

NOVEMBER  
2024

NEBRASKA'S

# STATEWIDE TECHNOLOGY PLAN



Driving Transformation  
in Government,  
Education, Healthcare,  
and Communities for  
the Future

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

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# LETTER FROM THE CIO



## **Dr. Matthew McCarville**

Chief Information Officer  
Chair, NITC

Since 1998, The Nebraska Information Technology Commission (NITC) has consistently driven transformation across education, government, and communities through strategic technology initiatives. Over the years, NITC has played a pivotal role in helping Nebraska adapt to an ever-evolving technological landscape, leveraging the power of information technology to make services across sectors more efficient and impactful.

This year's Statewide Technology Plan emphasizes six strategic initiatives designed to enhance the use of technology within state operations and throughout the broader community. Three of these initiatives—State Government IT Strategy, IT Security, and Geospatial Nebraska—are crucial in addressing Nebraska's top IT priorities: security, availability, and consolidation. By embracing an enterprise-wide approach to IT, Nebraska is building a resilient infrastructure that strengthens service delivery and protects the state's digital environment.

The Plan also highlights technology's transformative role in education and economic development, where reliable broadband and digital access are increasingly essential. Network Nebraska, Digital Education, and Community Digital Skills are key initiatives focused on empowering students, businesses, and communities with the technology they need to thrive. These efforts not only foster effective technology use but actively work to bridge the digital divide, ensuring equitable access to digital resources.

This Plan would not be possible without the invaluable contributions of the NITC Commissioners, advisory group members, and staff. Your dedication is shaping a more connected, innovative, and forward-thinking Nebraska.

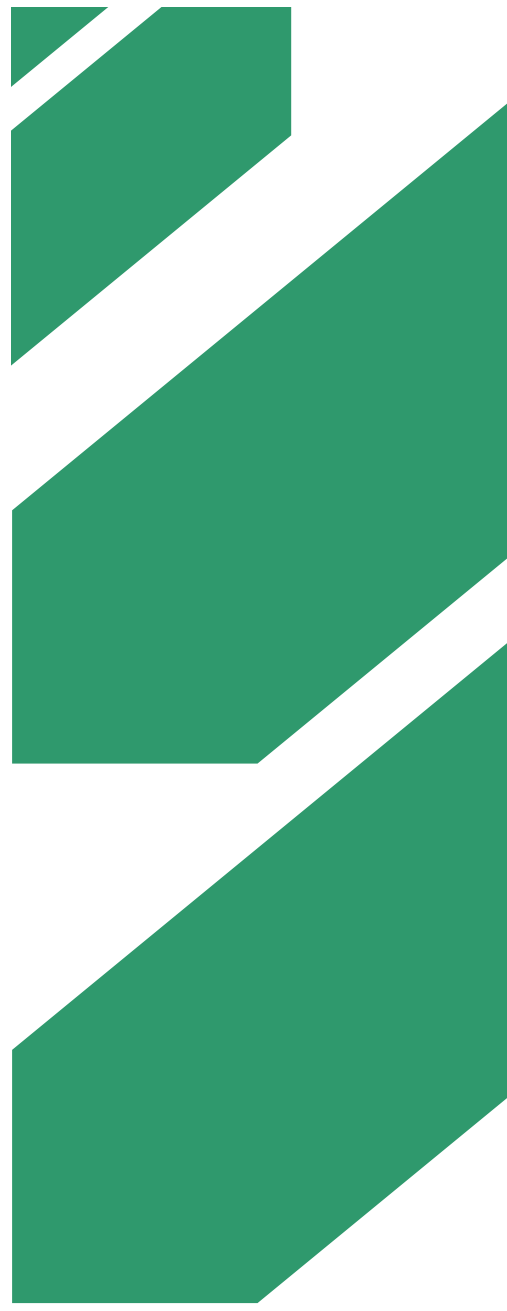
## **NITC's mission**

The Nebraska Information Technology Commission's mission is to ensure that the state's IT infrastructure is accessible and responsive to the needs of all citizens, regardless of location. By streamlining investments in government, education, healthcare, and other services, the Commission seeks to improve efficiency and deliver cost-effective solutions across Nebraska.

**DR. MATTHEW MCCARVILLE**  
**CHIEF INFORMATION OFFICER**  
**CHAIR, NITC**

# NITC Commissioners & Staff

## Commissioners



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

## Staff

- RICK BECKER, NITC EXECUTIVE ADMINISTRATOR**
- BECCA KINGERY, EDUCATION IT MANAGER**
- CASEY DUNNGOSSIN, STATE GIS COORDINATOR**
- VANESSA CASTRO, COMMUNITY IT MANGER**
- LORI LOPEZ URDIALES, OFFICE SERVICES MANAGER II**





# EXECUTIVE SUMMARY

The Nebraska Information Technology Commission (NITC), established by the Legislature in 1998, serves as a key advisory body, offering strategic direction and ensuring accountability for the state's information technology investments. Led by Dr. Matthew McCarville, the State's Chief Information Officer, the NITC is composed of commissioners appointed by the Governor, who represent various sectors including elementary and secondary education, higher education, communities, state government, agriculture, and the general public. The commission's work is largely carried out through its advisory groups: the Technical Panel, Community Council, Education Council, and GIS Council.

