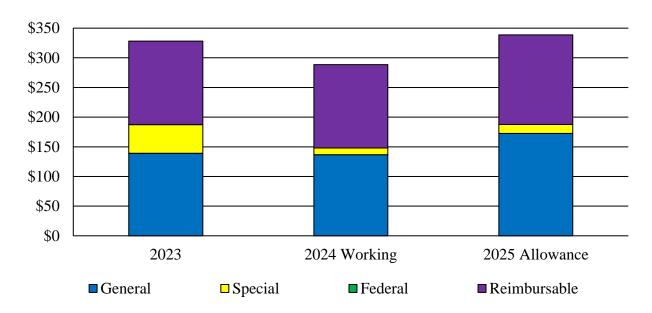
F50 **Department of Information Technology**

Executive Summary

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

Fiscal 2025 Budget Increases \$50.2 Million, or 17.4%, to \$338.7 Million (\$ in Millions)



Note: The fiscal 2024 working appropriation includes deficiencies. The fiscal 2024 impacts of statewide salary adjustments appear in the Statewide Account in the Department of Budget and Management (DBM), and adjustments are not reflected in this agency's budget. The fiscal 2025 impacts of the fiscal 2024 statewide salary adjustments appear in this agency's budget. The fiscal 2025 statewide salary adjustments are centrally budgeted in DBM and are not included in this agency's budget.

• The increase in the fiscal 2025 allowance is attributable to a \$50 million increase in general funds in DoIT's Security program, which provides for a preventive approach to protecting State of Maryland public and confidential information and avoiding cybersecurity breaches.

For further information contact: Yashodhara Rai

Key Observations

- Funding for Major Information Technology Development Project Fund (MITDPF) Lowers: The fiscal 2025 MITDPF allowance includes \$78.5 million in general funds and \$12.2 million in special funds for projects, which is 12.8% lower than fiscal 2024 working appropriation.
- Funding for Security Program Increases: Three pieces of legislation were enacted in the 2022 session to enhance State and local cybersecurity capabilities. As a result, the fiscal 2025 allowance includes increased funding to support State and local cybersecurity, regular assessments, disclosing cybersecurity incidents, security requirements for contracts, and increasing information sharing between agencies and levels of government.
- SB 294 and HB 227 of 2024 Would Make Changes to Major Information Technology Development Project (MITDP) Oversight: As introduced, SB 294 and HB 227 make various changes to DoIT's oversight of MITDPs, including altering the threshold for a total cost of development from \$1 million to \$5 million to be considered an MITDP. In addition, it provides additional authority to the Secretary of Information Technology to include or exempt projects as MITDPs.

Operating Budget Recommended Actions

Funds

- 1. Add language to restrict general funds for the eMaryland Marketplace eProcurement Solution project until an information technology project request is provided.
- 2. Add language to restrict general funds for the Public Health Services Data Modernization Program project until an information technology project request is provided.
- 3. Increase turnover expectancy for 11 new positions to 25% to be -\$ 377,207 consistent with budgeted turnover for new positions.
- 4. Adopt committee narrative requesting Managing for Results goals and indicators for services to State agencies.
- 5. Adopt committee narrative requesting a plan for spending cybersecurity funds appropriated in the Dedicated Purpose Account.

Total Net Change

-\$ 377,207

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Department of Information Technology

Operating Budget Analysis

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), which 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.

The department administers the 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.

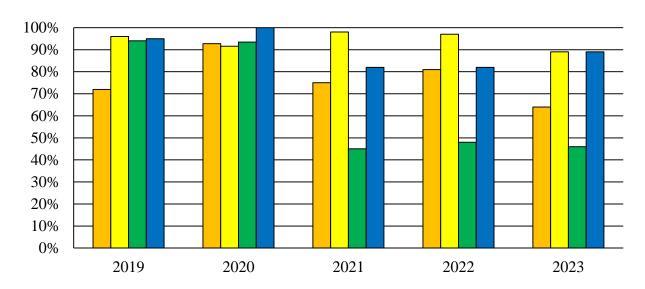
Performance Analysis: Managing for Results

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 cyberattacks and breaches and (2) to increase inter- and intra-agency 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 cyberdefense 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. Although these issues have been addressed and the share of compliant employees increased to 81% in fiscal 2022, it has decreased to 64% in fiscal 2023. DoIT notes that the decline in fiscal 2023 was impacted by employees that have not been completing the required training modules and assessments. DoIT advises that it has initiated more involved outreach to improve compliance and expects to see a higher compliance rate in fiscal 2024. **DoIT should brief the committees on its outreach efforts to improve the share of employees compliant with cybersecurity awareness training.**





- State Employees Compliant with Cybersecurity Awareness Training
- □ Endpoints Protected by Advanced Endpoint Protection Response
- Endpoints Protected by Critical Patch Compliance
- Servers Which Have Undergone a Vulnerability Scan in Last 30 Days

Source: Department of Budget and Management

Endpoints are physical devices like mobile devices, desktop computers, virtual machines, etc. that connect to a network system. Critical patches are software and operating system updates that aim to fix security vulnerabilities. Devices protected by critical patch compliance have dropped significantly from 93% in fiscal 2020 to 46% in fiscal 2023. Critical vulnerabilities are continuous, and DoIT notes that it has refocused its efforts on prioritizing the remediation of critical vulnerabilities exceeding their service-level agreements (SLA). The newly created director of vulnerability management under OSM starts in March 2024.

End users are the personnel that have access to endpoints or physical devices. Starting in fiscal 2023, DoIT introduced a new endpoint detection and response (EDR) solution that continuously monitors end-user devices to detect and respond to cyber threats. Prior to fiscal 2023, the endpoints covered and protected have been above the 90% threshold. However, the coverage decreased in fiscal 2023 to 89% due to deployment lag of the new EDR for certain types of endpoints and lack of visibility. **DoIT should brief the committees on its efforts to improve EDR solution coverage.**

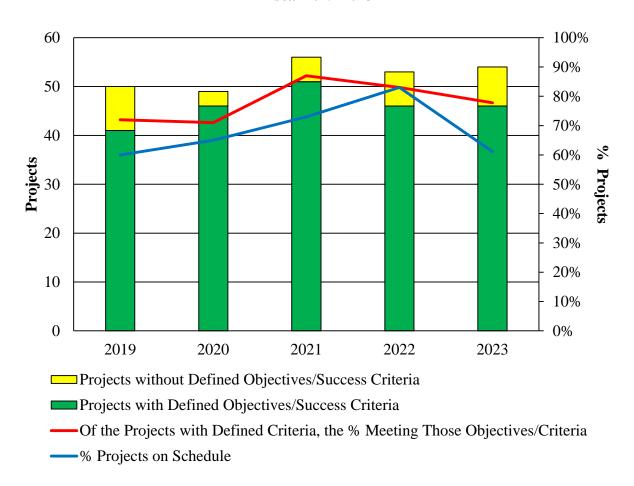
DoIT's MFR indicators for critical patches and vulnerability scans relate to agencies under DoIT's enterprise IT support services, which includes 25 agencies with approximately 10,000 employees. In fiscal 2021, the percentage of endpoints compliant with critical patches dropped to 45% of agencies. One reason for this is that some agencies were slow to react to the expiration of support, including Windows 10. DoIT advises that this issue has been addressed, but the ratio remained below 50% in fiscal 2023. 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 should be prepared to discuss strategies to improve compliance with critical patches.**

2. Oversight of Major IT Projects

The fiscal 2025 budget includes \$90.6 million funded by the MITDPF. DoIT expects to oversee 58 projects in fiscal 2025. The fiscal 2025 budget includes 5 projects not included in last year's out-year forecast. As introduced, SB 294 and HB 227 are departmental bills that would make various changes to DoIT's oversight of MITDPs. The bills modify the first criterion of requiring a project's estimated total cost of development to equal or exceed \$5 million instead of \$1 million to be considered an MITDP. They also expand the Secretary's authority to determine if a project may be a considered an MITDP if (1) the unit of State government has sufficient implementation resources, including human capital, subject matter expertise, and technological infrastructure or has the means to obtain these resources prior to project initiation; (2) there is no sufficient alternative within the State's IT inventory; and (3) the project will result in a single, comprehensive solution designed to meet a cohesive set of business and technology objectives. The bills would also authorize the Secretary of Information Technology to exempt a project that otherwise would be considered an MITDP from DoIT's oversight.

