



EXECUTIVE OFFICE OF TECHNOLOGY SERVICES & SECURITY

COMMONWEALTH OF MASSACHUSETTS | 1 ASHBURTON PLACE, 8TH FLOOR, BOSTON, MA 02108

MAURA T. HEALEY
GOVERNOR

KIMBERLEY DRISCOLL
LIEUTENANT GOVERNOR

JASON SNYDER
SECRETARY

June 29, 2023

The Honorable Diana DiZoglio
State Auditor
State House, Room 230
Boston, MA 02133

Chair Aaron Michlewitz
House Committee on Ways and Means
State House, Room 243
Boston, MA 02133

Chair Antonio Cabral
Joint Committee on State Administration
and Regulatory Oversight
State House, Room 466
Boston, MA 02133

Chair Michael Rodrigues
Senate Committee on Ways and Means
State House, Room 212
Boston, MA 02133

Chair Nick Collins
Joint Committee on State Administration
and Regulatory Oversight
State House, Room 312-E
Boston, MA 02133

Dear Auditor DiZoglio, Chair Michlewitz, Chair Rodrigues, Chair Cabral, and Chair Collins:

Pursuant to Chapter 126 of the Acts of 2022, the Executive Office of Technology Services and Security (EOTSS) is pleased to provide you with the enclosed report detailing an account of IT-related project expenditures over the previous 12-month period.

Due to the June 30th reporting deadline, amounts reported in the enclosed report are actuals through June 9th and forecasts through June 30th since final FY23 numbers will not be known with certainty until after the MMARS Accounts Payable period at the end of August. In FY23, there were 75 active IT projects across the Executive Branch, compared with 65 in the prior year. In total \$301M was invested in qualifying IT capital projects in FY23, an increase of 12% over FY22. Almost \$268M was invested in the same period last year.

	FY23			FY22		
	Number of projects	Investment (\$000s)	% of Total projects	Number of projects	Investment (\$000s)	% of Total projects
Executive Office						
Health and Human Services	11	\$136,777	45%	10	\$114,774	43%
Technology Services and Security	8	\$43,114	14%	6	\$48,212	18%
Public Safety and Security	16	\$33,592	11%	9	\$25,071	9%
Transportation	20	\$27,059	9%	22	\$21,344	8%
Education	6	\$26,905	9%	5	\$25,141	9%
Labor and Workforce Development	1	\$20,186	7%	2	\$21,980	8%
Administration and Finance	9	\$8,021	3%	7	\$6,489	2%
Energy and Environmental Affairs	4	\$4,885	2%	4	\$4,750	2%
Housing and Economic Development	0	\$449	0%	0	\$0	0%
	75	\$300,987	100%	65	\$267,761	100%

FY23 Investment activity (projects >\$250K)

EOHHS and EOTSS remain the principal investors in IT, accounting for 59% of total investment dollars in FY23 compared with 61% in FY22. For the anticipated FY24 \$250K+ IT Projects Report, EOTSS will detail IT spending for the Executive Office of Veterans' Services and the Executive Office of Housing and Livable Communities as newly-established cabinet secretariats.

I am grateful for your continued partnership with EOTSS. Please feel free to contact Scott Ahern at scott.m.ahern@mass.gov should you have any questions about this report.

Sincerely,



Jason Snyder

Secretary, Executive Office of Technology Services and Security, and Chief Information Officer of the Commonwealth of Massachusetts



Executive Office of Technology Services and Security

FY23 \$250K+ IT Projects Report

June 2023

Executive branch information technology projects in FY23

The Executive Office of Technology Services and Security (EOTSS) has collaborated with agencies across state government to improve the delivery of digital services for constituents, schools, businesses, government agencies, and municipalities. EOTSS is focused on modernizing the Commonwealth's Information Technology (IT) landscape while prioritizing security, leveraging technology across multiple agencies, and investing in high-impact projects that can be efficiently supported over their useful lives. IT projects are centered around several categories of investment, as detailed below.

Improving government performance

Key initiatives in this report include the digitization of patient health records at the Holyoke and Chelsea Soldiers' Homes and Departments of Public and Mental Health; the standardization of data collected by the Executive Office of Education and its agencies to connect business applications, streamline user access, and make the data and analytics secure, cloud-based and user-friendly for parents, educators, schools and community education providers; and the establishment of a cross-tracking system to consolidate data from criminal justice agencies, the Trial Court, the Parole Board, and houses of correction, as mandated in the 2018 Criminal Justice Reform Act.

Improving government service delivery

This report includes projects that: modernize the Commonwealth's Unemployment Insurance online claims system; create an integrated benefits portal that allows citizens to access multiple healthcare benefits; and expand electronic access to occupational licenses and permits at EOEEA and EOHED.

Modernizing technical infrastructures

There are continued investments in digital infrastructure, networks, and hosting services to enhance the resiliency of the Commonwealth's information systems and business applications, ensuring the uninterrupted delivery of government services to constituents and stakeholders, and expanding the capabilities of an increasingly mobile workforce.

Securing the integrity of citizen data and state assets

We invest in initiatives that support the Commonwealth's Security Incident and Event Management system, which enhances the security of the Commonwealth's networks and information systems by enabling EOTSS to detect, investigate, communicate, and mitigate cyber threats to systems and data. Another critical component of the Commonwealth's cybersecurity framework is the vulnerability management and mitigation program. This program helps ensure that state agencies remain both vigilant and aware of persistent cyber threats and committed to a continuous and adaptive vulnerability management program to mitigate ever-present threats. In addition to the Commonwealth's workforce, these initiatives support municipal government and state higher education institutions by providing access to critical cybersecurity training to better detect and avoid cyber threats.

Executive Office of Health and Human Services

\$136,777,139

Health Insurance Exchange (HIX) Integrated Eligibility System (IES)

\$49,582,572

This project supports the development and implementation of the Affordable Care Act (ACA)-compliant health insurance exchange and Medicaid eligibility system, supporting the Health Connector and MassHealth. The HIX/IES system provides the eligibility determination foundation both for Massachusetts' state-based marketplace (the "Connector") as well as MassHealth's Modified Adjusted Gross Income (MAGI) Medicaid population, under the provisions of the ACA. The benefits to the Commonwealth include more accurate and timely determination of eligibility for Health Connector and MassHealth programs, continued compliance with federal and state policy and regulation, reduced operational and administrative burden on staff, enhanced capacity for program integrity assessments and audits, and overall improvement in programmatic efficiency. Ultimately this results in better and more cost-effective provisioning of health insurance benefits to residents of the Commonwealth. HIX/IES manages the eligibility of approximately 2 million Commonwealth residents and enables health plan shopping for 300,000 eligible people. In FY24, HIX/IES will begin to integrate with other health department systems, such as the Integrated Eligibility and Enrollment system.

