February 9, 2023

Matthew Gorzkowicz
Secretary of Administration and Finance
State House, Room 373
Boston, MA 02133

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

Dear Secretary Gorzkowicz, Auditor DiZoglio, Chair Michlewitz, and Chair Rodrigues:

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 initiatives undertaken by EOTSS over the previous 12-month period to modernize the Commonwealth's information technology (IT) infrastructure and enhance its cybersecurity posture.

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

Purpose of this Report

The Executive Office of Technology Services and Security's (EOTSS) 1790-0100 line item in the Fiscal Year 2023 operating budget includes language requiring EOTSS to report on various aspects of information technology (IT) consolidation initiatives in the Commonwealth under the authority granted by Chapter 64 of the Acts of 2017 – which established EOTSS as the lead IT and cybersecurity secretariat for the Executive Branch.

"…that not later than February 15, 2023, the executive office shall submit a report to the secretary of administration and finance, the state auditor and the house and senate committees on ways and means that shall include, but not be limited to: (i) financial statements detailing savings and, where applicable, additional expenses realized from the consolidation of information technology services within each executive office and other initiatives; (ii) efforts being taken to ensure the compatibility and interoperability of agency systems and to consolidate relevant data between agencies (iii) the number of personnel assigned to information technology services within each executive office; (iv) efficiencies that have been achieved from the sharing of resources; (v) the status of the centralization of the commonwealth's information technology staffing, infrastructure and network and cloud hosting; (vi) the status of the commonwealth's cybersecurity; and (vii) strategies and initiatives to further improve the: (a) efficiency and security of the commonwealth's information technology; and (b) transparency of the executive office of technology services and security with the general court, other executive branch agencies and the general public…"

Introduction

This past year, EOTSS celebrated its 5th anniversary as a cabinet-level secretariat and the lead enterprise information technology (IT) and cybersecurity organization for the Executive Branch. This milestone has provided us with an important moment to reflect on the challenges and successes we've experienced as the Commonwealth's youngest secretariat and look forward to our shared goals to drive the Commonwealth's technology future.

Since the creation of EOTSS, we have made it our mission to modernize state-owned IT systems and services, strengthen the Commonwealth's cybersecurity posture, and improve the constituent digital-government experience. Significant investments in our core personnel, processes, and technologies have been made in collaboration with our partners in the Legislature and fellow executive branch secretariats.

These investments have gained recognition at the national level, with the Commonwealth of Massachusetts receiving a letter grade of A- in the 2022 Digital States Survey, a biennial evaluation of states' use of technology to improve service delivery, increase capacity, streamline operations, and reach state priorities. Since the creation of EOTSS in 2017, the Commonwealth's technology investments have resulted in consistent improvements in the biennial survey, with the Commonwealth bettering its letter grade of B in the 2018 survey and further improving to a letter grade of B+ in the 2020 survey. Additionally, the Commonwealth received an award in the category of Leadership for its enterprise approach to modernizing the state's information technology, utilizing a strategy that aligns with the Administration's priorities.

The Commonwealth finds itself at a transformational moment as technology becomes ever-more integrated into the way government conducts business. Now is the time to leverage the acceleration towards digital-centric services and a more resilient state government that was set in motion by the COVID-19 response. In this transformational moment, cybersecurity, resiliency, mobility, and accessibility will continue to serve as the four cornerstones of our efforts to modernize and secure the enterprise.

At the heart of those four cornerstones is EOTSS's enterprise approach to IT modernization, cybersecurity, and the delivery of accessible digital services. By taking this enterprise approach, the cost advantages achieved by more efficient operations offer greater economies of scale. EOTSS' agency partners can also leverage the technological expertise that EOTSS offers to collaborate on product and service initiatives to achieve a more successful launch.

We thank our colleagues in the Legislature for their continued leadership and investment in the Commonwealth's technology and cybersecurity needs. We look forward to continued dialogue with the Legislature as we navigate the challenges that lie ahead as we continue our mission to make for a more accessible and resilient Commonwealth.

