

**F50**  
**Department of Information Technology**

***Executive Summary***

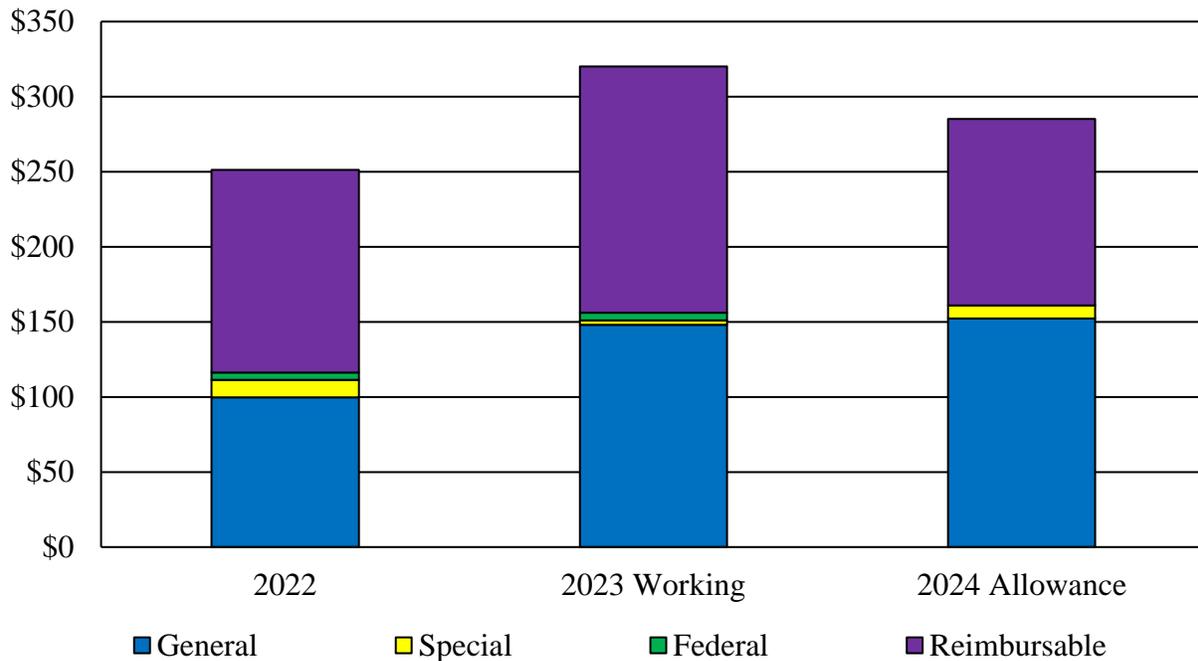
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The Department of Information Technology (DoIT) supports information technology (IT) needs in State agencies. This includes operations, major IT project development, security, web services, application management, and the State’s 700 megahertz (MHz) first responder radio system.

***Operating Budget Summary***

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**Fiscal 2024 Budget Decreases \$35.6 Million, or 11.1%, to \$285.1 Million  
(\$ in Millions)**



Note: The fiscal 2023 working appropriation includes deficiency appropriations including this agency’s share of a deficiency appropriation budgeted in the Statewide Account within the Department of Budget and Management (DBM). Fiscal 2024 salary enhancements are budgeted in the Statewide Account within DBM.

- The decrease in the fiscal 2024 allowance is attributable to \$46.2 million in reimbursable funds in fiscal 2023 for major IT projects being developed by DoIT. The fiscal 2024 budget does not have any reimbursable funds for DoIT’s projects, but budget amendments are anticipated to transfer these funds into DoIT’s budget.

For further information contact: Patrick S. Frank

Patrick.Frank@mlis.state.md.us

## ***Key Observations***

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- ***Funding for Major IT Projects Remains High:*** The fiscal 2024 Major Information Technology Development Project (MITDP) allowance includes \$105 million in general funds for projects. Early indications are that fiscal 2025 could have over \$160 million in general funds. The State is currently replacing legacy systems. Cybersecurity assessments are also raising concerns about some legacy systems, which adds to the demand for MITDP funding.
- ***Comprehensive Legislation Restructuring Cybersecurity Enacted in 2022:*** Three bills were enacted in 2022 to enhance State and local cybersecurity capabilities. Changes include centralizing cybersecurity into DoIT and requiring additional cybersecurity funding to support State and local cybersecurity, regular assessments, guidelines for disclosing cybersecurity incidents, basic security requirements for contracts, and increased information sharing between agencies and levels of government.

## **Operating Budget Recommended Actions**

	<b><u>Funds</u></b>
1. Reduce general funds for Maryland AIDS Drug Assistance Program major information technology project and authorize special funds.	-\$ 2,215,421
2. Delete funds for the Department of General Services' AS400 replacement system major information technology project.	-\$ 210,000
3. Adopt narrative requesting a report on Managing for Results goals and indicators for services to State agencies.	
4. Adopt narrative requiring quarterly reporting for the Financial Management Information System replacement major information technology project.	
<b>Total Net Change</b>	<b>-\$ 2,425,421</b>

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***Operating Budget Analysis***

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**Program Description**

DoIT's goals are (1) to provide leadership and support to State agencies in areas of cybersecurity policy, risk and vulnerability assessment, technology implementation, awareness training and incident response to raise the security posture of State government; (2) that State agency IT systems meet the State Information Technology Master Plan objectives of consolidation, interoperability, and standardization; (3) that the department provide efficient and high-quality online services to State agencies and the public; and (4) to provide efficient and high-quality IT services to State agencies. The department has the following programs:

- ***State Chief of Information Technology:*** Responsible for executive direction and major IT project oversight. This includes a chief operating officer and a chief data officer as well as enterprise architecture, project management, communication, and legislation.
- ***Security Management:*** Responsible for developing statewide security policies, enforcing policies, and supporting State agencies' security efforts. This includes cyber incident response, cyber risk and strategic analysis, vulnerability detection and assessment, intelligence and investigation, and software assurance.
- ***Application Systems Management:*** Responsibilities include application development, web systems, geographic information systems (GIS), and operating statewide systems, such as the Financial Management Information System (FMIS).
- ***Infrastructure:*** Responsibilities include operating networkMaryland, the State's data network, voice systems, and maintaining and supporting shared services day-to-day operations for Executive Branch agencies.
- ***Radio or Statewide Interoperable Communications Division:*** Operates the Maryland First Responders Interoperable Radio System Team (MD FiRST) that is the State's 700 MHz radio system. The system is used by State, local, and federal first responders.
- ***Chief of Staff:*** Provides departmentwide administrative support.

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The department administers the Major Information Technology Development Project Fund (MITDPF). This is a nonlapsing fund that supports large IT initiatives as defined in §§ 3A-301 and 3A-302 of the State Finance and Procurement Article. MITDPs 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; and/or
- the Secretary of Information Technology determines that the project requires the special attention and consideration given to an MITDP.

## ***Performance Analysis: Managing for Results***

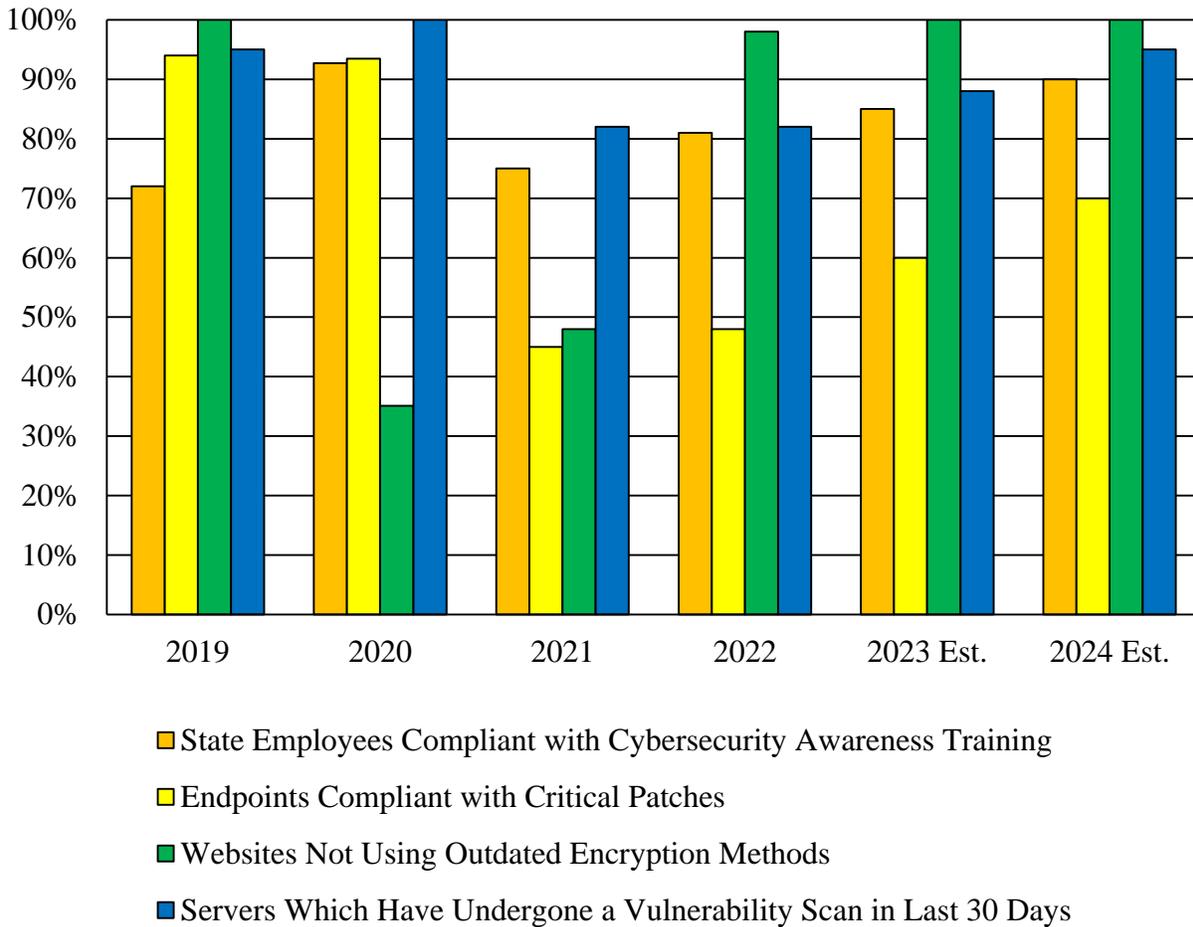
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### **1. Cybersecurity**

DoIT’s first Managing for Results (MFR) goal is to provide “leadership and support to State agencies in areas of cybersecurity policy, risk and vulnerability assessment, technology implementation, awareness training, and incident response to raise the security posture of State government.” The objectives are (1) to reduce risk and improve response to cyber-attacks and breaches and (2) to increase inter and interagency alignment of IT business functions. With respect to the second objective, Chapters 241, 242, and 243 of 2022 were enacted to centralize the State’s cyber defense under DoIT’s Office of Security Management (OSM). This is discussed in more detail in Issue 1.

**Exhibit 1** shows performance measures that address the first objective. A common cybersecurity weakness is people, who are vulnerable to social engineering. Training is now required so that individuals are aware of the dangers and are less likely to be tricked into giving away sensitive information. To measure this, DoIT measures the share of employees that are compliant with cybersecurity awareness training. DoIT’s training has monthly modules that employees are required to complete. DoIT works with agency security awareness training managers to implement the training. Compliance was quite high in fiscal 2020 but declined to 75% in fiscal 2021. DoIT advises that this was partly attributable to some agencies not removing former employees from the rolls and also having employees without IT access on the rolls. These issues have been addressed, but the share of compliant employees is increasing modestly each year. **DoIT should be prepared to brief the committees on its efforts to improve the share of employees compliant with cybersecurity awareness training.**

**Exhibit 1  
Cybersecurity Indicators Estimated  
Fiscal 2019-2024**



Source: Department of Budget and Management

In fiscal 2021, the percent of endpoints compliant with critical patches dropped to 45% of agencies. One reason for this is that some agencies were slow to react to the expiration of support, including Windows 10. DoIT advises that issues have been addressed, but the ratio remained below 50% in fiscal 2022. Since software and hardware is constantly changing, keeping up with up-to-date encryption will always be an issue that needs to be monitored. The Department of Legislative Services (DLS) notes that DoIT expects to get Dedicated Purpose Account (DPA) funds to address endpoint issues. This is discussed in more detail in Issue 2. **The department should be prepared to discuss strategies to improve compliance with critical patches.**

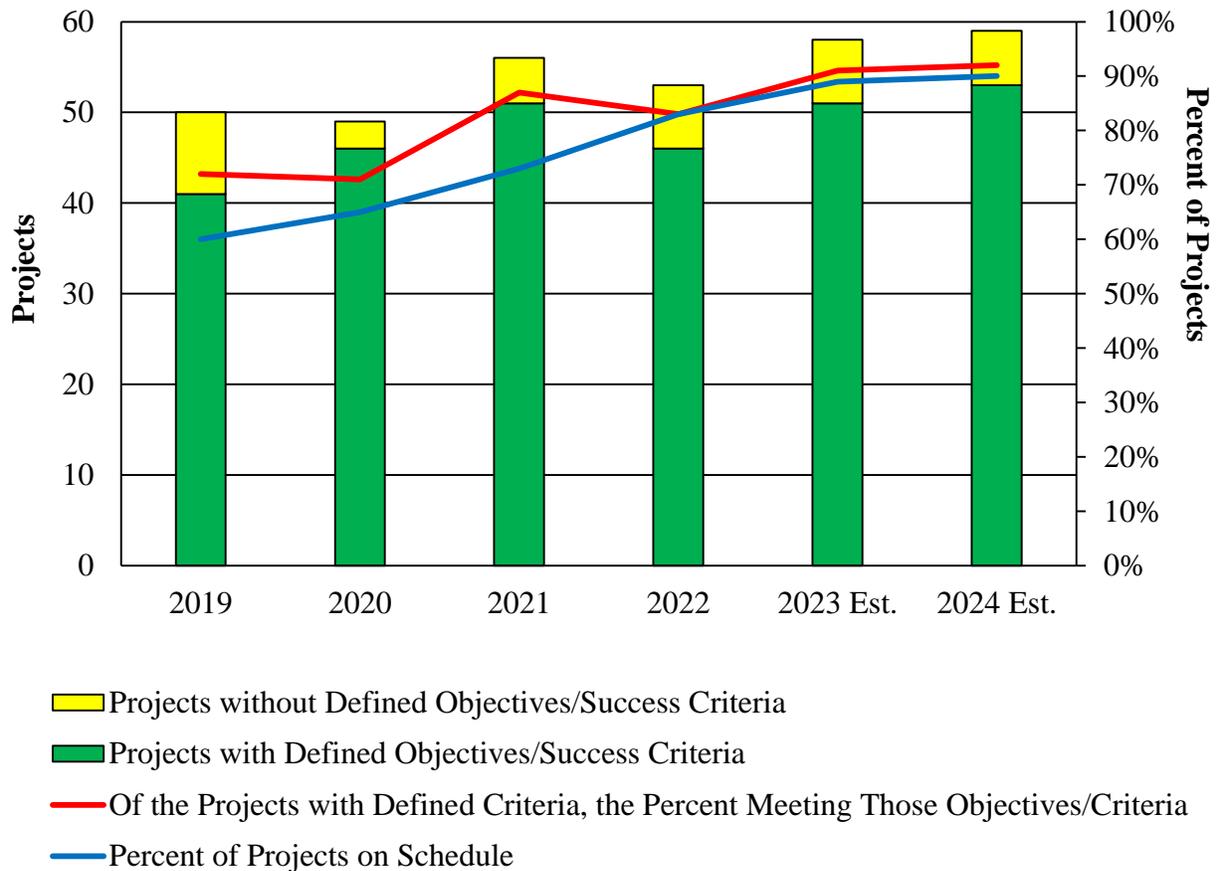
DoIT's MFR indicators for critical patches and vulnerability scans relate to agencies under DoIT's enterprise IT support services. This is 25 agencies with approximately 10,000 employees. This excludes some large agencies like the Department of Natural Resources (DNR) and the Maryland State Department of Education (MSDE). Legislation has expanded DoIT's role by centralizing cybersecurity. As such, the department should explore how to expand its indicators to include more agencies.

