



Executive Office of Technology Services and Security

Annual Legislative Report

February 2024



The Commonwealth of Massachusetts
Executive Office of Technology Services and Security
One Ashburton Place, 8th Floor
Boston, Massachusetts 02108

MAURA T. HEALEY
Governor

JASON SNYDER
Secretary / CIO

KIMBERLY DRISCOLL
Lieutenant Governor

February 15, 2024

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 230
Boston, MA 02133

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

Pursuant to Chapter 28 of the Acts of 2023, the Executive Office of Technology Services and Security 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 Christopher Smith at christopher.t.smith@mass.gov should you have any questions about this report.

Sincerely,

Jason Snyder
Secretary and Commonwealth Chief Information Officer

Purpose of this Report

The Executive Office of Technology Services and Security's (EOTSS) 1790-0100 line item in the Fiscal Year 2024 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, 2024, the executive office shall submit a report to the executive office for 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

As the lead IT and cybersecurity secretariat, EOTSS is committed to modernizing state-owned IT systems and services, strengthening the Commonwealth's cybersecurity posture, and improving the constituent digital-government experience.

EOTSS's enterprise approach is at the heart of how the Commonwealth approaches IT modernization, cybersecurity, and the delivery of accessible digital services. By leveraging this enterprise approach, the cost advantages achieved by more efficient operations offer greater economies of scale. As EOTSS matures each year, it also expands a greater deal of IT leadership to our agency partners, allowing them to leverage the technological expertise that EOTSS offers while also being able to better focus on its respective mission.

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 we continue our mission to provide IT leadership along with secure, quality digital information, services, technology and tools across the enterprise.

Savings, Efficiencies in Sharing Resources, and Additional Expenses through Consolidation

Contract Management

To successfully undertake multiple transformational IT projects while also ensuring they each meet the requisite data security and privacy requirements, oversight, state procurement rules, and cost accounting, methodical contract management is critical.

The Contract Management unit provides contract drafting, review and negotiation services on large-scale IT projects across the Commonwealth at the direction of the Secretary. To date, our Contract Management unit 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), and more importantly, a structured centrally-managed program that prioritizes contractual data security and privacy 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 the potential damages of a security breach or system failures due to unsupported or compromised software.

The unit had another productive year in 2023 with negotiating several significant Master Service Agreements (MSA) for the enterprise, including a three-year enterprise renewal with Microsoft; Phase 1 of the process improvement 'BEST' project; Adobe software, maintenance and professional services ; professional services for business process automation with Triverus; Everlaw enterprise e-Discovery solution and services; three MSAs for the Land Mobile and Microwave Radio Communication Equipment Site and Professional Services, each with a term of fifteen years; and supporting the Operational Services Division in negotiating three MSAs for the Fleet Management Software, to name a few.

IT Investment Advisory Board

We are grateful to the full Legislature for its continued leadership and support of both the EOTSS operating budget and IT capital authorizations. In particular, IT capital funding is critical for new investments and the replacement of outdated legacy IT infrastructure and systems.

Last month, Governor Healey filed the FutureTech Act, a five-year, \$1.23 billion bond authorization to support a wide range of cross-secretariat initiatives. The request is the result of an extensive survey of the executive branch on its IT needs over the next five years. We appreciate the Legislature's close consideration of the Governor's proposal.

The need for IT project funding is significant. In any given year, we receive twice as many requests for funding than we can provide. To select which projects move forward, a Board judiciously reviews proposals to determine their affordability and feasibility.

EOTSS chairs the IT Investment Advisory Board through its Office of Capital Planning to oversee the IT capital investment portfolio and program management. Composed of executives across the Commonwealth with expertise in overseeing large, complex IT portfolios, the Board strategically approves capital projects that improve the delivery of government services, taking into consideration

the project's risk and respecting the investment of taxpayer dollars. The governance around capital spending is well-developed, with clear protocols and methods for evaluating capital requests, and collaboration among the board to ensure that IT investments align with IT priorities.

