November 15, 2018

Progress Report to the Governor and Legislature

State of Nebraska
Nebraska Information Technology Commission
nitc.nebraska.gov
501 S. 14th Street
P.O. Box 95045
Lincoln, NE 68509-5045
(402) 471-3560

Contents

NITC Commissioners

Ed Toner, Chair	Chief Information Officer, Office of the CIO, State of Nebraska
Senator Bruce Bostelman	Nebraska Legislature (ex-officio)
LaShonna Dorsey	Senior IT Consultant, Mutual of Omaha Insurance
Shane Greckel	Owner/Operator, Greckel Farms, LLC
Dr. Terry Haack	Superintendent, Bennington Public Schools
Dorest Harvey	USSTRATCOM/AFLCMC-HBCC
Thomas Nutt	County Commissioner, Phelps County
Daniel Spray	President, Precision Technology
Gary Warren	President of Services Corporation, Hamilton Telecommunications
Walter Weir	Chief Information Officer, University of Nebraska

Staff

Ed Toner	Chief Information Officer
Rick Becker	Government Information Technology Manager
Anne Byers	eHealth and Community Information Technology Manager
Tom Rolfes	Education Information Technology Manager
Jayne Scofield	IT Administrator, Network Services
John Watermolen	GIS Technology Manager
Lori Lopez Urdiales	Office Services Manager

Executive Summary

The Legislature established the Nebraska Information Technology Commission (NITC) in 1998 to provide advice, strategic direction, and accountability on information technology investments in the state. This progress report highlights many of the significant accomplishments of the 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.

In particular, 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.

IT Security. This initiative will define and clarify policies, standards and guidelines, and responsibilities related to the security of the State's information technology resources. Recent accomplishments include the adoption of a new information security policy and sponsoring the Annual Cyber Security Conference.

Nebraska Spatial Data Infrastructure. This initiative promotes coordination of geospatial data and GIS programs, guides policy, provides guidance on data accuracy requirements, coordinates dissemination of data through NebraskaMAP, and strengthens data sharing through partnerships to ensure access to quality geospatial datasets for governmental business needs and the public. This will be further strengthened with the passing of the National Geospatial Data Act of 2018. Partnerships and more than $4 million dollars in contributions have been finalized to complete LiDAR elevation acquisition for the state to be completed in 2017. LiDAR acquisition has been completed and data delivered in 2018. The state of Nebraska now has complete LiDAR coverage. The GIS Council is reviewing the GIS standards because of changes in technologies and applications. The OCIO GIO team has consolidated all GIS server licenses from various agencies into a Statewide GIS Enterprise Platform

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 Education Council and the Community Council created a joint work group to research and recommend interventions to improve the equity of access for digital learners. The Office of the CIO is partnering with the Nebraska Library Commission on grant writing and administration to improve student equity of access to the internet through their public libraries.

Network Nebraska. Participants in Network Nebraska are reducing costs and stimulating investment in Nebraska's telecommunications infrastructure. During the 2016-2018 time period, Network Nebraska grew its membership by one public library system. The demand for Internet has increased by 43% as the unit cost has decreased by 28% over this same period. The Education Council partnered with Doane University to conduct a Department of Homeland Security Cyber Resiliency workshop for Network Nebraska members.

Rural Broadband and Community IT Development. The NITC Community Council continues to work with the University of Nebraska, Nebraska Public Service Commission, Nebraska Department of Economic Development, and Nebraska Library Commission as part of the Nebraska Broadband Initiative to help communities better understand the importance of broadband. The initiative partnered with the Nebraska Telecommunications Association to organize the 2017 Nebraska Broadband Today! Conference, videotaping two of the most popular sessions. The NITC Community Council has also worked with the initiative to highlight success stories and to examine broadband availability data.

eHealth. The Nebraska Information Technology Commission completed a health information exchange grant from the Office of the National Coordinator for Health IT in July, 2017. The grant supported the adoption of health information exchange through NeHII in 47 facilities and health systems—including 21 Critical Access Hospitals (CAHs)—in 31 counties in Nebraska and in Montgomery County, Iowa. As a result of the projects completed using the grant funding, NeHII is now connected to 68% of the hospital beds in Nebraska. The number of hospitals, clinics, and other health care providers sharing data with NeHII increased from 28 to 53. Additional functionality, including population health analytics and an HIE to HIE gateway, were also implemented.