Savings, Efficiencies, and Additional Expenses through Consolidation

Contract Management

Related to the efforts of our Enterprise Risk Management (ERM) Office, methodical contract management is critical to the Administration's ability to simultaneously undertake multiple transformational IT projects while ensuring they each meet the requisite security measures, oversight, and cost accounting. As observed by the IT Investment Advisory Board (IIAB), common missteps in the procurement process can be avoided by dedicating personnel and procedures that align with industry best practices. Our Contract Management office's primary focus is on enterprise-wide projects including Modern Workplace; Adobe e-sign, Paid Family and Medical Leave (PFML), and the Business Systems Enterprise Transformation ('BEST') project to implement a comprehensive software solution to modernize the Commonwealth's accounting and human resources, to name a few.

The Office provides contract review and contract negotiation services on large scale projects across the Commonwealth, at the direction of the Secretary. To date, our Contract Management office has negotiated and established highly discounted enterprise volume license agreements with several major software providers, resulting in millions of dollars of annual savings for the Commonwealth (license costs, maintenance, and cost avoidance for deployment). More importantly, the EOTSS Contract Management office has a structured centrally-managed program that prioritizes contractual data security obligations, and ensures access to security patches and bug fixes for software deployments across the Commonwealth. The cost avoidance gained in mandating standard data security terms and maintaining up-to-date software systems can be measured against avoiding operational impacts to government services that could result from security breaches or system failures due to unsupported or compromised software.

IT Investment Advisory Board

We remain grateful to the Legislature for its commitment to investing in the Commonwealth's cybersecurity and IT modernization efforts through the passage in 2020 of Governor Baker's General Governmental Bond Bill, which included $650 million in IT capital authorizations. Governor Baker filed a General Governmental Bond Bill in January 2022 that included additional IT capital authorizations to ensure there is no lapse in the progress being made on ongoing priority IT and cybersecurity initiatives. We appreciate the Legislature's close consideration on these proposed funds.

As background, EOTSS oversees the IT capital investment portfolio and related program management through its Office of Capital Planning. The EOTSS Secretary, in collaboration with the IT Investment Advisory Board (IIAB), reviews and recommends projects to the Governor and the Secretary for Administration & Finance (A&F) for inclusion in the annual Capital Investment Plan (CIP).

The IIAB is comprised of security, IT, and business operations executives from across state government and meets monthly (or more frequently as needed) to review and advise the Secretary on IT capital project proposals for potential inclusion in the CIP. The IIAB also considers emergency and contingency funding requests and regularly reviews the progress of ongoing projects. The Board helps ensure that IT capital funding is allocated strategically on projects that align with the Commonwealth's goals of enhancing its security and improving its delivery of government services for the people of the Commonwealth.

Cloud Computing

EOTSS continues to collaborate with agency leaders and business application managers to make further progress in migrating critical legacy Commonwealth applications and systems to cloud hosted services and other EOTSS-approved hosting options included in our Standard Operating Environment (SOE) framework. Cloud migrations and the move to modern hosting solutions are a key tool in ensuring that critical business applications powering vital government services remain accessible and resilient.

All migrations are handled through a "cloud smart" approach, where EOTSS works with agencies to gain a full understanding of their business needs, while ensuring continuity of those government services to avoid any adverse effects for the constituents that rely on them. EOTSS prioritizes up-front planning to determine which hosting platform provides the better option based on several considerations: need, priority, readiness, budget, delivery, management, and security.

Migrating agency business applications and infrastructure from state-owned and operated data centers to 3rd party managed Infrastructure-as-a-Service and/or co-location hosting facilities is critical to ensure the Commonwealth's information systems and infrastructure remain resilient, secure, and available. While moving legacy systems into a highly resilient environment will incur parallel costs during the transition phase, the cost of inaction could result in a catastrophic failure of our IT systems if they remain dependent on older technology and the state-owned and -managed data centers.

