in FY 2008.

Reductions—($86,072)
Consulting Services—($86,072)
Reductions are needed in the budget to fund higher priority program needs. There is a $86,072 reduction for FY 2009 in consulting services for the Financial Management System.

Division of Business Systems - 444/443

Ricardo Salandy-Defour, Director I

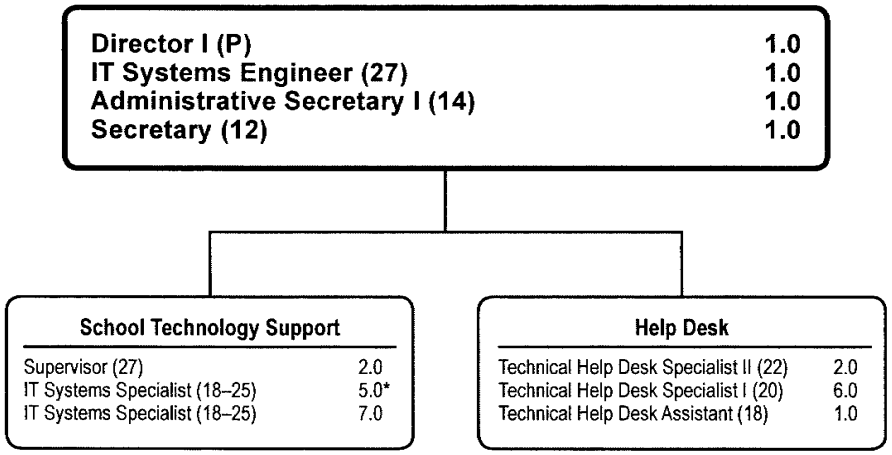
Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	22.300	18.500	18.500	**19.500**	1.000
Position Salaries	$1,870,379	$1,726,442	$1,726,442	**$1,756,795**	$30,353
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		19,546	19,546	**20,524**	978
Other					
Subtotal Other Salaries	35,924	19,546	19,546	**20,524**	978
Total Salaries & Wages	1,906,303	1,745,988	1,745,988	**1,777,319**	31,331
02 Contractual Services					
Consultants		165,517	165,517	**159,445**	(6,072)
Other Contractual		2,191,142	2,191,142	**1,533,652**	(657,490)
Total Contractual Services	1,631,737	2,356,659	2,356,659	**1,693,097**	(663,562)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		4,500	4,500	**4,500**	
Other Supplies & Materials					
Total Supplies & Materials	4,123	4,500	4,500	**4,500**	
04 Other					
Local Travel		3,551	3,551	**3,551**	
Staff Development					
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	2,606	3,551	3,551	**3,551**	
05 Equipment					
Leased Equipment					
Other Equipment		224,165	224,165	**224,165**	
Total Equipment	182,012	224,165	224,165	**224,165**	
Grand Total	$3,726,781	$4,334,863	$4,334,863	**$3,702,632**	($632,231)

Division of Business Systems - 444/443

Ricardo Salandy-Defour, Director I

CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
	444 Division of Business Systems						
1	P Director I		1.000	1.000	1.000	**1.000**	
3	BD Instructional Specialist		1.000				
1	14 Administrative Secretary I		1.000	1.000	1.000	**1.000**	
1	13 Fiscal Assistant I		.800				
	Subtotal		**3.800**	**2.000**	**2.000**	**2.000**	
	443 Business Systems						
1	O Supervisor		1.000	1.000	1.000	**1.000**	
1	27 Development Proj Manager		4.500	4.500	4.500	**4.500**	
1	25 Applications Developer II		7.000	5.000	5.000	**5.000**	
1	25 Technical Analyst		2.000	2.000	2.000	**2.000**	
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 Data Control Technician II		1.000	1.000	1.000	**1.000**	
1	12 Secretary					**1.000**	1.000
	Subtotal		**18.500**	**16.500**	**16.500**	**17.500**	**1.000**
	Total Positions		**22.300**	**18.500**	**18.500**	**19.500**	**1.000**

Division of Technology Support



F.T.E. Positions 22.0

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

Division of Technology Support—422/423

Shelley Beddingfield, Director I 240-632-6970

Mission

The mission of the Division of Technology Support (DTS) is to provide daily technology support including operational and maintenance services, information, and assistance focused on supporting productivity for the Montgomery County Public Schools (MCPS) user community—students, teachers, support staff, and administrators. This support facilitates process improvement and access to resources, materials, and services that are essential to achieving MCPS strategies and initiatives identified in *Our Call to Action: Pursuit of Excellence*, the strategic plan for the Montgomery County Public Schools.

Major Functions

DTS provides on and off-site technical support for staff in all schools and offices through the services of the School Technology Support (STS) unit, the Help Desk, and the Customer Relationship Manager (CRM). The work of the division is accomplished through phone calls; the Help Desk Web site; routine and emergency site visits; and the use of the Unicenter Service Desk (USD), a Web-based enterprise service request tool and knowledge management system.

The STS unit provides first-level support to elementary schools and alternative sites through regularly scheduled visits by information technology system specialists (ITSSs). During these visits, the specialists respond to staff requests for service; maintain, monitor, and upgrade the hardware configurations and software applications that support K–12 programs and initiatives; administer network systems; oversee network security; install and monitor the use of software applications, such as student assessments; and install and maintain peripherals, including handheld devices. ITSSs also assist school-based staff in the basic use of products and applications that support new instructional initiatives. The STS unit conducts regularly scheduled preventive maintenance during the summer months—installing updates to computer applications and upgrading Internet support applications and service packs for computers in all elementary schools. STS staff responds to emergencies through on-site, telephone, and remote support over the MCPS wide-area network. Certified STS computer repair technicians provide daily on and off-site hardware repair and software support to elementary, secondary, and alternative sites, maintaining non-warranty instructional workstations and peripherals. New this year, the STS unit also is responsible for second-level K–12 technical support. The ITSS II team is responsible for high-level technical issues that are escalated from the ITSS I team in all schools. Work is received and tracked in the Unicenter Service Desk request tool.