Other Progress and Priorities

- Over the past two years, the NITC has also realized significant achievements in each of the seven criteria set forth in Section 86-524(2).
- 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 prepared annually by the NITC 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. In addition, the Community Council produces a blog to inform stakeholders of new research and developments. The Community Council is also using social media to share information about broadband development in Nebraska.

- In order to encourage interoperability and standardization, the NITC has adopted over 90 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.
- The NITC encourages and facilitates input and involvement of all interested parties by engaging in collaborative processes, involving five advisory councils, the Technical Panel, and numerous workgroups and subcommittees. Additionally information is publicly distributed and public input is encouraged.
- The NITC is addressing long-term infrastructure innovation, improvement, and coordination through Network Nebraska and by supporting the Rural Broadband Task Force.

NITC Staff from Left to Right: Lori Lopez Urdiales, Tom Rolfes, Rick Becker, John Watermolen, and Anne Byers.

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 Ed Toner 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, the Governor, and the general public.

The NITC conducts most of its work through six advisory groups: the Community Council, Education Council, eHealth Council, Geographic Information Systems Council, State Government 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.

NITC Commissioners gather at the Jul. 12, 2018 NITC meeting at the AIM Institute in Omaha. From Left to Right: Senator Bruce Bostelman, Ed Toner, Dr. Terry Haack, Walter Weir, Dorest Harvey, Tom Nutt, Shonna Dorsey, Shane Greckel, and Dan Spray.

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 vision has been 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 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:

1. Support the development of a robust statewide telecommunications infrastructure that is scalable, reliable, and efficient;
2. Support the use of information technology to enhance community and economic development;
3. Promote the use of information technology to improve the efficiency and delivery of governmental and educational services, including homeland security;
4. 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 measureable 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 annual Statewide Technology Plan (http://nitc.nebraska.gov/documents/statewide_technology_plan.pdf).

The current list of strategic initiatives includes:

- State Government IT Strategy
- IT Security
- Nebraska Spatial Data Infrastructure
- Network Nebraska
- Digital Education

- Rural Broadband and Community IT Development
- eHealth

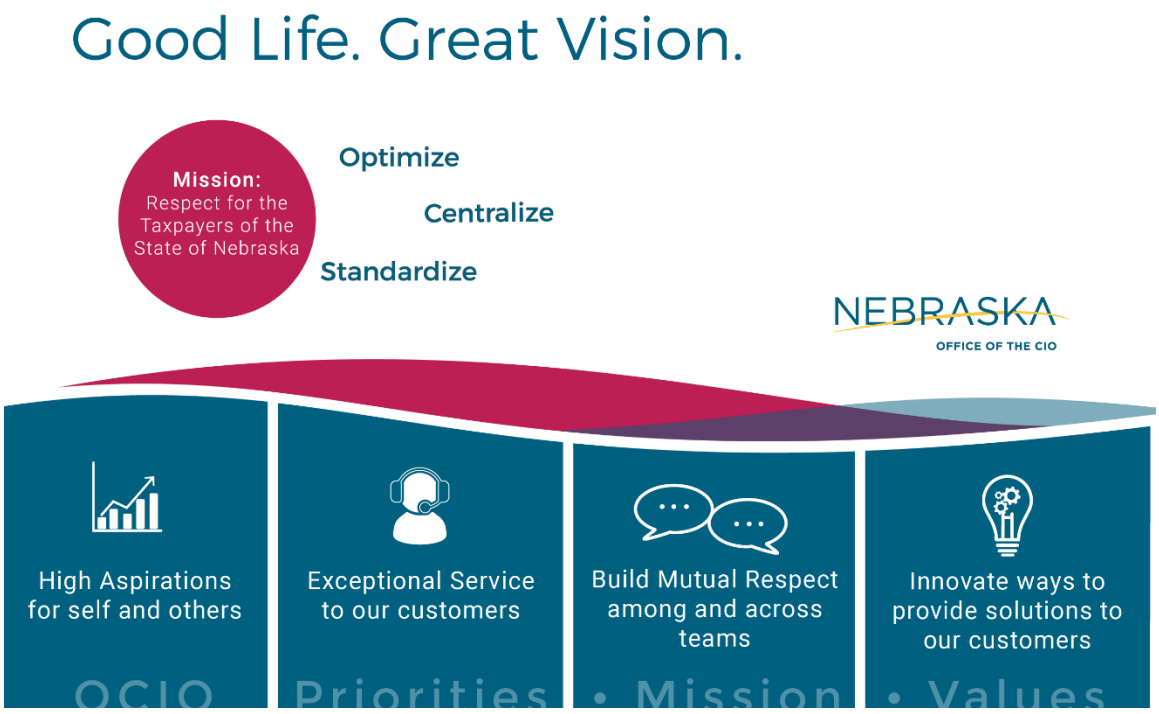
The past two years have brought significant progress in each of the strategic initiatives. A summary of each strategic initiative follows.

