MAINE STATE LEGISLATURE

The following document is provided by the

LAW AND LEGISLATIVE DIGITAL LIBRARY

at the Maine State Law and Legislative Reference Library

http://legislature.maine.gov/lawlib



Reproduced from electronic originals (may include minor formatting differences from printed original)



Office of Information Technology

2022 ANNUAL REPORT



MaineIT delivers reliable, secure, and effective technology solutions and strategies for State agencies to maximize service to Mainers.

To enrich and transform the delivery of government service to Mainers through technological innovation.

Executive Summary

MaineIT has established and is committed to maintaining an environment of collaboration, shared innovation, and resident-centric service by delivering excellence in information technology (IT) services and developing strong, trusted partnerships. Throughout 2022, the State of Maine Office of Information Technology (MaineIT) has further traversed the path of being the technology provider for all State of Maine Executive Branch agencies.

Since 2019, MaineIT has been delivering on a modern IT strategy and vision that builds on the foundation laid by all our previous efforts and accomplishments. A strategy in which:

- → We guide agency business partners through technology challenges to provide a resident-centric experience.
- → We lead the way in bringing value-added technology solutions to the table.
- → Our staff take great pride in their work which directly benefits Maine residents.
- → We have clear leadership alignment and a shared decision-making framework.
- → We have the flexibility to offer proactive, expert technology advice and shared solutions while providing a superior experience for our business partners.

To facilitate the realization of our vision, and to integrate our overarching effort of cultural improvement, MainelT adopted four core values, Customer Focus, Accountability, Responsiveness, and Empathy (CARE), to serve as our guiding principles for every decision, interaction, and service. As we embrace a holistic culture of CARE, our values are the underlying foundation for all major accomplishments that have been achieved throughout the past year.

The 2022 MaineIT Annual Report reflects on our accomplishments by highlighting areas of achievement, as well as areas in which we have identified additional opportunities in the coming years. Throughout this report, we highlight collaboration, self-improvement, and future vision initiatives. We detail both our annual accomplishments and future goals to ensure reliable and secure technology solutions and strategies that maximize services to the residents of Maine.





About Us

MaineIT, as part of the Department of Administrative and Financial Services, is a group of dedicated State employees and contractors striving to provide the highest quality services to our agency partners to ensure the public is served. We are a centralized, shared-services organization that directly delivers a full range of IT support, services, and innovation for Executive Branch agencies, and provides selected IT services to the Judicial Branch. MaineIT is also responsible for the operation and maintenance of the State's public-safety radio network.

MaineIT roles and responsibilities are legislatively authorized by statute: 5-M.R.S. Chapter 163: Office of Information Technology. The roles and responsibilities of MaineIT and the Chief Information Officer include the complete spectrum of IT oversight and management for Executive Branch agencies and selected parts of the spectrum throughout State government. MaineIT services include providing:

- Best business practices and project management (§1973);
- IT communications and coordination across State government (§1973);
- IT leadership and vision (§1973);
- Policies and standards (§1973);
- Privacy and security (1973);
- Strategic planning (§1974);
- Training and development programs for State employees (§1974);
- Approval of acquisition and use of equipment (§1974);
- High-quality, responsive, cost-effective information technology services (§1981); and
- Establishment of a Data Governance Program (§547).²

¹ http://legislature.maine.gov/statutes/5/title5ch163sec0.html

² https://legislature.maine.gov/legis/statutes/1/title1sec547.html

Essential Areas within MaineIT



Client & Infrastructure Services

- o *Central Printing* provides all agency partners with application high speed printing.
- Client Technologies provides client software, devices, and help-desk services to facilitate functionality, productivity, and ease-of-use for State agency partners.
- Computing Infrastructure & Services hosts approximately 800 agency systems on 600 servers and provides foundational enterprise services such as the Microsoft 365 suite, email accounts, data backup, and file storage.
- Network/Voice Services manages datacenters and maintains and protects all communication through State data networks, including voice and wireless networks.
- o **Radio Operations** provides all two-way radio communications and designs and builds emergency communication systems for Public Safety vehicles.

Enterprise Shared Services

- Application Development provides and supports the development, vendor selection, implementation, and maintenance of approximately 800 business applications.
- Architecture and Policy collaboratively creates, maintains, and governs the enterprise technology vision and related standards for consistent and secure processes.
- o **Enterprise Data Services** provides and supports agency data services by managing over 300 active servers and relational databases by providing analytic services.
- Shared Services consolidates business and technical operations for enterprise applications to standardize and streamline processes while reducing redundancies.

The **Information Security Office** protects State IT systems and assets by creating, disseminating, and implementing security policies, standards, and controls. The Office also responds directly to threats and assists with recovery from cyber intrusions.

Office of the Chief Information Officer

- Account Management ensures effective agency partner relationships and alignment of business needs with IT solutions.
- The *Chief Data Officer* develops and implements the State data governance and data management programs.
- The *CIO and CIO Advisory Team* determine the strategic direction of the organization and inclusion of the service portfolio and strategy.
- IT Finance is one example of our shared partnerships. This partnership with the DAFS Service Center provides vital business functionality through rate setting, budgeting, processing invoices, and providing financial support.
- o *IT Procurement* is another example of our shared partnerships. The group establishes and oversees contracts, acquisitions, and supports long-term, value-added, reseller relationships to help achieve State IT goals and objectives.

The **Project Management Office** defines and maintains project management best practices and introduces economies of repetition into the execution and supports technology projects across the State of Maine.