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 MITDPs remain on schedule and are meeting their defined objectives. **Exhibit 2** shows that only 61% of projects were on time in fiscal 2023. DoIT notes that for the reporting period of this data, 6 MITDPs were in the planning phase, while 12 were in the implementation phase, which lowered the number of projects on schedule. DoIT advises that, if enacted, SB 294 and HB 227 would put measures in place to reduce project delays by requiring discovery phases prior to project commencement, which would also reduce the number of projects with failed or delayed procurements. **DoIT should discuss how the proposed legislation will improve oversight, including how changes in authority will impact oversight for both projects that would continue to qualify as MITDPs as well as for projects that will no longer qualify.**

Exhibit 2
Major Information Technology Development Project Indicators
Fiscal 2019-2023



Source: Department of Budget and Management

DoIT is now using an Agile approach to develop MITDPs, 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 2023, 46 out of 54 projects had criteria, and 78% of them were meeting the criteria. Not all projects will be Agile projects because not all MITDPs 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.

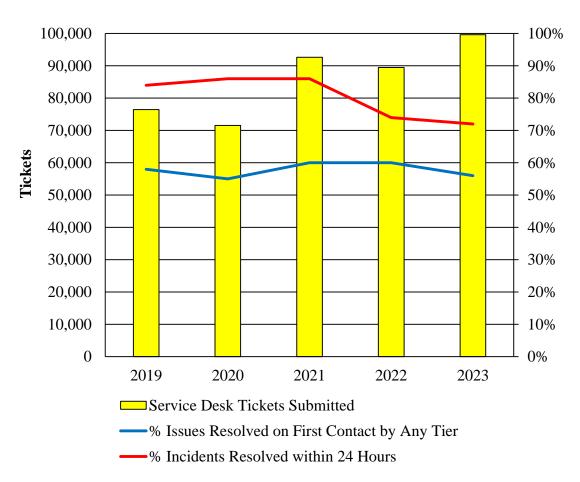
3. Support Services for State Agencies

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, the Department of Natural Resources, the Maryland State Department of Education, 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 area networks (LAN) and wide area networks (WAN); and (3) managed firewall. Agencies participating in the enterprise IT system enter 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 SLAs associated with the services in the catalog. Where appropriate, consideration is given to industry benchmarks in establishing 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 99,600 tickets in fiscal 2023, which is an 11% increase compared to fiscal 2022. DoIT attributes the increase to onboarding new agencies that subscribe to its enterprise shared services. Additionally, DoIT introduced and implemented new technologies that directly impacted enterprise end users, namely Okta for end user identity access management; Delinea, a privileged endpoint management and access management platform solution; and Palo Alto Global Protect Virtual Private Network, a remote access solution. The introduction of these new technologies called for end user adoption and learning curves, which led to higher volumes of tickets in fiscal 2023.

Exhibit 3
Agency Services Indicators
Fiscal 2019-2023



Source: Department of Budget and Management

The data shows that 56% of the service desk tickets were resolved by first contact in fiscal 2023, which is 4 percentage points lower than fiscal 2022. Similarly, 72% of incidents were resolved in 24 hours in fiscal 2023, which is 2 percentage points lower than in fiscal 2022 and 14 percentage points lower than in fiscal 2021. **DoIT should discuss the reasons for the decrease in the incidents resolved on first contact or within 24 hours.**

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 2023 *Joint Chairmen's Report* (JCR) required that DoIT add goals and indicators

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for services to State agencies that measure workload and efficiency. The department notes that a service rate assessment was performed in response to the new MFR requirements in December 2023, which is why the department missed the publication with the fiscal 2025 budget. The department further notes that changes or updates to the existing MFR will not commence until May 2024 at the direction of DBM and the MFR coordinator.

The Department of Legislative Services (DLS) recommends adopting committee narrative to expand DoIT's MFR goals to include value and add indicators that measure costs and value, to be reported with the MFR submission accompanying the fiscal 2026 budget.

Fiscal 2024

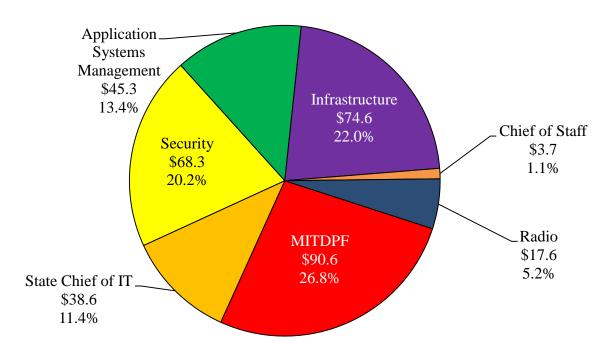
Proposed Deficiency

The fiscal 2025 budget includes two proposed fiscal 2024 deficiency appropriations totaling \$865,471 in general funds for DoIT. This includes \$179,462 to fund 2 contractual full-time equivalent (FTE) positions in the newly formed Office of Accessibility, which will enforce Maryland's new Digital Accessibility policy, which was announced on January 8, 2024, and \$686,009 to fund the ongoing operational costs for the OneStop platform.

Fiscal 2025 Overview of Agency Spending

The fiscal 2025 allowance includes a total of \$338.7 million for DoIT. **Exhibit 4** shows that the MITDPF fund and infrastructure account for 48.8% of DoIT's spending. Infrastructure includes end user applications and support, LAN and WAN support, networkMaryland, and voice communication. These services are included in the enterprise IT support services offered by DoIT. The Security program accounts for 20.2%, which provides for a preventive approach to protecting public and confidential information and avoiding cybersecurity breaches.

Exhibit 4
Overview of Agency Spending
Fiscal 2025 Allowance
(\$ in Millions)



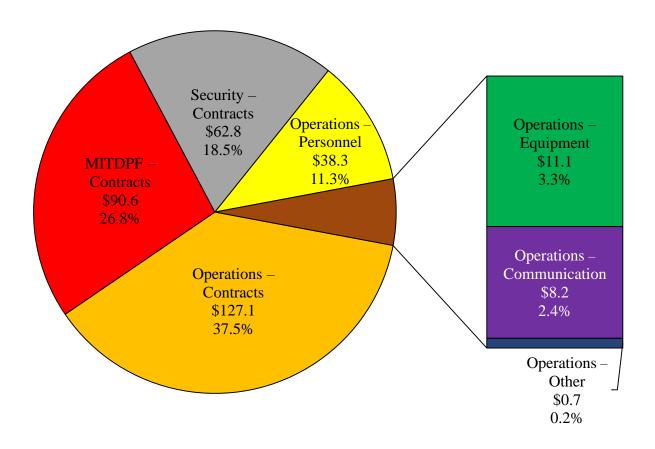
MITDPF: Major Information Technology Development Project Fund

Note: The fiscal 2025 statewide salary adjustments are centrally budgeted in the Department of Budget and Management and are not included in this agency's budget.

Source: Governor's Fiscal 2025 Budget Books

The department relies heavily on contracts to provide services. **Exhibit 5** shows that contracts for MITDPF, operations, and cybersecurity combined total 82.8% of spending. The next largest area of spending is personnel, including regular positions and contractual FTEs, at 11.3%.

Exhibit 5
Spending by Agency and Objects
Fiscal 2025
(\$ in Millions)



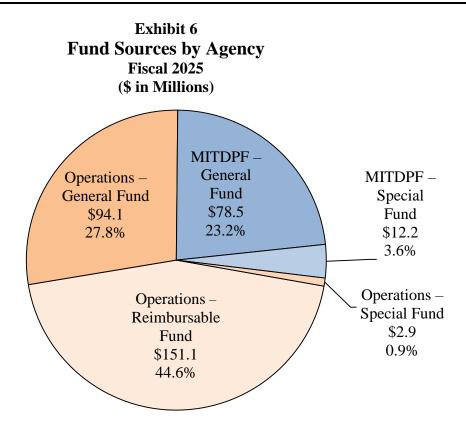
MITPDF: Major Information Technology Development Project Fund

Note: The fiscal 2025 statewide salary adjustments are centrally budgeted in the Department of Budget and Management are not included in this agency's budget.