Once a capital project is approved by the Board, the project performance is evaluated throughout its lifecycle. Similar to contract management, common missteps can be avoided if personnel are dedicated to guide complex projects. If a project performance is undesirable, the EOTSS Capital Planning office may request a project health check. As a result, projects stay on track, on time, and remain sound investments.

EOTSS values transparency, and we believe the IIAB, combined with our project management expertise, is a successful check to the trust placed in us through these bond authorizations.

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 vital tools in the government's ability to ensure critical business applications that power important 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 the continuity of those government services to avoid any adverse effects for the constituents that rely on them. Outside of Massachusetts, we are seen as a leader in the space of cloud hosting. Last year, Amazon Web Services (AWS) awarded Massachusetts with the AWS State and Local Government Champions award for our innovative use of AWS Cloud technologies in a way that had a positive impact on state services and citizen engagement.

We continue to work with our agency partners to identify and prioritize opportunities for further cloud migrations and hosting opportunities. Failure of government IT systems are costly, both in terms of a temporary inability for constituents to access vital government services and also potential costs associated with needed data recovery. Cloud migrations can be viewed as a cost avoidance initiative for the Commonwealth and investments in the continuity of government operations and improvements to the constituent digital experience.

MassVoice Modernization

Last spring, EOTSS led 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. Teams across EOTSS worked diligently to execute a complex yet successful roll-out of CloudBlu to provide this service securely and on schedule. The modernization of the MassVoice system will result in lower costs 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

Under the vision that data should drive every policy, process, and decision in the Commonwealth, the EOTSS Data Office has some ambitious and exciting goals set for 2024.

Foremost, we are working to establish an Enterprise Data Analytics program that improves the constituent experience by allowing decision-makers in every Secretariat to access accurate, timely, and easy-to-digest data to support the evaluation, analysis, and continuous improvement of Commonwealth policies and operations.

We recognize that the importance of measuring and reporting on policy outcomes has never been higher. Building an analytics program that focuses on the constituent and how our processes, services, and policy impact them is essential. Outcomes rarely are self-contained within one agency, and establishing formal processes for both sharing and reporting upon these outcomes is the mission of our data and analytics program.

Providing data governance standards and processes for all Secretariats to adhere to, the Data Analytics program has been boosted by the recently retooled Data Leadership Council, comprised of data experts across the executive branch, with the goal of aligning our data vision across the enterprise. The Data Leadership Council is also engaged in efforts to evaluate the current statewide data-sharing framework and make improvements to ease the safe, secure integration and use of data across state agencies to improve the delivery of state services to residents.

Massachusetts Data Hub

The EOTSS Data Office continues to build on the success of the user-friendly [Massachusetts Data Hub](#) tool to connect 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.

Since launching the Data Hub two years ago, EOTSS has added 132 new pages of content, and the Hub remains in the top 1% of mass.gov traffic. Of note, we have recently seen a significant surge in mobile users, suggesting more uptake by the general public.

In the year ahead, the newly launched MassGIS Data Hub will be incorporated into the main Data Hub. The MassGIS Data Hub serves as a "front door" where users can go to search for public geospatial data services from MassGIS and other organizations across the Commonwealth. Anyone can search the Hub for data of interest by entering keywords, or by browsing featured content or data categories, with options for viewing the items in maps and downloading the data in several formats.

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. expand its reach.

Emergency Assistance Sheltering

For the past several months, the Data Office has been embedded in the Emergency Assistance Sheltering Incident Command and is working hard, in equal partnership with our agency partners and the EOTSS Strategy team, to deliver a solution that integrates data across the emergency shelter system to deliver real-time data reporting capabilities. With feedback from the Legislature, EOTSS worked with the Governor’s Office and the Executive Office of Housing and Livable Communities to vastly improve the functionality and visualization of the emergency shelter public data dashboard that is available on mass.gov.

Commonwealth Information Warehouse (CIW)

The Commonwealth Information Warehouse (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. In our report last year, we noted that EOTSS had successfully modernized the CIW by executing the successful migration from its legacy platform to a new technology platform that 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.