Medicaid Management Information System (MMIS) Modernization

\$31,772,954

This project funds upgrades to Medicaid IT systems, including improved case management tracking for Medicaid, data reporting, and analytic systems. The project supports MassHealth Payment Reforms, enhances service delivery, improves IT agility, and aligns with the federal Center for Medicare & Medicaid Services announced strategic technology and funding directives. The planned redesign for Member and Provider Experience enhancements will improve the constituent experience and also provide streamlined workflows for assisting and managing member and provider information. MassHealth will be able to efficiently manage the complex contract compliance requirements and provide the coordination required to manage the Accountable Care Organizations (ACOs), Managed Care Organizations (MCOs) contracts and Community Partners. MMIS Modernization seeks to improve services for vulnerable populations (such as Long Term Services and Support (LTSS) and Behavioral Health) and improve member and provider experience through mobile applications, online self-service options and a provider portal. Automating current manual processes will improve service delivery and make it more efficient and responsive. Continuation of the MassHealth Payment Reform (ACO full implementation) will improve health care quality for the Medicaid population and reduce costs by converting the Fee for Service (FS)-based structure to one of the three types of ACO models, while also enhancing collaboration between traditional health providers and behavioral health providers through the Community Partners program. Implementing LTSS Data Repository and Behavioral Health Redesign will improve services to vulnerable and under-served populations.

Enhanced Analytics

\$13,094,234

The Enhanced Analytics project will provide improved and more timely reporting to enable Accountable Care Organizations (ACO) to forecast financials, improve population health management and be accountable for quality outcomes. ACOs directly impact 1.2M MassHealth members and their access to health and welfare programs. This project will replace outdated and end-of-life data servers, which will dramatically improve capacity, availability and performance and enable the Data Warehouse to in-source many data, analytic and reporting functions. The project will provide an improved and more timely reporting to support MassHealth Program activities including Payment Reform, enabling ACOs to forecast financials, improve population health management and be accountable for quality outcomes for MassHealth members.

Integrated Eligibility & Enrollment

\$12,500,000

The goal of the Integrated Eligibility and Enrollment (IE&E) initiative is to improve the overall client experience and enhance integration and interoperability among in-scope programs and enhance integration & interoperability between departments. In 2019, the Commonwealth identified five benefit programs in need of updates: MassHealth/MAGI, Department of Transitional Assistance (DTA), Department of Public Health, Department of Housing and Community Development, and the Department of Early Education and Care. In December 2019, these

stakeholders prioritized the goal of improving client communications through the Common Noticing Initiative. The IE&E Steering Committee determined that the first priority of the project would be the development of a Common Noticing Solution to improve client communications and to support DTA and MassHealth/Commonwealth Care Alliance (MH/CCA)/HIX. The new solution will modernize and integrate the eligibility and enrollment process for state benefits agencies, improve the overall client experience and enhance integration and interoperability among the in-scope programs. In addition, the project enhances integration and interoperability between departments.

Electronic Health Record Modernization at DPH and DMH

\$10,839,827

The Department of Public Health (DPH) Hospital Systems and the Department of Mental Health (DMH) must update a 20-year-old health record system. This program replaces the existing legacy solution that does not meet standards for medication management, patient care and safety and is not positioned to meet the federal Office of the National Coordinator (ONC) CURES Act requirements that healthcare providers and payers give patients access to electronic healthcare records without delay or expense. It funds efforts towards a consolidated Electronic Health Record (EHR) for inpatient services. Since the implementation of MediTech over a decade ago, and Meta Healthcare more recently, EHR technology has changed significantly. Today DPH and DMH hospitals and State Office of Pharmacy Services (SOPS) face significant challenges related to the age of the Meditech EHR and the stability of Meta Healthcare. These challenges include significant downtime on the Meta Healthcare side, which potentially affects patient safety, reporting, and the lack of interoperability, especially with Computerized Physician Order Entry/Electronic Medication Administration Record (cPOE/eMAR).

Transformed Medicaid Statistical Information Systems (T-MSIS) - Phase II

\$8,641,118

This project funds upgrades to Medicaid IT systems, including improving case management tracking for Medicaid and improving data reporting and analytic systems. Enhancements to the T-MSIS include migrating the reporting modules of the Encounter data collection process from a legacy proprietary file format to the HIPAA 837 Post Adjudicated format, as mandated by Federal Guideline 45 CFR § 162.1102(b)(2)(v)(C) ("HIPAA 837"). This ensures compliance with federal mandates and continued access to federal funds for operating the MassHealth program. Phase II will support in-depth CMS analysis of cost and population metrics, and provide timely feedback to CMS on Medicaid quality, cost, and usage patterns. This information will be used in developing Medicaid program-related delivery enhancements to constituents of the Commonwealth and provide data to improve decision making and determinations regarding Medicaid costs and services statewide.

Registry of Vital Records and Statistics Digital System Upgrade

\$3,500,000

This project provides essential improvements to an outdated and vulnerable technology environment. The scope and costs provide for a fully electronic, inter-, and intra-operable Vital Registration and Statistics System (VRSS), an electronic document management system, a central database, customer service kiosks and a client relations management system that will support core functions in a cost-effective, secure and customer service friendly manner while reducing redundancies, enhancing workflows, and improving data accuracy and timely reporting.

Virtual Gateway Migration to AWS

\$2,925,406

This is the migration of EOHS Virtual Gateway infrastructure and the 50+ applications it hosts from a private cloud vendor to Amazon Web Services (AWS). The project eliminates significant cost increases (~\$2M) from maintaining infrastructure in a private cloud and moving applications and infrastructure from aging and difficult-to-support infrastructure to the AWS cloud. It will facilitate more streamlined maintenance and support for these applications and will result in potential operating costs savings.