Source: Governor's Fiscal 2025 Budget Books

DoIT is two agencies: (1) funding for MITDPs; and (2) operations. Major IT funding is supported by general funds and special funds. Operations includes services (security, Applications System Management, infrastructure, chief of staff, 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. Administration receives general funds, which avoids State agencies paying for DoIT overhead costs. As shown in **Exhibit 6**, 26.8% of funding for DoIT is for MITDPF, split into 23.2% in general funds and 3.6% in special funds. The remaining 73.2% of DoIT's funding is for its operations, which is split into 27.8% in general funds, 44.6% in reimbursable funds, and 0.9% in special funds. General funds for operations in the fiscal 2025 allowance have substantially increased compared to fiscal 2024 due to the increased funding for security.



MITDPF: Major Information Technology Development Project Fund

Source: Governor's Fiscal 2025 Budget Books

Proposed Budget Change

As shown in **Exhibit 7**, the fiscal 2025 allowance for DoIT increases by \$50.2 million, or 17.4%, compared to the fiscal 2024 working appropriation after accounting for the proposed deficiency appropriations. The largest change occurs in the security program, as DoIT increased its enterprise support services for State and local agencies relating to cybersecurity and requires more applications software to support this expanded service.

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

How Much It Grows:	General <u>Fund</u>	Special <u>Fund</u>	Federal <u>Fund</u>	Reimb. <u>Fund</u>	<u>Total</u>
Fiscal 2023 Actual	\$139,164	\$48,348	\$190	\$140,545	\$328,247
Fiscal 2024 Working Appropriation	136,615	11,429	0	140,389	288,434
Fiscal 2025 Allowance	<u>172,516</u>	15,103	<u>0</u>	<u>151,055</u>	338,673
Fiscal 2024-2025 Amount Change	\$35,900	\$3,674	\$0	\$10,665	\$50,239
Fiscal 2024-2025 Percent Change	26.3%	32.1%		7.6%	17.4%
Where It Goes:					Change
Personnel Expenses					
Salary increases and associated fr increments	-	_			\$2,023
Net increase of 17.0 new regular p	ositions				2,243
Reclassification of all cybersecurity positions					1,172
Overtime earnings in the Fiscal Office					
Turnover expectancy decreases from 7.87% to 7.70%					
Major Information Technology Development Projects and Oversight					
MITDPF					-13,328
Transfer of reimbursable funds for Development Projects to MITD		J		••	-13,425
Security Program					
Enterprise support services for Star	te and local	agencies re	lating to see	curity	29,838
Security applications software lice	nses, renewa	al, and mair	ntenance		19,373
Infrastructure and Applications Co	osts				
Software licenses					9,766
Enterprise support services for Star	te and local	agencies			2,707 2,289
Annual applications software renewal and maintenance					
Other Changes					
Operating costs for MD FiRST					1,804
Outside consulting services related to information processing					
Communications					935
Additional equipment for cloud services					876

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Where It Goes:	Change
Net of 3.0 new contractual full-time equivalents	703
Data processing supplies and equipment	596
System analysis	550
Equipment repairs and maintenance	435
Computer maintenance contracts	172
Travel expenses	122
Insurance paid to State Treasurer's Office	52
Rent paid to Department of General Services	-146
Other expenses	32
Total	\$50,239

COLA: cost-of-living adjustments

DoIT: Department of Information Technology

MD FiRST: Maryland First Responders Interoperable Radio System Team MITDPF: Major Information Technology Development Project Fund

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

MITDPF and MITDP Expenditures

Current law requires that all general funds appropriated for MITDPs be held in the MITDPF, and DoIT is responsible for MITDP oversight and releasing funds to the agencies, where the funds are shown as reimbursable funds.

DoIT Has Transitioned MITDP Approach to Scaled Agile Framework

The MITDP approach that DoIT currently uses is Agile. In Agile, 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. The previous development approach (Waterfall) is being phased out, and all new projects are using Agile. DoIT's MFR indicators were modified for Agile in fiscal 2019.

MITDPF-funded Projects

Exhibit 8 shows fund transactions for the MITDPF for fiscal 2022 through the proposed budget in fiscal 2025.

Exhibit 8 Major Information Technology Development Project Fund Fiscal 2022-2025 (\$ in Thousands)

	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Opening Fund Balance	\$116,920	\$181,393	\$0	\$300
Revenues				
General Fund	\$84,225	\$116,026	\$104,987	\$78,462
General Fund – Deficiency Appropriation	0	0	0	0
Special Fund – Carryover to Reappropriate				
Funds	0	0	6,800	12,178
Special Fund – Resource Sharing Agreement				
Revenues	3,460	1,050	0	0
Investment Interest	528	300	300	300
Total Available Revenues	\$205,133	\$298,769	\$112,087	\$91,240
Expenditures				
Transferred to Agencies ¹	-\$23,740	-\$291,669	-\$111,787	-\$90,640
Adjustments				
Estimated Carryovers to be Reappropriated	0	-7,100	0	0
End-of-year Fund Balance	\$181,393	\$0	\$300	\$600

¹ Fiscal 2024 and 2025 spending shows all appropriated funds are expended. Should expenditures be less, end-of-year fund balances would be larger.

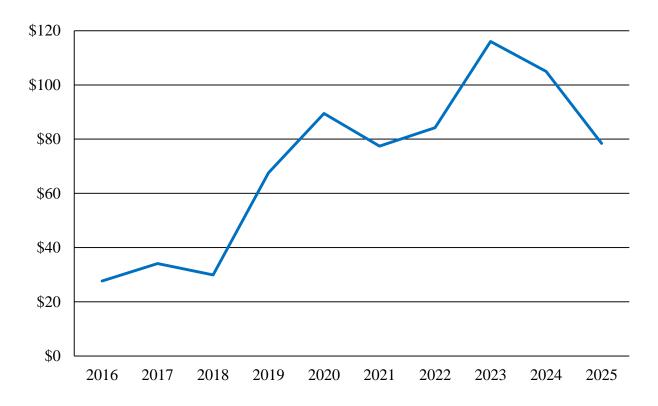
Source: Department of Budget and Management; Department of Information Technology; Department of Legislative Services

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. Reversions from appropriations from fiscal 2017 to 2021 total \$6.8 million. These funds are reappropriated in fiscal 2024 as special funds to support the Enterprise Planning Solutions Planning Initiative. **DoIT should provide information on the canceled funds that comprise the \$12.2 million of reappropriated special funds in fiscal 2025.**

Exhibit 9 shows that although State general fund support for MITDPs has decreased in recent years, it has been accompanied by an increase in the number of MITDPs receiving funding from 15 in fiscal 2015 to 41 in fiscal 2025. A complete list of these projects can be found in **Appendix 2**. There are 2 projects that receive at least \$5 million in general funds in fiscal 2025 for a total of \$25.6 million. These projects are:

- \$10.4 million for the State Board of Elections' (SBE) 2026 New Voting System; and
- \$15.2 million for the Comptroller's Integrated Tax System.

Exhibit 9
General Fund Appropriations into the MITDPF
Fiscal 2016-2025
(\$ 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 MITDPs 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' review of MITDPs. The vast majority of ITPRs were given to DLS prior to the required deadline on January 15, 2024. However, as of February 17, 2024, DoIT notes that the following ITPR has not been approved by DoIT and released to DLS:

• Department of General Services *eMaryland Marketplace* eProcurement Solution.

Additionally, the fiscal 2025 ITPRs for the following projects have not been released to DLS:

- Maryland Department of Health (MDH) Public Health Services Data Modernization Program; and
- Office of the Attorney General (OAG) Case Management and Document Management.

DLS recommends adding language restricting general funds for the two projects for which ITPRs have not been provided to DLS, pending submission of the ITPRs. The third project does not receive funding in fiscal 2025 (OAG Case Management and Documentation Management).

The fiscal 2025 budget for the MITDPF includes six new projects:

- State Department of Assessments and Taxation (SDAT) Maryland Assessment Administration and Valuation System;
- DBM Fleet Management System Replacement;
- DoIT Maryland Enterprise Web Strategy;
- Maryland Department of Agriculture (MDA) Digitization and Modernization Project;
- Maryland Department of Environment (MDE) Portal Project; and
- MDE's MDE Wells and Septic Portal Project.