The Help Desk staff resolves technology problems, provides timely and reliable information to end users, and works with designated staff within the Office of Chief Technology Officer (OCTO) to resolve and mitigate known and potential problems. The Help Desk team provides users with a one-stop process for seeking information and resolution of problems via telephone, e-mail, and the Web-based problem tracking system. In addition, Help Desk staff post useful information and common solutions on the Help Desk Web site. This provides a forum for capturing and sharing knowledge with the MCPS community of users. This team also assists with operations and applications training to ensure that the most current information available is being received and disseminated to MCPS staff.

The CRM works in partnership with school-based and office staff to gather requirements for requests for help with projects; collaborates with OCTO staff to ensure alignment with end user needs; and provides information to positively impact the quality of service to schools and offices, as they integrate technology into the instructional program. To assure prompt, dependable service to schools, the CRM works with cross-functional teams to ensure that necessary processes are in place to support new technology initiatives. The CRM designs and delivers reports that provide a window into trends and performance measures for various audiences, such as reports to elementary schools that allow them to analyze and manage technology issues at their own schools. The CRM extracts information from USD software and, using software tools and statistical analysis, provides reports to afford designated staff the ability to use data to make informed decisions about the success of critical initiatives, such as the Encore Special Education initiative, the Performance Matters and Promethean projects that support the Middle School Innovative Reform Initiative, and the Financial Management System (FMS). The CRM also serves as a subject matter expert and application administrator of USD problem-tracking software, project manager on implementation projects, and manages other projects as required.

Trends and Accomplishments

In FY 2007, 101,426 requests for services and support were opened in the USD management system by MCPS staff in schools and offices as compared to 88,244 in FY 2006.

In FY 2007, of the 101,426 requests logged by the system, the MCPS Help Desk opened and resolved 59,693 requests of which 77 percent were closed at first contact. Help Desk staff continuously works to improve customer service by collaborating with other OCTO teams in the development of customized support plans and organizational-level agreements. They also prepare training documents and assist in the training of staff on new enterprise applications. Additionally, the Help Desk team maintains and regularly updates a "Hot News" page on the Help Desk Web site which provides problem solutions and tips. The Help Desk is proactive in using the knowledge tools application to spot trends and aid in troubleshooting with second-level support staff as problems are identified.

In FY 2007, ITSSs provided an average of 7.5 hours of support to each school per week. ITSS staffing is based on a geographical team model that ensures support for each of their assigned five schools with primary and backup support assigned to each location. This model provides on-site support for over 90 percent of all elementary schools each week. The School Technology Support (STS) unit also provides

frontline support for the emergency telecommunications system by contacting all school-based sites on a weekly basis to ensure effective operation and usability of the Nextel direct capability. Results are recorded and reported weekly.

In FY 2007, the CRM worked with cross-functional teams to establish support agreements for the new FMS, Performance Matters, and Encore. The CRM used Crystal Reports software to provide support performance statistics on projects; such as 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 system. In concert with the USD administration team, the CRM began the planning and design for an upgrade of the problem tracking system that will allow the end-user community to more easily resolve technology problems.

All DTS staff is receiving an appropriate level of training in technologies to support classroom initiatives and administrative process improvements as part of an overall strategy to more knowledgably support the integration of technology with the revised curriculum.

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. Specific strategies/initiatives include refreshing hardware, software and network infrastructure through the Technology Modernization project, addressing the gap created by the digital divide, and providing information needed by teachers, administrators, parents, and the community through the Integrated Quality Management System (IMS and data warehouse).

Strategies

- Provide technology support for instructional programs and other systemwide initiatives by maintaining an infrastructure that provides a platform capable of supporting modern technological hardware and software tools.
- Participate in strategic planning for the creation of a multiyear technology road map, identifying strategic plans for school-based software and hardware technologies, telecommunications, network operating systems, and a support system firmly based in industry standards and instructional research.
- Support the technology modernization project providing access to high capability computers with Web connectivity in schools and the community.
- Support the development and implementation of integrated information technology systems to improve products, resources, and services. Provide technical support and instruction to ensure that these systems are fully utilized 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 units 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.
- 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 calls 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 adeptness in solving and preventing technology-related problems through just-in-time help and expanded knowledge tools through self-help systems.
- Provide accurate and timely information to customers regarding the status of information technology infrastructure and systems.
- 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: Number of "emergency priority" requests in schools that are closed within 4 hours.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
56%	75%	90%

Explanation: This measure is an indication of the timeliness of problem resolution as reported in USD by ITSSs in the STS unit.

Performance Measure: Number of "normal priority" requests in schools that are closed within six days.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
79 %	85%	90%

Explanation: This measure is an indication of the timeliness of problem resolution by the ITSSs in the STS unit.

Performance Measure: Percentage of K–12 service calls for hardware repair designated as "emergency priority" that are responded to within 12 working hours of the customer's request for service.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
99%	99%	99%

Explanation: This measure is an indication of the timeliness of problem resolution.

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 software within 2 hours).

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
80%	80%	82%

Explanation: This measure is an indication of the timeliness of problem resolution by Help Desk staff and reflects additional support for new classroom initiatives, such as the Pinnacle grading system and OASIS, the online student information system.

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

The FY 2009 request for this division is $1,806,546, a decrease of $715,632 from the current FY 2008 budget of $2,522,178. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$82,203
The negotiated agreements with employee organizations increase the salary costs of employees in this division by $81,725. There is an increase of $478 in continuing salary costs to reflect step or longevity increases for current employees.

Realignments—($723,367)
FY 2008 Reorganization—($681,777)
The Office of the Chief Technology Officer has reorganized for FY 2008 to flatten the management structure of the office. As a result, the budget for the Division of Technology Support has decreased by 10.0 positions and $681,777. These positions have been realigned to other OCTO units.

FY 2009 Realignments—($41,590)
There are a number of realignments within and between the units under the Office of the Chief Technology Officer to fund higher priority programs. There are realignments to other units of $41,590 decreasing this budget for supplies and materials, local travel, equipment, and equipment lease/purchase.

