F50
Department of Information Technology

Operating Budget Data

($ in Thousands)

	FY 14 Actual	FY 15 Working	FY 16 Allowance	FY 15-16 Change	% Change Prior Year
General Fund	$35,885	$40,304	$56,627	$16,323	40.5%
Deficiencies and Reductions	0	-1,150	-1,616	-466	
Adjusted General Fund	**$35,885**	**$39,154**	**$55,011**	**$15,857**	**40.5%**
Special Fund	5,469	8,264	11,005	2,741	33.2%
Deficiencies and Reductions	0	1,155	-21	-1,176	
Adjusted Special Fund	**$5,469**	**$9,419**	**$10,984**	**$1,565**	**16.6%**
Federal Fund	570	969	632	-336	-34.7%
Adjusted Federal Fund	**$570**	**$969**	**$632**	**-$336**	**-34.7%**
Reimbursable Fund	41,243	54,470	57,470	2,999	5.5%
Adjusted Reimbursable Fund	**$41,243**	**$54,470**	**$57,470**	**$2,999**	**5.5%**
Adjusted Grand Total	**$83,167**	**$104,012**	**$124,097**	**$20,084**	**19.3%**

Note: The fiscal 2015 working appropriation reflects deficiencies and the Board of Public Works reductions to the extent that they can be identified by program. The fiscal 2016 allowance reflects back of the bill and contingent reductions to the extent that they can be identified by program.

- The budget bill includes a $1.2 million special fund deficiency to support the State Board of Election's voting system replacement project.

- After adjusting for cost containment reductions, the fiscal 2016 budget increases by $20.1 million over the fiscal 2015 working appropriation.

Note: Numbers may not sum to total due to rounding.

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- Most of the increase is attributable to major Information Technology (IT) project funding, which increases by $19.3 million.

- Cost containment reductions total $1.2 million in fiscal 2015 and $1.6 million in fiscal 2016.

Personnel Data

	FY 14 Actual	FY 15 Working	FY 16 Allowance	FY 15-16 Change
Regular Positions	134.00	140.00	138.00	-2.00
Contractual FTEs	1.65	4.00	1.00	-3.00
Total Personnel	**135.65**	**144.00**	**139.00**	**-5.00**
Vacancy Data: Regular Positions				
Turnover and Necessary Vacancies, Excluding New Positions		5.43	3.99%	
Positions and Percentage Vacant as of 12/31/14		23.00	16.43%	

- The increase in the number of full-time equivalent positions from fiscal 2014 to 2015 is attributable to the Department of General Services (DGS) transferring positions to the Department of Information Technology (DoIT), in exchange for DoIT assuming responsibility for the day-to-day operations of DGS' IT operations.

- Four regular positions are deleted in fiscal 2016. Two positions support the old personnel system and another supports Enterprise Information Systems. The department is also consolidating work and deleting two part-time positions.

- Two new positions are created to support the Maryland First Responders Interoperable Radio System Team (Maryland FiRST), which is the new 700 megahertz public safety communication system.

Analysis in Brief

Major Trends

Oversight of Major IT Projects: DoIT oversees State agency major IT projects. Since fiscal 2009, measures established to judge project success suggest that progress is being made as more projects remain on schedule and on budget. Projects with delays or cost increases remain at a relatively low 10% in fiscal 2014.

Web Systems: The State's IT master plan identifies the Internet as essential in engaging citizens and providing services. In fiscal 2013, agencies transferred regular positions and funds into the department to support web services. DoIT also contracts with a private vendor to develop web services. The department has not developed any indicators that show progress toward offering more services on the Internet. **The Department of Legislative Services (DLS) recommends that DoIT develop indicators that measure progress toward realizing this vision.**

State Agency Support: The department also supports systems used by State agencies, such as telecommunications systems, wireless networks, a data network, and statewide financial and personnel systems. Surveys suggest that the service provided is perceived to be satisfactory.

Cybersecurity: The department has published new cybersecurity performance measures. The agency will provide additional vulnerability assessments, penetration tests, or audits. A new cybersecurity awareness program has also been implemented.

Issues

Department Should Evaluate Personnel: In recent years, DoIT has had high vacancy rates. Previous studies recommended a flexible workforce that needs to be adjusted incrementally. Efforts to reclassify positions have stalled. **DLS recommends that the committees adopt narrative requiring the department to report on personnel actions.**

Maryland FiRST Operating Budget Expenditures Expected to Increase: The new wireless system is being implemented statewide. Costs are expected to increase steadily. **The department should be prepared to brief the committees on projected operating budget costs and the deliberations of the Radio Control Board.**

Maryland Insurance Administration Did Not Comply with State Procurement Regulations: The State developed a major IT development process and procurement regulations to reduce the risk that major IT projects fail. The Maryland Insurance Administration did not follow these practices or procurement law. The new premium tax system has lost features, which resulted in a number of audit findings. **The department should brief the committees on its review of IT projects. This should include a discussion of processes in place to minimize the number of agencies and projects that avoid obtaining proper procurement approval or avoid following required planning processes.**

State Policies on Internet Advertising: The State Department of Assessment and Taxation recently began to provide space to advertisers on the Internet. This raises issues including what is appropriate on State websites and what compensation policies are suitable. **DLS recommends narrative that requires DoIT to develop Internet advertising policies.**

Recommended Actions

		Funds
1.	Delete funds for the Medicaid Enterprise Restructuring Project.	$ 7,775,410
2.	Reduce funds for the Automated Financial System project due to delays.	338,250
3.	Delete funds for the Integrated Tax System.	1,500,000
4.	Add language requiring the department to include Managing for Results indicators concerning websites and web applications with the fiscal 2017 budget.	
5.	Add narrative requiring the department to submit a report on personnel actions.	
6.	Require the department to submit report on State Internet advertising policies.	
7.	Add a section to the back of the bill that reduces reimbursable fund appropriations to reflect reductions made by Sections 20 and 21 relating to employee general salary increases and increments.	
	Total Reductions	**$ 9,613,660**

F50
Department of Information Technology

Operating Budget Analysis

Program Description

Chapter 9 of 2008 created the Department of Information Technology (DoIT). The department contains the following divisions:

- **State Chief of Information Technology –** responsible for executive direction.

- **Enterprise Information Systems (EIS)** – responsibilities include developing statewide infrastructure and security standards. EIS also provides a range of services for the Office of the Governor, the Department of Budget and Management (DBM), the Department of General Services (DGS), and the Maryland Emergency Management Agency (MEMA).

- **Application Systems Management (ASM)** – responsibilities include the operating mainframe computer agency-based accounting, purchasing, budgeting, personnel, and asset management systems, such as the Financial Management Information System (FMIS).

- **Networks** – responsible for operating networkMaryland, the State's data network, and the State's telecommunications and wireless systems.

- **Strategic Planning** – responsible for the oversight of information technology (IT) procurement, project management, and policies and planning.

- **Major Information Technology Projects** – development of major IT projects for DBM.

- **Web Systems** – operates the State web portal as well as developing and administering web standards and procedures.

- **Telecommunications Access of Maryland (TAM)** – provides telecommunications relay service for Maryland's hearing and speech disabled citizens.

The department administers the Major Information Technology Development Project Fund (MITDPF). This is a nonlapsing fund that supports large IT initiatives as defined in Sections 3A-301 and 3A-302 of the State Finance and Procurement Article. Major Information Technology Development Projects are projects that meet one or more of the following criteria:

- the estimated total cost of development equals or exceeds $1 million;

- the project is undertaken to support a critical business function associated with the public health, education, safety, or financial well-being of the citizens of Maryland; or

- the Secretary of DoIT determines that the project requires the special attention and consideration given to a major IT development project.

Description of Systems Development Life Cycle Methodology

A key component of DoIT's mission is to provide oversight for the State's major IT systems development. The need to develop safe, secure, and reliable systems is heightened by an increasing dependence on technology to provide services, develop products, administer programs, and perform management functions. To establish procedures and practices for IT project development, the department has implemented the Systems Development Life Cycle (SDLC) methodology. It is used for all major IT projects.

The SDLC methodology provides IT project managers with the tools to help them implement systems that satisfy agency objectives. The documentation requires that executive leadership, functional managers, and users sign-off on the requirements and implementation of the system.

SDLC methodology is a two-step approval process for major IT projects. Initially, an agency submits a Project Planning Request. After the requirements analysis has been completed and a project has completed all of the planning required through Phase Four of SDLC (Requirements Analysis), including a baseline budget and schedule, the agency may submit a Project Implementation Request and begin designing and developing the project when the request is approved. **Exhibit 1** identifies the SDLC phases.

Exhibit 1
Systems Development Life Cycle Phases

Phase	Description
Project Planning Request	
Initiation	Management determines that a system may be necessary. Significant assumptions and constraints are identified. A project team is formed. A Concept Proposal identifies the needs and opportunities to improve business functions. The Information Technology Project Request, which is the formal budget request, is prepared.
System Concept Development	This phase begins when the Concept Proposal has been formally approved by the agency Chief Information Officer. The project team analyzes needs, risks, and alternatives. The System Boundary Document (that limits the scope) and Risk Management Plan are prepared. The agency decides to proceed into the next life cycle phase, continue additional conceptual phase activities, or terminate.

Phase	Description
Planning	The Project Management Plan (PMP) is developed in this phase. (The plan documents the project scope, tasks, schedule, resources, and interrelationships with other projects. The plan includes an acquisition planning section to show how all government human resources, contractor support services, hardware, software, and telecommunications capabilities are acquired during the life of the project.) The internal management, engineering, business management, and contract management processes that will be used by the project office for all subsequent life cycle phases are also determined in the phase.
Requirements Analysis	This phase begins when the PMP is approved. The key product developed in this phase is the Functional Requirements Document (FRD). This is a user-oriented document that includes business process descriptions, a logical model that describes the fundamental processes and data needs, an analysis of business activities and data, an analysis to define the interaction between the business activities and business data, and a detailed analysis of the current technical architecture, application software and data to ensure that limitations or unique requirements have not been overlooked. A Test and Evaluation Master Plan is also prepared. **The baseline is typically prepared at the end of this phase.**
Project Implementation Request	
Design	The objective of the Design Phase is to transform the detailed, defined requirements into complete, detailed specifications for the system to guide the work of the Development Phase. Tasks include beginning the maintenance manual, user manual, training manual, and contingency plan. Ideally, the project's tasks are divided into two-week segments.
Development	The programming of the system occurs in this phase. Although much of the activity in this phase addresses the computer programs that make up the system, this phase also puts in place the hardware, software, and communications equipment.
Integration and Test	The objective of this phase is to determine if the developed system satisfies the requirements defined in the FRD. This includes system, security, and acceptance testing.
Implementation	The system is installed and made operational.
Operation and Maintenance	The system is in use. As problems are detected, needs occur, or software is upgraded, the system is updated.
Disposition	This is implemented to either eliminate a large part of a system or, in most cases, close down a system and end the life cycle process.