Failure of government IT systems are costly, both in terms of a temporary inability for constituents to access vital government services and potential costs associated with needed data recovery. Cloud migrations can be viewed as a cost avoidance initiative for the Commonwealth, an investment in the continuity of government operations, and an improvement to the constituent digital experience.

MassVoice Modernization

EOTSS is leading a multi-secretariat MassVoice contract initiative to replace the existing on premises phone system with a more modern cloud communication platform to be used across the enterprise. The initiative has resulted in the successful publishing of a Request for Information (RFI) and subsequent Request for Quote (RFQ) that resulted in the naming of successful bidders for the enterprise MassVoice contract replacement.

The initiative includes the modernization of the circuits associated with the system as well as adding a contemporary and comprehensive omni channel contact center offering. The modernization of the MassVoice system will result in lower cost for phone services and a better customer engagement experience for Commonwealth helpdesks and call centers.

Compatibility and Interoperability of Agency Systems to Consolidate Relevant Data Between Agencies

Massachusetts Data Hub

This year, EOTSS launched a new user-friendly Massachusetts Data Hub tool, which connects users to data and reports published by Massachusetts state agencies. The tool not only allows users to search state resources and data by topic or keyword and aggregates state agency-published data and web pages, it also organizes content around topics that cut across multiple secretariats, making data easier to find by the general public.

The Massachusetts Data Hub reflects the Commonwealth's commitment to sharing data transparently and openly to better serve the Commonwealth's residents, businesses, and visitors. Feedback from users will allow EOTSS to further refine and improve the Hub, and more data will be added to the Hub to expand its reach.

Criminal Justice Reform Data Collection

The Commonwealth reached a major milestone in its efforts related to data collection and cross tracking across the Commonwealth's criminal justice system. To expand public access to the newly integrated data across the Commonwealth's criminal justice system via the Cross Tracking System, EOTSS played a supporting role in the launch of the Executive Office of Public Safety and Security's new online dashboard, which now provides population metrics from state and county correctional agencies.

This new dashboard consolidates 9.4 million records submitted to the Massachusetts Department of Correction (DOC) and 14 County Sheriff Offices dating back to January 2017. The dashboard empowers users to distinguish between pre-trial and sentenced populations and visualize demographic subsets of the populations by sex, race-ethnicity, and age. Users can view organized aggregated data and download datasets for independent study.

Commonwealth Information Warehouse (CIW)

EOTSS has successfully modernized the Commonwealth Information Warehouse (CIW) by executing the successful migration to a new technology platform. The CIW brings together enterprise financial,

budget, time and labor, human resources, and payroll data that is maintained in separate source applications run by independent agencies.

The team migrated HR/CMS, MMARS, and UMASS from its legacy platform to Amazon Web Services (AWS) Redshift database. This modernization provides access to information through a centralized integrated repository that supports timely well-informed business decisions. The CIW provides query assistance to over 2,000 Commonwealth employee users. Since the modernization has been completed, millions of queries have been successfully executed, with an average run time of approximately 2 seconds.

Data Integration Services

EOTSS has successfully modernized its Data Integration Services via the successful migration from its legacy interchange system to MOVEit, hosted by Amazon Web Services (AWS), which will serve as the Commonwealth's managed files transfer service. This modernization initiative offers agency customers reliability, efficiency, scalability, enhanced security, standardized configuration, and a user-friendly interface. The project included the implementation of a File Transfer Dashboard, which allows agency customers to monitor the status and history of their own transfers.

MOVEit handles millions of file transfers totaling terabytes of data between Commonwealth agencies. This includes System-to-System (S2S) transfers, which are a fully automated process where files are transferred from one server to another without human intervention, System-to-Person (S2P) transfers, Person-to-System (P2S) transfers, and Person-to-Person (P2P) transfers, which are the simplest form of file transfer between Commonwealth employees and does not require any additional software - just a web browser for both ends of a transfer.

Executive Branch IT Personnel

Recruitment and employee retention of top talent in cybersecurity, IT, and digital services continue to face a strong headwind for the Commonwealth in a robust labor market (particularly in technology).