Reductions—($74,468)
Reductions are necessary in the budget to fund higher priority program needs. There is a $56,400 reduction for contractual services related to call tracking systems design services, $6780 in supplies and materials, and $11,288 for local travel for FY 2009.

Division of Technology Support - 422/423/424

Shelley Beddingfield, Director I

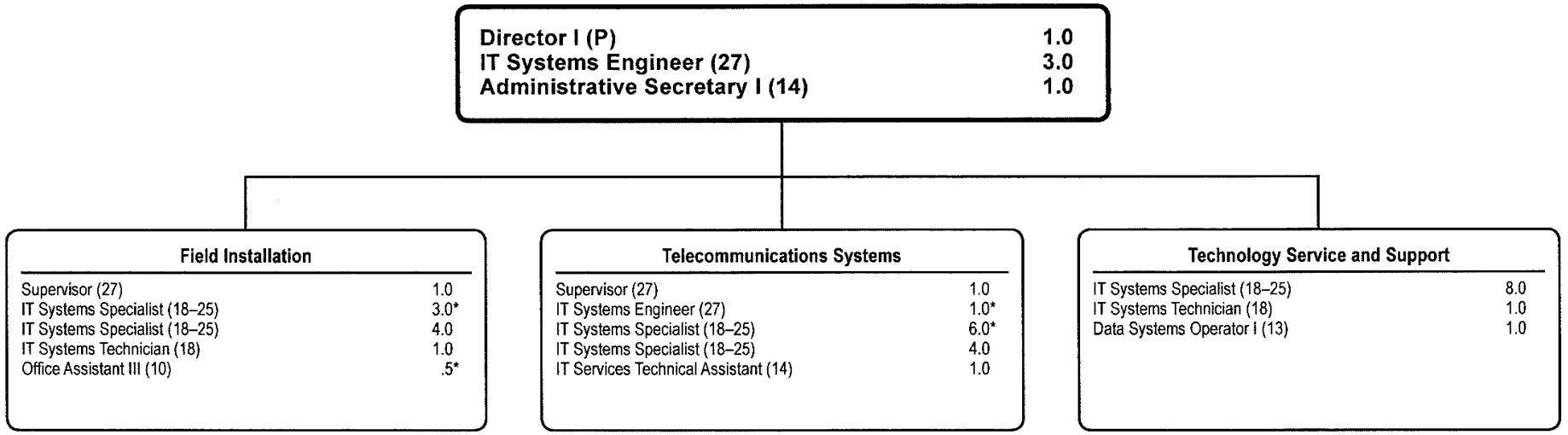
Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	31.000	32.000	32.000	**22.000**	(10.000)
Position Salaries	$2,002,662	$2,315,505	$2,315,505	**$1,715,931**	($599,574)
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	2,002,662	2,315,505	2,315,505	**1,715,931**	(599,574)
02 Contractual Services					
Consultants					
Other Contractual		110,250	110,250	**47,941**	(62,309)
Total Contractual Services	28,280	110,250	110,250	**47,941**	(62,309)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		17,192	17,192	**13,192**	(4,000)
Other Supplies & Materials		36,302	36,302	**4,760**	(31,542)
Total Supplies & Materials	33,569	53,494	53,494	**17,952**	(35,542)
04 Other					
Local Travel		18,420	18,420	**4,647**	(13,773)
Staff Development		1,395	1,395	**1,395**	
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	8,522	19,815	19,815	**6,042**	(13,773)
05 Equipment					
Leased Equipment		12,255	12,255	**16,014**	3,759
Other Equipment		10,859	10,859	**2,666**	(8,193)
Total Equipment	22,557	23,114	23,114	**18,680**	(4,434)
Grand Total	$2,095,590	$2,522,178	$2,522,178	**$1,806,546**	($715,632)

Division of Technology Support - 422/423/424

Shelley Beddingfield, Director I

CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
	422 Division of Technology Support						
1	P Director I		1.000	1.000	1.000	**1.000**	
11	27 Supervisor		1.000	1.000	1.000		(1.000)
1	27 IT Systems Engineer		1.000	1.000	1.000	**1.000**	
11	25 IT Systems Specialist		4.000	6.000	6.000		(6.000)
3	25 IT Systems Specialist		1.000	1.000	1.000		(1.000)
1	14 Administrative Secretary I		1.000	1.000	1.000	**1.000**	
11	13 Data Systems Operator I		1.000	1.000	1.000		(1.000)
1	12 Secretary		1.000	1.000	1.000	**1.000**	
	Subtotal		**11.000**	**13.000**	**13.000**	**4.000**	**(9.000)**
	423 Technology Systems Maintenance						
11	27 Supervisor		1.000	1.000	1.000		(1.000)
11	25 IT Systems Specialist		8.000	8.000	8.000		(8.000)
3	25 IT Systems Specialist		2.000				
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		3.000	4.000	4.000	**4.000**	
11	18 IT Systems Technician		1.000	1.000	1.000		(1.000)
1	18 Technical Help Desk Asst		1.000	1.000	1.000	**1.000**	
	Subtotal		**20.000**	**19.000**	**19.000**	**9.000**	**(10.000)**
	424 School Technology Support						
11	27 Supervisor					**2.000**	2.000
11	25 IT Systems Specialist					**7.000**	7.000
	Subtotal					**9.000**	**9.000**
	Total Positions		**31.000**	**32.000**	**32.000**	**22.000**	**(10.000)**

Division of Field Operations



F.T.E. Positions 27.0

(*In addition, there are 10.5 Capital Budget positions shown on this chart)

Division of Field Operations—431/432/433/434/436

Michael R. Cady, Director I 301-279-3241

Mission

The mission of the Division of Field Operations (DFO) is to provide Montgomery County Public Schools (MCPS) with a reliable and cost-effective electronic infrastructure, creating and sustaining an environment that delivers the highest quality information technology and telecommunication tools to support *Our Call to Action: Pursuit of Excellence.*

Major Functions

DFO staff provides field installation and project management, design, and support for network operating systems and telecommunications systems. The responsibilities of this division are closely aligned with the Technology Modernization (Tech Mod) project funded through the Capital Improvements Program that refreshes technology in schools on a four-year cycle. DFO collaborates with stakeholders, including local and state governments, to implement communication and information technologies, and support the day-to-day network and telecommunications operations for more than 200 sites. The division consists of three units: Field Installation, Telecommunications Systems, and Research and Development.