Key Focus Initiatives: Accomplishments and Goals

In 2022, MaineIT engaged in projects to modernize assets, strengthen security, and enhance IT services for agency partners and the public. The below sections highlight progress made over the past year as well as goals we plan to prioritize in 2023.

Application Modernization

MaineIT is modernizing our application strategy to identify, align, select, and support investments in modern IT assets for all Executive Branch agencies. Our approach to a modernized application service and delivery initiative will enable us to support changing needs, provide innovative solutions, support scalability, mitigate risk, and develop sustainable support models while meeting agency needs and aligning strategic priorities.

Accomplishments from our Goals

Education Data Standards, Modernization & Future Readiness Initiative. As a result of a grant awarded to the Department of Education (DOE), MainelT supported the DOE in a "Modernization & Future Readiness Initiative." This session provided a venue for State education agencies to identify and develop meaningful innovations in interoperability. To help states realize their ambitions, a state-by-state facilitated interoperability assessment was conducted to support the identification of where they are and where they intend to go. This diagnostic focused on people, processes, and systems, to get at the current and desired future state. In addition, MainelT, in support of DOE, attended a series of "Data Standards-based Deep Dive Discussions" on a variety of topics as well as the annual "Privacy and Interoperability Symposium." Interoperability with district data systems is part of the strategic plan to assist with the mission of providing information, guidance, and support to schools, educators, and leaders to ensure adequate and equitable school funding and resources.

"I appreciate all of the team members that have joined in the Deep Dive sessions. I appreciate their time in learning more about education data technologies and look forward to hearing about their experience in the sessions."

- A MainelT Agency Partner on the Data Standards-based Deep Dive Discussions

Maine State Ferry Ticketing System. MaineIT implemented a new ferry ticketing system to support the Maine Department of Transportation Ferry Service. The previous paper-based system was high maintenance and required three separate components to capture rider counts and relate ticket sales to usage. The new web system includes functionality for online sales, reading tickets by iPhones, logging full ticket history, and improved reservation management. The new system opens opportunities to greatly increase reservation capacity using deck space rather than fixed-slot counts.

My Maine Connection Web Portal. MainelT replaced a legacy benefits application system with a modern, intuitive, and user-friendly web application to support the Department of Health and Human Services. These improvements make it easier for Maine residents to apply online for health, financial, and food supplement benefits, and increases the efficiency for staff to review benefit eligibility for applicants.

Goals Moving Forward

Geographic Information System Modernization. In 2023, MaineIT will be supporting a modernization effort for the State Enterprise Geographic Information System. This system allows agencies to capture, store, manipulate, analyze, manage, and present all types of geospatial data. Traditionally hosted on-premises, this system will be moved to a cloud hosted environment in alignment with the Statewide Cloud Smart strategy. By decreasing our on-premises presence and increasing our reliance on the cloud, the State of Maine will be able to leverage cloud resources for increased capacity and enhanced resiliency within the Geographic Information System.

Modernized Licensing System. Collectively, the State of Maine oversees more than 50 separate licensing services and programs from Accountants to Veterinary Technicians, Liquor to Environmental, and many things in between. These programs are critical to protect and prevent harm to the public in both professional and consumer-based industries. A significant number of the systems supporting these licensing programs are dated and would greatly benefit from modernization efforts over the coming years. MainelT is approaching this effort with a plan to consolidate many of these legacy systems into a single enterprise licensing system based on industry technology standards and architectures. This effort will require significant collaboration between MainelT and our agency partners who directly support and oversee these services.

Offender Management System (OMS). MaineIT and the Department of Corrections (DOC) are preparing for the replacement of the mission-critical legacy OMS application. This system supports the DOC's primary business of managing adult and juvenile residents while in institutions, on community confinement, or under supervision in the community. In 2023, the vendor selection and contract will be completed and the project to replace the existing application with a modern solution will begin.

STARS Tax System. In 2022, MaineIT continued production of the State Tax and Revenue System (STARS) project, a four-year phased operation to replace the legacy tax systems for Maine Revenue Services. In November 2022, the project had the second successful rollout to production which included Sales Tax and Withholding Taxes. Moving forward in 2023, MaineIT will continue to support Maine Revenue Services through this critical modernization.

Client-Centric Service

In alignment with our CARE values, client-centric means providing a positive experience for and collaborating successfully with our agency partners to provide the IT systems and support necessary to ensure the residents of Maine receive exceptional State service. Since prioritizing this as a cornerstone to our IT service delivery model, MaineIT has implemented several key initiatives to improve user experiences and fostered open, trusting relationships that facilitate shared successes and outcomes.

Accomplishments from our Goals

Data Management Modernization. MaineIT has replaced our legacy, on-premises network file sharing data management system with a single, unified platform. In 2022, more than 620 network shares were successfully migrated to this new, more secure, cloud-integrated environment. Benefits of this migration include cost savings for storage, improved data management, and the ability for State of Maine users to independently retrieve back-up data.

High-Speed Print. Following a full modernization project, high-speed print is now in full production. The entire process from the back-end delivery of a print job to the queue, to the front-end printing output on three brand-new, high-speed printers was upgraded and aligned with the IRS Safeguard policies. MaineIT maintained the daily operations of printing impressions and managed a full upgrade without missing a deadline.

In 2022, MainelT supported **17,798,171** print impressions, including employee W2s and Maine citizen COVID Relief Checks.