EOTSS' Personnel Team offers centralized IT recruiting across the Executive Branch, improving both the internal hiring process and the candidate experience throughout the application and interview process. We continue to seek out creative solutions to recruit the highly skilled workforce needed to further the Commonwealth's technology goals.

Additionally, EOTSS remains dedicated to its legislative mandate to consolidate IT personnel under its Article 87 authority. EOTSS will continue to make strategic and targeted consolidation efforts that achieve efficiencies across the Commonwealth while prioritizing the continuity of vital government service operations for the constituents that rely on them.

The following chart shows the number of IT personnel who support IT infrastructure and business applications within each executive office as of February 2023:

Secretariat	Number of IT Personnel
A&F	224
EOE	32
EEA	49
HHS	523
HED	14
LWD	145
EPS	27
TSS	375
DOT	46
TOTAL	*1,435*

Status of Centralization of Infrastructure, Network, and Cloud Hosting

Cloud Hosting

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 lift and shift, lift and optimize, and complete re-platform transformations of Commonwealth systems to the cloud to ensure continuity of those government services.

Since 2017, EOTSS has coordinated the migration of over 350+ Commonwealth applications/platforms to the cloud services model. We continue to work with our agency partners to identify and prioritize opportunities for further cloud migrations.

Over the past year, EOTSS has collaborated with our agency partners to complete the successful migration of key Commonwealth applications, including, but not limited to:
- Department of Mental Health (DMH) Applications
    - Successful migration of 50 DMH applications running on legacy servers to Amazon Web Services (AWS)
- Department of Public Health (DPH) Electronic Lab Reporting
    - Successful collaboration between EOTSS, DPH, Mass Brigham General, and other providers to set up the correct ports and protocols to allow traffic to flow to the associated application and database
- MassHealth NetReveal

- o Successful migration to Amazon Web Services (AWS) of fraud detection software used by MassHealth's Massachusetts Medicaid Information System (MMIS) to detect fraudulent billing and submissions
- MassHealth eSubmission Application
  - o Allows MassHealth recipients 65 and older to re-enroll online rather than in person or via email

Network and Infrastructure

The Modern Workplace Program (MWP), a multi-year undertaking, continues to be critical to EOTSS' carefully choreographed deployment of hardware, software, and tools that promote data security, collaboration, and mobility. The goal of the program is to build a sustainable technology foundation ensuring a resilient, accessible, and scalable platform for the continuity of government services. It is a component of the larger Future of Work Initiative in enabling a 21st century state workforce that is more nimble, consumes a smaller office footprint, and has access to updated hardware, software, and productivity tools across all agencies.

Additionally, EOTSS continues the buildout and operation of the enterprise-wide One Network that will lead to a uniform, scalable, and secure connectivity across the enterprise for all agencies and customers. EOTSS plans to make further enhancements to One Network by building out the wide area network (WAN) and security services to account for and support increased resiliency, mobility, and remote management.

EOTSS remains committed to its enterprise goals of retiring old infrastructure and mainframes, moving out of state-owned data centers, and migrating applications and systems to approved hosting solutions as part of the Standard Operating Environment (SOE).

Cybersecurity

Cybersecurity Executive Order

A recently issued Executive Order (#602) established the Massachusetts Cyber Incident Response Team (MA-CIRT), comprised of cybersecurity subject matter experts from across state government agencies, charged with the mission of enhancing the Commonwealth's ability to prepare for, respond to, mitigate against, and recover from significant cybersecurity threats.

The MA-CIRT, led by the Secretary of EOTSS, reinforces Massachusetts as a leader in cybersecurity enhancement efforts through a variety of strategies. MA-CIRT will routinely review cybersecurity threat information and vulnerabilities to make informed recommendations and establish appropriate policies to manage risk. The team will also develop and maintain an up-to-date Cyber Incident Response Plan, which will guide the actions of the Commonwealth's key public safety and information security and technology teams, state agency resources, and security professionals in responding to and minimizing the impact of significant cybersecurity threats to Commonwealth systems.