Electronic Medical Records for Executive Office of Veterans' Services

\$2,423,777

This project will better coordinate care in the Chelsea and Holyoke Veterans' Homes and partner organizations to comply with regulations requiring interoperability with Accountable Care Organizations (ACOs) and electronic prescriptions. An Electronic Medical Record (EMR) will allow the veterans' homes to coordinate care across partner organizations and comply with regulations requiring interoperability with ACOs and electronic prescribing. It provides the ability to support data sharing and the exchange of information, allowing patient data to move with the

patient to improve access and continuity of care as well as increased Medicare billing; funds that today cannot be reimbursed by CMS due to gaps in process and documentation for audit. This project will provide both improved quality of care and the ability to meet regulatory requirements, as well as better coordinate care in veterans' homes and partner organizations to comply with regulations requiring interoperability with Accountable Care Organizations (ACOs) and electronic prescriptions. An EMR will allow the veterans' homes to coordinate care across partner organizations and comply with regulations requiring interoperability with ACOs and electronic prescribing.

Massachusetts Rehabilitation Commission Systems Modernization (One MCR)

\$997,000

This project continues the modernization of MRC systems that manage eligibility, enrollment, case management and financing to more accurately document, monitor, and assess services provided to consumers. It covers state- and federally funded programs, such as vocational rehabilitation and state head injury and traumatic brain injury programs. It will provide better data for federal reporting and agency operational management needs, and reduce inefficiencies in operations, and improve the ability to properly track and coordinate client data. It will improve MRC's ability to satisfy federal regulation and mitigate lost revenue from federal reimbursement.

Enterprise Invoice/Service Management (EIM/ESM)

\$500,250

The EIM/ESM application is used to manage provider billing for over \$3.2B in Purchase of Service contracts across EOHHS. It is used to collect vital data for program and contract management, monthly billing processing, and analyzing client outcomes. The project consists of two phases: Phase I (Assessment) is the analysis of the EIM/ESM complex business processes to provide a road map for a future/enhanced EIM/ESM system/platform. Phase 1 was completed in FY23. A business process redesign and high-level requirements for a replacement solution has been conducted with the 9 EOHHS agencies. Phase II (RFQ2 Development and Implementation) is based on results of the Business Process Analysis recommendations and will launch in FY24. The current application is aging and showing strain in some areas. The project seeks to streamline processes for ease of maintenance and operational efficiency and provide functionality such as agency and provider access to data for self-service reporting, which is not available in the current solution. Implementation of the final solution will reduce the administrative burden/costs for providers and agency staff, and increase efficiency, ease of maintenance and user satisfaction for both providers and EOHHS agencies.

Executive Office of Technology Services and Security

\$43,113,744

Commonwealth Cybersecurity Investment Program

\$9,386,257

The Commonwealth's Security Incident and Event Management system provides the capacity and capability to enhance the security of the Commonwealth's networks and information systems. With this platform, the unified Security Operation Center can detect, investigate, communicate, and mitigate cyber threats to our systems and data. EOTSS' vulnerability management and mitigation program is another critical component to the Commonwealth's security framework and approach. While continued progress has been made through this program, EOTSS and state agencies must maintain vigilance and a commitment to remaining aware of persistent threats by operating a continuous and adaptive vulnerability management program to mitigate these ever-present threats. In addition to the Commonwealth's workforce, EOTSS supports opportunities to assist our partners in municipal government. The Municipal Cybersecurity Awareness Grant program provides annual threat detection training to over 42,000 municipal and public school employees throughout the Commonwealth.

Commonwealth Network Infrastructure Program

\$9,913,874

EOTSS has completed the design of its One Network Core. This represents the consolidation from disparate networks into a single Commonwealth core. In this, unnecessary legacy agency network cores have been eliminated along with overlapping internet protocol (IP) space to simplify the routing of data between networks. Security measures have been put into place to block off any 'back doors' by removing the many different internet connections previously located at each Executive Branch secretariat, enhancing the Commonwealth's security, providing higher availability and resiliency, and saving money by tapping into commodity services instead of requiring custom buildouts. In FY24, EOTSS will make further enhancements to the Commonwealth One Network by building out the

wide area network (WAN) and security services to account for and support increased resiliency, mobility, and remote management.

Commonwealth Data Infrastructure Program

\$13,338,795

Cloud services provide the Commonwealth with best-in-class technology that allows for incremental improvements in a faster, agile manner. They also provide the ability to react to increased demands, reduce time to provision and deprovision licenses, and more efficiently manage assets. More importantly for today's work environment, cloud services strengthen security to support remote access to our systems from any location, further enabling the Commonwealth's remote workforce. EOTSS works closely with the Secretariat Chief Information Officers (SCIOs) and business application owners at Executive Branch secretariats to best understand their business needs and prepare for the 'lift and shift' of Commonwealth systems to the cloud to ensure the continuity of those government services. EOTSS has coordinated the migration of almost 500 Commonwealth applications/platforms to the cloud services model and off-premise data centers, as appropriate. This program is planned to be completed in FY24.

Modern Workplace Program

\$2,767,160

This investment supports the Commonwealth's remote/hybrid workforce by ensuring all Executive Branch employees are equipped with modern hardware and software that allows for work mobility and meaningful collaboration. It provides the ability to deliver government services from remote work locations. In FY21 the program developed plans for the deployment of devices, and software deployments through self-service automation to relieve pressure on Help Desks. Additionally, Microsoft Teams video conferencing was rolled out to more than 25,000 remote users. In FY23, the program was completed when EOTSS substantially completed the migration of personal and shared work files to OneDrive and SharePoint, e-mail, archives, and OneDrive-Group File Shares.

Digital Services

\$3,240,124

Investments in digital services and systems improve the user experience of government services for the residents, businesses, and visitors of the Commonwealth. This program maintains and expands Mass.gov, with the goal of making this channel the go-to method for interacting with state government. This EOTSS-sponsored program focuses on improving the citizen digital experience. It includes funding to ensure that the Mass.gov website meets evolving needs across the Commonwealth. In FY24, we will continue to transition Secretariats off .org and .net domains and onto the .gov platform, while expanding data research capabilities.