In accordance with the Legislature's mandate (Neb. Rev. Stat. § 86-516) to "annually update a statewide technology plan," the NITC, with input from its advisory groups and key stakeholders, has identified six strategic focus areas. These initiatives are vital to the state, requiring a coordinated, enterprise-level approach, NITC involvement, and collaboration across multiple entities to ensure success. The strategic initiatives, along with their supporting action items, form the foundation of the statewide technology plan. The current NITC strategic initiatives include:

- State Government IT Strategy
  - Geospatial Nebraska
  - Network Nebraska
  - Digital Education
  - IT Security
  - Community Digital Skills
- 

# NITC OVERVIEW

## VISION

The vision of the NITC is to improve the quality of life of all Nebraskans by promoting the use of information technology in education, health care, economic development and all levels of government. In order to achieve this vision, the NITC has identified five 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;
- Ensure the security of the State's data and network resources and the continuity of business operations.
- Promote effective planning, management and accountability regarding the state's investments in information technology.

## MISSION

The mission of the Nebraska Information Technology Commission is to make the State of Nebraska's information technology infrastructure more accessible and responsive to the needs of its citizens, regardless of location, while making investments in government, education, health care and other services more efficient and cost effective.

## CORE VALUES

- We strive to know our customers and stakeholders and understand their needs.
- We inspire cost-effective solutions.
- We encourage collaboration for the sharing of resources.
- We encourage public participation in the technology development process.

## ADVISORY GROUPS



Technical  
Panel



Community  
Council



Education  
Council



GIS  
Council

## **TECHNICAL PANEL**

The Technical Panel provides analysis and recommendations to the NITC on technical issues.

## **COMMUNITY COUNCIL**

The Community Council is composed of representatives from economic development, work force development, non-profits, agriculture, public libraries, and local government. It was formed to identify, prioritize, and coordinate user needs with respect to community information technology.

## **EDUCATION COUNCIL**

The Education Council is a 16-member advisory committee composed of representatives from K-12 and postsecondary education. It identifies, prioritizes, and coordinates user needs with respect to educational information technology.

## **GIS COUNCIL**

The GIS Council is a 28-member council, composed of representatives from federal, state, local government, education and private individuals and associations. They coordinate statewide GIS initiatives.

## **STRATEGIC INITIATIVES**

To advance its vision and goals, the Nebraska Information Technology Commission, with input from its advisory groups and other stakeholders, has identified six key initiatives aimed at promoting the effective use of technology across the state, particularly in education, economic development, and local government. By focusing on these strategic initiatives, the NITC seeks to secure funding and foster collaboration among state agencies to drive these efforts forward.

The first three initiatives—State Government IT Strategy, IT Security, and Geospatial Nebraska—emphasize the importance of an enterprise-wide approach to IT. These initiatives prioritize the state's IT goals of security, availability, and consolidation.

The remaining three initiatives focus on enhancing technology's role in education and economic development, recognizing that access to technology and broadband is becoming increasingly essential for students and businesses. Network Nebraska, Digital Education, and Community Digital Skills initiatives promote effective technology use while also addressing the growing digital divide between those with access to technology and the skills to use it, and those without.



## 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 Office of the CIO is developing a roadmap for planning and tracking progress on projects and action items prioritized to improve state government efficiency. As the CIO Roadmap is updated, the action items for this initiative will also be updated.

## IT SECURITY

- \* The objective of this initiative is to enhance the state's cybersecurity posture by protecting digital infrastructure, improving incident response capabilities, and fostering collaboration across government, industry, and international partners. The plan prioritizes building a skilled cybersecurity workforce, safeguarding citizens' data and privacy, and promoting technological innovation to stay ahead of evolving cyber threats. These objectives aim to ensure national security, economic stability, and public trust in the digital age.



# 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.

# NETWORK NEBRASKA

\* Since its conception in 2006, Network Nebraska has continued to provide a broadband, scalable telecommunications infrastructure that optimizes the quality of service to every public entity in Nebraska. The Office of the CIO and the University of Nebraska engaged in a collaborative partnership that used existing and new resources to aggregate disparate networks into a multipurpose core backbone extending from Omaha, Lincoln, Grand Island, Scottsbluff, and Norfolk.

Benefits of Network Nebraska membership include lower network costs, greater efficiency, interoperability of systems providing video courses and conferencing, increased collaboration among educational entities, new educational opportunities, more affordable Internet access, and better use of public investments. Network Nebraska serves 99.6% of public school districts (243), 100% of Educational Service Units (17), and 100% of public higher education entities (13). Private educational entities are also eligible for membership with approximately 20% of private K-12 schools (43), and 45% of private colleges or universities (6). Members benefit from one of the lowest commodity Internet rates in the entire country, possible through the aggregation of demand and statewide bidding. Network Nebraska's new action item focuses on identifying cybersecurity practices for educational entities, and the comprehensive development for the future of Network Nebraska.

# 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. This initiative will involve the coordination and promotion of several major systems and applications that have either been developed mostly at the local level or have not been replicated statewide. Action items will focus on the technical challenges for students transitioning from secondary to post-secondary education while addressing the need for equitable broadband access for students and their families to access digital education resources.

# COMMUNITY DIGITAL SKILLS

\* The goal of this initiative is to empower individuals from covered populations with essential digital skills to thrive in a technology-driven world. By providing accessible training in areas like basic computer use, internet navigation, cybersecurity awareness, and job-related digital tools, this initiative aims to bridge the digital divide and strengthen community resilience in addressing common challenges. Through partnerships with local organizations, libraries, and educational institutions, the initiative fosters economic growth, improves digital literacy, and ensures everyone has the opportunity to participate fully and confidently in the digital economy.