The Field Installation unit provides project management in the design and installation of technology associated with the deployment of system initiatives and technical support and installation services to non-school based offices (NSBO). Unit staff gathers requirements from stakeholders, works with school staff to plan the integration of computer technology in schools, procures and installs the technology, and ensures its readiness at the opening of the school year. Managing the de-installation and reassignment of older technology to schools, community groups, and international organizations also is the responsibility of this unit. The unit leads a cross-functional team in developing and implementing technical standards for local area networks (LAN), desktop and laptop computers, desktop configuration, printers, and associated peripherals. Additionally, the unit collects online data for updating and maintaining the asset management system and provides centralized network administration that includes distribution of software updates, service packs, and virus definition files. The project management expertise of this group supports the implementation of Middle School Reform through the installation of white board technology, the piloting of Performance Matters for reporting progress in selected middle schools, and the Encore special education reporting initiative in schools. The technical services and support team is responsible for providing on-site equipment repair and software support to non-school-based offices. 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 planning and purchasing new audiovisual equipment. This unit also is responsible for ensuring continuity in access to network and local data in support of office transitions and staff changes. As part of the NSBO Tech Mod program, Technical Services and Support (TSS) information technology systems specialists (ITSSs) plan technology refreshment and facilitate computer relocations for offices; and configure and test software applications for use on instructional and administrative desktop computers, laptops, and peripherals. In addition, they provide integration services, preventive maintenance, network administration, and desktop image development for non-school-based office locations. Staff is certified to perform warranty work and service on a variety of computer systems and printers. This team also evaluates computer hardware, peripherals, and audiovisual equipment bids and provides technical support and equipment for MCPS meetings and activities.

A research and development (R&D) team consisting of three systems engineers reports to the director, and conducts applied research and development related to network operating systems and design models for enhancements that are essential to the delivery of network services to schools and offices. The team evaluates and tests new and emerging products and configurations prior to deployment to schools. Included in this role is the annual development of a desktop management strategy that provides a standardized interface for classes of users, and ensures security and anti-virus programs are operational and version updates and system patches are tested and applied. This unit also provides technical training for ITSSs.

The Telecommunication Systems unit designs, installs, and supports local and wide-area networks (LAN/WAN) which includes wiring in schools, central office, and field offices. The unit maintains all telephony, both wired and cellular, including school and office voice-mail systems, data transmission lines, and voice circuits. The Telecommunications Systems unit supports converged telephony which combines voice, data, and video on data circuits. This unit installs and maintains telephones in all MCPS school and office locations. 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 Verizon and the county's fiber-optic network (FiberNet) using routers and switches installed by the unit. The connection to the Internet and county government, the security firewall, intrusion detection/prevention equipment, and the Internet protocol (IP) surveillance video solution for secondary schools also are the responsibility of this unit. Finally, the unit is responsible for wiring at new and modernized construction projects, including the telephone and cable television distribution systems.

Trends and Accomplishments

The rapid pace of the growth of technology and the convergence of voice, data, and video services have led to an information explosion, challenging the school system to ensure that students have the needed tools to prepare for their future workplace and competition in a global economy. The continuing rapid advancement of technology requires DFO staff to research new and emerging technologies, work continuously with technology users in reassessing which technologies best meet their needs, and plan how to modernize or replace aging and obsolete equipment and software.

MCPS staff requires improved infrastructure and increased technical training and support. 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.

Recent accomplishments during FY 2008 included installing 9,068 computers with related instructional software in 10 high schools, 11 middle schools, 21 elementary schools, and 3 special centers as part of the Tech Mod program. This included the opening of Arcola Elementary School and the completed renovations of Parkland Middle School, Richard Montgomery High School, and College Gardens Elementary School. A total of 8,644 computers were de-installed in FY 2008. Additionally, 838 computers from the Tech Mod schools were cascaded to schools for the Read 180 program, United Streaming cache servers, library catalog workstations, and computer repair classes. The MCPS Student Information Technology Foundation received 801 computers to support their program. To assist in decreasing the digital divide, 6,942 computers were available for donation to local community centers and international not-for-profit agencies supporting the education of children in Africa and Latin America.

In FY 2007, TSS responded to 3,960 Unicenter service requests and repaired 4,902 units. Eighty-eight percent of the normal priority repairs were completed in one to three days or less. TSS responded to approximately 969 emergency requests and completed 99.2 percent within twelve hours. System integration work accounted for 798.5 staff hours. Integration processes include image development and testing; securing user data; software and desktop customization; user account maintenance, maintaining inventories, and management of outside vendor personnel during system installations. As part of the technology refreshment program for NSBO, staff replaced 532 office computers, 22 office printers, and moved thousands of user documents.

Support for other projects included installing interactive white boards, student response systems, wireless network devices, mobile laptop computer carts, and video production systems as part of the middle school Integrated Reform Initiative; completing the expansion of a reading intervention program to all secondary schools; implementing of a systemwide grade book; providing programs to support assessments; and deploying technologies that give school-based staff easier access to online resources.

As part of the Tech Mod program, 146 new file and applications servers were installed in schools. An automated, centralized distribution and standardization system has increased the ease and efficiency of the delivery of software and server troubleshooting. DFO staff continued the MCPS strategic migration to Windows Server 2003 from earlier versions of the Novell operating system. DFO system engineers have begun planning for implementation of the Windows VISTA operating system, Microsoft Office 2007, and Windows Server 2008.

Telephone systems were installed on time as scheduled in two elementary schools, two middle schools, one high school, and the Spring Mill facility. The Voice over Internet Protocol (VoIP) telephony testing has expanded to include one middle school, two more high schools, and one transportation center which are making the use of the automated call attendant for countywide announcements. In addition, hundreds of work requests for moves, adds, and changes for administrative offices were processed in FY 2008. The Telecommunications unit continued management of the cell phone and data device programs, which includes emergency phones in portable classrooms and school emergency kits, and for selected MCPS staff and principals. Dial tone availability continued to be over 99 percent.