State Government IT Strategy

This initiative focuses 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 are centralized with agency-specific activities remaining with the agencies. Top priorities include:

- Security
- Consolidation
- Availability

The following graphic illustrates the priorities of the OCIO:



Action items supporting this initiative include:

- Single help desk solution and incident management implementation;
- IT cost efficiencies;

- Operationalize IT and project governance;
- Consolidate on STN domain;
- Data center consolidation;
- Network migration (new world);
- Enterprise tool consolidation; and
- Application process maturation (DevOps);

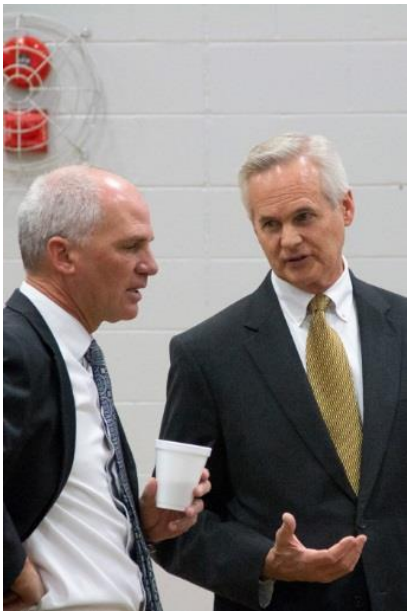
Recent accomplishments include:

- Migrated to a new help desk solution at the OCIO and began the migration of other agencies;
- Implementing a phased migration to a consolidated domain;
- Implementing a phased migration to a consolidated data center; and
- Implementing a phased network migration to "new world."

IT Security

This initiative focuses on defining and clarify policies, standards and guidelines, and responsibilities related to the security of the State's information technology resources, including:

- Reviewing security settings on State hardware and software;
- Reviewing security requirements for IT purchases;
- Conducting security awareness training and education;
- Conducting security assessments and risk assessments on data and facilities;
- Conducting vulnerability management scanning;
- Conducting application vulnerability scanning;
- Complying with Federal regulations for PCI, HIPAA, IRS, CJIS, SSA; Following the NIST Framework;
- Implementing a statewide reporting mechanism for security related events;
- Implementing a statewide Security Operations Center in cooperation with the



Dr. Paul Illich, President of Southeast Community College (SCC), and Lt. Gov. Mike Foley converse before taking the podium at the 13th Annual Nebraska Cyber Security Conference.

University of Nebraska System;

- Implementing a statewide Computer Emergency Response Team (CERT).

Recent Accomplishments:

- New Information Security Policy adopted.
- 13th Annual Cyber Security Conference was held Septeber 27, 2018.

Nebraska Lt. Governor Foley addresses the crowd at Nebraska's Cyber Security Conference, Sept. 27, 2018, at SCC's Career Academy located in Lincoln, NE. The conference was well-attended by students and educators, State and local government representatives, and professionals from the local, private industry.

Nebraska Spatial Data Infrastructure

Mapping and geospatial data support the economy, safety, environment and overall quality of life for Nebraskans. More than $35 million has been invested to date in core framework data throughout local, state and federal stakeholders. Coordination and management of these activities are essential to reduce duplication of efforts and provide cost savings to our taxpayers.