# STATE GOVERNMENT IT STRATEGY



## **OBJECTIVE:**

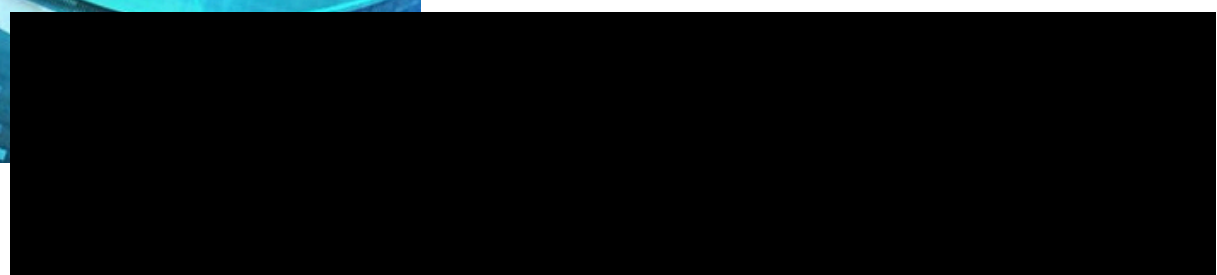
To develop and implement a strategy for the use of information technology by Nebraska state government.

## **DESCRIPTION:**

Develop and implement a comprehensive strategy for use of information technology by Nebraska state government. The Office of the CIO is developing a roadmap for planning and tracking progress on projects and action items prioritized to improve state government efficiency. As the CIO Roadmap is updated, the action items for this initiative will also be updated.

## **COLLABORATORS:**

OCIO, Technical Panel, and State Agencies



# ACTION ITEMS

## Consolidate on STN Domain

- Lead: OCIO
- Participating Entities: OCIO and remaining cabinet agencies (DHHS and Nebraska State Historical Society)
- Timeframe: See target and deliverables for completion dates
- Funding: OCIO Overhead
- Targets/Deliverables:
  - 1.1 DHHS Applications and Servers – 10/31/2025
  - 1.2 DHHS Users – 06/27/2025
  - 1.3 Nebraska Historical Society – TBD

## Intune Deployment for all Mobile Devices and Workstations

- Lead: OCIO
- Participating Entities: OCIO and State Agencies
- Timeframe: TBD
- Funding: TBD
- Targets/Deliverables: TBD

## Mainframe Modernization Analysis

- Lead: OCIO
- Participating Entities: OCIO, DHHS, Revenue, NDOT, DCS, NDOL
- Timeframe: TBD
- Funding: TBD
- Targets/Deliverables: TBD



## Softphone Migration

- Lead: OCIO
- Participating Entities: OCIO and State Agencies
- Timeframe: TBD
- Funding: TBD
- Targets/Deliverables: TBD

## Data Fabric

- Lead: OCIO
- Participating Entities: OCIO and State Agencies
- Timeframe: TBD
- Funding: TBD
- Targets/Deliverables: TBD

# IT SECURITY

## OBJECTIVE:

Enhance cybersecurity by protecting infrastructure, improving response, fostering collaboration, building workforce skills, and safeguarding data to ensure security, stability, and public trust.

## DESCRIPTION:

As part of the Statewide technology plan, cybersecurity is a top priority to protect our digital infrastructure, public services, and constituent data from ever-evolving cyber threats. Our strategy emphasizes a proactive, resilient, and adaptive approach to ensuring the security of government networks, systems, data, and partnerships among other branches of government, political subdivisions, and strategic private sector entities.

## COLLABORATORS:

State, County, and Local Governments and political subdivisions that choose to participate will collaborate on this plan.



# ACTION ITEMS

## Cyber Security Expansion

- Lead: Patrick Wright, Chief Information Security & Privacy Officer
- Timeframe: October 2024 - October 2026
- Funding: State & Local funding, the Federal State and Local Cybersecurity Grant Program (SLCGP), and other applicable State and federal grant sources.
- Measurables: Number of Political Subdivisions Covered; Number and Types of products deployed; Number of logs ingested; Number of Alerts Triaged; Number of Incidents Responded to;

## Cybersecurity Cost-Reduction

- Lead: Patrick Wright, Chief Information Security & Privacy Officer
- Timeframe: October 2024 - October 2026
- Funding: State & Local funding, the Federal State and Local Cybersecurity Grant Program (SLCGP), and other applicable State and federal grant sources.
- Measurables: Number and Types of products deployed; Percentage saved over list price per entity on a given product;

## Identity and Access Management Modernization

- Lead: Patrick Wright, Chief Information Security & Privacy Officer
- Timeframe: October 2024 - October 2026
- Funding: State & Local funding, the Federal State and Local Cybersecurity Grant Program (SLCGP), and other applicable State and federal grant sources.
- Measurables: The plan aims to streamline AD structure, expand MFA, provide secure single-sign-on access, automate privileged account controls, and implement self-service tools to enhance security and simplify access.

# NETWORK NEBRASKA



## OBJECTIVE:

To develop a broadband, scalable telecommunications infrastructure that optimizes the quality of service to every public entity in the State of Nebraska.