DLS also recommends committee narrative and reductions to appropriations for some projects. Narrative and fund restrictions along with nongeneral fund deletions are recommended in each agency's budget analysis. Recommendations related to general funds budgeted in the MITDPF appear in the operating budget recommended actions section of this analysis. DLS has recommendations for the following projects:

- SBE Pollbook Project: recommend narrative requiring quarterly reports;
- SBE 2026 New Voting System: recommend narrative requiring quarterly reports;
- SBE 2026 New Campaign Reporting Information System: recommend narrative requiring quarterly reports;
- **SDAT Cloud Revenue Integrated System:** recommend restricting general funds until two reports on this project's status and cybersecurity are submitted; and
- *Maryland Department of Labor (MDL) Electronic Licensing Modernization (ELMo):* recommend deleting \$2,793,000 in special funds included in the allowance in error.

Personnel Data

	FY 23 Actual	FY 24 Working	FY 25 Allowance	FY 24-25 Change	
Regular Positions	184.00	208.00	225.00	17.00	
Contractual FTEs	<u>16.53</u>	0.00	3.00	3.00	
Total Personnel	200.53	208.00	228.00	20.00	
Vacancy Data: Regular Positions					
Turnover and Necessary Vacano	cies, Excluding				
New Positions	,	15.94	7.70%		
Positions and Percentage Vacant as	of 12/31/23	44.00	21.15%		
Vacancies Above Turnover		28.06			

• The fiscal 2025 allowance reflects a net of 17 new regular positions and 3 contractual FTEs. The 3 contractual FTEs are responsible for performing procurement and administration functions for DoIT contracts. **Exhibit 10** shows the new positions added to DoIT's fiscal 2025 budget.

Exhibit 10 New Positions Fiscal 2025

Budget Code	<u>Program</u>	Job Title	Position Count
F50B04.01 – State Chief of	Digital Experience Office	Technology Platform Managers	4
IT	Office of	IT Accessibility Specialist	1
	Accessibility	Accessible Communications Specialist	1
	Delivery Program Management Office	Requirements Business Analysts	2
		Project Managers	2
		Systems Architect	1
F50B04.04 –	LAN/WAN Services	LAN Services Network Engineers	3
Infrastructure		Network Maryland Operations Platform Manager	1
F50B04.07 –	MD FiRST	Assistant System Manager	1
Radio		Configuration/Inventory Manager	1

IT: information technology LAN: local area network

MD FiRST: Maryland First Responders Interoperable System Team

WAN: wide area network

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

• Funding for the new positions does not reflect the standard 25% turnover rate that is typically applied to account for time to hire new staff. **DLS recommends increasing turnover expectancy for 11 new positions to 25%, which are supported with general funds.**

• As of December 31, 2023, DoIT has 44 vacant positions. Of these, 4 positions have been vacant for more than a year, 6 positions have been vacant for more than six months, while the remaining 34 positions have been vacant for less than six months, which includes 21 positions that are new in fiscal 2024 but not yet filled. DoIT notes that all the vacant positions are either in the process of reclassification due to the agency's restructuring under the new executive leadership to accommodate gaps within the agency or are being actively recruited. DoIT expects to fill all these positions by the end of June 2024. **DoIT should comment on the ability to fill the 17 new positions in light of not having yet been able to fill 24 new positions created in fiscal 2024.**

Issues

1. Cybersecurity

In 2022, three pieces of legislation were enacted into law that restructure State cybersecurity. This issue examines the progress made by DoIT to meet the requirements of the legislation.

Local Cybersecurity Support Act

Chapter 241 of 2022 expanded the role of the State in local cybersecurity efforts. Local governments include local school systems and boards and local health departments. Since the enactment of the legislation in 2022, the Maryland Information Sharing and Analysis Center (MD-ISAC) was created in calendar 2022. DoIT notes that over 50 State agencies are members, and additional State agencies and local jurisdictions are continuing to sign up to become members. MD-ISAC aims to produce timely, relevant, actionable cyberthreat intelligence that meets the common needs across the breadth of State and local government stakeholders to reduce cyber risk. Additionally, Chapter 241 also established the Cyber Preparedness Unit at the Maryland Department of Emergency Management (MDEM), which is discussed in detail in the analysis D52 – MDEM.

Modernize Maryland Act

An independent Modernize Maryland Oversight Commission was established according to Chapter 243 of 2022 to ensure confidentiality, integrity, and availability of information held by the State concerning State residents and to advise the Secretary of Information Technology and the State chief information security officer (CISO) on the appropriate IT and cybersecurity investments and upgrades, funding for these investments and upgrades, and future procurement mechanisms. In its initial report published on December 20, 2023, the commission unanimously adopted 20 recommendations for the consideration of the Secretary and the State CISO concerning modernization funding, governance, advice and oversight, planning, management, IT organization, and procurement. Funding recommendations included that the State establish a dedicated IT investment fund over and above DoIT's annual operating budget to finance the replacement of legacy IT systems, process transformation, and effective digital government across the Executive Branch. Recommendations concerning governance comprised the establishment of a Maryland Technology Investment Board by the General Assembly, to be chaired by the Secretary of Information Technology and include multi-agency representation, a public representative appointed by the Governor, and other members as appropriate. Advice and oversight recommendations suggest that the Modernize Maryland Oversight Commission' charter, membership, and authorities be amended to establish the commission as an advisory board with the purpose of identifying best modernization practices, formulating recommendations for the State Executive Branch and the General Assembly, and providing transparency about the progress in addressing modernization objectives across the Executive Branch. Planning, management, and IT organization recommended that DoIT produce a new strategic plan by December 1, 2024, with

specific, measurable, achievable, relevant, and time-bound goals. Finally, the commission recommended that IT procurements of \$2 million or less be exempt from Board of Public Works (BPW) approval. Chapter 243 states that IT procurements valued below \$1 million are exempt from BPW oversight and approval.

In accordance with Chapter 243, the Local Cybersecurity Investment Fund has been established, which is a special, nonlapsing fund being administered by MDEM. The fund is discussed in detail in the analysis D52 – MDEM.

Cybersecurity Coordination and Governance

The legislation with the most significant impact on DoIT is Chapter 242 of 2022. This expanded and enhanced the State's regulatory framework for State and local government cybersecurity. This legislation excludes OAG, the Comptroller, the State Treasurer, and the Legislative and Judicial branches of State government from DoIT oversight related to IT.

OSM is required to report to the Governor and various committees of the General Assembly on its key accomplishments and activities for the year, the state of cyber preparedness, spending on cybersecurity, federal funding sources, and recommendations to improve State and local cyber preparedness on or before December 31 each year. This report was submitted on January 12, 2024, by OSM. The report focused on three key activities, which included development of cybersecurity strategy, minimum security standards, and incident reporting.

As per Chapter 242, OSM published its State Minimum Cybersecurity Standards for the Executive Branch on May 25, 2023. These standards align to the National Institute of Standards and Technology Cybersecurity Framework, consisting of controls that contribute to an organization's overall cybersecurity maturity while mitigating or reducing cybersecurity risk and vulnerabilities. DoIT notes that 20 State agencies completed its Standard Minimum Cybersecurity Standards compliance certification, while 3 agencies did not complete the certification of compliance.

In accordance with Section 5 of Chapter 242, the Statewide Cybersecurity Centralization Strategy was released in August 2023 and is available on DoIT's website. The Statewide Cybersecurity Centralization Strategy addresses key challenges in streamlining and standardizing operations and toolsets, visibility across networks, threat detection capabilities, budgetary constraints, retaining skilled security professionals, partnership between organizations, and cyber resilience measures. To enhance incident response capabilities across all units of the Executive Branch, OSM created the director of cyber resilience position who will oversee and lead the Maryland Security Operations Center (MD-SOC) while assuming responsibility for a wide array of critical systems and functions. OSM continues to develop comprehensive services designed to address a wide range of cybersecurity incidents with strategic partnerships with external vendors. Basic services, at present, include handling all incidents submitted through various channels such as email, phone, or internal ticketing system, including a 24/7 call center. OSM is currently developing centers of excellence that are designed to offer comprehensive guidance, resources, and program materials aimed at enhancing the IT security program of each

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government unit and a statewide asset inventory designed to provide accurate and updated asset inventories information. The plan includes providing training to security personnel and also a possibility of procurement of a centralized mass communications platform equipped with prebuilt templates for rapid dissemination of information that will facilitate seamless communication between key stakeholders.

