

2022

ANNUAL REPORT



Moving Minnesota Forward with Technology

mi MINNESOTA
IT SERVICES

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Photo:

Technician at a Minnesota IT Services staging facility preparing laptop computers for distribution.

Foreword

By MNIT Commissioner and State CIO Tarek Tomes



Throughout 2022, technology organizations found themselves at a momentous intersection of change – continuing to demonstrate the potential of technology without the daily pressures of the pandemic response. The State of Minnesota’s IT agency, Minnesota IT Services (MNIT), is no different. We spent the year demonstrating how technology can help the state accomplish big, difficult things to get people the support they need.

Just last year, state technology enabled 1.2 million Minnesotans who worked on the frontlines of COVID-19 to receive bonus pay, distributed over \$18.5 million to veterans and their families eligible for a service bonus, and expanded the availability of free or reduced-price school meals to over 50,000 students. To accomplish this work, MNIT put the people of Minnesota and their needs first.

This led to new opportunities to collaborate across state government, local governments, and the private sector. The Technology Advisory Council spent months focusing on how the state can adopt modern, business service-driven ways of working that center around end users and customers, and how to ensure a secure and solid foundation for state technology. The newly formed Cybersecurity Task Force worked to advance a whole-of-state approach to protect the information of Minnesotans and visitors, and keep critical systems running.

Now, MNIT is moving forward to enable the government services Minnesotans deserve. Every time that our customers, end users, clients, and partners interact with us, they should feel their time, energy, and needs are valued. We must ask ourselves and our partners, “How might we meet Minnesotans where they are at? How might we provide agility to Minnesotans in how they interact with government?” The answers to these questions require us to embody excellence and put people at the forefront of the business of technology. In the pursuit of these answers, we will not just modernize technology, but also the way that IT and agencies work together to improve outcomes for Minnesotans.



Equity statement

MNIT is committed to advancing equity through our technology and our work. We serve all Minnesotans, and we are part of the solution to reduce racial, economic, and other disparities.

How we will get there:

- Design the environment and accountability measures necessary to embed equity across MNIT.
- Ensure our workforce reflects the diversity of the communities we serve.
- Engage the voices and perspectives of those who will be impacted.
- Build, support, procure, and advocate for technology that works for a diverse Minnesota.

Who we are

Minnesota IT Services (MNIT) is the information technology agency for the State of Minnesota. Led by the state's Chief Information Officer, MNIT partners with agencies to deliver secure, reliable technology solutions to improve the lives of all Minnesotans as we set IT strategy, direction, policies, and standards statewide.

Photo:

MNIT staff review the progress of moving critical fiber infrastructure for Minnesota's Network for Enterprise Telecommunications (MNET) along I-94 in St. Paul for the new METRO Gold line, a Bus Rapid Transit (BRT) line.



What we do

Technology plays a critical role in creating an innovative government that works for everyone. MNIT delivers a full suite of services to state agencies, boards, councils, and commissions, and many central services to local government partners.

MNIT also enables state agencies to carry out day-to-day operations by supporting the numerous applications and technologies they use to connect with and provide services to Minnesotans.

Across the technology spectrum, MNIT teams support a statewide IT infrastructure, which incorporates a system of software, hardware, networks, facilities, security, storage, and service components, that keep the State of Minnesota running. The services that MNIT provides to each state agency embed security protections, maximize efficiencies, and reduce costs.

Services we provide

MNIT provides a large portfolio of IT services, which include:

- Collaboration and conferencing tools for remote and hybrid work
- Full workstation support
- Softphone and traditional voice services
- Business intelligence and low-code application tools
- Web services
- Cloud storage
- Network and telecommunications services
- Data and cybersecurity detection and monitoring
- Digital accessibility guidance and support
- Geospatial guidance and support
- IT product and project management coaching and services

How we provide IT services

MNIT provides services at both an enterprise and a local agency level.

Services that are provided broadly to the majority of the agencies MNIT supports are referred to as Enterprise Services. Enterprise Services are managed by MNIT Assistant Commissioners and enterprise teams. Enterprise services include storage and hosting, network, and voice services. MNIT charges rates for these IT services.

Services that are unique to a state agency are managed and delivered locally by MNIT's Chief Business Technology Officers (CBTOs) and their support teams. MNIT partners with state agencies to support hundreds of local services, such as the Minnesota Department of Employment and Economic Development's (DEED) Unemployment Insurance (UI) system and the Minnesota Department of Human Services (DHS) Pandemic-Electronic Benefits Transfer (P-EBT) program. Local services include support for agency-specific applications and projects, and they are a direct pass-through charge to the agencies.

MNET

Since 1993, MNIT has managed Minnesota's Network for Enterprise Telecommunications – a secure, reliable, and integrated statewide network. Through MNET, MNIT provides statewide broadband and wireless access to all state agencies in addition to Minnesota's higher education institutions, school districts, public libraries, the legislative branch, judicial branch, constitutional offices, counties, cities, tribal nations, and other government organizations in Minnesota.

MNET's statewide telecommunications strategy supports services to meet remote and hybrid workplace and education needs. Security is built into the MNET design, including Distributed Denial of Service (DDoS) protections for 1,700 locations and the state's main data centers. MNIT also extends cybersecurity staff and programs to counties to reduce risks to state data and systems.

How we work



Mission

We partner to deliver secure, reliable technology solutions to improve the lives of all Minnesotans.



Vision

An innovative digital government that works for all.



Guiding Principles

- Practice servant leadership.
- Treat everyone with respect and dignity.
- Do the right thing, especially when it is difficult.
- Ask how your actions are reinforcing or removing structural inequity.
- Promote the common good over narrow special interests.
- Be accessible, transparent, and accountable.
- Include voices from communities who will be most impacted.
- Embrace change.
- Measure when you can.
- Engage with empathy.

2022 at a glance



Cultivate a holistic and Connected Culture of work

- Launched a resource-sharing pilot to offer regular, ongoing opportunities to share IT talent across the agency. In quarter 3 of 2022, 15 employees participated in the pilot program.
- Connected with thousands of Minnesotans during the Minnesota State Fair.
- Socialized MNIT's equity statement – articulating the agency's commitment to advancing equity through our technology and our work.



Fortify the value and delivery of projects and initiatives

- Assessed modernization maturity improvements across state agencies using the Modernization Playbook as a guide.
- Built additional resources for state agencies to improve stakeholder engagement and sponsor IT projects.
- Launched the Product and Agile Center of Enablement to align people, processes, and technology to improve the way government services are delivered.



Promote people-centered digital government services

- Conducted an eight-week experiential innovation and design thinking workshop series for agency leaders.
- Launched customer satisfaction surveys through the Minnesota Service Hub – MNIT’s IT help portal for state employees – to measure performance and improve services.



Elevate Minnesota’s Digital Estate

- Moved hundreds of servers from on-premise to cloud-based infrastructure as part of Minnesota’s journey to the cloud.
- Enabled the technical capacity to break down data silos and reduce barriers to integrate data reporting for programs like P-EBT, the Children’s Cabinet, and Ed-Fi.
- Updated state websites, including those of the [Minnesota Department of Health](#) and the [Minnesota Pollution Control Agency](#), to improve usability and design, and to support new features.



Bolster successful state cybersecurity efforts

- Added endpoint detection and response capabilities to our statewide security program that cities, counties, port cities, and tribal nations can enable at a reduced cost. Endpoints are workstations, laptops, servers, and more.
- Modernized how MNIT assesses vendor security risks for all agencies through the lifecycle of technology contracts.
- MNIT and Minnesota Management and Budget improved security on the state’s Supplier Portal, where businesses can bid on opportunities to become suppliers for the state.