## DESCRIPTION:

Network Nebraska interconnects several hundred education entities to a multipurpose core backbone extending between Omaha, Lincoln, Grand Island, Norfolk, and Scottsbluff that provides aggregated Internet and commercial peering services extending out to the furthest corners of the state.

## COLLABORATORS:

Collaborative Aggregation Partnership: Office of the CIO, University of Nebraska, Nebraska Public Media, Public Service Commission, Nebraska Department of Education, Nebraska Information Technology Commission, Network Nebraska Advisory Group.

Network Nebraska Advisory Group: 8 K-12 members; 8 higher education members.

Educational Service Unit (ESU) Coordinating Council, ESU-Network Operations Committee, ESU-Distance Education Advisory Committee, higher education chief technology officers.

## **STRENGTHS/ASSETS:**

- Nearly every K-12 public school district, educational service unit, and public college and university participate in Network Nebraska and share in its annual costs.
- Network Nebraska is a completely voluntary, self-funded project, which contributes to its resilience, sustainability and focus on customer service.
- Shared personnel support within the Office of the CIO, Administrative Services, and the University of Nebraska contribute to its ultra-low operational costs and affordability.
- With the collaborative management style utilized by Network Nebraska, there is a sense of ownership and pride in its continued development and growth.

## **CHALLENGES/ISSUES:**

- The absence of full-time network employees reduces the capacity for such services as marketing, communications, research & development, and customer follow-up.
- The Network Nebraska cost recovery rates, although small in comparison to other state networks, are still above what small rural public libraries and private K-12 schools are accustomed to paying for Internet service provision alone. And prices continue to rise as the need for technological solutions in the learning space expand in both complexity and scope.

## **RECENT ACCOMPLISHMENTS:**

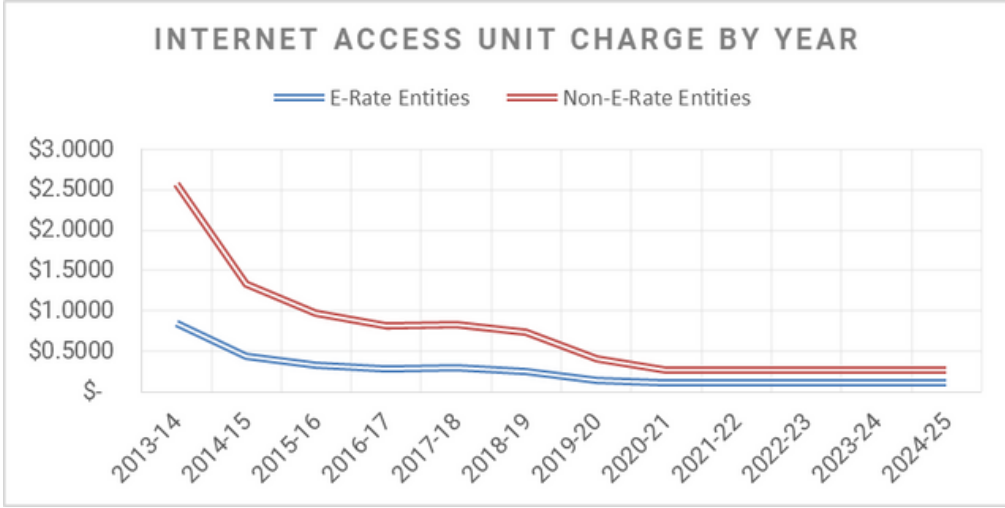
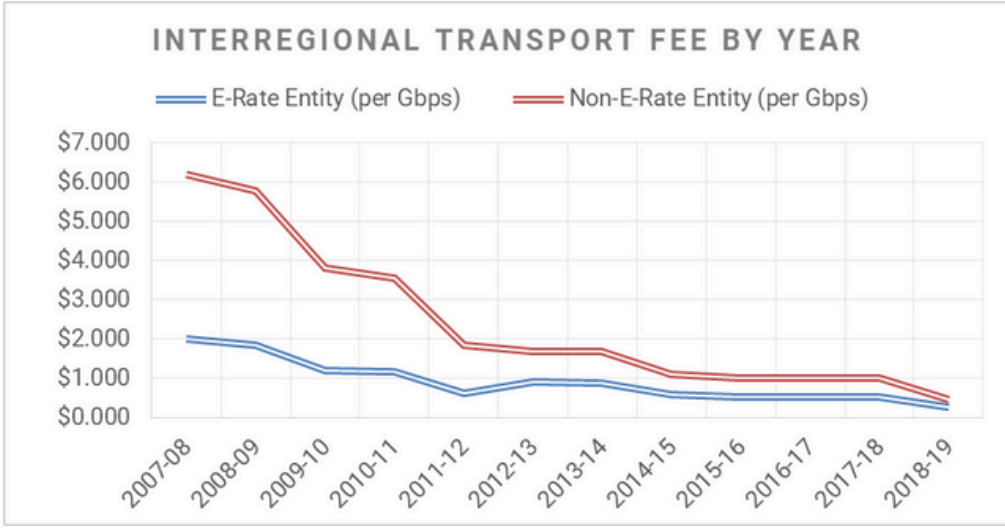
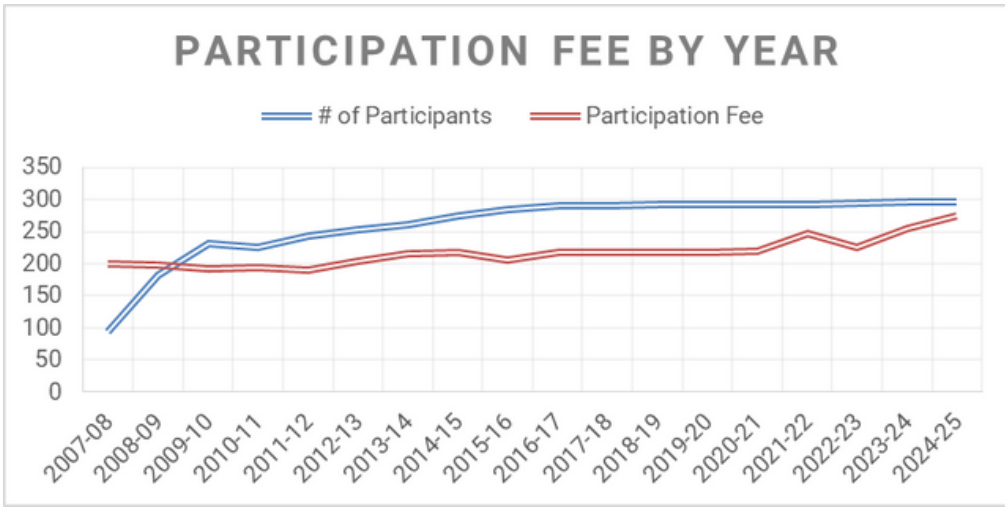
- Maintained public school district participation at 99.6%.
- Achieved 100% membership among public and tribal colleges, and universities.
- Network Nebraska became one of the first research and education networks in the country to expand the use of eduroam® in the elementary and secondary educational settings. It has been widely accepted by members with over 70% of public K-12 school utilizing the service within the state.
- Achieved one of the lowest commodity Internet rates in the entire country, made possible through aggregation of demand and statewide bidding.