Source: Department of Information Technology, January 2015

Performance Analysis: Managing for Results

DoIT's Managing for Results (MFR) data reflect the mission of the office, providing statewide IT oversight as well as operating/overseeing the operation of statewide information systems and networks.

1. Oversight of Major IT Projects

A major responsibility with long-term statewide implications is DoIT's review of major IT projects that are planned and implemented in State agencies. The department has a series of output measures that examine the extent to which major IT projects remain on schedule, on scope, and on budget.

Exhibit 2 shows that the number of projects that were on schedule at the end of the fiscal year increased markedly from fiscal 2009 to 2012, from 39% in fiscal 2009 to 73% in fiscal 2012. Since then the number of on schedule projects has remained stable at 75% in fiscal 2013 and 73% in fiscal 2014.

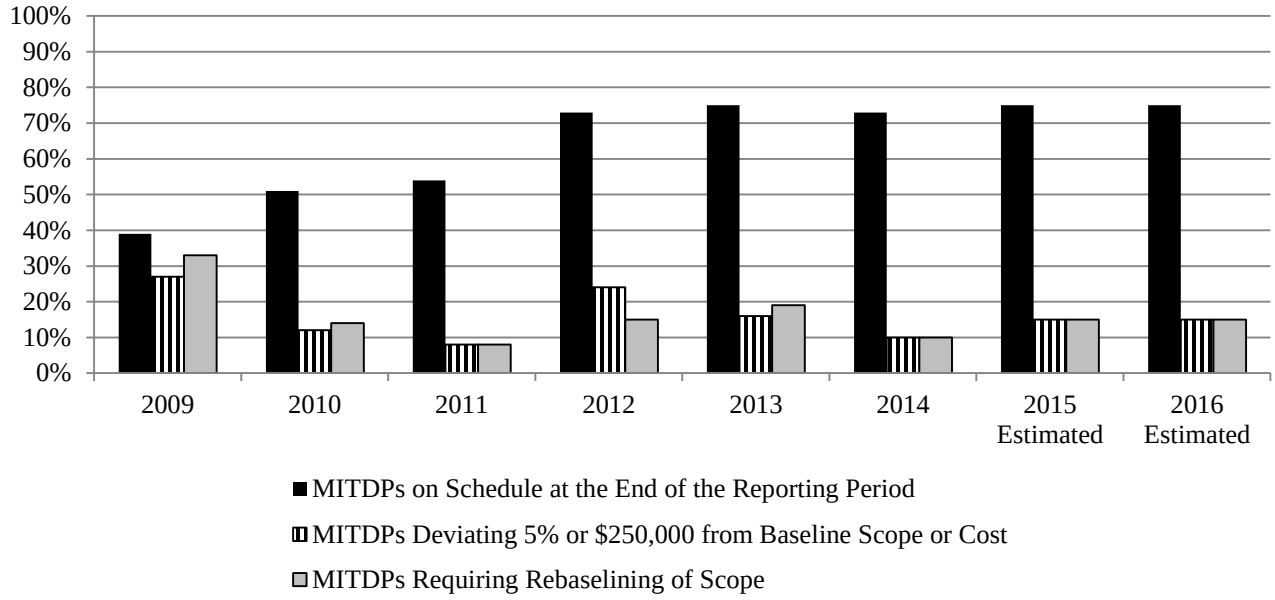
Progress was also made with projects that need changes to the scope in the project's baseline. The number of projects with a rebaselined[1] scope declined from 33% in fiscal 2009 to 14% in fiscal 2010. Since fiscal 2010, the range has ranged between 8% and 19%.

Though the percentage of projects deviating from costs (either 5% or $250,000) has tended to decline, the swings are more pronounced than projects with changes in scope. Since reaching its nadir of 8% in fiscal 2011, the percent of cost changes increased to 24% in fiscal 2012 and then declined to 10% in fiscal 2014. Recognizing that costs changes are inevitable, DoIT projects that the cost of 15% of projects will change. This is consistent with the average from fiscal 2010 to 2014, which is 14%.

DoIT did not have an oversight role in developing Maryland's Health Exchange Project. Consequently, the MFR data does not include this project. Although DoIT was not involved in the Health Exchange Project. The DoIT Secretary was assigned to the Health Benefits Exchange in December 2013. She worked on the project as a resource dedicated to that organization. DoIT, as an agency, had no responsibility for the implementation or operations of the Health Benefits Exchange and no DoIT employee other than the Secretary worked on the MHBE project

[1] A baseline can be prepared for the scope, schedule, or budget. It is the initial measurement to which a project team manages and is held accountable. Deviation from the baseline in any of those areas is likely to result in a compensating action to get back into alignment with the baseline. For instance, if a project begins to slip from its baseline schedule, to get back on track, the project manager may need to add more resources or reduce the scope. Either of these actions could cause a baseline problem in the scope or cost areas. At that point, an effort is made to determine, according to the Project Management Plan (prepared in Phase 3, planning), how to mitigate risks that cause scope, schedule, or cost risks and then to establish a plan of action in the event that a risk becomes an issue. If circumstances make it necessary or desirable to establish a new baseline of cost, schedule, or scope, the process by which this is achieved is referred to as rebaselining.

Exhibit 2
Major Information Technology Project Planning Performance Measures
Fiscal 2009-2016 Estimated



MITDP: Major Information Technology Development Project

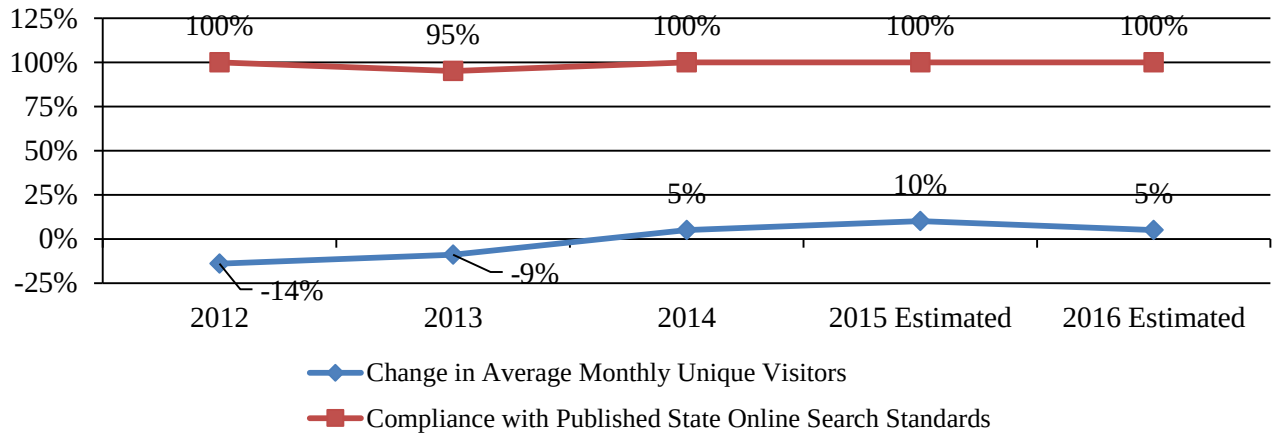
Source: Department of Information Technology

2. Web Systems

The State's IT master plan identifies the Internet as essential in engaging citizens and providing services. Web services are one of the strategies by which higher standards can be realized. The objective is to use these resources for projects that "improve the delivery of services to citizens and visitors as well as the business processes of the State." The Internet has become ubiquitous, and there are growing expectations from citizens that services are to be provided on the Internet.

Exhibit 3 provides usage and agency compliance data. The data show an increase in average monthly users and full compliance with published standards in fiscal 2014.

Exhibit 3
Maryland Portal Directory Performance Indicators
Fiscal 2012-2016 Estimated



Source: Department of Information Technology

In fiscal 2013, 8 regular positions and approximately $1 million from other State agencies transferred into DoIT's budget as part of a centralized IT support initiative. Specific initiatives include:

- expanding State government's presence by using standard development and design tools. This involves developing templates for agencies to use, expanding Geographic Information Systems (GIS), and providing multimedia services such as video services;

- improving the form of content delivered and measuring the success. This includes developing social media portals for agency public information officers, improving usability so that users can find what they need, and adopting web statistics that allow for common measurement tools, surveys, and forms to track usage and interests;

- developing efficiencies through shared platforms, procedures, and service levels. This involves providing common development tools and a code library as well as assisting agencies with configuration of websites and applications; and

- improving collaboration and training, which includes skills training and quarterly meetings of web managers.

DoIT advises that agencies will still be responsible for the content on their websites. DoIT's role will be to develop standards and provide resources for agencies. **The department should brief the committees on the progress made since the transfer of these positions.**

Missing from the measures is any indication of the quality of Maryland.gov. There are numerous factors that contribute to a good website, including accessibility, navigation, content, security, speed, accuracy, and currency (up-to-date data). **In addition to providing resources for agency websites, the department should direct some of its MFR efforts to developing indicators that measure the quality of State websites.**

The State should also be expanding the number of services that are offered on the Internet. DoIT has made efforts to expand the number of services offered on the Internet. In August 2011, the Board of Public Works (BPW) approved a master contract with NICUSA, Inc. (NIC) to develop websites, online services, and secure payment processing applications for State agencies. NIC has been developing eGovernment applications for over a decade and is developing them for at least 24 states. The State is not charged for this service; NIC generates revenues by implementing some commercially valuable services and pooling these revenues to support other applications. NIC advises that nonrevenue generating applications account for approximately 80% of applications. Maryland State agencies have begun developing applications with NIC, such as the Department of Business and Economic Development's Central Business Licensing and Registration portal, the Motor Vehicle Administration's Android Driver Practice Exam, and MEMA's Maryland Prepares.

This contract provides the State an opportunity to expand web services. But from the MFR data, it is unclear to what extent the State is expanding the number of services offered on the Internet. The web systems programs have a vision of "providing citizens with easy access to Maryland government data and State agencies with secure and reliable statewide web applications."

