

Q3 2020

Quarterly Report

— Note from the Commissioner —

Over a year ago, Minnesota IT Services began a collaborative journey to redefine the agency's long-term vision. Our initial work involved interactive, cross-agency discussions that led to the creation of our Tactical Plan, and this September we took another step in that journey as we developed our new Strategic Plan. MNIT's Strategic Plan will move the agency forward through the next three years, enabling us to achieve our vision – an innovative digital government that works for all.

This vision is already being realized in many places across MNIT, as evidenced by the work in this report. It is incredibly important to MNIT that the Strategic Plan center around our end users, and we will work hard to make sure they are involved and considered throughout the implementation of our vision. While we will take risks, we will simultaneously ensure that the voices of agencies, government partners, and Minnesotans are all heard.

The COVID-19 pandemic and our state government's response allowed so many people to experience the power of technology solutions, many of which will be in place when we come out of this. The collaboration tools now in use, the cloud constructs that allow us to boost capacity, remote process automation to automate certain workflows, data visualization that can unearth inequity – the list goes on. The work of innovative, person-centered technology solutions and infrastructure is the work that MNIT is proud to codify with our Strategic Plan and future priorities.



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Planning

Strategic Plan

In September, Minnesota IT Services (MNIT) [published its Strategic Plan](#). Minnesota IT Services' Strategic Plan sets the long-term vision and direction for technology strategy at the agency. It is updated biennially and incorporates input from executive branch agency leadership, IT employees, and management. The Strategic Plan serves as the state's master plan for IT services.

The Strategic Plan will be implemented with a centralized and decentralized approach to integrate the plan within all levels of the agency. The main vehicle for centralized implementation is MNIT's Tactical Plan. The tactics will be updated annually, in an iterative manner, as the agency makes progress on its strategies.

Decentralized implementation will begin in 2021 as agency-based offices and enterprise service areas develop strategic plans that align with MNIT's vision.

Mission and Vision

In alignment with Governor Walz's One Minnesota Plan, MNIT's Strategic Plan will enable the agency to achieve a new vision and mission.



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.

Notable achievements, awards, and events



10th Anniversary of Minnesota's Digital Accessibility and Usability Standard

On September 1, 2020, the state of Minnesota celebrated the [10-year anniversary of the adoption of a digital accessibility and usability standard](#), which defines what it takes to create accessible technology and content. To celebrate the anniversary, Minnesota IT Services' (MNIT) Office of Accessibility held trainings and panels to help state employees learn more about how far the state has come over the past decade, where we're headed, and what you can do to incorporate accessibility into your work. Minnesota's digital accessibility and usability standard has been key to state agencies' mission of providing information that is available and useful for all. 182 people attended the panel events and 275 people attended the trainings.



Commissioner Tomes Receives ORBIE Award

Minnesota's Commissioner of IT Services, Tarek Tomes, was recognized by the Twin Cities CIO of the Year ORBIE Awards for excellence in technology leadership. The award, presented on September 18, 2020, honors chief information officers (CIOs) who have demonstrated leadership, innovation, and excellence. Governor Walz announced the award win and his support for Commissioner Tomes in a [press release](#).



MNIT Recognized as NASCIO Finalists

[Four of MNIT's projects](#) were selected as finalists for the [National Association of State Chief Information Officers \(NASCIO\) State IT Recognition Awards](#). NASCIO selected 30 finalists across 10 categories for the projects and initiatives from NASCIO member states and territories. Over 60 NASCIO members served as volunteer judges to review the over 90 submissions, narrowing the nominees down to three finalists in each category.