The GIS Council develops strategies, standards and policies related to the creation and use of geospatial data and geographic information system technologies for Nebraska. The council's interagency and intergovernmental coordination efforts focus on facilitating data sharing, coordinating joint database development, developing GIS enterprise services, data and system standards, and education. The council represents state, local and federal government agencies and other stakeholders needing access to data. The council is affiliated with nationally coordinated efforts through the Federal Geographic Data Committee and the National States Geographic Information Council.

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*

"Geospatial technologies incorporate GIS, global positioning systems (GPS), remote sensing such as imagery and Light Detection and Ranging (LiDAR), and other geographic data and information systems. GIS is a tool to capture, store, manipulate, analyze, manage, and present all types of geographic data."

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

NESDI Data Layers

- Survey and Geodetic control
- Transportation (roads, rail, air, etc.)
- Cadastre/parcels
- Elevation
- Aerial imagery
- Hydrography
- Political and administrative boundaries
- Addresses
- Soils
- Groundwater

The objective of the NESDI is:

> **"***To develop and foster an environment and infrastructure that optimizes the efficient use of geospatial technology, data, and services to address a wide variety of business and governmental challenges within the state. Geospatial technologies and data will be delivered in a way that supports policy and decision making at all levels of government to enhance the economy, safety, environment and quality of life for Nebraskans*.**"**

The major components of this initiative include:

1. Facilitating the creation, maintenance, analysis and publishing of quality NESDI data and information systems.
2. Encouraging data sharing and provide widespread access to data and services through NebraskaMAP.gov.
3. Developing and implementing NESDI layer standards and guidelines.
4. Facilitating technical assistance and education outreach opportunities for furthering the adoption of the NESDI and geospatial applications.
5. Achieving sustainable and efficient allocation of resources to support the implementation and wise governance of GIS services and geospatial data.

NESDI Framework Layer Assessment. The NESDI comprises of geospatial data layers that have multiple applications and are used by a vast majority of stakeholders. They are consistent with the Federal National Spatial Data Infrastructure (NSDI) "7 framework layers" and provide additional layers of particular importance to Nebraska stakeholders. The current priority layers for the state include imagery, elevation, street centerlines, address points, and land records.

The Nebraska Boundary Assessment Project started in 2016. This effort evaluates all political and administrative boundaries in relation to the NESDI framework layers. Many boundaries are derived from other datasets such as survey and geodetic control, imagery, street centerlines, parcels, and other authoritative data layers such as municipalities, counties, and state boundaries.

The results of this project will assist in developing best practices and minimum set of standards to be used towards standardization of data schemas, statewide data aggregation, and develop agreements to be used for geometric placement of boundaries to support Enhanced/Next Generation 9-1-1, U.S. Census 2020 Boundary Validation Program and other uses.

Metadata standards (NITC 3-201 Geospatial Metadata) have been developed specific to the needs of Nebraska stakeholders while maintaining compliance with the metadata standards from the Federal Geographic Data Committee (FGDC).

The following are other accomplishments for the priority data layers.

Survey and Geodetic Control. Survey and geodetic control need to be taken into consideration for good quality data to exist in the future for several of the NESDI framework layers—particularly if multiple data sets are used in combinations for analysis and decision making. Some of the State's current data sets were created for specific purposes with given budgets. As the use of geospatial data has grown, there are now other needs for the data. Some of these additional uses require a greater level of spatial accuracy.

Recommendations are being implemented including the need for control in standards and data acquisition plans. Survey and geodetic control recommendations have been identified and are included into recent NITC standards for elevation, imagery, street centerline, and address points.

A low-distortion projection (LDP) project has begun under the direction of the State Surveyor's office with assistance with other registered land surveyors of Nebraska. The LDP will create the best ground to grid solution with control established using recognized local control. This will eventually lead to a better source data for all GIS horizontal calculations that improves all of our spatial data sets. Survey and geodetic control recommendations have been identified and included into ongoing data collection projects.

The state has been working with BLM and have a signed MOU to share data with control points for Federal and non-federal lands. The state surveyor's office will be the steward of this data.

Elevation (LiDAR). This action item establishes the Nebraska Statewide Elevation Program. It is led by the Elevation Working Group which facilitates the acquisition, maintenance, and sharing of a statewide elevation dataset by developing standards and specifications for LiDAR point clouds and derivative products. It further develops alternatives for systematic and cost-effective acquisition of these products and defines a program of stewardship for managing and publishing the data.