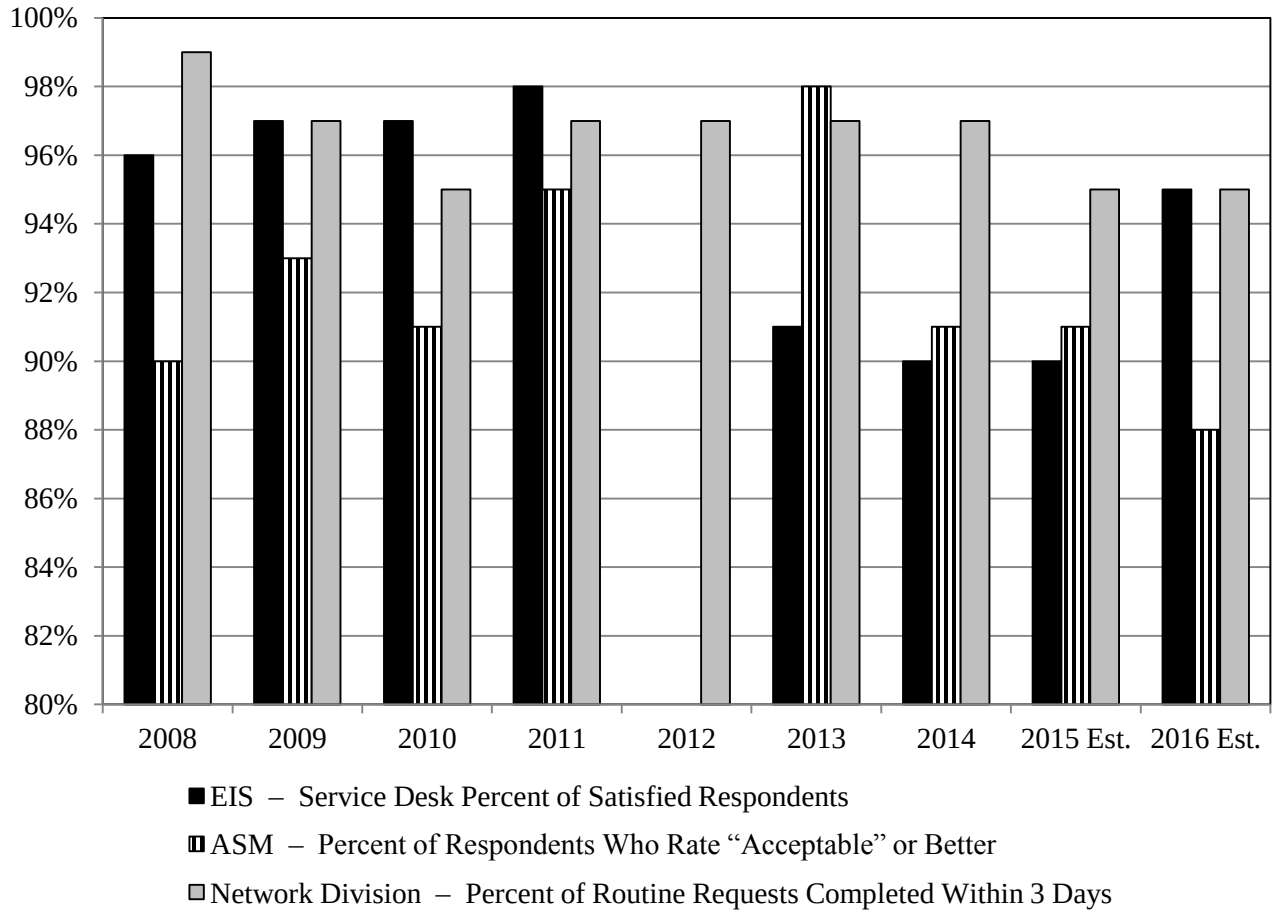
Every two years the Center for Digital Government, the research and advisory arm of *Government Technology* magazine, evaluates state governments' ability to improve internal processes and better serve citizens. In the 2014 survey, the state of Utah received an A grade. In Utah, the "public expects to be able to interact with their government using new convenient technologies." The report notes that Utah now offers over 1,100 online services. It is unclear how many services Maryland offers. **The Department of Legislative Services (DLS) recommends that DoIT develop MFR indicators that measure progress toward realizing this vision. Budget bill language requiring DoIT to include MFR measurement data is recommended.**

3. State Agency Support

DoIT supports systems that State agencies use. EIS operates a help desk and the local area networks in Annapolis and Baltimore. The department supports IT operations in a number of agencies, including the Governor's Office, MEMA, and DGS. ASM operates the FMIS, which supports the agency-based financial systems, and human resources systems, such as the new Statewide Personnel System. The Networks Division operates telephone systems, networkMaryland, and the State's wireless system. The department's MFR initiative also measures the effectiveness of these services.

Exhibit 4 shows that from fiscal 2008 to 2011, at least 96% of EIS help desk respondents rated the service favorable. There was no survey in fiscal 2012, and the favorable rating dropped to 91% in fiscal 2013. The drop is attributable to a change in the survey. Beginning in fiscal 2013, the choices were expanded to include "neutral." DoIT advises that 7% of respondents chose "neutral." In 2014, the number of satisfied responses dropped to 90%.

Exhibit 4
Agency Support Systems Performance Indicators
Fiscal 2008-2016 Est.



ASM: Applications Systems Management
EIS: Enterprise Information Systems

Note: No EIS survey was prepared in fiscal 2012 due to resources being reassigned to Google email implementation.

Source: Department of Information Technology

Since fiscal 2008, over 90% of ASM respondents rated their systems acceptable or better. With respect to the Networks Division, at least 95% of its routine requests have been completed within three days. Routine requests include adding, disconnecting, moving, and removing telephone lines and voice mailboxes.

4. Cybersecurity

In the 2014 *Joint Chairmen's Report* (JCR), DoIT was asked to develop MFR cybersecurity indicators. In its MFR submission, the department has added the goal that it "provide leadership and support to state agencies in the areas of cybersecurity policy, risk and vulnerability assessment, technology implementation, awareness training and incident response." As requested, the department also added five performance measures. **Exhibit 5** shows the initial measures and the targets for fiscal 2015 and 2016.

Exhibit 5
Cybersecurity Performance Indicators
Fiscal 2015-2016 Estimated

	2015 Estimated	2016 Estimated
Employees Compliant with Cybersecurity Awareness Training Program	90%	94%
Agencies with Vulnerability Assessment, Penetration Test, or Audit	10%	40%
Agencies with Data Loss Prevention Tool in Operation	5%	10%
Multi-agency Security Drills or Exercises	1%	3%
Certified Security Information Professionals Employed by the State	5%	10%

Source: Department of Information Technology

The cybersecurity awareness training program began in December 2013. The program is delivered to registered Executive Branch employees and contractors with a State email account. It consists of monthly lessons on topics like passwords, working remotely, and data loss prevention. The training is provided at no cost to the agencies. The program was made mandatory by the previous Administration for Executive Branch employees. In 2014, DoIT advises that 40,000 employees and contractors participated. The goal is to have 90% of employees completing each month's training in fiscal 2015. Missing from the training regime are employees from the Legislative and Judicial branches. **The department should brief the committees on its willingness to offer the training to other branches of government at no cost.**

The department has also initiated vulnerability assessments (identify and classify security holes), penetration tests (act as malicious attacker to identify weaknesses), and security audits (systematic evaluation of security against established criteria). Plans have been made for 38 agencies as well as the Maryland Department of Transportation's (MDOT) agencies. By fiscal 2016, each of these should be assessed, tested, or audited almost once a year.

The goals for data loss prevention tools are that 5 agencies have them operational by fiscal 2015 and 10 by fiscal 2016. These goals seem modest. **The department should brief the committees on its efforts to ensure that agencies have adequate data loss tools and any plans to expand the use of these tools.**

DoIT plans to have one multi-agency security drill in fiscal 2015 and three in fiscal 2016. MEMA and the Air National Guard work with DoIT to develop drills that test responses to cybersecurity threats that impact State IT systems.

The new indicators also include a measure of the number of certified security professionals employed by the State. Each agency determines its own staffing levels that are appropriate to protect its systems from unauthorized access, modification, disclosure, or destruction. They can employ their own staff or procure contractors. **The department should be prepared to brief the committees on the need for security professionals, how DoIT supports agencies assessments, and what an appropriate statewide target for professionals is.**

Fiscal 2015 Actions

Proposed Deficiency

A deficiency provides $1,155,458 in special funds to support the first lease payment for a new voting system for the State Board of Elections. The current voting system is beyond the useful life recommended by the manufacturer. Funds were initially included in fiscal 2009 but were reduced because of cost containment. The project has received planning funds and is being implemented. The State entered into a lease for new equipment in December 2014. The funds are necessary for the fiscal 2015 lease payment. **DLS recommends approval.**

Cost Containment

Exhibit 6 shows that two rounds of cost containment reduced fiscal 2015 general funds by $733,769. BPW reduced appropriations by $389,769 in July 2014 and another $344,000 in January 2015.

DoIT's fiscal 2015 budget was also reduced by $806,076 in the January 2015 round of cost containment. This is a 2% reduction. DoIT has not indicated how this reduction will affect operations. **The department should brief the committees on how the fiscal 2015 budget will be reduced 2% and how this will affect operations.**

Exhibit 6
Fiscal 2015 Reconciliation
($ in Thousands)

Action	Description	General Fund	Special Fund	Federal Fund	Reimb. Fund	Total
Legislative Appropriation with Budget Amendments		**$40,694**	**$8,264**	**$969**	**$54,470**	**$104,397**
July BPW	Reduced software maintenance ($184,400), Geographic Information Systems and Cybersecurity ($200,000), and the Maryland Time System ($5,769).	-390	0	0	0	-390
Working Appropriation		**$40,304**	**$8,264**	**$969**	**$54,470**	**$104,007**
January BPW	Reduced equipment leases ($244,000) and Geographic Information Systems ($100,000).	-344	0	0	0	-344
January BPW Across the Board	2% across-the-board reduction.	-806	0	0	0	-806
Deficiency Appropriations	Support Voting System.	0	1,155	0	0	1,155
Total Actions since January 2015		***-$1,150***	***$1,155***	***$0***	***$0***	***$5***
Adjusted Working Appropriation		**$39,154**	**$9,419**	**$969**	**$54,470**	**$104,012**

BPW: Board of Public Works

Source: Department of Budget and Management

Proposed Budget

The fiscal 2016 allowance proposes $124.1 million in spending. The department receives $57.0 million in reimbursable funds from State agencies and $55.0 million in general funds. Special funds ($11.0 million) and federal funds ($1.0 million) are 9% of the budget. **Exhibit 7** shows that this is $20.1 million more than the fiscal 2015 working appropriation. A large and volatile share of the budget is funding for major IT projects, which total $62.6 million in fiscal 2016. Cash flow requirements for these projects change substantially from year to year. The fiscal 2016 allowance is $19.3 million more than budgeted in fiscal 2015. Costs for departmental operations increase by $0.8 million in fiscal 2016.

In fiscal 2016, the Administration has implemented several across-the-board reductions. This includes a general 2% reduction, elimination of employee increments, and a revision to the salary plan, which reflects the abolition of the 2% general salary increase provided on January 1, 2015. DoIT's share of these reductions is $1,636,986.