The award nominations showcase the use of information technology to address critical business problems, more easily connect citizens to their government, improve business processes, and create new opportunities that improve the lives of citizens. Read more about [MNIT's finalist projects](#):

- MNIT and MDH: Cloud, AI, and Data Lake Transformation
- MNIT and DNR: Digital App Manages Public Water Access Sites
- MNIT and MDVA: Modern Digital VATS-Education System Serves Veteran
- Collaborative Maps Community of Practice: Creating Groundbreaking Accessible Map Guides

Emerging Technology: Text message benefits eligibility

The COVID-19 pandemic led many families in Minnesota to face food insecurity. In March, the federal Coronavirus Aid, Relief and Economic Security (CARES) Act created the Pandemic Electronic Benefit Transfer (P-EBT) program to provide food benefits to families with children who qualified for free and reduced meals at school, but were not receiving those meals because school buildings had closed. The P-EBT project required extensive data matching with the Minnesota Department of Education to verify families' free and reduced-price meal eligibility. MNIT, DHS, and Code for America Launched a web-based application for families to apply for benefits through July 31, 2020.

To help Minnesotans receive their benefits as quickly as possible, and to ensure an efficient process, MNIT, DHS, and Amazon Web Services also created a pilot program to text P-EBT eligible clients. The text message helps quickly alert Minnesotans that applied for P-EBT that their benefits had been issued. Approximately 123,500 people received text messages about their benefits and \$116 million of P-EBT in federal and state funds were issued through the end of Oct. 2020, with service continuing as long as Minnesotans need assistance.

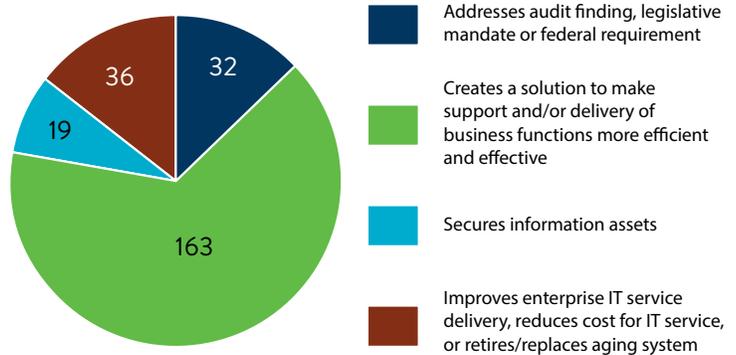
Agency Updates

Project Management Office

Over the quarter, MNIT's Project Management Office (PMO) tracked the completion of 18 projects across nine Executive branch agencies, boards, commissions, and councils. MNIT defines a project as "a temporary endeavor undertaken to create a unique product, service or result. It has a start date, specific goals and conditions, defined responsibilities, a budget, a plan, and end date." These projects range from public-facing applications to internal-facing IT infrastructure endeavors.



Q3 Projects by Value*



**Some projects may provide value for more than one category while others' value may fall outside of these categories.*

NOTABLE PROJECTS

Groundwater Contamination Atlas

The Groundwater Contamination Atlas, released in June 2020 by Minnesota's Pollution Control Agency (PCA), is a tool for learning about polluted groundwater at sites around the state. Groundwater supplies 75% of Minnesota's drinking water and 90% of agricultural irrigation. Using a text-based search or scanning the map, Minnesotans can now view groundwater areas of concern for sites in remediation programs. Within an area of concern, users can download groundwater sampling data or

