

Q2 2022

Quarterly Report

Note from the Commissioner -

The legislature adjourned the 2022 legislative session in May. This report includes a full update on the session, but for MNIT, this session meant that some of the important proposals in the Governor's budget recommendations did not move forward. We continue to work with our legislative partners to shape the conversation around investing in the future of technology in state government. The Governor's budget recommendations provided a vision for fundamentally shifting the way technology supports the mission of state government and enabling IT to serve as a secure digital connector and catalyst for more efficient state government service delivery.

While there was not enough time to finish the work, we are grateful that the State Government Conference Committee reached an agreement that recognized both the heightened cyber threat environment and the opportunity to modernize our operations and services with cloud technology.



Some important initiatives *did* move forward, however, including finalizing the Frontline Worker Pay program. Regardless of the timeline or scale of programs like this, Minnesotans need access to these services. MNIT worked quickly with the Minnesota Department of Labor and Industry, the Minnesota Department of Revenue, and the Department of Employment and Economic Development to stand up an online application that struck a balance between fraud prevention, timely payments, and making it easy for eligible workers to receive the payments they are entitled to under the law. The solutions that we develop need to be easy to access and intuitive – we are working hard to be more nimble and agile than ever.

Part of our evolution includes our work with the Technology Advisory Council (TAC). TAC is an advisory body that includes state agency leaders, private sector technology experts, and legislators, and it seeks to aid in strengthening Minnesota's ability to deliver innovative digital services. TAC's current sub-committees will formulate recommendations in these areas: project to product/agile, sustainable IT funding, user experience/self-service, and cybersecurity.

We are eager to continue moving this work forward with our state agency business partners, our partners in the Minnesota Legislature, and our partners in private industry so that together, we can all deliver on the value of these recommendations for all Minnesotans.

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Legislative update

On May 23, 2022, the legislature adjourned the 2022 legislative session. The Governor and legislative leaders reached an agreement on a global framework that shaped end-of-session negotiations. However, the clock ran out before most major bills could cross the finish line. The technology budget recommendations included:

- proposed IT investments in advanced cybersecurity tools,
- · state funding to back a federally funded local government cybersecurity grant program,
- · enterprise cloud transformation,
- · application modernization funding, and
- · support for technology accessibility.

The State Government Conference Committee reached an agreement on the cloud transformation and local cybersecurity grant program proposals, but there was not sufficient time to finish the work to fund these proposals. MNIT is grateful that the conference committee chairs recognized both the heightened cyber threat environment and the opportunity to modernize our operations and services with cloud technology. MNIT will continue to partner with the legislature and the Technology Advisory Council (TAC) to meet these important needs.

Other key outcomes that impacted MNIT this session include:

- Frontline worker pay was passed. Read more about the application process and how it came to life in our notable projects (page 5).
- · Ratified contracts and plans for state employees.
- Minnesota Department of Agriculture received IT modernization funding in the agriculture omnibus bill.



Notable achievements, awards, and events



Global Accessibility Awareness Day

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



DNR wins award for public engagement technology

The Minnesota Department of Natural Resources (DNR) won the <u>Tech Trailblazer Award</u> 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. The DNR team used a new public engagement tool, Engage with DNR, to broaden opportunities for feedback and create a destination for Minnesotans throughout the state to participate in the <u>wolf plan update</u>. The MNIT teams supporting DNR helped evaluate public engagement tools and implement the solution.



MNIT launches cloud training challenge

MNIT launched a cloud training challenge as part of the state's CloudRAMP (Cloud Readiness and Modernization Project) effort. Over 350 MNIT employees completed a fundamental cloud training course during the challenge period and 700 more employees are continuing their training after the challenge ended in July.

Transformation Practitioner's Team



The Office of Transformation and Strategy Delivery is guiding all state employees who touch technology projects to use the <u>Modernization Playbook</u> with a change agent network called the Transformation Practitioner's Team (TPT). The TPT celebrated its 1st anniversary in June 2022. Learn how a few individuals on the TPT are using the Modernization Playbook to <u>improve access to modern government services</u>.