## **2. Oversight of Major IT Projects**

The fiscal 2024 budget includes \$115 million funded by the MITDPF. DoIT expects to oversee 59 projects in fiscal 2024, including 31 funded in the MITDPF. The fiscal 2024 budget includes four projects not included in last year's out-year forecast. The department's MFR goal is that State agency IT systems meet State IT master plan objectives of consolidation, interoperability, and standardization. The objective is that all MITDPs executed by Executive Branch agencies are successful. The department has a series of output measures that examine the extent to which major IT projects remain on schedule and are meeting their defined objectives.

**Exhibit 2** shows that 83% of projects were on time in fiscal 2022. DoIT is now using an Agile approach to develop major IT projects, which is an iterative approach that builds usable components more quickly. Major IT projects should develop defined objectives and success criteria that can measure how well project development is progressing. DoIT has an indicator that measures the number of projects with defined objectives and success criteria and the percentage that are meeting them. In fiscal 2022, 46 out of 53 projects had criteria, and 83% of them were meeting the criteria. Not all projects will be Agile projects because not all major IT projects develop information systems. For example, the MD FiRST Radio Tower and Backhaul Improvement Project improves a 700 MHz radio system, so the Agile process does not apply to this project.

**Exhibit 2**  
**Major Information Technology Development Project Indicators**  
**Fiscal 2019-2024 Estimated**



Source: Department of Budget and Management

### 3. Support Services for State Agencies

DoIT’s fourth MFR goal is to provide “efficient and high-quality IT services to State agencies.” Among other things, this addresses the State’s consolidated IT operations through the enterprise IT support services. Currently, 25 Executive Branch agencies participate in this program, including the Governor’s Office, DNR, MSDE, and the Department of Budget and Management (DBM). Agencies are charged for these services, and these services are the source of a high share of reimbursable funds in the DoIT budget. For these agencies, DoIT provides full IT operations support including (1) end user hardware, applications, and support; (2) local and wide

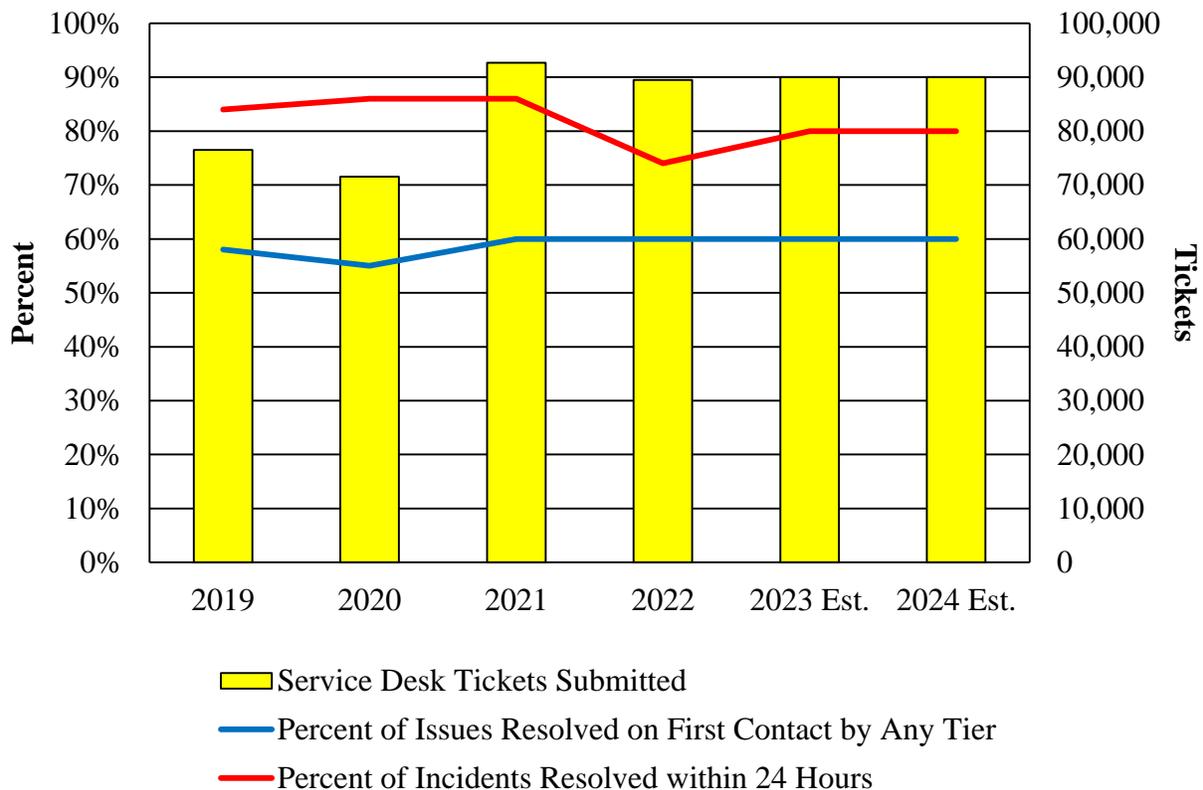
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area networks; and (3) managed firewall. Agencies participating in the enterprise IT system enter into a standard memorandum of understanding with DoIT.

DoIT also offers other IT services to agencies, such as networkMaryland internet services, GIS, and web development services. Another 75 departments and agencies receive some enterprise IT service but are not part of the system. These services are offered in the DoIT service catalog. DoIT has created service-level agreements (SLA) associated with the services in the catalog. Where appropriate, consideration is given to industry benchmarks in establishing the SLAs in the service catalog. For example, the network availability SLA for networkMaryland services is consistent with that of other network service providers.

**Exhibit 3** shows that the service desk received approximately 89,500 tickets in fiscal 2022. The number of tickets have increased since the beginning of the COVID-19 pandemic. The data also show that 60% were resolved by first contact, and 74% of incidents were resolved in 24 hours.

**Exhibit 3**  
**Agency Services Indicators**  
**Fiscal 2019-2024 Estimated**



Source: Department of Budget and Management

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DoIT’s MFR indicators provide data about the workload and how quickly incidents are resolved. The goal is to provide efficient and high-quality IT services. The goal does not mention providing value, and there are no cost indicators. From the MFR, it is unclear if DoIT’s services are cost effective or if State agencies could receive comparable services from the private sector at a lower cost. The *2022 Joint Chairmen’s Report* (JCR) required that DoIT add goals and indicators for services to State agencies that measure workload and efficiency. The department advises that it has procured a consultant to assist in developing goals and indicators and that this process has not concluded. **DoIT should be prepared to brief the committees on the status of the workload and efficiency goals and indicators.**

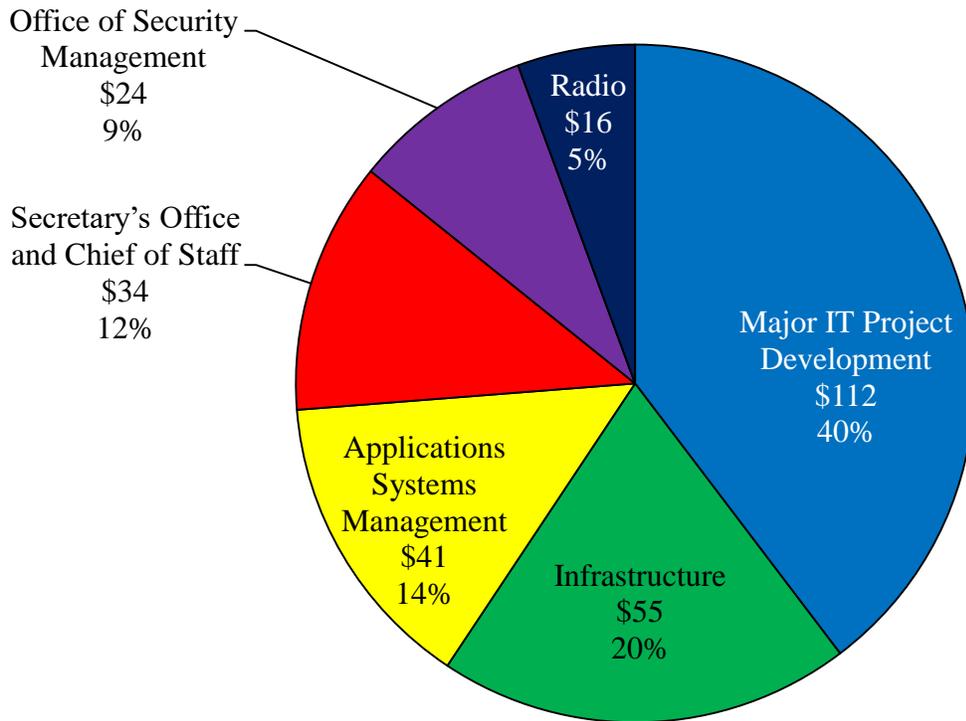
### **Proposed Deficiency**

The operating budget bill includes one deficiency appropriation for DoIT, which proposes to add \$250,000 in general funds to support operations web services on the OneStop platform. This is discussed in more detail in Issue 4.

### **Fiscal 2024 Overview of Agency Spending**

**Exhibit 4** shows that major IT project development and infrastructure account for 60% of DoIT’s spending. Infrastructure includes end user applications and support, local and wide area network support, networkMaryland, and voice communication. These services are included in the enterprise IT support services offered by DoIT.

**Exhibit 4**  
**Overview of Program Spending**  
**Fiscal 2024 Allowance**  
**(\$ in Millions)**



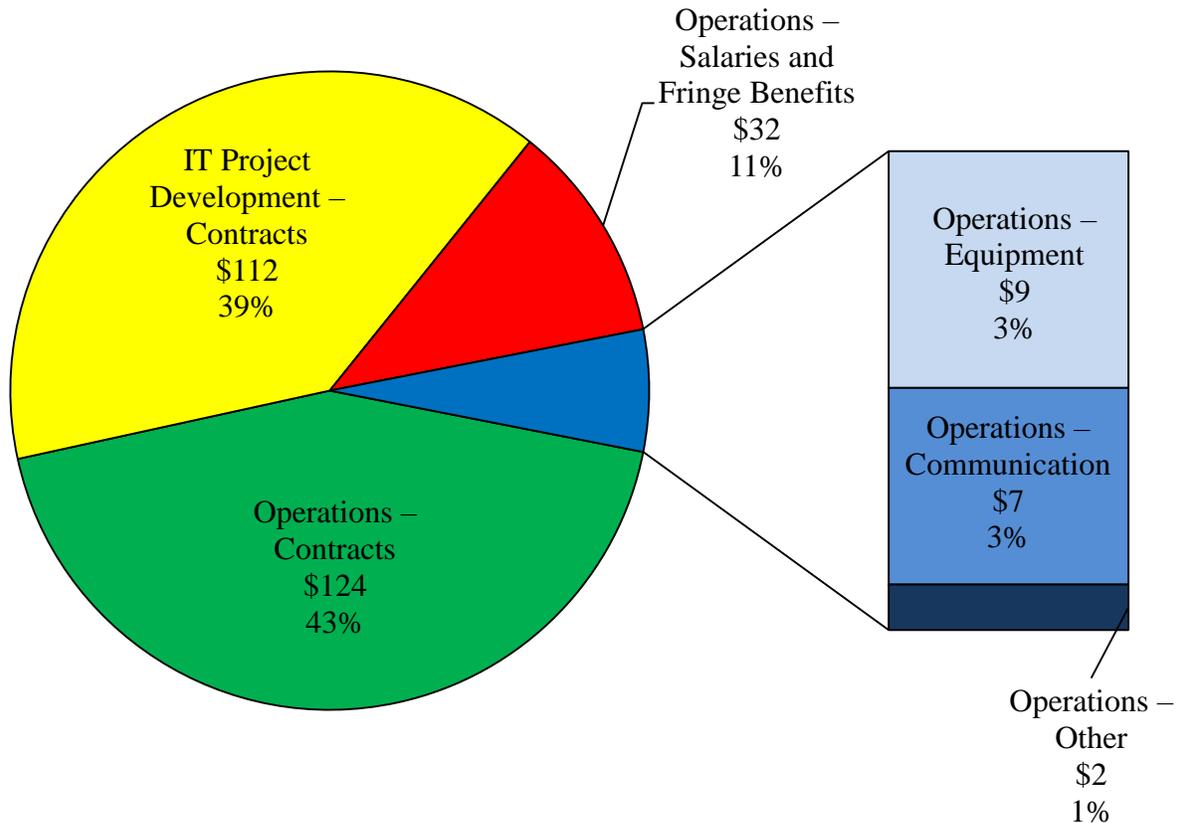
IT: information technology

Source: Department of Budget and Management

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The department relies heavily on contracts to provide services. **Exhibit 5** shows that contracts for major IT project development and operations are 82% of spending. This is over seven times as much as salaries and fringe benefits.