During FY 2008, the Telecommunications Systems team completed wiring and equipment upgrades for Tech Mod elementary, middle and high schools. All now have a capacity of 100 Megabytes Per Second (MBps) to the desktop. Internet bandwidth was doubled to 1,000 MBps to better serve the needs of schools and offices. Updates have resulted in reduced operating costs. In FY 2008, fiber connections were completed for four middle schools bringing all secondary schools onto the FiberNet network. Twenty-eight elementary schools were added to the FiberNet network during the year. WAN/LAN and Internet Service Provider (ISP) availability continued at over a 99 percent uptime.

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* 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. Specific strategies/initiatives are refreshing hardware, software, and network infrastructure through the Tech Mod project; addressing the gap created by the digital divide; and providing information needed by teachers, administrators, parents, and the community through Integrated Quality Management System (IMS and data warehouse).
- The MCPS Board of Education Policy, IGS, Educational Technology, requires that staff and students be provided with easy, equitable access to technology tools.
- By February 2009, MCPS must comply with digital television conversion mandated by the Federal Communications Commission.

Division of Field Operations—431/432/433/434/436

Michael R. Cady, Director I 301-279-3241

Strategies

- Provide services and support for the Tech Mod program that uses Capital Budget funding to refresh aging technology and infrastructure in schools and offices every four years.
- Develop a converged telecommunications strategy plan, firmly based on industry standards to guide MCPS in the modernization and expansion of its telecommunications system including telephony and data.
- Work collaboratively with staff, government agencies, and vendors to purchase, install, and operate new hardware/software, computer networks, and cable television wiring to improve teaching and learning.
- Monitor performance of the WAN, school servers, and Internet connectivity and ensure staff or vendors respond promptly to any problems.
- Work collaboratively with other units to assess and respond to customer needs and provide ongoing technical and operational support to schools and offices.
- Provide solutions to technical problems in a timely, efficient, and reliable manner enterprise wide.
- Work with MCPS staff and consultants to identify, develop, and implement industry-accepted network management procedures, best practices, and technical solutions.
- Work with staff and industry representatives to evaluate and identify new and emerging technologies that improve telephony, computer and network services, ensuring interoperability with existing technologies.
- 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.
- Initiate contact with school administration for new and modernized schools regarding technology planning needs.
- Provide technical training to school and office ITSSs and media staff to maintain and support school and office technology resources.
- Increase end-user independence and adeptness in solving and preventing technology-related problems through just-in-time help and training.
- Increase DFO staff understanding and support of continuous improvement strategies with an emphasis on the Baldrige Criteria for Performance Excellence and continue to measure performance improvement within each unit.
- Develop a strategic plan for the pending digital television conversion mandated by the Federal Communications Commission.
- Provide a comprehensive update to audio-visual and presentation standards for all schools as a baseline for technology program evaluation.
- Combine the audio-visual replacement program with the Tech Mod project to simplify the refreshment of all technology in schools.
- Support administrative computers in offices and provide solutions to technical problems in a timely, efficient, and reliable manner.

Performance Measures

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

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
98.87%	99.9%	99.9%

Explanation: A measure of the quality of Tech Mod installation procedures and the timeliness of resolving operational problems.

Performance Measure: Percent of uptime for the wide-area network.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
99.95%	99.9%	99.9%

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 dial-tone availability for telephony connectivity at all locations or dial-out capacity.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
99.9%	99.9%	99.9%

Explanation: A measure of connectivity and dial tone capability at all locations.

Performance Measure: Percentage of service calls from non-school-based office staff designated as "emergency priority" that are responded to within 12 working hours of the customer's request for service.

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
99 %	99 %	99 %

Explanation: This measure is an indication of the timeliness of problem resolution by staff in the TSS unit.

Budget Explanation
Division of Field Operations—431/432/433/434/436/437

The FY 2009 request for this division is $2,804,767, an increase of $637,969 from the current FY 2008 budget of $2,166,798. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$34,066
The negotiated agreements with employee organizations increase the salary costs of employees in this division by $100,927. There is a decrease of $66,861 in continuing salary costs. Step or longevity increases for current employees are offset by reductions for staff turnover.

Realignments—$675,169
FY 2008 Reorganization—$635,729
The Office of the Chief Technology Officer has reorganized in FY 2008 to flatten the management structure of the office. As a result, the budget for the Division of Field Operations is increased by 9.0 positions and $635,729. These positions have been realigned from other OCTO units.

FY 2009 Realignments—$39,440
There are a number of realignments within and between the units under the Office of the Chief Technology Officer to fund higher priority programs. There are realignments to this budget from other units totaling $39,440 to increase supplies and materials ($28,762), local travel ($2,485), and equipment ($8,193). There also is a realignment within the unit of $204,477 from contractual maintenance to telecommunication/LANWAN supplies.

Reductions—($71,266)
Program Supplies—($71,266)
Reductions are needed in the budget to fund higher priority program needs. There is a $71,266 reduction for FY 2009 in telecommunication supplies.