Hoteling and Telework Authorization. Following the pandemic, to support the State's return to work strategy and new telework policy, MainelT expanded our remote work portfolio with the addition of two new applications. The first application tracks employee telework requests, allows supervisors to approve requests, and documents required components to ensure compliance with the telework policy. The other application, a workplace management solution for "hoteling" requests, provides agencies with a mechanism to effectively use their office space real estate to accommodate a hybrid workforce. Through the hoteling application, employees can reserve a workspace on days they plan to be in the office, allowing agencies to maximize the utilization of workspaces and offering flexibility to our workforce.

Laptop Refresh Project. With support from the Legislature, MainelT has implemented the Laptop Refresh initiative to reduce the laptop replacement cycle for the State of Maine organization to four years. Moving forward, and with no increase in cost to agencies, all laptops will be replaced on a four-year, rather than five-year cycle. Shortening the lifetime of

devices ensures that all users are working from high performing, modern, and security compliant machines now and into the future.

Modernized Laptop Setup Support: MainelT is leveraging cloud-based services to preconfigure laptops, to arrive directly from the manufacturer to the end user's desk, ready to complete the final steps for set-up specific to each user. MainelT provides an avenue, staffed throughout the workday, to support users if any setup questions or issues arise. This innovative approach to laptop delivery enables users to receive their new devices where they are at, and complete final device set up easily and quickly.

Network Support Initiatives. Over the past year, MaineIT has established a new contract with Consolidated Communications Incorporated for network transport (moving of data along fibers) services to support more than 450 State locations throughout Maine. The new contract will provide the State with an improved ability to deliver more bandwidth across the network at a lower price point. MaineIT also established an Enterprise Agreement with Cisco for wireless, routing, and switching licensing. The Enterprise Agreement simplifies licensing, enabling the State to implement higher bandwidths without necessitating costly hardware upgrades.

Self-Sustaining Culture of CARE. In 2022, MainelT launched an organization-wide CARE workshop series, which all MainelT was required to complete. Internal ambassadors learned techniques to leverage our core values and train the rest of the organization using best practices from world-class organizations. After several live sessions, the workshop series was redesigned as a virtual, on-demand training and is a required expectation for all MainelT new hires. This approach is one of the foundational building blocks to foster our self-sustaining culture of CARE at all levels of the organization.



Supply Chain Challenges. Ripple effects from the pandemic continue to result in networking equipment and hardware shortages around the country. To ensure that MainelT remained ready to support anticipated networking projects, we proactively worked with vendors to order the necessary equipment. Due to this forward thinking, MainelT was able to support all our agency partner planned projects and moves without being halted due to a lack or backorder of hardware.

Tier-Two Customer Support. In 2022, MainelT piloted a tier-two customer support escalation team. This team receives all unresolved customer support tickets from the MainelT Call Center technicians. Our pilot of this two-tier customer support model has been successful with 95% of all incidents escalated to this team being resolved in a few days. Since the creation of this team, wait times for customer support incident tickets in the Augusta area have been reduced by over 100 hours.

Goals Moving Forward

Enterprise Learning Management System. Since the pandemic, requests for a virtual learning management system (LMS) have skyrocketed. Over this period, MaineIT has implemented several different LMS solutions for State agencies to meet immediate needs. In 2022, MaineIT began collaborating with IT Procurement to draft a request for proposal, for release in 2023, to select a single vendor to implement an enterprise wide LMS to meet the virtual training needs of all State agency partners.

Increasing Network Bandwidth. MaineIT is focusing on increasing bandwidth across the State of Maine network as well as network connectivity to the cloud, and management of cloud networking. As part of this effort, MaineIT Network Services will be undergoing a full redesign of the State of Maine's internet interface which will include implementation of new circuits, internet firewalls, and network routing protocols.

Information Technology Service Management (ITSM). MainelT is implementing a new enterprise ticketing solution to replace the legacy Footprints system. This solution will be compliant with Information Technology Infrastructure Library best practices and will facilitate IT service, incident, catalog, knowledge, change, and asset management requests between State users and MainelT. Through the RFP process, MainelT has contracted with a vendor to implement the system in three phases. The ITSM project team has worked with MainelT service providers to document requirements and begin configuring the system to State of Maine needs. In 2023, MainelT will complete the first implementation phase and move to the second and third phases of the project.

In 2022, MainelT resolved <u>61,119</u> customer support tickets.

Predictive Analysis for Device Performance. MainelT is investing in predictive analysis software to centrally manage devices. The predictive analytics tool will provide insight necessary to identify and proactively resolve issues before they impact user devices.

Self-Service Lockers Pilot. In 2023, MaineIT will be piloting self-service lockers to improve our agency user experience and expedite IT hardware services. Self-service lockers will offer a safe and convenient location where technology devices and accessories can be picked up or dropped off when in need of repairs or being returned.

Digital Accessibility

In this age of digital transformation, it is crucial that our digital information and services are accessible to everyone, and that the entire State of Maine workforce is empowered to serve members of the public as well as their coworkers. This includes people with disabilities, who make up approximately 16% of Maine's population.

In 2022, MaineIT made significant progress in our journey to make the State's digital information and services accessible to the broadest possible audience. Below are key achievements from our strategic initiative to build and sustain digital accessibility maturity across ten key organizational dimensions.

Accomplishments from our Goals

Increased Digital Accessibility Awareness. Effective and regular communication is essential to develop and sustain awareness of the importance of ensuring digital accessibility for all. Over the past year we have included digital accessibility content in every MainelT newsletter, adopted a digital accessibility awareness and education plan, presented digital accessibility topics at multiple forums, and consolidated digital accessibility resources into a <u>single digital</u> accessibility website.