Now, the EOTSS Technology team is working to align the CIW with the BEST program and the enterprise data vision to improve the integration, availability, and analytics/reporting capabilities of finance and human resources data for all state agencies.

Executive Branch IT Personnel

Recruitment and employee retention of top talent in cybersecurity, IT, and digital services remain a priority. We continue to seek creative solutions and new pipelines to recruit the highly skilled workforce needed to further the Commonwealth’s ambitious technology goals.

EOTSS also remains dedicated to its legislative mandate to consolidate IT personnel under its statutory 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. We intend to make significant progress in the year ahead as we work to consolidate the remaining secretariats and agencies.

The following chart shows the number of IT personnel who support IT infrastructure and business applications within each executive office as of February 2024:

Graphic 1.

Secretariat	Number of IT Personnel
A&F	254
EOE	56

EEA	59
HHS	577
HED	13
LWD	46
EPS	39
TSS	373
DOT	124
HLC	8
EOVS	1
<i>TOTAL</i>	<i>1550</i>

EOTSS, along with the Human Resources Division (HRD) and Secretariat CIO and HR leaders, has revised the classification of all IT roles across the Commonwealth as part of the Technical Pay Law (TPL) Program. Established by Chapter 717 of the Acts of 1983, the original TPL Program provided two job categories with broad salary ranges for IT roles. Under this revised classification system, there are now 75+ roles falling under nine job families and four levels. This has resulted in more clarity of the IT function being performed across the Commonwealth as well as consistency of service being delivered. After successful union negotiations over the past year, EOTSS and HRD are now implementing the program. All staff have been identified in a role and have been placed on a revised compensation scale. We anticipate this to be fully completed in March 2024.

It is anticipated that this revised system will aid in the recruitment and retention of staff, as well as expand upon professional development opportunities. Further, this is directly aligned with Governor Healey's recent skills-based hiring initiative.

As a result of roles getting re-classified, we have identified previous roles that were incorrectly classified as IT roles. The numbers in Graphic 1 reflect a more accurate account of IT roles than had been reported in previous years. It should also be noted that as the Executive Offices of Veteran Services and Housing and Livable Communities respective organizations grow, the IT personnel supporting the respective business applications for those secretariats may scale.

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.

Cloud migrations and hosting benefit from improved cybersecurity through more routine backups, high availability, resiliency, fewer individual points of failure, and specialized security capabilities. Utilizing the Cloud also offers improved environmental resiliency, as the consolidated hosting footprint allows for green energy usage, lower electricity consumption, and lower carbon emissions than maintaining several traditional on-premises data centers.

Since 2017, EOTSS has coordinated the migration of over 400+ Commonwealth applications and platforms to the cloud services hosting model. Over the past year, EOTSS collaborated with our agency partners to complete the successful migration of key Commonwealth applications, including but not limited to:

- The Department of Revenue's (DOR) GeniSys - Mass Tax application,
- The Group Insurance Commission's (GIC) "MAGIC," a state employees' benefits portal, and
- The Executive Office of Education's Malden Data Center, a significant migration that included 130+ applications.

Network and Infrastructure

As EOTSS promotes information sharing and privacy, a key component of that playbook is to deploy hardware, software, and tools that promote data security, collaboration, and mobility – all vital in the continuity of government services. EOTSS is committed to operational excellence and efficiency through the centralized management of information technology standards, infrastructure, and service delivery. The House 2 budget proposal supports tech modernization and hardware maintenance that enable continuous renewal and improvement in the delivery of state information technology services and solutions. In FY25, EOTSS will also continue with its consolidation of executive office information and technology services, bringing the benefit of standardization and economy of scale to purchasing and service delivery.

While some Executive Branch entities still operate distinct data centers and networks, EOTSS is working to transfer that infrastructure to the center through the One Network program. Enterprise Information Security policies and standards are published for the entire executive branch and any other agencies that rely on EOTSS services. Any executive office maintaining a separate environment from EOTSS must adhere to those security policies and standards. Through the Enterprise Risk Management office, EOTSS is working this year to review and update those critical policies and standards.