**Exhibit 5**  
**Spending by Agency and Objects**  
**Fiscal 2024**  
**(\$ in Millions)**

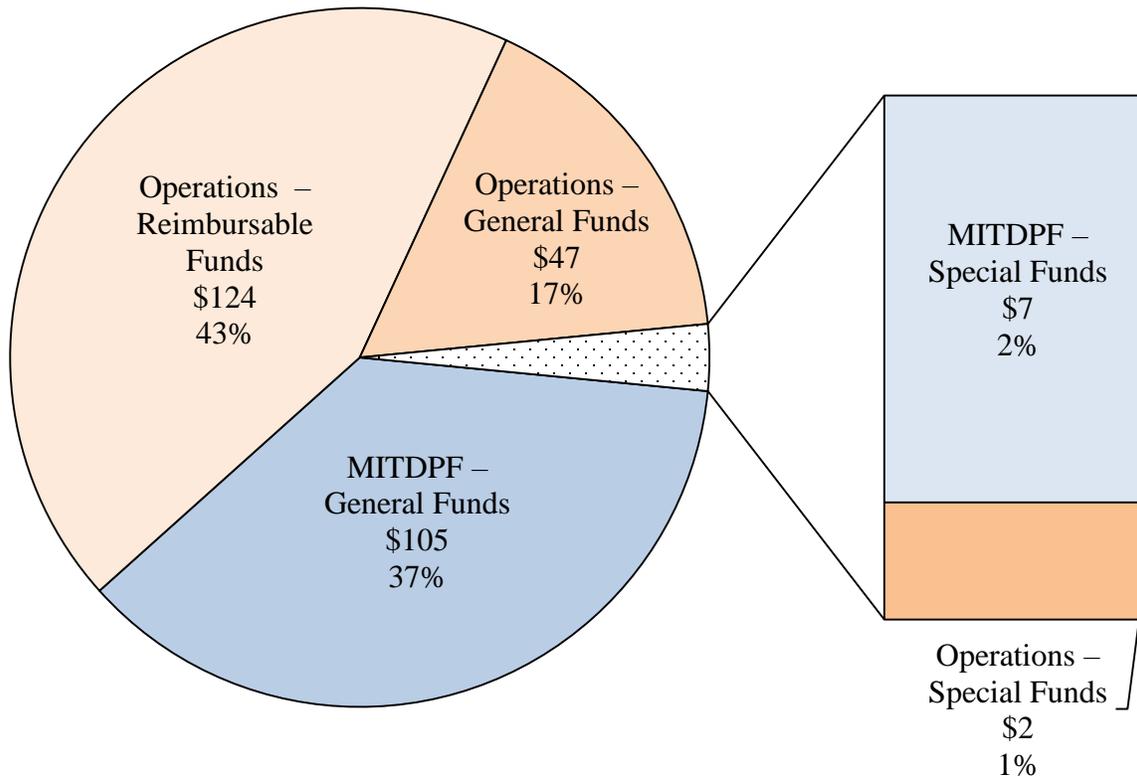


IT: information technology

Source: Department of Budget and Management

DoIT is two agencies: (1) funding for major IT projects; and (2) operations. Major IT funding is supported by general funds and special funds. Operations includes services (cybersecurity, Applications System Management, infrastructure, and radio) for State agencies and administration. Agency services are funded by general funds, reimbursable funds, and special funds. Many services do not receive general funds but are entirely funded by fees for services. However, legislation enacted in 2022 requires that only general funds support cybersecurity. Administration receives general funds, which avoids State agencies paying for DoIT overhead costs. **Exhibit 6** shows that 80% of funding for DoIT is general funds for major IT projects and reimbursable funds for operations. General funds for operations are 17% of the department’s funding.

**Exhibit 6**  
**Fund Sources by Agency**  
**Fiscal 2024**  
**(\$ in Millions)**



MITDPF: Major Information Technology Development Project Fund

Source: Department of Budget and Management

**Proposed Budget Change**

**Exhibit 7** shows that the fiscal 2024 allowance is \$285.1 million, which is 11.1% less than the fiscal 2023 working appropriation. The decrease in funds is attributable to MITDPF reimbursable funds in fiscal 2023. The working appropriation includes \$46.2 million in reimbursable funds for DoIT major IT projects. The general funds for major IT projects are appropriated in the MITDPF. DoIT transfers these funds to agencies as they are needed. Since there are ongoing major IT projects, additional reimbursable funds for major IT projects will be transferred by budget amendment into the DoIT budget in fiscal 2024. **Appendix 3** through **Appendix 7** list the projects receiving general fund appropriations in fiscal 2024.

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

<b>How Much It Grows:</b>	<b>General Fund</b>	<b>Special Fund</b>	<b>Federal Fund</b>	<b>Reimb. Fund</b>	<b>Total</b>
Fiscal 2022 Actual	\$99,627	\$11,744	\$4,797	\$135,187	\$251,354
Fiscal 2023 Working Appropriation	148,688	3,009	5,000	163,998	320,695
Fiscal 2024 Allowance	<u>152,255</u>	<u>8,759</u>	<u>0</u>	<u>124,053</u>	<u>285,067</u>
Fiscal 2023-2024 Amount Change	\$3,567	\$5,750	-\$5,000	-\$39,945	-\$35,628
Fiscal 2023-2024 Percent Change	2.4%	191.1%	-100.0%	-24.4%	-11.1%
<b>Where It Goes:</b>					<b><u>Change</u></b>
<b>Personnel Expenses</b>					
New positions .....					\$2,794
Increments and other compensation .....					2,298
Reclassifications .....					947
Turnover adjustments .....					361
Annualization of 4.5% general salary increase .....					297
Employee and retiree health insurance .....					151
<b>Major Information Technology Development Projects and Oversight</b>					
Major Information Technology Development Project Fund (MITDPF) .....					-5,289
Fiscal 2023 reimbursable funds transferred from MITDPF for agency projects .....					-46,193
<b>Cybersecurity-related Costs</b>					
Salaries and fringe benefits for 4 full-time equivalent contractual cybersecurity positions ..					1,000
Cybersecurity software licenses .....					500
<b>Infrastructure and Applications Costs</b>					
Enterprise support services for State and local agencies .....					10,755
Annapolis Data Center charges .....					2,872
Software licenses .....					-283
Outside consulting services related to information processing .....					-1,765
<b>Other Changes</b>					
Radio operations contract for MD FiRST .....					794
State Insurance Trust Fund premiums .....					109
Other changes .....					23
Federal funds supporting information technology equipment purchases for State .....					-5,000
<b>Total</b>					<b>-\$35,628</b>

MD FiRST: Maryland First Responders Interoperability Radio Team

Note: The fiscal 2023 working appropriation includes deficiency appropriations including this agency's share of a deficiency appropriation budgeted in the Statewide Account within the Department of Budget and Management (DBM). Fiscal 2024 salary enhancements are budgeted in the Statewide Account within DBM. Numbers may not sum to total due to rounding.

## ***Personnel Data***

	<b><u>FY 22</u></b>	<b><u>FY 23</u></b>	<b><u>FY 24</u></b>	<b><u>FY 23-24</u></b>
	<b><u>Actual</u></b>	<b><u>Working</u></b>	<b><u>Allowance</u></b>	<b><u>Change</u></b>
Regular Positions	185.00	184.00	207.00	23.00
Contractual FTEs	<u>6.03</u>	<u>0.15</u>	<u>0.00</u>	<u>-0.15</u>
<b>Total Personnel</b>	<b>191.03</b>	<b>184.15</b>	<b>207.00</b>	<b>22.85</b>

### ***Vacancy Data: Regular Positions***

Turnover and Necessary Vacancies, Excluding New Positions	15.84	8.61%
Positions and Percentage Vacant as of 12/31/22	17.00	9.24%
Vacancies Above Turnover	1.16	0.63%

**Exhibit 8** shows the job titles and salaries of the 23 new positions added to the fiscal 2024 allowance. There are 20 cybersecurity positions. As required by Chapter 242, DoIT has hired a consultant to prepare a performance and capacity assessment and submit the draft to the Governor and General Assembly by December 1, 2023. This will inform how the positions are used, and it seems likely that some positions will be reclassified. This is discussed in more detail in Issue 1. DoIT is also getting a new portfolio officer to interact with local agencies. This is in response to requirements in Chapter 241, also discussed in Issue 1. DoIT is also receiving an intake manager to assist the customer experience manager and replacement for a position that was reclassified and moved to OSM.

### **Exhibit 8 New Positions Fiscal 2024 (\$ in Thousands)**

<b><u>Program</u></b>	<b><u>Job Title</u></b>	<b><u>Fund</u></b>	<b><u>Position Count</u></b>	<b><u>Salary</u></b>	<b><u>Salary and Fringe Benefits</u></b>
Security Management	Program Manager Senior <sup>1</sup>	GF	20	\$2,631	\$3,482
Chief of Staff	Portfolio Officer	RF	1	145	159
Chief of Staff	Administrative Officer I	RF	1	57	72
Chief of Staff	Data Entry Operator	RF	1	53	69
<b>Total</b>			<b>23</b>	<b>\$2,887</b>	<b>\$3,783</b>

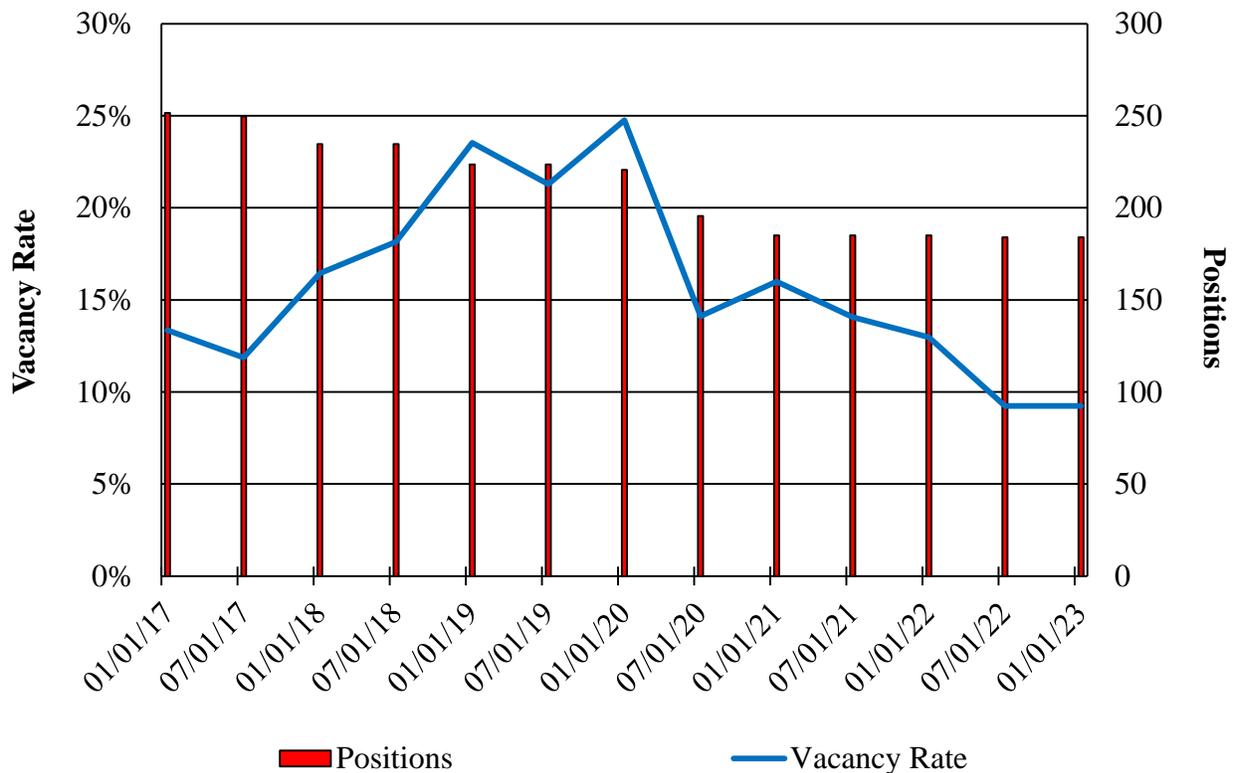
GF: general funds  
RF: reimbursable funds

<sup>1</sup> Each position's budgeted annual salary is \$131,561.

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

As in other State agencies, DoIT has a high vacancy rate. DoIT has a long history of high vacancies and employee turnover. **Exhibit 9** shows that vacancies have consistently been above 10%. However, DoIT’s vacancy rate has now dropped below 10% and is now lower than the statewide average.

**Exhibit 9**  
**Positions and Vacancy Rates**  
**January 2017 to January 2023**



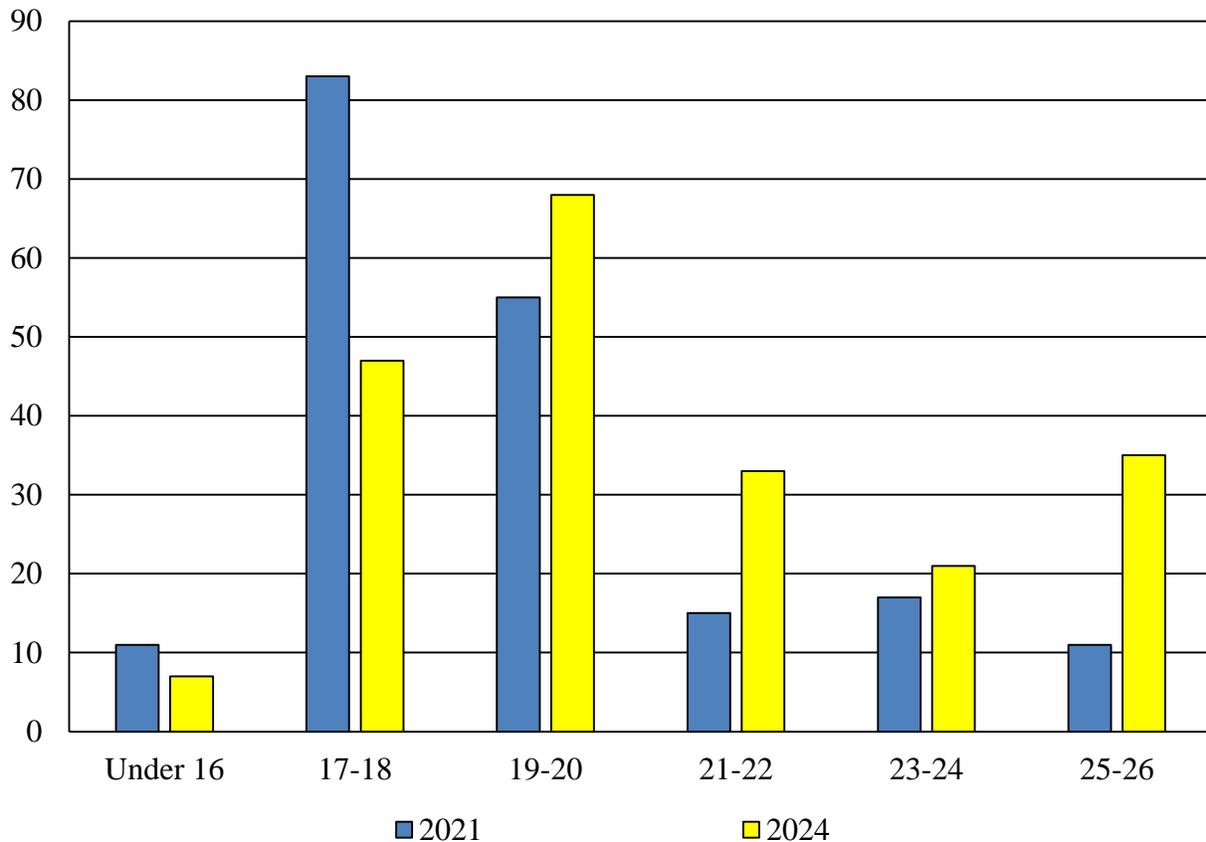
Source: Department of Budget and Management

A key concern about DoIT’s workforce is that low salaries make it difficult to retain employees. In response to the low salary ranges, DoIT has typically placed newly hired positions near the top of the salary scales, giving them less room to grow. Because of low salaries and high vacancy rates, the budget committees have asked DoIT to reclassify positions so that salaries are more competitive.