Strengthened Partnerships. In 2022, we continued to build upon our long-term partnership with the Information Technology Accessibility Committee (ITAC). Through this advisory group, which includes both community and state members, we have fostered vital relationships with individuals who have a vast array of knowledge and a vested interest in digital accessibility. Key ITAC input was incorporated in multiple strategic areas including digital accessibility awareness, education, and testing.

Goals Moving Forward

Nurture Our Digital Accessibility Culture. Requests for digital accessibility guidance again significantly increased over the prior year, as the importance of digital accessibility is becoming more widely understood organizationally. To sustain momentum, MainelT will concentrate our strategic efforts on governance, communication, policy, compliance, fiscal, software development, testing, documentation, procurement, and training.

Promote Multi-State Digital Accessibility Collaboration. The Maine-initiated Multi-State Digital Accessibility Collaborative expanded to fourteen states in 2022. We anticipate additional growth as we continue to engage in and gain visibility through additional forums including the National Association of State Chief Information Officers (NASCIO). We will continue to leverage this important collaborative to share digital accessibility information, identify best practices, and increase consistency between states.

Finance

In 2021, MaineIT identified goals involving our funding model, financial performance, service priorities, and federal funding available due to COVID. In 2022, there was additional turnover in our IT Finance Director position. However, the position was quickly filled, and continuity was established through communication, documentation, and support from the previous Director. This close collaboration provided the opportunity for a fresh perspective as well as a consistent approach to improving on our goals for 2022.

Accomplishments from our Goals

Federal Funding Sources. By the end of FY22, MaineIT had fully liquidated what remained of our allocated \$5.9 million in CARES funding. The funds were used to adjust for unbudgeted remote workspace changes including IT security tools, phone system upgrades, call center infrastructure improvements, network upgrades, and equipment needed for agency staff around the State to be effective working remotely.

Funding Model. In 2022, MaineIT finalized the rates for the FY24 and FY25 biennium. The rate-setting process allowed MaineIT to reevaluate how costs are allocated to our agency partners by services provided. Our rate-setting process is important to both ensure that MaineIT is financially stable moving forward, and that our agency partners are being charged appropriately for the IT services they are utilizing.

Goals Moving Forward

Maine Jobs and Recovery Plan. In 2022, MaineIT leveraged American Rescue Plan funds through the Maine Jobs and Recovery Plan to support IT services and operations, with authorization to spend \$48.5 million of these funds for various business cases through FY24. With these federal funds, along with the continued support of the Legislature, MaineIT will continue to align our fiscal model to support IT services in partnership with the agencies serving residents of the State of Maine.

Quality of Service, IT Security. Our investment in quality of service and IT security remains a top priority. In FY20, investment in this area was 3.65% of the IT budget. In FY21 investment increased to 5.4%, and in FY22 investment in IT security grew to 8.5% of the IT budget. This increase better aligns the State with the 10% national average.

Governance

IT governance is a formal framework which establishes the set of rules, policies, and processes necessary to support decision-making and ensure the effective, controlled, and valuable operation of IT departments. The practice of good governance focuses on documented boundaries and repeatable processes to align objectives and promote responsiveness, objective decision-making, resource balancing, and risk management. Excellence in IT management and service delivery can be achieved through adoption of and adherence to structured, proven governance principles and practices.

Accomplishments from our Goals

Chief Data Officer. MaineIT reestablished and filled the previously frozen Chief Data Officer (CDO) position. The CDO is responsible for both data management and data governance through the intersection of policies, standards, processes, technology, and people responsible for using and managing data as a secure and strategic asset. By employing rigorous data stewardship and communication, the CDO ensures data is valid, reliable, secure, and available throughout State government to improve data collection and address technology barriers currently faced by State agencies today. The work of the CDO is critical to the success of efforts such as PL 2021, Chapter 717, An Act to Promote Equity in Policy Making by Enhancing the State's Ability To Collect, Analyze and Apply Data.

Goals Moving Forward

Data Governance and Data Management Programs. MaineIT, in collaboration with State agencies and the State of Maine Chief Data Officer, will focus on developing a data governance program for the collective sharing of data with the goal to improve citizen interactions with government. Data governance, as an IT responsibility, encompasses all aspects of data, including data security, data lineage, master data management, data sharing, and data loss prevention. Through an appropriate data governance structure, the State will be positioned to share data seamlessly across platforms and between agencies to support data-based decision making and improve data collection. Through the implementation of a robust data governance program, the State of Maine will ensure that our residents receive a rich digital experience with improved access to State of Maine Government services.

Emerging Technology Governance. Proper IT governance ensures a consistent, aligned, and repeatable framework is established to inform decisions and accomplish business objectives. In 2022, as part of our larger modernization and governance efforts, MaineIT published several policies related to the governance of low code technologies. Moving forward, MaineIT will continue to focus on establishing IT governance surrounding the use of emerging technologies. By implementing a standard rubric for IT governance in this area, the State of Maine will be empowered to leverage the power of emerging technologies to adapt the way we do business, fulfill statutory responsibilities, best meet goals, and maintain alignment with our data and architectural practices.