New MNIT leaders

This spring, MNIT welcomed two leaders: Kimberly Maturo-Hilt and Alison Slaats. Maturo-Hilt is the Chief Business Technology Officer (CBTO) for MNIT partnering with the Minnesota Department of Veterans Affairs (MDVA). Alison Slaats is Minnesota's Chief Geospatial Information Officer (GIO) and Director of the Geospatial Information Office (MnGeo). Read about these new leaders and how their work impacts Minnesotans.

Emerging technology: application portfolio

All of the state's applications have a lifecycle and timeline. MNIT implemented a statewide application portfolio management process with a tool that helps us track applications' lifecycle, 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. MNIT uses this process to assess and analyze security risk, architecture standards, technology products, application cloud strategy, business capabilities, and more.

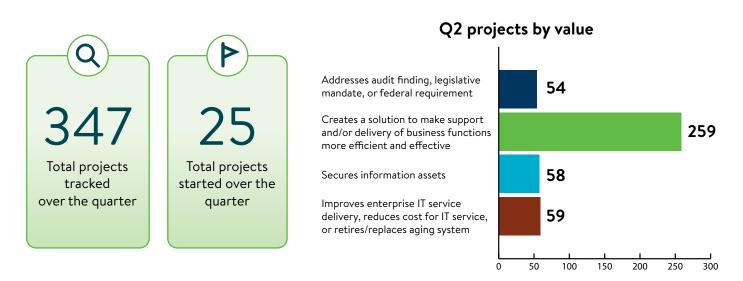
The tool also creates statewide visibility for all 2,400+ applications. MNIT built a data dashboard that gives executives a snapshot of the state's application portfolio. The data ensures that we are making efficient and accurate decisions about applications – which help Minnesotans do everything from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

MNIT is also using the tool to streamline types of applications and streamline processes. For example, if an agency learns that a customer relationship management (CRM) application is the type of application they need to solve a problem, they can use the new tool to see who else in the state is using a CRM application. We can modernize and simplify tasks when we have the opportunity to do so.

Agency updates

Office of Transformation and Strategy Delivery

Over the quarter, MNIT's Office of Transformation and Strategy Delivery tracked 29 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.



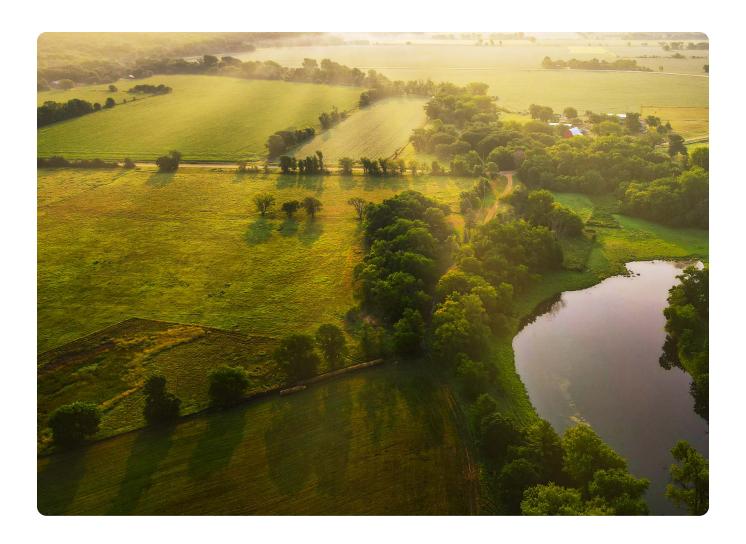
NOTABLE PROJECTS



Frontline worker pay

To thank Minnesotans who worked on the frontlines during the COVID-19 peacetime emergency, Gov. Tim Walz signed Frontline Worker Pay into law on April 29, 2022. The Frontline Worker Pay law provides bonus pay for eligible COVID-19 frontline workers who were employed in <u>frontline sectors</u> between March 15, 2020, and June 30, 2021.