The executive order requires executive department agencies and other state agencies served by EOTSS to identify and report significant cybersecurity incidents and coordinate efforts to mitigate and prevent

further damage from cyber incidents. It also strongly encourages other government entities throughout the Commonwealth not served by EOTSS to report cybersecurity threats and incidents to the Commonwealth Security Operations Center.

Lastly, the executive order further requires all executive department personnel to annually complete the EOTSS-approved security awareness training program administered by the Human Resources Division (HRD).

Privacy Program

EOTSS's Privacy Office developed a Privacy Impact Assessment (PIA) to facilitate the identification and resolution of data protection and privacy concerns to address the growing threat of data breaches and the risk to Commonwealth and constituent data. The Office developed a Privacy by Design framework that will enhance the Commonwealth's conformance with applicable legal, regulatory, and policy requirements and ensure privacy concerns are embedded into the development and operation of IT systems, network infrastructure, and business practices. The Office will be rolling out the PIA process on a pilot basis with the intent to expand to enterprise wide.

EOTSS' Privacy Office also continues to engage with state agency partners to provide privacy consultations. The Office recently worked with the Executive Office of Health & Human Services (EOHHS) on the development of template consent forms for constituent health surveys and user engagement projects. Moving forward, the Office intends to standardize and build out the consultation framework to provide key services to help state agency partners meet their privacy needs.

The Office also released an updated Mass.gov Privacy Policy to better ensure constituents are informed of their privacy protections. This next iteration provides greater transparency on how user data is collected, stored, and retained, including any interactions from third-party vendors. The Office will continue to review and update its Privacy Policy to align with changing needs and technologies and to enhance the Commonwealth's privacy posture.

Enterprise Risk Management Program

EOTSS' Office of Enterprise Risk Management (ERM) is now requiring cloud service providers to respond to an information security risk assessment as part of its vendor risk management program. ERM will oversee this process in coordination with the Procurement and Contract Management teams.

Vendor Risk Management (VRM) is comprised of assessments to evaluate cloud service providers for information security and operational risks. This is a critical step to enhance the security of the Commonwealth, as it increasingly relies on 3rd-party vendors for its business applications and services, making vendor risk a real threat to government operations.

This initiative is a component of EOTSS' larger collaboration with State RAMP, which is comprised of leaders from state and local government, service providers, and assessment organizations. Modeled in part on the success of FedRAMP, State RAMP's mission is to promote best practices through education, advocacy, and policy development to support its members and improve the cyber posture of state and local governments and the citizens they serve.

Security Operations Center and Standard Operating Environment

EOTSS continues to engage with partners in the vendor community to procure and deploy top class cybersecurity technologies to incorporate into the Commonwealth's Unified Security Operations Center (SOC). Tools such as data aggregators allow our Security Operations Team to better monitor for abnormal activity on Commonwealth systems that require further investigation.

The SOC has been stood up and we continue to make progress on expanding its capacity and service offerings. We are expanding the technology platform to automate and orchestrate enterprise and agency data sources. Adding skilled personnel and managed professional cybersecurity services to continually monitor, mitigate, and eradicate threats will further support Commonwealth entities under the program. The SOC remains a top priority.

EOTSS also maintains the publication of security policies, standards, guidelines, and administrative directives as part of the Standard Operating Environment (SOE), including an Enterprise Security Incident Reporting and Response Framework and new end-user hardware and software standards.

State Cybersecurity Awareness Training

The Commonwealth provides cybersecurity end-user awareness training to all Commonwealth Executive Branch employees to ensure they are equipped with the knowledge to remain vigilant and avoid falling prey to potential cyber threats. By training our workforce, we essentially expand the number of the Commonwealth's cybersecurity team from a couple dozen to tens of thousands of employees. EOTSS supplements its cybersecurity training with enterprise phishing simulation exercises to gain a better understanding of the Commonwealth's endpoint vulnerabilities and to enhance its training materials.