Exhibit 7
Proposed Budget
Department of Information Technology
($ in Thousands)

How Much It Grows:	General Fund	Special Fund	Federal Fund	Reimbursable Fund	Total
Fiscal 2014 Actual	$35,885	$5,469	$570	$41,243	$83,167
Fiscal 2015 Working Appropriation	39,154	9,419	969	54,470	104,012
Fiscal 2016 Allowance	55,011	10,984	632	57,470	124,097
Fiscal 2015-2016 Amt. Change	$15,857	$1,565	-$336	$2,999	$20,084
Fiscal 2015-2016 Percent Change	40.5%	16.6%	-34.7%	5.5%	19.3%

Where It Goes:

Personnel Expenses	
New positions	$126
Abolished positions	-375
Increments and other compensation (prior to cost containment)	648
Section 20: Abolition of prior year 2% general salary increase	-152
Section 21: Abolition of employee increments	-175
Reclassifications	-310
Employee and retiree health insurance	319
Employee pension contributions	193
Turnover adjustments	169
Other fringe benefit adjustments	38

Where It Goes:	
State Agency Support	
Maryland FiRST service and maintenance contracts	1,812
Licenses for Google cloud for government	-1,164
networkMaryland wireless and project management support	-398
Delete contractual positions supporting litigation and financial systems	-187
Maryland time system State agency support	-176
Hardware for Department of General Services and Department of Information Technology personal computers and server operations	172
Contractual service desk support	-96
Cybersecurity	
Rent for new disaster recovery center	160
Cybersecurity awareness training	37
Major IT Oversight	
Major information technology project oversight contracts	701
Department of Information Technology Major IT Projects	
Statewide personnel system	-6,631
Enterprise budget system	1,519
Central Collection Unit System modernization	9,636
Major Information Technology Project Fund	
State agency major information technology projects	14,808
Section 19: Fiscal 2016 2% Reductions Net of Fiscal 2015 Reduction	-504
Other Changes	-86
Total	**$20,084**

Maryland FiRST: First Responders Interoperable Radio System Team
IT: information technology

Note: Numbers may not sum to total due to rounding. The fiscal 2015 working appropriation reflects deficiencies and the Board of Public Works reductions to the extent that they can be identified by program. The fiscal 2016 allowance reflects back of the bill and contingent reductions to the extent that they can be identified by program.

Early in fiscal 2105, DoIT agreed to assume responsibility for DGS' IT operations. This includes maintaining personal computers and local access networks as well as providing service desk support. In exchange, DGS transferred 5 positions to DoIT.

Personnel

In fiscal 2016, 4 positions are deleted and 2 new positions are created. The deleted positions include 2 positions supporting the old personnel system, which is replaced by the new Statewide Personnel System. The department also deleted 1 position that included a long-vacant part-time

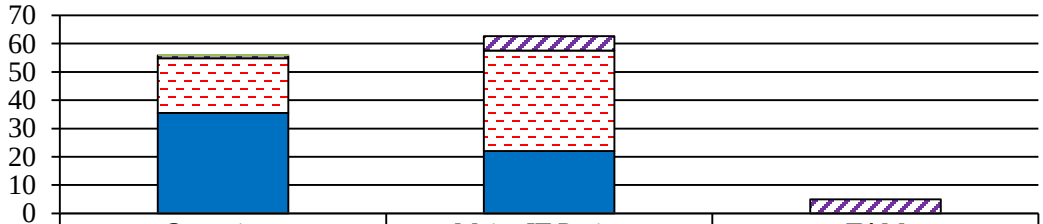
position and a part-time position that was merged with another position. The final deleted position is a reimbursable funds position that supports EIS. Budgeted fiscal 2015 costs for the 4 positions total approximately $375,000, of which $243,000 is for salaries.

Two new positions are created in fiscal 2016. The positions are an administrator and technical support for wireless services in the Networks Division. The positions support operations of the First Responders Interoperable Radio System Team (Maryland FiRST). Fiscal 2016 budgeted costs total approximately $126,000, of which $100,000 are for salaries.

Operations and Project Spending

DoIT's activities can be divided into three distinct functions: TAM provides telecommunications relay service for Maryland's hearing and speech disabled citizens; Major IT Projects provides oversight for State agencies developing major IT projects; and Operations supports the ongoing telecommunication and IT services in State agencies. **Exhibit 8** shows that the largest share of DoIT's appropriation supports major IT projects, which receive $35.6 million in general funds and $22.0 million in reimbursable funds from State agencies. Operations are supported by $19.4 million in general funds and $35.5 million in reimbursable funds. Another $5.0 million (4% of spending) supports TAM.

Exhibit 8
Spending by Purpose and Fund
Fiscal 2016
($ in Millions)



	Operations	Major IT Projects	TAM
Federal Funds	$0.6	$0.0	$0.0
Special Funds	1.0	5.0	5.0
General Funds	19.4	35.6	0.0
Reimbursable Funds	35.5	22.0	0.0

IT: information technology
TAM: Telecommunications Access of Maryland

Note: Adjusted to reflect reductions proposed by in the Governor's budget plan.

Source: Department of Budget and Management

Major IT Development Project Fund and Major IT Project Expenditures

Chapters 467 and 468 of 2002 created the MITDPF. The fund replaced the Information Technology Investment Fund; required all general funds appropriated for major IT projects to be held in the fund; and enhanced the oversight role of DoIT (known then as the Office of Information Technology) in approving projects from the fund.

MITDPF Funded Projects

Exhibit 9 shows fund transactions for the MITDPF for fiscal 2013 through the proposed budget in fiscal 2016. Fiscal 2016 includes a $35.6 million general fund appropriation, $1.8 million in special fund appropriations, and $0.3 million in interest earnings. General fund appropriations represent 94.3% of appropriations. Special funds are available from projects that have been completed and no longer need the funds.

Fiscal 2016 appropriations are detailed in **Exhibit 10**. The fiscal 2016 allowance includes funding for three new projects, the Comptroller's Integrated Tax System, the Department of Juvenile Services' Automated Statewide Support and Information Systems Tools (ASSIST) Upgrade, and the Maryland Department of Agriculture's telecommunications/data communications upgrade.

Exhibit 9
Major Information Technology Development Project Fund Data
Fiscal 2013-2016

	2013	2014	2015	2016
Opening Fund Balance	$13,894,320	$27,232,042	$31,269,245	$0
Revenues				
General Fund	29,316,732	20,100,566	21,668,423	35,606,996
Special Fund – Investment Interest	345,070	431,186	300,000	300,000
Special Fund – Appropriations[1]	369,870	673,818	175,560	1,844,542
Total Available Revenues	**$43,925,992**	**$48,437,612**	**$53,413,228**	**$37,751,538**
Expenditures				
Transferred to Agencies	-16,693,951	-17,168,367		
Reallocation from Prior Years Expended[2]			-1,844,542	
Anticipated Transfers			-51,568,686	-37,451,538
End-of-year Fund Balance[3]	**$27,232,042**	**$31,269,245**	**$0**	**$300,000**

MITDP: Major Information Technology Development Projects

[1] Fiscal 2015 Reallocation from Prior Years Expended excludes proposed $1,155,458 fiscal 2015 deficiency.

[2] Fiscal 2015 appropriation includes $1,844,542 in previously appropriated funds that are no longer needed for the following projects: Comptroller of Maryland's Modernized Integrated Tax System, State Department of Assessments and Taxation's Administration and Valuation System, Medicaid Management Information System, Department of Public Safety and Correctional Services' Offender Case Management System, Department of Human Resources' Client Automated Resource and Eligibility System, and Maryland Higher Education Commission's College Aid/Student Financial Aid System.

[3] Excludes funding for the Statewide Personnel System, Enterprise Budget System, and Central Collection Unit System Modernization budgeted in the Department of Information Technology budget instead of the Major Information Technology Development Project Fund. Transportation and higher education projects are also excluded.

Source: Department of Legislative Services; Department of Information Technology; Department of Budget and Management, February 2015

Exhibit 10
Major Information Technology Development Project Fund
Projects Receiving New Fiscal 2016 Funding (Excluding Carryover Project Funding)

Agency	Project Name	Project Description	MITDPF Funding	Comment
Ongoing Projects				
Governor's Office for Children	State Children, Youth and Families Information System	Convert the current data system for children placed in out-of-home residential programs to commercial off-the shelf product with Internet applications. The project is in the planning phase.	$300,000	This project is funded solely with general funds. Planning costs have increased from approximately $400,000 last year to $550,000 now. **The Department of Legislative Services (DLS) recommends approval.**
State Board of Elections (SBE)	New voting system replacement project	Replace an aging voting system that has reached the end of the manufacturer's useful life. Planning was completed in October 2014.	$6,893,299	The project is being implemented and is scheduled to be operational for the 2016 presidential election. SBE entered into a lease for the equipment in December 2014. There is also a $1.2 million deficiency appropriation proposed in fiscal 2015; **DLS recommends approval.**
Department of Health and Mental Hygiene (DHMH)	Medicaid Enterprise Restructuring Project	Replace legacy Medicaid information system and align to federally mandated Medicaid Information Technology Architecture requirements. Project also adds enhancements such as coordination of benefits, surveillance and utilization review, federal and	$7,775,410	Fiscal 2016 also includes $49.7 million in federal funds. Concerns have been raised about major risks related to funding (general fund cost is $25.4 million), interdependencies (integrate with federal and Department of Human Resource (DHR) systems), and implementation (large and complex project with tight deadlines). The project was plagued with delays and needed to be rebaselined. The project is now 21 months behind the rebaselined schedule. Two cure notices have been issued and a stop order was issued in August 2014. **DLS recommends deleting the**

Agency	Project Name	Project Description	MITDPF Funding	Comment
		management reporting, and case management.		**appropriation for the Medicaid Enterprise Restructuring Project (MERP). The department should reevaluate its plans and resubmit its plan when it is ready to move forward.**
DHMH	Long-term Services and Support Tracking System	Implement a system to track long-term care services as well as develop a standardized assessment and in-home services verification tool.	$7,350,000	The appropriation supports development, integration and testing, operation and maintenance, and oversight costs. A Notice to Proceed was issued in October 2014 and DHMH is working with the vendor to develop a detailed system development schedule. The State is receiving $7.8 million in federal funds. The project is generally considered low risk. **DLS recommends approval.**
Department of Human Resources (DHR)	Automated Financial System	Replace fiscal system that tracks payments, maintains transaction history, generates reports, and produces data for other systems. New system will interface with the Internet. The system is widely used by local offices.	$676,500	Project is still in the planning phase. DHR's fiscal 2015 appropriation also includes $676,500 in federal funds. The project was initially expected to have completed the planning phase by June 2014; however, the current project schedule anticipates completing the planning phase instead in November 2015. Based on that timeframe and the current schedule, DHR would not complete the implementation phase until fiscal 2017. As a result, not all of the funds included in the fiscal 2016 allowance, which is the amount needed to complete the project, would be required. **DLS recommends reducing the appropriation.**
Department of State Police (DSP)	Public Safety Communication System	Purchase radios for 700 megahertz communication systems.	$8,574,729[1]	Purchase of radios for the Department of Public Safety and Correctional Services, DSP, Department of Natural Resources, and Comptroller of Maryland. **DLS recommends approval.**