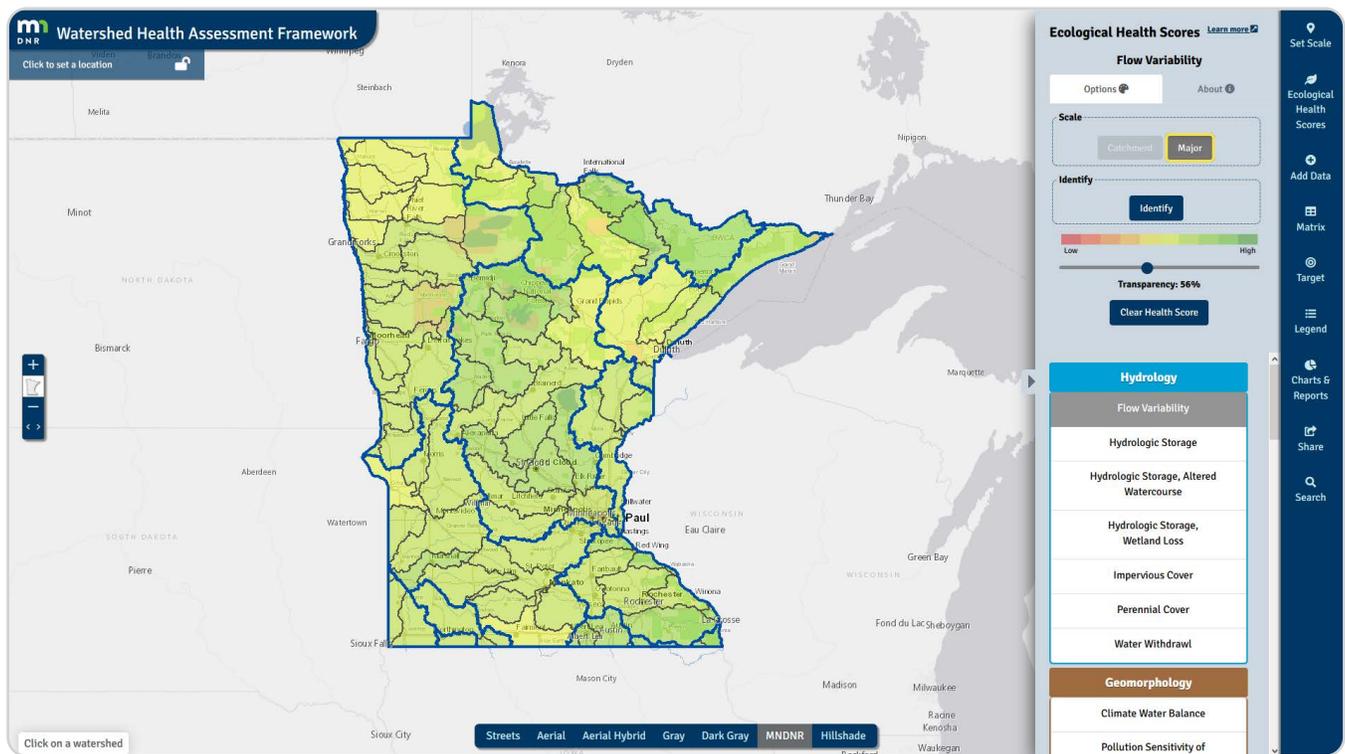
learn the story about contamination at a specific site. This tool made this data available to Minnesotans for the first time, and increased efficiency of staff that used to pull the information manually. Based on a technology stack that supports data-drive website work, MNIT partnering with PCA built on previous accomplishments to provide detailed data about each groundwater area of concern.

Watershed Health Assessment

The Watershed Health Assessment Framework (WHAFF) provides an organized approach for understanding natural resource conditions and challenges, and for identifying opportunities to improve the health and resilience of Minnesota’s watersheds.

[An updated, GIS-driven online map](#), developed in partnership with Minnesota Department of Natural Resources (DNR) delivers an organized exploration

of watershed conditions. Leveraging new GIS and data technology, the online platform provides a better user experience, is more stable, and includes improved architecture for easy maintenance. The new map incorporates over 200 data layers from the DNR, PCA, the Minnesota Department of Health, among other resources. The updated map was profiled in DNR communications in August and will likely see additional improvements in an 2020 upcoming release.