The Minnesota Department of Labor and Industry (DLI) launched the Frontline Worker Pay application from June 8 through July 22, 2022. MNIT, DLI, 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 for eligible workers to receive the payments they are entitled to under the law. The application was built in less than six weeks and over 1.2 million Minnesotans applied for the benefit. Applications were processed by the State in August 2022.

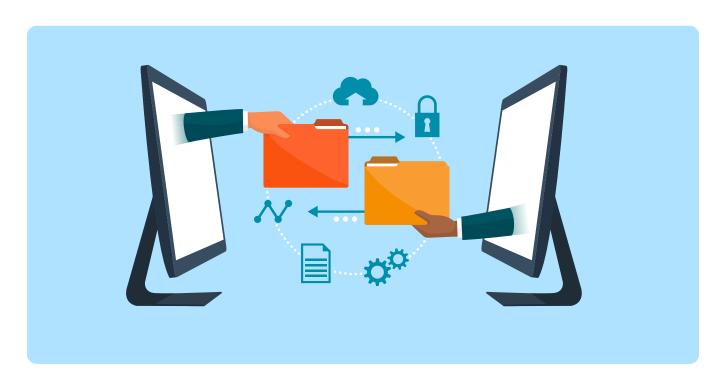


State deed system modernization

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-fortified land. Tax-fortified 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 online and pay the application fees electronically. The new online form replaces a paper-based system for the 1,400 applications that the Property Tax Division processes each year. The new, streamlined process has reduced the time spent manually entering and correcting forms and provided a quicker, more efficient way for the counties to submit and pay the applications.

MDH system improvements

MNIT is working with the Minnesota Department of Health (MDH) to pursue its goal to remove technical hurdles to cooperative data aggregation/integration/access and modernize the legal and administrative processes around data sharing. This will lead to improved decision-making and public health policy development and ultimately statistically improved health outcomes for citizens while rebalancing outcomes for historically under-served communities.



Electronic case reporting for COVID-19

MDH launched a project in the spring of 2020 to incorporate reporting from healthcare organizations through electronic case reporting (eCR). Automating the extraction of COVID-19 case reports into the MDH surveillance system significantly decreased workloads for both the provider and MDH staff while maintaining the quality of information. Providers are required to report cases of communicable diseases. Historically, this involved manually faxing the information. The new eCR process ensured timely and consistent reporting, which allowed MDH to have a better understanding of how COVID-19 impacted Minnesotans and the healthcare system throughout the pandemic. The reporting also provided insight into where the State of Minnesota resources were needed. The process and evaluation of information collected by eCRs was recently published in the <u>Journal of the American Medical Informatics Association</u> (JAMIA), one of the first accepted papers on eCR from a public health agency.

MNIT created dashboards to quickly view eCR messages by date of submission, healthcare organization, and encounter type. Using these dashboards, MDH can quickly discover trends and changes in eCR messages at both broad and detailed levels



Exchanging death record data securely and efficiently

The COVID-19 pandemic increased demand for quicker access to accurate death data. The MDH's Office of Vital Records relies on partners like medical examiner's offices to collect and report data about death events, certify records, review and approve the registration of non-natural deaths, and authorize final dispositions. Medical examiners and coroners play an important role in the timely and accurate filing. This information is used by local, state, tribal, and federal entities – improving the system improves cross-boundary collaboration. Medical examiners also ensure the quality and specificity of information about the immediate and underlying cause of death as well as contributing factors.

MNIT and MDH modernized the way that data is exchanged – the interoperability – between the state's database for registering and certifying births and deaths – Minnesota Registration & Certification (MR&C) – and the Southern Minnesota Regional Medical Examiner's Office (SMRMEO) case-management system. MR&C uses Fast Healthcare Interoperability Resources (FHIR) for some functions. FHIR is a standard format created by the Health Level Seven (HL7) International health-care standards organization to describe data formats, data elements, and application programming interfaces (APIs) for exchanging electronic health records. MNIT created an open API so that SMRMEO staff could securely enter records in both their case-management system and the MR&C in one step.