Agency	Project Name	Project Description	MITDPF Funding	Comment
DSP	Automated Licensing and Registration Tracking System	Automate and streamline the process by which a citizen requests approval to purchase a firearm.	$3,000,000	The project is generally low or medium risk, the exception is organizational culture. Since this project will result in a shift from a paper to electronic process, detailed training and new procedures are expected. The Requirements Analysis is being prepared and should be completed by the end of fiscal 2015. The new funds support design, development, and integration. **DLS recommends approval.**
Maryland Department of the Environment (MDE)	Permit Tracking System Modernization	Enhance permit tracking by adding a component that allows access through the Internet.	$800,000	MDE advises that the system is expected to use proven technology, which reduces risk. An objective is to reduce the burden on industry and enhance regulatory customer service. The requirements analysis is being prepared and should be completed by the end of fiscal 2015. The funds support implementation begins in fiscal 2016. **DLS recommends approval.**
Subtotal			***$35,369,938***	
New Projects				
Comptroller of Maryland	Integrated Tax System	Replace current State of Maryland Tax, Computer Aided Collection System, and other systems.	$1,500,000	Objective is to integrate systems to simplify taxpayer compliance as well as improve reporting for office staff. Project is in initial planning. Currently in System Concept Development and should begin Requirements Analysis later this year. Project includes some high-risk factors, such as interdependencies (needs to be compatible with different systems), organizational culture (resistance to change), and implementation (complicated requires high level of coordination). **DLS recommends**

Agency	Project Name	Project Description	MITDPF Funding	Comment
				deleting the appropriation for the Integrated Tax System.
Department of Juvenile Services (DJS)	Automated Statewide Support and Information Systems Tools (ASSIST)	Upgrade ASSIST, which is DJS's primary client case management system that serves the State, federal government, and private vendors.	$425,000	The current system has reached a saturation point with complexities of the different free-standing systems that are incorporated in ASSIST. This has caused system errors, outages, and frequent maintenance. Planning began in 2012 and currently is in the Requirements Analysis phase. **DLS recommends approval.**
Maryland Department of Agriculture (MDA)	Telecomm/ Datacomm Upgrade	Replace MDA telephone system and network backbone in Annapolis, Frederick, and Salisbury offices.	$156,600	Current system is no longer supported by the vendor and parts are increasingly difficult to obtain and phone service can be lost. Project is in initial planning. Currently in System Concept Development and should begin Requirements Analysis in 2016. **DLS recommends approval.**
Subtotal			***$2,081,600***	
Total Fiscal 2016 Allowance			**$37,451,538**	
Fund Sources				
General Funds			$35,606,996	
Special Funds[1]			$1,844,542	
Total Funds			**$37,451,538**	

[1] Special funds totaling $1,844,542 support the 700 megahertz equipment.

Source: Department of Legislative Services; Department of Information Technology; Department of Budget and Management

MITDPF Out-year Commitments

Major IT projects require substantial financial commitments and require years to complete. The department has developed the SDLC methodology to guide the planning process. This process produces documents that support the planning process and estimate out-year costs. In the Budget Highlights of the Governor's budget books, the department provides a list of all projects that have received appropriations. Costs are based on the current projects that are being planned, as new projects are approved, out-year costs could increase.

Exhibit 11 shows the expected out-year costs of projects that are in the SDLC. This includes planned projects that have not yet received any appropriations. In fiscal 2017, $159 million in total appropriations and $70 million in general fund appropriations are expected. This amount is substantially more than previously projected. These costs include the following projects with substantial commitments in fiscal 2017:

- Medicaid Enterprise Restructuring Project (MERP) anticipates $36 million in total fund costs and $7 million in general fund costs;

- Department of Labor, Licensing, and Regulations' Unemployment Insurance modernization estimates $24 million in federal fund costs and no general fund costs;

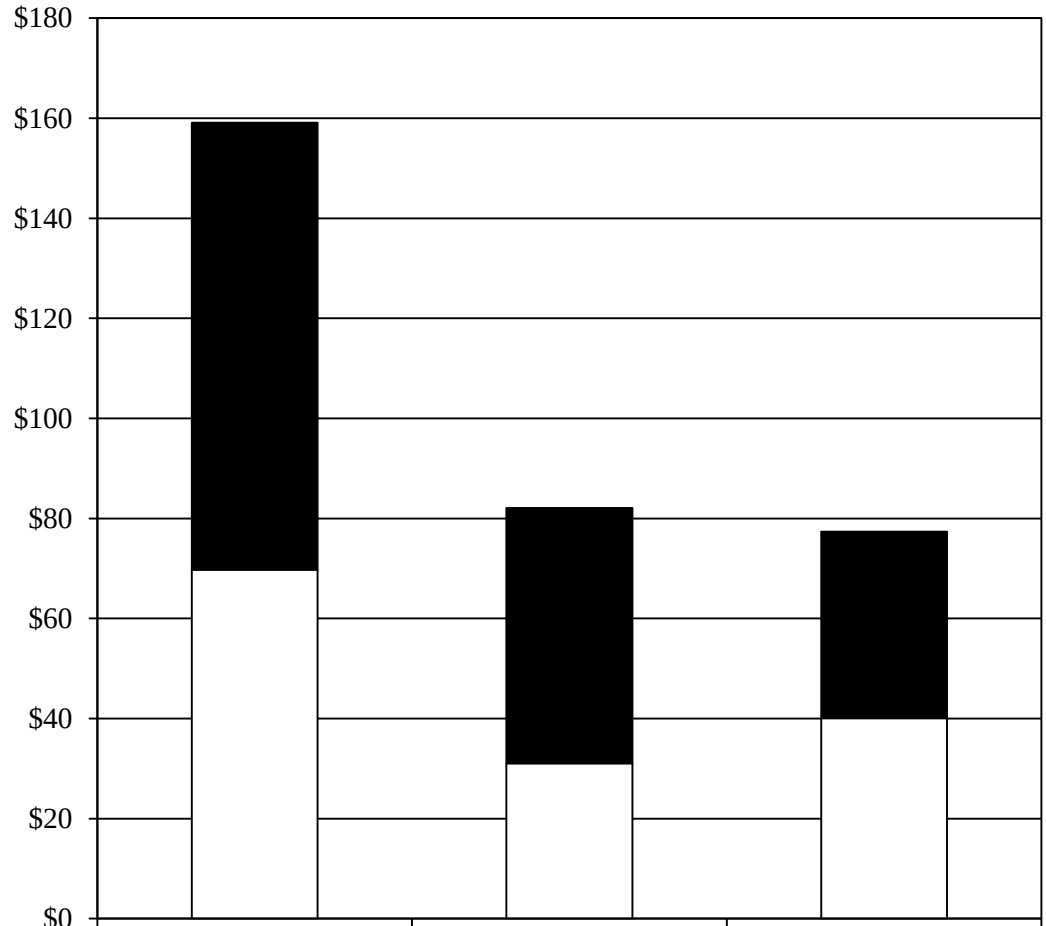
- Voting System Replacement Project anticipates $23 million in total costs, of which $12 million is general fund costs;

- Integrated Tax System expects $22 million in total costs and $13 million in general fund costs;

- Enterprise Budget System anticipates $15 million in total costs and $11 million in general fund costs; and

- 700 megahertz (MHz) radios estimate $9 million total costs, all of which are supported by the general fund.

Exhibit 11
Major Information Technology Development Project Fund
Projected Out-year Expenditures
Fiscal 2017-2019
($ in Millions)



	2017	2018	2019
Nongeneral Fund Costs	$89	$51	$37
General Fund Costs	70	31	40

Note: This excludes transportation and higher education projects.

Source: Department of Legislative Services; Department of Budget and Management; Department of Information Technology

There are also a number of projects that are being planned whose total project costs have not been estimated. These projects have not progressed far enough in the planning process to have estimated implementation costs. As agencies complete the planning process and implement these projects, out-year costs are also expected to increase. **Exhibit 12** lists planning projects whose total project costs have not been identified.

Exhibit 12
Planning Projects
All Funds
($ in Thousands)

Agency	Project	Prior Funds	2016	2017	Remainder to Complete
BCCC	Enterprise Resource Planning System	$1,200	$1,384	998	$2,145
OPD	Case Management Replacement	0	0	300	0
OPD	Employee Mobility	0	0	150	0
AG	Case Management System	0	0	300	0
GOC	State Children, Youth, and Family Information System	300	300	2,200	0
SBE	Data Warehouse	0	0	0	0
DHMH	Electric Health Records System	0	0	550	0
DHMH	Financial Restructuring of DDA	3,397	0	0	0
DHMH	Maryland Board of Physicians IT Licensure Project	634	684	0	0
DHR	Enterprise Content Management Solution II	0	0	1,939	0
DHR	Data Warehouse	0	0	900	0
DSP	Maryland Information Management Exchange	0	0	1,050	0
DJS	ASSIST System Upgrade	468	425	0	0
Total		**$5,999**	**$2,793**	**$8,386**	**$2,145**