2022 by the numbers



43,679,858

Visits to state websites



4,126,041

Visits to MNsure websites



4,215,410

Visits to DEED's Unemployment Insurance websites



5,911,520

Visits to COVID-19 websites



1,006

Number of security incidents resolved



2,470

MNIT employees



2,495

Number of applications supported



444

Total projects tracked



11,793

Network devices supported



289

Number of websites we host and support



423,859

Service desk tickets across the executive branch



74,920,000

Chats on state systems



1,002

Total resources on the Minnesota Geospatial Commons



359,440,000

Emails handled by state systems



4,894

Purchase request volume

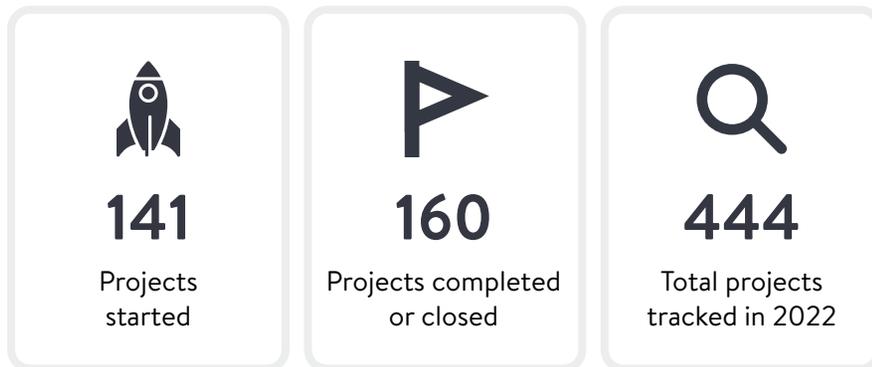
Digital services for Minnesotans

Portfolio metrics

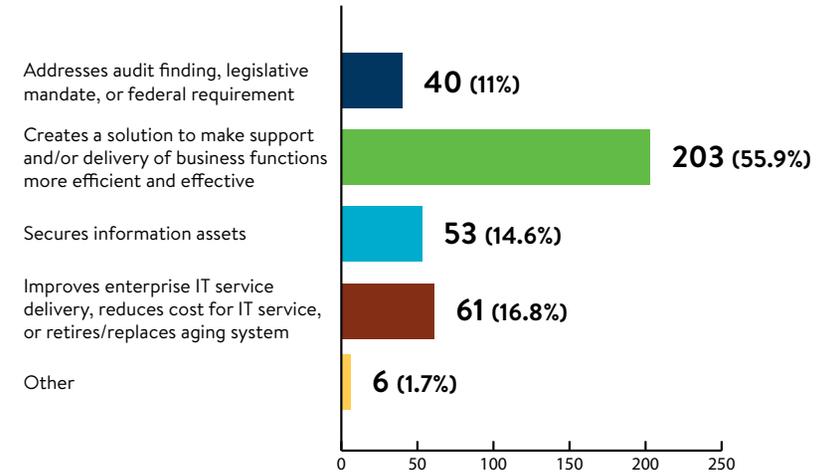
In 2022, MNIT's Office of Transformation and Strategy Delivery tracked 160 completed projects across Minnesota's executive branch agencies, boards, commissions, and councils. These projects range from public-facing applications to internal-facing IT infrastructure endeavors.

The Office of Transformation and Strategy Delivery also created executive-level portfolio reporting dashboards to increase transparency. All IT projects in Minnesota are tracked in a single reporting tool, and the data from that tool have been standardized to create dashboards, including a Key Initiatives Dashboard that aligns IT drivers, scope, schedule, budget, risks, and mitigation strategies.

Throughout 2022:



Dec. 2022 portfolio by value



Process improvements

Minnesota's Modernization Playbook, launched in December 2021, has powered the state's ability to transform how Minnesota's programs and services deliver value. MNIT is consistently using stakeholder engagement, project management best practices, and IT modernization principles to ensure that Minnesota has the business processes and procedures in place to streamline access to the executive branch's systems, services, and programs.



By providing people with many ways of obtaining services, we keep the focus on the fact that when you give people agility and time back, you're probably giving them the most precious thing that you can.

Tarek Tomes

Commissioner and State CIO

In 2022, the team of project management professionals who help agencies incorporate the playbook framework, the Transformation Practitioners Team (TPT), celebrated one year of work. The TPT includes technical and non-technical staff across Minnesota's executive branch. Throughout the year, MNIT launched new tools and assessments to help state agencies get a better understanding of the risks and opportunities for IT projects.

- **New go-live process:** A standardized go-live process ensures that projects are appropriately positioned before launching. In 2022, the team added automation and improved how information flows between divisions at agencies.
- **Modernization Maturity Assessment:** The second survey of its kind in Minnesota showed that modernization scores improved across the state, and agencies are continuing to mature their technology portfolios.

In 2023, MNIT will work closely with the Technology Advisory Council (TAC) to help agencies begin transitioning from a project-centered model for managing technology work to a product-centered model. Starting with a few agencies, the goal is to use product and agile approaches to help all state agencies provide innovative services that are valued by the people they serve. In 2022, MNIT worked with agency leaders and the TAC to start developing educational materials and resources for early adopters.

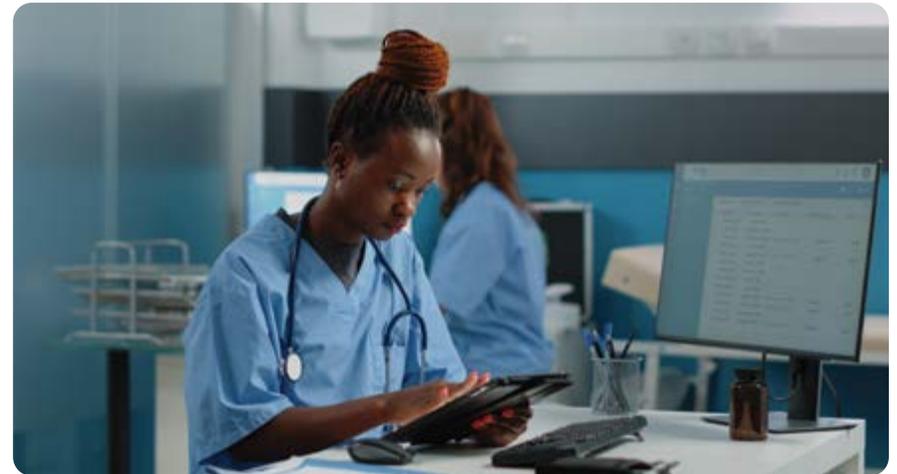
Additionally, in 2022, MNIT began to evaluate new tools to track and monitor technology initiatives that operate in either the project or product operating models. A tool will be implemented in 2023 to increase transparency about the health of the state's entire technology portfolio.

2022 highlights



Post-9/11 Veterans Service Bonus

On May 6, 2022, the Omnibus Veterans and Military Affairs bill provided \$25M for a [Veteran Service Bonus Program](#) payable to eligible veterans who served from 9/11/01 to 8/30/21. The Minnesota Department of Veterans Affairs (MDVA) partnered with MNIT and MMB to facilitate this program for eligible veterans, currently serving service members or veterans' beneficiaries. Within 60 days of bill passage, the teams developed an online system that processed veteran applications from entry to payment. To date, payments to 17,125 individuals totaling \$18.5 million are helping veterans and their families, fueling community economies across the state, and increasing awareness of veterans' services.