OSM's strategy plan outlines minimum logging requirements of specific sources to safeguard critical assets and data, effectively mitigate risks, and fortify Maryland's overall cybersecurity resilience. These include, but are not limited to, changes in attributes and credentials, system access and logoff, scheduled task creation or changes, firewall logs, etc. Advanced logging requirements include authentication attempts performed on a web server, connections to malicious websites, transfer of unstructured data files with sensitive data, etc.

The strategy plan also outlines a *Cybersecurity Metrics and Reporting Framework* to ensure accountability, transparency, and consistent performance evaluation across IT and cybersecurity teams. Certain performance metrics like average time to respond to incident tickets, critical patch compliance, and advance EDRs have been included in the MFR submissions by DoIT. **DoIT should brief the committees on how it plans to implement other metrics listed in the Statewide Cybersecurity Centralization Strategy like executive metrics, cybersecurity program outcome-driven metrics, and incident response performance metrics.**

Furthermore, OSM established criteria for reporting cybersecurity incidents for local and State governments including utility providers in accordance with Chapter 242. The guidelines for local and State governments state that cybersecurity incidents must be reported to MD-SOC no later than one hour after confirmation of a detected cybersecurity incident. The guidelines for utility providers state that a detected cybersecurity incident should be reported no later than 24 hours after confirmation of its detection. OSM also established guidelines for public disclosure of cybersecurity incidents in accordance with Chapter 242. Any cybersecurity incident that results in an unauthorized disclosure of substantial information like protected health information, personally identifiable information (PII), private financial information, or uncategorized but sensitive information; a substantive disruption to governmental administrative functions; any mission-impacting disruption to critical government-run services; or permanent loss of a substantial number of records that the State has a statutory or regulatory obligation to retain will be reported publicly. Three incidents were publicly reported in calendar 2023. Two incident investigations reported that there was no known misuse of PII. All three organizations have agreed to provide credit monitoring services for the impacted parties and have advised that breach notification letters will be sent to impacted parties.

Cybersecurity Funding in the State Budget

The fiscal 2025 allowance includes \$68.3 million in general funds for the Security program, which provides a preventive approach to protect the State's public and confidential information and avoid cybersecurity breaches. The \$68.3 million in general funds will be used to provide cybersecurity services to the subscriber of DoIT's enterprise service support, including associated software and license renewals and maintenance. The Cybersecurity Services Team implements best practices for cyber incident response, cyber risk and strategic analysis, vulnerability detection and assessment, intelligence and investigation, digital forensics and forensics analysis, software assurance, and cybersecurity policies and programs.

Exhibit 11 shows that the total funds, including DoIT's funding for cybersecurity in each agency's budget and including those who are not required to have DoIT's oversight for their cybersecurity activities, total \$97.4 million in fiscal 2025, which is \$79.6 million higher than in fiscal 2024. To understand the different areas of spending related to cybersecurity activities in State agency budgets, DLS has categorized them into seven main activity categories, which are (1) statewide cybersecurity assessments; (2) efforts to improve cybersecurity; (3) other cybersecurity assessments; (4) workforce/business development; (5) recovering from cyber incidents; (6) general DoIT oversight; and (7) cybersecurity assistance to non-State agencies.

Exhibit 11 Cybersecurity Funds by Agency Fiscal 2023-2025 (\$ in Thousands)

	<u>2023</u>	<u>2024</u>	<u>2025</u>
Efforts to Improve Cybersecurity*	\$44,985	\$8,610	\$49,396
Statewide Cybersecurity Assessments*	5,879	1	28,000
Recovering from Cyber Incidents	0	0	13,667
Workforce/Business Development	3,161	4,240	4,990
Cybersecurity Assistance to Non State Agencies	6,428	4,540	960
General Department of Information Technology Oversight	272	282	276
Other Agencies – Cybersecurity Assessments*	1,606	244	141
Total	\$62,331	\$17,917	\$97,429

^{*} Includes the Department of Information Technology's funding for security program.

Source: Governor's Fiscal 2025 Budget Books; Department of Legislative Services

2. Update on Dedicated Purpose Account Cybersecurity Spending

From fiscal 2021 to 2024, \$362 million was appropriated into the Dedicated Purpose Account (DPA) for cybersecurity activities. **Exhibit 12** shows that as of February 2024, \$114 million of these funds have been used for a variety of activities.

Exhibit 12 Sources and Uses of DPA Cybersecurity Funds Fiscal 2021-2024 (\$ in Thousands)

Year	<u>Purpose</u>			
	Appropriations			
2021	Cybersecurity Assessments	\$10,000		
2022	Cybersecurity Efforts	100,000		
2023	Comprehensive Cybersecurity Activities and Major IT Projects	100,000		
2024	Cybersecurity Assessments and Remediation	152,000		
	Total Appropriations	\$362,000		
	Proposed DPA Transfer	-\$149,500		
	Net Appropriations Transfer	\$212,500		
	Spending – Budget Amendments Transferring Funds to Agencies			
2022	Cybersecurity Assessments	\$9,571		
2022	Maryland Department of Health Incident Remediation	40,412		
2023	Department of Information Technology Cybersecurity	35,631		
2023	Statewide Cybersecurity Remediation	58,459		
2023	Maryland Department of Health Incident Remediation	25,000		
2023	Reverted from DoIT	-55,030		
	Total Expenditures	\$114,043		
	Total Funds Remaining in DPA	\$98,457		

DoIT: Department of Information Technology

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

Proposed Transfer of \$149.5 Million DPA Appropriation

The Budget Reconciliation and Financing Act of 2024 includes a provision that authorizes a transfer of \$149.5 million to the general fund from the funds for cybersecurity that have yet to be expended in fiscal 2025. The proposed transfer would leave \$98.5 million in the DPA for this purpose. DoIT notes that approximately 60% of the remaining \$98.5 million in the DPA is committed to DoIT and 40% to MDH as the agency continues to recover from the cybersecurity incident in calendar 2021 and expects to spend the entire \$98.5 million over fiscal 2024 and 2025. **DLS recommends committee narrative that outlines how these funds will be spent.**

Operating Budget Recommended Actions

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

Further provided that \$1,900,000 of this appropriation made for the purpose of funding the Department of General Services eMaryland Marketplace eProcurement Solution Major Information Technology Development Project may not be expended until the fiscal 2025 information technology project request for the project has been provided by the Department of Information Technology to the Department of Legislative Services. The report shall be submitted 45 days before the expenditure of funds, and the budget committees shall have 45 days from the date of the receipt of the report to review and comment. Funds restricted pending the receipt of a report may not be transferred by budget amendment or otherwise to any other purpose and shall revert to the General Fund if the report is not submitted to the budget committees.

Explanation: New and ongoing projects must submit an information technology project request (ITPR) to request funding for the project, which is then to be approved by the Department of Information Technology (DoIT). The Department of General Services (DGS) submitted a request for fiscal 2025 funding for the eMaryland Marketplace eProcurement Solution project. While funding was included in the fiscal 2025 allowance for the project, the ITPR was still pending approval from DoIT. This language restricts general funds for the project until DoIT has provided the ITPR to the Department of Legislative Services.

Information Request	Author	Due Date
Fiscal 2025 ITPR for the DGS eMaryland Marketplace eProcurement Solution project.	DoIT	45 days before the expenditure of funds.

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

Further provided that \$1,500,000 of this appropriation made for the purpose of funding the Maryland Department of Health Public Health Services Data Modernization Program Major Information Technology Development Project may not be expended until the fiscal 2025 information technology project request for the project has been provided by the Department of Information Technology to the Department of Legislative Services. The report shall be submitted 45 days before the expenditure of funds, and the budget committees shall have 45 days from the date of the receipt of the report to review and comment. Funds restricted pending the receipt of a report may not be transferred by budget amendment or otherwise to any other purpose and shall revert to the General Fund if the report is not submitted to the budget committees.