Cybersecurity

Security Operations Center

EOTSS continues to consider the cybersecurity of the Commonwealth's IT infrastructure, networks, and data as a top priority. We remain committed to making cybersecurity enhancements through a variety of strategies.

Through the support of key, trusted vendors, the unified Commonwealth Security Operations Center, or SOC, continues to expand its capacity and service offerings to monitor, alert, respond to, and mitigate cybersecurity threats across the Executive Branch. Guided by the Enterprise Security Incident Reporting and Response Framework, the SOC receives all incidents reported by executive branch agencies and can

receive reports from municipalities as another layer of security awareness that is mutually beneficial to the municipal organization and to the Commonwealth. In addition to the Incident Reporting and Response Framework, EOTSS maintains the publication of other security policies, standards, guidelines, and administrative directives as part of the Standard Operating Environment (SOE), including end-user hardware and software standards.

As we mature our cybersecurity infrastructure and processes, the personnel working in the SOC and EOTSS leadership continue to build strong cross-secretariat partnerships through the Massachusetts Cyber Incident Response Team, or MA-CIRT, comprised of public safety and information technology subject matter experts from across state government agencies. MA-CIRT is charged with enhancing the Commonwealth's ability to prepare for, respond to, mitigate against, and recover from significant cybersecurity threats and routinely reviews cybersecurity threat information and vulnerabilities to make informed recommendations, establish appropriate policies, and manage risk. Last year was a significant one for the MA-CIRT as in its first full year it matured formal incident response process and ran several tabletop exercises to validate that process.

Enterprise Risk Management Program

In parallel with the MA-CIRT, last year the Commonwealth's Chief Risk Officer and Chief Information Security Officer stood up a Chief Information Security Officer Council, or CISO Council, that has been an invaluable resource to manage IT assets and mitigate our known vulnerabilities by developing a vulnerability management lifecycle program. The CISO Council is a peer-to-peer network of risk and security professionals, the membership of which is comprised of representatives from the Executive Branch, Judiciary, Constitutional Officers, and Independent Agencies. Vulnerabilities are regularly identified by the Commonwealth SOC, and then fed into the CISO Council to remediate. Although we still have a long way to go, as a result of this process, vulnerabilities across state infrastructure fell by 30.2% since July 2023.

Third-party vendor risk remains a potential threat to the Commonwealth. Accordingly, our Office of Enterprise Risk Management is now requiring cloud service providers to respond to an information security risk assessment as part of its Vendor Risk Management (VRM) program. This program is overseen in coordination with our Procurement and Contract Management teams.

The Application Security Center of Excellence (ASCOE) was created to evaluate the security of software and applications purchased and renewed across the Executive Branch and aligns with the ERM's vendor risk management program. The security risk assessments include static and dynamic code analysis and penetration testing. These investments are designed to enhance the Commonwealth's security posture by mitigating third-party risk.

Privacy Program

Protecting the Commonwealth's data is of paramount importance to EOTSS. To that end, our Privacy Office developed a Privacy Impact Assessment, or "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 Privacy office began a pilot program in collaboration with our risk and security teams to assess privacy risks during the contracting and development stages using this

new PIA tool. This program allows the Privacy Office to assess privacy risks for new contracts and projects and develop mitigation strategies to protect Commonwealth data.

We continue to engage with state agency partners to promote privacy and have established an Enterprise Privacy Council consisting of privacy and legal experts from across state government who meet on a monthly basis with the goal of information sharing and building our privacy maturity. The Privacy Office, in collaboration with the Council, has developed a privacy policy designed to set baseline standards for privacy protection across the Commonwealth and fill in the gaps within the existing statutory framework. The Privacy Office has also developed an AI Policy to standardize AI use in the Commonwealth with the goal of promoting innovation while setting necessary guardrails to address privacy and legal risks.

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). In collaboration with HRD and secretariat leadership, EOTSS ensures that employees remain in full compliance with this mandate.