Light Detection and Ranging

LiDAR is a technology that is used in conjunction with GPS technology, an aerial collection platform, and a processing computer to collect data points that can be used to define the location of objects that reflect near infrared light, including the land surface, structures and vegetation.

The Elevation Business Plan was approved by the GIS Council on March 26, 2015. The plan outlines the business case for LiDAR statewide. The plan takes a comprehensive approach and details the organizational needs, technology and human resource requirements, required product deliverables, funding requirements, legislative support, implementation plans, and a marketing and outreach strategy. The Elevation standard has reached its defined milestone with complete coverage for Nebraska and will be reconvening in the future to address plans for the next 3D nation plan being developed by the USGS and NOAA

LiDAR data and its derived products are expected to have a benefit to cost ratio of five to one, with a project value of $23 million to taxpayers in Nebraska.

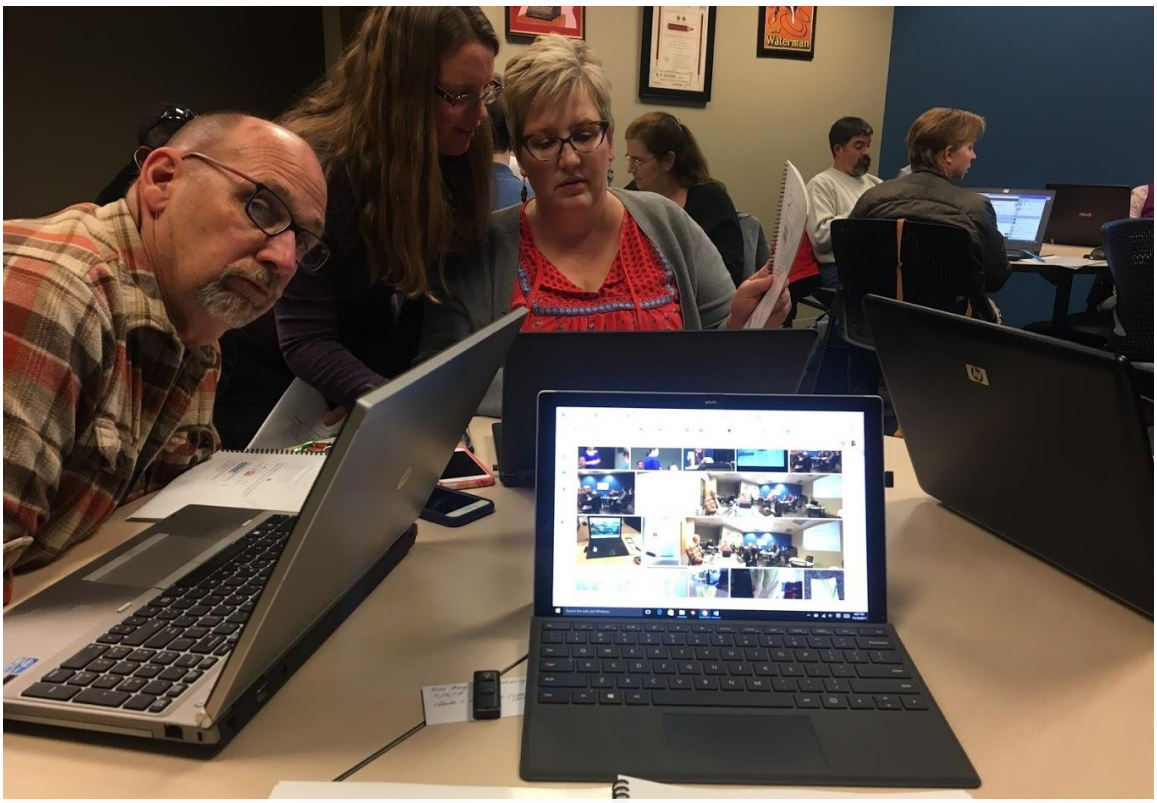
Imagery. This action item establishes the Nebraska Statewide Imagery Program which sets out to coordinate the acquisition, delivery, and data sharing of imagery products and services. All government entities can participate with the program.