Division of Field Operations - 431/432/433/434/436/437

Michael R. Cady, Director I

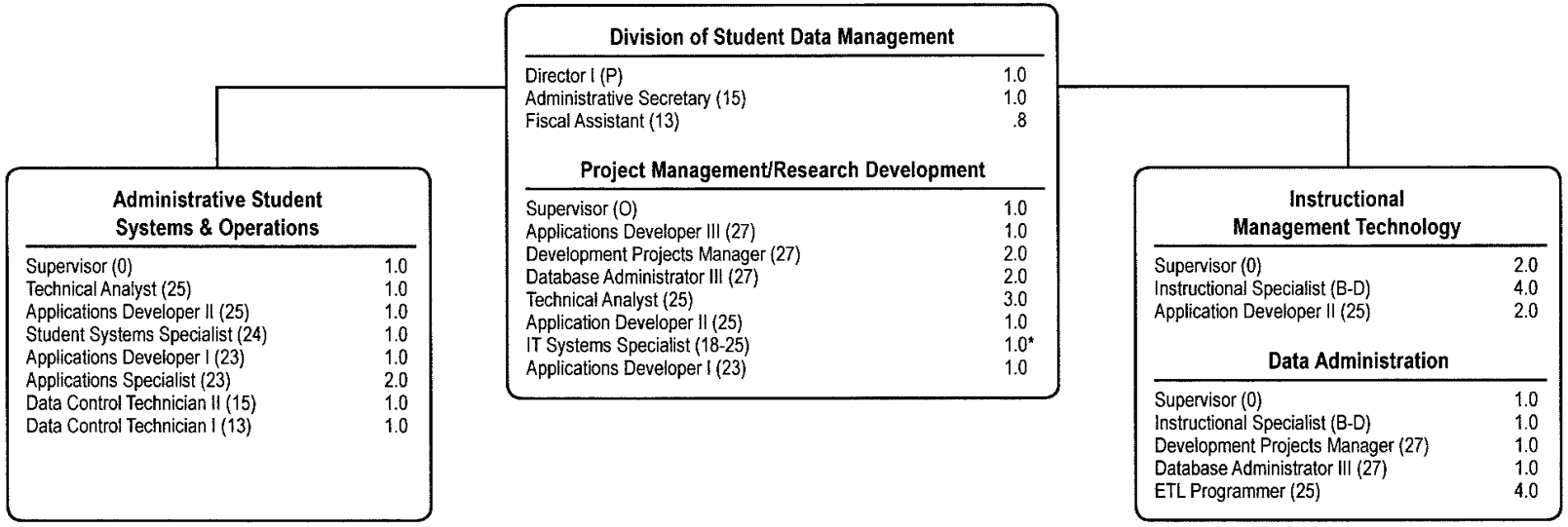
Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	18.000	18.000	18.000	**27.000**	9.000
Position Salaries	$1,212,855	$1,390,854	$1,390,854	**$2,057,721**	$666,867
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		47,258	47,258	**46,215**	(1,043)
Other		9,262	9,262	**15,267**	6,005
Subtotal Other Salaries	75,575	56,520	56,520	**61,482**	4,962
Total Salaries & Wages	1,288,430	1,447,374	1,447,374	**2,119,203**	671,829
02 Contractual Services					
Consultants		18,914	18,914	**12,500**	(6,414)
Other Contractual		468,479	468,479	**264,002**	(204,477)
Total Contractual Services	421,233	487,393	487,393	**276,502**	(210,891)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials		4,635	4,635	**4,635**	
Office		3,000	3,000	**7,000**	4,000
Other Supplies & Materials		180,979	180,979	**342,435**	161,456
Total Supplies & Materials	140,233	188,614	188,614	**354,070**	165,456
04 Other					
Local Travel		9,423	9,423	**13,577**	4,154
Staff Development		2,900	2,900	**2,128**	(772)
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	13,861	12,323	12,323	**15,705**	3,382
05 Equipment					
Leased Equipment		31,094	31,094	**31,094**	
Other Equipment				**8,193**	8,193
Total Equipment	14,414	31,094	31,094	**39,287**	8,193
Grand Total	$1,878,171	$2,166,798	$2,166,798	**$2,804,767**	$637,969

Division of Field Operations - 431/432/433/434/436/437

Michael R. Cady, Director I

CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
	431 Division of Field Operations						
1	P Director I		1.000	1.000	1.000	**1.000**	
1	27 IT Systems Engineer					**3.000**	3.000
1	14 Administrative Secretary I		1.000	1.000	1.000	**1.000**	
	Subtotal		**2.000**	**2.000**	**2.000**	**5.000**	**3.000**
	433 Telecommunications Systems						
11	27 Supervisor			1.000	1.000	**1.000**	
11	25 IT Systems Specialist		3.000	4.000	4.000	**4.000**	
11	20 Telecommunications Tech III		2.000				
11	18 IT Systems Technician			2.000	2.000		(2.000)
11	14 IT Services Technical Asst			1.000	1.000	**1.000**	
11	13 Fiscal Assistant I			1.000	1.000		(1.000)
11	12 Secretary		1.000				
11	10 Office Assistant III		1.000				
	Subtotal		**7.000**	**9.000**	**9.000**	**6.000**	**(3.000)**
	434 Field Installation						
3	27 Supervisor		1.000	1.000	1.000	**1.000**	
3	27 IT Systems Engineer		1.000	1.000	1.000		(1.000)
1	25 IT Systems Specialist		2.000	4.000	4.000	**4.000**	
3	25 IT Systems Specialist		2.000				
1	18 IT Systems Technician		1.000	1.000	1.000	**1.000**	
	Subtotal		**7.000**	**7.000**	**7.000**	**6.000**	**(1.000)**
	436 WAN/LAN						
11	27 Supervisor		1.000				
11	20 Telecommunications Tech III		1.000				
	Subtotal		**2.000**				
	437 Technology Service and Support						
11	25 IT Systems Specialist					**8.000**	8.000
11	18 IT Systems Technician					**1.000**	1.000
11	13 Data Systems Operator I					**1.000**	1.000
	Subtotal					**10.000**	**10.000**
	Total Positions		**18.000**	**18.000**	**18.000**	**27.000**	**9.000**

Division of Student Data Management



F.T.E. Positions 38.8

(*In addition, there is a 1.0 Capital Budget position shown on this chart)

Division of Student Data Management—445/426/442

Elton Stokes, Director I 301-279-3577

Mission

The mission of the Division of Student Data Management (DSDM) is to plan, implement, and support quality technology solutions to facilitate the collection, management, analysis, and reporting of student and school-related administrative and achievement data in support of *Our Call to Action: Pursuit of Excellence.*

Major Functions

DSDM works with other offices, schools, and local government agencies to promote and support Montgomery County Public Schools (MCPS) and Office of the Chief Technology Officer (OCTO) initiatives by developing, implementing, and continuously improving MCPS technology solutions that address student data needs. Solutions 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). These integrated systems 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.

