



Nebraska Information  
Technology Commission



# PROGRESS REPORT

TO THE GOVERNOR AND LEGISLATURE

## 2024

State of Nebraska

**NEBRASKA INFORMATION TECHNOLOGY COMMISSION**



[nitc.nebraska.gov](https://nitc.nebraska.gov)



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# NITC COMMISSIONERS

Dr. Matthew McCarville, Chair, CIO, State of Nebraska  
Senator Wendy DeBoer, Nebraska Legislature, Ex-officio member  
Dr. Leah Barrett, President, Northeast Community College  
Bret R. Blackman, Vice President for IT and CIO, University of Nebraska  
James Ediger, General Counsel, Hamilton Telecommunications  
Nathan Watson, CEO, Contemporary Analysis  
Kirk Langer, Chief Technology Officer, Lincoln Public Schools  
Zachary J. Mellender, Business Systems & Analytics Manager, Omaha Zoological Society  
Phillip Doerr, Owner and Manager, Doerr Farms  
Katie Niemoller, Registered Nurse, Children's Nebraska

# STAFF

Becca Kingery, Education IT Manager  
Rick Becker, NITC Executive Administrator  
Casey DunnGossin, State GIS Coordinator  
Vanessa Castro, Community IT Manager  
Lori Lopez Urdiales, Office Services Manager II

# EXECUTIVE SUMMARY

This progress report highlights many of the accomplishments of the Nebraska Information Technology Commission and fulfills the requirement of Section 86-518 to submit a progress report to the Governor and Legislature by November 15 of each even-numbered year.

Significant progress has been made on the following priority areas designated as strategic initiatives by the NITC.

**State Government IT Strategy.** The objective of this initiative is to develop and implement a comprehensive strategy for the use of information technology by Nebraska state government. The strategy has utilized a hybrid centralization model combining elements of both the centralized and decentralized IT management models. Enterprise technologies are centralized with agency-specific activities remaining with the agencies.

**Geospatial Nebraska.** The primary objective of this initiative is to establish and maintain guidelines and policies for statewide geospatial operations and management. Geospatial Nebraska works to optimize use of technology, data, and services to address a variety of spatial challenges in the state. To help grow investment in Nebraska and its communities, the GIS Council will continue to identify and make available authoritative and interoperable data and applications that support policy and decision making.

**Digital Education.** The primary objective of the Digital Education Initiative is to promote the effective and efficient integration of technology into the instructional, learning, and administrative processes and to utilize technology to deliver enhanced digital educational opportunities to students at all levels throughout Nebraska on an equitable and affordable basis. NITC staff assisted the Nebraska Department of Education as it developed the Hierarchy of Digital Learning Needs and CARES Act guidance for Nebraska school districts and private schools in an attempt to address the Homework Gap. NITC staff partnered with the Nebraska Library Commission and Public Service Commission as the NUSF-117 Nebraska Special Construction Matching Fund program was created to incentivize new fiber construction for public libraries in rural areas.

**Network Nebraska.** Network Nebraska has succeeded in lowering the unit cost of Internet service to participating entities through aggregated purchasing power. By combining Network Nebraska's K-20 Internet purchases and peering into five state contracts of over 100Gbps, the K-12 E-rate-eligible price has gone from \$.18/Mbps/month on July 1, 2020, down to \$.08/Mbps/month on July 1, 2022, a 55% decrease in unit cost. This will benefit all current and future Network Nebraska schools, ESUs and colleges that purchase their Internet service from the statewide master contract. Benefits of Network Nebraska also include flexible bandwidth utilization, Intranet routing, lower network costs, greater efficiency, interoperability of systems providing video courses and conferencing, increased collaboration among educational entities, new student learning opportunities, enterprise network management software, and better use of public investments.

**Rural Broadband and Community IT Development.** The NITC Community Council and staff have supported rural broadband and community IT development in several ways. NITC staff has provided staff support to the state's Rural Broadband Task Force. NITC staff provided assistance in developing grant applications for federal broadband funding programs. Staff of the NITC/Office of the CIO are also participating in the Connect Nebraska Working Group, the interagency working group responsible for coordinating federal broadband funding. NITC/Office of the CIO staff will be administering the State Digital Equity Planning Grant which is expected to be awarded in October or November 2022.

**eHealth.** Nebraska continues to be a leader in health information exchange with near universal participation in the statewide health information exchange, CyncHealth. LB 411 which was signed by Governor Ricketts on May 24, 2021, mandated participation in the state health information exchange by ambulatory surgical centers, critical access hospitals, intermediate care facilities, long-term care hospitals, mental health substance use treatment centers, PACE centers, pharmacies, psychiatric or mental hospitals, public health clinics, and rehabilitation hospitals.

### **Other Progress Priorities**

- The NITC's vision is being realized and short-term and long-term strategies have been articulated and employed. The NITC has developed a vision statement, goals, and strategic initiatives to articulate its vision and to highlight technology projects which have strategic importance to the State of Nebraska.
- The Statewide Technology Plan has been an effective vehicle for identifying key projects, building stakeholder support, coordinating efforts, and communicating with policy makers.
- The NITC website serves as an information technology clearinghouse. Additional resources on broadband are currently available on the Rural Broadband Task Force website (<https://ruralbroadband.nebraska.gov>).
- In order to encourage interoperability and standardization, the NITC has adopted over 100 technical standards and guidelines.
- Recommendations made by the commission to the Governor and Legislature have assisted policy and funding decisions. The review process and prioritization of new IT projects provides policy makers with information about the objectives, justification, technical impact, costs, and risks of proposed systems. Additionally, the NITC has provided staff assistance to the Rural Broadband Task Force.
- The NITC encourages and facilitates input and involvement of all interested parties by engaging in collaborative processes, involving four advisory councils, the Technical Panel, and numerous workgroups and subcommittees. Information is publicly distributed and public input is encouraged.
- The NITC is addressing long-term infrastructure innovation, improvement, and coordination through Network Nebraska, by supporting the Rural Broadband Task Force, and by participating in the interagency working group responsible for coordinating federal broadband programs.