## **RECOMMENDATIONS:**

- Continue this initiative.
- Position Network Nebraska to continue to expand its offered services, and implement strategies to offset the rising cost associated with network management, thus providing additional stability to the consortium.



# METRICS



# ACTION ITEMS

## Develop a scalable, secure plan for Network Nebraska to meet statewide needs of agencies, local governments, and schools per section 79-1201.01.

- Lead: Education Council
- Participating Entities: Collaborative Aggregation Partnership (CAP); Network Nebraska Advisory Group (NNAG), OCIO/NITC staff
- Timeframe: 2024-2026
- Funding: Additional funding and/or resources will be required for this action item out of the Network Nebraska Participation Fee, which is a participant-funded budget.
- Targets/Deliverables:
  - 1.1 Liaison with, NNAG, CAP, to provide insight and guide decision-making regarding services, identified initiatives and associated business models.
    - 1.1.1 Measurables: A) NNAG co-chairs will attend monthly CAP meetings and share information. B) CAP liaisons will attend bi-monthly NNAG meetings and share information.
  - 1.2 Continue to evaluate the effectiveness of the current Network Nebraska fee structures and address changes related to the associated business models as related to core functions and additional services.
    - 1.2.1 Measurable: A) NNAG will convene a retreat and present suggested modifications to the Education Council's Network Nebraska task group and to the Chief Information Officer

## The Education Council, OCIO/NITC staff, and Network Nebraska support staff will sufficiently and appropriately communicate to, and in support of, current and potential Network Nebraska Participants

- Lead: Education Council; OCIONITC Staff, Network Nebraska support staff
- Participating Entities: Collaborative Aggregation Partnership (CAP); Network Nebraska Advisory Group (NNAG)
- Timeframe: 2024-2026
- Funding: Additional funding and/or resources will be required for this action item out of the Network Nebraska Participation Fee, which is a participant-funded budget.
- Targets/Deliverables:
  - 2.1 Develop and implement a communications strategy.
    - 2.1.1 Measurables: A) Specific data and reports in an online newsletter or other form of communication to members outside of the annual fee memo. B) Designated representatives send timely notifications of changes in procedures affecting member relations with the Network Nebraska Support Team.
  - 2.2 Conduct a periodic survey of Participants to guide direction and service development.
    - 2.2.1 Measurable: A) Survey is conducted, and data from the survey is compiled for sharing with NNAG, CAP, and the NITC Education Council.
  - 2.3 Develop, publish, and maintain a catalog of Network Nebraska services comprised of services offered directly by Network.
    - 2.3.1 Measurable: Catalog of services is published and updated annually
  - 2.4 Enhance communications regarding change control events affecting Network Nebraska membership.
    - 2.4.1 Measurable: The Network Nebraska Support Team use AlertSense and NN\_INFO listserv to communicate change control events to Network Nebraska members.

# ACTION ITEMS

## Enhance Network Nebraska to meet member needs with advanced security, cloud computing, and educational infrastructure, prioritizing innovation and efficiency.

- Lead: Education Council; CAP; NNAG; UNS IT Staff
- Participating Entities: ESU-NOC; Higher Education CIOs
- Timeframe: 2024-2026
- Funding: Additional funding and/or resources will be required for this action item out of the Network Nebraska Participation Fee, or from consumption-based billing.
- Targets/Deliverables:
  - 3.1 Develop strategies for advanced service delivery, integrate them into Network Nebraska's business model, and implement value-added services to enhance offerings, membership growth, and membership satisfaction.
  - 3.1.1 Measurable: A) liaison with NNAG and CAP to formulate a Strategy document complete with target dates while tracking progress. B) Additional services added to Network Nebraska services list.