Based on ongoing customer requirements and priorities, the division designs, develops or purchases, and implements new systemwide, 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. DSDM works with software vendors and staff in schools and offices to establish, operate, maintain, and enhance the delivery of student information and decision support systems. Functions include development, implementation, and maintenance of systems that may include components for data integration, grade collection, curriculum publication, and ad hoc querying and reporting.

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. IMS is used for tactical decision making and curriculum management by monitoring student progress and performance, helping to identify potential modifications to instruction, and providing a well-organized set of tools to aid in maximizing student performance. The 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. The newly implemented Incident Reporting System provides a means to collect and analyze the occurrence of incidents that seriously impact our schools and students. Resulting data analysis guides timely and appropriate response and proactively aids in process refinements to prevent similar incidents in the future. These solutions enable MCPS to use information resources effectively for analysis, planning, and monitoring organizational accountability to parents, students, and the citizens of Montgomery County.

Trends and Accomplishments

To ensure that MCPS maintains its status as a world-class school system, DSDM must continue to expand and enhance information technology support, including identifying, developing, and implementing industry standard database management systems, data warehouse and instructional management solutions, and software applications necessary to meet the requirements of schools and offices. Recent division accomplishments include the migration of the student enrollment process from the Student Legacy (mainframe) database to OASIS, completing the modernization of the student information system replacing the outmoded mainframe system with the new Web-based OASIS. OASIS will provide schools and central office users with far greater ease of use, functionality, and data integrity.

The implementation of an electronic grade book and classroom-to-home communication system, OARS, has been expanded to all secondary schools in alignment with Policy IKA: Grading and Reporting. The OARS project has expanded to include a pilot of OARS in Grades 1 and 2 in selected schools currently implementing the standards-based grading and reporting tools. This small prototype of Pinnacle 7 has been implemented in a select number of elementary classrooms to test the new Web standards-based electronic grading system, providing the Elementary School OARS Project Team an opportunity to verify and validate the new technology. OARS dramatically increases the efficiency of processing interims and report cards by providing the ability to print interims directly from the grade book and by eliminating the need for bubblesheets to submit end-of-marking period grades. In addition, a field test was conducted using OARS in the 19 elementary schools that are using standards-based grading, giving end users the ability via the Internet to both access the grade book from home and report student achievement to parents.

All emergency information collected and maintained by schools has been entered into OASIS. Parents are now enabled to provide updates/corrections on a single form only rather than on multiple copies. Parents of secondary school students have the option to modify their emergency information online via Edline. All schools have access to and maintain this information using OASIS.

Enhancement of the SIMS process enables schools to request and download SIMS files when needed rather than waiting for a bi-weekly processing cycle.

Division of Student Data Management—445/426/442

Elton Stokes, Director I 301-279-3577

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 departments of Technology Modernization and 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 departments of Shared Accountability and Reporting and Regulatory Accountability to maintain and enhance the student information segment of the data warehouse.
- Collaborate with the Office of School Performance and schools to maintain and enhance the student information in the data warehouse and IMS.
- Collaborate with the Office of Human Resources to maintain, enhance, and expand human resource data in the data warehouse.
- Collaborate with the divisions of Business Systems, Systems Architecture and Operations, and Field Operations to assess capability and plan for infrastructure readiness.
- 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 Department of Student and Business Technologies staff has the skills and knowledge to implement planned information technology systems.
- To continuously assess and examine new and emerging technologies to determine appropriateness.
- Increase the amount of information available and increase the power of reporting tools available to users.

Performance Measures

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

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
75%	90%	95%

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

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

FY 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
NA	80%	100%

Explanation: This measure indicates the percentage of school-based users 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 2007 Actual	FY 2008 Estimate	FY 2009 Recommended
NA	75%	95%

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

Budget Explanation Division of Student Data Management—445/426/442

The FY 2009 request for this division is $7,946,163, an increase of $839,155 from the current FY 2008 budget of $7,107,008. An explanation of this change follows.

Continuing and Negotiated Salary Costs—$142,134
The negotiated agreements with employee organizations increase the salary costs of employees in this division by $190,364. There is a decrease of $48,230 in continuing salary costs. Step or longevity increases for current employees are offset by reductions for staff turnover.

Realignments—$411,542
FY 2008 Reorganization—$191,378
The Office of the Chief Technology Officer has reorganized for FY 2008 to flatten the management structure of the office. As a result, the budget for the Division of Student Data Management is decreased by 15 positions and $1,355,441, that are realigned to other OCTO units,and increased by 16 positions and $1,546,819 from other OCTO units.

FY 2009 Realignments—$220,164
There are a number of realignments within and between the units under the Office of the Chief Technology Officer to fund higher priority programs. There are realignments from other units totaling $220,164 to provide contractual maintenance of serious incident software.

Other—$381,814
The IRS has increased the local travel mileage reimbursement rate for 2008 resulting in an increase of $1,685 in this budget for FY 2009. An additional $316,165 is budgeted for contractual services to support Discovery Education digital video-on-demand and an online teaching service to help improve students' retention and test scores. There also is an increase of $63,964 in contractual maintenance to support additional components for OASIS and Pinnacle systems.

Reductions—($96,335)
Consultants—($53,960)
Reductions are needed in the budget to fund higher priority program needs. There is a reduction in consulting services of $53,960 for mainframe support that is no longer necessary since the discontinued use of the mainframe.

Contractual Services—($42,375)
There is a $42,375 reduction for FY 2009 in contractual services related to the discontinued use of the mainframe.