Hybrid-Cloud. A hybrid-cloud environment combines on-premises assets with cloud technology. Our hybrid-cloud initiative is aimed at modernizing our legacy hosting environments which have historically resided solely in on-premises data centers. Cloud offerings provide the sustainable hosting foundation necessary to support new applications and modernization efforts. Through a hybrid-cloud approach, the State will realize significant flexibility and value from security, service delivery, integration, and data recovery perspectives.

Accomplishments from our Goals

Analytics in the Cloud. MainelT migrated Maine Department of Transportation's (MDOT) analytics to the Oracle Cloud. This migration provides MDOT with the agility and flexibility to quickly pivot for new requirements, implement continuous enhancements, and foster faster innovation.

Immunization Application Migration. MaineIT migrated the Maine Center for Disease Control and Prevention's on-premises immunization application to the Amazon Web Services cloud. The application is used to electronically receive, and store information pertaining to Federally distributed vaccines and comply with Federally mandated reporting. This migration provides modern technology, updated security features, and is a major milestone for the medical community moving forward.

Mainframe as a Service (MFaaS). In 2022, MaineIT completed the migration of our on-premises mainframe to the cloud. The decommissioning of our mainframe brought our nearly 50-year era of having an on-premises mainframe to a close. As part of this effort, the system which processes all State payroll was transitioned to a cloud platform where it is running smoothly. This migration has eliminated the need for MaineIT to hire for legacy skills to support a sunsetting technology and placed this critical workload on a supported platform with added disaster recovery capabilities previously not available.

Oracle Database Migration. In 2022, MaineIT migrated 160 Oracle databases to the latest version, positioning Oracle applications to transition off legacy hardware and onto new infrastructure. These modernizations ensure that the Oracle database platform remains current and ready for the future in State of Maine cloud hosting.

Goals Moving Forward

Continued Cloud Migrations. MaineIT will continue to move the State from a position of cloud readiness to a full hybrid-cloud model. One major component planned in 2023 are additional migrations that allow the State to continue the trajectory of moving off legacy hardware and provide for an enhanced security posture with new features. The combination of this migration and new features will allow for a better experience in a robust, resilient, and reliable environment.

Project Management

The Project Management Office (PMO) provides project and portfolio management services to agencies throughout the lifecycle of important initiatives that serve Maine residents. The PMO provides independent oversight and ensures national best practices are consistently applied to achieve predictable, beneficial, and sustainable outcomes. The PMO provides a full array of project and transformation management services from initiation to completion including project needs analysis, strategic alignment, project delivery, and change management.

Accomplishments from our Goals

Shift to Enterprise Project Management. Beginning in 2021 and through 2022, the PMO fully transitioned to a centralized PMO, providing direct project management and project consulting services to Executive Branch agencies and Constitutional Offices. During this time, we developed and implemented new services that, once mature, will serve as a single project portfolio lifecycle. Each of these services adds value alone, but together, as part of a unified model, that value will multiply. The services added to our portfolio are:

- → Portfolio Management: Helping agencies gain more value from projects by managing, tracking, and preparing initiatives early so they are ready when opportunities arise.
- → Portfolio Governance: Helping agencies choose the right projects at the right time to maximize resources and facilitate positive outcomes.
- → Initiatives Needs Analysis: Investigating agency business process needs before products or projects are selected to ensure investments are made wisely. These needs can be used for inclusion in RFPs.
- → Business Case Development: Defining desired outcomes, resource requirements and strategic values before beginning a project to get buy-in and create a clear target.

Goals Moving Forward

Human Resources Management System (HRMS) Replacement. The HRMS project will replace the several legacy systems with a modern and efficient application. In 2023, MaineIT will provide continued support to the HRMS project to include providing integration services and data analytics support for the initiative.

Statewide Enterprise Project Management Office (EPMO). Over the next two years, the PMO is committed to establishing a statewide EPMO for complete management of projects in the context of the agencies' long-term strategic goals. The Enterprise Project Management Office will combine the various aspects together into a unified framework. The framework will be based on national standards adapted to Maine State Government, that can be adopted by all State agencies, and in some cases, groups of agencies.

Radio Operations

The MaineIT Radio Operations team is responsible for multiple critical radio and communication system assets, including reliable radio operations for our Public Safety, law enforcement, and first responder partners. Serving as the backbone for all agency radio traffic within the State of Maine, it is vital that we continue to proactively support all users needing reliable and secure radio services every hour of every day.

Accomplishments from our Goals

MSCommNet System Continuous Upgrades. The Maine State Communication Network system (MSCommNet) provides a statewide radio frequency-based voice and data communication system. Our Public Safety partners rely on this system to perform lifesaving search and rescues, forest fire abatements, high-speed multi-jurisdictional criminal pursuits, and arrests. We have continued to improve the MSCommNet system by completing core and network updates in several locations to ensure alignment with the latest firmware, operating system, and security patching. Additionally, as part of our investment in keeping this vital system current, we continue to make progress on the deployment of the BeOn (radio communications over cellphone or laptop) technology. In 2022, BeOn was deployed to seven agencies, supporting over 280 users.

In 2022, the MSCommNet Radio System supported **24,750,129** push to talk communications for a total of **24,043** airtime hours.

This averages approximately 67,808 push to talk communications for over 65 hours of airtime per day!

One City Center Tower Site. The new radio tower site, located at One City Center, has been completed and tested. The addition of this site allows for more coverage in areas that, in the past, had limited or no radio coverage. The site also played a key part in the Governor's Annual Meeting.