With the issuance of Executive Order #602 establishing the Massachusetts Cyber Incident Response Team (MA-CIRT), all executive department personnel are now required to complete the EOTSS approved security awareness training program administered by the Human Resources Division (HRD).

Municipal Cybersecurity Awareness Training

In addition to the Commonwealth's workforce, EOTSS supports opportunities to assist our partners in municipal government. EOTSS' Office of Municipal and School Technology (OMST) is in its fourth year of administering the Municipal Cybersecurity Awareness Grant Program. Each year, approximately 40,000 to 60,000 employees from over 175 municipalities and public-school districts participate in the program to receive cybersecurity awareness training to better detect and avoid cyber threats. Coupled with the Community Compact IT Grant Program and OMST's free Cybersecurity Health Check Program, our partners in municipal government have the opportunity to connect with multiple resources to shore up their cybersecurity capabilities.

State and Local Cybersecurity Grant Program

In 2021, the federal government and Congress made a monumental statement by including $1 billion for a State and Local Cybersecurity Grant Program in the bi-partisan infrastructure bill. This four-year program will provide states across the country with vital resources to improve their cyber defenses. The passage of this first of its kind cybersecurity grant program is a clear indication that Congress recognizes the increasing threat that municipal governments face from cyber threats.

Over the past year, EOTSS has engaged with a number of state security organizations, including the Executive Office of Public Safety and Security (EOPSS) and MassTech Collaborative's MassCyberCenter to

apply for the federal fiscal year 2022 grant funds on behalf of the Commonwealth. This working group, led by EOTSS, has established a legislatively-mandated committee that includes municipal representatives and cybersecurity subject matter experts to develop a cybersecurity plan to best make use of the funds the Commonwealth will be receiving to support our municipalities in strengthening their cybersecurity defenses against cyber threats. EOTSS was recently informed that the Commonwealth's application has been approved by the federal departments administering the grant program.

Multi-Factor Authentication and Single Sign On

Over this past year, EOTSS' Enterprise Platforms Team has successfully integrated 300+ users on the EOTSS shared tenant with the Azure Directory (AD) and Multi-Factor Authentication (MFA). This successful integration will lead to increased security benefits and allow for Single Sign On for users.

Mobile Device and Application Management

EOTSS has completed the successful implementation of Microsoft Intune Mobile Device Management (MDM) and Intune Mobile Application Management (MAM). The implementation of MDM and MAM supports the Commonwealth's standard operating environment.

MDM and MAM are a cloud-based service that enables mobility for end users while ensuring adherence to security policies on mobile devices and allows EOTSS to securely manage access to Commonwealth applications, data, and resources on cell phones and tablets.

Transparency with the Legislature, Executive Branch Agencies and the General Public

Transparency with the Legislature

In coordination with our partners in the Legislature, EOTSS has developed and implemented systems for additional oversight and reporting for IT projects and procurement. For enhanced cost oversight and control, any IT project or procurement with expenses over $200,000 made by an executive office or one of its' respective state agencies must be reported to and approved by the Chief Information Officer of the Commonwealth.

Additionally, on an annual basis, EOTSS provides a report to the State Auditor and Legislature detailing the complete accounting and justification for all IT expenditures over $250,000. We appreciate the opportunity to share this information with the Legislature for increased transparency detailing how allocated funds are being invested in the Commonwealth's IT and cybersecurity infrastructure.

These reporting requirements support the mission of EOTSS and its IT Investment Advisory Board to ensure that taxpayer money is being invested wisely to improve delivery of government services and secure the Commonwealth's IT and data assets.

Transparency with Executive Branch Agencies

EOTSS has successfully launched a new EOTSS Product and Service Catalog, which allows our agency customers to browse more than 100 EOTSS products and services all in one place on mass.gov. This streamlined catalog makes it easier than ever for agency customers to leverage EOTSS' many offerings.

Agency customers can now make product and service requests through ServiceNow, a cloud-based software, that allows EOTSS to receive, track, and fulfill customer product and service requests.