# INTRODUCTION

The Nebraska Information Technology Commission (NITC) was established by the Legislature in 1998 to provide advice, strategic direction, and accountability on information technology investments in the state. Chief Information Officer Dr. Matthew McCarville currently serves as the governor-designated chair of the NITC. Commissioners are appointed by the Governor, approved by the Legislature, and represent elementary and secondary education, postsecondary education, communities, agriculture, the Governor, and the general public.

The NITC conducts most of its work through four advisory groups: the Community Council, Education Council, Geographic Information Systems Council, and Technical Panel. Each council establishes ad hoc work groups to prepare recommendations on specific topics. The Office of the Chief Information Officer provides support for the NITC, its councils, the Technical Panel, and ad hoc groups.

Section 86-518 directs the NITC to submit a progress report to the Governor and Legislature by November 15 of each even-numbered year. This report fulfills this requirement. Over the past two years, the NITC has realized many significant achievements in each of the seven criteria established by the Legislature in Section 86-524(2). This report details those achievements.

# REALIZATION OF VISION AND EMPLOYMENT OF STRATEGIES

The NITC has developed a vision statement, goals, and strategic initiatives to articulate its vision and to highlight technology projects which have strategic importance to the State of Nebraska. The NITC continues to make progress toward the realization of its vision. However, because technology constantly presents new challenges and opportunities, the NITC's vision will continually evolve.

**Vision.** The NITC vision statement is to “promote the use of information technology in education, health care, economic development, and all levels of government services to improve the quality of life of all Nebraskans.”

**Goals.** The NITC has established four goals:

- Support the development of a robust statewide telecommunications infrastructure that is scalable, reliable, and efficient;
- Support the use of information technology to enhance community and economic development;
- Promote the use of information technology to improve the efficiency and delivery of governmental and educational services, including homeland security;
- Promote effective planning, management and accountability regarding the state's investments in information technology.

**Strategic Initiatives.** In 2004 the NITC began identifying priority areas as strategic initiatives. Each strategic initiative includes measurable action items. The development of the action items has been a collaborative effort involving many individuals and entities. These efforts have been successful in gaining cooperation of many stakeholders. The strategic initiatives form the core of the NITC's Statewide Technology Plan ([https://nitc.nebraska.gov/documents/statewide\\_technology\\_plan.pdf](https://nitc.nebraska.gov/documents/statewide_technology_plan.pdf)).

The 2022 Statewide Technology Plan included the following initiatives:

- State Government IT Strategy
- Nebraska Spatial Data Infrastructure
- Network Nebraska
- Digital Education
- Rural Broadband and Community IT Development
- eHealth

# STATE GOVERNMENT IT STRATEGY

This initiative focused on the development and implementation of a comprehensive strategy for the use of information technology by Nebraska state government. The strategy has utilized a hybrid centralization model combining elements of both the centralized and decentralized IT management models. Enterprise technologies were centralized with agency-specific activities remaining with the agencies.

Top priorities include:

- Security
- Consolidation
- Availability

Action items supporting this initiative include:

- Implement same sign-on for certain enterprise applications;
- IT cost efficiency projects;
- Consolidate on STN domain;
- Application process maturation (DevOps); and
- SharePoint/Teams (cloud migration).

Recent accomplishments include:

- JDEdwards 9.2 Upgrade
- Mainframe Virtual Tape Refresh
- Active Directory Clean-up
- 501 Data Center Move
- Chromebook Kiosks
- Clarity Move to the Cloud and Application Upgrade
- Migrate Judicial Branch to M365 Tenant
- Service Portal Enhancements
- SharePoint Online Migrations
- AD Admin Rights Auditing
- eDirectory Same Sign-On

# NEBRASKA SPATIAL DATA INFRASTRUCTURE

The Nebraska Geographic Information Systems (GIS) Council made strides to further the Nebraska Spatial Data Infrastructure (NESDI) initiative since 2022. Spatial data and mapping are integral components which support the economy, safety, environment, and overall quality of life for Nebraskans. Coordination and management of these activities are essential to reduce duplication of efforts and provide cost savings to our taxpayers.

This initiative promotes coordination, guides policy, provides guidance on NESDI data accuracy requirements, and strengthens data sharing through partnerships to ensure access to quality geospatial datasets for governmental business needs and the public.

## GIS Council Mission:

- To encourage the appropriate utilization of GIS technology and to assist organizations to make public investments in GIS technology and geospatial data in an effective, efficient, and coordinated manner. Nebraska Revised Statute – §86-569 through §86-573

## Action items supporting NESDI:

- Formalize the Definition of NESDI and Data Stewardship
- Geodetic and Survey Control Inventory and Assessment
- Nebraska Statewide Elevation Program (Retired 2024)
- Nebraska Statewide Imagery Program (Retired 2024)
- Street Centerline-Address Database (Retired 2023)
- Statewide Land Record Information System
- NebraskaMAP – A Geospatial Data Sharing and Web Services Network

Retirements. Since 2022, the GIS Council has retired three of the seven action items that worked to support the NESDI initiative, because the council had reached a steady state and achieved the goals of the action items.

The Street Centerline-Address Database has been implemented by the Public Service Commission in support of the NextGen 911 system. The Nebraska statewide address dataset was added to the National Address Database in 2023, and will be updated as needed.