Naloxone tracking and reporting system

The Naloxone Portal is a centralized system to make sure that the opioid-reversal drug Naloxone is available for external partners like emergency medical services, and community and harm-reduction partners. MNIT partnered with the Minnesota Department of Health and the Department of Human Services to implement the system. The portal will improve the efficiency of how the drug is requested and distributed between stakeholders and increase the availability of Naloxone where it's needed most to ultimately reduce harm and prevent deaths associated with opioid abuse.



Frontline Worker Pay

The Frontline Worker Pay law provided bonus pay for eligible COVID-19 frontline workers who were employed in frontline sectors between March 15, 2020, and June 30, 2021. MNIT, the Department of Labor and Industry, the Department of Employment and Economic Development, and the Department of Revenue worked quickly to create an online application that balanced fraud prevention, timely payments, and ease of use. The application was built in less than six weeks and over 1.2 million Minnesotans applied for the benefit.

Expanded availability of free meals to well over 50,000 additional students

A cross-agency pilot of a new program, Medicaid Direct Certification, resulted in the discovery of over 50,000 additional pre-K through grade 12 students eligible for free or reduced-price school meals who would not have otherwise been identified. Overseen by the U.S. Department of Agriculture (USDA) and Minnesota's Children's Cabinet, the collaboration between the Minnesota Department of Education, Department of Human Services, and MNIT created a new component to the existing direct certification system that compiled data from the Medicaid system so households did not have to submit additional applications. This pilot continues the commitment the Walz-Flanagan Administration made to ensure seamless access to food for children during the school year.

Sexual assault kit tracking system

In July 2022, the Bureau of Criminal Apprehension and MNIT launched Track-Kit, a new sexual assault kit tracking program. Track-Kit provides victim survivors with 24/7 secure access to information about the status of their sexual assault kit, in compliance with Minnesota Statute 299C.106 that mandated victim survivors have access to information about the sexual assault kit related to their incident. They can also find victim advocacy resources and get contact information for the professionals affiliated with their kit. Track-Kit uses a barcode system to update information about a kit's status and location in real-time.





Exchanging death record data securely and efficiently

The Minnesota Department of Health (MDH) Office of Vital Records relies on partners like medical examiner offices to collect and report data about death events. MNIT and MDH modernized the way that data are exchanged – the interoperability – between the Minnesota Registration & Certification database for registering and certifying births and deaths and the Southern Minnesota Regional Medical Examiner’s Office case-management system. MNIT created an open application programming interface (API) to allow secure record entry in one step.

This secure infrastructure sets up future standards-based interoperability for other partners involved in vital event data collection and registration across Minnesota. It also improves the timeliness, completeness, and accuracy of death records by removing dual data entry. It has reduced staff time and minimized the risk of registration errors.



Electronic case reporting

MDH launched a project in the spring of 2020 to incorporate electronic case reporting (eCR). The new eCR process ensured timely and consistent reporting from healthcare organizations, which allowed MDH to have a better understanding of how COVID-19 impacted Minnesotans and the healthcare system throughout the pandemic. MNIT created dashboards to quickly view eCR messages to help MDH discover trends and changes in eCR messages.

Improved protections for vulnerable adults

The Department of Human Services, MDH, and MNIT created a reporting repository for the Minnesota Adult Abuse Reporting Center (MAARC). An algorithm de-identifies and archives personal data in reports of alleged maltreatment that must be referred and investigated. At the end of the investigation, the algorithm matches people to the Medical Assistance services they receive and service interventions for the lead investigative agency responsible for responding to the maltreatment. The new reporting system allows DHS to track critical steps in response to adults who are vulnerable and reported as maltreated, and enables reports about patterns of abuse, neglect, and exploitation.

New website for students about higher education in Minnesota

[My Higher Ed Minnesota](#) is a new website that was designed for students of all ages and all types, parents, and educators to provide them with relevant information and resources in the hopes of making their higher education journey as easy as possible. MNIT and the Office of Higher Education built this dynamic site to include a chatbot, multi-factor searches, and tools to compare schools and calculate costs. The site currently has over 2,300 monthly visitors, 61% of them ages 18-44.

Solid waste portal

The Minnesota Pollution Control Agency (MPCA) launched a new online service to collect data about solid waste from permitted facilities, transporters, and more. The data help MPCA issue permits and approvals. The new service improves user experience, data integrity and access, transparency, and speed of the permit process. MPCA plans to expand the availability of online services for the solid waste program to improve how users can submit documents, plans, and required reports.

Connecting farmers through self-service

In October 2022, MNIT and the Minnesota Department of Agriculture upgraded the FarmLink application. This searchable web tool connects prospective farmers with retiring farmers, establishes mentor relationships, and helps prospective farmers find farmland. With the FarmLink app, registered users can use the self-service features to manage land or farm listings, explore job opportunities and mentorships, and seek and review workforce applicants.

Photo:

My Higher Ed Minnesota website screenshots.





Mobile app to inventory DNR assets

MNIT worked with the Minnesota Department of Natural Resources (DNR) to create a new application that DNR staff use to inventory the more than 15,000 DNR assets – including aircraft, watercraft, vehicles, copiers, and more. The inventory can now be completed on a mobile device using a barcode scanner, and staff can access the application through a web app. During the 2022 pilot, the DNR inventoried over 70% of the DNR’s assets with the new app.



Data-driven seed inspections

The Plant Protection Program at the Minnesota Department of Agriculture (MDA) inspects seeds every year to make sure that Minnesota’s seeds are labeled with the right quality and type of seed. MDA, MNIT, and two vendor partners modernized the inspection process with an application that supports the strategic goal of building service-driven infrastructure. Eliminating paper and manual processes reduced inspection to report times from 20 days to less than 7 days. Staff now spend more time working with labelers and retailers to improve the impact of the regulatory process to benefit Minnesota’s farmers.



State deed modernization

In May, MNIT and the Property Tax Division at the Department of Revenue launched a new form for counties to complete state deed applications for tax-forfeited land. Tax-forfeited lands are lands in Minnesota that have been forfeited for non-payment of the general real estate tax. Counties seeking deeds for these lands can now apply quickly and easily online, and pay fees electronically.

Photo:

Previous page: DNR staff use the app and a smartphone in the field to inventory DNR fleet vehicles.



Improved overweight and oversize vehicle permitting system

Minnesota SUPERLOAD, a modern oversize/overweight vehicle permitting system, launched in June 2022. Commercial motor carriers can now order and pay fees for one or more permits with a single transaction, from any device, on any browser. System-issued permits increased by about 26%, reducing permit delays. Timely route information is provided to users through quarterly map updates and twice-daily road restriction updates from Minnesota 511.

Expanded identity options for state employees

As state government becomes more welcoming and inclusive, Minnesota Management and Budget and MNIT partnered with our statewide Employee Resource Group, MNclusive, to give employees options to describe their individual identities. Employees can now voluntarily state their gender identity or pronouns that accurately reflect their gender identity. Pronoun data will soon appear in the employee's Microsoft Office apps.

- HE/HIM
- SHE/HER
- THEY/THEM



Powering government

Enterprise services metrics

The enterprise service desk provides 24/7 IT support and services for Minnesota state government: executive branch agencies, boards, councils, and commissions; non-executive branch customers, education, tribal governments, nonprofits; and MNIT staff.



423,859

Total volume of service desk tickets across the executive branch



209,250

Number of those tickets resolved the same day



49.4

Percentage of service desk tickets resolved in one day



4.7

Average rating of service desk interaction (1-5 scale)



Moving to the cloud

MNIT made significant progress to transition to cloud computing services through the project CloudRAMP (Cloud Readiness and Modernization Project).