Goals Moving Forward

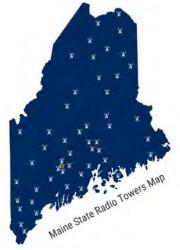
Additional Portable Radio Coverage. In 2023, MaineIT will continue to make critical investments in the portable radio coverage in areas surrounding the Maine State Capitol Building and Cross Office Building. Robust and secure radio coverage is critical for the safety of those working in these areas to support a timely and direct response when needed. Additional coverage ensures the necessary infrastructure is in place to support and protect those working in and around these geographical areas of State Government.

Co-Location Pilot. MaineIT's Enterprise Radio Services group has begun a Radio Equipment Co-location pilot program, beginning with the Aroostook County Sheriff's Office. The goal of this program is to develop a methodology to evaluate the viability of locations where county public safety communications equipment could operate effectively on State of Maine communications towers. Where successful, this effort would be a cost-effective way to improve Public Safety communications in rural areas by sharing infrastructure instead of new construction. An application procedure has been established and beta testing with the Aroostook County Sheriff's Office is underway.

Converged Network. The MaineIT Radio Operations team is developing and implementing plans and strategies to keep our radio communications system current and actively move towards a "converged network" of Land Mobile Radio (LMR) and Long-Term Evolution (LTE). This converged network will increase the effectiveness and safety of personnel by providing a dedicated, wireless broadband infrastructure capable of offering critical communication services, including voice, data, and video.

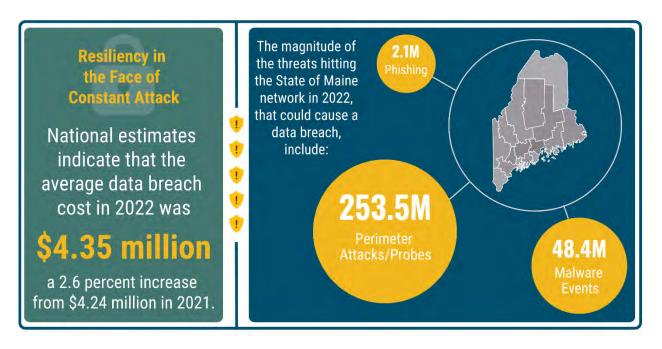
Microwave Upgrade. The preliminary review, assessment and engineering for the microwave radio upgrade has been completed, allowing for the equipment to be ordered, built, and configured. In 2023, we will complete customer-based testing prior to beginning installation later in the year. Once complete, the new system will bring a single technology to all sites and will provide for increased end-to-end bandwidth for radio system traffic along with site alarms and controls. This upgrade will enable the ability to perform remote software and security updates at difficult to access remote mountain top sites, saving the State travel, time, and expenses.

Upgrading to Phase 2 Radio Technology. Radio Operations is actively developing a plan to move the State of Maine Radio network to Phase 2 communications. The Phase 2 communications land mobile radio standard was developed by the Telecommunications Industry Association to meet requirements to develop a mission critical land mobile radio standard. The Phase 2 standard uses the radio spectrum more efficiently, reduces bandwidth congestion, and improves portable device battery life.



Security

MaineIT is committed to ensuring the security of State of Maine information assets. As threats continue to become more sophisticated, it is vital that we continue adapting to proactively counter those threats. In 2022, MaineIT made significant progress in strengthening our IT security posture to protect Maine State assets. This work encompassed several significant initiatives within not only State government but also local governments and municipalities throughout our state as well as on the Federal level. To continue our trajectory, we aim to further enhance our architectural, structural, and security improvements while providing support throughout Maine to strengthen the entire government security posture regardless of division, branch, or jurisdiction.



Accomplishments from our Goals - Information Security Improvement

Cyber Security Awareness Month. Governor Janet Mills proclaimed October 2022 as Cybersecurity Awareness Month in Maine. National Cyber Security Awareness Month is held annually in October. The Information Security Office announced details of this event and took the opportunity to provide State of Maine employees additional details on how they can protect themselves at work and home.

Maine Jobs and Recovery Plan. MaineIT authored and received approval for over \$14 million in grants under the Maine Jobs and Recovery Plan. These grant funds will provide the means to revolutionize the State Cybersecurity Program and result in huge advances in business continuity and disaster recovery planning for the State of Maine.

Maturing our Security Framework. MaineIT has adopted the information security standards and controls set forth in the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 Version 5 as the framework for our security program. MaineIT

continues to strengthen our security by implementing these security controls across the Executive Branch of State government. These efforts improve our ability to protect against new and emerging cybersecurity threats and vulnerabilities to ensure the confidentiality, integrity, and availability of State systems.

Security Standards Improvement. MaineIT ascribes to security and privacy controls set by the National Institute of Standards and Technology (NIST), the standards used in all federal compliance requirements and by the State of Maine in audits conducted by the Office of the State Auditor. NIST controls are generally used to enhance the cybersecurity framework, risk posture, information protection, and security standards of organizations. In 2019, MaineIT worked with a third-party security vendor to conduct a security and privacy control assessment against NIST standards. In 2022, a follow up assessment, conducted by the same third-party security vendor, showed a nine percent increase in our security and privacy control implementation. While this is a modest gain, during this same period NIST substantially increased the required number of security and privacy controls, adding 66 additional controls and 149 control enhancements.

To date, MaineIT has created and published 23
NIST Policies containing over 159 controls and
164 control enhancements.