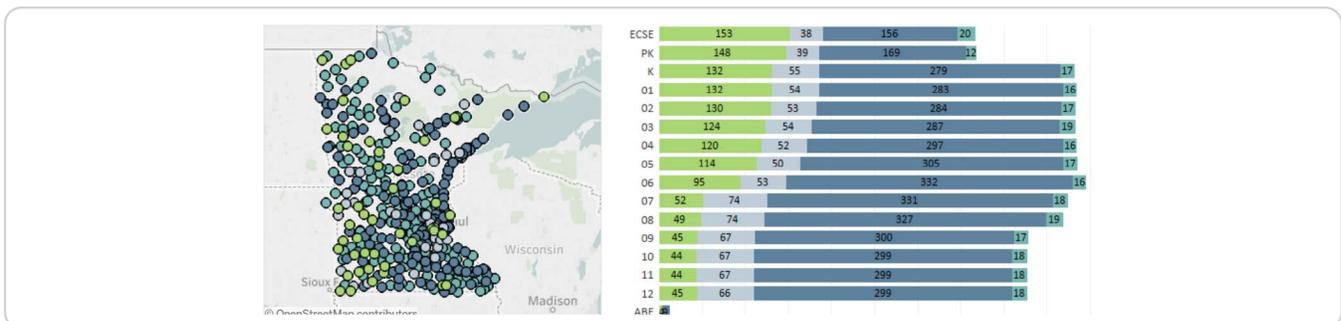
Screenshot of Watershed Health Assessment Framework map

Minnesota Safe Learning Data Model

[Minnesota's Safe Learning Plan](#), as outlined in [Executive Order 20-82](#), stated that school districts and charter schools need to report to the Minnesota Department of Education (MDE) which learning model(s) they are implementing during the 2020-21 school year. This includes reporting the learning model(s) being implemented at the start of the school year and notifying MDE within 24 hours of any change in learning model. MDE, in partnership with Minnesota IT Services, developed a Learning Model Portal where schools report this information, and a dashboard for

users to view state- and district-level data on learning model implementation. The dashboard launched to the public in September 2020.

In the [Safe Learning Model Dashboard](#), users can filter by location on a map, by grade-level, or find summary information for the models currently in effect at the district level. With the Look-Up application, Minnesotans can search by address, district, or school, and find detailed results such as when districts report plans for updated learning models.



Screenshot of dashboard showing charter school locations and learning models.

511 Upgrades

The Minnesota Department of Transportation (MnDOT) deployed multiple upgrades to its [511 Traveler Information site](#) this year. 511 helps travelers access information about road conditions, traffic incidents, commercial vehicle restrictions, and weather information any time of the day or night. The system is visited by around 2 million Minnesotans and visitors per month, and up to 7 million people users during winter storm season. The first upgrades included a web responsive design and modifying an API to share data with third parties to ensure accessible data. Travel information is now available to private and public sectors partners such as Google/WAZE, HERE, Garmin, media partners, municipalities, and more.

The Minnesota Department of Transportation also integrated automatic road condition reporting into the 511 application through an existing system, MnDOT Maintenance Decision Support System (MDSS). MDSS determines road conditions based on inputs from multiple resources. When integrated into 511, MDSS can provide timely information to the public and reduce the need for manual reporting by state employees. In March, 511 incorporated streaming videos that allow drivers to see a traffic camera in full motion video, rather than just snapshots. Minnesotans can experience a better understanding of current road and traffic conditions for approximately 1,000 MnDOT traffic cameras. MnDOT collected website feedback over the summer of 2020, rolled out improvements in the fall, and has a goal of transitioning all users to the new site by spring 2021.