This secure infrastructure establishes a way for future standards-based interoperability not only with other medical examiner offices but also with 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. SMRMEO metrics show that interoperability reduces staff time and minimizes the risk of registration errors.



Improving how the DNR verifies its boats, vehicles, and other assets

MNIT worked with the Minnesota Department of Natural Resources (DNR) to create a new application that DNR staff used to complete an annual inventory of the agency's physical assets. The agency owns 15,000 assets – including aircraft, watercraft, vehicles, copiers, and more. The DNR can now complete the inventory on a mobile device using a barcode scanner. Staff can also access the inventory application through a web app. Because most of the assets aren't located right next to a computer, the new application reduced the time it took to complete a full inventory at a DNR location. The streamlined process and intuitive, user-friendly application also result in a more accurate inventory.

MNIT and the DNR piloted the new application during the 2022 annual inventory. Over 70% of the DNR's assets were inventoried in the new system. The agency expects to complete the entire inventory with the new application in 2023. To ensure a beneficial user experience, the MNIT and DNR project team used an agile approach to build the application. The MNIT and DNR team followed Minnesota's Modernization Playbook to build the application – the first project in the agile transformation journey at the DNR that used these practices.

Security

To keep state government running, and to protect Minnesotans' private data, we must continually work to better secure Minnesota's IT systems. Cybersecurity is one of the most critical functions that Minnesota IT Services is tasked with, and it functions best when we are all working together, from the individual citizen to our state agencies, and even to our legislators; that is how we can help protect the 35,000 users of our systems and 5.7 million Minnesotans who have private data secured by the state.

We serve Minnesotans by connecting all 87 counties, 300 cities, and 200 public higher education campuses across the state through MNET – Minnesotan's dedicated public sector network. This network provides broad visibility into cyber activity occurring across the state. From January to March, our Security Operations Center (SOC) detected or received reports of 209 cyber incidents.

Type of security incident	# reported
Forensic investigation	58
Malware	49
Compromised password	36
Policy violation	11
Copyright violation	8
Denial of service	7
Network attack/scan	6
Lost/stolen devices	4
Unauthorized access attempt	3
Social engineering	3
Unauthorized disclosure	3
Other	21



Security incidents detected by or reported to MNIT SOC.

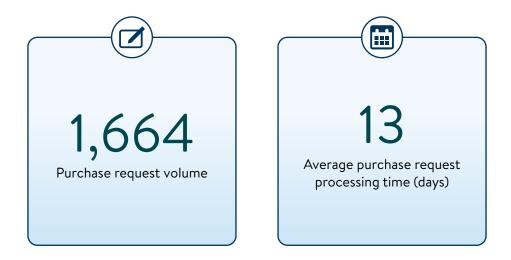
Legislative Commission on Cybersecurity

On June 14, 2022, MNIT presented to the <u>Legislative Commissioner on Cybersecurity</u>. This bicameral body was established in 2021 to provide oversight of the whole of state's cybersecurity measures. The commission reviews cybersecurity policies, challenges, and practices across all levels of government and may recommend policy changes to adequately protect the state from cybersecurity threats. The commission also may develop recommendations and draft legislation to support and strengthen the state's cybersecurity infrastructure.

MNIT's presentation (PDF) outlined current cybersecurity threats. MNIT also participated in a closed meeting, held under Minnesota Statutes, section 3.888, subdivision 5, and the commission's Rules for Closed Meetings adopted on May 4, 2022. The closed meeting is meant to share information in a manner that is necessary to safeguard the state's cybersecurity.