614 cloud training courses completed

137 databases transitioned to a cloud provider

445 servers built in or migrated to the cloud

Accessibility and geospatial metrics

Geospatial Information Office

The Minnesota Geospatial Information Office (MnGeo) coordinates geographic information systems within the state, creating connections between state agencies and other stakeholders from public and private organizations.



37

Number of projects the office supports and hosts for 22 agencies



1,002

Number of resources on the Minnesota Geospatial Commons

Aa

2,542

Number of downloads of guidance (and training) documents



729

People who have taken or are taking the Accessible Word training course



45

Orgs sharing their data on the Minnesota Geospatial Commons



88,384,246

Number of hits on the geospatial image server



2,960

Number of downloads of the Office of Accessibility's quick cards

2022 highlights

Improved connections for agencies and counties

MNIT improved bandwidth, cloud connectivity, and internet resilience across MNET. This led to more resilient networks at 83 out of 87 county courthouses by upgrading internet speeds and reliability for courts and county programs. The teams also improved internet speeds at state parks and state-managed land to increase speed and reliability for DNR staff and visitors. Finally, MNIT designed and refreshed WiFi networks for the Department of Revenue and the National Guard. They upgraded 93 switches and 127 access points at Camp Ripley and implemented new wiring and WiFi for 4 Minnesota Department of Revenue locations covering 1,500 employees.

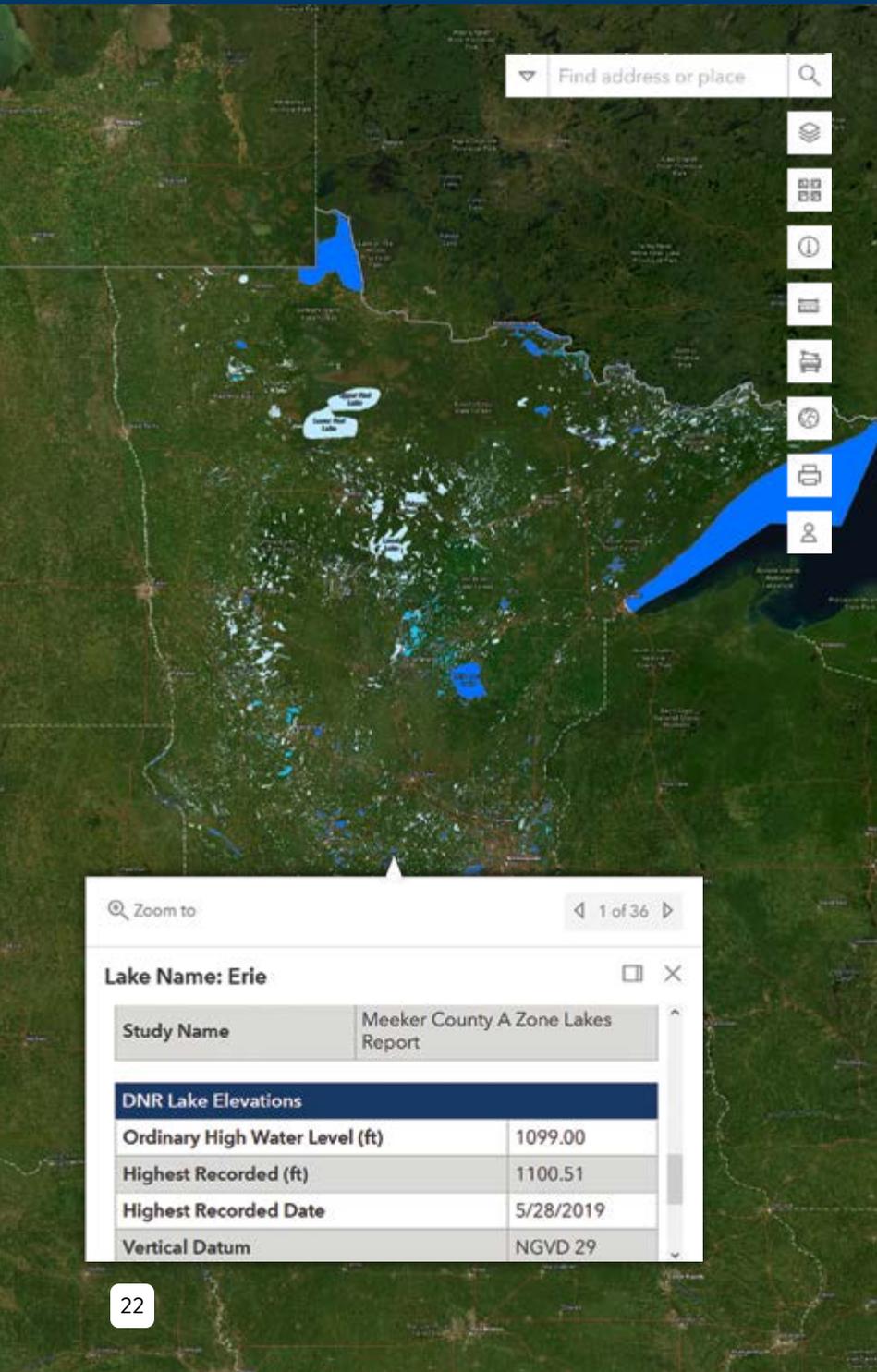
Lidar collection

Lidar data are precise elevation data that inform decision-making in agriculture and precision farming, natural resource conservation, flood risk management, water quality, infrastructure, construction management, etc. MNIT's partners include counties, cities, conservation districts, private sector businesses, tribal nations, and state and federal agencies. To date, partner efforts have acquired lidar data for 48,656 square miles, about 56% of Minnesota, with funding in place to acquire another 16,703 square miles, for a total of 75% of Minnesota.

Photo:

Network technician performing work at the Minnesota Judicial Center.





Zoom to 1 of 36

Lake Name: Erie

Study Name	Meeker County A Zone Lakes Report
DNR Lake Elevations	
Ordinary High Water Level (ft)	1099.00
Highest Recorded (ft)	1100.51
Highest Recorded Date	5/28/2019
Vertical Datum	NGVD 29

Modernizing applications in the cloud

MNIT undertook five application modernization efforts in the cloud to allow state agencies to deliver more flexible, secure, and user-friendly experiences for Minnesotans when they interact with state government. These applications were part of this effort:

- The Department of Natural Resources Lake & Flood Elevations Online application (LFEO) helps landowners understand the risk of flooding to their properties should lake levels rise, based on historical and modeled data.
- By modernizing a printing application, the Minnesota Department of Transportation (MnDOT) will reduce capital expenditures for the agency and improve the application’s resiliency for more continuous, reliable printing services.
- The Minnesota Department of Revenue’s Confirmation of County Assessor Appointees application is used by those seeking to be appointed as county assessors in Minnesota.
- The Minnesota Department of Education’s Test Disruption Database (TDD) application enables parents and administrators to log disruption incidents during the administering of statewide testing.
- Minnesota Management and Budget (MMB) has a Flu Clinic application used by MMB’s State Employee Group Insurance Program and flu clinic coordinators to schedule, manage, and coordinate state sites for employees to receive flu vaccinations.

Photos

The Lake & Flood Elevations Online map and data of Lake Erie in Minnesota.

Moving to the cloud

In 2022, MNIT modernized the architecture for applications and databases, supporting MPCA's move to cloud servers to make them more efficient, supportable, and secure. The teams moved 71 servers by "lifting" the architectural stack from one platform and "shifting" it to another. MNIT worked with DLI to lift and shift part of their infrastructure with the least impact on DLI business units. MNIT also moved enterprise servers in 2022 and continues to work with state agencies to accomplish similar modernization activities that reduce risk and improve resilience.