DoIT has responded and reclassified positions. **Exhibit 10** shows that grades 19 and 20 (salaries ranging from \$67,802 to \$112,091) are now the most common grade. Previously, the most common grades were 17 and 18 (salaries ranging from \$59,608 to \$98,523). The median grade in

fiscal 2021 was 18. This increases to 20 in the fiscal 2024 allowance. The average DoIT salary increased from approximately \$80,400 to \$104,100, a 29% increase, assuming the General Assembly approves the 2% general salary increase proposed for fiscal 2024.

**Exhibit 10**  
**Positions by Grade**  
**Fiscal 2021 Working Appropriation and Fiscal 2024 Allowance**



Note: Excludes Executive Pay Plan positions.

Source: Department of Budget and Management

### **MITDPF and Major IT Project Expenditures**

Current law requires that all general funds appropriated for major IT projects be held in the MITDPF, and DoIT is responsible for major IT project oversight and releasing funds.

**DoIT Has Transitioned MITDP Approach to Scaled Agile Framework**

The major IT project development approach that DoIT is using has changed from Waterfall to Agile. Waterfall begins with thoroughly planning all aspects of a project. At the end of the planning period, a functional review document is prepared. This document has detailed specifications that can be used in a request for proposals (RFP) when bidding the project. The vendor then implements the project based on these specifications. It is not unusual for a project to take two years to plan and three years to implement. There are 10 phases to the Waterfall approach.

By contrast, the Agile approach does not complete planning prior to beginning to build the software. Instead, a high-level plan rather than a detailed plan of all requirements is developed. Projects are divided into a number of tracks. These are usually implemented simultaneously. Each track is broken down so that there are a number of sequential parts to build. The parts are planned and then built over a two-week period called a sprint. This is tested, and another part is planned. After a series of sprints, there is a program increment (a usable component). There should be a usable component every six months. This approach uses the plan-do-check-act approach, which is a repetitive four-stage model for continuous improvement in business process management that is repeated until the project is done. Waterfall is being phased out, and all new projects are using Agile. DoIT’s MFR indicators were modified for Agile in fiscal 2019. These indicators note that 79% of major IT projects developed in fiscal 2021 used the Agile approach.

**MITDPF-funded Projects**

**Exhibit 11** shows fund transactions for the MITDPF for fiscal 2021 through the proposed budget in fiscal 2024.

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**Exhibit 11**  
**Major Information Technology Development Project Fund**  
**Fiscal 2021-2024**  
**(\$ in Thousands)**

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Opening Fund Balance	\$145,655	\$116,920	\$181,393	\$0
<b>Revenues</b>				
General Fund	\$82,426	\$84,225	\$116,026	\$104,987
General Fund – Deficiency Appropriation	0	0	0	0
Special Fund – Carryover to Reappropriate Funds	0	0	0	6,800
Special Fund – Resource Sharing Agreement Revenues	4,706	3,460	1,050	0
Investment Interest	423	528	300	300
Transfers from Other Agencies	827	0	0	0

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	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Cost Containment Reductions	-5,000	0	0	0
<b>Total Available Revenues</b>	<b>\$229,036</b>	<b>\$205,133</b>	<b>\$298,769</b>	<b>\$112,087</b>
<b>Expenditures</b>				
Transferred to Agencies <sup>1</sup>	-\$112,117	-\$23,740	-\$291,669	-\$111,787
<b>Adjustments</b>				
Estimated Carryovers to Be Reappropriated	\$0	\$0	-\$7,100	\$0
<b>End-of-year Fund Balance</b>	<b>\$116,920</b>	<b>\$181,393</b>	<b>\$0</b>	<b>\$300</b>

<sup>1</sup> Fiscal 2022 and 2023 spending shows all appropriated funds are expended. Should expenditures be less, end-of-year fund balances would be larger.

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

As part of the budget process, the department regularly cancels funds if the projects are no longer needed and reappropriates them as special funds to support other projects. **Exhibit 12** shows that reversions from appropriations from fiscal 2017 to 2021 total \$6.8 million. These funds are reappropriated as special funds to support the Enterprise Planning Solutions Planning Initiative (\$2.8 million) and ONE Portal Project (\$4 million).

**Exhibit 12**  
**Major IT Projects Reverting Funds**  
**Fiscal 2017-2021**  
**(\$ in Thousands)**

<u>Project</u>	<u>Amount</u>
Maryland State Department of Education – Replacement Educator Information System	\$1,454.5
State Board of Elections – Agency Election Management System	906.8
Department of State Police – Automated License and Regulation	892.2
Department of Information Technology – Oversight Project Management	749.8
Comptroller’s Office – Integrated Tax System	530.3
Maryland Department of Health – Long-Term Services	323.2
Maryland Department of Health – Medicaid Enterprise System Modular Transformation	291.9
Maryland Department of Health – Computerized Hospital Record and Information System	263.5
Maryland Department of Health – Integrated Electronic Vital Records Registration System	259.6
Department of Information Technology – ONE Portal	255.4

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<b><u>Project</u></b>	<b><u>Amount</u></b>
Department of Natural Resources – Modernization and One Stop Integration	253.8
Department of General Services – eMaryland Marketplace	228.8
Maryland Department of the Environment – Environmental Permit Tracking System Modernization	96.8
Department of Labor – Electronic Licensing Modernization	96.6
Maryland Department of Agriculture – Maryland One Stop	93.2
Maryland Department of Health – Migrate Headquarters to Data Center to the Cloud	42.5
State Board of Elections – Pollbook Project	23.1
Department of Public Safety and Correctional Services – Computerized Criminal History Replacement Phase II	22.3
State Treasurer’s Office – Financial Systems Modernization	8.6
State Lottery and Gaming Control Agency	4.7
State Board of Elections – New Voting System Replacement	1.8
Maryland Department of Health – Boards of Nursing Enterprise Licensing and Regulatory Management	0.4
Department of Labor	0.2
<b>Total</b>	<b>\$6,800.0</b>

IT: information technology

Note: Includes reverted appropriations for oversight and Independent Verification and Validation.

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

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**Exhibit 13** shows that State general fund support for major IT projects has increased substantially in recent years. This has been accompanied by an increase in the number of major IT projects receiving funding from 15 in fiscal 2015 to 32 in fiscal 2024. A complete list and discussion of these projects can be found in **Appendix 2**. There are 7 projects that receive at least \$5 million in general funds in fiscal 2024 for a total of \$69.3 million. These projects are:

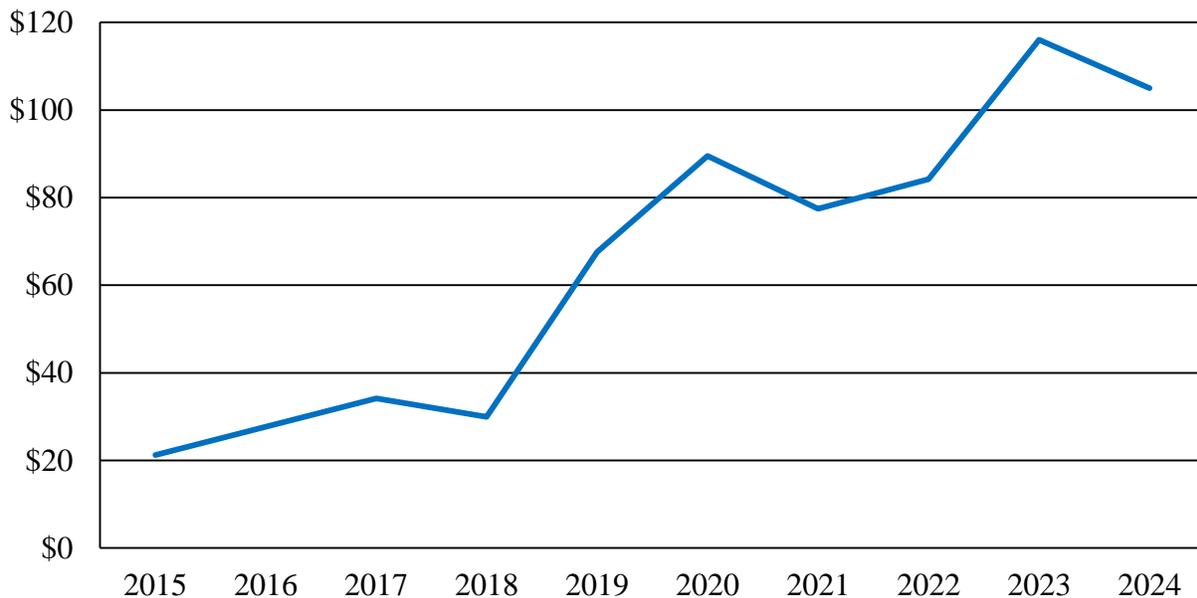
- \$17.5 million for the Maryland Department of Health’s (MDH) Medicaid Enterprise System Modular Transformation (MMT);
- \$12.5 million for the Comptroller’s Integrated Tax System (ITS);
- \$10.7 million for MDH’s Statewide Electronic Health Records (EHR) system;

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- \$10 million for the FMIS replacement project that involved DoIT, the Comptroller’s Office, the State Treasurer’s Office (STO), and the Maryland Department of Transportation (MDOT);
- \$8.3 million for the Department of General Services’ (DGS) eMaryland Marketplace Advantage (eMMA) eProcurement Solution;
- \$5.4 million for the Governor’s Grant Office’s (GGO) Enterprise Grants Management System; and
- \$5 million for the Department of Public Safety and Correctional Services’ (DPSCS) Computerized Criminal History (CCH) Replacement Phase II.

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**Exhibit 13**  
**General Fund Appropriations into the MITDPF**  
**Fiscal 2015-2024**  
**(\$ in Millions)**



MITDPF: Major Information Technology Development Project Fund

Note: Includes reversions, cost containment reductions, and deficiencies.

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

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Section 3.5-308 of the State Finance and Procurement Article requires that all major IT projects for Executive Branch agencies, except higher education institutions, have an information technology project request (ITPR). The ITPR is a comprehensive document about the project, and each ITPR is required to include information about the project's (1) need; (2) risks; (3) scope and complexity; and (4) development and support costs. ITPRs are the starting point for DLS's review of major IT projects. The vast majority of ITPRs were given to DLS prior to the required deadline on January 15. However, as of February 6, the following ITPRs for new projects had not been released to DLS:

- State Board of Elections (SBE) New Voting System;
- SBE's Campaign Reporting Information System (CRIS);
- MDH's Non-Medicaid Case Management Modernization; and
- MDH's Public Health System (PHS) Data Modernization and Oversight.

DLS notes that projects were delayed, and in some cases required to be rebaselined. These projects are:

- ***DGS – eMaryland Marketplace Advantage (eMMA) eProcurement Solution:*** delayed due to flaws in the Vendor Management component's code. This led to delays and additional costs;
- ***DNR – Modernization and OneStop Integration:*** delays are attributable to flaws in the vendor's code and the project will not move forward until there is a new vendor. This is discussed in more detail in Issue 4;
- ***DPSCS – Computerized Criminal History Replacement Phase II:*** delayed after two bids were disqualified, another bid rescinded, and the single remaining bid was withdrawn;
- ***GGO – Enterprise Grants Management Solution:*** bid was not approved by the Board of Public Works (BPW). GGO is preparing another bid. The project has been delayed and costs increased, in part due to a more thorough understanding of requirements and vendor costs;
- ***MDH – Medicaid Enterprise System Modular Transformation:*** affected by the COVID-19 pandemic and a new roadmap was completed in July 2022;
- ***MDH – Maryland AIDS Drug Assistance Program (MADAP) Case Management System:*** delays are attributable to changes in requirements;

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- ***STO – Financial Systems Modernization:*** delayed due to the COVID-19 pandemic and staffing changes; and
- ***DoIT – Maryland OneStop Portal:*** delays are attributable to deficiencies found in previously accepted modules and the vendor filing for bankruptcy, which is discussed in more detail in Issue 4.

DLS is also recommending committee narrative and reductions to appropriations for some projects. Narrative is recommended in each agency’s budget analysis. The recommendation to reduce general funds budgeted in the MITDPF is in this analysis. DLS has recommendations for the following projects:

- ***MDH – Non-Medicaid Case Management Modernization Project:*** recommend narrative requiring quarterly reports;
- ***MDH – Public Health System Data Modernization and Oversight Project:*** recommend narrative requiring quarterly reports;
- ***SBE – New Voting System Project:*** recommend narrative requiring quarterly reports;
- ***SBE – Campaign Reporting Information System Project:*** recommend narrative requiring quarterly reports;
- ***Comptroller – Integrated Tax System Project:*** recommend narrative requiring quarterly reports;
- ***DoIT et al. – Financial Management Information System Replacement Project:*** recommend narrative requiring quarterly reports;
- ***DGS – AS400 Replacement Project:*** recommend reducing general funds for this project since progress has been slow and \$1.6 million appropriated in fiscal 2023 should be sufficient to support fiscal 2024 expenses; and
- ***MDH – Maryland AIDS Drug Assistance Program Case Management:*** recommend reducing general funds budgeted in the MITDPF and allow MDH to use MADAP special funds. Special funds are supporting this project in fiscal 2023.