Procurement

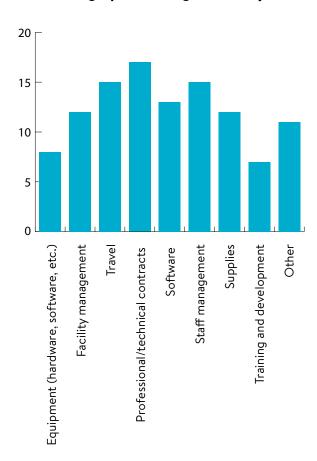
The Procurement Division is responsible for processing all requests to purchase everything from IT hardware, software, and mobile devices to contractors brought in to assist on projects. Procurement follows a standardized purchasing process that can include administrative review, accessibility testing, vendor negotiation, open bidding, and competitive RFP processes, among others.



Number of purchase requests

Equipment (hardware, etc.) Facility management Travel Software Staff management Supplies Training and development Other

Average processing time (days)



Geospatial Information Office

The Minnesota Geospatial Information Office coordinates geographic information systems (GIS) within the state, creating connections between state agencies and other stakeholders from government and non-government organizations. Using geography to inform decisions and influence outcomes, shapes public safety, transportation planning, access to health services, the preservations of our natural resources, and much more. The Geospatial team manages the Minnesota Geospatial Commons, a collaborative public website where publishers can share, and users can access geospatial resources – data, maps, services, and applications. The Minnesota Geospatial Commons is supported by an operational team that includes staff from MnDOT, the Metropolitan Council, and MNIT staff partnering with DNR, MDE, MDA, and MPCA.









Office of Accessibility

The Office of Accessibility is charged with overseeing the implementation of accessibility standards for all executive branch employees and state agencies.



/24

Number of downloads of the Office of Accessibility's guidance documents



185

Number of people who have taken or are taking the Accessible Word training course through the state employee training system, known as ELM



810

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

Service desk

Our 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.

107,270

Total volume of all service desk tickets across the executive branch



51,963

Number of those tickets resolved the same day



48.4%

Percentage of service desk tickets resolved in one day



4.6

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

IT optimization updates

CloudRAMP

This quarter, MNIT's CloudRAMP (Cloud Readiness and Modernization Project) focused on learning how to prepare for successful migrations to the cloud. MNIT's Enterprise Services division and the Minnesota Pollution Control Agency (MPCA) worked through the nuances of a repeatable process with the project team. They are creating new ways of working, training staff on new skills (cloud training challenge), and establishing a foundation for faster, collaborative development and work processes.

Modernized databases: 12

Migrated servers: 74



Meet MNIT —



Peny Nguyen

Peny Nguyen was named the 2021 Employee of the Year during MNIT's Annual Awards ceremony for her significant contributions to helping Minnesotans better understand the evolution and changing impact of COVID-19. As a financial analyst and data scientist with MNIT Finance, she used sophisticated data visualization tools to develop Minnesota's COVID-19 vaccine dashboard. Nguyen's pioneering work enables state agency executives to manage over \$600M in annual IT resources using innovative analytic tools.

Nguyen started at MNIT in 2017. She has an MBA and a Bachelor's degree in Economics from Hamline University.

About MNIT —

Minnesota IT Services, led by the state's Chief Information Officer, is the Information Technology agency for Minnesota's executive branch, providing enterprise and local IT services to over 70 agencies, boards, and commissions. MNIT employs more than 2,000 people across 90 physical locations. Together, we build, maintain, and secure the State's IT infrastructure, applications, projects, and services. MNIT sets IT strategy, direction, policies, and standards for enterprise IT leadership and planning. We also serve Minnesotans by connecting all 87 counties, 300 cities, and 200 public higher education campuses across the state on the MNET network. Through public-private partnerships, our team proactively protects the state's information systems and the private data of 5.7 million Minnesotans.

Learn more

For questions, comments, and feedback on MNIT's quarterly reports, please reach out to <u>MNIT_Comm@state.mn.us</u>

You can also find more stories about the agency across our social media accounts:









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