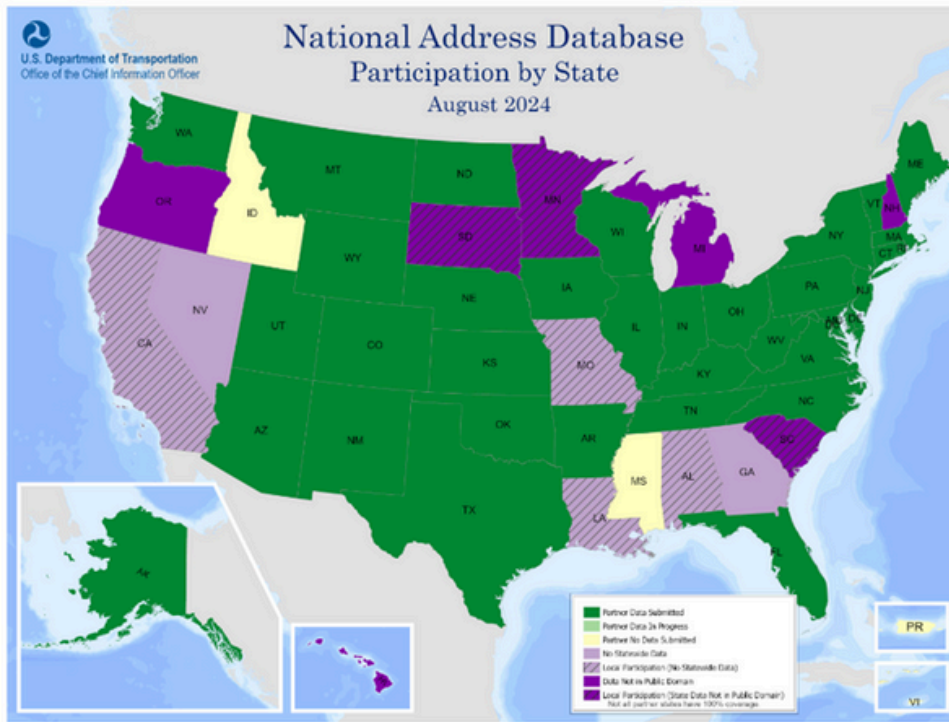


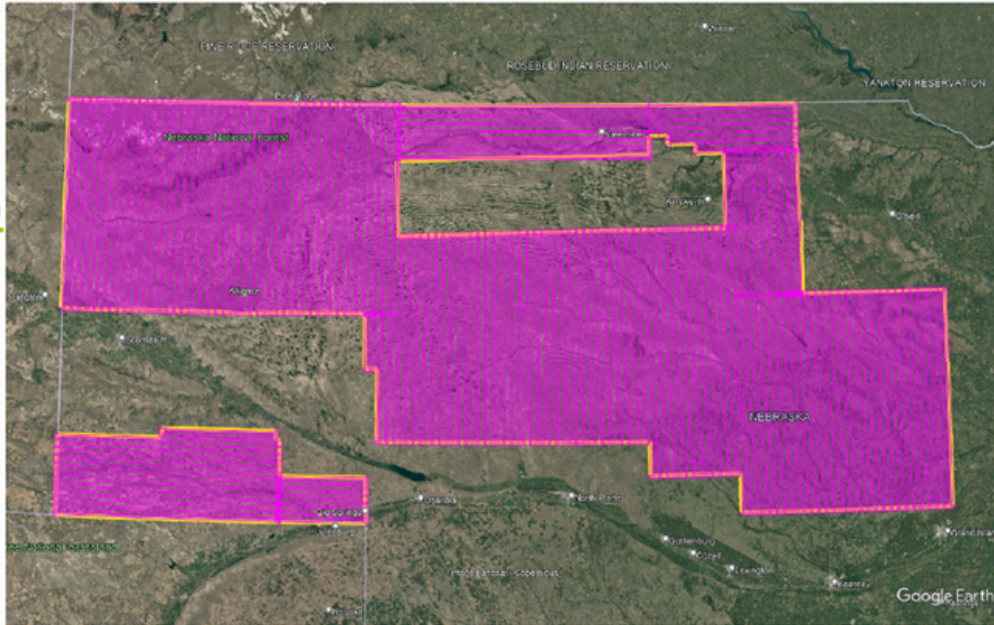
Figure 1: Source USDOT, NAD Status Map

The Nebraska Statewide Elevation Program was retired in 2024 due to full coverage of Nebraska with QL2 (Quality Level 2 / 1 meter resolution) lidar (light detection and ranging) data. Several local and regional governments collect their own lidar data at higher resolutions and some make the data available for download online. While not yet complete, the USGS (US Geological Survey) and NRCS (National Resources Conservation Service) are collecting a 27,190 sq. mi. area (26 counties) project at QL1 standards. QL1 (roughly 6 in resolution) is a higher resolution product than QL2 and will facilitate more complex elevation, flood plain, precision agriculture, and other types of analysis for Nebraska agencies, and organizations.

The Nebraska Statewide Imagery Program was retired in 2024 largely because the State of Nebraska continues to purchase and utilize the USDA NAIP (US Department of Agriculture National Agriculture Imagery Program) as its source for statewide imagery. The NAIP product is flown on even numbered years in Nebraska and meets most of the needs for Nebraska state agencies. Local and regional governments do collect imagery outside of the NAIP product for their own purposes.

**Updates.** In 2023 the GIS Council stood up 2 working groups, Boundary Working Group and Parcel Data Working Group. Both working groups started meeting in 2024. The boundary working group focuses on Interim Study Resolution 370 and is reviewing all statutes that describe boundaries, areas, or other subdivisions in Nebraska. This working group has reviewed 35% of the statutes mentioned in the report.

The goal of this working group is to identify all boundaries in Nebraska, the data owner, and a digital dataset. The workgroup will also make recommendations to the GIS Council, NITC, and other appropriate groups related to the statutes either for standardization, clarification, or modernization of the statutes. The Parcel Data Working group has met several times and is working towards defining a common schema standard and spatial standard for parcel data in Nebraska.



*Figure 2: Source USGS, D23\_Statewide Project*

Finally, below is the biannual report card that is provided by the National States Geographic Information Council (NSGIC) to Nebraska. This report card looks at the maturity of the different state GIS programs in the United States.

# GEOSPATIAL MATURITY ASSESSMENT 2023

Nebraska Report Card

Overall Grade: B+

COORDINATION	GRADE: B
STATE-LED THEMES	GRADE
Address	A
Cadastre	B-
Elevation	B+
Orthoimagery Leaf-Off	D+
Transportation	A
NG9-1-1	A
FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	A
Orthoimagery Leaf-On	B-

## METRICS:

A - Superior

C - Average

F - Failure

B - Above average

D - Below average

N/A - Not Applicable

The National States Geographic Information Council Geospatial Maturity Assessment provides NSGIC members and other partners with a summary of geospatial initiatives, capabilities, and issues within and across state governments. The NSGIC GMA now produce report cards for each state on central data themes and coordination topics. The assessment is performed every two years.

# NETWORK NEBRASKA

Participants in Network Nebraska are reducing costs and stimulating investment in Nebraska's telecommunications infrastructure. Network Nebraska is represented as a compilation of three major sub-networks: The University of Nebraska network, State and County Government network, and the K-20 Education network. Each network has its own management staff, but takes advantage of co-location facilities, Internet and telecommunications contracts, and shared infrastructure wherever possible.