Division of Student Data Management - 445/426/442

Elton Stokes, Director I

Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	34.000	37.800	37.800	**38.800**	1.000
Position Salaries	$2,793,997	$3,507,192	$3,507,192	**$3,735,573**	$228,381
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends				**25,000**	25,000
Professional Part Time					
Supporting Services Part Time		206,233	206,233	**263,940**	57,707
Other					
Subtotal Other Salaries	334,995	206,233	206,233	**288,940**	82,707
Total Salaries & Wages	3,128,992	3,713,425	3,713,425	**4,024,513**	311,088
02 Contractual Services					
Consultants		340,080	340,080	**262,400**	(77,680)
Other Contractual		2,848,664	2,848,664	**3,493,808**	645,144
Total Contractual Services	1,888,286	3,188,744	3,188,744	**3,756,208**	567,464
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		5,000	5,000	**5,500**	500
Other Supplies & Materials		46,500	46,500	**57,565**	11,065
Total Supplies & Materials	29,279	51,500	51,500	**63,065**	11,565
04 Other					
Local Travel		2,265	2,265	**3,950**	1,685
Staff Development		30,838	30,838	**10,266**	(20,572)
Insurance & Employee Benefits					
Utilities					
Miscellaneous		55,908	55,908	**55,908**	
Total Other	102,389	89,011	89,011	**70,124**	(18,887)
05 Equipment					
Leased Equipment		61,593	61,593	**26,783**	(34,810)
Other Equipment		2,735	2,735	**5,470**	2,735
Total Equipment	80,770	64,328	64,328	**32,253**	(32,075)
Grand Total	$5,229,716	$7,107,008	$7,107,008	**$7,946,163**	$839,155

Division of Student Data Management - 445/426/442

Elton Stokes, Director I

CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
	445 Division of Student Data Management						
1	P Director I			1.000	1.000	**1.000**	
2	O Supervisor		1.000	2.000	2.000		(2.000)
1	O Supervisor		1.000	1.000	1.000	**1.000**	
2	O Supervisor		2.000				
3	BD Instructional Specialist		3.000	4.000	4.000		(4.000)
1	27 Applications Developer III					**1.000**	1.000
2	27 Database Administrator III		3.000	2.000	2.000	**2.000**	
1	27 Development Proj Manager		1.000	1.000	1.000	**2.000**	1.000
1	25 Applications Developer II					**1.000**	1.000
2	25 ETL Analyst/Programmer		4.000	4.000	4.000		(4.000)
1	25 Technical Analyst					**3.000**	3.000
2	25 Technical Analyst		1.000				
1	23 Applications Developer I					**1.000**	1.000
2	15 Administrative Secretary II					**1.000**	1.000
1	13 Fiscal Assistant I					**.800**	.800
2	12 Secretary		1.000				
	Subtotal		**17.000**	**15.000**	**15.000**	**13.800**	**(1.200)**
	426 Instructional Management Technology						
1	O Supervisor					**3.000**	3.000
3	BD Instructional Specialist					**5.000**	5.000
1	27 Database Administrator III					**1.000**	1.000
1	27 Development Proj Manager					**1.000**	1.000
1	25 Applications Developer II					**2.000**	2.000
2	25 ETL Analyst/Programmer					**4.000**	4.000
	Subtotal					**16.000**	**16.000**
	442 Student Systems						
1	O Supervisor		1.000	2.000	2.000	**1.000**	(1.000)
3	BD Instructional Specialist		1.000	1.000	1.000		(1.000)
1	27 Database Administrator III		1.000	1.000	1.000		(1.000)
1	27 Development Proj Manager		2.000	2.000	2.000		(2.000)
1	25 Applications Developer II		2.000	4.000	4.000	**1.000**	(3.000)
1	25 Technical Analyst		3.000	4.000	4.000	**1.000**	(3.000)
1	24 Student Systems Specialist		1.000	1.000	1.000	**1.000**	
1	23 Applications Developer I		2.000	2.000	2.000	**1.000**	(1.000)
1	23 Applications Specialist I		2.000	2.000	2.000	**2.000**	
1	15 Data Control Technician II		1.000	1.000	1.000	**1.000**	
1	13 Fiscal Assistant I			.800	.800		(.800)
1	13 Data Control Technician I		1.000	1.000	1.000	**1.000**	

Division of Student Data Management - 445/426/442

Elton Stokes, Director I

CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
	442 Student Systems						
1	12 Secretary			1.000	1.000		(1.000)
	Subtotal		**17.000**	**22.800**	**22.800**	**9.000**	**(13.800)**
	Total Positions		**34.000**	**37.800**	**37.800**	**38.800**	**1.000**

Dept. of Student & Business Technologies - 441

Vacant, Director II

Description	FY 2007 Actual	FY 2008 Budget	FY 2008 Current	**FY 2009 Request**	FY 2009 Change
01 Salaries & Wages					
Total Positions (FTE)	9.000	12.000	12.000		(12.000)
Position Salaries	$522,493	$1,007,511	$1,007,511		($1,007,511)
Other Salaries					
Supplemental Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	522,493	1,007,511	1,007,511		(1,007,511)
02 Contractual Services					
Consultants		116,029	116,029		(116,029)
Other Contractual		452,959	452,959		(452,959)
Total Contractual Services	499,296	568,988	568,988		(568,988)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		1,500	1,500		(1,500)
Other Supplies & Materials		42,575	42,575		(42,575)
Total Supplies & Materials	39,045	44,075	44,075		(44,075)
04 Other					
Local Travel		15,432	15,432		(15,432)
Staff Development		10,950	10,950		(10,950)
Insurance & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	7,602	26,382	26,382		(26,382)
05 Equipment					
Leased Equipment		76,273	76,273		(76,273)
Other Equipment		2,735	2,735		(2,735)
Total Equipment	26,359	79,008	79,008		(79,008)
Grand Total	$1,094,795	$1,725,964	$1,725,964		($1,725,964)

Dept. of Student & Business Technologies - 441

Vacant, Director II

CAT	DESCRIPTION	10 Mon	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2008 CURRENT	**FY 2009 REQUEST**	FY 2009 CHANGE
2	Q Director II		1.000	1.000	1.000		(1.000)
1	O Supervisor		1.000	2.000	2.000		(2.000)
1	27 IT Systems Engineer		2.000	1.000	1.000		(1.000)
1	25 IT Systems Specialist		2.000	4.000	4.000		(4.000)
1	25 Technical Analyst		2.000	2.000	2.000		(2.000)
1	18 IT Systems Technician			1.000	1.000		(1.000)
2	15 Administrative Secretary II		1.000	1.000	1.000		(1.000)
	Total Positions		**9.000**	**12.000**	**12.000**		**(12.000)**