Digital Services Roadmap

\$490,000

The Commonwealth Digital Services Roadmap is a transformational program to provide personal, simple, and secure digital experiences that adapt to a resident, business or visitor's needs so that every time they engage with any part of state government, they get the most and the best of the Commonwealth. The program will make Commonwealth-wide improvements in five areas: single identity and user profile, omnichannel communications, accessibility & digital equity/inclusion, customer management/tracking progress, and customer management/tailored moments. This is a multi-year program and will be a major component of the EOTSS CIP for the coming years.

Standard Operating Model

\$3,137,484

TSS continues to develop an Information Governance standard and expand the Enterprise Risk Management office. The program funded the creation of a Customer Service capability to proactively manage service requests and delivery processes across the Executive Branch, including an up-to-date digital Service Catalogue identifying all the services provided by EOTSS along with the tools necessary to engage the delivery of those services. EOTSS analyzed the current state of technology services delivery to the executive branch and then realigned service delivery systems and processes, both within the technology division and to external agency partners. EOTSS will continue to improve information governance and risk management processes going forward. This program funded phase 3 of EOTSS' Customer Engagement Program, and firmly established the Enterprise Risk Management office. In FY24, we will complete development of the Service Level Agreement standards and a Customer Relationship Management (CRM)

strategy to serve Executive Branch organizations. We will also mature our risk management process and broaden the reach of the Enterprise Risk Management office so that it can better assist other secretariats and agencies.

State-wide Legal Case Management Systems

\$840,049

The Commonwealth's Legal Case Management System consortium seeks to implement a statewide Legal Case Management Platform that includes various capabilities required for standard case management practices. The Legal Case Management Platform will provide government organizations with transparency into their processes and infrastructure. It will increase efficiency, reduce costs, and improve self-service. The pilot program will cost \$3.5M and will be completed in FY24.

Executive Office of Public Safety and Security

\$33,591,988

Department of Correction Radio Modernization

\$6,500,000

This is a replacement of aging radios and infrastructure at the DOC and supports the strategic goal of enabling end-user capabilities through access to data and services anywhere and anytime. Upon completion in early FY24, the DOC will have modern radio equipment and infrastructure that is core-connected and interoperable with the statewide Commonwealth of Massachusetts Interoperable Radio System (CoMIRS) P25 Radio Network, enhancing the physical security of DOC officers, inmates, and other employees in DOC facilities.

Centralized Data Collection and Reporting (Cross Tracking)

\$5,000,000

The purpose of this project is to achieve compliance with the operational and data reporting requirements mandated by the 2018 Criminal Justice Reform law. The Criminal Justice Reform Inmate Data project will preserve and upgrade the Configurable Off the Shelf (COTS) solution investments made to date to meet the additional and significant operational and reporting requirements in the 2018 law. The project will build a centralized warehouse of anonymized inmate data extracted from Sheriffs, the Department of Correction, state and local law enforcement, Trial Courts, and the Parole Board databases for analytical reporting on recidivism rates for re-arraignment, reconviction, and re-incarceration. The data will be available to policymakers, researchers, and the public to assist and inform research, policy planning, and public safety initiatives.

Public Safety Records and Data System Improvements - AFIS Upgrade

\$4,000,000

The Cloud Automated Biometric Identification System (ABIS), which replaces the existing Automated Fingerprint Identification System (AFIS), is responsible for criminal and civil fingerprint identification and provides additional biometric identification modalities. It supports the EOPSS IT strategic goal of establishing a data program to support the data analysis demands tied to Criminal Justice Reform. Fingerprint-based records are key to this effort, as it creates the identity for tracking through the criminal justice system. This project also supports the goal of improving our security posture, designed to meet the U.S. government's requirements for data security and continuity of operations, and the Commonwealth's public safety and homeland security mission. Information is shared and collaboration is fostered between municipal, county, state, federal and national partners, and stakeholders.

Criminal Justice Reform - Inmate Data

\$3,400,000

This project will build a centralized warehouse of inmate data extracted from Sheriffs, DOC, and Parole for analytical reporting required by the 2018 Criminal Justice Reform law. It supports the EOPSS IT strategic goal of establishing a data program to support the data analysis demands tied to Criminal Justice Reform (CJR). The cross-tracking system is comprised of data from various stakeholders, including the County Sheriffs. This upgrade included changes to the Sheriffs' Offender Management Systems to capture required data fields to meet CJR requirements and enhance data sharing. MA residents and visitors will benefit from the data sharing of enhanced, integrated criminal justice information, which include criminal history/criminal background check systems supporting employers' ability to hire, background checks for landlords and housing, and law enforcement agencies' mission to protect and serve.

State Police Body Worn Cameras**\$3,239,304**

The Massachusetts State Police (MSP) Body Worn Cameras Project supports the EOPSS IT strategic goal of enabling access to data and services anywhere and anytime. The MSP Body Worn Camera Project allows increased transparency of officer/citizen interactions, quicker resolution of officer complaints, and increased professionalism through the use of footage in officer training.

Public Safety Mass Voice Migration**\$3,000,000**

The infrastructure and telecom systems at the public safety locations are in desperate need of replacement. This project updates the infrastructure (cabling) within the facilities and allows for moving the telecommunications services, as provided today, from a capital renewal plan to an operational expense model by moving to the MassVoice cloud environment. This project is being driven and managed by the secretariat in line with the Article 87 directive of standardizing systems and migrating enterprise-wide systems to the center. The system improves communications, interoperability, resiliency, and management of phone communications for the secretariat and its agencies.

Public Safety Data Center Move**\$2,305,763**

The Public Safety Data Center, where most EOPSS applications are hosted, is being moved to an Infrastructure as a Service (IaaS) solution at Markley Boston privately hosted data center (the primary location) and Markley Lowell (the disaster recovery location). The project will mitigate the aging/out-of-support infrastructure running critical applications, and thereby reduce the risk of cyber attacks due to old operating systems with limited security patches.

CPI Message Switch Replacement**\$1,396,500**

The current Information Broker/Message Switch was deployed in 2009 and is central to the mission of DCJIS as it is the sole means for access to critical Public Safety information systems, both within the Commonwealth and nationally. Systems accessed via the Message Switch include FBI-National Crime Information Center (NCIC), National Law Enforcement Telecommunications System (Nlets), RMV ATLAS, MSP State Identification Section (SIS), Trial Court, and custodial agencies (DOC and Sheriffs). This is the replacement of the switch and migration from on-premise to a SaaS environment, creating a more resilient system that will enhance public safety access to critical networks.