### **Out-year Forecasts**

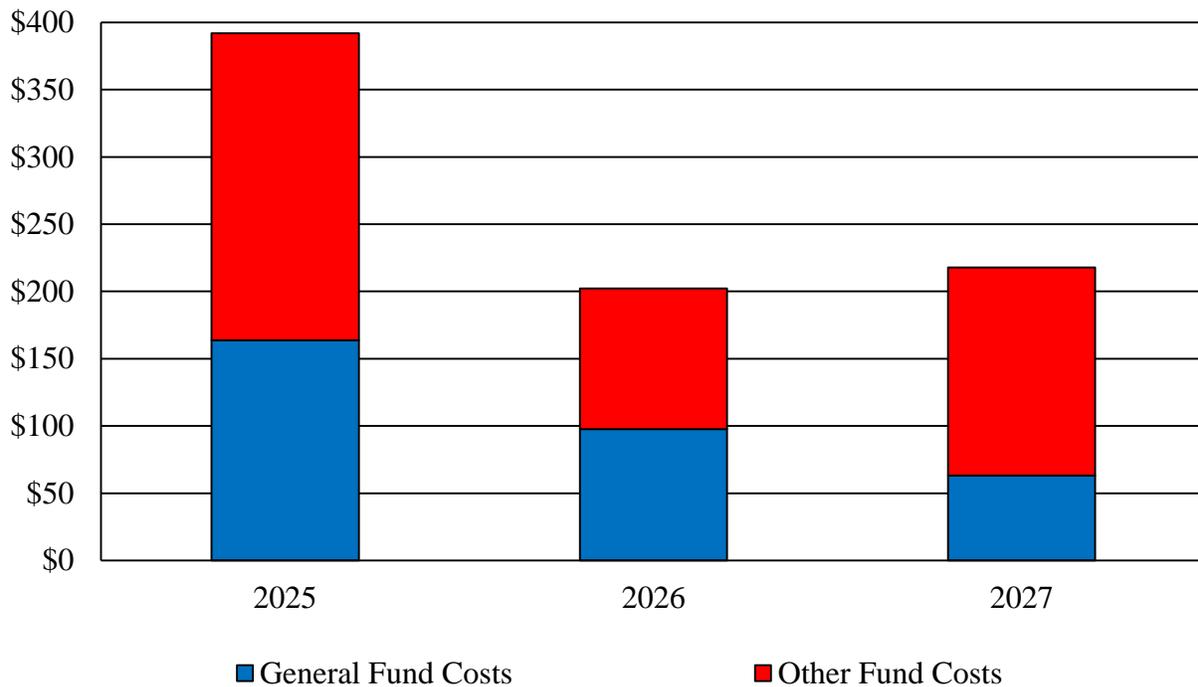
Major IT projects require substantial financial commitments and take years to complete. **Exhibit 14** shows the expected out-year costs of major IT projects. In fiscal 2025, \$391 million in total appropriations and \$164 million in general fund appropriations are expected. Large anticipated fiscal 2025 general fund expenditures include \$28 million for MDH’s MMT,

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\$20 million for DoIT’s Financial System Modernization, \$15 million for MDH’s EHR, and \$17 million for the Comptroller’s ITS. Some projects just started so costs are unknown. As planning progresses, funding for project costs will be added to the budget.

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**Exhibit 14**  
**Major Information Technology Development Project Fund**  
**Projected Out-year Expenditures**  
**Fiscal 2025-2027**  
**(\$ in Millions)**



Source: *Budget Highlights* Appendix N, Department of Budget and Management

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## ***Issues***

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### **1. Cybersecurity**

In 2022 three bills were enacted into law that restructure State cybersecurity. This issue examines the effect of this legislation on DoIT.

#### **Cybersecurity Coordination and Governance**

The legislation with the most significant impact on DoIT is Chapter 242. This expands and enhances the State’s regulatory framework for State and local government cybersecurity. This legislation excludes the Office of the Attorney General, the Comptroller, the State Treasurer, and the Legislative and Judicial branches of State government from DoIT oversight related to IT. The key changes are described in the following sections.

***Clarifying and Expanding Responsibilities of State Chief Information Security Officer (SCISO) and OSM:*** OSM must collect and maintain information on State assets. If SCISO determines that there are security vulnerabilities or deficiencies in any information systems or if there is a threat caused by an entity connected to networkMaryland, OSM must take direct actions. OSM is responsible for coordinating with the Maryland Department of Emergency Management (MDEM) Cyber Preparedness Unit during emergency response efforts. OSM must provide (1) technical assistance to localities in mitigating and recovering from cybersecurity incidents and (2) provide technical services, advice, and guidance to units of local government to improve cybersecurity preparedness, prevention, response, and recovery practices. OSM must develop and maintain IT security policies, standards, and guidance documents, consistent with best practices developed by the National Institute of Standards and Technology (NIST).

***Local Cybersecurity Preparedness Assessments and Incident Reporting:*** Each county government, local school system, and local health department must have a cybersecurity preparedness and response plan and complete a cybersecurity preparedness assessment. These entities must also report a cybersecurity incident to the appropriate local emergency manager and the State Security Operations Center (SOC) within DoIT.

***External Assessments of State Agencies and Minimum Cybersecurity Standards:*** OSM must ensure that each State agency completes an external assessment at least once every two years and assist each unit to remediate any security vulnerabilities or high-risk configurations identified in the assessment. Agencies excluded from the legislation must also have a similar process.

By June 30, 2023, each agency in the Executive Branch of State government must certify to OSM compliance with State minimum cybersecurity standards established by DoIT. Certification must be reviewed by independent auditors, and any findings must be remediated. If an agency has not remediated any findings pertaining to State cybersecurity standards found by the independent audit by July 1, 2024, OSM must ensure compliance of an agency’s cybersecurity through a shared service agreement, administrative privileges, or access to networkMaryland.

**Security Requirements for Contracts:** DoIT must require basic security requirements to be included in a contract (1) in which a third-party contractor will have access to and use State telecommunication equipment, systems, or services or (2) for systems or devices that will connect to State telecommunication equipment, systems, or services. The security requirements must be consistent with a widely recognized security standard.

**Transition Strategy and Performance and Capacity Assessment:** By June 30, 2023, OSM, in consultation with the Maryland Cybersecurity Coordinating Council, must prepare a transition strategy toward cybersecurity centralization, including recommendations for (1) consistent incident response training; (2) implementing security improvement dashboards to inform budgetary appropriations; (3) operations logs transition to the Maryland Security Operations Center; (4) establishing consistent performance accountability metrics for IT and cybersecurity staff; and (5) whether OSM needs additional staff or contractors to carry out its duties.

In addition, DoIT is required to hire a contractor to conduct a performance and capacity assessment to (1) evaluate DoIT's capacity to implement the Act's provisions and (2) recommend additional resources necessary for DoIT to implement the Act's requirements and meet future needs, including additional budget appropriations, additional staff, altered contracting authority, and pay increases for staff. An interim report of the findings and recommendations must be submitted to the Governor and General Assembly by December 1, 2023, and a final report by December 1, 2024.

**Guidelines for Disclosure of Cybersecurity Incidents:** By June 1, 2022, SCISO had to establish guidelines to determine when a cybersecurity incident must be disclosed to the public. By November 1, 2022, SCISO had to submit a report on the guidelines to specified legislative committees. DoIT has complied with this requirement.

### **Modernize Maryland Act**

Chapter 243, the Modernize Maryland Act, included the following provisions:

- **Local Cybersecurity Investment Fund:** The Local Cybersecurity Support Fund is a special, nonlapsing fund that must be administered by MDEM. It provides financial assistance to local governments. The fund may be used only (1) to provide financial assistance to local governments to improve cybersecurity preparedness; (2) to assist local governments applying for federal cybersecurity preparedness grants; and (3) for administrative expenses. To be eligible to receive assistance from the fund, a local government must provide proof to DoIT that the local government conducted a cybersecurity preparedness assessment in the previous 12 months or, within 12 months, undergo a cybersecurity preparedness assessment.
- **Expand DoIT's Responsibilities:** New responsibilities include upgrading IT and cybersecurity-related State government infrastructure and annually evaluating specified

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technologies for providing public services and the development of data analytics capabilities to enable data-driven policymaking by units of State government.

- ***Modernize Maryland Oversight Commission:*** The independent Modernize Maryland Commission is established in DoIT to ensure the confidentiality, integrity, and availability of information held by the State concerning State residents and to advise the Secretary and SCISO on appropriate IT and cybersecurity investments and upgrades, funding sources, and future procurement mechanisms.
- ***BPW Review of Procurements to Modernize Maryland Infrastructure:*** Procurements by DGS for the purpose of modernizing cybersecurity infrastructure for the State valued below \$1.0 million are exempt from BPW oversight and approval. By December 1 of each year, DGS must submit a report to BPW on these procurements and include for each procurement the purpose of the procurement, the name of the contractor, the contract amount, the method of procurement used, the number of bidders who bid on the procurement, and the contract term.
- ***20% Annual Spending Requirement for Fiscal 2024:*** The Governor is required to include in the DPA fiscal 2024 appropriation an amount equivalent to no less than 20% of the aggregated amount appropriated for IT and cybersecurity resources in the fiscal 2023 Budget Bill. The legislation did not provide a precise definition of what constitutes this spending; DBM has interpreted this to be DoIT's budget including MITDPF, fiscal 2023 cybersecurity funding in the DPA, and funding in statewide subobjects usually associated with IT throughout the State. This totals \$760 million, so the DPA allowance includes \$152 million in cybersecurity funding.

### **Local Cybersecurity Support Act**

Chapter 241 expanded the role of the State in local cybersecurity efforts. Local governments include local school systems and boards and local health departments. Key changes include:

- ***Establishing the Cyber Preparedness Unit in MDEM:*** In coordination with SCISO, the Cyber Preparedness Unit duties include (1) supporting local governments in developing a vulnerability assessment and cyber assessment; (2) developing cybersecurity training resources; (3) assisting local governments in the development of cybersecurity preparedness and response plans; and (4) conducting regional cybersecurity preparedness exercises.
- ***Establishing the Information Sharing and Analysis Center in DoIT:*** The center (1) coordinates information on cybersecurity by serving as a central location for information sharing across State and local government, federal government partners, and private entities; (2) supports cybersecurity coordination between local units of government; (3) provides support to SCISO and the Cyber Preparedness Unit during cybersecurity

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incidents that affect State and local governments; (4) supports risk-based planning for the use of federal resources; and (5) conducts analyses of cybersecurity incidents.

- ***Redacting Cybersecurity Audit Findings:*** The Office of Legislative Audits must redact any cybersecurity findings, in a manner consistent with auditing best practices, before an audit report is made available to the public.
- ***Having Local Governments Certify That They Are Compliant with DoIT’s Minimum Cybersecurity Standards:*** By June 30, 2023, each unit of local government must certify to OSM its compliance with State minimum cybersecurity standards established by DoIT. Certification must be reviewed by independent auditors, and any findings must be remediated. If a unit of local government has not remediated any such findings by July 1, 2024, OSM must provide guidance for the unit to achieve compliance with the cybersecurity standards.

### **Spending Added to DoIT Budget and the DPA**

New spending associated with the Acts is \$152 million in the DPA and \$3.7 million in annual salaries and benefits for 20 new positions. DPA appropriations are unassigned but will certainly fund what is required by the Acts. For example, past DPA appropriations are supporting remediating issues found in prior cybersecurity assessments. Anticipated costs, such as procuring a Governance, Risk, and Compliance (GRC) module, are also expected to be funded out of the DPA. The GRC module expects to minimize paperwork, standardize efforts, and scan data into system records. **The department should be prepared to brief the budget committees on its plans to implement the new cybersecurity legislation.**

## **2. Update on DPA Cybersecurity Spending**

From fiscal 2021 to 2023, \$220 million was appropriated into the DPA for cybersecurity appropriations. **Exhibit 15** shows that as of February 2023, DBM has proposed spending \$154 million of these funds on specific activities.

**Exhibit 15**  
**Sources and Uses of DPA Cybersecurity Funds**  
**Fiscal 2021-2023**  
**(\$ in Thousands)**

<u>Year</u>	<u>Purpose</u>	<u>Amount</u>
<b>Appropriations</b>		
2021	Cybersecurity Assessments	\$20,000
2022	Cybersecurity Efforts	100,000
2023	Comprehensive Cybersecurity Activities and Major IT Projects	100,000
<b>Total</b>		<b>\$220,000</b>
<b>Spending – Budget Amendments Transferring Funds to Agencies</b>		
2021	Cybersecurity Assessments	\$10,000
2022	Cybersecurity Assessments	9,571
2022	Maryland Department of Health Incident Remediation	40,412
2023	Department of Information Technology Cybersecurity Remediation – Proposed	35,631
2023	Statewide Cybersecurity Remediation – Proposed	58,459
<b>Total</b>		<b>\$154,074</b>
<b>Remaining Balance</b>		<b>\$65,926</b>

DPA: Dedicated Purpose Account

IT: information technology

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

Source: Department of Budget and Management; operating budget bills

In response to a report required in the 2022 JCR, DoIT informed the budget committees about its plans to spend DPA appropriations. DBM submitted a budget amendment for Legislative Policy Committee review for a \$94.1 million transfer in fiscal 2023 in February 2023. The amendment is consistent with the JCR response.

### **Fiscal 2023 Funding for DoIT Cybersecurity Remediation**

DBM proposes transferring \$35.6 million for its cybersecurity remediation. This relates to DoIT’s operations and the agencies that are part of DoIT’s enterprise support services.

The largest share of these funds, totaling \$19.3 million, support the Authority to Operate workstream of the cybersecurity program to provide a consistent and thorough approach to securing the priority State systems used by Enterprise agencies. The workstream uses key

protocols, like the *Maryland Security Manual* and NIST 800-53 guidance, to allow appropriate usage to minimize risk. The GRC module will support this initiative.

The funds also support privileged access management, at \$5.3 million, which limits access to systems and reduces damage if systems are breached. Another \$2.2 million funds tracking assets like hardware, software, systems and subsystems, which has been lacking and is a consistent recommendation in cybersecurity evaluations.

### **Fiscal 2023 Funding for Statewide Cybersecurity Remediation**

DBM proposes transferring \$35.6 million for statewide cybersecurity remediation. The largest share of these funds, \$20 million, supports remediating findings from cybersecurity audits.

Another \$14.4 million funds agency security and governance. Agencies will have information security officers and a structure that has agencies more involved with supporting appropriate cybersecurity behavior in the agencies. Approximately \$10 million will be to establish the structure, which includes adding 40 contractual information security officers to work in the agencies. Another \$4.2 million will support Centers of Excellence (COE) for risk management, incident response, and business continuity and disaster recovery. This includes centrally defining and developing best practices with enabling templates to address common assessment themes that are standardized across agencies. The COEs begin as a pilot program.

