CHAPTER 9

Office of the Chief Technology Officer

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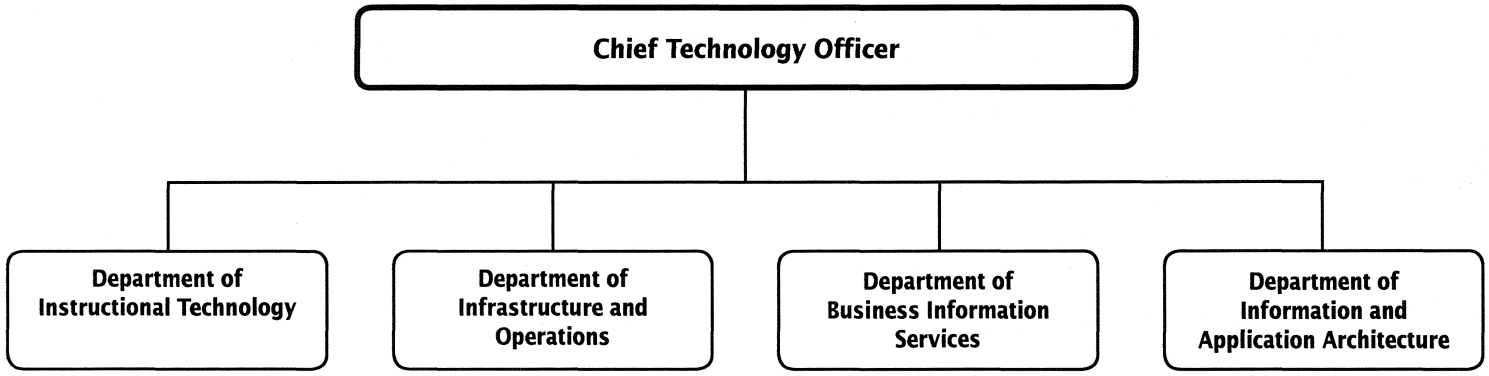
Office of the Chief Technology Officer
Summary of Resources
By Object of Expenditure

OBJECT OF EXPENDITURE	FY 2013 ACTUAL	FY 2014 BUDGET	FY 2014 CURRENT	FY 2015 BUDGET	FY 2015 CHANGE
POSITIONS					
Administrative	15.000	14.000	14.000	14.000	
Business/Operations Admin.	13.000	13.000	13.000	12.000	(1.000)
Professional	20.200	20.200	20.200	20.200	
Supporting Services	110.800	109.800	109.800	109.800	
TOTAL POSITIONS	**159.000**	**157.000**	**157.000**	**156.000**	**(1.000)**
01 SALARIES & WAGES					
Administrative	$1,747,486	$1,854,977	$1,854,977	$1,907,958	$52,981
Business/Operations Admin.	1,208,956	1,488,889	1,488,889	1,380,769	(108,120)
Professional	2,046,266	2,209,349	2,209,349	2,281,752	72,403
Supporting Services	8,591,305	9,056,771	9,056,771	9,117,483	60,712
TOTAL POSITION DOLLARS	**13,594,013**	**14,609,986**	**14,609,986**	**14,687,962**	**77,976**
OTHER SALARIES					
Administrative					
Professional	57,333	21,000	21,000	195,724	174,724
Supporting Services	279,847	242,284	242,284	71,870	(170,414)
TOTAL OTHER SALARIES	**337,180**	**263,284**	**263,284**	**267,594**	**4,310**
TOTAL SALARIES AND WAGES	**13,931,193**	**14,873,270**	**14,873,270**	**14,955,556**	**82,286**
02 CONTRACTUAL SERVICES	**8,344,026**	**6,456,557**	**6,456,557**	**6,843,378**	**386,821**
03 SUPPLIES & MATERIALS	**417,876**	**394,881**	**394,881**	**376,382**	**(18,499)**
04 OTHER					
Local/Other Travel	67,589	83,971	83,971	67,145	(16,826)
Insur & Employee Benefits					
Utilities	3,034,191	3,036,955	3,036,955	2,886,848	(150,107)
Miscellaneous	653,129	634,405	634,405	634,405	
TOTAL OTHER	**3,754,909**	**3,755,331**	**3,755,331**	**3,588,398**	**(166,933)**
05 EQUIPMENT	**715,661**	**568,841**	**568,841**	**725,103**	**156,262**
GRAND TOTAL AMOUNTS	**$27,163,665**	**$26,048,880**	**$26,048,880**	**$26,488,817**	**$439,937**

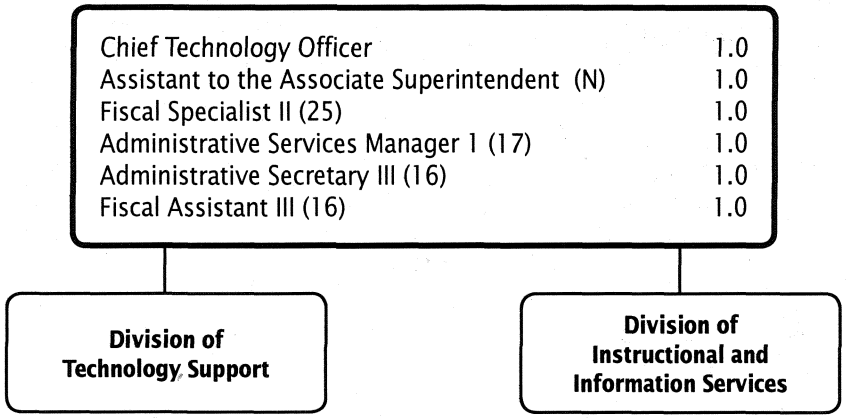
Office of the Chief Technology Officer—Overview



F.T.E. Positions 156.0

(In addition, there are 18.5 positions funded by the Capital Budget, and a 0.5 position funded by the Employee Benefits Trust Fund)

Office of the Chief Technology Officer



F.T.E. Positions 6.0

Office of the Chief Technology Officer—411

Sherwin Collette, Chief Technology Officer 301-279-3581

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

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

MAJOR FUNCTIONS

Information and Application Architecture

OCTO supports schools and offices by provisioning the management and administration of student systems. These systems allow 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. OCTO staff collaborates with other offices to develop and implement various system architectures to enhance services we provide to schools and students.

Instructional Technology

OCTO leads the design, development, and delivery of high-quality technology professional development on systemwide applications to support teaching and learning; using technology to facilitate and enhance professional learning communities, collaborating with MCPS offices and schools to identify needs for which technology solutions can be applied; and developing, distributing, and supporting interactive distance and blended learning experiences. The office provides leadership and program management for the implementation of new technologies in schools to increase teacher capacity by saving valuable time. The office manages the Center for Technology Innovation (CTI), which is the school system's primary technology training facility for all staff. The office supports the instructional implementation of the Educational Technology Policy in all schools and the Technology Modernization Program. OCTO evaluates new technologies and plans for the ordering and distribution of these technologies.

Infrastructure and Operations

OCTO is responsible for building, fortifying, and managing the enterprise-wide technical systems and learning infrastructure across the school district. This office facilitates the implementation of effective, secure, and reliable hardware and software solutions for the entire school system. OCTO staff provides operational support for the provisioning of administrative data and reports. OCTO staff ensures the safety and security system of the MCPS network.

Business Information Services

OCTO supports the development of solutions used to manage the business of education throughout the district. Staff creates automations and efficiencies throughout various business-related systems. The office works collaboratively with MCPS offices to assist in developing solutions that enhance operational efficiencies to support staff and schools.

Technology Support

OCTO provides on-site technical support, customer relationship management and Help Desk services to schools and offices. The office is responsible for the installation of new technologies and ensuring readiness for the start of school.

Instructional and Information Services

OCTO staff provisions instructional systems, including the Online Achievement and Reporting System, comprising electronic grading and assessment systems, and reporting of assessments aligned to MCPS and Maryland state standards. OCTO staff develops and maintains the myMCPS portal to deliver a personalized user experience, based on users' roles and responsibilities in the school system. myMCPS facilitates team and peer-group communication and collaboration; provides role-specific access to applications, data warehouse dashboards and reports; and offers information services, including the elementary integrated curriculum, teacher and student attendance data, and social networking features, such as wikis, discussion boards, and blogs.

ACCOMPLISHMENTS AND INITIATIVES

» OCTO has expanded and enhanced the usefulness of key operational management solutions. The office had identified, developed, and implemented industry-leading software solutions such that best meet the needs of schools and offices.

» OCTO has implemented an online system to provide staff and student access to digital resources, research databases, and mobile technologies. A collection and circulation management system was implemented for the evaluation and selection of instructional materials, streamlining the evaluation of library materials so they get to students faster.