MSP: Cruiser speech recognition tool**\$1,224,996**

This is the implementation of Nuance Dragon speech recognition software at the Massachusetts State Police (MSP). The goal of the project is to increase officer safety and efficiency. This technology relies on a microphone to capture the officer's voice, allowing troopers to remain "heads up" in a cruiser, as opposed to having their heads and eyes buried in a keyboard. Integration with CJIS Web will allow plates to be queried upon verbal request, rather than hand-entered through a computer. This software creates an opportunity to increase the time a trooper can spend in the field by digitizing administrative obligations.

MSP- PenLink Project**\$849,569**

PenLink is software capable of collecting and analyzing both live and historical phone and social media data in a single comprehensive platform, providing comprehensive investigative support to the MSP. This initiative will allow the State Police to develop and implement business process improvements. The upgrade to PenLink also provides new opportunities to integrate with other department applications, utilizing data more effectively and supporting data-driven decision making by the State Police. The existing system (ADACS) has been in production since 2014 and has been found to have several investigative and operational deficiencies.

DOC Body Worn Cameras**\$836,856**

The objective of the DOC Body-Worn Cameras ("BWC") project is to procure and implement a BWC technology solution and related services involving correctional officers at multiple institutions within the DOC to record and retain specific categories of visual and audio interactions by correction officers. Outfitting DOC officers with a rugged and reliable BWC is designed to help limit false accusations, build trust in the community, and ultimately keep

officers safe. It also reduces valuable time and resources when conducting an investigation with evidence captured via a BWC at the time of an event. The project will provision the necessary cloud services, storage, and software to allow the DOC to manage, view, tag, edit, and redact the video and audio files collected by the cameras.

Public Safety Records and Data System Improvements – One-III

\$500,000

The Public Safety Records and Data Systems Improvements Project is comprised of a series of projects that are integral to Commonwealth compliance with the legislative mandate on Criminal Justice reform. The One-III project replaces the Store and Forward system with a centralized biometric-supported Computerized Criminal History record (CCH) system. Fingerprint-based records are key to this effort as it creates the identity for tracking through the criminal justice system. This project also supports the goal of improving our security posture, designed to meet the U.S. government's requirements for data security and continuity of operations. Enhancements to the One-III application were necessary to conform to the data requirements of Criminal Justice Reform and provide a combined framework for enhanced real-time information sharing for municipal, county, state, federal and national criminal justice stakeholders.

Public Safety Records and Data System Improvements – MassCourts

\$500,000

The Public Safety Records and Data Systems Improvements Project is a series of projects that are integral to Commonwealth compliance with the legislative mandate on Criminal Justice Reform. This project is for the MassCourts Data Interface Project, which sets up an environment for data sharing between the Trial Courts and Public Safety. These data exchanges are necessary to conform to the data requirements of Criminal Justice Reform and provide a combined framework for enhanced real-time information sharing for municipal, county, state, federal and national criminal justice stakeholders.

Natural language support for DNA submissions

\$304,000

This is Criminal Justice Information System (CJIS) web application update to add language supporting DNA submissions. This project provides law enforcement with improved visibility of persons that are required to provide a DNA sample in order to be compliant with M.G.L. Chapter 22E. When a law enforcement user performs a Person Robo Query, the returned results will now include whether DNA has been submitted by the subject or is required to be submitted.

Augmented Criminal Investigation Support System upgrades (ACISS)

\$285,000

This is the consolidation of the MSP records systems into one solution/platform that increases accountability, including auditing and validity checks that support officer accountability, transparency, tracking activities and providing reporting tools that strengthen officer safety, improve situational awareness, and streamline workflow to gain efficiencies and provide improved technical tools to officers. This project includes the capture of data elements required for collection under the standards as defined in the Massachusetts Criminal Justice Reform Bill, Section 501, CMR 18.00.

Inmate Management System Modernization

\$250,000

The purpose of the DOC Management System Modernization program is to replace the existing legacy inmate management system with a more advanced cloud-based Commercial-off-the-shelf (COTS) solution which is easy-to-maintain, scales well to serve DOC's business, functional, operational & technology requirements, as well as meeting public safety stakeholders' expectations. The cross-tracking system is comprised of data from various stakeholders, including the DOC Inmate Management System (IMS). In addition to improved data collection with a more functionally, operationally, and technologically advanced system replacing the current legacy system, this project will help DOC maintain and meet requirements, such as data sharing requirements, to public safety and other stakeholders as mandated by the 2018 CJR law. This funding is being used to discover the optimal solution for DOC.

Massachusetts Department of Transportation

\$27,058,539

ProjectInfo Modernization 2.0 - Implementation Phase

\$7,540,176

The objective of this project is to complete the implementation of re-platforming ProjectInfo, the online project information system used by MassDOT Highway. This project will plan and execute the initial implementation of moving ProjectInfo functionality into the chosen platform. Strategically, this is a Modernization and Workforce Productivity investment. The project involves creating the design of a new platform, reducing VPN usage, increased security, and fostering better remote collaboration. The outcome of this phase is a full-phased plan for the design and architecture of new technology, including improved security and data reliability to address inefficiencies and loss of production as users continue to use outdated applications, and to allow integration with other systems as they modernize also. The new system will be cloud-based.

RMV Crash Modernization

\$4,216,330

M.G.L. Chapter 90, Section 26 requires a person who was operating a motor vehicle involved in an accident to complete the Motor Vehicle Crash Operator Report form in a crash in which any person was killed, any person was injured, or there was damage in excess of \$1,000 to any one vehicle or other property. The purpose of the project is to implement a modern, cloud-based solution on the ServiceNow platform that will replace the current MassDOT Crash Data System (CDS). This supports DOT's Modernization and Safety program. This data informs highway safety improvements, as well as federal and state policies and regulations to improve the safety of all citizens and will provide quality crash reporting through an existing or new public portal that is more accessible with real-time data.