For SOC, \$12.8 million is provided to expand and improve operations. Activities include increased automation and expanded preventive controls, identifying and deploying web filtering solutions, and increased visibility of potential cyber events through expanded logging and alerting.

Modernizing endpoint security costs \$10.3 million. This can expand from monitoring approximately 30,000 endpoints to 100,000 endpoints. Another concern, raised in the MFR discussion, is a lack of consistently implementing, managing, and protecting endpoint controls. This should address these issues as well. Combining improved endpoint controls and SOC should reduce times to detect, respond, and remediate cybersecurity incidents.

### **Potential Funding for MDH Cyber Incident Remediation**

The JCR response also identified \$59.5 million in additional costs for remediating MDH's December 2021 cyber incident. This includes \$37.7 million in additional one-time network restoration costs, \$9.4 million in ongoing restoration costs, and \$12.5 million in system improvements. The DPA also transferred \$40.1 million in one-time restoration costs in fiscal 2022. **This has been an expensive incident that highlights both the high costs of cybersecurity incidents and the potential benefits of addressing cybersecurity issues head-on before there is an incident.**

### **\$152 Million DPA Appropriation in Fiscal 2024**

As noted previously, Chapter 243 requires that 20% of the fiscal 2023 IT budget be appropriated for cybersecurity in fiscal 2024. DBM estimates this to be \$152 million. **As with the fiscal 2023 DPA appropriations, DLS recommends committee narrative that outlines how these funds will be spent.**

### **3. Remote Work Is Key to Having an Effective Government Workforce**

According to DBM, over 36% (over 13,000 employees) of the Executive Branch workforce in the State Personnel Management System worked remotely full-time or part-time in July 2022. It is DBM’s policy to promote remote work wherever possible. Remote work is now expected for many kinds of positions so that not offering remote work can put an employer at a disadvantage. As such, remote work is key to having an effective workforce.

#### **Remote Workforce Enablement Project**

To improve remote work, DoIT added the Remote Workforce Enablement Project to the MITDP in fiscal 2023. The goal is to have a secure and effective managed platform that enables workers to access IT resources, services, and systems while working outside of their typical office location. This platform will include layers of systems, tools, and processes that can be used across agencies. This could also be expanded to local jurisdictions.

This process began in fiscal 2021, when DoIT commissioned a report to explore and evaluate the technological options available to form the basis of the platform. The report provided DoIT with a better understanding of the business need for a proposed platform, the various populations and capabilities that it should support, and the technological requirements.

In March 2022, DoIT procured a solution that was recommended by the fiscal 2021 report and subsequently deployed and evaluated a small-scale implementation of that solution. This pilot program implemented a stack of both on-premises and cloud-based virtualization software (VMWare) and products. If successful, this would deliver improved user experiences, simpler system administration, and allow for a tenant-style operational model to enable customer agencies’ self-management where appropriate. This solution includes virtual private network (VPN) and application streaming components to address the core considerations of the JCR. DoIT found that this VMWare solution does not provide an appreciable improvement over solutions already in operation while suffering from similar limitations. Consequently, DoIT does not recommend expanding the pilot to a full production-level implementation.

#### **Initiative to Move Toward a Zero Trust Network Environment**

While the remote workforce pilot was under way, DoIT procured and implemented the foundational technology for a Statewide Workforce Identity platform, and a Statewide Endpoint

Detection and Response (EDR) tool. Both of these solutions are fully cloud-based Software as a Service (SaaS) offerings that provide components to a zero trust network environment. While these tools can provide contextual information about identities and devices trying to access network and data resources, what is still needed is a system to broker that zero trust access based on the information presented by these tools. This is commonly known as a Zero Trust Network Access (ZTNA) solution. DoIT is evaluating the feasibility of rebaselining the Remote Workforce Enablement MITDP to include evaluating and implementing a cloud-based ZTNA solution, as well as a cloud-based endpoint management platform that integrates well with the statewide EDR system.

**DoIT should be prepared to brief the committees on its efforts to have a safe and user-friendly remote workforce network.**

#### **4. Vendor for OneStop Portal Files for Bankruptcy**

In the fiscal 2024 ITPR for the DNR’s OneStop Portal, DoIT advises that project has completed the first two phases, which is to digitize DNR’s workflow and prepare the architectural design of core components of a new system. However, deficiencies were identified in previously accepted modules. In its year-end of fiscal 2022 report, DoIT noted that the third quarter of fiscal 2022 was spent rectifying issues and completing work that was incomplete. Further work was canceled.

The source of these problems are at least partly attributable to the bankruptcy of the vendor for DNR’s OneStop Portal. In March 2022, Enovational filed for bankruptcy in the District of Columbia. Since the bankruptcy, Ernst and Young, LLP, has acquired Enovational. DoIT advises that, since this acquisition, applications have been moving forward. This bankruptcy raises the following questions:

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- To what extent does this bankruptcy increase costs or delay implementation of new components of DNR’s OneStop Portal?
- To what extent did this cause any deterioration of services?
- What are the cybersecurity risks? Is OneStop getting necessary upgrades and bug fixes?
- What other OneStop applications are supported by this vendor?
- Are there proprietary applications that will be difficult or expensive to maintain?
- What is the long-term solution? Will Ernst and Young keep this service or will this be sold when a buyer is found?
- What plans does DoIT have to manage this kind of vendor risk with modules supported by other vendors?

**DoIT should be prepared to brief the committees on these questions.**

## Operating Budget Recommended Actions

	<b><u>Amount</u></b>	
	<b><u>Change</u></b>	
1. Reduce general funds for the Maryland Department of Health’s (MDH) Maryland AIDS Drug Assistance Program (MADAP) major information technology (IT) project and authorize special funds. MADAP rebates that are appropriated as special funds have been used to support major IT projects. In recent years, spending has consistently been below projections, and the fund typically ends the fiscal year with a fund balance exceeding \$50 million. Fiscal 2022 ended with a \$50.2 million fund balance. This reduction deletes general funds proposed for the MADAP Case Management System project but does not reduce oversight costs. Should additional funding be needed, MDH is authorized to transfer MADAP special funds to support this project.	-\$ 2,215,421	GF
2. Delete funds for the Department of General Services’ AS400 replacement system major information technology (IT) project. This project’s first appropriation was \$1.6 million in fiscal 2023. Progress has been slow. The IT project request, which State law requires for all projects, was not submitted until February 2023. Documents show that the project has not yet onboarded a qualified project manager. The limited progress suggests that these funds are not needed, and that the fiscal 2023 appropriation is sufficient through the end of fiscal 2024.	-\$ 210,000	GF
3. Adopt the following narrative:		
<p><b>Managing for Results (MFR) Goals and Indicators for Services to State Agencies:</b> The Department of Information Technology’s (DoIT) fourth MFR goal is to provide efficient and high-quality information technology services to State agencies. DoIT also has indicators that measure the workload and efficiency. However, the goal does not address value, and there are no indicators for costs. Many of the services that DoIT provides are comparable to services provided by the private sector and other organizations. DoIT should expand its MFR goals to include value and add indicators that measure costs and value. The department should report these indicators with the fiscal 2025 budget.</p>		
<b>Information Request</b>	<b>Author</b>	<b>Due Date</b>
MFR indicators for value and costs of DoIT’s services to State agencies	DoIT	With the fiscal 2025 budget submission
<b>Total General Fund Net Change</b>	<b>-\$ 2,425,421</b>	

4. Adopt the following narrative:

**Quarterly Report on the Financial Management Information System (FMIS) Replacement:** FMIS is the State’s legacy accounting system of record that also includes purchasing, inventory, and reporting applications. The system will need to interface with other systems, like the eMaryland Marketplace Advantage procurement system. The Department of Information Technology (DoIT) is listed as the custodian of this project, but other key stakeholders include the Comptroller’s Office, Treasurer’s Office, and the Maryland Department of Transportation. Replacing the system will require substantial funding and also agencies’ providing subject matter experts to support development. With so many key agencies, governance may also be a challenge. The committees are interested in the progress and development of the FMIS Replacement Major Information Technology Development Project. The committees request that DoIT submit a report each quarter providing an update on the project’s current status, cost projections, and timeline. The report should detail the use of the fiscal 2024 budget, project development costs, and any changes in scope or timeline.

<b>Information Request</b>	<b>Author</b>	<b>Due Date</b>
Quarterly report on the status of the FMIS Replacement	DoIT	July 15, 2023
		October 15, 2023
		January 15, 2024
		April 15, 2024

**Appendix 1**  
**2022 Joint Chairmen’s Report Responses from Agency**

The 2022 JCR requested that DoIT prepare six reports. Electronic copies of the full JCR responses can be found on the DLS Library website.

- ***MFR Goals and Indicators for Services to State Agencies:*** DoIT also has indicators that measure the workload and efficiency. However, the goal does not address value, and there are no indicators for costs. DoIT is preparing a report to examine this. DoIT did not provide MFR indicators but has committed to provide them with the fiscal 2025 allowance.
- ***Plan for Spending Cybersecurity Funds Appropriated in the DPA:*** Over \$100 million was appropriated into the DPA for cybersecurity assessments. The response was required by December 16, 2022. The response was submitted on February 2, 2023. This is discussed in Issue 2.
- ***Update Remote Workforce Enablement MITDP:*** Audits from 2020 have four audit findings in which agencies have issues associated with VPNs. To improve remote work, DoIT initiated a major IT project to develop a single, secure VPN. The report was submitted in February 2023. For more details, see Issue 3.
- ***Infrastructure Investment and Jobs Act (IIJA) Funding and Reporting:*** The IIJA provides federal funds to support State and local cybersecurity efforts. The budget committees asked for a spending report. These funds will flow through MDEM. The report was submitted on time in November 2022.
- ***Pricing of Maryland Public Television Tower Resource Sharing Agreements (RSA):*** Television and radio tower RSAs were priced similarly as cell phone towers, even though reception ranges differ vastly. DoIT was asked to revise its pricing for television and radio agreements. As requested, DoIT prepared a schedule based on type of broadcaster, signal strength, and number of viewers or listeners. The report was submitted on time in December 2022.
- ***State Chief Data Officer and State Chief Privacy Officer:*** Executive orders in July 2021 created the positions of State Chief Data Officer and State Chief Privacy Officer. The Governor’s Office and DoIT were asked to report on these new positions. The report was submitted on time in September 2022.

**Appendix 2**  
**Major Information Technology Development Project Fund**  
**Fiscal 2024**  
**(\$ in Thousands)**

**New Projects**

**Agency:** MDH **Allowance:** \$1,050 GF

**Project Name:** Non-Medicaid Case Management (CRM) Modernization

**Description:** The project updates record systems. The goal is to improve business processes with new operational workflows and provide management reporting. The CRM is also part of MDH’s attempts to automate and integrate its operations.

**Status:** Planning is beginning, and there were no ITPR for this project as of February 6, 2023.

**Recommendation:** Approve and recommend narrative requiring progress reports.

**Agency:** MDH **Allowance:** \$1,050 GF

**Project Name:** PHS Data Modernization and Oversight

**Description:** The project proposes to deliver data-related initiatives to get more relevant, accurate, timely, and efficient data. This supports (1) information system assessment; (2) data exchange and interoperability; (3) data governance; and (4) data analytics, visualization, and reporting, to move from siloed systems to connected, resilient, adaptable, and sustainable ‘response-ready’ systems.

**Status:** This is the initial appropriation. Key planning requirements like strategic goals and requirements are still being developed. There were no ITPR for this project as of February 6, 2023.

**Recommendation:** Approve and recommend narrative requiring progress reports.

**Agency:** SBE **Allowance:** \$271 GF

**Project Name:** New Voting System

**Description:** The project is for a new statewide voting system to be implemented for the 2026 gubernatorial election cycle. The current voting system was procured via a lease agreement which is set to expire after the 2024 presidential election cycle.

**Status:** Planning is beginning, and there were no ITPR for this project as of February 6, 2023.

**Recommendation:** Approve and recommend narrative requiring progress reports.

**Agency:** SBE **Allowance:** \$100 GF

**Project Name:** CRIS

**Description:** Build a new CRIS in time for the 2026 election cycle. The goal is to allow contributors and committees to (1) self-register; (2) declare their participation in an election cycle; (3) document all contributions, expenditures, outstanding obligations and loans; and (4) electronically file reports to SBE.

**Status:** Planning is beginning, and there were no ITPR for this project as of February 6, 2023.

**Recommendation:** Approve and recommend narrative requiring progress reports.

## Ongoing Projects

**Agency:** Comptroller

**Allowance:** \$12,510 GF

**Project Name:** ITS

**Description:** Replace current State of Maryland Tax, Computer Aided Collection System, and other systems. Objectives are to integrate systems for efficiency, to simplify taxpayer compliance, reduce wait times, and improve security, including disaster recovery.

**Status:** The Comptroller has entered into a new contract for a vendor to provide IT management services in fiscal 2022 because the prior vendor’s contract expired. In calendar 2022, corporate and alcohol billing and refunds went live. In addition, operating and servers system upgrades were deployed. Project includes risks, such resource availability (resources within the Comptroller’s Office do not have skill sets required) and interdependencies (linked to systems being modernized). The alcohol tax and the corporate tax release have been implemented. The final appropriation is expected to be in fiscal 2026, and all components should be implemented by August 2026. Although Appendix N in the Governor’s *Budget Highlights* shows total costs at \$189 million, DoIT projects only \$155 million in costs.

**Recommendation:** Approve and recommend narrative requiring progress reports.

**Agency:** Comptroller

**Allowance:** \$2,000 GF

**Project Name:** Payroll System Replacement

**Description:** Replace legacy mainframe payroll system with a cloud-based integrated SaaS solution for payroll processing. This is a common application. No high risk have been identified. The new system is scheduled to be completed by the end of fiscal 2025.

**Status:** This was a new project in fiscal 2023 that was bundled with FMIS and has now been separated into its own program. As of the end of 2022, the requirements document was completed. An RFP is expected to be released in early 2023 so that a vendor can be selected by in April 2023. Costs are estimated to total \$6.5 million.

**Recommendation:** Approve.

**Agency:** DBM

**Allowance:** \$4,159 GF

**Project Name:** Capital Budget Information System Replacement

**Description:** Replace the 16-year-old capital budgeting system. The new system should improve productivity by reducing time spent on formatting and fixing reports. Increased flexibility and customizability should improve output.

**Status:** This is a new project for which planning is beginning. There is no ITPR for this project. Costs are estimated to total \$5.7 million in general funds.

**Recommendation:** Approve

*F50 – Department of Information Technology*

**Agency:** DGS

**Allowance:** \$8,254 GF

**Project Name:** eMMA eProcurement Solution

**Description:** Replace current eMaryland Marketplace procurement system with a cloud-based, software as a service system.