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) announced the recipients of the 2024 [Municipal Cybersecurity Awareness Grant Program](#) Awards last month. Nearly 80,000 employees from over 227 municipalities and public school districts will receive cybersecurity awareness training to better detect and avoid cyber threats. Coupled with the Administration's Community Compact IT Grant Program; the OMST's free Cybersecurity Health Check Program; cyber health services, scanning and penetration testing provided by the Massachusetts State Police Commonwealth Fusion Center; and the MassCyberCenter's planning guidance, the Administration offers our partners in municipal government with multiple no-cost 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 the Executive Office of Public Safety and Security (EOPSS) and MassTech Collaborative's MassCyberCenter to lead a legislatively-mandated working group that includes municipal representatives and cybersecurity subject matter experts to develop the inaugural Application for Grant Funding (AGF) for municipalities and state agencies to apply for this funding. Priorities for funding will be for organizations to migrate to a dot.gov domain, implement multi-factor authentication, and implement employee cybersecurity awareness training. The AGF was posted by the EOPSS Office of Grants and Research (OGR) in February 2024, with OGR acting as the State Administrative Agency for the grant program.

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 the 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 Catalogue, which allows our agency customers to browse more than 100 EOTSS products and services all in one place on mass.gov. This streamlined catalogue makes it easier than ever for customers to leverage EOTSS' many offerings. 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 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:

Commonwealth Digital Roadmap

Last year, EOTSS launched a multi-year digital roadmap project with the goal of providing simple and secure digital experiences that can adapt to people’s diverse and changing needs.

Similar to our data reporting effort, the digital services we offer have to start with a focus on the individual. Moving away from a focus on each individual agency and focus on a person’s experience is the primary goal of our Commonwealth Digital Roadmap program.

The problem statement for the roadmap is that the way people expect to interact with their government has changed, but we aren’t keeping pace with that expectation. We can solve that problem with a coordinated approach. The cornerstone of the roadmap is the creation of a single secure user profile that provides access to a centralized place for people to manage their interactions with various state agency services. With approximately one million Commonwealth users enrolled to date on login.mass.gov, the platform will scale as more users enroll, enabling greater personalization, accessibility, and integrated services over time.

By providing a single, unified identity across state government, we can better serve the person as an individual and only ask them for information once. The next opportunity of the roadmap is to provide the resident with a better way to track their progress, whether they are applying for a benefit or renewing a license, to improve transparency throughout the process and alert them proactively when action is needed or the process is complete. Users should not need to “know government” to receive the services available to them, it should be simple and straightforward. We also see an opportunity to streamline communications, making meaningful engagements across different channels, like SMS texts, chat and live agent, and getting residents’ feedback to inform future opportunities. Finally, we aim to provide personalized user experiences when interacting with the Commonwealth by catering to a resident’s unique needs, placing a strong emphasis on the accessibility of our digital services, while using simple, concise language to deliver personalized content.

‘Ask MA’ Chatbot

The AskMA chatbot quickly connects visitors to Mass.gov with the content and services they are seeking, with multilingual capabilities in twenty languages. Ask MA includes an 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. Ahead of the tax filing season, the AskMA chatbot is now offering graphic animation videos explaining one of the Department of Revenue’s most frequently asked questions. EOTSS continues to engage with our agency partners to find new opportunities to partner on this project.

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 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.

User Research and Content Analysis Engagements

We are seeing tremendous success as state agency partners are increasingly partnering with the Mass Digital team's expertise in user research and content analysis to keep residents at the center, involve them, and elevate their voices in how we design and improve state services. These engagements include direct communication with residents who rely on state services, offering increased transparency and improved service delivery.

To name a few, Mass Digital has engaged with:

- **Executive Office of Housing and Livable Communities (HLC)** to build a site for families who have been placed on an Emergency Assistance waitlist for to check their status for shelter availability. The program is also helping HLC make it easier for people to find information about housing assistance.
- **Dept of Unemployment Assistance (DUA)** to help receive feedback from real people as DUA builds their new system and incorporates plain language and accessibility considerations.
- **Division of Occupational Licensure (DOL)** on content strategy to make information about DOL's boards and licenses easier to find and understand. The Digital Roadmap team is also supporting the DOL tech modernization effort to develop one integrated licensing platform that will streamline the administration of their licensing, while providing our valued professionals with a better, seamless digital interface. We are also currently conducting research with DOL's customers to understand their pain points.
- **Early Education and Care (EEC)** to improve outreach to over 13,000 Massachusetts families on the state's child care financial assistance waitlist using targeted text reminders to ensure families receive important notifications and don't lose out on this vital assistance that allows parents to return to the workforce.
- **Department of Transitional Assistance (DTA)** to conduct user research to help the agency understand why persons with disabilities, older persons, and DTA clients at-large are utilizing in-person channels, such as visiting a local office, to apply for and manage benefits so that DTA can identify and act on ways to increase access to digital channels.

These collaborations are ongoing and are a snapshot of only a few engagements.

Digital Accessibility

Last month, EOTSS hired Massachusetts' first-ever Chief Information Technology Accessibility Officer (CIAO) last month. She is just the fourth statewide CIAO in the country. In this role, the CIAO will chair the Digital Accessibility and Equity Governance Board and will be responsible for ensuring that all of the state's digital applications are fully functional and accessible for all Massachusetts residents.

The office of the Chief IT Accessibility Officer was created by Executive Order 614, signed by Governor Healey last July on the 33rd anniversary of the signing of the Americans with Disabilities Act. Executive Order 614 established the Digital Accessibility and Equity Governance Board to advance the Healey-

Driscoll Administration's goal of providing a more equitable, inclusive, and accessible digital experience for everyone, including those who are blind, have low vision, deaf or hard of hearing, and other disabilities.

Operational Excellence

In 2023, EOTSS was able to make major advancements in the efficiency of its daily operations. EOTSS provides 24x7 enterprise monitoring services to monitor the health of all infrastructure hardware, networks, and applications to identify, predict, and preempt service outages and to notify the appropriate stakeholders. Email notifications are sent to both the customer and EOTSS when a system is critical or down. EOTSS will escalate within the EOTSS Incident Management process, up through the Major Incident process, as necessary.

Incident response took a leap forward by several key metrics. This year, EOTSS reported a reduction in Major Incidents from 49 to 44 when compared to the same timeframe last year, with an average incident duration of 18 minutes and 28 seconds. 81% of incidents were ultimately resolved in one day or less. These metrics come from a robust sample size: EOTSS averages 5,589 Incidents handled per month.

EOTSS handles a high volume of change request activity; this year, we continued to maintain and enhance technology services with a 93% success rate on all change activities, ensuring continuity of up-to-date and enhanced service. This results in 346 such changes monthly, on average.

IT Leadership

To ensure that EOTSS and the CIOs from across the Executive Branch are aligned on strategy and planning, EOTSS meets at least once a month with the Secretariat CIO Council. We convene the CIOs to provide IT leadership to the enterprise and give fellow Secretariats the tools and information they need to bring IT to the table at every phase of policymaking, especially at the beginning of a project lifecycle. The Secretariat CIO Council recently met to plan for 2024. Working together, we will advance our shared goals. Similar to EOTSS' internal priorities, the focus remains on cybersecurity, Identity Access Management, data analytics, and improving the digital experience for our residents.

Summary

This year, EOTSS reached major milestones, both operationally and with our IT capital portfolio. We matured the capabilities of the MA-CIRT and successfully tested the formalized incident response process. Our Security Operations Center (SOC) identified and mitigated large numbers of vulnerabilities

in statewide IT systems to ensure the continuity of government remains strong. We remain committed to the above efforts to advance operational excellence, enhance government efficiency, promote cybersecurity in the executive branch and with our external partners, and modernize the way the state does business.

In 2024, we look forward to advancing the Healey-Driscoll Administration's priorities of equity, inclusion and accessibility. Through the leadership of the first Chief IT Accessibility Officer and the Digital Accessibility and Equity Governance Board, EOTSS will ensure that digital accessibility and equity standards are aligned across the executive department.

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 are committed to these ongoing efforts to make state government more secure, more accessible, and more efficient. We welcome continued engagement and partnership with the Legislature to maintain the Commonwealth's position as a national technology leader.