Training up for the cloud

MNIT is building a learning culture, which is a pillar of successful IT modernization and how we optimize cloud migration and operations. Over the past year, more than 1,000 MNIT employees started training in cloud fundamentals, and many more completed a range of Azure courses and certifications.

MNIT also launched a workshop series to accelerate MnDOT and the Minnesota Department of Veterans Affairs cloud migration journey. During the workshop, MNIT staff dug into methods of migration and identified tangible next steps for moving to the cloud.



Application portfolio tool

All of the state's applications have a lifecycle and timeline. MNIT implemented a statewide application portfolio management process and improved data collection using a tool that tracks application lifecycles, business value, technical health, and much more. The tool helps the state make decisions about specific applications, like whether or not to invest more in the application to improve its technical health, whether it is ready to move to the cloud, or whether it needs more planning in case of an emergency/disaster.

The tool creates visibility for all 2,400+ applications. MNIT built a data dashboard that gives executives a snapshot of the state's application portfolio. The data ensure that MNIT is making efficient and accurate decisions about applications – which help Minnesotans do everything from buying a fishing license, ordering tabs for their car, and receiving benefits as a veteran.



Accessible PDF training

MNIT partnered with MMB and digital accessibility coordinators to launch a free e-learning program to train state employees to create accessible PDF documents. This is a key skill set for all state employees in meeting the state's Accessibility Standard for digital information. Short on-demand modules on 11 specific topics are available to everyone on MNIT's public website.



RPA

In 2020, MNIT introduced robotics process automation (RPA) at the state's service desk and has since worked at the enterprise and agency level to incorporate it where it fits across the executive branch. RPA improves repeatable processes that are time-intensive, need to be accurate, and don't require critical thinking. The Minnesota Department of Health (MDH) identified processes that could be improved using RPA and launched a pilot in February 2021, and went into full production in May 2022. MDH used RPA to process wage notices for new hires. A process that took MDH's human resources department two to three hours to complete took only two minutes with RPA. Faster processing times, in addition to improved consistency and accuracy, enabled the team to spend more time on other critical work.

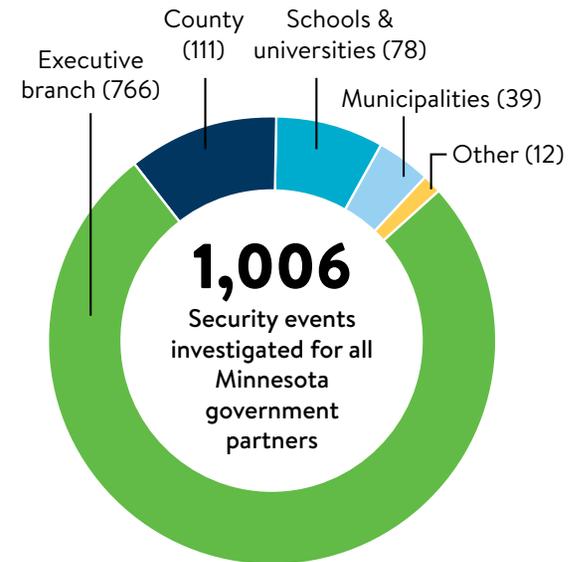
At the enterprise level, MNIT is introducing RPA to supplement portions of the staff onboarding/offboarding process. When a new state employee is hired, RPA works behind the scenes to automatically create an account and email address. When an employee leaves the state, RPA automatically disables and removes access to their email account on their last day/time of employment. After an agency's retention period passes, the RPA process deletes the account and mailbox.

Securing the state

Security metrics

Security incidents in 2022

Type of Security Incident	Number Reported
Compromised Password	197
Copyright Violation	16
Denial of Service	25
Forensic Investigation	209
Inappropriate Use	3
Lost/Stolen Device	8
Malware	245
Network Attack/Scan	40
Other	129
Policy Violation	84
Social Engineering	29
Unauthorized Access	14
Unauthorized Disclosure	7
Total	1,006

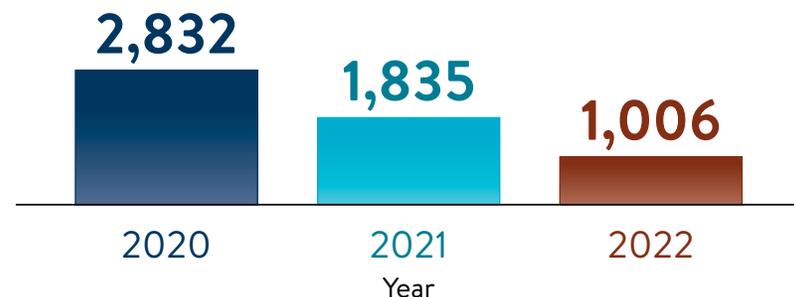


Improved detection leads to fewer reported incidents

Cybersecurity investments in endpoint detection and response, state employee training, multi-factor authentication, and threat intelligence led incidents investigated by the Security Operations Center (SOC) to decrease since 2019.

Even though the recorded incidents decreased, cyber attacks continue to increase in number and complexity. The SOC's tools and technologies can now automatically address common incidents to allow staff to focus on more complex situations.

Cybersecurity incidents reported in the last three years:



2022 highlights



SSMI Modernization

Minnesota continues to mature the Statewide Security Monitoring Initiative (SSMI), a program devoted to protecting the data of all Minnesotans by partnering with participating county governments, port cities, and tribal nations. MNIT introduced new features, including vulnerability management, incident response, log collection and monitoring, and risk and compliance to SSMI participating counties. The advanced vulnerability management features have directly led to an increased number of entities participating in SSMI. So far, over 60 counties, port cities, and tribal nations have signed up for the new services.

They can also now take advantage of Endpoint Detection and Response, which enables MNIT's Security Operations Center to help monitor and respond to incidents. This accelerated adoption far outpaces the gains in adoption under the previous SSMI program and helped MNIT receive a 25% increase in its grant dollars to implement the program in 2023. The updated SSMI program has quickly raised maturity levels and security capabilities for participating entities.

Protecting digital content and messages from the state to the people we serve

MNIT worked with state and local governments to standardize data that comes from state domains, websites, and apps in agencies, counties, and cities. This new policy helps to prevent cyber criminals from spoofing Minnesota's .gov, mn.gov, and state.mn.us websites and emails. Spoofing is a type of scam in which a cybercriminal disguises an email address, display name, phone number, text message, or website URL to convince a user that they are interacting with a known, trusted source.

Before you get an email from the State of Minnesota or visit a state government website, there is a system behind the scenes that makes sure your device recognizes that content or email as legitimate, and not spam, fraud, or phishing emails. MNIT recently added a series of security checks, called DMARC, for all emails that claim to be from the State of Minnesota or our registered web domains.

In the first two weeks after this project began, the percentage of messages that failed authentication daily was reduced from 50% to 1.22%. This new policy ensures Minnesotans can trust that the messages they receive, the websites they visit, and the apps they use are authentic – protecting both the people we serve and the reputation of the State of Minnesota.

EO 22-20

Governor Tim Walz issued [Executive Order 22-20](#) that requires state agencies to work with critical infrastructure providers to improve information security programs across the State of Minnesota and elevate cybersecurity work. One of the directives required MNIT to patch vulnerabilities and document any exceptions within the executive branch. MNIT also partnered with the Department of Public Safety to ensure appropriate planning and exercises take place to prepare for a cyber incident impacting Minnesota's critical infrastructure providers. These initiatives improved cybersecurity protections and response training across state government.