- OCTO has provisioned a system that manages staff retirement benefits. Among the enhanced functions of the upgraded system is the ability for staff members to calculate benefits on demand, including the ability to calculate future retirement benefits based on "what-if" scenarios. Staff members also will be able to print a retirement statement on demand, as opposed to on a yearly basis or by special request from the Employee and Retiree Service Center.
- OCTO implemented a financial management system for schools to manage Independent Activity Funds (IAF) and to give parents the ability to use credit cards to pay for school events and MCPS district fees. The system improves the efficiency and effectiveness of financial operations at both the school and central services levels, while offering a new level of access and convenience for parents.
- OCTO implemented business intelligence reporting for selected central service areas to enhance and improve the development and distribution of complex reporting from the Financial Management System (FMS).
- OCTO streamlined processes such as notification of Staffing Allocations, distribution of Employee Action Notices, school selection of stipend positions, and payroll processing, reduced paper, enhancing reliability and increasing access to information.
- OCTO provided technology modernization services, replacing 9,236 computers and 644 printers in 42 schools. The computer count includes 217 carts with 10 mobile devices in each cart to make use of wireless mobility within the school, in support of instruction and assessment. Staff continued to refurbish and repair 834 computers in the five schools that had been anticipating the replacement of their four-year-old computers in 2013. These schools included 10 high schools, 9 middle schools, 16 elementary schools, and 3 special schools. The program supported the installation of technology in one modernized high school, one modernized middle school, and two new elementary schools.
- OCTO enhanced the school support staffing model with primary and backup assignments, based on geography and technology inventory for each school. The model incorporates a "lifeboat" system to rapidly deploy replacement servers to schools, restoring access to technology and minimizing downtime.
- OCTO staff equipped all elementary schools with interactive whiteboard technologies by the beginning of the 2013–2014 school year. Interactive whiteboard solutions were installed in more than 80 schools, primarily in locations where this technology was not previously installed. A total of 2,015 interactive white boards were installed in instructional spaces across the county.
- OCTO staff designed and facilitated more than 120 professional development and work sessions representing more than 20 topics, including grading and reporting, integrating technology with instruction, using Measures of Academic Progress data to inform instruction, Professional Development Online, and Edline. More than 1,500 teachers and MCPS staff attended these trainings.
- The OCTO instructional technology specialists conducted more than 420 professional development sessions across 110 different topics. They provided job-embedded professional development for system initiatives and regularly supported collaborative grade-level planning to all elementary schools.
- OCTO has configured tablet technologies and integrated them into instructional spaces. Staff have enabled primary teachers to administer the Reading 3D assessments in place of the palm pilot devices. These new tablet technologies also will be used to support the new Kindergarten Entry Assessment.
- OCTO has updated the Documentation of Intervention (DOI) to enable users to set goals for groups of students, monitor those goals with data, and create multiple records at once, all in a new user-friendly interface. The DOI application is compatible with access from mobile devices.
- OCTO has upgraded the Online Administrative Student Information System to fulfill Board of Education policy, regulation, and procedural changes, as well as Maryland state and federal government-mandated changes. These upgrades included modifications to the Special Services module to comply with Maryland State Department of Education-mandated changes to the Individual Education Program.
- OCTO deployed the initial phase of the student course-scheduling system at select secondary schools. The upgrade enables schools to plan and complete their master schedule, using a web-based interface that provided improved accessibility and transparency for all users. The upgrade enabled better management and definition of courses and control of course availability.
- OCTO has released an upgraded data warehouse, enabling district staff, students, and parents to gain new insights into information to help our students continue to achieve at higher levels. This new system provides users with greater visibility into all student data, including demographics, assessments, marks, attendance, program participation, and instructional interventions. All data and reports are aligned with the school support and improvement framework and support monitoring and analysis of the performance targets set for the strategic planning framework districtwide milestones.
- OCTO staff worked in partnership with all offices at MCPS as well as with other MCPS partners such as Montgomery College (MC), Montgomery County Government (MCG), and the Universities at Shady Grove, to provision data systems to help our students and community. OCTO worked in partnership with MCG to make data available to the community as part of the data Montgomery initiative. This initiative provides direct access to county datasets in a user-friendly

format, offering the public an opportunity to review and analyze various sets of Montgomery County data.

» OCTO staff worked closely with staff from the Office of Special Education and Student Services to develop data systems and reports to ensure that MCPS is compliant with state and federal legislation governing the special education process and to monitor whether students are receiving the most appropriate services and accommodations in a timely manner.

OVERVIEW OF BUDGET CHANGES

FY 2015 Recommended Budget

The FY 2015 recommended budget for this office is $5,049,193, an increase of $239,490 over the current FY 2014 budget. An explanation of this change follows.

Same Service Level Changes—$436,223

Continuing Salary Costs—$18,630

There is an increase of $18,630 for continuing salary costs for current employees. This amount includes the cost associated with the annualization of the salary step provided to eligible employees on February 8, 2014.

Realignments to Meet Expenditure Requirements and Priorities—($8,752)

Realignments are budgeted to address priority spending needs in this office. There is a realignment of $1,208 from office supplies to fund software programs. In addition, $5,393 from office supplies and $3,359 from local travel mileage reimbursement are realigned from this office's budget to the budget for the Department of Instructional Technology.

Other—$426,345

MCPS is required to pay the web security appliance fee every three years, and there is an increase of $426,345 for contractual services.

Program Efficiencies and Reductions—($196,733)

As a result of contract renegotiations, a reduction of $150,107 for the telephone utility fee can be made. Also, there is a reduction of $46,626 budgeted for contractual maintenance. This reduction can be made based on prior year spending trends.

Office of Chief Technology Officer - 411

Sherwin Collette, Chief Technology Officer

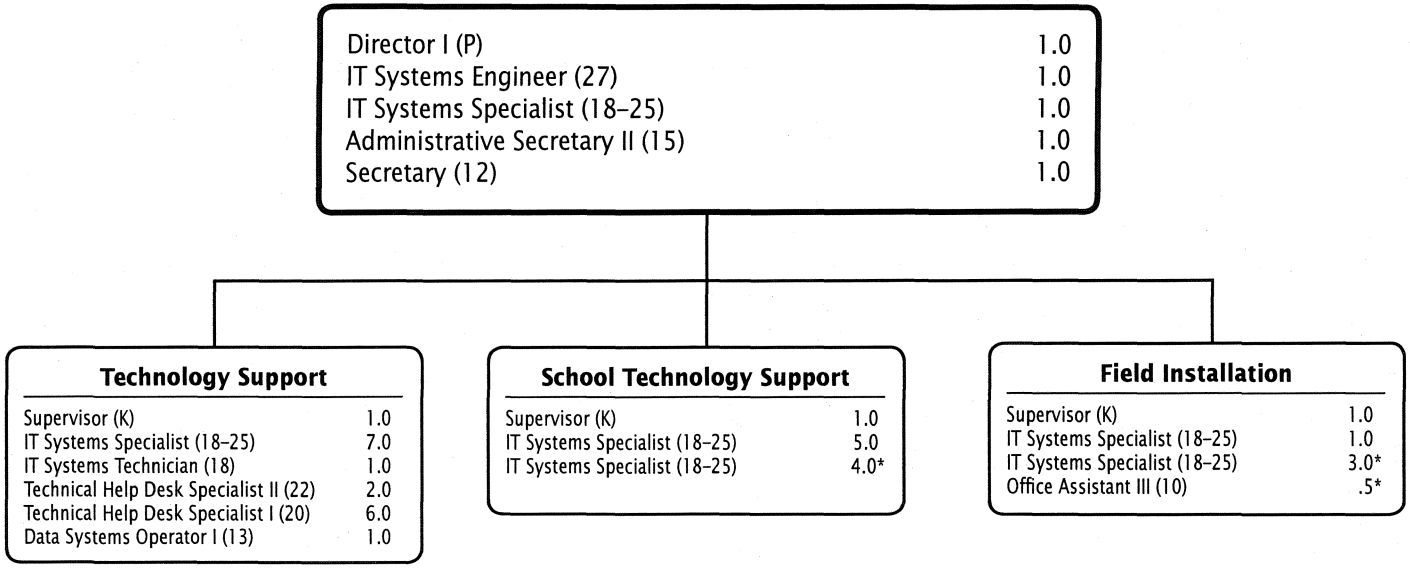
Description	FY 2013 Actual	FY 2014 Budget	FY 2014 Current	**FY 2015 Request**	FY 2015 Change
01 Salaries & Wages					
Total Positions (FTE)	7.000	6.000	6.000	**6.000**	
Position Salaries	$579,673	$549,056	$549,056	**$567,686**	$18,630
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	579,673	549,056	549,056	**567,686**	18,630
02 Contractual Services					
Consultants					
Other Contractual		540,012	540,012	**919,731**	379,719
Total Contractual Services	555,422	540,012	540,012	**919,731**	379,719
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		17,399	17,399	**10,799**	(6,600)
Other Supplies & Materials		2,300	2,300	**3,508**	1,208
Total Supplies & Materials	18,449	19,699	19,699	**14,307**	(5,392)
04 Other					
Local/Other Travel		29,576	29,576	**26,216**	(3,360)
Insur & Employee Benefits					
Utilities		3,036,955	3,036,955	**2,886,848**	(150,107)
Miscellaneous		634,405	634,405	**634,405**	
Total Other	3,713,245	3,700,936	3,700,936	**3,547,469**	(153,467)
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment	34,681				
Grand Total	$4,901,470	$4,809,703	$4,809,703	**$5,049,193**	$239,490

Office of Chief Technology Officer - 411

Sherwin Collette, Chief Technology Officer

CAT		DESCRIPTION	10 Mon	FY 2013 ACTUAL	FY 2014 BUDGET	FY 2014 CURRENT	**FY 2015 REQUEST**	FY 2015 CHANGE
1		Chief Technology Officer		1.000	1.000	1.000	**1.000**	
11	O	Supervisor		1.000				
1	N	Asst. to Assoc Supt		1.000	1.000	1.000	**1.000**	
1	25	Fiscal Specialist II		1.000	1.000	1.000	**1.000**	
1	17	Admin Services Manager I		1.000	1.000	1.000	**1.000**	
1	16	Administrative Secretary III		1.000	1.000	1.000	**1.000**	
1	16	Fiscal Assistant III		1.000	1.000	1.000	**1.000**	
	Total Positions			**7.000**	**6.000**	**6.000**	**6.000**	

Division of Technology Support



F.T.E. Positions 31.0

(*In addition, there are 7.5 positions funded by the Capital Budget)

Division of Technology Support—422/423/424/434

Charles L. McGee, Director I 240-453-2590

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

MAJOR FUNCTIONS

DTS provides technical assistance to staff in all MCPS facilities through the services of the School Technology Support team, Help Desk, Technical Services and Support team, and the Field Installation Unit.

School Technology Support

The School Technology Support (STS) team consists of three groups—first- and second-level information technology support specialists (ITSS), and certified computer repair staff. The ITSS group is responsible for network administration; server, workstation, and printer maintenance and repair; and software installation and upgrades including visitor management and school access control systems. The team's work assignment includes all elementary schools, 16 middle schools, and 5 special schools. This group routinely partners with administrators, teachers, media specialists, and central services staff to prepare for distance learning, online testing, and other events that require technical assistance. They also participate in project management in support of school initiatives. The certified hardware repair group is deployed to kindergarten through Grade 12 locations to troubleshoot, diagnose, and repair hardware that no longer is under warranty. The workload of the STS team is monitored through the Unicenter Service Desk (USD) issue tracking system, which allows the supervisors to adjust resource allocation needs more effectively. Although USD is the major source of requests for service and support, the team also receives communications through e-mail, telephone, routine and emergency site visits, and internal requests for more advanced help to resolve problems. The STS team works proactively to identify industry best practices in order to improve customer service. The Help Desk team provides one central location for MCPS staff to seek information and immediate resolution to technical problems.