To develop a broadband, scalable telecommunications infrastructure that optimizes quality of service to public entities, the State of Nebraska and the University of Nebraska began aggregating their backbone network services into a core network backbone in 2003. In 2006, the Nebraska Legislature passed LB 1208 which named the statewide network as Network Nebraska and tasked the Chief Information Officer (assisted by the University of Nebraska) with "providing access to all education entities as soon as feasible, but no later than July 1, 2012." Network Nebraska is also expected to "meet the demand of state agencies and local governments...Such network shall provide access to a reliable and affordable infrastructure capable of carrying a spectrum of services and applications, including distance education, across the state."

Network Nebraska has succeeded in lowering the unit cost of Internet service to participating entities through aggregated purchasing power. By combining Network Nebraska's K-20 Internet purchases and peering into five state contracts of over 320 Gbps, the K-12 E-rate-eligible price has remained steady for this biennium at prices effective as of July 1, 2024, \$0.08/Mbps/month. Prices are expected to fall in the next biennium. This continues to benefit all current and future Network Nebraska schools, ESUs and colleges that purchase their Internet service from the statewide master contract.

Benefits of Network Nebraska also include flexible bandwidth utilization, Intranet routing, lower network costs, greater efficiency, interoperability of systems providing video courses and conferencing, increased collaboration among educational entities, new student learning opportunities, enterprise network management software, and better use of public investments.

Network Nebraska has also stimulated investments and competition in telecommunications infrastructure. As the State bid connectivity to large regional areas of schools and colleges, the telecommunications companies responded with fiber Ethernet service pricing that greatly reduced the costs to educational entities.

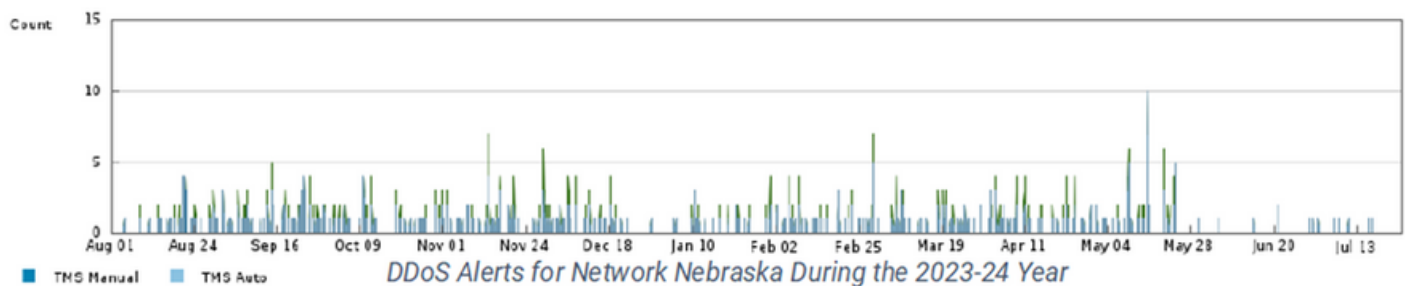


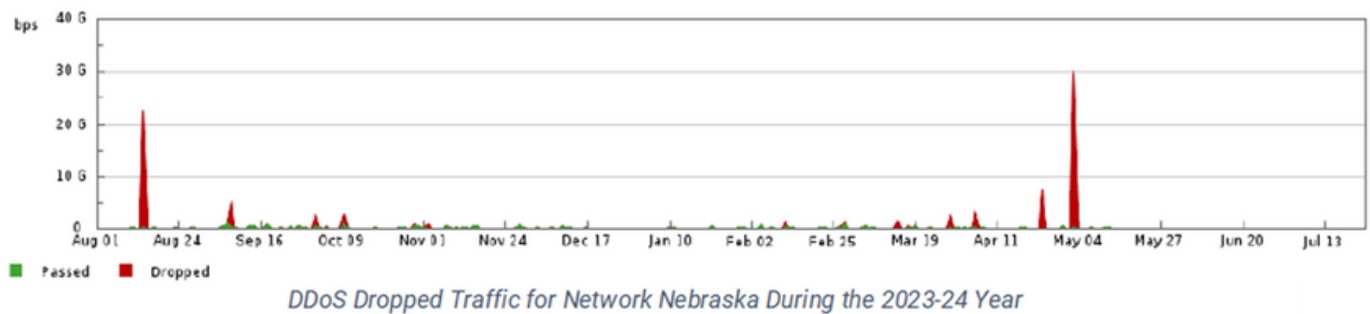
The development of the K-20 education network has increased the number of distance education courses available to Nebraska students. Through Zoom interactive videoconferencing, Nebraska high schools and community colleges exchange approximately 250 courses per year (2024-2025) with an additional 177 virtual field trips available to educational entities across the state. Highest concentration of courses are in English, Foreign Language, and Mathematics, however, offerings also include Agriculture, Technology, and Industrial Technology.

Due to the continued expansion of the Network Nebraska backbone, we are now able to reach every education entity in the State through seven core aggregation points: Grand Island, Kearney, Lincoln, Norfolk, Scottsbluff, and two locations in Omaha.

The development of the K-20 Education network has increased the number of customers served by Network Nebraska. Data and Internet customers currently include the three state colleges, all six community colleges, two tribal colleges, the University of Nebraska system, 40% of private colleges and universities, and nearly 100% of public school districts under 17 different educational service units. Likewise, non-public school district participation has continued to expand. The Nebraska K-20 Education network is completely funded by Participation and Interregional Transport Fees from its 296 members.

Cybersecurity continues to be a priority area of the Education Council with a refocus of action items in the most recent update to the Statewide Technology Plan. The Education Council and Network Nebraska Advisory Group continue to promote and provide cybersecurity training experiences for Network Nebraska members.