Accomplishments from our Goals – Community Outreach

Maine Elections Cybersecurity Summit and Training. MaineIT's Chief Information Officer and Chief Information Security Officer presented at the Secretary of State event, Maine Elections Cybersecurity Summit. The virtual gathering had more than 100 people in attendance and featured presentations from elections and cybersecurity staff from the Department of Secretary of State, the Cybersecurity and Infrastructure Security Agency, and MaineIT. Topics covered in the summit included a broad overview of election security, the importance of building trust with Mainers, how to identify and fend off phishing and ransomware attacks, and the future of cybersecurity efforts in Maine.

State and Local Cybersecurity Grant Program. Through the Infrastructure Investment and Jobs Act (IIJA), Congress established the State and Local Cybersecurity Improvement Act, which established the State and Local Cybersecurity Grant Program (SLCGP). The intent of the SLCGP is to establish the "State role as leader and service provider" and appropriate funding to be awarded to states over four years. In response to the SLCGP, MaineIT formed a planning committee who applied and were awarded \$2,666,577 for the first year of this program pending a complete State Cybersecurity Plan. While this funding will not meet all the State of

Maine's cybersecurity needs, MaineIT intends to maximize the funds to elevate our collective cybersecurity posture statewide. Maine continues to encourage the federal government to expand its funding for cybersecurity issues as fraud, scams, and breaches are a state, national, and global threat.

Accomplishments from our Goals - National Involvement

Multi-State Information Sharing and Analysis Center (MS-ISAC) Executive Committee. The State of Maine Chief Information Security Officer was appointed to the MS-ISAC Executive Committee. The mission of MS-ISAC is to improve the overall cybersecurity posture of State, Local, Tribal, and Territorial government organizations through coordination, collaboration, cooperation, and increased communication. The Executive Committee consists of representatives from across the nation who are elected by MS-ISAC members to assist in providing strategic guidance and recommendations.

State Risk and Authorization Management Program (StateRAMP) Committee. The State of Maine Deputy Chief Information Security Officer was recently appointed as a member of the StateRAMP Standards & Technical Committee. StateRAMP's mission is to promote cybersecurity best practices through education and policy development to improve the cyber posture of public institutions and the residents they serve. The State of Maine is growing our adoption of StateRAMP, which provides a cost-effective, risk-based approach for the adoption and use of cloud services by the government entities.

Goals Moving Forward

Business Continuity and Disaster Recovery. Strengthening the State of Maine's business continuity and disaster recovery resilience is imperative for critical infrastructure and agency operations to minimize the effects of significant service-impacting events. The lack of contingency planning, training, staff, and operation resources potentially poses the greatest existential risk to the continuity of government as it operates today. The actions we take now will support the framework to improve our infrastructure, manage threats, support our response to attacks, and ensure the continuity of services along with recovery efforts in the face of events or civil emergencies.

Cybersecurity Program Development. We continue to face a daunting cybersecurity threat environment that poses widespread risk to our state and local governments, economy, and nation's security. Developing a strong cybersecurity program requires planning, organizing, and aligning internal and external resources required to execute and govern the security program in a unified model. These efforts will support and strengthen the State's cybersecurity program to meet the challenges we face today for the benefit of all our residents.

Risk Management. The rapid and sustained deployment of a hybrid workforce substantially increased our network's surface, and with it, our susceptibility to cybersecurity threats within

our network and infrastructure. A dedicated approach to risk management will allow MaineIT to develop a deeper understanding of risk by proactively identifying and evaluating weaknesses. Implementing best practices using a risk-based and systematic approach allows us to address our greatest security risks first and prioritize protections for our highest impact systems, assets, and capabilities.

Threat Awareness. Security monitoring, protection, and response capabilities must be a core investment to support both legacy and modern technology assets. Cyber criminals, hackers and nation-state actors are actively increasing both their sophistication and frequency of attacks for financial gain, conducting financial and identity fraud, performing acts of espionage, simply causing chaos. To create chaos, a cyberattack need only to be successful one time after countless unsuccessful attempts. Increasing our threat awareness establishes a risk-based approach to information security operations by proactively identifying and evaluating risks, taking a systematic approach in prioritizing remediation efforts, and minimize adverse impacts to State operations.



Notable and Noteworthy: 2022 Project Achievements

Over the past year, MainelT has engaged in projects to help modernize our delivery, improve performance, align initiatives, and support our agency partners in their service to Maine residents. The below accomplishments from 2022 further serve to demonstrate our commitment to our four CARE values: Customer Focus, Accountability, Responsiveness, and Empathy.

Ages and Stages Questionnaire. Over the past ten years, the State has been working to improve the "ages and stages" child developmental screening rates throughout Maine. Using a paper-based system left Maine behind the curve for screening percentages, and coupled with the pandemic, Maine's screening rates fell significantly below national averages. As part of Maine Department of Health and Human Services' strategic direction to improve services to Maine's children, MainelT deployed the web-based Ages and Stages Questionnaire in 2022. The goal is to boost questionnaire rates over the next five years, and place Maine in the upper quartile of the 26 states who are reporting this measure to the Children's Health Insurance Program and to ensure that more Maine children are ready to learn and thrive.

COVID Relief Checks. MaineIT provided the programming and operations support needed to send out the \$850 COVID inflation relief checks to over 876,000 Maine taxpayers. This process was then modified and repeated to produce the \$450 Winter Emergency Energy Relief checks in early 2023, again to more than 876,000 Maine people.