Document Management/Storage Planning & Execution

\$2,725,515

MassDOT is seeking to reduce physical records and paper processes to both reduce cost and risk through more efficient, virtual ways of working. A critical component to achieving these goals is the reduction of paper processes and the adoption of effective document management processes. As a component of the Future of Work initiative, the project will improve the adoption of MassDOT's electronic signature policy, reduce physical records moving forward, digitize existing records to reduce storage needs, and design a long-term storage and management approach.

Enterprise Data Lake

\$2,453,349

MassDOT seeks to become a more data-driven organization, leveraging data and analytics to improve the lives of constituents of the Commonwealth. In alignment with this strategic direction, the objective of this project is to establish a common data and analytics platform to support multiple applications across MassDOT. The goal of this phase is to create a strategy to establish a common data and analytics platform to support multiple applications across MassDOT. Outcomes include easier access to information, more rapid delivery of analytics, improved quality of data, a reduction in operating costs through consolidation and standardization, and improved data governance.

Work and Family Mobility Act

\$1,625,000

The Work and Family Mobility Act enables all qualified state residents, regardless of immigration status, to apply for a standard Massachusetts driver's license. This maintains the Commonwealth's full compliance with REAL ID requirements while improving public safety, revenue, and economic opportunity. This project ensures the RMV's compliance with the Work and Family Mobility Act.

Enterprise Power BI Management Dashboards and Support Services

\$2,020,079

This project centralizes DOT's data management, reporting and dashboarding to effectively support evolving enterprise information management needs. It includes building a common data and analytics platform to support multiple applications across MassDOT. It will provide rapid delivery of analytics, dashboards, reports, and a single source of information for the enterprise.

Intelligent Transportation Systems Switch Replacement **\$713,081**

The objective of this project is to replace 58 end-of-life switches on the ITS network. As part of the state of good repair, it is important to keep network hardware up to date and vendor supported. Security software updates will be applied as they become available to the Intelligent Transportation Systems (ITS) Network team.

Active Directory Remediation **\$659,592**

This project procures third-party services to assess, identify and document the current state of the ITS Active Directory (AD). The project will upgrade the existing Active Directory infrastructure and functional level from Windows 2008 R2 to a minimum of Windows 2016 R2, and conduct an audit review of multiple issues with the configuration and current state of the ITS AD. A fully documented, updated, and redesigned AD architecture remediates existing vulnerabilities, improves security, and documents and simplifies the management and maintenance of the ITS AD environment.

ServiceNow HR Enterprise Onboarding Phase 1 **\$644,733**

This is the implementation of the ServiceNow HR Enterprise Onboarding platform (an upgrade from the current ServiceNow HR Professional license), specific to improving the onboarding process for new MassDOT employees. It automates onboarding tasks for managers in multiple departments, whereas the current onboarding process places a strain on MassDOT's supporting organizations.

Cybersecurity Program - Third Party Risk Management Tool Implementation **\$638,193**

The goal of the project is to install a third-party Risk Management Tool that provides risk assessments for new and existing vendors and organizations by identifying key cybersecurity performance metrics and notable events, preventing cyber attacks which could result in loss of data, system interruptions and diminished public confidence. It strengthened defenses, reduces vulnerabilities to potential cyber attacks, and mitigates potential loss of data, system interruptions and diminished public confidence.

MassDOT Enterprise eSignature Expansion **\$609,500**

This project expands Adobe eSignature across MassDOT and its organizations, resulting in greater adoption of MassDOT's electronic signature capability. This will reduce the number of physical records and digitize existing records to reduce storage needs.

ITS Highway Projects Portfolio **\$598,678**

This project provides funding to support a variety of Intelligent Transportation System (ITS) business projects. The ITS group spends a considerable amount of time in the support of ITS-related components in highway construction projects and to ensure successful completion, the project is able to provide adequate funding and monitors the appropriate allocation of key resources that provide timely solutions and on-time projects.

Audit Operations Modernization **\$527,491**

The objective of this project is to enhance data analytics and increase automation of the audit of RMV work processes. This project is part of a two-year initiative to improve reporting and analytics for RMV/Atlas reporting. It will improve reporting, thereby mitigating the potential need for federal/state funding because of data loss.

Business Impact Analysis App Phase 2 **\$373,639**

Business Impact Analysis is a process that allows DOT to identify critical business functions and predict the consequences of a service disruption. It also allows DOT to gather the information needed to develop recovery strategies and limit the potential loss. Business Impact Analysis applications contain critical information for troubleshooting and incident resolution for applications and create a unified support and response process.

Construction Division System Retirement - Phase 1 **\$313,571**

This project will relocate and modernize the 'Claims' and 'Contract Completion Information' functionality from the Construction Division System (CDS) to the Site Application Module (SAM) application. These functions will then be

retired from CDS. This will help increase productivity and create efficiencies through the consolidation of technology, improved security, and data reliability.

Snow and Ice Depot Technology Equipment Refresh **\$308,000**

The objective of this project is to refresh computers and printers in 123 Highway Depots across the six districts. A third-party vendor is engaged to perform imaging, configuring, and on-site refresh, keeping equipment up to standards and properly supported. Providing new workstations and printers in the Snow and Ice depots will give users better access to data during snow and ice events and keep MassDOT information secure.

IDEMIA Cloud Migration and Disaster Recovery **\$300,000**

This project migrates the current IDEMIA (a service provider) applications, Issuance 360 Back Office and AutoTest from IDEMIA's servers hosted in the MA Information Technology Center (MITC) to IDEMIA's AWS (Amazon Web Services) GovCloud environment and meets the requirement to vacate the MITC data center. It satisfies MassDOT IT's strategic goal to move to SaaS platforms. It will result in improved resiliency and scalability for RMV services.

Kubernetes Infrastructure Expansion **\$269,541**

The DOT's applications performance monitoring platform uses the Kubernetes (an open-source application orchestration system for automating software deployment, scaling, and management) system to run synthetic transactions for business-critical applications. The objective of this project is to extend the functionality of MassDOT application monitoring tools. Kubernetes orchestration allows IT teams to quickly build application services that span multiple architectures. Kubernetes runs in a high-availability state, which means if an application fails it will automatically replace the application and restart to continue non-interrupted service.