## Identify, define, and promote the statewide cybersecurity practices for Nebraska K-20 education.

- Lead: Education Council; CAP; NNAG; UNS IT Staff
- Participating Entities: ESU-NOC; Higher Education CIOs
- Timeframe: 2024-2026
- Funding: Additional funding and/or resources will be required for this action item out of the Network Nebraska Participation Fee, or from consumption-based billing.
- Targets/Deliverables:
  - 4.1 A) Establish recommendations for cybersecurity best practices within K-20 community.
  - 4.1.1 Measurable: A) The creation of best practices based on input from educational stakeholders throughout the state. B) Regular communication as the cybersecurity climate continues to adapt.

# ACTION ITEMS

## Encourage K-20 participation in cyber-related industry events.

- Lead: Education Council; CAP; NNAG; UNS IT Staff
- Participating Entities: ESU-NOC; Higher Education CIOs
- Timeframe: 2024-2026
- Funding: Additional funding and/or resources will be required for this action item out of the Network Nebraska Participation Fee, or from consumption-based billing.
- Targets/Deliverables:
  - 5.1 A) Leverage available resources and communicate recommendations to reach as many stakeholders as possible.
  - 5.1.1 Measurable: A) The creation of a listserv, or utilization of the existing Network Nebraska website to communicate upcoming events with other relevant information.

## Other Recommended Measurables:

- Network Nebraska backbone uptime
- Network Nebraska Internet access uptime
- Network Nebraska backbone bandwidth utilization (actual)
- Network Nebraska membership growth
- Network Nebraska Internet growth (purchased and actual)
- Network Nebraska unit cost of Internet
- Number of public, non-public, and non-education entities connected to Network Nebraska

# DIGITAL EDUCATION

## OBJECTIVE:

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.

## DESCRIPTION:

The Digital Education initiative will involve the coordination and promotion of several major systems and applications that heretofore have either been developed mostly at the local level or have not been replicated statewide.

Initiative progress will be 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.

## COLLABORATORS:

- Educational Service Unit (ESU) Coordinating Council and advisory groups
- Public and private K-12 schools
- Nebraska Department of Education
- University of Nebraska
- Nebraska State College System
- Nebraska Community College System
- Council of Independent Nebraska Colleges Foundation



## **STRENGTHS/ASSETS:**

- The enhancement of Digital Education is the combined focus of public and private K-12 entities and public and private higher education entities working together through Network Nebraska.
- The recent developments in learning management software, content management software, and longitudinal data tracking and depiction make it a particularly important time to improve on the statewide deployment of these systems.
- The high bandwidth transport and Internet capacity of Network Nebraska makes it possible to implement private cloud and public cloud applications to every education entity on Network Nebraska.

## **CHALLENGES/ISSUES:**

While collaboration among entities is strong, the initiative lacks a “champion”, and any additional implementation funding is a scarce commodity.

## **RECENT ACCOMPLISHMENTS:**

- The Nebraska Library Commission, in partnership with the State Office of the CIO, has assisted the Nebraska Public Service Commission with utilization of the Nebraska Special Construction Matching Fund grant program to incentivize new fiber construction for schools and libraries.

## **RECOMMENDATIONS:**

- Continue and refocus this initiative.
- Encourage and/or incentivize collaborators and stakeholders to be more results-oriented using project management techniques.
- Build on the excellent foundation and success of Network Nebraska to deliver high quality digital educational opportunities that provide a framework for student success.

# ACTION ITEMS

## Help ensure the success of Nebraska digital education.

- Lead: Education Council;
- Participating Entities: K-12 and Higher Education professional and advisory groups , Nebraska Department of Education, and the Coordinating Commission for Postsecondary Education.
- Timeframe: 2024-2026
- Funding: Additional funding may be required for this action item
- Targets/Deliverables:
  - 1.1 Establish a common definition and understand the current state of Nebraska Digital education.
    - 1.1.1 Measurable: Collaborate with existing take holders to formulate a cohesive definition for digital education, and take an inventory of existing digital education practices within Nebraska.
  - 1.2 Promote effective practices, determine factors relevant to measuring the success of digital education.
    - 1.2.1 Measurable: Utilize reliable communication methods to convey advancements in digital education.
  - 1.3 Connect constituencies to promote improvement.
    - 1.3.1 Measurable: Organize conferences for stakeholders to collaborate on effective solutions.

## Identify, define, and promote the statewide cybersecurity practices for Nebraska K-20 education.

- Lead: Education Council; CAP; NNAG; UNS IT Staff
- Participating Entities: ESU-NOC; Higher Education CIOs
- Timeframe: 2024-2026
- Funding: Additional funding and/or resources will be required for this action item out of the Network Nebraska Participation Fee, or from consumption-based billing.
- Targets/Deliverables:
  - 4.1 A) Establish recommendations for cybersecurity best practices within K-20 community.
  - 4.1.1 Measurable: A) The creation of best practices based on input from educational stakeholders throughout the state. B) Regular communication as the cybersecurity climate continues to adapt.