Connected Culture in action

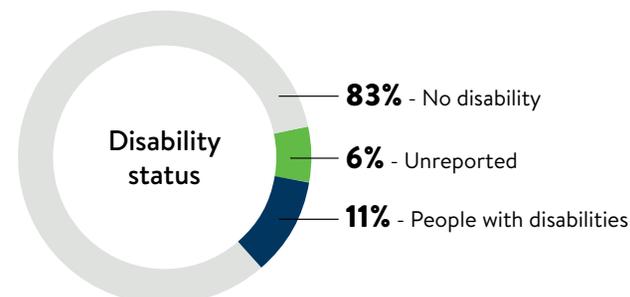
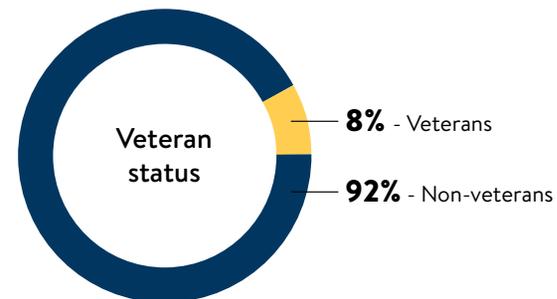
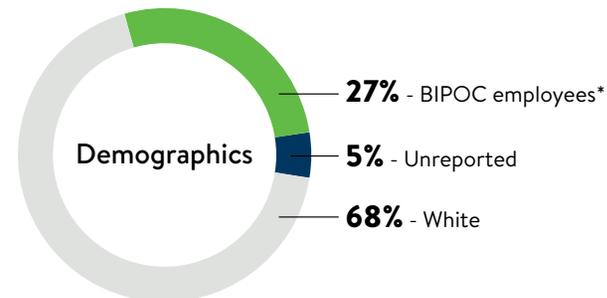
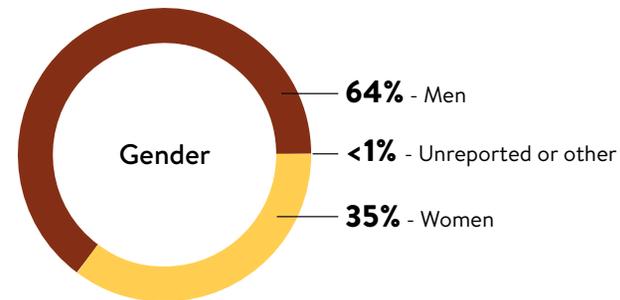
Diversity, Equity, and Inclusion

2022 highlights

- 50 employees on MNIT's Equity Team worked on 25 activities to incorporate equity into the way that we work.
- MNIT met Gov. Walz's goal of a two-year 75% retention rate for newly hired Black, Indigenous, and People of Color (BIPOC) employees, people with disabilities, and veterans by 2022.
- We met and exceeded Gov. Walz's goal of reaching 10% of people with disabilities within our workforce to match statewide workforce availability.

* BIPOC employees include: <1% American Indian/Alaska Native, 17% Asian, 6% Black/African American, 2% Hispanic/Latino, 1% Multiracial

Workforce demographics as of December 28, 2022:



Events MNIT attended



Minnesota State Fair

MNIT hosted two booths during the Minnesota State Fair. In the Education Building, MNIT staff helped fairgoers learn about phishing emails and chatbots. During STEM Day at the Minnesota State Fair, kids and families learned about coding and safe passwords from MNIT technology experts. We connected with over 11,000 Minnesotans during the fair.

MNIT Week

In January, MNIT held its annual MNIT Week – a time for professional development opportunities, and for staff to connect with MNIT leadership. This was the second virtual MNIT Week. Over 1,400 people participated in virtual training opportunities and over 500 attended expo presentations.

MNCITLA Annual Conference

MNIT leaders spoke at the Minnesota County IT Leadership Association (MNCITLA) Annual Conference in September. During an interactive Q&A session, MNIT connected with county IT leaders to better understand mutual technology needs, including cybersecurity and modernization.

GAAD

MNIT's Office of Accessibility celebrated Global Accessibility Awareness Day (GAAD) on May 19 with State of Minnesota employees. A series of short presentations showcased the value of accessibility and the way that accessibility improvements drive inclusion.

Cybersecurity Awareness Month

Governor Tim Walz proclaimed October 2022 as [“Cybersecurity Awareness Month” in the State of Minnesota](#). Throughout Cybersecurity Awareness Month, MNIT shared cybersecurity tips on social media to generate public awareness about staying safe online, and educated state employees about cybersecurity best practices and reporting procedures through an internal messaging campaign.

Photo:

Tarek Tames, MNIT Commissioner and State CIO, delivering remarks at STEM day at the Minnesota State Fair.

2022

Visionary Leadership Award



Laura Johnson



Terry Seiple

Employee Recognition

Cyber Security Visionary Leader

The 2022 Visionary Leadership Awards honor the efforts of industry colleagues who are truly leading the way through their visionary approaches across the discipline of cybersecurity. During the Cyber Security Summit on Oct. 25, 2022, Leader Awards went to two MNIT staff: Terry Seiple (Visionary Application Security Leader) and Laura Johnson (Visionary Security Operations Leader).

Annual Awards

As part of MNIT Week, MNIT employees joined together to celebrate their work delivering outstanding IT service to Minnesota and its executive government with the Annual Awards ceremony. The agency's Employee Recognition Committee (ERC) recognized honorees and finalists for the Annual Awards. Honorees from 2022 are:

- **Employee of the Year:** Peny Nguyen, MNIT Finance
- **Manager of the Year:** Neal Dawson, MNIT Enterprise Security
- **Team of the Year:** Enterprise Workstation Deployment
- **Project of the Year:** COVID-19 Relief Advanced Premium Tax Credit (APTC) Changes: MNIT DHS and MNsure
- **Partner of the Year:** the Minnesota Department of Health

Top 25 Doers, Dreamers, and Drivers

The State of Minnesota's Chief Information Officer (CIO) and the Commissioner of MNIT, Tarek Tomes, was named a [2022 Top 25 Doer, Dreamer, and Driver](#) by Government Technology magazine (GovTech). Read more about Commissioner Tomes' work in a [profile from GovTech](#).

Agency awards



Digital States Survey

The State of Minnesota [received an A in the Digital States Survey](#) for the first time in the state's history. It assesses how IT organizations within a state align their work with the governor's priorities.

Geospatial Governor Commendation

Two [Minnesota Governor's certificate awards](#) for exemplary geospatial projects were presented at the [MN GIS/LIS Conference](#) in Bemidji, Minnesota, on October 13, 2022: COVID-19 Testing Locations and Vaccine Finder Web Mapping Applications; and Minnesota Natural Resource Atlas. The COVID-19 Testing Locations and Vaccine Finder Web Mapping Applications recognized the work of MNIT, partnering state agencies, and the Metropolitan Council.

DNR Tech Trailblazer Award

The Minnesota Department of Natural Resources (DNR) won the [Tech Trailblazer Award](#) in the 2022 Granicus Digital Government Awards for their wolf plan online public engagement project. The Tech Trailblazer Award recognizes an organization charging forward with digital transformation.

Governor's Safety Award

Minnesota IT Services was [recognized for excellence in workplace safety and health](#) during the 2022 Minnesota Safety and Health Conference, May 3-4. MNIT is one of 191 employers to be honored through the awards program, coordinated by the Minnesota Safety Council.

Golden GOVIT

The 2022 Golden GOVIT Awards, part of the Government IT Symposium, recognizes government agencies and individuals that have advanced government technology through collaboration, innovation, service, and individual leadership. Three technology efforts associated with the State of Minnesota and Minnesota IT Services (MNIT) were honored as award winners and finalists.