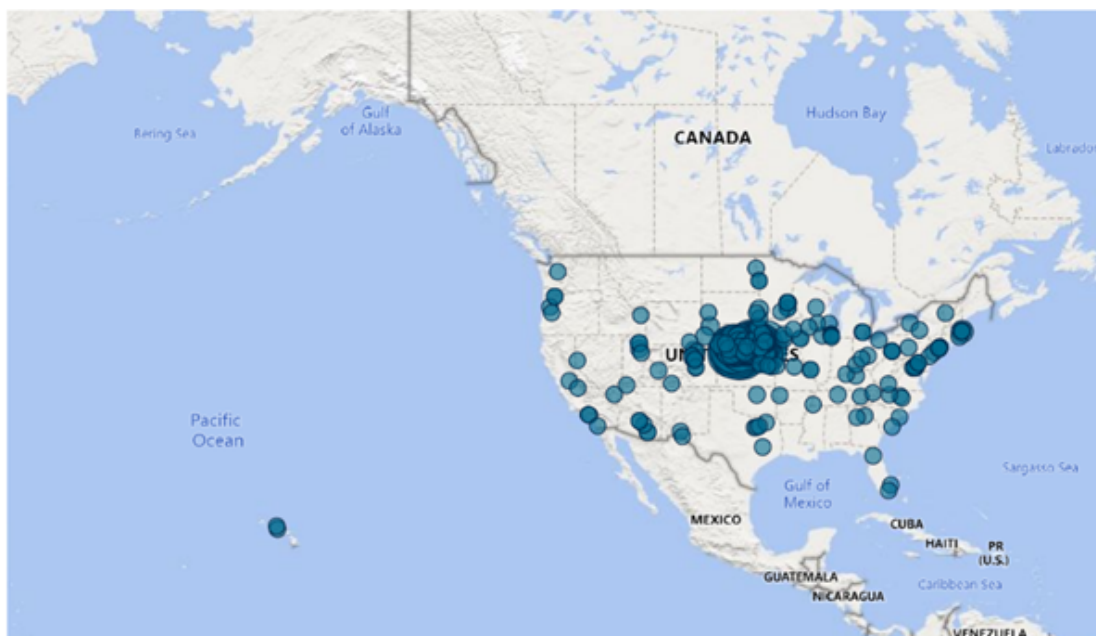




Establishing a robust digital education environment is critical to Nebraska’s future. So much of what teachers, students, and administrators do today is dependent upon Internet-based information and communication. To assist with facilitation of digital education, and in efforts to combat the ‘homework gap,’ in 2021 Nebraska was selected as one of only three initial states to pilot a K-12 global Wi-Fi program called eduroam®.

eduroam® is a service that allows students, researchers, teachers, and staff from participating universities, colleges, K-12 schools, libraries, and museums to obtain secure Internet connectivity when visiting participating schools and partners by simply opening their computing device. ConnectEd Nebraska was created through a collaborative effort between Network Nebraska, the Nebraska Department of Education, the University of Nebraska, and ESU leaders. The objective of ConnectEd Nebraska is to enable participating teachers, staff, and students in Nebraska to have anywhere, anytime wireless access at all educational sites in the state and in other eduroam-participating sites throughout the U.S. and other countries. eduroam is available to all Network Nebraska participants, and saw a steady increase in school utilization of public school districts enrolled in the eduroam program to 70% of Network Nebraska members.





*Snapshot of Network Nebraska eduRoam Users throughout the United States January – June 2024*

Student equity of access to the internet continues to be a high priority action item; the Office of the CIO partnered with the Nebraska Library Commission and Public Service Commission continue to promote the Nebraska Special Construction Matching E-Rate fund for schools and libraries. The matching funds from the FCC’s E-Rate program and the Nebraska Universal Service Fund will increase the discount for special construction of fiber by as much as 20%, which could dramatically reduce costs and increase transport speeds for the participants.

Network Nebraska has been made possible through a cooperative effort of the Collaborative Aggregation Partnership (CAP). CAP is composed of several operational entities: Office of the CIO, University of Nebraska, and Nebraska Educational Telecommunications with policy assistance from the Nebraska Department of Education, Public Service Commission, and the NITC.

In 2009, the NITC Education Council chartered the Network Nebraska Advisory Group (NNAG). These 16 members, representing all the major K-12 and higher education communities, have been instrumental in helping guide Office of the CIO decisions concerning network infrastructure, services, and fees.

Network Nebraska is not a state-owned network. Facilities and circuits are leased from private telecommunications providers in the state, allowing the State of Nebraska and members of Network Nebraska to act as anchor tenants.

# DIGITAL EDUCATION

The primary objective of the Digital Education Initiative is to promote the effective and efficient integration of technology into the instructional, learning, and administrative processes and to utilize technology to deliver enhanced digital educational opportunities to students at all levels throughout Nebraska on an equitable and affordable basis.

The initiative is dependent upon adequate Internet connectivity and transport bandwidth for learners, instructors, administrators, and for educational attendance sites. A minimum acceptable level of classroom technology will have to be established for the initiative to be successful.

The primary components of the Digital Education Initiative include:

- A statewide telecommunications network with ample bandwidth capable of transporting voice, video, and data between and among all education entities (See Network Nebraska.);
- Distance insensitive Internet pricing for all Nebraska education entities;
- Development of a statewide eLearning environment so that every teacher and every learner has access to a web-based, digital curriculum;
- Development of a statewide digital resource library so that any teacher or learner will be able to retrieve digital media for use in instructional and student projects;
- Synchronous videoconferencing interconnections between all schools and colleges;
- The means to coordinate and facilitate essential education opportunities for all students through a statewide student information system; and
- Regional Pre-K-20 education cooperatives that vertically articulate educational programs and opportunities.