Help Desk

The Help Desk supports a wide range of technology infrastructure, hardware, and more than 100 enterprise-wide and school- and office-based applications. Help Desk specialists attend ongoing training to prepare them to resolve basic network issues; support new application inquiries; and respond to software questions, including questions about the Microsoft Office Suite. This team also attends operation and application training to ensure that the most current information available is shared with MCPS staff. The Help Desk team routinely researches and collaborates with other technologists in order to post useful information and timely solutions to frequently asked questions on the Help Desk website as well as to a self-service database, Knowledge Tools. The Help Desk collaborates with appropriate staff and departments to create services and operation-level agreements that specifically outline a comprehensive support plan for all MCPS enterprise applications.

Technical Services and Support

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

USD administration is provided by members of the TSS team as well as the STS team. This team is responsible for applying application upgrades and maintaining USD instances for the Employee and Retiree Service Center (ERSC), the Offices of Shared Accountability, Curriculum and Instructional Programs, and the Chief Technology Officer (OCTO), and the Division of Family and Community Partnerships. This team also is responsible for extracting data from the USD issue tracking system to design customized reports for schools and central services when information is requested.

Field Installation Unit

The Field Installation Unit implements 21st century technologies in MCPS classrooms. Staff in this unit works with school staff to update technology in schools through the Technology Modernization Program and ensure readiness at the opening of the school year. Staff maximizes the technology investment by reassigning older technologies and equipment to single-purpose, less demanding, yet important, functions, in the schools. Examples of reassignments include door card readers, achievement series scan stations, visitor management systems, Fluency and Automaticity through Systematic Teaching with Technology (FASTT) Math, and Read 180. Additionally, the unit collects online data for updating and maintaining the asset management system and software license compliance. This unit supports centralized distribution of software updates, service packs, license keys, and enterprise systems management.

ACCOMPLISHMENTS AND INITIATIVES

» Tech Mod replaced 9,236 computers and 644 printers in 42 schools including 3 special education schools and 4 newly revitalized schools. The computer count includes 217 carts with 10 mobile devices in each cart to make use of wireless mobility within their school, in support of instruction and assessment. Staff continued to refurbish and repair 834 computers in the five schools that had been anticipating the replacement of their four-year-old computers in Fiscal Year (FY) 2013. These schools included 10 high schools, 9 middle schools, 16 elementary schools, and 3 special schools. The program supported the installation of technology in one modernized high school, one modernized middle school, and two new elementary schools.

» In FY 2013, of the 91,832 requests logged by the system, the MCPS Help Desk closed 25,404 requests within two hours of the call. In addition, they processed another 35,443 tickets that were submitted by other MCPS staff via the web or e-mail and handled by the eight-member team. The supervisor and team lead of the Help Desk are proactive in using the issue tracking software to spot trends. They routinely use this information to provide first-level troubleshooting before escalating an issue to second-level support staff, usually resolving the customer's problem within the Help Desk, without escalation. The Help Desk team works continuously to improve customer service by collaborating with other teams in OCTO and by incorporating user feedback into daily operations. They participate in the development of customized support plans and service and operation level agreements that are essential to the seamless delivery of service to our customers. This team meets with various project teams periodically to prepare training documents and assist in training designated staff on new enterprise applications. The Help Desk maintains the Help Desk website and provides users with timely solutions to frequently asked questions.

» In FY 2013, STS staff resolved 37,700 reported problems. ITSS staffing is a team model with primary and backup assignments, based on geography and technology inventory for each school. The team incorporates a "Lifeboat" system to rapidly deploy replacement servers to schools, restoring access to technology and minimizing downtime.

» In FY 2013, the TSS team closed 534 emergency requests, handling 74 percent within the 12-hour service-level agreement (SLA) performance measure. The TSS team also handled 4,184 normal priority calls, meeting the 3-day SLA performance measure 56 percent of the time. The total number of requests of all priorities for this time period was 4,037.

PERFORMANCE MEASURES

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
84%	85%	85%

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

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
100%	100%	100%

Explanation: This measure is evaluated through the use of customer satisfaction survey cards to indicate the timeliness of problem resolution by the MCPS hardware staff servicing non-warranty equipment K–12. This percentage reflects the satisfaction rate of those who responded through the survey cards.

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
86.2%	88%	90%

Explanation: This measure reflects the level of customer satisfaction, according to customers who reply to the customer satisfaction survey cards, with the services provided by the assigned technologist. This percentage reflects the satisfaction rate of those who responded through the survey cards.

Performance Measure: Percentage of emergency tickets closed within 48 hours for non-school-based offices.

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
80%	80%	83%

Explanation: This measure reflects the number of tickets closed within the 48 hours, as they were opened.

OVERVIEW OF BUDGET CHANGES

FY 2015 Recommended Budget

The FY 2015 recommended budget for this division is $2,802,005, a decrease of $10,112 from the current FY 2014 budget. An explanation of this change follows.

Same Service Level Changes—($10,112)

Continuing Salary Costs—($1,311)

There is a decrease of $1,311 for continuing salary costs. The costs associated with the annualization of the step provided to employees on February 8, 2014 are offset by reductions for staff turnover.

Realignments to Meet Expenditure Requirements and Priorities—($8,801)

Realignments are budgeted to address priority spending needs in this division. There is $8,801 realigned from local travel mileage reimbursement in this division's budget to the budget for the Department of Instructional Technology.

A review of definitions of state categories of expenditure has resulted in the realignment of some positions from one state category to another. The change is budget neutral and has no impact on employees.

Division of Technology Support - 422/423/424/434

Charles McGee, Director I

Description	FY 2013 Actual	FY 2014 Budget	FY 2014 Current	**FY 2015 Request**	FY 2015 Change
01 Salaries & Wages					
Total Positions (FTE)	31.000	31.000	31.000	**31.000**	
Position Salaries	$2,653,830	$2,620,693	$2,620,693	**$2,619,382**	($1,311)
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	2,653,830	2,620,693	2,620,693	**2,619,382**	(1,311)
02 Contractual Services					
Consultants					
Other Contractual		131,720	131,720	**131,514**	(206)
Total Contractual Services	174,868	131,720	131,720	**131,514**	(206)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		10,152	10,152	**10,152**	
Other Supplies & Materials		22,923	22,923	**22,923**	
Total Supplies & Materials	32,468	33,075	33,075	**33,075**	
04 Other					
Local/Other Travel		20,853	20,853	**12,258**	(8,595)
Insur & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	15,654	20,853	20,853	**12,258**	(8,595)
05 Equipment					
Leased Equipment		5,776	5,776	**5,776**	
Other Equipment					
Total Equipment	5,769	5,776	5,776	**5,776**	
Grand Total	$2,882,589	$2,812,117	$2,812,117	**$2,802,005**	($10,112)

Division of Technology Support - 422/423/424/434

Charles McGee, Director I

CAT	DESCRIPTION	10 Mon	FY 2013 ACTUAL	FY 2014 BUDGET	FY 2014 CURRENT	**FY 2015 REQUEST**	FY 2015 CHANGE
	422 Division of Technology Support						
1	P Director I		1.000	1.000	1.000	**1.000**	
1	27 IT Systems Engineer		1.000	1.000	1.000	**1.000**	
1	25 IT Systems Specialist					**1.000**	1.000
11	25 IT Systems Specialist		8.000	1.000	1.000		(1.000)
11	18 IT Systems Technician		1.000				
1	15 Administrative Secretary II		1.000	1.000	1.000	**1.000**	
11	13 Data Systems Operator		1.000				
1	12 Secretary		1.000	1.000	1.000	**1.000**	
	Subtotal		**14.000**	**5.000**	**5.000**	**5.000**	
	423 Technology Support						
10	K Supervisor					**1.000**	1.000
11	K Supervisor		1.000	1.000	1.000		(1.000)
10	25 IT Systems Specialist					**7.000**	7.000
11	25 IT Systems Specialist			7.000	7.000		(7.000)
1	22 Technical Help Desk Spec II		1.000	1.000	1.000	**2.000**	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	**6.000**	4.000
3	20 Technical Help Desk Spec I		4.000	4.000	4.000		(4.000)
10	18 IT Systems Technician					**1.000**	1.000
11	18 IT Systems Technician			1.000	1.000		(1.000)
10	13 Data Systems Operator					**1.000**	1.000
11	13 Data Systems Operator			1.000	1.000		(1.000)
	Subtotal		**9.000**	**18.000**	**18.000**	**18.000**	
	424 School Technology Support						
10	K Supervisor					**1.000**	1.000
11	K Supervisor		1.000	1.000	1.000		(1.000)
10	25 IT Systems Specialist					**5.000**	5.000
11	25 IT Systems Specialist		5.000	5.000	5.000		(5.000)
	Subtotal		**6.000**	**6.000**	**6.000**	**6.000**	
	434 Field Installation						
10	K Supervisor					**1.000**	1.000
3	K Supervisor		1.000	1.000	1.000		(1.000)
1	25 IT Systems Specialist		1.000	1.000	1.000		(1.000)
10	25 IT Systems Specialist					**1.000**	1.000
	Subtotal		**2.000**	**2.000**	**2.000**	**2.000**	
	Total Positions		**31.000**	**31.000**	**31.000**	**31.000**	

Division of Instructional and Informational Services

Director I (P)	1.0
Supervisor (O)	3.0
Supervisor (K)	1.0
Instructional Specialist (B–D)	3.0
Application Developer III (27)	1.0
Database Administrator III (27)	1.0
Application Developer II (25)	7.0
Technical Analyst (25)	1.0
Student Systems Specialist (24)	1.0
Applications Specialist I (23)	1.0
Administrative Secretary II (15)	1.0
Data Control Technician II (15)	1.0
Data Control Technician I (13)	1.0
Fiscal Assistant I (13)	.8

F.T.E. Positions 23.8

Division of Instructional and Informational Services—442

Joel Smetanka, Director I 240-453-2580

MISSION ***The mission of the Division of Instructional and Informational Services (DIIS) is to provide instructional and information solutions that enhance the education of students through the innovative application of technology; increase the efficiency of the educator; and transform access to information in support of teaching and learning for staff, students, parents, unions, and the community.***

MAJOR FUNCTIONS

Application Development

DIIS collaborates with offices, schools, and local government agencies to promote and support MCPS and the initiatives of the Office of the Chief Technology Officer by developing, implementing, and continuously improving MCPS applications and services. Based on goals and priorities, the department develops, purchases, implements, and supports complex solutions for students, parents, schools, and offices. These solutions enable the collection and analysis of essential data; decision making and planning; dissemination of accurate and timely information; and operational effectiveness that streamlines and enhances the management of teaching and learning, as well as MCPS's compliance with state and federal regulations. DIIS focuses on provisioning and managing student systems so that they support greater accountability and sharing of knowledge among staff, students, and parents.