**Status:** Design flaws in the Vendor Management code prevented release of that function. The delays are attributable to design failures stemming from inadequate requirements gathering by the systems integration vendor. An additional year will be needed to deploy the Vendor Management component. The scope has also been increased to add a component that can accurately monitor, track, and report on Minority Business Enterprise compliance. Total projected costs have increased from \$41 million to \$51 million.

**Recommendation:** Approve

**Agency:** DGS

**Allowance:** \$210 GF

**Project Name:** AS 400 Replacement

**Description:** Implement a new management tool to track cost, schedule, and progress of capital projects used by the Office of Design, Construction and Energy. Specifically, replace the legacy AS400 with a cloud-based financial and project management system. Management of design and construction is complex and includes the contract, schedule, and financial management of the projects and their fund sources. The current legacy system was developed in 1988.

**Status:** The project has begun slowly. Last year, there was no ITPR, and this year, the ITPR arrived early in February. DGS will get support from DoIT to onboard staff, including a qualified project manager. In fiscal 2023, \$1.6 million was appropriated for this project.

**Recommendation:** Delete funds. The project did not provide a timely ITPR and is behind schedule. Prior appropriations should be sufficient.

**Agency:** DNR

**Allowance:** \$589 GF

**Project Name:** Modernization and OneStop Integration

**Description:** Implement a web-based platform that is integrated with internal and external systems. The current system is not integrated, which leads to manual entry, duplicative reporting, and incorrect reports.

**Status:** The project has completed the first two phases, which is to digitize DNR's workflow and prepare the architectural design of core components of a new system. However, deficiencies were identified in previously accepted phases. The vendor filed for bankruptcy in March 2022. An alternative procurement is needed to address licensing requirements. The project has been delayed and will not move forward until there is a new vendor.

**Recommendation:** Approve

*F50 – Department of Information Technology*

**Agency:** DNR

**Allowance:** \$3,000 GF

**Project Name:** Park Reservation and Revenue Management System (PRRMS)

**Description:** Develop a web-based, mobile-enabled PRRMS with a customer call center to take registrations and reservations, facilitate retail transactions, inventory control, revenue tracking, and reporting.

**Status:** The initial appropriation was in fiscal 2023. Since the project is new, it is not affected by the bankruptcy of the OneStop vendor. Planning is expected to be completed by the end of fiscal 2023, and the project plan is to have the system implemented by the end of fiscal 2025. The current vendor contract expires in March 2024, and it is unclear how this will be managed if the project is not completed until after that date.

**Recommendation:** Approve

**Agency:** DoIT

**Allowance:** \$10,000 GF

**Project Name:** FMIS Replacement

**Description:** Replace FMIS, which is the State’s accounting system of record that includes accounting, purchasing and inventory, and reporting applications. While DoIT is listed as the custodian, other key stakeholders are DBM, the Comptroller, Treasurer, and MDOT. High risks include sponsorship (all agencies use the system which can complicate governance), resource availability (key staff need to be involved in developing the system), and organizational culture (replacing legacy systems is often met by resistance to change). High risks include sponsorship (multiple agencies complicate governance), resource availability (all key agencies must stay focused and provide key staff), interdependencies (system should integrate with other systems like procurement and budgeting), and organizational culture (replacing a legacy system).

**Status:** This first received funding in fiscal 2023. The project management plan, solutions roadmap, responsibility assignment matrix, and functional requirements are expected to be complete by the end of fiscal 2023. The expectation is that the new system will begin implementation in fiscal 2024. Total cost is projected to be \$60 million with the final appropriation in fiscal 2026. This project is still early in development, so costs and schedules could change.

**Recommendation:** Approve and recommend narrative requiring progress reports.

**Agency:** DoIT

**Allowance:** \$879 GF

**Project Name:** Enterprise GIS Modernization

**Description:** Update systems that support GIS and open data that is available to the public. GIS technology and uses are advancing quickly, and the current systems are becoming obsolete. Current systems are limiting service expansion and cumbersome to maintain.

**Status:** The project being planned and should be deployed in July 2023. Current activities include upgrading the software from 3.0. launched in 2018, to 4.0.

**Recommendation:** Approve

*F50 – Department of Information Technology*

**Agency:** DoIT **Allowance:** \$1,050 GF

**Project Name:** networkMaryland 100G Network Topology Upgrade

**Description:** The current Maryland network infrastructure was designed and implemented over 15 years ago and is no longer meeting the current and growing needs of the Executive Branch agencies. There is a surge in subscriber demand, and DoIT has to extend delivering 100 gigabyte (GB) capacity distribution to each point of presence edge. A previous project upgraded the backbone to 100 GB. The project increases the network topology from 10 GB to 100 GB. The network topology connects the nodes to the backbone of a network.

**Status:** Planning for this project is beginning.

**Recommendation:** Approve

**Agency:** DPSCS **Allowance:** \$5,000 GF

**Project Name:** CCH Replacement Phase II

**Description:** The 30-year-old legacy system, which includes the Ident/Index and Arrest Disposition Reporting mainframe systems, will be replaced with an enhanced solution that allows for the provisioning of timely, updated offender information to Local Law Enforcement, Community Supervision Programs, and other DPSCS constituents. The new system will provide effective monitoring, rehabilitation, and case management of offenders within these programs, providing timesaving processes that eliminate manual processes while providing consolidated information within a single data system.

**Status:** The project has been delayed. DPSCS's federal grant was reverted due to the project's delays. A mainframe solution was initially envisioned. Now a cloud-based solution is being pursued. Bids for a new vendor are being evaluated, and the vendor should be on board by the end of fiscal 2023. Costs increased from \$15 million to \$23 million due to the adjusted timeline and the failed procurement.

**Recommendation:** Approve

**Agency:** GGO **Allowance:** \$5,394 GF

**Project Name:** Enterprise Grants Management Solution

**Description:** There is no centralized system for grant tracking and reporting grants. The system will integrate existing statewide accounting and personnel systems to report on the use of grant funds.

**Status:** The project's initial vendor award was denied by BPW in December 2021. The project was rebaselined in April 2022, when the new solicitation was released. An award should be made in fiscal 2023. Costs increased from \$28 million to \$39 million, due to a more thorough understanding of the requirements and vendor costs.

**Recommendation:** Approve

*F50 – Department of Information Technology*

**Agency:** MDH

**Allowance:** \$10,670 GF

**Project Name:** Statewide EHR formerly Computerized Hospital Record and Information System (CHRIS)

**Description:** Replace a legacy CHRIS. The current system is over 25 years old. MDH plans to purchase a technical solution that can be configured to meet the business process needs, through a commercial off- the-shelf product. This will be a vendor-hosted cloud solution, preferably where the agency will pay a license fee and use the application based upon a subscription model. The EHR system should improve operational efficiency, hospital planning, evaluation and accreditation, patient care and safety, and data security.

**Status:** MDH released the RFP in July 2022 and is evaluating submitted vendor proposals. The agency implementation should begin in the last half of fiscal 2023 and completing approximately a year later.

**Recommendation:** Approve

**Agency:** MDH

**Allowance:** \$68 GF

**Project Name:** Integrated Electronic Vital Records Registration System

**Description:** Replace legacy paper and electronic system with a web-based system that supports including birth, fetal death, marriage, and divorce. Stakeholders include Maryland medical facilities and funeral homes. Other links include the National Center for Health Statistics, federal Social Security Administration, local health departments, and Motor Vehicle Administration (MVA).

**Status:** The pilot program for obtaining birth certificate documents at an MVA location to support the REAL ID license program was successful. The birth and death legacy systems are on the Maryland Total Human-services Integrated Network (MD THINK) platform. The project was awarded a federal grant to support COVID-19 topics, which lead to a rebaselining. Costs total \$21.5 million, with a final appropriation in fiscal 2025. The total cost estimate has been reduced from \$28 million to \$22 million due to reduced hardware and software costs as the agency identified opportunities for reuse. Additionally, the agency’s estimated staffing plan was reduced due to better than planned performance.

**Recommendation:** Approve

**Agency:** MDH

**Allowance:** \$167 GF

**Project Name:** Long Term Services (LTSS)

**Description:** Implement an integrated care management system to track long-term care services as well as develop a standardized assessment and in-home services verification tool. The system is key to the State’s strategy to support home and community services for vulnerable Medicaid recipients.

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**Status:** Recent software enhancements include new features for the Rare and Expensive Medical Case system and improvements to existing functionality. LTSS also completed its portion of the Eligibility and Enrollment interface with the MD THINK system and has begun a multi-year implementation of Waiver Model functionality. Fiscal 2024 also includes \$24.9 million in federal funds. Total project costs through fiscal 2027 are \$47.5 million in general funds and \$286 million in federal funds.

**Recommendation:** Approve

**Agency:** MDH

**Allowance:** \$17,500 GF

**Project Name:** MMT

**Description:** Procurement of a modern Medicaid Management Information System to replace current system, which is antiquated and inflexible. Three key goals are real time adjudication of claims, a new financial management system to automate the federal fund claims process, and improved reporting capability. Project will cover all aspects of the Medicaid program such as pharmacy, provider management, claims processing, decision support as well as migration to the MD THINK cloud solution.

**Status:** An updated roadmap was published in July 2022. The new roadmap has three-phase approach to delivering the remaining components and revised the timeline that was affected by COVID-19. Fiscal 2024 includes \$199 million in federal funds. Total costs through fiscal 2027 are \$957 million, of which \$125 million are general funds.

**Recommendation:** Approve

**Agency:** MDH

**Allowance:** \$2,094 GF

**Project Name:** Migrate MDH HQ Data Center to the Cloud

**Description:** Migrate all systems in the MDH data center into the cloud, including systems that support Medicaid, the Behavioral Health Administration, the Developmental Disabilities Administration, and certain boards. The cloud solution will need to comply with State and federal privacy laws and security policies.

**Status:** The MDH website has been transferred to DoIT's enterprise hosting website environment. Targeted services will be migrated to MD THINK and other possible cloud solutions. Total costs are \$23.4 million. The final appropriation, totaling \$4.3 million, is anticipated in fiscal 2025.

**Recommendation:** Approve

**Agency:** MDH

**Allowance:** \$2,545 GF

**Project Name:** Statewide Voice over Internet Protocol (VoIP) Transition

**Description:** Migrate MDH's telephone system into VoIP. MDH currently uses private branch exchange (PBX)-based telecom technology that is at the end of its life. MDH has a total of 5,500 phones in 18 facilities with 16 of those sites using end-of-life PBX systems. Hardware, such as PBX equipment, and software will be replaced.

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**Status:** MDH expects to begin work in the last half of fiscal 2023. When completed, this will move the phones at all 18 sites to a cloud-based VoIP environment. Total project costs are \$10.3 million, with a final appropriation in fiscal 2026.

**Recommendation:** Approve

**Agency:** MDH **Allowance:** \$4,050 GF

**Project Name:** License and Regulatory Management System (LRMS)

**Description:** An Enterprise LRMS capable of the management of every aspect of licensing and discipline. These capabilities include software licenses and support, systems analysis, development, implementation, and support services for the Health Occupation Boards.

**Status:** This project is a continuation of the IT Licensing project initiated by the Board of Physicians in 2015. The scope has changed to include the various Health Occupation Boards within MDH. The project was delayed by the bankruptcy of the vendor. MDH is recruiting staff and doing market research to understand vendors and products.

**Recommendation:** Approve

**Agency:** MDH **Allowance:** \$1,643 GF

**Project Name:** Bed Registry Referral

**Description:** Create a mental health and substance use disorder bed registry and referral system that will track available capacity to refer individuals for services, as required by Chapter 29 of 2020.

**Status:** A publicly accessible behavioral health directory became operational in March 2022, and an Outpatient Care and Coordination and Referral Pilot began in July 2022. MDH anticipates purchasing a commercial off-the-shelf product. A vendor is currently being selected. Full implementation should be completed by the end of fiscal 2024.

**Recommendation:** Approve

**Agency:** MDH **Allowance:** \$2,637 GF

**Project Name:** Office of Controlled Substances Operations Systems Integration and Modernization

**Description:** Implement a new platform to replace existing legacy systems for registrant application processing of Controlled Dangerous Substance registrations. Risks for this project relate to the lack full-time IT staff and a lack of IT proficiency in the workforce.

**Status:** A requirements analysis has been completed, and the project expects to be posted on the OneStop portal.

**Recommendation:** Approve

*F50 – Department of Information Technology*

**Agency:** MDH **Allowance:** \$2,326 GF

**Project Name:** MADAP Case Management System

**Description:** Modernize case management systems for MADAP

**Status:** The project began application development but changes in requirements have led to a reassessment and delayed the project. The assessment will evaluate what partial work can be used. MDH is examining what implementation approach is most appropriate. It is unclear how this will affect costs at this time.

**Recommendation:** Delete general funds and authorize the transfer of special funds by budget amendment, if needed.

**Agency:** Interagency Committee for School Construction (IAC) **Allowance:** \$164 GF

**Project Name:** IAC Business Management System

**Description:** Procure and establish a configurable, online business management system that will contain, route, and save the documents and information related to the IAC's many business processes, consistent with Chapter 14 of 2018, 21st Century Schools Act.

**Status:** The project start date was originally August 2020. However, the RFP was canceled in November 2020. High risk is organizational culture since IAC was a stand-alone agency from 1971 to 2018 and is now under MSDE. IAC's unusual structure also makes technical issues a high risk. The project is technically difficult in that it must route multiple transactions through multiple funding programs and through staff from multiple agencies. Procuring a solution that meets these requirements as IAC business processes change may be challenging. A contract has been awarded and began work in fiscal 2023. The final appropriation is in fiscal 2024 and it is approximately \$400,000 less than projected.

**Recommendation:** Approve

**Agency:** SBE **Allowance:** \$2,633 GF

**Project Name:** Pollbook Project

**Description:** Procure and implement a new pollbook system, which is used for voter registration and related voter functions.

**Status:** Implementation has been delayed until the 2024 elections. A new vendor was selected in October 2021. BPW approved extending the current vendors contract through the 2022 elections. Total project costs are \$23.9 million, including \$10.2 million in general funds.

**Recommendation:** Approve and recommend narrative requiring progress reports.

**Agency:** STO **Allowance:** \$2,974 GF

**Project Name:** Financial Systems Modernization

**Description:** Replace the State Treasurer's Treasury Management System, which processes bank transactions, insurance claims, and leases.

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**Status:** The accounting system and insurance claims portals have been rolled out. Modules to be completed include (1) insurance claims intake, adjudication, and rollout; (2) treasury module development in Azure services to process bank, Comptroller, General Accounting Division, and agency financial transactions; and (3) managed file transport using FTP (file transfer protocol) and ETL (extract, transfer, and load) programs. With respect to the banking module, planning should be completed by January 2023 with implementation starting shortly thereafter and continuing through the winter of calendar 2024.