Digital States Survey. Maine has received an overall grade of an A- for the 2022 Digital States Survey. The Center for Digital Government's Digital States Survey is a robust survey designed to help state governments modernize and improve government IT service delivery. This survey is the most comprehensive and respected benchmarking for state government IT organizations, and a grade of an A- is the highest grade ever achieved for the State of Maine! An A- indicates that we have demonstrated "very strong innovation, high performing solutions, and have applied excellent practices in all aspects of operations, governance, and administration." Maine, along with all other 49 states in the nation, has completed this survey biennially for over a decade.

DocuWare Migration Project. DocuWare was identified by MaineIT as the replacement solution for Fortis. In 2022, six databases supporting over 120 different use cases in Fortis were fully migrated to DocuWare. Replacing Fortis with DocuWare will provide additional functionality to allow the State of Maine to further streamline existing processes and will allow for use to expand into other areas.

EDFACTS Federal Submission Improvements. The Department of Education (DOE) Data Team experienced an unprecedented amount of turnover in 2022, losing about 60% of the team's institutional knowledge. This turnover resulted in new collaboration between MaineIT and the DOE to help discover, update, document, and run processes in a variety of areas. As one example, the existing EDFACTS submission process was streamlined by leveraging best practices to generate the files related to behavior, special education staff and special education exit data groups. MaineIT and DOE teams reviewed file specifications, and validation was performed earlier than previous years, resulting in a high-quality data submission to the Federal government. This work provides the DOE with better analysis and use in policy development, planning, and management at the federal, state, and local levels.

End of Support Environments. The Computing Infrastructure & Services team identified business critical workloads that existed on unsupported servers and collaborated with agency partners to migrate those workloads to the latest compatible and supported version available. After migrating workloads to supported servers, the team successfully and fully decommissioned the entire Windows 2003 environment, as well as 99% of 2008 databases, and moved all on-premises SharePoint sites to the cloud.

Linux Environment Automations. The Linux team invested in automation to reduce time, effort, and manual errors across all aspects of the system administration work. Time savings is realized through automated processes, allowing the team to focus more on remediating security vulnerabilities and value-add tasks.

Supervisor Audit. MaineIT implemented a new process for supervisor audits, providing supervisors the ability to validate the individuals assigned to them monthly, via an automatic email notification. Supervisors can now add or remove staff as needed to correct their employee assignments. This information is then used to update assignment data in the State's payroll system, if needed, to prepare for the Human Resources Management System project, and all reporting is made available through DAFS Analytics.

Uninterruptible Power Supply (UPS) Datacenter Upgrade. Functionality of UPS in State of Maine datacenters is critical to ensure that, in the event of a power interruption, glitch, or failure, all systems remain up and running to sustain operations. The previous UPSs in our datacenters had been in service for 15 years and needed to be upgraded. This modern and powerful equipment will now continue to robustly support systems during inevitable and unexpected power failures. The entire project was completed in nine days.

IT Policies and Procedures: 2022 Accomplishments

The Architecture and Policy team at MaineIT, as one primary responsibility, develops and publishes IT and IT security policies for the State of Maine. Our IT policies aim to ensure the technology adopted and used within the State, meets the technical, compliance, and accessibility requirements to align with architecture principles and IT security posture.

The Architecture and Policy team, in collaboration with key stakeholders and the Information Security Office, and in response to an outside security assessment, continues to align our IT security policies with the National Institute of Standards and Technology (NIST) framework. As the U.S. Government IT Security framework, NIST serves as the formal guidance to manage cybersecurity risks, strengthen security operations, comply with regulatory requirements, and implement and maintain security management practices and programs. Additionally, the ever-changing technology landscape makes it critical to review and update all published policies on a routine basis to remain compliant with current standards and practices. The list below provides a selection of the major 2022 policy accomplishments that align with the NIST framework.

New NIST Policies Published in 2022

- → **Media Protection Policy (MP-1).** Documents procedures for protecting, retaining, and destroying media, including media access, legacy backup tapes, mobile phones, marking, storage, transport, sanitization, and use.
- → Personnel Security Policy (PS-1). Outlines how we manage risk from employee and contractor access to the State's information assets, including position risk designations, personnel screening, personnel terminations, personnel transfers, access agreements, third-party personnel security, and personnel sanctions.

NIST Policies Substantially Updated in 2022

- → Identification and Authentication Policy (IA-1). Outlines the procedures to ensure that appropriate identification and authentication methods are instituted across Maine State information assets.
- → System and Information Integrity Policy and Procedures (SI-1). Defines the State of Maine's policy and procedures to ensure the protection of the confidentiality, integrity, and availability of State information assets.
- → Access Control Policy (AC-1). Documents State of Maine procedures for implementing and maintaining appropriate access controls for State information assets.

Thank you

In 2022, cybersecurity threat awareness and protections continue to be of increasing importance for organizations at large, and especially State government operations who hold and protect a substantial amount of confidential and protected citizen data. Cyberthreats are not going away and are further likely to only continue increasing in complexity and number as we have seen throughout the past several years.

Over the coming year, MaineIT looks forward to leveraging Federal funds and State General Fund appropriations to continue ensuring that our technology footprint and IT services are both safer, more effective, and more available to residents. MaineIT continues to implement the services and systems necessary to protect State assets, support our hybrid workforce, and best serve the residents of Maine.

I would like to say thank you to Maine State leadership for their continued support. Our State has come together during difficult and unprecedented times to excel in our commitment to serving the residents of Maine. As we continue to grow and modernize our technology framework, partnership, and collaboration, we will continue to serve Maine residents for years to come.

Nicholas Marquis

Interim Chief Information Officer