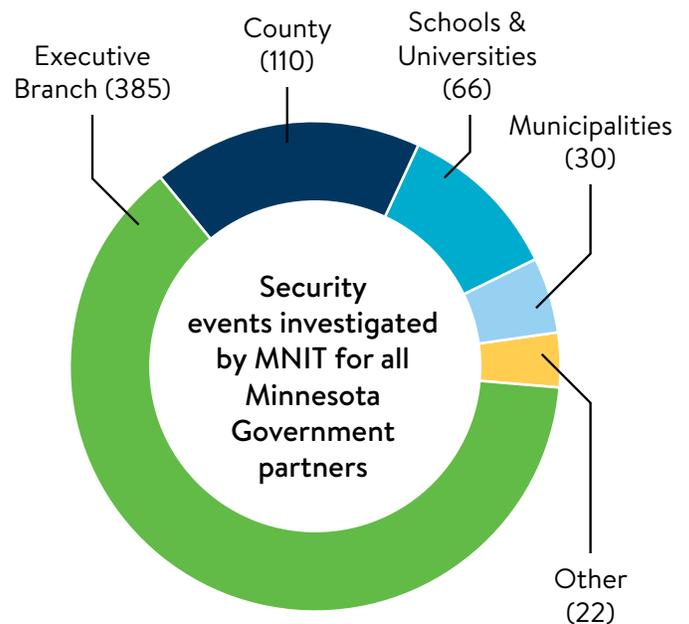
Security

To keep state government running, and 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 5.5 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 July to September, our Security Operations Center (SOC) detected or received reports of 613 cyber incidents.

Type of Security Incident	Number Reported
Malware	213
Unauthorized Access Attempt	81
Unauthorized Access	3
Network Attack/Scan	53
Forensic Investigation	99
Copyright Violation	7
Social Engineering	14
Denial of Service	21
Lost/Stolen Devices	4
Unauthorized Disclosure	1
Policy Violation	24
Inappropriate Use	5
Other	88

Security incidents detected by or reported to MNIT SOC.



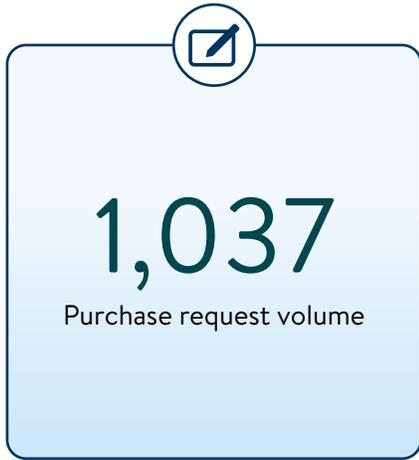
Election Preparation



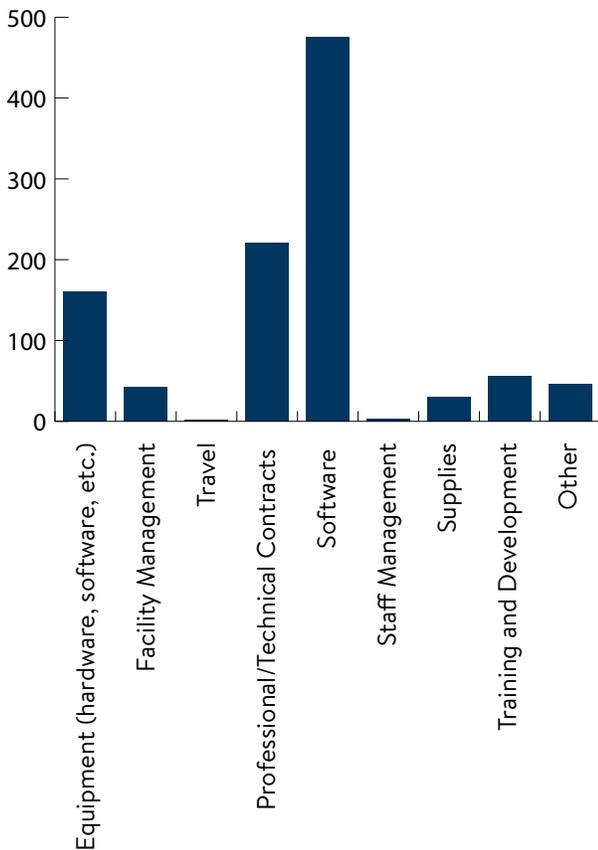
In 2016, Minnesota was one of 21 states targeted by foreign actors seeking to impact the U.S. election. While the 2016 efforts were not successful in Minnesota, MNIT has continued to work with the Minnesota Secretary of State's office over the last four years to expand current capabilities and build out strong relationships with federal, state, and local partners to ensure that Minnesota could deliver a safe and secure election. MNIT worked with ten different agencies at all levels of government to prepare, test, plan, and execute the most detailed election cybersecurity monitoring and response effort ever seen in the state. Through the Secretary of State's new Cyber Navigator program, all 87 counties also actively participated in these efforts. This year, Minnesota again set records with the highest national voter turnout rate and no major incidents – all thanks to the great inter-governmental partnerships that have been built and the tireless efforts of the Secretary of State's office and local election officials.