**Recommendation:** Approve

**Agency:** DoIT

**Allowance:** \$3,965 SF

**Project Name:** Maryland OneStop Portal

**Description:** Develop a portal that directs internet searches to the appropriate online form.

**Status:** MDH, Maryland Higher Education Commission (MHEC), Department of Commerce (Commerce), Secretary of State, DNR, Department of Agriculture (MDA), and the Department of Housing and Community Development’s (DHCD) Economic Recovery Initiatives have forms integrated into the system. The development of nine systems was not completed due to the vendor filing for bankruptcy.

**Recommendation:** Approve

**Agency:** DoIT

**Allowance:** \$2,835 SF

**Project Name:** Enterprise Solutions Planning Initiative

**Description:** Provide integrated planning support to IT solutions requests received across multiple agencies.

**Status:** The project is engaging agencies with common needs and data, developing appropriate strategies and architecture, identifying acquisitions, and determining technologies and systems for implementation. These costs are ongoing.

**Recommendation:** Approve

<b>Total General Funds</b>	<b>\$104,987</b>
<b>Total Special Funds</b>	<b>\$6,800</b>
<b>Total Funds</b>	<b>\$111,787</b>

**Appendix 3**  
**Financial Management Information System**  
**Major Information Technology Project**  
**Department of Information Technology**

<b>New/Ongoing:</b> Ongoing – Previously combined with Central Payroll Project								
<b>Start Date:</b> July 2022					<b>Est. Completion Date:</b> n/a			
<b>Implementation Strategy:</b> n/a								
<b>(\$ in Millions)</b>	<b>Prior Year</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>Remainder</b>	<b>Total</b>
<b>GF</b>	\$0.000	\$5.000	\$10.000	\$20.000	\$25.000	\$0.000	\$0.000	\$60.000
<b>Total</b>	<b>\$0.000</b>	<b>\$5.000</b>	<b>\$10.000</b>	<b>\$20.000</b>	<b>\$25.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$60.000</b>

- Project Summary:** Replace the legacy FMIS, which is the State’s accounting system of record that includes accounting, purchasing and inventory, and reporting applications. While DoIT is listed as the custodian, other key stakeholders are DBM, the Comptroller, Treasurer, and MDOT.
- Need:** The FMIS accounting system is a critical system without which State government could not operate. This legacy system is inefficient and inflexible. Law changes, which are common, require expensive coding. The systems inflexibility limits reporting. The aging technology limits the labor pool to support the system. A new system should improve links between accounting and more recently developed procurement, personnel, and budgeting systems, as well as the State Treasurer’s Financial System Modernization.
- Observations and Milestones:** The project management plan, solutions roadmap, responsibility assignment matrix, and functional requirements are expected to be complete by the end of fiscal 2023. The expectation is that the new system will begin implementation in fiscal 2024. Total cost is projected to be \$60 million with the final appropriation in fiscal 2026. This project is still early in development, so costs and schedules could change.
- Concerns:** High risks include sponsorship (multiple agencies complicate governance), resource availability (all key agencies must stay focused and provide key staff), interdependencies (system should integrate with other systems like procurement and budgeting), and organizational culture (replacing a legacy system).
- Other Comments:** The project’s initial funding was in fiscal 2023. It was combined with the new payroll system. Since these are separate systems, they are now separated.

**Appendix 4**  
**Enterprise Solutions Planning Initiative**  
**Major Information Technology Project**  
**Department of Information Technology**

<b>New/Ongoing:</b> Ongoing								
<b>Start Date:</b> July 2017					<b>Est. Completion Date:</b> Ongoing Development Costs			
<b>Implementation Strategy:</b> Agile								
<b>(\$ in Millions)</b>	<b>Prior Year</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>Remainder</b>	<b>Total</b>
<b>GF</b>	\$2.342	\$1.850	\$0.000	\$0.000	\$0.000	\$0.000	n/a	\$4.192
<b>SF<sup>1</sup></b>	3.300	0.000	2.835	2.280	2.280	4.557	n/a	15.252
<b>Total</b>	<b>\$5.642</b>	<b>\$1.850</b>	<b>\$2.835</b>	<b>\$2.280</b>	<b>\$2.280</b>	<b>\$4.557</b>	<b>n/a</b>	<b>\$19.444</b>

- **Project Summary:** Provide integrated planning support to information technology projects received to combine planning activities that have traditionally occurred in silos. This includes (1) centralized planning; (2) ensuring that solutions are scaled at an appropriate level and apply enterprise model to reduce duplicative systems; (3) supporting the Agile approach to system development; (4) influencing common modeling, designing, and coding practices for systems architecture; and (5) ensuring that priority needs/solutions are addressed timely and funded appropriately.
- **Need:** This is consistent with DoIT’s mission to support major IT project development.
- **Changes:** This is an ongoing initiative. Costs are adjusted to reflect project needs.

<sup>1</sup> Special funds are general funds appropriated for projects that have been completed. Unused general funds from completed projects are appropriated as special funds for another project.

**Appendix 5**  
**State of Maryland**  
**Enterprise Geographic Information Systems Modernization**  
**Major Information Technology Project**  
**Department of Information Technology**

<b>New/Ongoing:</b> New								
<b>Start Date:</b> July 2022					<b>Est. Completion Date:</b> July 2023			
<b>Implementation Strategy:</b> Agile								
<b>(\$ in Millions)</b>	<b>Prior Year</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>Remainder</b>	<b>Total</b>
<b>GF</b>	\$0.000	\$0.000	\$2.088	\$0.879	\$0.000	\$0.000	\$0.000	\$2.967
<b>Total</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$2.088</b>	<b>\$0.879</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$2.967</b>

- **Project Summary:** Update systems that support GIS and open data that is available to the public.
- **Need:** Demand for GIS and open data has increased substantially. GIS is now a common application that many agencies use regularly. GIS technology and uses are advancing quickly, and the current systems are becoming obsolete. Current systems are limiting service expansion and cumbersome to maintain. GIS was centralized in DoIT over a decade ago, so this project affects many agencies. GIS data is shared frequently, and a common platform make processes more efficient.
- **Observations and Milestones:** The project is being planned and should be deployed in July 2023. Current activities include upgrading the software from 3.0., launched in 2018, to 4.0.
- **Concerns:** This is a low-risk project. The most significant risks relate to interdependencies since this project affects so many agencies. But this risk is not likely to hinder development.

**Appendix 6**  
**networkMaryland**  
**Major Information Technology Project**  
**Department of Information Technology**

<b>New/Ongoing:</b> New								
<b>Start Date:</b> Fiscal 2023					<b>Est. Completion Date:</b> estimated or actual date			
<b>Implementation Strategy:</b> Waterfall/Agile (pick one)								
<b>(\$ in Millions)</b>	<b>Prior Year</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>Remainder</b>	<b>Total</b>
<b>GF</b>	\$0.000	\$0.000	\$1.050	\$0.000	\$0.000	\$0.000	\$0.000	\$1.050
<b>Total</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$1.050</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$1.050</b>

- **Project Summary:** The project increases the network topology from 10 GB to 100 GB. The network topology connects the nodes to the backbone of a network. A previous project upgraded the backbone to 100 GB.
- **Need:** The current Maryland network infrastructure was designed and implemented over 15 years ago and is no longer meeting the current and growing needs of agencies. There is a surge in subscriber demand, and DoIT has to extend delivering 100 GB capacity distribution to each point of presence edge. This project expands 100 GB capacity beyond the backbone and to the nodes connecting to networkMaryland.

**Appendix 7**  
**Maryland OneStop Portal**  
**Major Information Technology Project**  
**Department of Information Technology**

This is discussed in Issue 2.

<b>New/Ongoing:</b> Ongoing								
<b>Start Date:</b> November 2017					<b>Est. Completion Date:</b> n/a			
<b>Implementation Strategy:</b> Agile								
<b>(\$ in Millions)</b>	<b>Prior Year</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>Remainder</b>	<b>Total</b>
<b>GF</b>	\$17.418	\$8.000	\$0.000	\$4.000	\$10.190	\$1.864	n/a	\$37.471
<b>SF<sup>1</sup></b>	7.800	0.000	3.965	0.000	0.000	0.000	n/a	11.765
<b>Total</b>	<b>\$25.218</b>	<b>\$8.000</b>	<b>\$3.965</b>	<b>\$4.000</b>	<b>\$10.190</b>	<b>\$1.864</b>	<b>n/a</b>	<b>\$49.236</b>

- **Project Summary:** This project provides a consolidated, easy-to-find portal for State-issued licenses, permits, and forms. DoIT works with agencies to bring their processes online.
- **Need:** Before this project was implemented, DoIT estimated that Maryland had over 1,000 forms online spread across State agency websites. Many of these forms are only available to download, complete manually on paper, and return via U.S. mail. There was no interagency coordination for such a common process as license processing, so license processing tasks are duplicated many times throughout the State government apparatus.
- **Observations and Milestones:** MDH, MHEC, Commerce, the Secretary of State, DNR, MDA, and DHCD’s Economic Recovery Initiatives have forms integrated into the system. The development of nine systems was not completed due to the vendor filing for bankruptcy.
- **Concerns:** The vendor filed for bankruptcy in March 2022. This is discussed in more detail in Issue 2.
- **Other Comments:** This project consolidates State operations on the web. As needs have been identified, scope of this project has increased to accommodate additional applications joining the platform. The need for this consolidation exceeds projected spending.

<sup>1</sup> Special funds are general funds appropriated for projects that have been completed. Unused general funds from completed projects are appropriated as special funds for another project.

**Appendix 8**  
**Object/Fund Difference Report**  
**Department of Information Technology**

<u>Object/Fund</u>	<u>FY 22</u> <u>Actual</u>	<u>FY 23</u> <u>Working</u> <u>Appropriation</u>	<u>FY 24</u> <u>Allowance</u>	<u>FY 23 - FY 24</u> <u>Amount Change</u>	<u>Percent</u> <u>Change</u>
<b>Positions</b>					
01 Regular	185.00	184.00	207.00	23.00	12.5%
02 Contractual	6.03	0.15	0.00	-0.15	-100.0%
<b>Total Positions</b>	<b>191.03</b>	<b>184.15</b>	<b>207.00</b>	<b>22.85</b>	<b>12.4%</b>
<b>Objects</b>					
01 Salaries and Wages	\$ 22,717,836	\$ 24,311,651	\$ 31,755,671	\$ 7,444,020	30.6%
02 Technical and Special Fees	203,705	3,523	1,000,000	996,477	28284.9%
03 Communication	8,276,466	7,203,992	7,222,289	18,297	0.3%
04 Travel	51,214	89,690	98,821	9,131	10.2%
06 Fuel and Utilities	35,916	53,000	53,000	0	0%
07 Motor Vehicles	4,922	38,075	9,420	-28,655	-75.3%
08 Contractual Services	209,540,411	274,073,022	235,743,089	-38,329,933	-14.0%
09 Supplies and Materials	94,206	24,622	17,122	-7,500	-30.5%
10 Equipment – Replacement	8,218,894	12,725,000	7,720,000	-5,005,000	-39.3%
11 Equipment – Additional	1,769,576	955,000	960,000	5,000	0.5%
13 Fixed Charges	440,772	372,486	487,516	115,030	30.9%
<b>Total Objects</b>	<b>\$ 251,353,918</b>	<b>\$ 319,850,061</b>	<b>\$ 285,066,928</b>	<b>-\$ 34,783,133</b>	<b>-10.9%</b>
<b>Funds</b>					
01 General Fund	\$ 99,626,674	\$ 147,842,711	\$ 152,255,031	\$ 4,412,320	3.0%
03 Special Fund	11,743,810	3,009,081	8,759,087	5,750,006	191.1%
05 Federal Fund	4,796,804	5,000,000	0	-5,000,000	-100.0%
09 Reimbursable Fund	135,186,630	163,998,269	124,052,810	-39,945,459	-24.4%
<b>Total Funds</b>	<b>\$ 251,353,918</b>	<b>\$ 319,850,061</b>	<b>\$ 285,066,928</b>	<b>-\$ 34,783,133</b>	<b>-10.9%</b>

Note: The fiscal 2023 appropriation does not include deficiencies. The fiscal 2024 allowance does not include contingent reductions or cost-of-living adjustments.

**Appendix 9**  
**Fiscal Summary**  
**Department of Information Technology**

<u>Program/Unit</u>	<u>FY 22 Actual</u>	<u>FY 23 Wrk Approp</u>	<u>FY 24 Allowance</u>	<u>Change</u>	<u>FY 23 - FY 24 % Change</u>
01 Major IT Development Project Fund	\$ 84,225,034	\$ 117,075,653	\$ 111,786,520	-\$ 5,289,133	-4.5%
01 State Chief of Information Technology	22,183,722	45,254,662	33,858,347	-11,396,315	-25.2%
02 Security	23,259,758	15,730,648	24,290,955	8,560,307	54.4%
03 Application Systems Management	32,576,132	25,861,637	40,647,761	14,786,124	57.2%
04 Infrastructure	56,809,548	52,700,863	55,425,335	2,724,472	5.2%
05 Chief of Staff	2,266,662	2,106,910	3,258,383	1,151,473	54.7%
06 Major IT Development Projects	16,157,763	46,193,061	0	-46,193,061	-100.0%
07 Radio	13,875,299	14,926,627	15,799,627	873,000	5.8%
<b>Total Expenditures</b>	<b>\$ 251,353,918</b>	<b>\$ 319,850,061</b>	<b>\$ 285,066,928</b>	<b>-\$ 34,783,133</b>	<b>-10.9%</b>
General Fund	\$ 99,626,674	\$ 147,842,711	\$ 152,255,031	\$ 4,412,320	3.0%
Special Fund	11,743,810	3,009,081	8,759,087	5,750,006	191.1%
Federal Fund	4,796,804	5,000,000	0	-5,000,000	-100.0%
<b>Total Appropriations</b>	<b>\$ 116,167,288</b>	<b>\$ 155,851,792</b>	<b>\$ 161,014,118</b>	<b>\$ 5,162,326</b>	<b>3.3%</b>
Reimbursable Fund	\$ 135,186,630	\$ 163,998,269	\$ 124,052,810	-\$ 39,945,459	-24.4%
<b>Total Funds</b>	<b>\$ 251,353,918</b>	<b>\$ 319,850,061</b>	<b>\$ 285,066,928</b>	<b>-\$ 34,783,133</b>	<b>-10.9%</b>

Note: The fiscal 2023 appropriation does not include deficiencies. The fiscal 2024 allowance does not include contingent reductions or cost-of-living adjustments.