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Explanation: New and ongoing projects must submit an information technology project request (ITPR) to request funding for the project, which is then to be approved by the Department of Information Technology (DoIT) and then provided to the Department of Legislative Services (DLS). The fiscal 2025 ITPR for the Maryland Department of Health (MDH) Public Health Services (PHS) Data Modernization Program project has not been provided to DLS. This language restricts general funds for the project until DoIT has provided the ITPR to DLS.

Information Request	Author	Due Date
Fiscal 2025 ITPR for the MDH PHS Data Modernization Program	DoIT	45 days before the expenditure of funds.
project.		

Amount Change

- 3. Increase turnover expectancy for 11 new positions to 25% -\$ 377,207 GF to be consistent with budgeted turnover for new positions.
- 4. Managing for Results (MFR) Goals and Indicators for Services to State Agencies: 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 MFR submission accompanying the fiscal 2026 budget.

Information Request	Author	Due Date
MFR indicators for value and costs of DoIT's services to State agencies	DoIT	With the submission of the fiscal 2026 budget

5. Plan for Spending Cybersecurity Funds Appropriated in the Dedicated Purpose Account (DPA): The Department of Information Technology (DoIT) will have access to up to \$98.5 million in funding in the DPA to support cybersecurity efforts. DoIT advises that these funds will support the next phase of the cybersecurity assessments, including ongoing cybersecurity, vulnerability risk and reduction assessments, privacy impact assessments, and implementation of remediation recommended by the assessments. The committees request that DoIT report on its plans to spend funds in the DPA. The report should include discussions of the activities and timing of the spending, and progress made securing State information technology hardware, software, and systems. It should also include an update on efforts made to address cybersecurity risks in legacy systems.

Information Request	Author	Due Date		
Report on spending DPA funds	DoIT	December 31, 2024		
Total General Fund Net Change		-\$ 377,207		

Appendix 1 2023 Joint Chairmen's Report Responses from Agency

The 2023 JCR requested that DoIT prepare five reports. Electronic copies of the full JCR responses can be found on the DLS Library website.

- Quarterly Report on FMIS Replacement: DoIT has submitted two of the four quarterly reports. The Comptroller's Office has taken over as the lead for the project and has requested an extension to submit the third quarterly report from the original deadline of January 15, 2024, to April 15, 2024.
- MFR Goals and Indicators for Services to State Agencies: DoIT currently has indicators that measure workload and efficiency. However, the measures do not address value, and there are no indicators for costs. DoIT did not submit new measures with the fiscal 2025 MFR submission. However, DoIT explained that a service rate assessment was performed in response to the new MFR requirements for DoIT. At the direction of DBM and the MFR coordinator, DoIT notes that changes/updates to the existing MFRs will not commence until spring 2024.

Analysis of the FY 2025 Maryland Executive Budget, 2024

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

A 1221	Project Title	Agency	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs – All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	Recommendations
ncic of the E	Case Management and Document Management	OAG	\$50	\$3,875	2017	2022	No Project Management Assigned, Vendor Compliance	
M 5000 A	Enterprise Modernization	Workers' Compensation Commission		23,723	2019	2025		
amiland Evacution	Pollbook Project	SBE	896	22,151	2020	2027	Resource Availability, Technology, Interdependencies, User Interface, Implementation	Quarterly reporting language recommended in agency's analysis.
Budaat 2024	2026 New Voting System	SBE	10,404	54,928	2024	2027	Resource Availability, Technology, Interdependencies, User Interface, Implementation	Quarterly reporting language recommended in agency's analysis.

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Project Title	<u>Agency</u>	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs — All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	<u>Recommendations</u>
2026 New Campaign Reporting Information System	SBE	532	1,227	2024	2026	Resource Availability, Technology, Interdependencies, User Interface, Implementation	Quarterly reporting language recommended in agency's analysis.
Statewide Emergency Management Communication System Upgrade	MIEMSS	65	15,413	2018	2026	Resource Availability, Technology, Interdependencies, User Interface, Implementation, Organizational Culture	
MIA Legacy System Replacement	MIA		7,543	2021	2025	High Project Cost, Resource Availability, Implementation	Language requesting two reports on its project development, including updates on estimated project costs, actual spending, and progress in completing project components recommended in agency's analysis.

Project Title	<u>Agency</u>	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs — All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	Recommendations
Integrated Tax System	Comptroller	15,193	204,877	2017	2027	Project Funding, Resource Availability, Interdependencies, Technical	
Central Payroll Bureau System Replacement	Comptroller	580	14,000	2023	2028	Implementation, Funding, Resource Availability, Interdependence, Implementation	
FMIS Replacement	Comptroller	4,000	260,673	2024	2030	Multiple Agency Governance, Resource Availability, Technical, Interdependencies, Implementation, Organizational Culture	
Financial Systems Modernization	State Treasurer	4,628	31,276	2018	2026	Cost Rebaseline, Resource Availability, Interdependence, Technical, Implementation	

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	Project Title	<u>Agency</u>	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs – All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	<u>Recommendations</u>
	Cloud Revenue Integrated System (CRIS)	SDAT	50	31,235	2018	2028	Supportability, Resource Availability, Procurement Delays	Language requesting a CRIS project update with \$50,000 in general fund restriction recommended in the agency's analysis.
	Maryland Assessment Administration and Valuation System	SDAT	550	14,571	2025	2028	Resource Availability, Implementation	
1	Capital Budget Information System Replacement	DBM	50	7,564	2023	2028	n/a	
	Fleet Management System Replacement	DBM	250	2,850	2025	2027	n/a	
	Enterprise GIS	DoIT	1,213	4,180	2023	2025	Loss of Executive Sponsor	
	networkMaryland 100G Backbone Upgrade	DoIT	4,504	8,762	2024	2026	Funding, Implementation	
	Maryland OneStop Portal	DoIT	5,411	42,594	2018	2025	n/a	

Project Title	<u>Agency</u>	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs — All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	Recommendations
MD FiRST Radio Tower and Backhaul Improvement Project	DoIT	1,050	7,731	2024	2028	n/a	
Maryland Enterprise Web Strategy	DoIT	1,500	21,500	2025	2028	Resource Availability, User Interface,	
eMaryland Marketplace eProcurement Solution	DGS	1,900	55,029	2019	2026	Funding, Organizational Culture, Implementation, Lack of MOU between eMaryland Marketplace Advantage and Pilot Agencies	DLS recommends language restricting \$1.9 million in general funds in DoIT's budget until the fiscal 2025 ITPR has been provided by DoIT to DLS. Refer to Operating Budget Recommended Actions section in this analysis.
AS400 Replacement	DGS	50	4,643	2023	2028	Interagency Interdependencies, Funding, Resource Availability, Technical, User Interface, Implementation	

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Project Title	<u>Agency</u>	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs — All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	Recommendations
DNR Modernization and OneStop Integration Project	DNR	50	16,125	2021	2025	Technical	
Modernizing Maryland Park Reservation and Revenue Management System	DNR	2,095	8,030	2023	2026	n/a	
MDA Customer Data Modernization Initiative	MDA	2,167	6,543	2023	2026	n/a	
MDA Digitization and Modernization Project	MDA	1,050	60,388	2025	2029	Program Scope, Cost, Technical Capabilities, Sponsorship, Technical, Organizational Culture	
Statewide Electronic Health Records (formerly Computerized Hospital Record & Information System)	MDH	423	38,687	2017	2026	Prolonged Procurement Delays, Resource Availability	

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Project Title	<u>Agency</u>	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs — All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	Recommendations
Integrated Electronic Vital Records Registration System	MDH	1,117	29,268	2019	2027	Resource Availability	
MDH Licensing and Regulatory Management System Project	MDH	528	7,248	2019	2025	Resource Availability, Expanded Scope to Provide	
Long Term Supports and Services Tracking System	MDH	3,834	427,183	2020	2028	Sponsorship, Funding, Interdependencies	
Migration of the Cloud Data Center	MDH	50	22,816	2022	2027	Resource Availability, Undefined Project Scope and Timeline	
MDH Statewide VoIP Conversion	MDH	1,958	12,926	2022	2028	n/a	
Bed Registry and Referral System	MDH	632	5,944	2023	2025	Resource Availability, Implementation	
OPER Systems Integration and Modernization	MDH	999	5,103	2023	2026	Resource Availability, Implementation	