Procurement

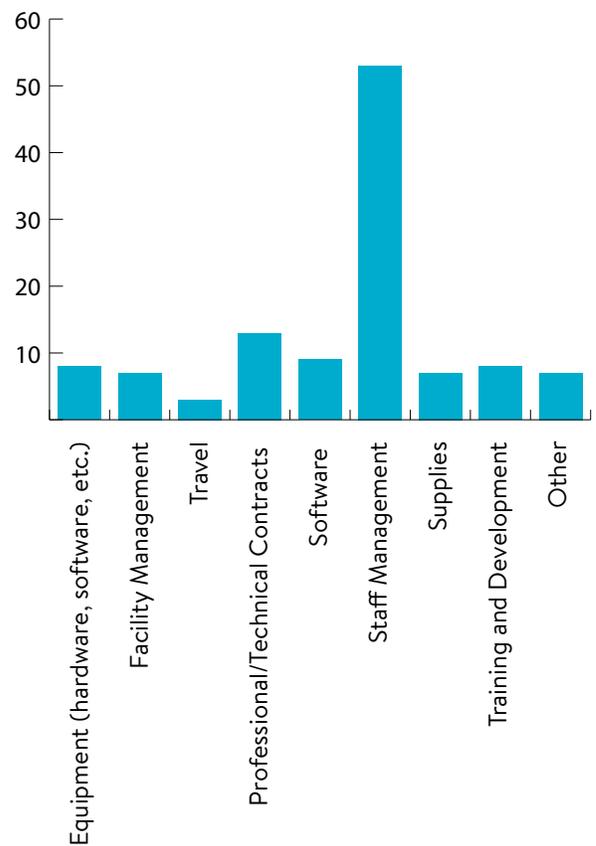
The Procurement Division is responsible for processing all requests to purchase everything from IT hardware, software, and mobile devices, to contractors brought in to assist on projects. Procurement follows a standardized purchasing process that can include administrative review, accessibility testing,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



Number of purchase requests



Average processing time (days)



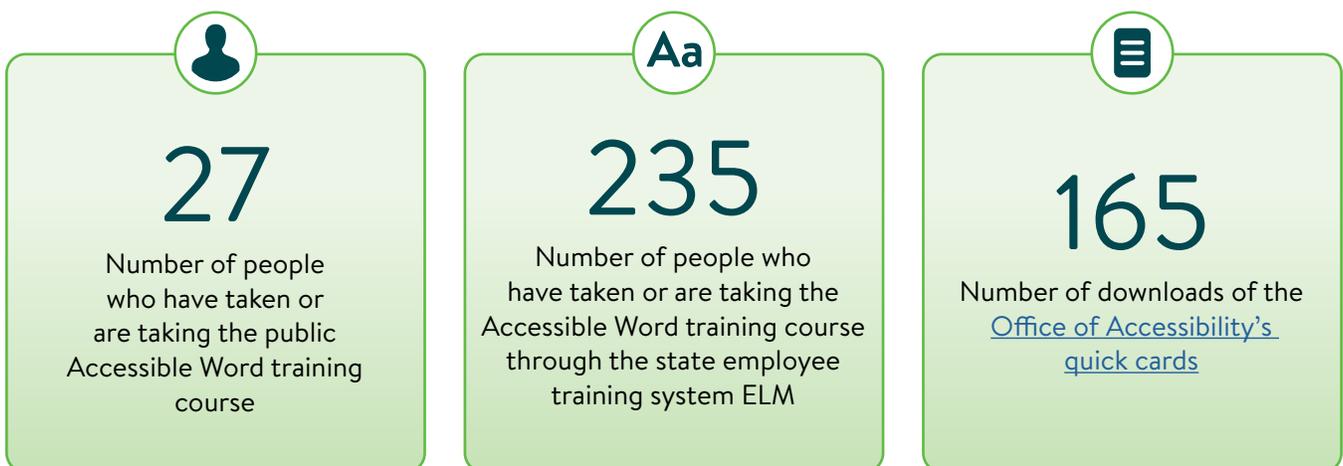
Geospatial Information Office (MnGeo)