MassDOT IT Disaster Recovery Governance **\$263,000**

The objective of this project is to establish a full governance program for disaster recovery, including policies, procedures, and communications. These standard processes will provide an improved ability to respond in a predictable manner in the event of a disaster scenario. This project defines the management and oversight of DOT's Disaster Recovery capability, as mandated by MassDOT leadership. It will provide an improved ability to respond in a predictable manner in the event of a disaster scenario through effective policies, procedures, and communications.

VueWorks Final Phase **\$259,071**

The objective of this project is to complete the migration of all assets into an updated enterprise asset management system, including Tunnel Asset Management, Inventory Management, and Roadway Drainage. As a result, this project will enable MassDOT to discontinue Highway's use of the current end-of-life system and consolidate more highway assets into the new system.

Executive Office of Education **\$26,905,060**

Integrated Digital Data System (IDDS) **\$17,300,000**

The goal of IDDS is to provide the Commonwealth with a secure and cost-effective, standards-based educational platform and application portfolio that connects data and user experiences across all education agencies, birth to career. This project funds the development of a secure and modern data repository to provide more timely and useful educational information to educators, administrators, and the public. This is a multi-year project and will be completed by FY25. IDDS provides the modernization of Executive Office of Education systems into a unified, secure platform. To date, the IDDS project has retired two data centers, and greatly improved security and data accessibility.

Modernizing Background Checks (BRC) **\$5,131,555**

This investment replaces EEC's multiple aging systems for processing Background Record Checks (BRCs) with a single, modern system that incorporates all of the BRCs required by state and federal law, including Massachusetts Criminal Offender Registry Information (CORI) checks; Massachusetts child welfare checks through the Department of

Children and Families (DCF); Massachusetts Sex Offender Registry Information (SORI) checks through the Sex Offender Registry Board; fingerprint-based checks of national and state criminal history databases through the Federal Bureau of Investigations; National Sex Offender Registry checks (NSOR); and out-of-state checks. The BRC program will be completed in June 2023.

Early Education and Childcare (EEC) Quality Account **\$2,119,787**

The Child Care and Development Block Grant (CCDBG) provides subsidies to assist low-income families in obtaining childcare so that parents can work or participate in education or training activities. This project implements new software to upgrade end-of-life systems to support new federal mandates. This addresses CCDBG requirements related to childcare subsidy management and financial assistance. It supports an integrated system of childcare that ensures the seamless delivery of quality, accessible and affordable childcare for children from birth to school age.

Public Higher Education Cybersecurity Grants **\$999,307**

These grants fund a comprehensive strategic review of specific cybersecurity practices and protocols across the Commonwealth's fifteen community colleges and nine state universities to develop a coordinated approach to maintaining and supporting effective cybersecurity technologies and practices across the public higher education system. This will be strengthening each institution's ability to detect and prevent unauthorized access and damage to networks, devices, programs, and data. This is year 3 of a 5-year capital program and includes cybersecurity training for all participants as required.

DESE Grants Administration **\$764,317**

Provide an eGrants solution for the Department of Elementary and Secondary Education (DESE), including managed software, maintenance and support, training, and documentation for a cloud-based Grants Processing Application to replace the existing legacy Grants Processing System, EdGrants. The Grants Processing Application functionality will include receiving, approving, paying, and amending various types of grants. The system will replace a dated and stand-alone legacy system that has been problematic for all users. This solution will address pain points while providing end users with a modern, secure, and integrated product, thereby reducing risk, and improving overall oversight of grant processing across multiple teams and agencies.

Communication Hub and Monitoring Platform (CHAMP) **\$590,094**

This project will provide a Regulatory Compliance Monitoring Solution to DESE to deliver robust functionality related to communicating, reviewing, monitoring, managing corrective action plans, and drafting and posting final reports for schools, programs, agencies, collaboratives, and districts which serve students in the Commonwealth. This solution will track compliance with state and federal regulations, as well as program compliance at the school and district levels. It will provide a holistic view of organizations receiving grants, ensuring more complete monitoring.

Executive Office of Labor and Workforce Development **\$20,185,678**

Employment Modernization and Transformation (EMT) **\$20,185,678**

A comprehensive modernization of the state's unemployment system to provide MA companies and citizens with seamless and timely unemployment tax administration and benefits delivery, in compliance with evolving federal and state regulations, and with service levels and operational costs that will significantly improve upon the current state.

Executive Office of Administration and Finance **\$8,020,561**

ARPA Grants Management System **\$1,810,261**

The purpose of this solution is to provide a full lifecycle programmatic and fiscal grants management system for all projects funded by the American Rescue Plan Act (ARPA) Coronavirus State Fiscal Recovery Fund (CSFRF), as well as additional funding sources as needed. This includes all activities related to sub-award processing, from funding opportunity setup through closeout, compliance monitoring and audit activities, and reporting from A&F and other

participating agencies to the federal government. Massachusetts, and specifically A&F, is required to report to the federal government the expenditures that are made using the COVID-19 funds provided to Massachusetts.

GIC Member Experience Transformation & Modernization Phase IV **\$1,600,000**

This is the latest phase of the implementation of GIC's Member Experience Transformation Initiative. The project is a result of the GIC's strategic planning process to review the entire range of agency goals and objectives and identify actions to transform and modernize. It includes funds for implementing Salesforce software and DocuSign products, as well as additional configurations and enhancements. Benefits include operational cost reductions, business efficiency gains, and enhanced customer service. The project has enabled the GIC to reduce paper usage, improve operational efficiencies, and provide members the opportunity for self-service management of their benefits in real time. All members can manage their benefits through the GIC Portal, with new self-service options.

Child Support Enforcement system re-architecture **\$1,068,300**

This project redesigns a cumbersome technical architecture from a large-scale technical function structure to a small-scale functional modular design to enable ease of use, while at the same time removing complexities that drive expensive maintenance and support tasks. This will result in a more streamlined process with lower maintenance and support costs.

Migrate the Genisys (tax) application to the cloud **\$925,000**

This project prepares the Genisys tax application for migration out of the aging MITC data center to the AWS GovCloud environment. This will result in a more stable operating environment, with enhanced resiliency and security. The project was completed in FY23.