Instructional Applications

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

myMCPS

Information from the student systems and other information services is published in the myMCPS portal, which provides end users with the information they need in a single place. The myMCPS portal is designed to deliver a personalized user experience, based on a user's roles and responsibilities in the school system. The portal facilitates team and peer-group communication and collaboration; provides access to role-specific applications, data warehouse dashboards, and reports; and offers information services, including the elementary integrated curriculum, teacher and student attendance data, and social networking features such as wikis, discussion boards, and blogs.

ACCOMPLISHMENTS AND INITIATIVES

- » DIIS identifies, develops, and implements industry-leading software solutions that best meet the requirements of schools and offices. The prevalence of social networking structures underpins important technology decisions as MCPS works to provide solutions that meet or exceed the expectations of 21st century learners and educators.
- » The enterprise portal, myMCPS, received a major upgrade that provides users with a dynamic, interactive, and scalable environment that enables school and office staff to contribute to, and participate in, social networking and professional development. The portal features rich cloud-based application delivery, communication, document storage, and collaboration resources with interactive dashboards and reports. The enhanced features empower staff to create and share instructional content with the MCPS 21st century professional learning community. Rich feature sets include video libraries, content personalization, and discussion boards to accelerate the communication of ideas across groups. The department is committed to continuously enhancing applications.
- » The Documentation of Intervention (DOI) has been updated to allow users to set goals for groups of students, monitor those goals with data, and create multiple DOIs at once, all in a new user-friendly interface.
- » OASIS has received continuous upgrades to fulfill Board of Education policy, regulation, and procedural changes, as well as Maryland state and federal government-mandated changes. These upgrades included modifications to the Special Services module to comply with Maryland State Department of Education (MSDE)-mandated changes to the IEP.
- » New student data reports were created in support of new state and federal compliance requirements, which are tied to MCPS funding levels and MSDE compliance regulations.
- » The Extended School Year and the Home and Hospital programs continue to be streamlined and automated, ensuring that students with special needs receive timely access to services.

» The initial phase of the student course scheduling system upgrade began at selected secondary schools. This upgrade enables those schools to plan and complete their master schedule, using a web-based interface that provides improved accessibility and transparency for all users. During subsequent phases, students will have the ability to enter their course requests, improving the accuracy and efficiency for master schedulers during articulation and master schedule development. Additionally, the upgrade enabled better management and definition of courses and control of their availability.

» The electronic grade book has been adopted by the remaining 103 elementary schools in Kindergarten through Grade 5, in support of the implementation of standards-based teaching and learning. This allows all 131 elementary schools to take full advantage of Curriculum 2.0.

» All elementary students will receive a standards-based report card, which will reflect more accurately the students' understanding of the concepts taught in each subject.

» Use of the electronic gradebook to collect attendance in middle schools was expanded to simplify the recording and reporting of daily attendance for local and state accountability.

PERFORMANCE MEASURES

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
92%	95%	97%

Explanation: This is a measure of customer satisfaction with DIIS staff service, as measured by surveying stakeholders in work group sessions.

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
80%	90%	92%

Explanation: This measure indicates the percentage of software implemented that performs without error, based on design specifications, as measured by source control work item management software.

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
90%	92%	94%

Explanation: This measure indicates the percentage of user-requested enhancements that are implemented once approved by a recognized advisory group. This is measured by using project/work plans that itemize the work of the unit, including user-requested enhancements, and are used to monitor progress and completion of those items.

OVERVIEW OF BUDGET CHANGES

FY 2015 Recommended Budget

The FY 2015 recommended budget for this division is $2,936,171, an increase of $268,388 over the current FY 2014 budget. An explanation of this change follows.

Same Service Level Changes—$433,759

Continuing Salary Costs—($10,917)

There is a decrease of $10,917 for continuing salary costs. The costs associated with the annualization of the step provided to employees on February 8, 2014 are offset by reductions for staff turnover.

Realignments to Meet Expenditure Requirements and Priorities—$444,676

Realignments are budgeted to address priority spending needs in this division. There is a realignment of $95,724 from supporting services part-time salaries to fund professional part-time salaries. In addition, there are realignments of $368,230 from contractual maintenance and $76,446 from consultant services from the Department of Information and Application Architecture's budget to this division's budget.

A review of definitions of state categories of expenditure has resulted in the realignment of some positions from one state category to another. The change is budget neutral and has no impact on employees.

Program Efficiencies and Reductions—($165,371)

There is a reduction of a 1.0 operations development manager position and $112,672. The responsibilities of this position will be distributed to other staff members in the division. Also, there is a reduction of $52,699 budgeted for consultant services. This reduction can be made based on prior year spending trends.

Div. of Instructional & Informational Services - 442

Joel Smetanka, Director I

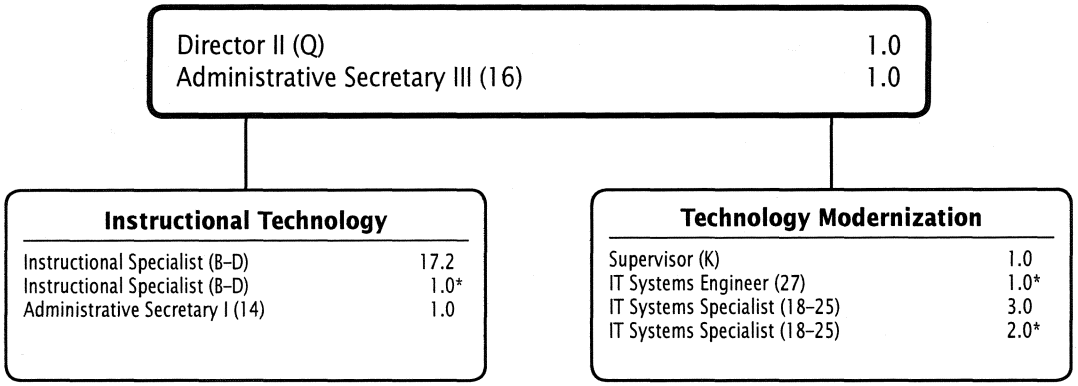
Description	FY 2013 Actual	FY 2014 Budget	FY 2014 Current	**FY 2015 Request**	FY 2015 Change
01 Salaries & Wages					
Total Positions (FTE)	24.800	24.800	24.800	**23.800**	(1.000)
Position Salaries	$1,982,721	$2,438,953	$2,438,953	**$2,315,364**	($123,589)
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time				**95,724**	95,724
Supporting Services Part Time		190,724	190,724	**16,000**	(174,724)
Other					
Subtotal Other Salaries	220,109	190,724	190,724	**111,724**	(79,000)
Total Salaries & Wages	2,202,830	2,629,677	2,629,677	**2,427,088**	(202,589)
02 Contractual Services					
Consultants		31,006	31,006	**136,753**	105,747
Other Contractual				**368,230**	368,230
Total Contractual Services	179,725	31,006	31,006	**504,983**	473,977
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office					
Other Supplies & Materials		6,600	6,600	**3,600**	(3,000)
Total Supplies & Materials	6,313	6,600	6,600	**3,600**	(3,000)
04 Other					
Local/Other Travel		500	500	**500**	
Insur & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	524	500	500	**500**	
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$2,389,392	$2,667,783	$2,667,783	**$2,936,171**	$268,388

Div. of Instructional & Informational Services - 442

Joel Smetanka, Director I

CAT		DESCRIPTION	10 Mon	FY 2013 ACTUAL	FY 2014 BUDGET	FY 2014 CURRENT	**FY 2015 REQUEST**	FY 2015 CHANGE
1	P	Director I		1.000	1.000	1.000	**1.000**	
1	O	Supervisor		1.000	1.000	1.000	**3.000**	2.000
2	O	Supervisor		2.000	2.000	2.000		(2.000)
1	K	Supervisor		1.000	1.000	1.000	**1.000**	
1	J	Operations Development Manager		1.000	1.000	1.000		(1.000)
1	BD	Instructional Specialist					**3.000**	3.000
2	BD	Instructional Specialist		3.000	3.000	3.000		(3.000)
1	27	Applications Developer III		1.000	1.000	1.000	**1.000**	
1	27	Database Administrator III					**1.000**	1.000
2	27	Database Administrator III		1.000	1.000	1.000		(1.000)
1	25	Applications Developer II		6.000	6.000	6.000	**7.000**	1.000
2	25	Applications Developer II		1.000	1.000	1.000		(1.000)
1	25	Technical Analyst		1.000	1.000	1.000	**1.000**	
1	24	Student Systems Specialist		1.000	1.000	1.000	**1.000**	
1	23	Applications Specialist I		1.000	1.000	1.000	**1.000**	
1	15	Administrative Secretary II		1.000	1.000	1.000	**1.000**	
1	15	Data Control Technician II		1.000	1.000	1.000	**1.000**	
1	13	Fiscal Assistant I		.800	.800	.800	**.800**	
1	13	Data Control Technician I		1.000	1.000	1.000	**1.000**	
	Total Positions			**24.800**	**24.800**	**24.800**	**23.800**	**(1.000)**

Department of Instructional Technology



F.T.E. Positions 24.2

(*In addition, there are 4.0 positions funded by the Capital Budget)

Department of Instructional Technology—435/427/428/434

Kara B. Trenkamp, Director II 301-279-3581

MISSION ***The mission of the Department of Instructional Technology (DIT) is to lead the selection of innovative technologies in K–12 environments and lead the development of high-quality professional development that promotes the effective integration of technology in teaching and learning environments and excellence in teaching and learning. This is accomplished by building the capacity of administrative, instructional, and support services staff through high-quality, differentiated, and job-embedded professional development to support the implementation of new and existing technologies in schools and offices.***

MAJOR FUNCTIONS

Leadership, Professional Development, and Innovative Technologies

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

Professional Development on the Integration of Technology

The team of instructional technology specialists provides on-site, centralized, and web-based professional development using the Analysis, Design, Development, Implementation, and Evaluation instructional system design model for school and office staff on skills and strategies needed for data-driven decision making, and integrating technology into instructional and management practices. Professional development, including myMCPS, assessment technologies, communications applications, curriculum and course management platforms, instructional applications, and electronic resources, will enhance both instructional and managerial practices. Whenever feasible, this team employs a job-embedded approach to professional development when working with school staff to increase technological pedagogical content knowledge as it relates to each teacher's implementation of the curriculum. The use of webinar and collaboration site technologies facilitates professional learning communities that bring together job-alike professionals from across the county. The team develops online training opportunities using best-practice technology solutions and methodologies, translates application functions into MCPS business practices, and researches and develops the latest instructional resources and software. This group collaborates with school leadership and identifies targeted, exemplary technology integration practices. Staff also helps identify hardware, software, and electronic resources to support school-improvement objectives, and provide support and training to administrators and instructional and support staff. This team also supports the use of 21st century interactive classroom technologies to create and strengthen inclusive, diverse community-centered classrooms that foster a culture of inquiry, respect, and risk-taking so that all students are empowered to participate as full citizens in meaningful learning communities.