# RURAL BROADBAND AND COMMUNITY DEVELOPMENT

The NITC Community Council and staff have addressed rural broadband and community IT development in several ways:

## ***State Broadband Programs***

- Nebraska's Rural Broadband Task Force, created by LB 994 in 2018, brought together stakeholders to learn more about rural broadband and to make recommendations. Those recommendations are providing a framework in which to address the challenges of improving rural broadband. More information on the task force and the 2021 report are available at <https://ruralbroadband.nebraska.gov>.
- Remote Access Rural Broadband Grant Program. Nebraska's first broadband grant program, the Remote Access Rural Broadband Grant Program, demonstrated the impact of state broadband grant programs on broadband deployment. The program, which was funded by the CARES Act and administered by the Nebraska Department of Economic Development, provided \$29.5 million in funding for 60 projects which brought broadband to 17,600 households.
- Nebraska Broadband Bridge Grant Program. With the support of Governor Ricketts, the Nebraska Legislature established the Nebraska Broadband Bridge grant program by enacting LB 388 in 2021 and appropriated \$20 million a year for two years for the program. The Nebraska Public Service Commission awarded \$19.2 million in funding to 60 projects to connect 12,660 locations in January and February 2022.
  - A second round of funding was awarded in 2022. LB 1144 which was passed by the Legislature on April 13, 2022 and signed by Governor Ricketts on April 19, 2022, made several modifications to the grant program, including reducing the match requirement to 25% in high cost areas.
- NUSF. The Nebraska Universal Service Program administered by the Nebraska Public Service Commission was an essential funding source for supporting broadband service and investments in new broadband infrastructure in rural areas. Broadband projects funded through the Nebraska Universal Service Fund have connected 19,583 households since 2019. The Public Service Commission is taking steps to initiate a reverse auction of \$13 million in NUSF support in 2022. Additionally, the Nebraska Public Service Commission established the E-Rate Special Construction Matching Program in 2020, providing matching funding for 6 public libraries and one public school in the first year of the program.

- The Nebraska Public Service Commission had taken steps to modernize the fund and to improve accountability. Remittances to the Nebraska Universal Service Fund increased from \$32.8 million in 2018 to \$46.8 million in 2020 due to reforms to the residential contribution method. LB 338 improved the accountability of the Nebraska Universal Service Fund by specifying build out requirements of 100 Mbps down and 100 Mbps up and by requiring recipients to conduct and submit speed tests.
- CARES ACT Funding for Student Connectivity and Devices. Governor Ricketts, the Nebraska Department of Education, Educational Service Units, and local school districts coordinated federal funding to purchase computing devices, hot spots, and internet enabled devices as well as implement connectivity projects through the Governor's Emergency Education Relief (GEER) and Elementary and Secondary School Emergency Relief (ESSER) fund as part of the CARES Act.

### ***Federal Broadband Funding Opportunities***

- American Rescue Plan Act (ARPA) Capital Projects. Nebraska had been allocated \$128,740,178 in funding for capital projects which directly enable work, education, and health monitoring and address critical needs, including broadband infrastructure projects, digital connectivity projects, and multi-purpose community facility projects. LB 1024 which was passed by the Legislature on April 12, 2022 and signed by Governor Ricketts on April 18, 2022 allocated funding by Congressional District. No more than \$35 million was allocated for multi-purpose community facilities projects in Congressional District 2 which includes Omaha. No less than \$40 million was allocated for projects in Congressional Districts 1 and 3. The Nebraska Department of Economic Development will administer the program, but intends to contract with the Nebraska Public Service Commission to distribute broadband deployment funding through the Nebraska Broadband Bridge Program.
- Infrastructure Investment and Jobs Act (IIJA) Broadband Equity, Access and Deployment (BEAD) Program. Nebraska had been allocated at least \$100 million in funding for broadband infrastructure projects. States submitted a 5-year action plan in order to receive implementation funding. The amount of funding allocated to each state was determined using data from the second iteration of the FCC's new broadband map which was made available in the spring of 2023. States submitted a 5-year action plan in order to receive implementation funding. Nebraska received over \$405 million through the BEAD program.
- Infrastructure Investment and Jobs Act (IIJA) State Digital Equity Capacity Grant Programs. Nebraska had been allocated nearly \$600,000 in funding to develop a state digital equity plan. The development of a state digital equity plan was a requirement to receive funding to implement a state digital equity grant program with funding from the IIJA State Digital Equity Capacity Grant Program. Nebraska was allocated \$6 million over 5 years. The NITC/Office of the CIO administered the planning grant process and it was approved by the NTIA. The Nebraska Broadband office will carry out the Digital Equity plan.

### **Recent Community Council Accomplishments Related to Broadband and Digital Equity:**

- NITC staff together with staff from the Nebraska Public Service Commission provided support to the Rural Broadband Task Force.
- The NITC Community IT Manager Anne Byers completed the Digital Equity Planning Plan, which is now available at <https://broadband.nebraska.gov/media/ur1aa3kg/nebraska-de-plan-approved.pdf>
- NITC Community IT Manager Vanessa Castro collaborated with seven organizations statewide to lead a \$12 million application for the Digital Equity Competitive Grant.

# IMPROVED COORDINATION AND ASSISTANCE TO POLICYMAKERS

Statewide Technology Plan. The statewide technology plan has been an effective vehicle for identifying key projects, building stakeholder support, coordinating efforts, and communicating with policy makers.

The plan focused on six strategic initiatives:

- State Government IT Strategy
- Nebraska Spatial Data Infrastructure
- Network Nebraska
- Digital Education
- Rural Broadband and Community IT Development
- eHealth

These initiatives were identified by the NITC and its advisory groups. These groups include representatives of a wide array of entities, including health care providers, education, local government, the private sector, and state agencies. This process has proven to be effective in building stakeholder support. These initiatives are collaborative projects involving many entities both inside and outside of state government. The statewide technology plan provides a method of communicating the importance of these initiatives, progress made, and plans for further implementation. The primary role of the NITC in these initiatives has been facilitation and coordination. The success of these initiatives testifies to the NITC's effectiveness at facilitation, coordination, and communication with policymakers.

The Chief Information Officer and the advisory groups of the NITC are occasionally called upon to provide analysis or review of technology initiatives, explanation of state-specific information technology data, and other requests as needed by the Governor and Legislature.

**Rural Broadband Task Force.** By providing staff support for Nebraska's Rural Broadband Task Force, the NITC has assisted policymakers by studying issues related to rural broadband availability and by making recommendations. The Rural Broadband Task Force was created by LB 994 in 2018 to "review issues relating to availability, adoption, and affordability of broadband services in rural areas of Nebraska." LB 994 was introduced by Senator Curt Friesen, Chair of the Transportation and Telecommunications Committee. The 14-member task force is chaired by Dr. Matthew McCarville, CIO for the State of Nebraska and Chair of the Nebraska Information Technology Commission. The task force's second report was submitted to the Legislature in October 2022.

