

2022 Impact Report

UNIVERSITY OF
Nebraska
System



**Information
Technology
Services**

its.nebraska.edu

About NU ITS

The University of Nebraska's unified IT division has the privilege of serving the Kearney, Lincoln, and Omaha campuses, as well as the NU System, since the OnelT initiative of 2017 brought our organization together. We work closely with UNMC IT in areas where there are opportunities for sharing best practices and gaining operational efficiencies. We are led by:



BRET BLACKMAN

VICE PRESIDENT AND CIO, UNIVERSITY OF NEBRASKA
CIO, OMAHA CAMPUS



HEATH TUTTLE, PHD

ASSOCIATE VICE PRESIDENT, UNIVERSITY OF NEBRASKA
CIO, LINCOLN CAMPUS



ANDREA CHILDRESS

ASSISTANT VICE PRESIDENT, UNIVERSITY OF NEBRASKA
CIO, KEARNEY CAMPUS

In addition to campus-specific teams in Academic Technology and Application Development, NU ITS is comprised of six shared services divisions, each led by an AVP:

- Infrastructure - led by Andrew Buker
- Security - led by Rick Haugerud
- Client Services - led by Brett Bieber
- Enterprise Services - led in an interim capacity by Andrea Childress
- IT Strategy - led by Dr. Jaci Lindburg
- Research IT - led by Dr. Heath Tuttle

We closely align our strategy to directly support the University of Nebraska System's Five Year Plan, as well as the top strategic goals of the campuses we serve.

More at its.nebraska.edu



Strategic Goals of NU ITS

Security



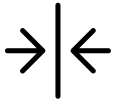
Create a safe and secure environment that minimizes risk and enables the university community to do their work through transformative technology.

Scale



Work together to achieve economies of scale so that we optimize resources, deliver on our financial commitments, and reallocate resources for emerging needs and innovation.

Alignment



Through agility and a bias for action, support and align to what matters most in service to the University of Nebraska and the campuses we serve.

Services



Provide outstanding IT services that are consistent and reliable across all locations, well understood, and valued by faculty, staff and students.

People



Commit to investing in people so that we build an exceptional work environment with avenues for advancement and growth. Empower our staff to facilitate broad collaboration and be outstanding partners to students, faculty, and staff.

Key Projects of 2022

NU ITS annually manages and completes dozens of critical projects, ranging from end-of-life equipment updates to full system migration. At times, these projects are mandatory due to changing technology or industry standards. Other times, these projects are a great opportunity to bring transformation and highly-desirable new functionality into scope for core services. Through a Change Advisory Board and small internal IT project management team, NU ITS prioritizes the efficient and effective management of change. We know that all change must be coupled with clear and transparent communication - as well as plenty of training and support - for the University of Nebraska community we serve.



Security

Some of the efforts that amplified our goal of security in 2022:

- partnered with NU Legal and Faculty Senates on each campus, NU ITS has worked to implement and raise awareness of updated minimum security benchmarks in Executive Memorandum (EM) 16 policy
- application development teams on each campus worked closely with the NU ITS security team to enhance and standardize security practices within web and application development across the NU system



Scale

Some of the key strategies we implemented that brought economics of scale in 2022:

- implemented automated role-based licensing for Microsoft 365
- partnered with Academic Affairs and HR units across the system to advance and standardize email account de-provisioning practices
- upgraded the Oracle Exadata environment alongside a transition to the Bellevue Data Center, significantly improving speed and production capacity for key databases and processing for core services including Financial Aid, course drop/add, and tuition calculations
- outsourced and decommissioned our legacy Network Operations Center
- implemented a software-defined wide area network (SD-WAN) to extend the unified network to the University of Nebraska' outstate locations, improving security and opening doors for increased performance
- partnered with P2P to complete a master services agreement with Rev for lowest-price captioning

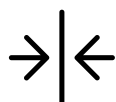
Key Projects of 2022



Services

Some of the projects that brought critical IT services to the University of Nebraska community in 2022:

- partnered with the NU Executive Vice President/Provost's Office, as well as campus offices of research, to enhance ITS's support of research and creative activity
- after a successful RFP in partnership with P2P, collaborated broadly across all NU campuses to pilot, select, implement, train faculty, and fully migrate from VidGrid to YuJa video content management for accessible academic video creation, which is typically utilized by NU faculty and students through a seamless Canvas integration
- upgraded and replaced/repairs hardware used for teaching in classrooms at UNK, UNL, and UNO
- overhauled storage finder application and implemented a new tier of on-premises storage to better meet the needs of researchers
- added functionality in collaboration with Student Information System administrative offices to improve change of campus, reverse transfer, batch process grouping, Open Nebraska attribute tracking, and admission application processes



Alignment

Some examples of how we aligned to the biggest needs of the campuses we support in 2022:

- supported customer relationship management (CRM) exploration, expansion, and implementation efforts at UNK, UNL, and UNO - these efforts are focused on enhancing top campus goals of recruitment and retention of NU students
- expanded our support of research faculty and research grants across UNK, UNL and UNO
- continued our support of the Open Nebraska digital course materials program - our instructional technologists train faculty with incorporating these materials into Canvas, our network team ensures wireless access points will support increased traffic from multiple device connections, and our IT strategy team leads the system-wide tracking of savings in addition to coordinating a faculty-led study of the impact of Open Nebraska on student success at NU



People

Some of the initiatives that focused on supporting our critical staff in NU ITS in 2022:

- envisioned and conducted the first NU ITS Leadership Academy, an in-house year-long leadership and organizational development program for approximately 30 NU ITS staff
- through continual focus on increasing retention of high-performing staff, we decreased NU ITS attrition to 9.5% in 2022

Measuring Success

NU ITS is a results-focused organization: we create a high return on investment, prioritize what matters most, maintain the health and sustainability of critical services, and embrace a culture of continuous improvement. The metrics below provide a snapshot into the efficiency, effectiveness, and value of some of the core ITS services and operations supporting the University of Nebraska community.

SECURITY

33,009 ENDPOINTS MANAGED
1896 UNIQUE VPN SESSIONS PER MONTH
45.4M ATTACKS BLOCKED PER MONTH
ACROSS ALL BORDER FIREWALLS

STUDENT INFORMATION SYSTEM

313,592 FINANCIAL AID AWARDS
70,602 ADMISSION APPS SUBMITTED
62,665 STUDENT TRANSCRIPTS REQUESTED
6297 PEAK LOGINS PER HOUR
635 PEAK ENROLLMENTS PER MINUTE

INFRASTRUCTURE

339.6M EMAILS RECEIVED
166,490 INBOXES MANAGED
1.5PB DATA STORED ON MS365
40K DAILY AVERAGE UNIQUE WIRELESS DEVICES

IT STRATEGY

\$13.3M SAVINGS TO STUDENTS VIA THE
OPEN NEBRASKA DIGITAL COURSE
MATERIALS INITIATIVE SYSTEM-WIDE

ACADEMIC TECHNOLOGY

120M MINUTES OF ZOOM MEETINGS
470M PAGE VIEWS IN CANVAS
756 CLASSROOMS/LEARNING
SPACES SUPPORTED

CLIENT SERVICES

143,040 SUPPORT TICKETS
42,421 SERVICE REQUESTS
203 SITES IN NEBRASKA NOW
BROADCASTING EDUROAM





What's Next

As we look forward to continuing to support the Kearney, Lincoln, and Omaha campuses - plus the NU System - in 2023, here are some of the key initiatives we will focus on in the year ahead:

RECRUITMENT AND RETENTION

We know that getting students to NU - and keeping them here - is the top priority of the campuses. We will prioritize our support of key enhancements to CRM and other focused strategies.

IT SERVICE MANAGEMENT (ITSM)

ITSM is used internally throughout ITS as well as with our distributed IT partners to provide efficient and responsive customer service. In 2023, we will implement TeamDynamix, a modern product used across the B1G, which was selected through a successful RFP in partnership with P2P.

IT SECURITY

In order to stay ahead of new threat tactics, our cyber posture will continue to advance in 2023 through enhancements to access management, endpoint protection, and firewalls.

WORKFORCE DEVELOPMENT AND INTERNSHIPS

Through the new ITS internship Program, we will focus on enabling our interns to gain skillsets within all areas of ITS, elevate customer support, distribute workload, provide leadership opportunities, and help to develop a workforce pipeline for our organization and the State of Nebraska.

DIGITAL LEARNING ECOSYSTEM

The Canvas ecosystem is used by nearly all NU faculty and students, regardless of course modality. Keeping this environment fresh, easy-to-use, and integrated with helpful tools is critical.

RESEARCH IT

IT collaboration, support, and services must be a consideration at all stages of the research lifecycle, pre- and post-award, and serves as a catalyst to advance research by reducing overhead, ensuring compliance requirements are met, and providing secure processes and infrastructure.

OPERATIONAL EXCELLENCE

A continued area of emphasis with significant enhancements planned for our on-premises data center facilities, data center networks, wide-area networks that interconnect the campuses, automation of processes, and our ability to recover quickly in the event of a disaster.

INNOVATION HUB

Adding additional partners and projects via our NU Applied Research in Technology Lab, we will continue to collaborate with faculty to study trends in our cyber and digital learning environments. In 2023, we will also look to add new transformational projects via the NU ITS Innovation Hub.

CUSTOMER SATISFACTION SURVEY

We will complete our biennial user survey to faculty, staff and students at UNK, UNL, UNO and the NU System sites. We align future projects and customer support strategies based on survey feedback.