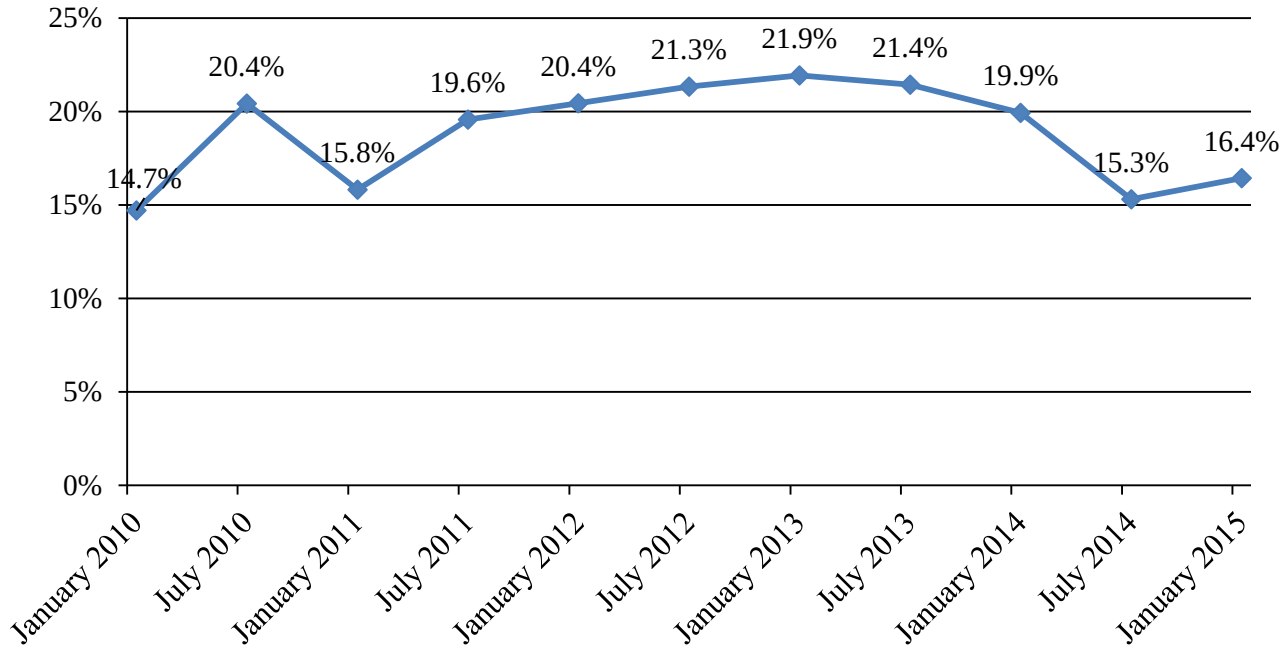
AG: Attorney General
ASSIST: Automated Statewide Support and Information System Tools
BCCC: Baltimore City Community College
DDA: Developmental Disabilities Administration
DHMH: Department of Health and Mental Hygiene
DHR: Department of Human Resources
DJS: Department of Juvenile Services
DSP: Department of State Police
GOC: Governor's Office of Children
IT: information technology
OPD: Office of the Public Defender
SBE: State Board of Elections
Source: Department of Information Technology, January 2015

Issues

1. Department Should Evaluate Personnel

DoIT relies on its workforce to provide major IT project development oversight, support cybersecurity improvements, operate voice and data networks, administer Web standards and procedures, operate statewide human resources and financial systems, and other functions. To do this, the Governor's budget provides a staff of 138 regular positions. In recent years, many of these positions have remained vacant. **Exhibit 13** shows that vacancy rates exceeding 20% are common.

Exhibit 13
Department of Information Technology Vacancy Rates
January 2010-2015



Source: Department of Budget and Management

To some extent, the high vacancy rates are attributable to the classifications of DoIT positions. The concern was that many positions were not properly classified and that it was therefore difficult to attract and maintain the personnel to fill these positions. To address these high vacancies, the department prepared a plan to reclassify positions. In the 2013 legislative session, the DoIT budget received approximately $1,170,000 in additional funds to reclassify positions. Another $989,000 was

received in fiscal 2015. Though some positions were reclassified in fiscal 2014, the department advises that no positions were reclassified in fiscal 2015.

In response to concerns raised by the budget committees in the fiscal 2014 JCR, the department prepared a strategy for the use of contractors and personnel. With respect to personnel, DoIT had the following recommendations:

- critical IT positions must be filled on a timely bases;
- rapid change in the IT landscape requires flexible and incremental adjustments to personnel requirements; and
- certain State IT positions should be market competitive.

In recent years, the department has been slow to fill positions. Though it began to reclassify positions, this effort seems to have stalled. Concerns have been raised that positions have not been filled because some salaries are not competitive. **To address this, DLS recommends that the committees adopt the following narrative:**

> **Report on Personnel Actions:** The budget committees are concerned about the high level of vacancies at the Department of Information Technology (DoIT). The committees concur with a DoIT report that characterizes the IT landscape as rapidly changing and, therefore, recommends that incremental personnel adjustments are required. The department should review its positions in order to determine if the positions are appropriately compensated to meet the demands placed on the department. Positions that are not appropriately classified should be reclassified in the fiscal 2017 allowance. DoIT should report its findings to the committees no later than December 1, 2015.

2. Maryland FiRST Operating Budget Expenditures Expected to Increase

Since 2000, the State has invested over $200 million to build an integrated, wireless public safety communications system. Towers have been built throughout the State. Parts of the system became operational in December 2012. The system provides wireless communication for State and local public safety agencies, such as the Maryland State Police, local police and sheriff's departments, and local fire and rescue.

To provide guidance, Chapter 117 of 2014 created the Statewide Interoperability Radio Control Board. The board is responsible for managing a well-functioning system by establishing standard operating procedures, quality of service standards, and maintenance guidelines. The board also approves new users, establishes working groups, coordinates collaborative relationships, and resolves conflicts among users. The board also reviews and makes recommendations about spending and maintenance efforts, such as:

- reviewing the annual cost estimation provided by the director of the board;

- recommending to the Governor and the General Assembly funding and resource levels for system operations and maintenance;

- advising the Governor and the General Assembly on resources needed for appropriate operation and expansion to meet service needs for public safety communications statewide; and

- negotiating agreements with federal agencies, surrounding states, or the District of Columbia for the use of the system.

Substantial Maintenance Costs Are Anticipated

Construction was phased according to the following regions:

- Region 1A provides service in the area served by the Maryland Transportation Authority;

- Region 2 services the Eastern Shore (Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester counties);

- Region 1 serves Central Maryland (Anne Arundel, Baltimore, Carroll, Cecil, Frederick, Harford, and Howard counties and Baltimore City);

- Region 4 provides service to Western Maryland (Allegany, Garrett, and Washington counties); and

- Region 3 provides service to the nation's capital area (Montgomery and Prince George's counties) and Southern Maryland (Calvert, Charles, and St. Mary's counties).

Region 1A became operational in December 2012. The system is also operational on the Eastern Shore. As different phases become operational, the State will be required to maintain the system. After the initial warranty period, which is two years after construction, the State will have to fully fund operations and maintenance. These costs are expected to escalate steadily until all construction is completed and the warranties expire. At that point, costs are projected to increase only modestly.

The Radio Control Board has analyzed the cost and presented a cost estimate. This was used to prepare the fiscal 2016 DoIT operating budget. **Exhibit 14** shows that operating costs are expected to increase from $4 million in fiscal 2016 to $13 million in fiscal 2021, when costs have been phased in completely.

Exhibit 14
Maryland FiRST Operating Costs
Fiscal 2016-2021
($ in Millions)

	2016	2017	2018	2019	2020	2021
Maintenance Costs						
Region 1A	$1.9	$1.7	$1.8	$1.9	$1.9	$2.0
Region 2	0.3	1.3	1.6	1.6	1.6	1.7
Region 1		0.5	1.6	2.1	2.2	2.2
Region 4			0.6	1.2	1.2	1.2
Region 3				0.9	1.9	1.9
Upgrade Assurance					1.0	2.0
Subtotal	**$2.2**	**$3.5**	**$5.5**	**$7.7**	**$9.8**	**$11.0**
Other Costs	1.8	2.0	2.2	1.9	2.0	2.0
Total Costs	$4.0	$5.6	$7.7	$9.6	$11.8	$13.0

Source: Radio Control Board, December 2014

The department should be prepared to brief the committee on projected operating budget costs and the deliberations of the Radio Control Board.

3. Maryland Insurance Administration Did Not Comply with State Procurement Regulations

The mission of DoIT is to "provide information technology leadership." This leadership includes "efficacious procurement of information technology services and products."

To achieve this, State procurement law provides that IT contract awards over $25,000 must be competitively bid and approved by DoIT. DoIT has also developed the SDLC methodology, which requires a substantial amount of IT project planning. A key component of this planning is thoroughly defining system requirements prior to implementation.

In this model, agencies submit their major IT project proposals to DoIT, which reviews and approves project plans and procurements. For some agencies, major system development or enhancement is uncommon. The department also provides technical support when reviewing plans or

producing requests for proposals (RFP). This can include procuring third-party contractors that can provide guidance to agencies. While thorough planning and the application of appropriate expertise does not guarantee that all projects will be successful, the model's goal is to apply the process so that the number of failed projects are minimized.

A concern is that agencies occasionally do not submit the projects to DoIT and that agencies do not always adhere to the process. A recent example of this is the Maryland Insurance Administration's (MIA) attempted procurement of a new premium tax system.

Audit Raises Concerns that MIA's Premium Tax Procurement Did Not Follow Procurement Law

The Insurance Article provides for the imposition of an annual tax on insurance companies for premiums generated from contracts in Maryland. Insurance companies are required to make estimated quarterly payments and, by March 15 of each year, file a final tax return. The State Auditor advises that MIA collected $458 million in fiscal 2014.

In a November 2014 audit, the State auditor found that MIA's "new premium tax system did not comply with State procurement regulations and the project was not adequately planned." Specific issues were that IT services were procured improperly, scope changes failed to initiate a new procurement, formal planning was lacking, and approval of contract modifications were lacking.

In September 2011, the agency solicited a bid to develop a web-based portal through which insurance companies can pay insurance premiums. When MIA solicited its initial procurement, it did not follow State procurement regulations. The RFP did not identify the technical requirements and their relative importance. Two bids were received. The winning bid was rated higher by two of the three bid evaluators. The losing bid offered a lower hourly rate ($68 per hour compared to $98 per hour). The bidders that rated the losing bid higher indicated that neither bid was technically qualified. The bid was awarded for $25,000 without documentation explaining the basis of the award. Since it did not exceed $25,000, DoIT approval was not required.

Soon after the bid was awarded, the scope of the project was changed. Instead of rebidding the contract, MIA ordered the contractor to implement a premium tax system using an insurance tax program developed and owned by the contractor and implemented in one other state. The decision was made despite the availability of other existing software applications, including one endorsed by the National Association of Insurance Commissioners.

In February 2012, the new premium tax system became operational with basic functionality. At the beginning of the project, MIA did not prepare documentation to outline the required system capabilities and features, including the security safeguards. Under the SDLC, the fourth phase, Requirements Analysis, requires a Functional Requirements Document, which is a user-oriented document that includes business process descriptions, a model that describes the processes and data needs, an analysis of business activities and data, and an analysis of the technical architecture, software and data to ensure that limitations or unique requirements have not been overlooked. If commercial off-the-shelf software is used, this phase should be completed before the vendor is selected.

The lack of planning may have contributed to the number of additional tasks that were added to the project at various times over the 22 months following the February 2012 implementation. While the system did enable insurance companies to report and pay on time, certain other capabilities of the former system were not implemented timely or at all. In the auditor's opinion, the "implementation of the new system of the new premium tax system adversely affected operations and security controls." This resulted in other audit findings. One example is that the new system no longer had the ability to automatically audit premium tax information and to calculate amounts due based on prior year overpayments.