The core product is a statewide aerial ortho-image that meets the minimum horizontal accuracy requirements and a spatial resolution of 12 inch or better, preferably flown during the "leaf-off" period for trees. Obliques and other value-added products and services will also be included in the program. The requirements from federal standards (i.e., National Emergency Number Association) are also driving the need for greater spatial accuracy of imagery in order to meet needs to develop and create street centerline and address points for Enhanced/Next Generation 9-1-1.

The business plan was approved in 2017 and the standard is currently under review and revision to address changes in technologies and policies with regards to federal partners and funding. The Imagery Working Group has identified a need for preserving historical aerial photographs and the OCIO-GIO has started working with the Natural Resource Conservation Service (NRCS) who is digitizing and georeferencing historic imagery in cooperation with the University of Nebraska-Lincoln.

Land Records. This action item enables the integration of different local government land records information into a statewide dataset.

A Nebraska Statewide Parcel Geodatabase Development and Implementation Plan was finalized in 2015 with input from several county assessors. The plan outlines expectations of the State's public records request and a timeline going forward to obtain core parcel data and GIS files on an annual basis. The state has developed statewide data aggregation workflows, a data schema/model, and appropriate map services to extend data for business operations. All counties that have digitized parcel data have been collected and aggregated into the statewide database since 2015. This effort has also leveraged a data sharing partnership effort by working together and identifying state level data that can also go back to counties to support their needs.



The Geographic Information Office regularly leads educational outreach sessions, including this one on Story Mapping, which was held in partnership with the University of Nebraska-Lincoln, in Spring 2018.

Currently all parcels in Nebraska are digitized in some form. The Nebraska State Records Board has provided more than $924,485 in grant assistance to digitize and create geodatabases utilizing the data. In 2013, five counties were awarded State Records Board grants totaling $117,065 for digitizing land parcel information.

Street Centerline Address Database. This action item is designed to develop and maintain a statewide seamless street centerline and address referencing system used for various transportation, emergency management, public safety (i.e., NG9-1-1), economic development and other related applications.

Efforts started in 2015 to communicate the recent street centerline and address standards to those involved with public safety and emergency management. The standards were presented to the State Enhanced 9-1-1 Advisory Board to address questions and to begin to develop partnerships to further build recommendations to transition to Next Generation 9-1-1. A Statewide Street Centerline and Address Data model with data definitions have been developed. This will be used to further communicate to participants who use state funds for projects developing street centerline and address data for the state in order to begin standardizing efforts going forward.

A business planning effort started in 2016 to begin defining data stewardship roles and responsibilities, data processing and workflows, costs, and plans with current E-911 and future NG9-1-1 coordination efforts. A review of federal requirements and national efforts has been completed and will be included in the business plan.

The **S**tatewide Nebraska Street Centerline Database (NSCD) and Nebraska Address Database (NAD) have been developed with coordination between the Nebraska Department of Transportation and the Office of the CIO. Both databases have relationships in attribution and geometric placement. The Department of Transportation finished a federal street centerline project with US Federal Highway Administration and is beginning to incorporate the geometric framework to improve the existing street centerline data for the state. The NAD is currently being implemented at the Office of the CIO with available address data in the state.

Until seamless address data becomes available to the state, several state agencies have partnered towards a shared service for a statewide enterprise license agreement to acquire statewide address and demographic data for the state. It is available to any state agency, city/local government, other state eligible political subdivision, college, or university (except University of Nebraska Medical Center). The state has leveraged the data to be made available in several formats and map services. This data will also assist the development of addressing points to be used in combination with the street centerline database.

NebraskaMAP. NebraskaMAP (http://www.NebraskaMAP.gov) is the online gateway to get access to Nebraska's authoritative geospatial data. The NebraskaMAP metadata clearinghouse was replaced in 2016 with a new and improved platform to deliver data and information on various platforms. The system integrates with the State's GIS Enterprise platform and has more than 150 data sets. The site had over 10,000 visitors in the first three weeks of its release.