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<u>Project Title</u>	<u>Agency</u>	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs — All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	Recommendations
Maryland AIDS Drug Assistance Program Case Management System	MDH	2,308	6,342	2023	2027	Funding, Resource Availability	
Public Health Services Data Modernization Program	MDH	1,500	15,520	2024	2027	Funding, Resource Availability, Organizational Culture	DLS recommends language restricting \$1.5 million in general funds in DoIT's budget until the fiscal 2025 ITPR has been provided by DoIT to DLS. Refer to Operating Budget Recommended Actions section in this analysis.
Non-Medicaid Case Management Modernization	MDH	1,500	16,233	2024	2027	Organizational Culture	·
Medicaid Management Information System	MDH	9,810	822,370	2017	2028	n/a	

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<u>Project Title</u>	<u>Agency</u>	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs – All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	<u>Recommendations</u>
Shared Human Services Platform (MD THINK)	DHS	600	831,466	2018	2025	Mature Cloud Platform, Funding, Resource Availability, Interdependencies, Technical, Organizational Culture, Supportability	
MDL Omni-channel Contact Center System	MDL	132	9,340	2022	2025	Funding, Resource Availability, Interdependencies, Organizational Culture, Implementation	
Electronic Licensing Modernization	MDL	24	8,449	2023	2026	Scope of Work, Funding	Language deleting \$2,793,000 in special funds that were included in the allowance in error recommended in the agency's analysis.
Computerized Criminal History Replacement (Phase II)	DPSCS	672	20,007	2018	2027	Funding, Resource Availability, Interdependencies	

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Project Title	Agency	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs – All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	Recommendations
Electronic Patient Health Record Replacement	DPSCS	50	21,619	2019	2027	Funding, Organizational Culture, Implementation	
Learning Management System Replacement	DPSCS		2,711	2020	2026	Resource Availability	
Commodity Classification Automated Tracking System Replacement Project	MSDE		42,646		2026	Funding	
New Unified Financial Aid System for Higher Education	МНЕС	3,204	21,000	2023	2026	Resource Availability	
Enterprise Resource Planning System	BCCC		19,563		2025	n/a	
Energy Efficiency Program Management System	DHCD		3,008		2025	n/a	
MDE Portal Project	MDE	1,050	5,398	2025	2027	Funding	

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Project Title	Agency	MITDPF Fiscal 2025 GF and <u>MITDPF Approp.</u>	Total Funding Costs – All Funds	First Year of Funding	Est. Completion <u>Fiscal Year</u>	High-risk <u>Categories</u>	Recommendations
MDE Wells and Septic Portal Project	MDE	904	3,435	2025	2028	Funding, Resource Availability, Interdependencies	
Automated Licensing and Registration Tracking System	MSP	1,107	9,789	2014	2026	n/a	

BCCC: Baltimore City Community College DGS: Department of General Services

DHCD: Department of Housing and Community Development

DHS: Department of Human Services DNR: Department of Natural Resources

DPSCS: Department of Public Safety and Correctional Services

GF: general funds

MD THINK: Maryland Total Human-services Integrated Network

MHEC: Maryland Higher Education Commission

MIA: Maryland Insurance Administration

MIEMSS: Maryland Institute for Emergency Medical Services Systems

MOU: memorandum of understanding

MSP: Maryland State Police

OPER: Office of Provider Engagement and Regulation

VoIP: Voice over Internet Protocol

Appendix 3 Geographic Information Systems Modernization Major Information Technology Development Project Department of Information Technology

New/Ongoing: Ongoing										
Start Date: Fiscal 2023					Est. Completion Date: Fiscal 2025					
Implementation Strategy: Waterfall										
(\$ in Millions)	Prior Year	2024	2025	2026	2027	2028	Remainder	Total		
GF	\$2.088	\$0.879	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$2.967		
SF ¹	0.000	0.000	1.213	0.000	0.000	0.000	0.000	1.213		
Total	\$2.088	\$0.879	\$1.213	\$0.000	\$0.000	\$0.000	\$0.000	\$4.180		

- **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 scheduled to go live in the first quarter of fiscal 2025.
- **Changes:** The project team is exploring disaster recovery options with the Infrastructure Team for the new environment to restore access and functionality after a disaster event.
- *Concerns:* This project has lost its executive sponsor with the agency. DoIT is in the process of briefing potential new executive sponsors to ensure that this support is secured. Additionally, because many agencies are impacted, interdependency is another significant risk but is not likely to hinder development.

¹ 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 4 networkMaryland 100 Gigabyte Backbone Upgrade Major Information Technology Development Project Department of Information Technology

New/Ongoing: Ongoing									
Start Date: Fiscal 2023				Est. Completion Date: Fiscal 2026					
Implementation Strategy: Agile									
(\$ in Millions)	Prior Year	2024	2025	2026	2027	2028	Remainder	Total	
SF excl. MITDF	\$2.009	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$2.009	
SF MITDF ¹	2.250	0.000	4.504	0.000	0.000	0.000	0.000	6.753	
Total	\$4.259	\$0.000	\$4.504	\$0.000	\$0.000	\$0.000	\$0.000	\$8.762	

- **Project Summary:** The project increases the bandwidth of the most heavily utilized core sites that are interconnected by networkMaryland fiber from 10 gigabytes (GB) to 100 GB to support the exponential growth in bandwidth required by current subscribers.
- **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.
- *Concerns*: Based on the fiscal 2024 mid-year report submitted by DoIT on the MITDPF and the portfolio of all MITDPs, DoIT notes that there is a risk that the installation costs may increase as a result of significant delays in supplier delivery.

¹ 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 Maryland OneStop Portal Major Information Technology Development Project Department of Information Technology

New/Ongoing: Ongoing								
Start Date: Fiscal 2018 Est. Completion Date: Fiscal 2026								
Implementation Strategy: Agile								
(\$ in Millions) Prior Year 2024 2025 2026 2027 2028 Remainder T							Total	
GF	\$25.418	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$25.418
SF	7.800	3.965	5.411	0.000	0.000	0.000	0.000	17.176
Total	\$33.218	\$3.965	\$5.411	\$0.000	\$0.000	\$0.000	\$0.000	\$42.594

- **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:* The project is anticipated to close in fiscal 2025. A new MITDP will be created to address any new initiatives for the OneStop platform.
- *Changes:* The sub-projects MDL's ELMo and MDA'sModernization were removed from the OneStop project, and DoIT is working on the rebaselining to complete minimal viable requirements for the project.

Appendix 6 MD FIRST Radio Tower and Backhaul Improvement Project Major Information Technology Development Project

Department of Information Technology

New/Ongoing: Ongoing									
Start Date: August 2021 Est. Completion Date: Fiscal 2026									
Implementation Strategy: n/a									
(\$ in Millions)	(\$ in Millions) Prior Year 2024 2025 2026 2027 2028 Remainder Total								
SF \$6.450 \$0.000 \$1.050 \$0.000 \$0.000 \$0.230 \$0.000 \$7.731								\$7.731	
Total	\$6.450	\$0.000	\$1.050	\$0.000	\$0.000	\$0.230	\$0.000	\$7.731	

- **Project Summary:** Chapter 317 of 2021 requires revenues DoIT receives from Resource Sharing Agreements (RSAs) to be deposited into the MITDPF. The law expands the purpose of the MITDPF to allow RSA funds to be used to support the MD FiRST Radio System, specifically its network of radio communications towers. The original infrastructure builds of MD FiRST was completed in April 2023 and consist of approximately 180 radio communication towers within its statewide network that support State, local, and federal first responder communications. These funds support (1) radio tower remediations to bring the existing towers up to construction code standards; (2) tower site maintenance and repair; (3) tower site physical security; (4) tower start-up lease costs; (5) tower construction; and (6) mitigation of known backhaul gaps within the MD FiRST network.
- **Need:** Tower and backhaul improvements are required to support the MD FiRST capital project, the MD FiRST T1 to Ethernet project along with the MD FiRST *Capital Improvement Program* to improve overall system operability, resilience, performance, and reliability.
- *Observations and Milestones:* This project started in fiscal 2023 and will enhance the upgrades to the system's towers. Capital budget funding is received by the towers.
- *Concerns*: This project is low risk and that will be supported by RSA revenues.