Selection, Testing, and Provisioning of Innovative Technologies

The Technology Innovation Unit continuously collaborates with schools and offices to understand interests and needs, gathering requirements from stakeholders. The unit cultivates strategic partnerships with vendors who focus on improving technology products, services, prices, quality, and on-time delivery. The team oversees the testing of products and configurations prior to deployment to schools to ensure product reliability and effective ongoing operations in every school. Staff also keeps abreast of emerging technology trends and products and assesses their applicability in the educational environment. Educationally appropriate products are evaluated to determine if the product meets identified needs, and high-level tests are performed to assess compatibility with the MCPS technology infrastructure. The team also oversees a program to refurbish computers in schools where technology is four years old, in response to the change from a four-year to a five-year replacement cycle that was put in place temporarily as a result of the fiscal crisis. Further, they oversee the planning and implementation of interactive whiteboard technology, in connection with redefining 21st century learning spaces.

ACCOMPLISHMENTS AND INITIATIVES

- The Technology Modernization initiative replaced approximately 9,300 computers in 42 schools, 4 of which were newly renovated. In support of the wireless project, the majority of computers provided to the schools in this initiative were laptop computers and tablets.
- Additionally, 2,050 computers were refurbished and supplied to the schools to supplement the new

computers and to ensure that the school had enough computers to meet the needs of their instructional programs.

» From February through August 2013, installation of Promethean technologies began across elementary schools. These interactive technologies serve as the hub of the classroom, facilitating whole-group instruction, small-group work and the ability for staff and students to interact with digital content through multiple modalities. The integration of student response systems, slates, and tablets with these technologies provision the ability for seamless formative assessment opportunities during classroom instruction. All elementary schools were equipped with these technologies at the beginning of the 2013–2014 school year. To date, interactive whiteboard solutions have been installed in more than 90 schools, representing those locations where this technology was not previously installed. A total of 2,015 interactive whiteboards were installed in instructional spaces at these locations.

» Throughout the school year, instructional technology specialists provided schools and offices with ongoing services and support for all technology systems, including the Instruction Center, myMCPS, Measures of Academic Progress, mClass, standards-based grading and reporting, the electronic grade book, Financial Management System, Human Resources Information System, MCPS Careers, Professional Development Online, Connect-ED, Fortis, the Transportation Information Management System, and the Facilities Availability and Emergency Status Reporting. The Office of the Chief Technology Officer instructional technology specialists conducted more than 420 professional development sessions across 110 different topics. They provided job-embedded professional development for system initiatives and regularly supported collaborative grade-level planning to all elementary schools.

» During the summer, DIT designed and facilitated more than 120 professional development and work sessions, representing more than 20 topics, including grading and reporting, integrating technology with instruction, using MAP data to inform instruction, PDO, and Edline. More than 1,500 teachers and MCPS staff attended these trainings this past summer.

» This past summer, instructional technology specialists worked with more than 900 teachers as they earned credit creating interactive lessons that integrate technology with Curriculum 2.0. These teachers participated in a week-long course designed to help them plan for meaningful instruction using digital content, multimedia formats, interactive applications, and technology resources as they teach Curriculum 2.0.

» Professional development on myMCPS and its key applications is designed and facilitated by specialists within DIT. The new Documentation of Interventions (DOI) application was completed this summer and is poised for use by all schools since the start of the school year. This enhanced application allows school staff to create records for student interventions, update and monitor student progress toward meeting goals, and create group DOI records. DIT is collaborating with units in other offices to design and deliver professional development to support teachers and instructional staff.

» The department provides project management on three assessment technologies: the MCPS Assessment Program—Primary Reading 3D; Measure of Academic Progress—Reading, Math, and Primary; and Achievement Series. Project management also is provided for Discovery Education Streaming, which provides schools with access to a vast on-demand video library to support instruction.

» Currently, DIT is working to configure tablet technologies and integrate these into instructional spaces. One immediate use of these technologies will be to enable primary teachers to administer the Reading 3D assessments in place of the palm pilot devices. These new tablet technologies also will be used to support the new Kindergarten readiness assessments.

» DIT is creating blended learning environments through the integration of technology, interactive applications, and virtual community spaces. These blended environments help meet the needs of students in regular instructional programs as well as alternative programs, credit recovery, and home and hospital teaching circumstances.

PERFORMANCE MEASURES

Performance Measure: Mastery of Training Outcomes.

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
90%	93%	96%

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

Performance Measure: Center of Technology Innovation Satisfaction.

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
87%	90%	93%

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

OVERVIEW OF BUDGET CHANGES

FY 2015 Recommended Budget

The FY 2015 recommended budget for this department is $2,680,933, an increase of $187,156 over the current FY 2014 budget. An explanation of this change follows.

Same Service Level Changes—$187,156

Continuing Salary Costs—$114,496

There is an increase of $114,496 for continuing salary costs for current employees. This amount includes the cost associated with the annualization of the salary step provided to eligible employees on February 8, 2014.

Realignments to Meet Expenditure Requirements and Priorities—$72,660

Realignments are budgeted to address priority spending needs in this department. There is a realignment of $5,220 from office supplies to fund local travel mileage reimbursement. In addition, there is a total of $72,600 realigned from other OCTO units' budget to this department's budget to fund stipends for Promethean ActivStudio training.

A review of definitions of state categories of expenditure has resulted in the realignment of a position from one state category to another. The change is budget neutral and has no impact on employees.

Dept. of Instructional Technology - 435/427/428

Dr. Kara B. Trenkamp, Director II

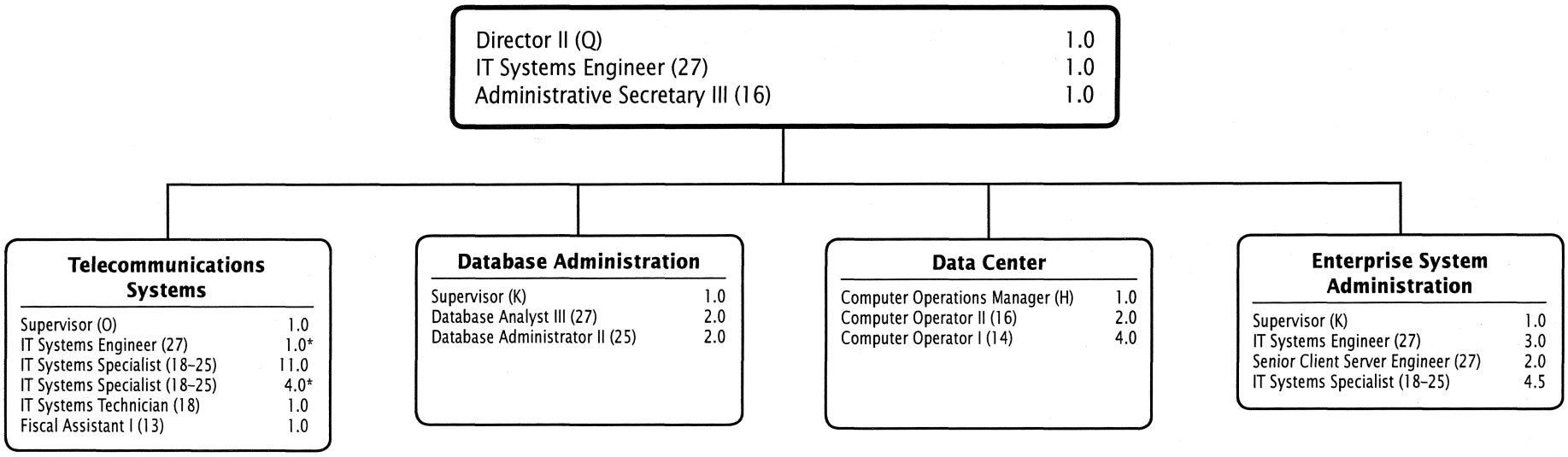
Description	FY 2013 Actual	FY 2014 Budget	FY 2014 Current	**FY 2015 Request**	FY 2015 Change
01 Salaries & Wages					
Total Positions (FTE)	25.200	24.200	24.200	**24.200**	
Position Salaries	$2,187,703	$2,434,757	$2,434,757	**$2,549,253**	$114,496
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends		21,000	21,000	**100,000**	79,000
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries	61,023				79,000
Total Salaries & Wages	2,248,726	2,455,757	2,455,757	**2,649,253**	193,496
02 Contractual Services					
Consultants					
Other Contractual		3,407	3,407	**3,900**	493
Total Contractual Services	268,974	3,407	3,407	**3,900**	493
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		12,000	12,000	**6,780**	(5,220)
Other Supplies & Materials		6,080	6,080	**2,000**	(4,080)
Total Supplies & Materials	13,477	18,080	18,080	**8,780**	(9,300)
04 Other					
Local/Other Travel		16,533	16,533	**19,000**	2,467
Insur & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	18,677	16,533	16,533	**19,000**	2,467
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment					
Grand Total	$2,549,854	$2,493,777	$2,493,777	**$2,680,933**	$187,156