To manage the process, EOTSS has established the Centralized Intake Group (CIG) to redirect requests to the responsible intake teams and escalate certain requests to leadership for review. CIG will collect key metrics to allow for EOTSS to continuously improve its transparency and customer service to its agency partners.

Transparency with the General Public

EOTSS has undertaken a number of initiatives to make state government services more accessible and to improve transparency between state government and the constituents we all serve. These initiatives include:

'Ask MA' Chatbot

EOTSS has completed the successful implementation of the 'Ask MA' chatbot, an enterprise product currently being expanded across numerous mass.gov pages. The Ask MA chatbot provides an additional mechanism for constituents to find and access critical information in a more direct manner. Ask MA includes a new auto-suggestion feature, which displays suggested questions if the text the user is entering matches or is similar.

Content typed into the chatbot helps provide the Commonwealth with important feedback on how constituents are interacting with the chatbot, whether they are finding what they are looking for, and what additional responses can be added to address the most frequent questions. Early results from the rollout of this enterprise product shows that more than 90 percent of the questions are being classified as "in-scope", meaning the chatbot thinks it knows the correct answer.

Initially launched as a tool to help connect constituents to important COVID-19 vaccine information, Ask MA is now being leveraged to help constituents access information across state government, including the Supplemental Nutrition Assistance Program (SNAP), the Department of Unemployment Assistance (DUA), and the Registry of Motor Vehicles (RMV). Expanded use of the enterprise chatbot is expected in the coming months, with EOTSS engaging with our agency partners to find opportunities to partner on this project.

Peace Officer Standards and Training Commission

EOTSS collaborated with the newly-formed Peace Officer Standards and Training Commission (POSTC) to build and launch a web application through which constituents can submit complaints to POSTC about police misconduct. This engagement is part of a larger effort to help POSTC better organize, act on, and report on information related to law enforcement certifications and conduct in the Commonwealth.

State Employee Diversity Dashboard

EOTSS' Data Team and Mass Digital partnered with the Human Resources Division (HRD) to launch the State Employee Diversity Dashboard. The new dashboard allows users to explore demographic data on the MA executive branch workforce and track the progress toward state government's goals to reflect the diversity of the people of the Commonwealth and to stand out as an employer of choice.

Data contained in the dashboard includes overall workforce composition, the number of hires, promotions, and separations. Demographic data includes gender, race, age group, length of service, veteran status, disability status, and more.

Map Tool for Survivors of Sexual Assault and Domestic Violence

EOTSS partnered with the Executive Office of Public Safety and Security (EOPSS) to launch a [new comprehensive, user-friendly website](#) designed to provide survivors of sexual assault and domestic violence and their families with information on resources available to them in a variety of critical issue areas.

The new website includes an [interactive map tool](#) for locating services throughout the Commonwealth. The map tool ensures that aggregated, important information is readily available and easily accessible on mass.gov. Both the website and interactive map tool are accessible on mobile devices, offering survivors with increased accessibility to these critical resources.

User Research and Content Analysis Engagements

State agency partners are increasingly leveraging EOTSS' Mass Digital team's expertise in user research and content analysis to improve the efficacy and user experience of its websites and applications. These engagements include direct communication with constituents that rely on state services, offering increased transparency and improved service delivery. Mass Digital is collaborating with our state agency partners on a number of engagements, including partnerships with the Executive Office of Health and Human Services (EOHHS), Executive Office of Labor and Workforce Development (EOLWD), and the Department of Unemployment Assistance (DUA) to conduct usability testing to improve the user experience interacting with their respective services. These collaborations are ongoing and we look forward to reporting on their progress in the coming year.

Looking Forward

In closing, we at EOTSS thank the Legislature for the opportunity to highlight some of our successes over the past year to modernize and secure the IT infrastructure across the enterprise in collaboration with our IT and business partners from across state government and in the vendor community. We welcome continued engagement and partnership with the Legislature to maintain the Commonwealth's position as a national technology leader.