The report included findings and recommendations on:

- Broadband availability;
- Broadband data and mapping;
- Alternative technologies and providers;
- Nebraska Universal Service Fund and reverse auction;
- Public-private partnerships and broadband planning;
- Digital inclusion, homework gap and leveraging E-Rate funding; and
- Broadband needs of farmers and ranchers

The report and supporting appendices is available at: <https://ruralbroadband.nebraska.gov>.

Members of the task force include:

**Dr. Matthew McCarville**, Task Force Chair, Chief Information Officer, State of Nebraska and Chair, Nebraska Information Technology Commission

**Senator Mike Moser**, Chair, Transportation and Telecommunications Committee, Nebraska Legislature

**Senator Bruce Bostelman**, Nebraska Legislature (selected by the Executive Board)

**Dan Watermeier**, Commissioner, Nebraska Public Service Commission

**Dave Dearmont**, Research Division Administrator, NE Department of Economic Development

**Sherry Vinton**, Director, Nebraska Department of Agriculture

**Zachary Hunnicutt**, Farmer, Hunnicutt Farms, Representing Agribusiness Community

Vacant, Representing Nebraska Business Community

**Tom Shoemaker**, President, Pinpoint Communications, Representing Regulated Wireline Telecommunications Industry

**Daniel Spray**, Owner, Precision Technology, Inc., Representing Wireless Telecommunications Industry

**Gwen A. Kautz**, CEO/General Manager, Dawson Public Power District, Representing Public Power Industry

**Andrew Whitney**, Director of Virtual Platforms, Bryan Health & Teledyne, Representing Health Care Providers

**Andrew Buker**, Executive Director of Infrastructure Services, University of Nebraska, Representing Nebraska postsecondary educational institutions

**Ron Cone**, Director of Network Information Services, ESU 10, Representing Rural Schools Offering Kindergarten through Grade Twelve

## **Policy and Funding Recommendations**

***Recommendations made by the commission to the Governor and Legislature have assisted policy and funding decisions.***

Section 86-516 (8) directs the NITC to “make recommendations on technology investments to the Governor and the Legislature, including a prioritized list of projects, reviewed by the technical panel,” as part of the biennial budget process. Technical reviews of information technology projects are conducted by a team of reviewers. Projects are then reviewed by the Technical Panel. Using information from the review process, the NITC makes recommendations to the Governor and the Legislature by November 15 of each even-numbered year. The review process and prioritization of new IT projects provides policy makers with information about the objectives, justification, technical impact, costs, and risks of proposed projects.

## **Policies, Standards, Guidelines, and Architectures**

***Policies, standards, guidelines, and architectures have been developed and observed.***

In order to encourage interoperability and standardization, over 100 standards and guidelines have been adopted by the commission. The development of standards and guidelines has helped the State of Nebraska achieve greater interoperability and efficiency. The process encourages public input from all involved constituents. Most standards are developed by a work group consisting of stakeholders from state government agencies and other interested entities. The Technical Panel recommends standards and guidelines to be considered for adoption by the NITC.

A full listing of the NITC Standards and Guidelines are listed at this website:  
<https://nitc.nebraska.gov/standards/index.html>

## Information Technology Clearinghouse

*An information technology clearinghouse has been established, maintained, and utilized of Nebraska's information technology infrastructure and of activities taking place in the state involving information technology, and the information flow between and among individuals and organizations has been facilitated as a result of the information technology clearinghouse.*

The NITC's website ([nitc.nebraska.gov](http://nitc.nebraska.gov)) serves as an information technology clearinghouse, providing access to information including resources for communities, health care providers, and educational entities, the GIS community, and state government. The NITC website is the official repository for agenda, minutes, and documents for the NITC, its councils and their workgroups. The section on "Standards and Guidelines" provides access to all technical standards and guidelines adopted by the NITC or under development. The Community Council and its partners have developed resources to help Nebraska communities and regions improve their broadband service. Links to these resources are available from the websites of the NITC and the Rural Broadband Task Force ([ruralbroadband.nebraska.gov](http://ruralbroadband.nebraska.gov)). Network Nebraska has its own project website, with information designed for current and prospective participants (<http://www.networknebraska.net>). The NITC website also includes a link to NebraskaMAP (<http://www.NebraskaMAP.gov>) which provides public access to geospatial data in Nebraska. Additionally, NITC staff members handle requests for information on technology projects and development and facilitate the exchange of information.

## Input and Involvement of Interested Parties

*Input and involvement of all interested parties has been encouraged and facilitated.*

The NITC engages in collaborative processes, involving four advisory councils, the Technical Panel, and numerous workgroups and subcommittees. Additionally, information is publicly distributed and public input is encouraged through the NITC's website and through e-mail distribution. NITC staff also present information on NITC initiatives at conferences, workshops, and meetings across the state. The list of NITC Commissioners, council members, and Technical Panel members is included in this document.

Active work groups and subcommittees over the past two years include:

- State Government Council—Security Architecture Work Group
- Technical Panel—Accessibility Work Group
- Technical Panel—Intergovernmental Data Communications Work Group
- GIS Council—Boundary Work Group
- GIS Council – Parcel Data Work Group
- Education Council—Network Nebraska Work Group
- Education Council—Digital Education Work Group
- Education Council—Network Nebraska Advisory Group

Additionally, the Rural Broadband Task Force has encouraged the input and involvement of interested parties through its subcommittees and by providing opportunities for public comment.

## **Infrastructure Innovation, Improvement and Coordination**

*Long-term infrastructure innovation, improvement, and coordination has been planned for, facilitated, and achieved with minimal barriers and impediments.*

The NITC is addressing long-term infrastructure innovation, improvement, and coordination through Network Nebraska, by supporting the Rural Broadband Task Force, and by participating in the State of Nebraska's interagency working group which is coordinating federal broadband funding.

**Network Nebraska.** Network Nebraska has aggregated statewide telecommunications to a common infrastructure, generated considerable cost savings to public entities, and decreased the unit cost of Internet service by leveraging the consolidated demand of all participating entities. Since September 2003, Network Nebraska has grown to serve the data and Internet service needs of all state agencies with outstate circuits, the University of Nebraska's four campuses, all six of the state's community colleges, all three state colleges, and all but one of the 244 school districts under 17 different educational service units. The number of customers is expected to continue growing due to the favorable Internet rates and the high quality of service offered by Network Nebraska. The Network Nebraska K-20 network is one possible alternative for them to interconnect with each other and purchase less expensive Internet.