Dept. of Instructional Technology - 435/427/428

Dr. Kara B. Trenkamp, Director II

CAT	DESCRIPTION	10 Mon	FY 2013 ACTUAL	FY 2014 BUDGET	FY 2014 CURRENT	**FY 2015 REQUEST**	FY 2015 CHANGE
	435 Dept. of Instructional Technology						
2	Q Director II					**1.000**	1.000
3	Q Director II		1.000	1.000	1.000		(1.000)
3	BD Instructional Specialist		17.200	17.200	17.200	**17.200**	
2	16 Administrative Secretary III		1.000	1.000	1.000	**1.000**	
2	14 Administrative Secretary I		1.000	1.000	1.000	**1.000**	
	Subtotal		**20.200**	**20.200**	**20.200**	**20.200**	
	428 Technology Modernization						
1	K Supervisor		1.000	1.000	1.000	**1.000**	
1	25 IT Systems Specialist		3.000	3.000	3.000	**3.000**	
1	15 Fiscal Assistant II		1.000				
	Subtotal		**5.000**	**4.000**	**4.000**	**4.000**	
	Total Positions		**25.200**	**24.200**	**24.200**	**24.200**	

Department of Infrastructure and Operations



F.T.E. Positions 39.5

(*In addition, there are 5.0 positions funded by the Capital Budget)

MISSION ***The mission of the Department of Infrastructure and Operations (DIO) is to manage the enterprisewide technical systems, including the data center, network connections, e-mail, and telephones and to facilitate the implementation of effective, secure, and reliable hardware and software solutions. This department also is responsible for providing the operational support for administrative data and reports aligned with the Foundation: Organizational Effectiveness,*** **Building our Future Together,** ***the MCPS Strategic Planning Framework.***

MAJOR FUNCTIONS

Department Management

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

Database Administration

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

Data Center

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

Telecommunication and Network Security

The Telecommunication and Network Security Unit designs, installs, and supports local- and wide-area networks (LAN/WAN), which include wired and wireless networks in schools, central services, and field offices. The unit maintains all telephone systems—wired, wireless, and cellular, including school and office voice mail systems, data transmission lines, and voice circuits. The Telecommunication Services Unit supports converged telephony, which combines voice, data, cellular, and video on data circuits. Telephony specialists evaluate current system needs while reviewing telecommunications trends. To improve MCPS telecommunications capabilities, staff is responsible for researching, planning, expanding, and modernizing existing systems as both technology and location needs evolve. The unit monitors and maintains the MCPS WAN, which is implemented by connections through several carriers, including the county's fiber-optic network (FiberNet). The connection to the Internet and county government, the security firewall, and the intrusion detection/prevention equipment—along with the data wiring at new and modernized construction projects, including the telephone and cable television distribution systems—also are the responsibility of this unit. This unit is also responsible for the Internet protection systems required by the *Children's Internet Protection Act*, and *Protecting Children in the 21st Century Act*. In addition, this unit monitors and investigates all violations of MCPS Regulation IGT-RA, and processes all legal eDiscovery requests. Also, this unit is responsible for the business continuity of the data center functions, and maintains an off-site recovery location. This unit applies for rebates for eligible telecommunications, internal connection, and Internet-related costs under the Schools and Libraries Universal Service E-Rate Program, funded under the *Telecommunications Act of 1996*. Staff carefully reviews telecommunication invoices, including wireless and data connection lines, to ensure accuracy of payment.

Enterprise Systems Administration

The Enterprise Systems Administration Unit designs systems architecture for new or upgraded applications and installs, manages, and supports enterprise servers that house the technology systems used by staff and students as well as parents. The unit is responsible for the efficient operation of the systems as well as preventive security measures. The Enterprise Systems Administration Unit also is responsible for systemwide user account management for the network and all application systems, such as the student data system, financial management, human resources systems, and the myMCPS portal, to enable appropriate access for MCPS users. In addition, the unit manages the operation of the MCPS e-mail system and is responsible for all e-mail system upgrades and implementations. The unit is also responsible for the operation and maintenance of Storage Area Networks, which provide a central repository for the storage of electronic data and databases. Enterprise Systems

Administration staff is responsible for researching emerging industry trends and standards and recommending enhancements that will improve the effectiveness and efficiency of enterprise technology systems. Enterprisewide data backup solutions are implemented and managed by this unit, including backing up central data as well as remotely backing up school data. The unit ensures that systems can be recovered quickly in the event of mechanical failure or disaster.

ACCOMPLISHMENTS AND INITIATIVES

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. The MCPS Strategic Technology Plan calls for a robust and resilient cyber infrastructure that ensures anytime, anywhere access to learning resources, and the virtual community is a fundamental requirement for effective digital learning.

- The department installed and implemented 121 school wide wireless systems in the schools, which did not yet have that capability, aligning with the MCPS Strategic Technology Plan.
- The department provided large-scale printing services for both student and business systems, including approximately 146,000 report cards, 19,000 related administrative reports, and 30,000 interim reports per reporting period, as well as 1,500 employee paychecks (employee paystubs are available electronically via ePaystub, eliminating the need for paystub printing for employees using direct deposit) and 22,000 timesheets per pay period. The Data Center staff collaborated with the Office of Shared Accountability's Testing Unit to print, fold, and seal 90,000 MSA and 60,000 HSA reports. The staff also collaborated with the Applied Research Unit to print, fold, and seal 210,000 school-based staff and parent surveys.
- The department has been actively researching and investigating emerging options for "cloud-based" computing. Staff is working toward a shift of some major components of the e-mail system to a cloud-based model, which will provide improved capabilities for secure staff and student collaboration through the myMCPS portal. Similarly, research is being conducted into the options of "elastic" computing models, which introduce efficiencies into the technology environment by expanding and shrinking the server (capacity) footprint to exactly match user demand.
- The expansion of the virtual server environment continued with the addition of four expansion nodes. These expansions have increased the capacity for server virtualization, resulting in less need for independent physical servers, which are more expensive and consume greater amounts of energy.
- The department has worked closely with other departments throughout OCTO to expand the myMCPS system in support of improved functionality and the addition of parent/student/teacher collaboration features.
- A new identity management system has been developed and is in the early deployment stages. The new identity management system will support many features of the new myMCPS portal, and will improve the management of user accounts and access to disparate systems throughout the enterprise.
- The department completed an upgrade of the MCPS e-mail system to Microsoft's Office 365, which uses Exchange 2010, to take advantage of increased protection of data for security and to optimize our investment for future growth. This upgrade also provides better integration with the MCPS portal, myMCPS. The department continued to modify the structure of the MCPS network (Active Directory) toward a single domain network design and consolidated domain controllers for a more efficiently run network.
- In Fiscal Year (FY) 2015, databases for the Financial Management System, student systems applications, and the myMCPS portal will be upgraded to the latest and most efficient versions that allow for faster access to data for students and staff.
- During FY 2014, almost all MCPS elementary schools were connected to the county's FiberNet system for faster and more reliable WAN and Internet connectivity. Internet availability continued to be over 99 percent overall.
- New telephone systems were installed in five elementary schools and administrative offices, using Voice-over-IP (VoIP)-capable phone systems. These VoIP systems provide additional services to the users, such as caller ID and call forwarding, and significantly reduce the expenses of inside wiring by using either existing data lines or running one data line throughout a school, as opposed to a large number of voice lines per handset. We anticipate that 4,900 work requests for moves, additions, and changes for schools and administrative offices will be completed in FY 2014. The Telecommunications Team continued its management of the cell phone and data device programs, refreshing phone equipment for emergency phones in portable classrooms and school emergency kits.

PERFORMANCE MEASURES

Performance Measure: Percentage of uptime for the WAN.

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
99.91%	99.95%	99.97%

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

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 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.

OVERVIEW OF BUDGET CHANGES

FY 2015 Recommended Budget

The FY 2015 recommended budget for this department is $6,105,641, an increase of $45,684 over the current FY 2014 budget. An explanation of this change follows.

Same Service Level Changes—$108,958

Continuing Salary Costs—($37,697)

There is a decrease of $37,697 for continuing salary costs. The costs associated with the annualization of the step provided to employees on February 8, 2014 are offset by reductions for staff turnover.

Realignments to Meet Expenditure Requirements and Priorities—$0

Realignments are budgeted to address priority spending needs in this department. There is a realignment of $4,500 from dues, registration and fees to fund consultant services. In addition, there is a realignment of $1,266 from supporting services part-time salaries to fund lease/purchase equipment.

A review of definitions of state categories of expenditure has resulted in the realignment of some positions from one state category to another. The change is budget neutral and has no impact on employees.

Other—$146,655

There is an increase of $146,655 for lease/purchase equipment to purchase two copier machines to print student report cards.

Program Efficiencies and Reductions—($63,274)

There is a reduction of $63,274 for contractual maintenance. This reduction can be made as a result of renegotiation of maintenance contracts in the Data Center resulting in lower costs.

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

Cary Kuhar, Director II

Description	FY 2013 Actual	FY 2014 Budget	FY 2014 Current	**FY 2015 Request**	FY 2015 Change
01 Salaries & Wages					
Total Positions (FTE)	39.500	39.500	39.500	**39.500**	
Position Salaries	$3,215,757	$3,492,389	$3,492,389	**$3,454,692**	($37,697)
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		29,729	29,729	**35,305**	5,576
Other		11,831	11,831	**10,565**	(1,266)
Subtotal Other Salaries	43,378	41,560	41,560	**45,870**	4,310
Total Salaries & Wages	3,259,135	3,533,949	3,533,949	**3,500,562**	(33,387)
02 Contractual Services					
Consultants		61,500	61,500	**66,000**	4,500
Other Contractual		1,637,279	1,637,279	**1,569,810**	(67,469)
Total Contractual Services	1,918,816	1,698,779	1,698,779	**1,635,810**	(62,969)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		3,400	3,400	**3,400**	
Other Supplies & Materials		250,829	250,829	**251,137**	308
Total Supplies & Materials	220,154	254,229	254,229	**254,537**	308
04 Other					
Local/Other Travel		9,935	9,935	**4,488**	(5,447)
Insur & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	2,781	9,935	9,935	**4,488**	(5,447)
05 Equipment					
Leased Equipment		563,065	563,065	**710,244**	147,179
Other Equipment					
Total Equipment	656,493	563,065	563,065	**710,244**	147,179
Grand Total	$6,057,379	$6,059,957	$6,059,957	**$6,105,641**	$45,684