# ACTION ITEMS

## Expand awareness and address the need for equity of access as it relates to digital education.

- Lead: Education Council;
- Participating Entities: NITC Community Council, K-12 and Higher Education professional and advisory groups
- Timeframe: 2024-2026
- Funding: Additional funding may be required for this action item
- Targets/Deliverables:
  - 2.1 Address professional development for teachers broadly and collaboratively.
    - 2.1.1 Measurable: Coordinate with the Nebraska Department of Education to identify professional development opportunities throughout the state, or available digitally.
  - 2.2 Focus on affordability initiatives.
    - 2.2.1 Measurables: Research digital equity funding opportunities; coordinate with the NITC Community Council to develop a collaborative solution.

## Other Recommended Measurables:

- Number of K-12 students who have gained home Internet access through Digital Inclusion initiatives
- Number of public libraries that have gained faster Internet access by reaching Network Nebraska, either directly or indirectly



# COMMUNITY DIGITAL SKILLS



## OBJECTIVE:

This initiative aims to equip covered populations with essential digital skills—such as computer use, internet navigation, and cybersecurity awareness—through accessible training and partnerships, bridging the digital divide to foster economic growth and community resilience in a technology-driven world.

## DESCRIPTION:

This initiative aims to equip individuals from underserved communities with essential digital skills, helping them thrive in a technology-driven world. The program offers accessible training sessions covering fundamental computer use, internet navigation, cybersecurity awareness, and digital tools relevant to the workplace. Training is delivered through partnerships with local organizations, libraries, and educational institutions, ensuring participants can attend workshops or access resources within their communities. Additionally, online modules and hands-on practice sessions are incorporated to accommodate various learning styles and schedules. By fostering digital literacy, enhancing job readiness, and closing the digital divide, this initiative supports economic growth and empowers individuals to fully participate in the digital economy with confidence.

## COLLABORATORS:

- Nebraska Library Commission
- El Centro Hispano de las Americas
- Lincoln Literacy

# ACTION ITEMS

## Digital Skills Classes

- Lead: Community IT Manager
- Timeframe: March 2025 - TBD
- Funding: TBD
- Measurables: TBD

## Nebraska Digital Skills Portal

- Lead: Nebraska Library Commission and Community IT Manager
- Timeframe: October 2024 - TBD
- Funding: TBD
- Measurables: TBD

# GEOSPATIAL NEBRASKA

## OBJECTIVE:

- 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.
- Facilitate the creation, maintenance, analysis, and publishing of quality and authoritative data and applications.
- Formalize data stewardship and encourage data sharing providing access to data, services, and applications through NebraskaMap.gov.
- Facilitate technical assistance and education outreach opportunities for furthering the adoption of the NESDI and geospatial applications.
- Achieve sustainable and efficient allocation of resources to support the implementation and wise governance of GIS services and geospatial data.



## COLLABORATORS:

- State of Nebraska Agencies
- Local and County Government
- League of Municipalities
- Nebraska Association of County Officials
- Nebraska GIS LIS Association
- Natural Resources Districts
- Public Power Districts
- Federal Agencies
- Private Industries
- K-12, College, and University of Nebraska

## **STRENGTHS/ASSETS:**

- The GIS Council, established by Neb. Rev. Stat. § 86-572(2), provides an existing governance structure, representing a broad range of stakeholder interests.
- Standards which are foundational to supporting the Nebraska Spatial Data Infrastructure (NESDI) are in place and reviewed as needed.
- Existing State GIS Coordinator and GIS staff members in CIO GIS Team.
- Several strong state agency and local county-based GIS programs.
- Nebraska Enterprise Geographic Information Systems (NEGIS) Infrastructure, an enterprise platform for state agencies. NebraskaMap, the state geospatial clearinghouse.

## **CHALLENGES/ISSUES:**

- Prioritization and communication of priorities need strong support from Legislative and Executive collaborators.
- Original Strategic Plan is 12 years old, and the revisit is approximately 5 years old.
- Resources are inadequate to develop and maintain all framework layers.
- Funding to make NEGIS sustainable.
- Getting agencies to utilize GIS or utilize it more effectively.
- Outreach and training needs of GIS and geospatial data use and applications are broad given the level of different users.
- Lack of understanding of standards and no authoritative enforcement to data stewards not following standards. Local counties do not see NITC standards as a requirement but a guideline.
- Future Datum change and its implications and educating the effects of the datum change on GIS users.
- Limited participation by GIS Council organizations in working groups.

## **RECENT ACCOMPLISHMENTS:**

- NebraskaMap is serving up local authoritative data to help make it a true spatial data clearinghouse for Nebraska.
- Use of Hub Premium Community engagement for two agency programs related to NG911 and ice jam/flood reporting.
- Updated State of Nebraska Enterprise License Agreement, and reduced cost over three years.
- Created and approved NITC 3-301. Nebraska State Plane Coordinate System Standard per LB102.

## **RECOMMENDATIONS:**

- Continue this initiative. Current GIS Council goals are in line with strategic initiative and objectives.