Minnesota's celebrated efforts included:

- Service Award Winner: Veterans Applications Tracking System with the Minnesota Department of Veterans Affairs (MDVA)
- Service Award Finalist: Workforce One eSignature project with the Minnesota Department of Employment and Economic Development
- Collaboration Award Finalist: Veterans Post 9/11 Service Bonus with MDVA

Metrics and finances

Procurement



4,894

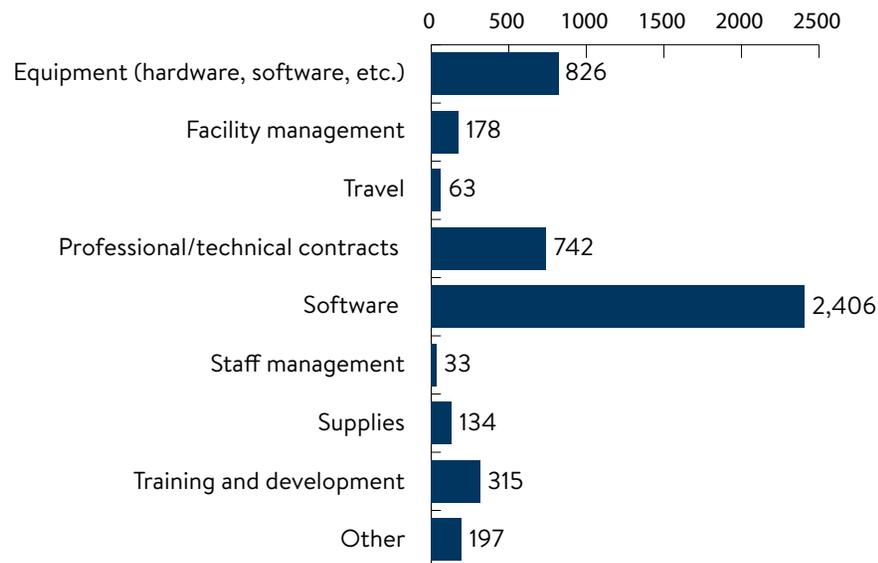
Purchase request volume



10 business days

Average purchase request processing time

Number of purchase requests



Average processing time (days)

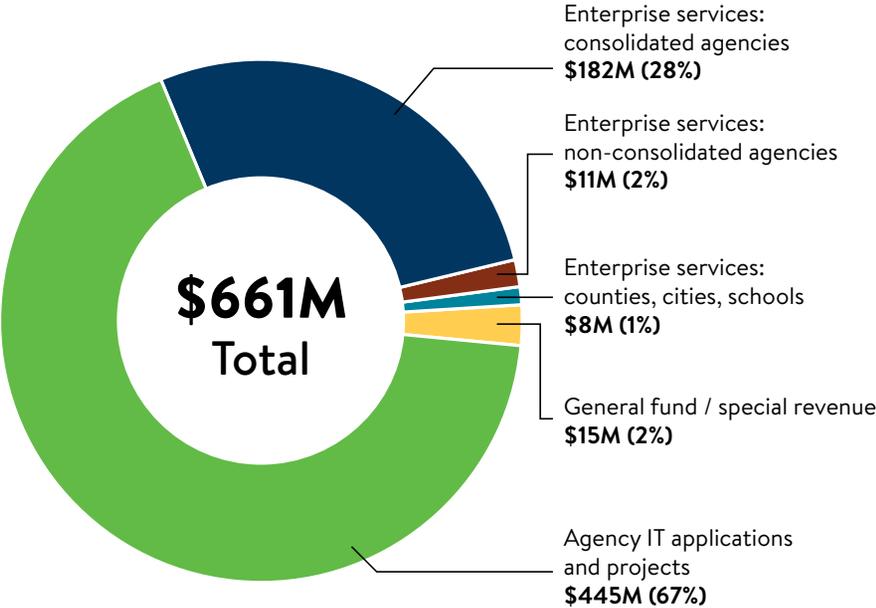


Enterprise Financial summary: FY22

How is MNIT funded?

Minnesota IT Services is primarily funded through a chargeback model where revenue is received from the executive branch and non-executive branch state agencies and some non-state entities for IT services. This funding includes enterprise rate-based services and pass-through services for IT projects and applications. Only two percent of funding is from general fund appropriations and special revenue funds.

MNIT funding, FY22 actual

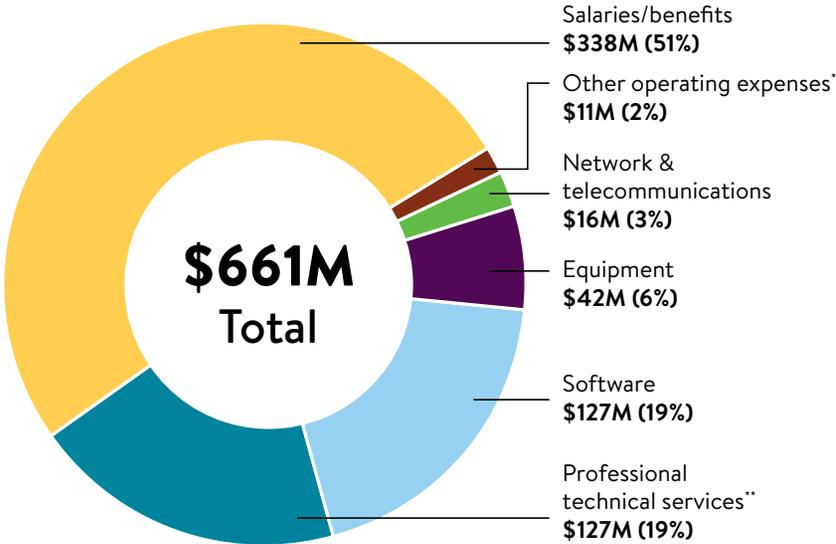


Notes:
 Agency IT Services: Mainly agency apps and projects
 Enterprise Services: Rate-based services
 General Fund/Special Revenue: Legislative appropriations, fees, grants, and other special revenue

How are MNIT's funds spent?

In FY22, MNIT expenses across all customers were \$661M. State agencies that are subject to IT consolidation spent \$642M on technology.

MNIT expenses, FY22 actual



* Other operating expenses includes space and utilities, statewide indirect, travel, supplies, and employee development.
 ** Professional technical services include both external and state vendors.

Transforming financial processes

MNIT continues to modernize our financial management processes using powerful analytics and automation tools that provide transparency and address the priority needs of agencies.

Over the past year, MNIT expanded the use of business intelligence tools to provide data visualization and process automation. The resulting improvements in processes, accuracy, and user experience touch multiple areas for MNIT and our agency partners:

- **Volume forecasting:** During the FY24/25 rate-setting process, MNIT launched a volume forecasting tool that improves the accuracy of forecasts, resulting in fewer changes.
- **Payroll:** New processes streamline biweekly payroll with automated notices about timesheet completion and approvals.
- **Billing:** MNIT uses new tools to analyze large amounts of billing data and present it in data dashboards to pinpoint anomalies and potential errors before the final billing process. These tools increased accuracy and decreased the amount of effort required to address issues. MNIT customers get automated notifications about payments and statements.
- **Financial Reporting:** Data visualizations from SWIFT, the state's Enterprise Resource Planning (ERP) system, help business users understand financial data for easier decision-making. Financial reporting is more accurate, timely, and efficient.
- **Cloud cost management:** To help Minnesota continue its journey to the cloud, MNIT created a Cloud Consumption Summary that tracks consumption and billing. It provides MNIT and agency staff with monthly application modernization costs to help inform decisions about the cost of optimal cloud usage.