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

Cary Kuhar, Director II

CAT	DESCRIPTION	10 Mon	FY 2013 ACTUAL	FY 2014 BUDGET	FY 2014 CURRENT	**FY 2015 REQUEST**	FY 2015 CHANGE
	446 Dept of Infrastructure & Operations						
1	Q Director II		1.000	1.000	1.000	**1.000**	
1	27 IT Systems Engineer		1.000	1.000	1.000	**1.000**	
1	16 Administrative Secretary III		1.000	1.000	1.000	**1.000**	
	Subtotal		**3.000**	**3.000**	**3.000**	**3.000**	
	433 Telecommunications Systems						
1	O Supervisor		1.000	1.000	1.000		(1.000)
10	O Supervisor					**1.000**	1.000
1	25 IT Systems Specialist		6.000	6.000	6.000		(6.000)
10	25 IT Systems Specialist					**11.000**	11.000
11	25 IT Systems Specialist		4.000	4.000	4.000		(4.000)
10	18 IT Systems Technician					**1.000**	1.000
11	18 IT Systems Technician		1.000	1.000	1.000		(1.000)
11	14 IT Services Technical Asst		1.000	1.000	1.000		(1.000)
10	13 Fiscal Assistant I					**1.000**	1.000
11	13 Fiscal Assistant I		1.000	1.000	1.000		(1.000)
	Subtotal		**14.000**	**14.000**	**14.000**	**14.000**	
	447 Database Administration						
1	K Supervisor		1.000	1.000	1.000	**1.000**	
1	27 Database Analyst III		2.000	2.000	2.000	**2.000**	
1	25 Database Administrator II		2.000	2.000	2.000	**2.000**	
	Subtotal		**5.000**	**5.000**	**5.000**	**5.000**	
	448 Data Center						
1	H Computer Operations Mgr		1.000	1.000	1.000	**1.000**	
1	16 Computer Operator II Shift 2		1.000	1.000	1.000	**1.000**	
1	16 Computer Operator II Shift 3		1.000	1.000	1.000	**1.000**	
1	14 Computer Operator I Shift 1		2.000	2.000	2.000	**2.000**	
1	14 Computer Operator I Shift 2		1.000	1.000	1.000	**1.000**	
1	14 Computer Operator I Shift 3		1.000	1.000	1.000	**1.000**	
	Subtotal		**7.000**	**7.000**	**7.000**	**7.000**	
	451 Enterprise System Administration						
1	K Supervisor		1.000	1.000	1.000	**1.000**	
1	27 Sr Client Server Engineer		2.000	2.000	2.000	**2.000**	
1	27 IT Systems Engineer		3.000	3.000	3.000	**3.000**	
1	25 IT Systems Specialist		2.000	2.000	2.000	**4.500**	2.500
11	25 IT Systems Specialist		2.000	2.000	2.000		(2.000)

Department of Business Information Services

Director II (Q)	1.0
Supervisor (K)	2.0
Application Developer III (27)	2.0
Development Project Manager (27)	3.5
Development Project Manager (27)	0.5*
Applications Developer II (25)	5.0
Technical Analyst (25)	1.0
IT Systems Specialist (18–25)	1.0
Administrative Secretary III (16)	1.0
Fiscal Assistant II (15)	1.0
Data Control Technician II (15)	1.0

F.T.E. Positions 18.5

(*In addition, there is a 0.5 position funded by the Employee Benefits Trust Fund)

Department of Business Information Services—421

Doreen Heath, Director II 240-453-2408

MISSION ***The mission of the Department of Business Information Services (DBIS) is to plan, develop, implement, and support high-quality business solutions contributing to the transformation of learning environments through the innovative integration of technology across all aspects of the school system.***

MAJOR FUNCTIONS

Business Operational Technologies

DBIS collaborates with offices, schools, and government agencies to promote and support Montgomery County Public Schools (MCPS) and the initiatives of the Office of the Chief Technology Officer by developing, implementing, and continuously improving business solutions. Based on goals and priorities, the department develops, purchases, implements, and supports complex solutions for the business of education. These solutions enable operational effectiveness that streamlines and enhances management for all stakeholders. Connect-ED is a website used by schools and central services to effectively and efficiently communicate important information to students, staff, parents, and the community, such as student absences and school activities. The Transportation Information Management System supports the management of human and automotive resources used by MCPS. Fortis software provides MCPS with an electronic document management system that dramatically increases access to information previously available only on paper, such as personnel and student records. The Destiny library management system provides schools with a centralized K–12 resource management tool. This system assists schools in working more efficiently, while creating an engaging and collaborative learning environment that promotes and supports student achievement.

Human Capital Management Solutions

DBIS implements and supports human capital management solutions, providing applications and systems to facilitate operational excellence in the delivery of services for human resource management, professional development, and career management. The Human Resources Information System (HRIS) integrates personnel, time and attendance, leave management, payroll, and employee benefit functions that allow for effective management of information and resources. Lifeworks is the system used to manage and administer employee pension benefits. Lifeworks also provides employees with retirement analysis features to assist in retirement planning. The Professional Development Online system is used for managing and monitoring MCPS employee training. MCPS Careers provides a web-based solution that automates the application and hiring process for MCPS-based position vacancies, and Career Pathways guides supporting services employees in career planning.

Financial Management Solutions

In collaboration with schools and offices across the system, DBIS staff develops new functionalities for financial management solutions and is committed to delivering the highest level of operational performance and support. The Financial Management System (FMS) integrates supply chain, finance, and budgeting functions, providing access to essential information and streamlining financial processes for schools and offices, service providers, and external agencies. Financial management software is used in schools to manage Independent Activity Funds (IAFs) providing real-time reporting and transactional information. In addition, a secure online system allows parents to view their students' financial account history and make electronic payments for school activity items, extracurricular activity fees, and summer school payments. Integration with systems, including HRIS and the Destiny Library Manager, illustrates the focus on streamlining and enhancing financial management for all stakeholders.

ACCOMPLISHMENTS AND INITIATIVES

- To ensure that MCPS maintains its status as a world-class school system, DBIS continues to expand and enhance the usefulness of key operational management solutions. This includes identifying, developing, and implementing industry-leading software solutions that best meet the needs of schools and offices. The prevalence of web-based solutions underpins important technology decisions as MCPS works to provide solutions that meet or exceed the expectations of 21st century institutions.
- The Destiny Library Manager was upgraded to enhance access to digital resources, research databases, and mobile technologies. A collection and circulation management system was implemented for the evaluation and selection of instructional materials streamlining the evaluation of library materials so they get to students faster. The Destiny system will be expanded to provide for the management of current inventories of textbooks and instructional materials and prepare for the management of the rapidly expanding availability of digital resources.
- A school financial management software system was implemented for schools to manage IAFs and to provide the ability to use credit cards to pay for school events and identified school system fees. Enhancements are planned to expand the capabilities for online payment and tracking. Overall, the newly implemented system improves the efficiency and effectiveness of financial operations at both the school and central services level, while offering a new level of access and convenience for parents.
- Business intelligence reporting was implemented for selected central services areas to enhance and improve the development and distribution of complex reporting in FMS. Plans to expand the capability are scheduled for development and implementation.

» The Fortis document management system was upgraded with necessary technologies to allow MCPS to expand the use of the system, enabling authorized users in schools and offices to access documents via a web-based portal.

» The system that manages staff retirement benefits, Lifeworks, received a major upgrade. Among the enhanced functions of the upgraded system is the ability for staff members to calculate benefits on demand, including the ability to calculate future retirement benefits based on "what-if" scenarios. Staff members also will be able to print a retirement statement on demand, as opposed to on a yearly basis or by special request by the Employee and Retiree Service Center.

» Career Pathways for support services employees was implemented in collaboration with the Office of Human Resources and Development and Service Employees International Union Local 500. This web-based system guides staff in preparing, planning, determining areas of interest, and discovering potential job opportunities.

» Improvements to reduce paper, streamline processes, and increase online access were implemented in several areas. Examples include the use of e-mail distribution for application information, including school staffing allocations and Summer Employment Action Notices; providing online screens for identifying elementary team leaders and faculty representatives; collecting accident/incident information for transportation; implementing job automation to enhance operations which reduces processing time for complex systems, such as payroll processing; and expanding the Fortis document management system, significantly reducing paper record keeping while increasing access to information.

PERFORMANCE MEASURES

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
100%	100%	100%

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

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
89%	92%	94%

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

OVERVIEW OF BUDGET CHANGES

FY 2015 Recommended Budget

The FY 2015 recommended budget for this department is $3,576,510, an increase of $198,650 over the current FY 2014 budget. An explanation of this change follows.

Same Service Level Changes—$198,650

Continuing Salary Costs—$125,797

There is an increase of $125,797 for continuing salary costs for current employees. This amount includes the cost associated with the annualization of the salary step provided to eligible employees on February 8, 2014.

Realignments to Meet Expenditure Requirements and Priorities—$1,862

Realignments are budgeted to address priority spending needs in this department. There is a decrease of $3,150 for office supplies and a corresponding increase for program supplies. In addition, there is an increase of $1,862 for consultant services in this department from the Department of Information and Application Architecture's budget.

Other—$70,991

A projected contractual maintenance fee increase for the Human Resource Information System and Human Resource Application Tracking System requires a budgetary increase of $70,991.