# ACTION ITEMS

## Formalize the definition of the Nebraska Spatial Data Infrastructure (NESDI) and data stewardship

This action item aims to define NESDI framework datasets and identify the necessary relationships among the various NESDI layers. The document will provide an illustration of the “big picture” of Nebraska’s framework including:

- A common understanding of framework
- A context for prioritizing the components of the framework
- A context and justification for future funding requests
- A basis for identification of potential stewards and stewardship roles and responsibilities

The context of the framework themes will be explored at the local, state, regional and national levels. Ideally the NESDI will feed directly into the Geospatial Data Act of 2018 and the National Spatial Data Infrastructure (NSDI) framework. This will benefit the overall coordination, development, revision and promulgation of the relationships among various GIS framework data standards. It will aid in development, implementation and revision of stewardship guidance and procedures for the various GIS framework themes. In addition, it will provide additional direction on NESDI governance, management practices, policy development, and outreach with the statewide community.

- Lead: State GIS Coordinator, GIS Council Representatives
- Participating Entities: GIS Council, NESDI Data Stewards
- Timeframe: 2025-2027
- Funding: Initially the cost for this action item will be personnel time to meet, develop and communicate plans.
- Targets/Deliverables:
  - 1. Establish a working group.
  - 2. Develop a document that defines the NESDI and the role of data stewardship to support the NESDI.

# ACTION ITEMS

## Geodetic and Survey Control Inventory and Assessment

Spatial data deployed in an enterprise environment generally has higher requirements for accuracy and quality than does a single-purpose dataset. Geodetic and survey control is essential for the development of spatial data that can be analyzed in combination with other layers.

A careful examination of our current survey and geodetic control data across the state based will be conducted on various criteria for its use in the development of NESDI framework layers. This action item will identify methods and linkages through NebraskaMap to communicate and provide access to relevant data to users and stakeholders.

A new datum model to represent the shape of the earth maybe available by 2025. The GIS Council has been briefed by the Nebraska State Surveyor on the implications of the new datum. This endeavor was pushed out to 2025 at the federal level.

- Lead: State Surveyor and NDOT
- Participating Entities: Nebraska Department of Transportation, State Surveyors Office, NOAA – National Geodetic Survey
- Timeframe: 2025-2027
- Funding: Funding may be needed for personnel time to meet, develop, communicate plans, and process all state data into the new datum.
- Targets/Deliverables:
  - 1. Prepare and Educate agencies and partners about the datum changes and its implications.
  - 2. Work with Professional Surveyors Group for training on implementing new datum.
  - 3. Develop an educational reference page on NebraskaMap to help with sharing information and resources about this action item with Nebraskans and Nebraska based organizations.
  - 4. Update NITC Standard 3-301 when changes are published by the National Geodetic Survey

# ACTION ITEMS

## Statewide Land Record Information Dataset & Cadastral Dataset

This action item is intended to track and facilitate two working groups related to land records in Nebraska. First, establish a working group to revise the current NITC Land Record Information and Mapping Standard. Second, establish a working group to develop a schema and process for statewide parcel dataset management.

- Develop guidelines for a common data model that can provide public data for use in a multitude of state government applications and make statewide data interoperable.
- Implement a geodata model to maintain the statewide parcel dataset.
- Work with local governments, state agencies, and the private sector to develop a collaborative plan, and standards/guidelines to empower and educate local governments to maintain their programs to maintain their programs for their communities.
- Improve data workflows with local county assessors to obtain parcel (spatial and attribute) data for use in various state government applications.
- Revise the current NITC Land Record Information and Mapping Standards for completeness and ensure they keep up with modern technology.
  - Lead: State GIS Coordinator, GIS Council Land Record/Parcel Working Groups
  - Participating Entities: GIS Council, State Surveyors Office, Department of Revenue, County Assessors, and various licensed Land Surveyors
  - Timeframe: 2025-2027
  - Funding: Funding may be needed to facilitate data creation, modernization, and maintenance at the local and state levels.
  - Targets/Deliverables:
    - 1. Review the current NITC 3-202 Land Record and Information Mapping Standards for standard land record product(s) that will meet the majority of stakeholder requirements and expectations in a cost-effective manner.
    - 2. Continue to work with Department of Revenue to create yearly Statewide Parcel Geodatabase feature class for internal state use.
    - 3. Make a dataset publicly accessible via NebraskaMap for use and download.

# ACTION ITEMS

## NEGIS and NebraskaMap – Facilitating Spatial Understanding

The goal of this action item is to improve upon the current versions of NEGIS, the Nebraska GIS Enterprise and NebraskaMap, the state geospatial clearinghouse. NEGIS is the current GIS portal and infrastructure used by state agencies to access, develop, and share spatial data, applications, and tools. NebraskaMap is an open data portal that allows applications and datasets created by government partners to be displayed and accessed in one location. The current version of NebraskaMap shares data and applications from state agencies that participate in the NEGIS. Local and regional governments are also able to share data on NebraskaMap if referenced or shared via collaboration.

- Lead: State GIS Coordinator
- Participating Entities: GIS Council, State Agencies, Local GIS Teams
- Timeframe: Ongoing
- Funding: Funding may be needed to offset the cost of licensing for state agencies to facilitate this program long term.
- Targets/Deliverables:
  - 1. Continue to build current NebraskaMap into a more robust statewide data clearinghouse enterprise platform.



# 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
- 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 Linqvist, 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

# CONTACT US



**Phone/**

402-471-3560

**Email/**

[OCIO.FrontDesk@nebraska.gov](mailto:OCIO.FrontDesk@nebraska.gov)

**Website/**

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

**Address/**

501 S. 14th Street  
P.O. Box 95045  
Lincoln, NE 68509