Councils and collaboration

Throughout 2022, MNIT collaborated with advisory, legislative, state, and local organizations to improve how technology serves Minnesotans.

Minnesota legislature highlights

- The Legislature passed the Frontline Worker Pay Program. Read more about the application process and how it came to life in our notable projects (page 12).
- Minnesota Department of Agriculture received IT modernization funding in the agriculture omnibus bill.
- MNIT testified to the Legislative Commission on Cybersecurity. This bicameral body was established in 2021 to provide oversight of the whole of state's cybersecurity measures.

Local and tribal collaboration

- MNIT collaborated with the Minnesota County IT Leadership Association to better understand mutual technology needs, including cybersecurity and modernization.
- MNIT developed a Cybersecurity County Primer to better inform IT leaders about how they can interact with state services.
- MNIT expanded its collaboration with tribal nations by participating in quarterly Minnesota Indian Affairs Council (MIAC) meetings and adding tribal nations to the SSMI program (page 26).
- MNIT developed deeper relationships with local government teams statewide through its new Security Operations Center Cyber Navigator program, which aims to help coordinate responses to emerging cyber threats and active incidents wherever they occur.

Minnesota Cybersecurity Task Force

In October 2022, MNIT established the [Minnesota Cybersecurity Task Force](#). This body, made up of 15 members from the state, local governments, tribal nations, and the private sector, will contribute to the development of a statewide cybersecurity plan to advance cybersecurity protections for Minnesotans.

The plan will also be a component of Minnesota's application for the [State and Local Cybersecurity Grant Program \(SLCGP\)](#), a new grant program passed in the Bipartisan Infrastructure Law (or Infrastructure Investment and Jobs Act).

Photo:

Cybersecurity Task Force

Left to right (on-screen): Jennifer Czaplowski, Lee DeVault, Randy Long, Chris Cauwels.
Left to right (standing): John Israel, Melissa Reeder, Matt Zaruba, Diane Bartell, Chris Gunderson, Nicole Pruden, Captain Arnoldo Martinez, Eric Peterson, Mike Gamache, Tarek Tomes, Rohit Tandon.



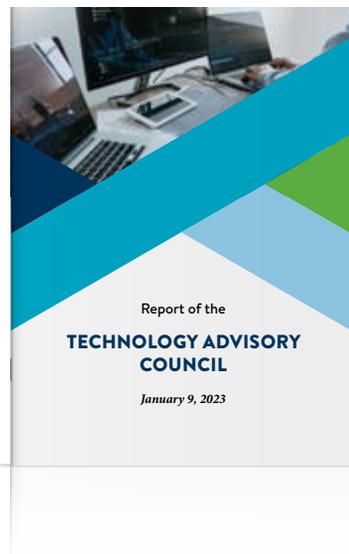
Technology Advisory Council

MNIT worked closely with the Technology Advisory Council (TAC), which is a permanent body to advise MNIT and executive branch agencies on strategic information technology initiatives and service delivery. Throughout 2022, the council's subcommittees formulated recommendations around the following areas:

- Cybersecurity
- Project to Product/Agile
- Sustainable IT Funding
- User Experience/Self-Service

Report and Recommendations

The Technology Advisory Council released its [most recent report](#) in January 2023. The report included recommendations that focus on adopting practices that put users and customers at the center of digital products delivered by state agencies, moving towards a product model of IT development, establishing strong change leadership, providing sustainable IT funding, improving protections of technology assets through long-term planning that includes cybersecurity funding, and expanding partnerships to develop – and retain – a skilled, cyber-aware workforce.



Membership

The Technology Advisory Council is made up of 19 members including four non-voting members from the Legislature. Individuals who were members in 2022 include:

- **Rick King**, Chair, Thomson Reuters, Former Executive
- **Margaret Anderson Kelliher**, MnDOT, Former Commissioner
- **Tom Butterfield**, Formerly TCF Bank
- **Vincent Cabansag**, Clockwork, Director of Technology
- **Kassie Church**, Minnesota Association of Professional Employees
- **Ed Clark**, University of St. Thomas, Former CIO
- **Shireen Gandhi**, DHS, Deputy Commissioner
- **Steve Grove**, DEED, Commissioner
- **Lee Ho**, Minnesota Department of Revenue, Deputy Commissioner
- **Chuck Johnson**, DHS, Former Deputy Commissioner
- **Jason Lenz**, Minnesota Association of Counties
- **Timothy Lynaugh**, DPS, Assistant Commissioner
- **Susan Ramlet**, Medtronic, Senior IT Manager
- **Melissa Reeder**, League of Minnesota Cities, CIO
- **Britta Reitan**, MMB, Deputy Commissioner
- **Katie Smith**, DNR, Director of Ecological and Water Resources Division
- **Theresa Wise**, Formerly Delta Air Lines
- **Representative Kristin Bahner**, Legislative Member
- **Senator Mark Koran**, Legislative Member
- **Representative Jim Nash**, Legislative Member
- **Senator Melissa Wiklund**, Legislative Member

Closing letter

By Tyrone Spratt, CBTO for MNIT DLI, MDA, and Board of Animal Health



Once in a while, technologists get the chance to come from behind the scenes and work directly on behalf of others. In 2022, Minnesota's Frontline Worker Pay program offered this opportunity to me and a large cohort of staff at Minnesota IT Services (MNIT).

Think back to March 2020. Life changed dramatically: the streets were deserted; businesses and schools were closed. Many of us reduced our in-person activities to slow the spread

of COVID-19, but healthcare workers, first responders, store clerks, restaurant workers, and countless others put their lives on the line every day for us.

The Frontline Worker Pay program, signed into law on April 29, 2022, by Governor Walz, authorized bonus payments to Minnesota's frontline workers. The selfless acts of courage of these individuals during the pandemic fueled the teams at the State of Minnesota who were charged with bringing this program to life. Our teams worked to make sure it was the best in the nation – Minnesota's workers deserved no less.

Two months before this legislation was signed, a cross-agency team from the Minnesota Departments of Labor and Industry (DLI), the Department of Revenue, the Department of Employment and Economic Development (DEED), Minnesota Management and Budget, and MNIT formed an unprecedented collaboration to prepare a framework. With strong collaboration and agility, MNIT gathered the right resources

to support our partners and program objectives. We led a technology assessment that included security reviews, accessibility evaluation and days-long contract negotiations. The result: a technology partner that provided an applicant portal to support eligibility determinations, respond to applicant questions, and distribute money.

Cross-functional MNIT teams worked with unemployment insurance, tax, and fraud prevention experts. We supported project management, data management, and reporting needs. MNIT displayed remarkable teamwork and can-do attitudes to meet the moment. The teams worked tirelessly to strike a balance between fraud prevention and timely payments, identifying potential obstacles that could prevent workers from receiving the payments they were entitled to under the law.

On June 8, 2022, a little over five weeks after the bill was signed into law, the program began accepting applications. And just three weeks after a mandatory appeals period, more than one million frontline workers began receiving their bonuses. Minnesota delivered on its promise.

The success of the Frontline Worker Pay program will be felt for years to come, demonstrating what state employees can do with clear goals, a commitment to excellence, and steady leadership. Our success was driven by planning, creativity, teamwork, collaboration, and data-driven decision-making. Our open communication, and unwavering focus on the outcome changed expectations forever. The stakes are high to serve Minnesota, and the state's technologists can and will continue to deliver.



mn.gov/mnit



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