Network Nebraska has been made possible through a cooperative effort of the State of Nebraska Office of the CIO, University of Nebraska, and Nebraska Educational Telecommunications, with policy assistance from the Nebraska Department of Education, Public Service Commission, and the NITC. This partnership is known as the Collaborative Aggregation Partnership (CAP).

The first phase of the State multipurpose backbone became operational in September 2003, serving Omaha, Lincoln, and Grand Island with the second phase following in February 2004, extending service to Norfolk, Kearney, North Platte, and the Panhandle. In July 2008, the Network Nebraska K-20 backbone interconnected Grand Island, Lincoln, and Omaha, and Scottsbluff was added in 2012. The University of Nebraska has multiple statewide Internet contracts for Network Nebraska that have dramatically reduced the unit cost of Internet access to Network Nebraska participants. By leveraging Internet2 and InterExchange Carrier peering relationships, an additional 40 Gbps of Internet egress has been made available at substantially lower costs than commodity Internet.

Network Nebraska is not a state-owned network. Facilities are leased from private telecommunications providers in the state. In this way, the state hopes to stimulate private investment into Nebraska's telecommunications infrastructure.

**Rural Broadband Task Force.** LB 994, which was introduced by Senator Curt Friesen, passed by the Legislature and signed into law by Governor Ricketts on April 17, 2018, created the Rural Broadband Task Force. LB 994 charges the task force with reviewing “issues relating to availability, adoption, and affordability of broadband services in rural areas of Nebraska.” Ed Toner, Chair of the NITC, serves as the chair of the Rural Broadband Task Force. The NITC is providing support to the Rural Broadband Task Force.

The Task Force submitted its second report to the Legislature and Governor Ricketts in October 2021. Since the first task force report was submitted in 2019, the State of Nebraska has implemented many of the task forces recommendations and has improved broadband availability and increased the accountability of telecommunications providers receiving state support. LB 388 which was enacted in 2021 established the Nebraska Broadband Bridge Grant Program. \$20 million a year for two years was appropriated for the program. The first round of grants were awarded in January and February 2022. Sixty-one grants were awarded totaling \$19.2 million to connect 12,640 locations. Awards for the second round will be announced in December 2022.

The establishment of a state broadband program has helped the State of Nebraska build the capacity to administer federal broadband funding made available through the American Rescue Plan Act (ARPA) and the Infrastructure Investment and Jobs Act (IIJA).

## Awards and Recognition



Nebraska received a grade of “B” on the 2024 Digital States Survey.



The State of Nebraska received a \$600,000 State Digital Equity Planning Grant from the National Telecommunications and Information Administration. The NITC/OCIO administered the grant in partnership with the Connect Nebraska Working Group.

# EDUCATION COUCIL

## POST SECONDARY

- Brandon Eckmann, Northeast Community College
- Dr. Derek Bierman, Doane University
- Nick Muir, Wayne State College
- Jeremiah Ourada, Nebraska Wesleyan
- Dr. Jaci Lindburg, University of Nebraska-Omaha
- Tom Peters, Central Community College
- Andrew Buker, University of Nebraska
- Cheri Polenske, Nebraska State College System

## K-12

- Cassandra Joseph, South Sioux City Community Schools
- Matt Chrisman, Mitchell Secondary School
- Dr. Ted DeTurk, Educational Service Unit 2
- Stephen Hamersky, Daniel J. Gross Catholic High School
- Dean Tickle, Loup City Schools
- Trent Kelly, Hastings Public Schools
- Elizabeth Kumru, Ralston Public Schools
- Gary Needham, Co-Chair, Educational Service Unit 9

## NON-VOTING LIAISONS

- Dr. Mike Baumgartner, Coordinating Commission for Postsecondary Education
- Vacant, Nebraska Department of Education
- Dr. Matthew McCarville, Office of the CIO, Nebraska Department of Administrative Services
- Ling Ling Sun, Nebraska Educational Telecommunications Commission

# GIS COUCIL

- Prabhakar Vijayarangam, Office of the Chief Information Officer
- Jennifer Parmeley, Department of Health and Human Services
- Shani Mach, Department of Environment and Energy
- Doug Hallum, Conservation and Survey Division, University of Nebraska-Lincoln
- Ryan Werner, Department of Natural Resources
- Grant Latimer, Governor's Policy Research Office
- Claire Inbody, Department of Transportation
- John Beran, State Surveyor's Office
- Tim Erickson, Legislative Research Office
- Spencer Trowbridge, Nebraska Game and Parks Commission
- Barbara Oswald, Property Tax Administrator
- Vacant, Federal Liaison USGS Nebraska Water Science Center
- Chuck Wingert, Nebraska Association of Resources Districts, Nemaha Natural Resources District
- Timothy Cielocha, Public Power Districts, Nebraska Public Power District
- Sean Kennedy, Nebraska Association of County Officials - Cass County GIS Coordinator
- Nancy Salmon, Nebraska Association of County Officials - Hamilton County Commissioner
- Michael Schonlau, League of Nebraska Municipalities
- Jeff McReynolds, Member at large SSP Innovations
- Vacant, Member at large
- Vacant, Representative of the Nebraska Emergency Management Agency
- Vacant, Representative of the Nebraska Public Service Commission
- Lesli Rawlings, Nebraska Geospatial Professional Association -
- Eric Herbert, Omaha Metro Area - SAM
- Adam Miller, Lincoln Metro Area, Lincoln Electric Systems
- Matt Tinkham, Member at large - Professional Surveyors, Lamp Rynearson & Associates
- Don Linquist, Member at large - Precision Agriculture Industry, Mitchell Implements
- Charlie Lucas, Representative of the Nebraska State Patrol
- Vacant, an Official Tribal Organization in Nebraska

# TECHNICAL PANEL

- Rick Haugerud, University of Nebraska Computing Services Network
- Kirk Langer, Chair, Lincoln Public Schools
- Ling Ling Sun, Nebraska Educational Telecommunications Commission
- Remy Sydik, Assistive Technology, University of Nebraska
- Dr. Matthew McCarville, Nebraska Office of the Chief Information Officer