Appendix 7 Maryland Enterprise Web Strategy Major Information Technology Development Project Department of Information Technology

New/Ongoing: New									
Start Date: Fiscal 2025 Est. Completion Date: Fiscal 2028									
Implementation Strategy: Agile									
(\$ in Millions)	Prior Year	2024	2025	2026	2027	2028	Remainder	Total	
GF \$0.000 \$0.000 \$1.500 \$4.000 \$8.000 \$8.000 \$0.000 \$21.500								\$21.500	
Total	\$0.000	\$0.000	\$1.500	\$4.000	\$8.000	\$8.000	\$0.000	\$21.500	

- **Project Summary:** This project is a new effort and will focus on ensuring agency websites, web applications, digital services, and mobile applications meet these principles: (1) accessible to all Marylanders; (2) consistent visual design and agency brand identity; (3) content that is authoritative and easy to understand; (4) user-centered and data-driven design; (5) mobile-first design that scales across varying device sizes; and (6) secure web presence.
- *Need:* The lack of centralized, user focused content limits the adoption of web services by Maryland residents including the State's ability to leverage artificial intelligence to better support user needs.
- *Observations and Milestones:* The project is currently in planning stage.
- *Concerns*: A contract for an Agile web team will be needed to support this effort. Additionally, continuous research is required to ensure that it meets the needs of the public.

Appendix 8 Enterprise Solutions Planning Initiative Major Information Technology Development Project Department of Information Technology

New/Ongoing: Ongoing								
Start Date: July 2017 Est. Completion Date: Ongoing Development Costs								
Implementation Strategy: Agile								
(\$ in Millions)	2025	2026	2027	2028	Remainder	Total		
GF	\$4.839	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$4.839
SF ¹	3.300	2.835	\$0.000	2.280	2.280	4.438	0.000	15.133
Total	\$8.139	\$2.835	\$0.000	\$2.280	\$2.280	\$4.438	\$0.000	\$19.972

- **Project Summary:** Provide integrated planning support to IT 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.
- Observations and Milestones: Enhancements for the Project Management Information System (PRISM) were canceled in fiscal 2023 due to the bankruptcy of the vendor servicing the system. A new vendor acquired the prior vendor assets and will provide operations and maintenance support for PRISM. Procurement delays have impacted progress. Upon completion of the procurement, the implementation is expected to begin in the third quarter of fiscal 2024.
- *Changes*: This is an ongoing initiative. Costs are adjusted to reflect project needs.

¹ 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 9 Voice over Internet Protocol Phone Services Transition Project Major Information Technology Development Project Department of Information Technology

New/Ongoing: Ongoing								
Start Date: Apr		Est. Completion Date: Fiscal 2024						
Implementation Strategy: Agile								
(\$ in Millions) Prior Year 2024 2025 2026 2027 2028 Remainder Tota								
GF	\$11.850	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$11.850
SF	7.364	0.000	0.000	0.000	0.000	0.000	0.000	7.364
FF	3.193	0.000	0.000	0.000	0.000	0.000	0.000	3.193
Total	\$22.407	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$22.407

- **Project Summary:** This is an infrastructure project that migrates the State's telephone system into Voice over Internet Protocol (VoIP). VoIP converts your voice into a digital signal, allowing one to make a call directly from a computer, a VoIP phone, or other data-driven devices. This replaces older Time Division Multiplexing technology. Hardware such as private branch exchange (PBX) equipment, and software will be replaced. DoIT manages PBXs at 30 locations throughout the state.
- *Observations and Milestones:* The project continues to make steady progress toward project completion, which is planned for the end of fiscal 2024.

Appendix 10 Object/Fund Difference Report Department of Information Technology

FY 24

				1127				
			FY 23	Working	FY 25	FY 24 - FY 25	Percent	
		Object/Fund	<u>Actual</u>	Appropriation	Allowance	Amount Change	Change	
An	Pos	sitions						
aly	01	Regular	184.00	208.00	225.00	17.00	8.2%	
sis	02	Contractual	16.53	0.00	3.00	3.00	N/A	
of	Tot	al Positions	200.53	208.00	228.00	20.00	9.6%	
Analysis of the FY 2025 Maryland Executive Budget, 50	Obj	jects						
F	01	Salaries and Wages	\$ 25,802,401	\$ 31,739,861	\$ 37,376,314	\$ 5,636,453	17.8%	
Y 2	02	Technical and Special Fees	470,593	0	882,913	882,913	N/A	
02.	03	Communication	7,666,061	7,222,289	8,192,608	970,319	13.4%	
5 A	04	Travel	59,813	98,821	220,418	121,597	123.0%	
A ai	06	Fuel and Utilities	47,727	53,000	66,700	13,700	25.8%	
50	07	Motor Vehicles	42,153	9,420	9,420	0	0%	
an	08	Contractual Services	280,275,315	238,736,715	280,449,628	41,712,913	17.5%	
d F	09	Supplies and Materials	130,487	17,122	29,122	12,000	70.1%	
ìхе	10	Equipment – Replacement	12,823,574	8,243,677	8,317,010	73,333	0.9%	
Cu	11	Equipment – Additional	529,904	960,000	2,735,519	1,775,519	184.9%	
tiv	13	Fixed Charges	398,667	487,516	393,522	-93,994	-19.3%	
e B	Tot	al Objects	\$ 328,246,695	\$ 287,568,421	\$ 338,673,174	\$ 51,104,753	17.8%	
gpn	Fur	nds						
et,	01	General Fund	\$ 139,163,511	\$ 135,749,760	\$ 172,515,582	\$ 36,765,822	27.1%	
2024	03	Special Fund	48,348,429	11,429,175	15,103,009	3,673,834	32.1%	
24	05	Federal Fund	190,036	0	0	0	0.0%	
•	09	Reimbursable Fund	140,544,719	140,389,486	151,054,583	10,665,097	7.6%	
	Tot	al Funds	\$ 328,246,695	\$ 287,568,421	\$ 338,673,174	\$ 51,104,753	17.8%	

Note: The fiscal 2024 appropriation does not include deficiencies. The fiscal 2025 allowance does not include statewide salary adjustments budgeted within the Department of Budget and Management.

Appendix 11
Fiscal Summary
Department of Information Technology

	FY 23	FY 24	FY 25		FY 24 - FY 25
<u>Program/Unit</u>	Actual	Wrk Approp	Allowance	Change	% Change
01 Major Information Technology Development Project Fund	\$ 116,025,653	\$ 103,967,147	\$ 90,639,592	-\$ 13,327,555	-12.8%
01 State Chief of Information Technology	36,732,488	36,763,716	38,588,019	1,824,303	5.0%
02 Security	54,330,787	18,284,172	68,297,241	50,013,069	273.5%
03 Application Systems Management	34,214,118	40,647,761	45,290,184	4,642,423	11.4%
04 Infrastructure	59,151,365	55,425,335	74,616,795	19,191,460	34.6%
05 Chief of Staff	2,129,751	3,256,093	3,659,965	403,872	12.4%
06 Major Information Technology Development Projects	10,772,625	13,424,570	0	-13,424,570	-100.0%
07 Radio	14,889,908	15,799,627	17,581,378	1,781,751	11.3%
Total Expenditures	\$ 328,246,695	\$ 287,568,421	\$ 338,673,174	\$ 51,104,753	17.8%
General Fund	\$ 139,163,511	\$ 135,749,760	\$ 172,515,582	\$ 36,765,822	27.1%
Special Fund	48,348,429	11,429,175	15,103,009	3,673,834	32.1%
Federal Fund	190,036	0	0	0	0.0%
Total Appropriations	\$ 187,701,976	\$ 147,178,935	\$ 187,618,591	\$ 40,439,656	27.5%
Reimbursable Fund	\$ 140,544,719	\$ 140,389,486	\$ 151,054,583	\$ 10,665,097	7.6%
Total Funds	\$ 328,246,695	\$ 287,568,421	\$ 338,673,174	\$ 51,104,753	17.8%

Note: The fiscal 2024 appropriation does not include deficiencies. The fiscal 2025 allowance does not include statewide salary adjustments budgeted within the Department of Budget and Management.