Dept. of Business Information Services - 421/425/443

Doreen M. Heath, Director II

Description	FY 2013 Actual	FY 2014 Budget	FY 2014 Current	**FY 2015 Request**	FY 2015 Change
01 Salaries & Wages					
Total Positions (FTE)	18.500	18.500	18.500	**18.500**	
Position Salaries	$1,666,202	$1,702,312	$1,702,312	**$1,828,109**	$125,797
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time					
Other					
Subtotal Other Salaries					
Total Salaries & Wages	1,666,202	1,702,312	1,702,312	**1,828,109**	125,797
02 Contractual Services					
Consultants		240,869	240,869	**289,352**	48,483
Other Contractual		1,418,357	1,418,357	**1,430,008**	11,651
Total Contractual Services	2,420,838	1,659,226	1,659,226	**1,719,360**	60,134
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		3,150	3,150	**1,862**	(1,288)
Other Supplies & Materials		7,940	7,940	**14,113**	6,173
Total Supplies & Materials	12,020	11,090	11,090	**15,975**	4,885
04 Other					
Local/Other Travel		5,232	5,232	**3,983**	(1,249)
Insur & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	3,852	5,232	5,232	**3,983**	(1,249)
05 Equipment					
Leased Equipment				**9,083**	9,083
Other Equipment					
Total Equipment				**9,083**	9,083
Grand Total	$4,102,912	$3,377,860	$3,377,860	**$3,576,510**	$198,650

Dept. of Business Information Services - 421/443/425

Doreen M. Heath, Director II

CAT	DESCRIPTION	10 Mon	FY 2013 ACTUAL	FY 2014 BUDGET	FY 2014 CURRENT	**FY 2015 REQUEST**	FY 2015 CHANGE
	421 Dept of Business Info Services						
1	Q Director II		1.000	1.000	1.000	**1.000**	
1	K Supervisor		2.000	2.000	2.000	**2.000**	
1	27 Applications Developer III		2.000	2.000	2.000	**2.000**	
1	27 Development Proj Manager		3.500	3.500	3.500	**3.500**	
1	25 Applications Developer II		5.000	5.000	5.000	**5.000**	
1	25 IT Systems Specialist		1.000	1.000	1.000	**1.000**	
1	25 Technical Analyst		1.000	1.000	1.000	**1.000**	
1	16 Administrative Secretary III		1.000	1.000	1.000	**1.000**	
1	15 Fiscal Assistant II		1.000	1.000	1.000	**1.000**	
1	15 Data Control Technician II		1.000	1.000	1.000	**1.000**	
	Subtotal		**18.500**	**18.500**	**18.500**	**18.500**	
	Total Positions		**18.500**	**18.500**	**18.500**	**18.500**	

Department of Information and Application Architecture

Director II (Q)	1.0
Supervisor (O)	2.0
Supervisor (K)	2.0
Database Administrator III (27)	2.0
ETL Analyst/Programmer (25)	2.0
Technical Analyst (25)	1.0
Application Developer I (23)	1.0
IT Systems Specialist (18–25)	1.0
Administrative Secretary III (16)	1.0

F.T.E. Positions 13.0

Department of Information and Application Architecture—445

Elton Stokes, Director II 301-279-3577

MISSION *The mission of the Department of Information and Application Architecture (DIAA) is to strengthen the ability of staff and students to effectively use technology through the design of connected systems, processes, and information services.*

MAJOR FUNCTIONS

Knowledge Management Solutions

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

Data Management and Reporting

DIAA oversees and manages the database architecture and reporting solutions for the district, as well as the implementation of quality assurance practices across the office. This department provides comprehensive data solutions to district staff, students, and parents, as well as to the Maryland State Department of Education (MSDE). These data management and reporting solutions provide a breadth of current and historical reports to support both detail and summary-level data analysis for strategic decision making.

Quality Management

This department adds value to the overall operations within OCTO through the implementation of quality assurance processes across all departments. This department provides leadership in the use of quality assurance best practices focused on meeting commitments for high-quality products and services that satisfy customer needs and perform reliably when delivered. Quality assurance practices encompass the entire software development process, including requirements, change management, configuration management, testing, and release. Quality assurance tools and techniques provide for tracking the effective use of development processes with measurement and verification throughout the development life cycle to final readiness review. Through the disciplines of technology testing and quality assurance, staff guides the planning and implementation of test protocols for products and services to verify their accuracy, performance, and usability in support of high-quality solutions. Additionally, staff creates materials, including user guides, quick reference cards, and frequently asked questions to provide school staff with guidance that supports a successful experience with the use of technology products and services.

ACCOMPLISHMENTS AND INITIATIVES

» To ensure that MCPS maintains its status as a world-class school system, DIAA continues to expand and enhance the usefulness of key data management solutions. This includes identifying, developing, and implementing industry-leading database solutions that best meet the needs of schools and offices. The prevalence of data-driven applications and reporting underpins the importance of technology as MCPS works to provide solutions that meet or exceed the expectations of 21st century learners and educators.

» As the learning systems, instructional practices, and data change and evolve throughout the district, the data management, reporting, and analysis engines evolve to help teachers and staff best use the enormous amount of information generated each day. An upgraded data warehouse enables district staff, students, and parents to gain new insights into this information to help our students continue to achieve at higher levels. This new system will provide users with greater visibility into all student data, including demographics, assessments, marks, attendance, program participation, and instructional interventions. Additionally, more data about school processes will be captured and made available, such as school programs and improvement plans. All data and reports are aligned with the School Support and Improvement Framework and support monitoring and analysis of the performance targets set for the strategic planning framework districtwide milestones.

» Schools with students applying for any University System of Maryland (USM) school will now have a far more efficient way to transmit official transcripts. A new electronic transcript management system will allow schools to generate, verify, and transmit transcripts directly to any school that is part of the USM consortium. This process significantly reduces the amount of time it has traditionally taken for students' official transcripts to be generated, transmitted by MCPS central services, received, and processed by USM consortia schools by allowing MCPS school administrators to transmit transcripts directly to the USM system in real time. Once submitted, school officials receive an electronic receipt that the transcript was transmitted and received within moments of the transmission. Other institutions not using the new system will continue to receive transcripts via electronic transmission using the eDocs feature of the Naviance system in use by all high schools, or by U.S. mail where applicable.

» Department staff continued to work in partnership with all offices at MCPS as well as with other MCPS partners such as Montgomery College (MC), Montgomery County Government (MCG), and the Universities at Shady Grove (USG) to provision data and systems

to help our students and community. DIAA worked in partnership with MCG to begin provisioning data to the community as part of the data Montgomery initiative, which provides direct access to county data sets in a consumable format, offering the public an opportunity to review and analyze raw data, and the opportunity to use it for a variety of purposes. DIAA also worked in partnership with MC and USG on the development and provisioning of data systems for the Achieving Collegiate Excellence and Success (ACES) program, which is a collaborative program that seeks to create a seamless pathway from high school to college completion. ACES focuses on identifying and supporting students who are underrepresented in higher education and those who are the first in their family to attend college.

» DIAA continued to provide close support for district and state reporting of special education data. As MSDE guides and mandates change, DIAA staff works closely with staff from the Office of Special Education and Student Services and the Department of Instructional Information Services to make changes. These changes to data systems and reports ensure that MCPS is compliant with state and federal legislation governing the special education process and help monitor to ensure that students are receiving the most appropriate services and accommodations in a timely manner.

PERFORMANCE MEASURES

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
95%	97%	100%

Explanation: This is a measure of customer satisfaction with DIAA staff service as obtained via customer service surveys provided during or after a customer engagement.

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
90%	92%	100%

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

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

FY 2013 Actual	FY 2014 Estimate	FY 2015 Recommended
92%	94%	100%

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

OVERVIEW OF BUDGET CHANGES

FY 2015 Recommended Budget

The FY 2015 recommended budget for this department is $3,338,364 a decrease of $489,319 from the current FY 2014 budget. An explanation of this change follows.

Same Service Level Changes—($489,319)

Continuing Salary Costs—($18,350)

There is a decrease of $18,350 for continuing salary costs. The costs associated with the annualization of the step provided to employees on February 8, 2014 are offset by reductions for staff turnover.

Realignments to Meet Expenditure Requirements and Priorities—($470,969)

There is a realignment of $446,676 for contractual services and consultant services from this department's budget to the budget of Department of Instructional and Informational Services. This change will align the budgeted expenditures where they are managed and utilized. In addition, there is $24,293 for contractual services realigned from this department's budget to the Department of Instructional Technology's budget to fund stipends for Promethean ActivStudio training.

A review of definitions of state categories of expenditure has resulted in the realignment of some positions from one state category to another. The change is budget neutral and has no impact on employees.

Dept of Information & Application Architecture - 445/426

Elton Stokes, Director II

Description	FY 2013 Actual	FY 2014 Budget	FY 2014 Current	**FY 2015 Request**	FY 2015 Change
01 Salaries & Wages					
Total Positions (FTE)	13.000	13.000	13.000	**13.000**	
Position Salaries	$1,308,127	$1,371,826	$1,371,826	**$1,353,476**	($18,350)
Other Salaries					
Summer Employment					
Professional Substitutes					
Stipends					
Professional Part Time					
Supporting Services Part Time		10,000	10,000	**10,000**	
Other					
Subtotal Other Salaries	12,670	10,000	10,000	**10,000**	
Total Salaries & Wages	1,320,797	1,381,826	1,381,826	**1,363,476**	(18,350)
02 Contractual Services					
Consultants		300,147	300,147	**170,697**	(129,450)
Other Contractual		2,092,260	2,092,260	**1,757,383**	(334,877)
Total Contractual Services	2,825,383	2,392,407	2,392,407	**1,928,080**	(464,327)
03 Supplies & Materials					
Textbooks					
Media					
Instructional Supplies & Materials					
Office		7,146	7,146	**4,146**	(3,000)
Other Supplies & Materials		44,962	44,962	**41,962**	(3,000)
Total Supplies & Materials	114,995	52,108	52,108	**46,108**	(6,000)
04 Other					
Local/Other Travel		1,342	1,342	**700**	(642)
Insur & Employee Benefits					
Utilities					
Miscellaneous					
Total Other	176	1,342	1,342	**700**	(642)
05 Equipment					
Leased Equipment					
Other Equipment					
Total Equipment	18,718				
Grand Total	$4,280,069	$3,827,683	$3,827,683	**$3,338,364**	($489,319)

Dept of Information & Application Architecture - 445/426

Elton Stokes, Director II

CAT	DESCRIPTION	10 Mon	FY 2013 ACTUAL	FY 2014 BUDGET	FY 2014 CURRENT	**FY 2015 REQUEST**	FY 2015 CHANGE
	445 Dept of Information & Application Architecture						
1	Q Director II		1.000	1.000	1.000	**1.000**	
1	O Supervisor		2.000	2.000	2.000	**2.000**	
1	K Supervisor		2.000	2.000	2.000	**2.000**	
1	27 Database Administrator III			1.000	1.000	**2.000**	1.000
2	27 Database Administrator III		2.000	1.000	1.000		(1.000)
1	25 IT Systems Specialist		1.000	1.000	1.000	**1.000**	
1	25 ETL Analyst/Programmer					**2.000**	2.000
2	25 ETL Analyst/Programmer		2.000	2.000	2.000		(2.000)
1	25 Technical Analyst		1.000	1.000	1.000	**1.000**	
1	23 Applications Developer I		1.000	1.000	1.000	**1.000**	
1	16 Administrative Secretary III		1.000	1.000	1.000	**1.000**	
	Subtotal		**13.000**	**13.000**	**13.000**	**13.000**	
	Total Positions		**13.000**	**13.000**	**13.000**	**13.000**	