After the initial contract was approved, MIA did not always justify or obtain appropriate approvals for contract modifications. Shortly after the initial contract, two $24,940 bids were executed without justification for DoIT approval. The last modification executed at the time of the auditor's review split a $48,100 modification artificially into two modifications that avoided DoIT review. The auditor's report does acknowledge that some of this sole source contract was reviewed by DoIT and BPW.

How Does DoIT Ensure Best Practices

The audit identifies a number of shortcomings in MIA's major IT project development processes. Initially, an unqualified and high-cost bidder was selected. The bid was below the DoIT approval threshold. The scope was changed but not rebid, even though qualified products were available. The agency did not properly plan and document its requirements. Contract modifications were split and often avoided DoIT review. The resulting product lost capabilities that were available in the former legacy system. This adversely affected operations and led to additional audit findings.

DLS has reviewed documents relating to MIAs IT plans and projects. The agency has inconsistently been preparing documents. As late as fiscal 2013, no master plan was filed on the State's Information Technology Advisory Council (ITAC) website. There also are no Information Technology Project Requests documents that provide a review of major IT projects being planned or implemented.

The department should brief the committees on its review of IT projects. This should include a discussion of processes in place to minimize the number of agencies and projects that avoid obtaining proper procurement approval or avoid following required planning processes.

4. State Policies on Internet Advertising

The Web Systems Division's mission is to develop State Web standards. State agencies have increased their Internet presence by building websites. The websites now generate thousands of Internet hits per day. Revenues can be generated by selling advertising on State websites.

In 2014, the State Department of Assessments and Taxation (SDAT) entered into an agreement with Towson University's Office of Information Services (TU/OITS) that was approved by BPW. Under the agreement, TU/OITS hosts and markets the SDAT website for commercial advertising sales that generate revenues. SDAT requested approval under Section 10-305 of the State Finance and

Procurement Article. Under the arrangement, much of the work will be performed by students, giving them an opportunity to gain experience in Internet advertising.

This new contract raises a number of issues, including:

- **Do State Agencies Have the Statutory Authority to Generate Revenues from the Internet**? SDAT's authority is limited. It is unclear which other agencies can advertise.

- **Are There Federal Restrictions That the State Should Consider?** The federal General Services Administration restricts the use of advertising on any .GOV website, which is why SDAT uses the state.md.us sub domain.

- **What Are Other States Doing?** Some states may have already worked with these issues. Maryland could benefit from examining their policies and outcomes.

- **Should There Be Limits on Who Can Advertise on State Websites?** Some advertisements may not be appropriate for State websites or for particular agency websites.

- **What Is an Appropriate Rate to Charge?** It may be most efficient for the State to develop a standard rate schedule per Internet hits that agencies can adopt. Other factors could also influence what can be charged.

DLS recommends that the committees adopt the following narrative:

State Policies on Internet Advertising: In 2014, the State Department of Assessments and Taxation (SDAT) entered into an agreement with Towson University's Office of Information Services. Under the agreement, the university hosts and markets SDAT's website for commercial advertising sales that generate revenues. This is the first such arrangement of its kind and it is possible that more arrangements will follow. The Department of Information Technology's mission is to develop State Internet standards. To provide guidance for State agencies that consider Internet advertising, the department should develop State policies on Internet advertising. These policies should consider statutory authority to advertise on the Internet, federal regulations, other states' policies, appropriate content, and appropriate compensation. This report should be submitted to the committees by November 2, 2015.

Recommended Actions

		Amount Reduction	
1.	Delete funds for the Medicaid Enterprise Restructuring Project (MERP). Concerns have been raised about the riskiness of this project. The project was plagued with delays and needed to be rebaselined. The project is now 21 months behind the rebaselined schedule. Two cure notices have been issued and a stop order was issued in August 2014. The Department of Legislative Services recommends deleting the appropriation for MERP. The department should reevaluate its plan and resubmit its plan when it is ready to move forward.	$ 7,775,410	GF
2.	Reduce funds for the Automated Financial System (AFS) project due to project delays. The AFS project was initially expected to have completed the planning phase by June 2014; however, the current project schedule anticipates completing the planning phase instead in November 2015. The implementation phase was initially projected to last one year. Based on that timeframe and the current schedule, the Department of Human Resources would not complete the implementation phase until fiscal 2017. As a result, not all of the funds included in the fiscal 2016 allowance, which is the amount needed to complete the project, would be required. A reduction of the same amount is included in the Major Information Technology Development Project Fund for the State share of the project costs.	338,250	GF
3.	Delete funds for the Integrated Tax System. The project is expensive and high risk. The total cost of the project is estimated to be $110.1 million. This includes $66.1 million in general funds. Fiscal 2017 general fund expenditures are estimated to be $13.2 million. Total major information technology costs are expected to increase to $69.8 million in fiscal 2017. According to the Information System Project	1,500,000	GF

Request high-risk factors include interdependencies (system is required to be compatible with different systems), organizational culture (resistance to change), and implementation (complicated so that it requires a high level of coordination). The office has also recently completed improvements to its tax system that required $50 million. Cost containment has limited the availability of State funds in recent years. Considering the cost of the project, the risks of the project, as well as State revenues' slow growth, the Department of Legislative Services recommends that the project not be funded at this time.

4. Add the following language to the general fund appropriation:

, provided that $500,000 of this appropriation may not be expended until the department develops Managing for Results (MFR) indicators related to websites and web applications offered by State agencies. The budget committees shall have 45 days to review and comment following the publication of MFR data in the Governor's fiscal 2017 budget books. Funds not expended for this restricted purpose may not be transferred by budget amendment or otherwise to any other purpose and shall revert to the General Fund.

Explanation: The budget bill language restricts $500,000 until the department develops Managing for Results indicators for State web applications. Indicators measuring the number and quality of websites and applications should be included in the Department of Information Technology's (DoIT) managing for results (MFR) indicators that are included with the fiscal 2017 budget books.

Information Request	**Author**	**Due Date**
Website and applications MFR Indicators	DoIT	With Fiscal 2017 Budget Books

5. Adopt the following narrative:

Report on Personnel Actions: The budget committees are concerned about the high level of vacancies at the Department of Information Technology (DoIT). The committees concur with a DoIT report that characterizes the IT landscape as rapidly changing and, therefore, recommends that incremental personnel adjustments are required. The department should review its positions in order to determine if the positions are appropriately compensated to meet the demands placed on the department. Positions that are not appropriately classified should be reclassified in the fiscal 2017 allowance. DoIT should report its findings to the committees no later than December 1, 2015.

Information Request	Author	Due Date
Report on personnel actions	DoIT	December 1, 2015

6. Adopt the following narrative:

State Policies on Internet Advertising: In 2014, the State Department of Assessments and Taxation (SDAT) entered into an agreement with Towson University's Office of Information Services. Under the agreement, the university hosts and markets SDAT's website for commercial advertising sales that generate revenues. This is the first such arrangement of its kind and it is possible that more arrangements will follow. The Department of Information Technology's (DoIT) mission is to develop State Internet standards. To provide guidance for State agencies that consider Internet advertising, the department should develop State policies on Internet advertising. These policies should consider statutory authority to advertise on the Internet, federal regulations, other states' policies, appropriate content, and appropriate compensation. This report should be submitted to the committees by November 2, 2015.

Information Request	Authors	Due Date
State Policies on Internet advertising	DoIT	November 2, 2015

7. Add the following section:

SECTION XX. AND BE IT FURTHER ENACTED, That the authorization to expend $146,000 in reimbursable funds in the Department of Information Technology is deleted. The Governor shall develop a schedule for allocating this reimbursable fund reduction across the departments as appropriate. The reduction under this section shall equal at least the amounts indicated for the budgetary types listed:

Fund Amount
General $73,000
Special $55,000
Federal $18,000

Explanation: This action extends the back of the bill reductions to the Department of Information Technology's reimbursable funds to reduce employee salaries by 2% (Section 20) and to eliminate increments and merit increases (Section 21) in fiscal 2016.

Total General Fund Reductions **$ 9,613,660**

Appendix 1

Current and Prior Year Budgets

Current and Prior Year Budgets
Department of Information Technology
($ in Thousands)

	General Fund	Special Fund	Federal Fund	Reimb. Fund	Total
Fiscal 2014					
Legislative Appropriation	$32,002	$11,496	$300	$58,523	$102,320
Deficiency Appropriation	-195	-10	0	0	-205
Budget Amendments	4,365	520	553	0	5,437
Reversions and Cancellations	-286	-6,536	-283	-17,279	-24,385
Actual Expenditures	**$35,885**	**$5,469**	**$570**	**$41,243**	**$83,167**
Fiscal 2015					
Legislative Appropriation	$40,622	$8,260	$969	$52,045	$101,895
Cost Containment	-390	0	0	0	-390
Budget Amendments	72	4	0	2,426	2,501
Working Appropriation	**$40,304**	**$8,264**	**$969**	**$54,470**	**$104,007**

Note: Numbers may not sum to total due to rounding. The fiscal 2015 working appropriation does not include January 2015 Board of Public Works reductions and deficiencies.

Fiscal 2014

Spending in fiscal 2014 totaled $83.2 million. This is $19.2 million less than appropriated by the General Assembly in the fiscal 2014 budget bill. A deficiency appropriation reduced expenditures by approximately $195,000 in general funds and $10,000 in special funds. Specific actions include:

- adding $549,000 in general funds to the MITDPF budget to support the new voting system replacement;
- reducing general funds by $250,000 for IT project consulting;
- reducing general funds by $212,000 by increasing turnover expectancy;
- reducing general funds for employee and retiree health insurance by $145,000;
- reducing general fund retirement contributions by $115,000;
- reducing the allotment for the Statewide Personnel System by $22,000;
- reducing special fund retirement contributions by $6,000; and
- reducing special funds for employee and retiree health insurance by $4,000

Additional funding was added to DoIT's budget through budget amendments, which included approximately:

- $4,200,000 general funds for the MITDPF to support the Department of Health and Mental Hygiene, the Department of Disabilities Administration, and the web-based tracking system project, as required in the fiscal 2014 budget bill;
- $512,000 in special funds to networkMaryland services in rural Maryland counties and Fairfax County, Virginia;
- $98,000 in general funds and $6,000 in special funds to support the general salary increase;
- $39,000 in general funds and $2,000 in special funds to support employee increments; and
- $28,000 in general funds to realign telecommunications costs in Comptroller Subobject 0305.

Fiscal 2014 cancellations and reversions totaled $24.4 million. The most significant cancellations and reversions include approximately:

- $249,000 in general funds related to statewide charges that must be cancelled if unspent attributable to the Annapolis Data Center;
- $26,000 in general funds for motor vehicles that were not replaced;
- $3.0 million in special funds supporting the Central Collection Unit modernization project;
- $2.5 million in special funds supporting TAM;
- $838,000 in special funds supporting the 700 MHz radios for the State Police;
- $12,390,000 in reimbursable funds supporting the Statewide Personnel System major IT project;
- $2,974,000 in reimbursable funds to migrate agencies to Google cloud applications;
- $1,320,000 in reimbursable funds supporting the Networks Division's personnel costs, Maryland FiRST agency migrations, and litigation expenses; and
- $358,000 in reimbursable funds supporting MDOT's share of centralized web services.