Supplier Diversity Hub **\$750,000**

The Supplier Diversity Hub ("The Hub") is a new way for state agencies and prime vendors to manage their supplier diversity efforts and to connect directly with diverse and small businesses. The Hub allows users to plan individual procurements, track benchmark progress for their department's spending, and manage the supplier diversity efforts of their prime contractors to ensure contract compliance. This project will improve the accuracy of tracking, validation and reporting of businesses and spending, and provide tools to help promote diverse and small businesses while enhancing our responsiveness to public stakeholder inquiries concerning the fairness of spending. The project will result in the creation of a secure, cloud-based system available for use by all Commonwealth departments, contractors, and all certified small and diverse businesses. This capital program allows The Hub to overcome challenges associated with previous manual data collection practices and enables informed decision-making, optimized processes, and streamlined data collection.

Centralized Mail and Print **\$700,000**

The Operational Services Division, working with the Future of Work team, identified an opportunity to create efficiencies through the co-location/centralization of the Commonwealth's print and mail facilities. The objective of the Print/Mail Consolidation Project is to reduce cost and increase efficiency in Executive Department print, copy, and mail operations while maintaining service levels and quality. A centralized organization would work to ensure the long-term adaptability and success of the Commonwealth's print operations. The print and mail industries are both experiencing a reduced demand based on the expansion of alternative electronic technologies and delivery models—trends that will continue. Consolidation of the Executive Department print and mail operations under a centralized organization will assure that operations adapt to meet the current and future challenges facing these industries.

Child Support Enforcement (CSE) system - SMS Call capability **\$617,000**

This upgrades the Child Support Enforcement's customer relationship management system with an instant messaging capability. This will allow CSE to design outreach campaigns and give access to vulnerable and underserved communities. This capability increases the ability of CSE to expand virtual interactions and support its Equity, Diversity & Inclusion goals. It allows for virtual meetings between CSE staff and customers of CSE to provide

immediate resolution to issues and the opportunity to conference cases without the need to meet with staff in person.

Underground Storage Tanks Division Technology Refresh **\$300,000**

The Department of Environmental Protection (MassDEP) regulates the registration, installation, operation, maintenance, inspection, and closure of petroleum fuel and hazardous substance UST systems. eUST serves as the primary application under which the Underground Storage Tank division conducts its business. It is currently a .Net 4.x Webforms application, which is being discontinued by Microsoft. This project is a rebuild of the eUST application to bring it in line with current technology to ensure continued support and security.

State Library Digitization Program **\$250,000**

The State Library staff continues to digitize Commonwealth documents, reports, and legislative material, adding to the existing electronic repository (DSpace). DSpace is open-source software provided by the Massachusetts Institute of Technology. This project will continue until all documents have been digitized. The goal is to increase user self-service (24/7 online access to Library resources means users no longer need to travel to the State House for conducting research); increase efficiency (by reducing the volume of calls for assistance, while allowing staff to focus on more complex inquiries); and reducing preservation costs because staff will no longer have to handle original documents, which are mostly in manuscript form.

Executive Office of Energy and Environmental Affairs **\$4,885,000**

EIPAS - Environmental Information and Public Access System **\$1,535,000**

The Energy and Environmental Affairs (EEA) Information and Public Access System (EIPAS) is a Secretariat-wide IT modernization project which enables EEA to be more flexible and agile in providing capabilities to drive better public access, information gathering, improved organizational effectiveness and centralized business intelligence, reporting and analytics through the design and development of EEA's next generation technology platform. Completed milestones include: the development of the Data Lake Data Portal with five interactive Dashboards and eight major topics for data search/export across multiple agencies, the development of a Site Management System to manage Facilities, Regulated Entities, Classifications, and Contacts (Multiple agencies), the release of DEP Annual compliance fees billing module, the DEP milestone tracker, DPU documents management application, and the MEPA Public Comments Portal, among other applications. This project will enhance customer service and government performance by enabling constituents and citizens services, including submission of environmental reports, payment of fees online, and access to environmental data through the EEA Data Portal.

EEA – ePermitting **\$1,300,000**

This program stems from the directive for an ePermitting solution using an enterprise application platform. Through EEA's alignment to this strategy, this multi-year initiative will consolidate through new business processes and retire hundreds of paper forms and associated manual processes and reduce overall operating costs. The result enables an online permitting solution supporting all Secretariat business units with a quicker speed to market for constituent engagement. Under this program, the EEA Public access portal was completed, and more than 313 application types have been released in the Accela platform across multiple agencies. This effort establishes quicker time to decision due to streamlined permitting processes, and in form field validation ensuring complete applications, resulting in potential reduction of environmental harm due to timely permit decisions as well as reduced agency administration costs due to online availability of data. Online permits reduce dependency on paper and other physical permitting materials. Constituent costs for administrative visits and file reviews are significantly reduced, as permit applications and decisions are now available online.

EEA - Application Rationalization and Innovation Strategy **\$1,800,000**

This program identifies critical legacy/end-of-life applications footprint and strategically aligns them to accomplish agency goals and improving business processes. The key benefit of this program centers around the retirement of legacy technology debt through the development of new solutions within configurable and available technology

platforms. It lowers the cost of operating legacy applications and improves EEA staff capability to serve citizen needs through improved processes and application technology.

MEP Business processes and future state-requirement document

\$250,000

Massachusetts Environmental Police (MEP) needs the ability to manage assigned work details, including overtime, in a manner that it is transparent, timely, and effectively reportable. Policy, procedure, & training management needs will be addressed. Initial focus is on implementing a workforce management system. Requirements documentation will be completed in FY23.

Executive Office of Economic Development

\$449,427

Division of Occupational Licensure (DOL) Modernization

\$449,427

The Division of Occupational Licensure (DOL) oversees approximately 500,000 licensed professionals under the guidance of 32 professional boards. The business operations include licensing, exam administration, public safety oversight, inspections, permits, enforcement, hearings, and compliance. The agency uses three disparate platforms and out-of-date Microsoft Access databases to manage these operations. DOL requires immediate and significant modernization onto one platform. The current platforms slow DOL's ability to operate efficiently, creating 'red tape' that impedes the agency's mission, requiring a new consolidated permitting system. Funding in FY23 was focused on readiness activities to support the development of a new strategy, data cleansing plan, overall project timeline plans, and a comprehensive change strategy that addresses internal and public users. It is anticipated that the costs for a new system could be in the \$10 million to \$15M million range.