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, it 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 operational team that includes staff from MnDOT, the Metropolitan Council and MNIT staff partnering with DNR, MDE, MDA and MPCA. As of Q3 in 2020, the Geospatial Information Office hosts and shares 72 applications and services with other agencies.



Office of Accessibility

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



Service Desk

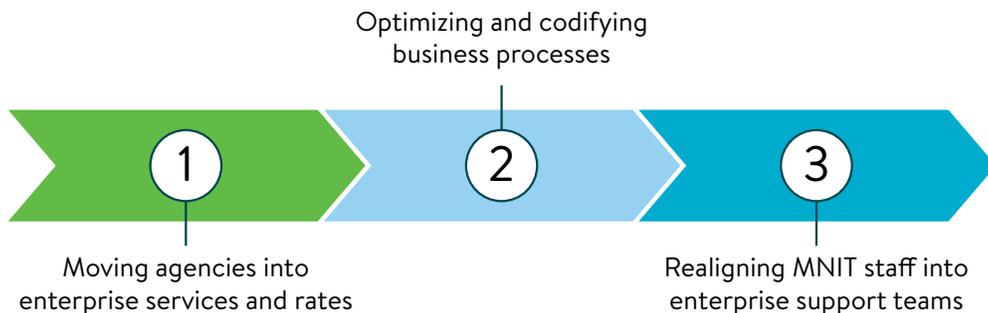
Our enterprise service desk provides 24/7 IT support and services for Minnesota state government: executive branch agencies, boards, councils, and commissions; non-executive branch customers, education, tribal governments, non-profits; and MNIT staff.



IT Optimization Updates

In July, after more than a year of careful planning, the Minnesota Department of Transportation (MnDOT) and the Minnesota Department of Revenue were onboarded to a centralized service management tool. Stakeholders from MnDOT, Revenue, and MNIT worked closely together to ensure that the transition was a success.

With the transition, these agencies now have access to new features and updates, such as the Minnesota Service Hub, the way that state employees receive IT service and support. MNIT teams, whether they are focused on specific executive branch agencies or work in a centralized division can collaborate more closely now that they are all on the same platform and replaces legacy infrastructure. The move to a centralized platform also brings in innovative practice happening at agency-based offices. For example, MNIT partnering with MnDOT had extensive workflow automation and custom development to support agency needs that was transitioned with optimization. Customized forms were also created to support the Department of Revenue for its transition into the centralized service management tool.



Meet MNIT



Kitty Hurley | MNIT Partnering with DNR

Kitty Hurley is a web and application developer for MNIT partnering with DNR. Hurley’s work combines geospatial information systems (GIS) and web development to help Minnesotans learn more about their environment. She recently was the lead developer for the Watershed Health Assessment Framework (WHAF) project highlighted in this report. For that project, Hurley focused on the user experience. She identified who users of WHAF would be, how they interact with systems, and expanded WHAF to meet their needs. Incorporating user into development is critical for Hurley as she develops applications that need to be valuable to both technical and non-technical users.

Kitty Hurley has been a GIS developer with Minnesota IT Services since 2013, partnering with the Minnesota Department of Health before her work with DNR. Previously Hurley worked for Hennepin County and the City of Brooklyn Park as a GIS specialist. She completed the state’s Emerging Leaders Institute program in 2020, received a M.S. in Geographic Information Science from St. Mary’s University, and received a B.A. in Geography from Gustavus Adolphus College.

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 5.5 million Minnesotans.

Learn More

For questions, comments, and feedback on MNIT’s quarterly reports, please reach out to MNIT_Comm@state.mn.us

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