Fiscal 2015

To date, cost containment has reduced expenditures by $389,769 while budget amendments have added an additional $2,501,467. On July 2, 2014, BPW withdrew $77.1 million in appropriations and abolished 61 positions statewide as fiscal 2015 cost containment. This agency's share of the reduction was $389,769 which reduced:

- software maintenance by $184,000 in general funds;
- GIS and Cybersecurity by $200,000 in general funds; and
- the Maryland Time System by $5,769 in general funds.

The following budget amendments were approved:

- $1,450,000 in reimbursable funds to support the EIS major IT project;
- $975,677 in reimbursable funds to provide DGS IT operations support; and
- $71,641 in general funds and $4,149 in special funds for a general salary increase.

Major Information Technology Projects

Department of Information Technology
Enterprise Budget System

Project Status	Planning.	**New/Ongoing Project:**	Ongoing.
Project Description:	Replace Hands on Budget Office, the Department of Budget and Management's (DBM) legacy budget system.		
Project Business Goals:	Goals are to replace the State legacy budget system that is in danger of failing due to antiquated technology that is difficult to staff with skills needed to support, and streamline and improve efficiency of budget preparation, analysis, and approval.		
Estimated Total Project Cost:	$37,120,000	**Estimated Planning Project Cost:**	$4,120,000
Project Start Date:	March 2013	**Projected Completion Date:**	n/a
Schedule Status:	The project is in Requirements Analysis. A task order request for proposal is scheduled to be released in the winter of 2015 to secure assets to support planning and project management. There have been delays attributable to resource-related procurement issues.		
Cost Status:	$3.1 million in planning costs have been identified. Preliminary total cost estimate is $37.1 million.		
Scope Status:	Scope has not changed.		
Project Management Oversight Status:	Because the Department of Information Technology is the implementing and oversight agency, the project poses some unique challenges. To address this, project managers have been procured.		
Identifiable Risks:	Interdependencies with other projects are a high risk since the project will need to interface with personnel and financial systems, which are being replaced. There are concerns about resource availability, since DBM staff may be occupied at certain times of the budget cycle.		
Additional Comments:	Current system's primary subject matter expert has retired. Planning is continuing through the transition to a new Administration. In spite of the turnover of executive and risk of failure, planning should be thorough and move forward purposefully to meet the deadline.		

Fiscal Year Funding ($ in Thousands)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Balance to Complete**	**Total**
Personnel Services	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Professional and Outside Services	2.1	11.1	15.0	8.0	0.0	0.0	0.0	36.1
Other Expenditures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Funding	**$2.1**	**$11.1**	**$15.0**	**$8.0**	**$0.0**	**$0.0**	**$0.0**	**$36.1**

Major Information Technology Projects

Department of Information Technology
Statewide Personnel System

Project Status	Implementation.	**New/Ongoing Project:**	Ongoing.
Project Description:	This replaces a system that was developed in 1975. The project includes modules such as recruiting, human resources, compensation, performance management, employee self-service, benefits administration, and timekeeping. The first phase has been deployed. The second phase includes benefits and timekeeping.		
Project Business Goals:	The system should modernize an antiquated legacy system, enable automated personnel-related reporting and business analysis, provide centralized data management, reduce administrative redundancies, and provide web-based employee self-service. A successful system will provide faster processing times, increased efficiencies, and robust current and historical reporting.		
Estimated Total Project Cost:	$60,374,028	**Estimated Planning Project Cost:**	$12,066,568
Project Start Date:	January 2008	**Projected Completion Date:**	December 2015.
Schedule Status:	The first phase is operational and the second phase is being developed. The second phase schedule has slipped a couple of months but is still on track to be completed in 2015.		
Cost Status:	No cost changes are projected.		
Scope Status:	No changes in scope are projected.		
Project Management Oversight Status:	Because the Department of Information Technology is the implementing and oversight agency, the project poses some unique challenges. To address this, project managers have been procured.		
Identifiable Risks:	Risk concerns include user interface (almost all State agencies will be using the system), the organizational culture (the current system has been in place for more than 30 years), and the availability of staff with the skills necessary to manage the system when it is implemented.		
Additional Comments:	Phase I implementation is discussed in the DBM Personnel analysis.		

Fiscal Year Funding ($ in Thousands)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Balance to Complete**	**Total**
Personnel Services	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Professional and Outside Services	28.1	6.4	0.5	0.0	0.0	0.0	0.0	34.9
Other Expenditures	13.6	6.0	5.9	0.0	0.0	0.0	0.0	25.5
Total Funding	**$41.7**	**$12.3**	**$6.4**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$60.4**

Note: May not sum to total due to rounding.

Major Information Technology Projects

Department of Information Technology
Central Collections Unit Systems Modernization

Project Status	Planning.	**New/Ongoing Project:**	Ongoing.
Project Description:	Replace legacy Columbia Ultimate Business System, which is the system used to support the Central Collections Unit's (CCU) activities. The project's scope has been expanded to include comprehensive review processes and systems. The first part of the process involves the core debt collection software. The second part integrates the core system with other systems, such as document management, interactive voice response, payment processing, and other systems.		
Project Business Goals:	Provide direct support for collection activities to maximize debt collections. The CCU expects to achieve the following quantifiable goals one year after implementation: a 15% to 20% increase in net profits on debt accounts; a 15% to 20% increase of debt accounts collected; and a 5% to10% decrease in the cost of printing and mailing.		
Estimated Total Project Cost:	$17,519,714	**Estimated Planning Project Cost:**	$8,705,592
Project Start Date:	August 2008	**Projected Completion Date:**	August 2017
Schedule Status:	The second part of the project is in the requirements analysis phase. Commercial off the shelf software for the core collections system is being installed and is expected to be operational in 2017		
Cost Status:	Total project costs are being reviewed and should be available when requirements analysis is completed.		
Scope Status:	Scope is being reviewed. Project could be broken up into smaller components after the planning is complete.		
Project Management Oversight Status:	Because the Department of Information Technology is the implementing and oversight agency, the project poses some unique challenges. To address this, project managers have been procured.		
Identifiable Risks:	Major risks are interdependencies (over 400 agencies refer debt), technical (CCU has a unique mission, such as intercepting State or federal taxes, and the uniqueness of the mission complicates development), and organizational culture (current system is over 20 years old).		

Fiscal Year Funding ($ in Thousands)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Balance to Complete**	**Total**
Personnel Services	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Professional and Outside Services	10.2	3.2	2.5	1.2	0.1	0.0	0.0	17.2
Other Expenditures	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Total Funding	**$10.6**	**$3.2**	**$2.5**	**$1.2**	**$0.1**	**$0.0**	**$0.0**	**$17.5**

May not sum to total due to rounding.

Object/Fund Difference Report
Department of Information Technology

Object/Fund	FY 14 Actual	FY 15 Working Appropriation	FY 16 Allowance	FY 15 - FY 16 Amount Change	Percent Change
Positions					
01 Regular	134.00	140.00	138.00	-2.00	-1.4%
02 Contractual	1.65	4.00	1.00	-3.00	-75.0%
Total Positions	**135.65**	**144.00**	**139.00**	**-5.00**	**-3.5%**
Objects					
01 Salaries and Wages	$ 11,281,970	$ 14,404,808	$ 15,212,438	$ 807,630	5.6%
02 Technical and Spec. Fees	97,194	234,922	48,123	-186,799	-79.5%
03 Communication	8,380,599	8,355,805	8,299,123	-56,682	-0.7%
04 Travel	73,555	77,340	83,243	5,903	7.6%
06 Fuel and Utilities	13,404	1,000	16,000	15,000	1500.0%
07 Motor Vehicles	3,365	6,410	6,840	430	6.7%
08 Contractual Services	60,596,560	77,479,732	91,926,730	14,446,998	18.6%
09 Supplies and Materials	98,012	92,100	48,600	-43,500	-47.2%
10 Equipment – Replacement	1,305,616	2,705,331	9,228,196	6,522,865	241.1%
11 Equipment – Additional	1,052,366	373,068	400,000	26,932	7.2%
12 Grants, Subsidies, and Contributions	0	22,275	29,948	7,673	34.4%
13 Fixed Charges	264,535	253,992	434,317	180,325	71.0%
Total Objects	**$ 83,167,176**	**$ 104,006,783**	**$ 125,733,558**	**$ 21,726,775**	**20.9%**
Funds					
01 General Fund	$ 35,884,999	$ 40,303,847	$ 56,626,713	$ 16,322,866	40.5%
03 Special Fund	5,469,244	8,263,901	11,004,835	2,740,934	33.2%
05 Federal Fund	569,617	968,642	632,267	-336,375	-34.7%
09 Reimbursable Fund	41,243,316	54,470,393	57,469,743	2,999,350	5.5%
Total Funds	**$ 83,167,176**	**$ 104,006,783**	**$ 125,733,558**	**$ 21,726,775**	**20.9%**

Note: The fiscal 2015 working appropriation does not include January 2015 Board of Public Works reductions and deficiencies. The fiscal 2016 allowance does not reflect contingent or across-the-board reductions.

Fiscal Summary
Department of Information Technology

Program/Unit	FY 14 Actual	FY 15 Wrk Approp	FY 16 Allowance	Change	FY 15 - FY 16 % Change
Major IT Development Project Fund	$ 20,100,566	$ 22,643,983	$ 37,451,538	$ 14,807,555	65.4%
Office of Information Technology	63,066,610	81,362,800	88,282,020	6,919,220	8.5%
Total Expenditures	**$ 83,167,176**	**$ 104,006,783**	**$ 125,733,558**	**$ 21,726,775**	**20.9%**
General Fund	$ 35,884,999	$ 40,303,847	$ 56,626,713	$ 16,322,866	40.5%
Special Fund	5,469,244	8,263,901	11,004,835	2,740,934	33.2%
Federal Fund	569,617	968,642	632,267	-336,375	-34.7%
Total Appropriations	**$ 41,923,860**	**$ 49,536,390**	**$ 68,263,815**	**$ 18,727,425**	**37.8%**
Reimbursable Fund	$ 41,243,316	$ 54,470,393	$ 57,469,743	$ 2,999,350	5.5%
Total Funds	**$ 83,167,176**	**$ 104,006,783**	**$ 125,733,558**	**$ 21,726,775**	**20.9%**

Note: The fiscal 2015 working appropriation does not include January 2015 Board of Public Works reductions and deficiencies. The fiscal 2016 allowance does not reflect contingent or across-the-board reductions.