All state agencies that use geospatial data are working together to reduce duplicated datasets and streamline the data sharing process. This also involves accessing data in a sole location for the most current information. The new system formalizes communication with all statewide data stewards to keep data current while exercising the importance of authoritative and quality data for public consumption. The following

are recent updates to this initiative:

- Metadata is required for data sets to be included through NebraskaMAP. New modifications to the existing Metadata Standards (NITC 3-201) have been adopted by the NITC in 2016. The new changes provide clearer definitions on minimum and complete metadata categories for use with creating and maintaining geospatial data sets.
- A data content and management policy has been approved through the GIS Council to outline expectations for open geospatial data to be made available through NebraskaMAP. This policy serves as instructions on what kind of data is acceptable and the necessary requirements when submitting data.
- A new NebraskaMAP Data Subcommittee has been formed to peer-review data requests. A workflow is in place to accept requests, review metadata, and publish data to the clearinghouse.
- A data management system has been developed and is tied to metadata standards using the ISO 19115 categories. This allows for content to be found by searching standardized tags and types of content. It also provides a mechanism to feed our holdings into the national clearinghouses such as GISInventory.net and data.gov
- The new web site incorporates search capabilities, featured datasets, news feeds for new data submissions and other news. The site also extends data through a map gallery on various applications and ISO topics.

The next phase of the project is to partner with other data stewards who share public data through local and county governments and other political subdivisions. The website will eventually include a component to provide an easier way to view and access available imagery, LiDAR and other raster and large file size datasets for Nebraska.

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.

In order 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 into two state contracts of over 50Gbps, the K-12 E-rate-eligible price has gone from $.77/Mbps/month on July 1, 2016 down to $.57/Mbps/month on July 1, 2018, a 26% decrease in unit cost. This will benefit all current and new 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 in telecommunications infrastructure. As the State bid connectivity to large regional areas of schools and colleges, the telecommunications companies responded with new network technologies such as metropolitan optical Ethernet, multi-protocol label switching (MPLS), and Ethernet "clouds" which have provided benefits for other nonpublic entities.

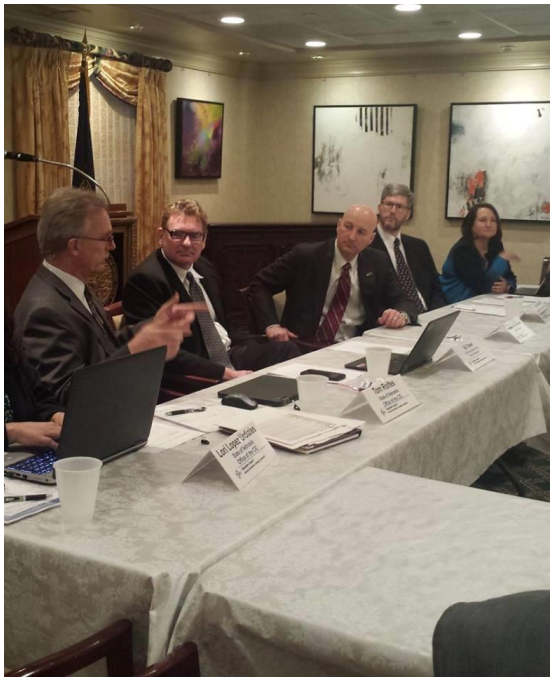
The development of the K-20 education network has increased the number of distance education courses available to Nebraska students. Through interactive videoconferencing, Nebraska high schools and community colleges exchange over 306 courses per year (2018-19). World languages, mathematics, language arts, and business courses continue to be popular offerings leveraged by rural students.

Due to advances in WAN Ethernet technology, Network Nebraska-Education is now able to reach every education entity in the State through five core aggregation points: Grand Island, Lincoln, Scottsbluff, and two locations in Omaha.

The development of the K-20 education sub-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, over half of the private colleges, and 244 school districts under 17

different educational service units. The Nebraska K-20 Education sub-network is completely funded by Participation and Interregional Transport Fees from its 292 members.

Cybersecurity has been a priority area of the Education Council since the most recent update to the Statewide Technology Plan. On September 28, 2018, the Education Council partnered with Doane University to conduct a Department of Homeland Security Cyber Resiliency Workshop that drew 45 participants to the Doane University-Lincoln campus.



Members of the Education Council meet with Governor Ricketts, October 2017, to discuss the State's participation in the Education SuperHighway.

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 of 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

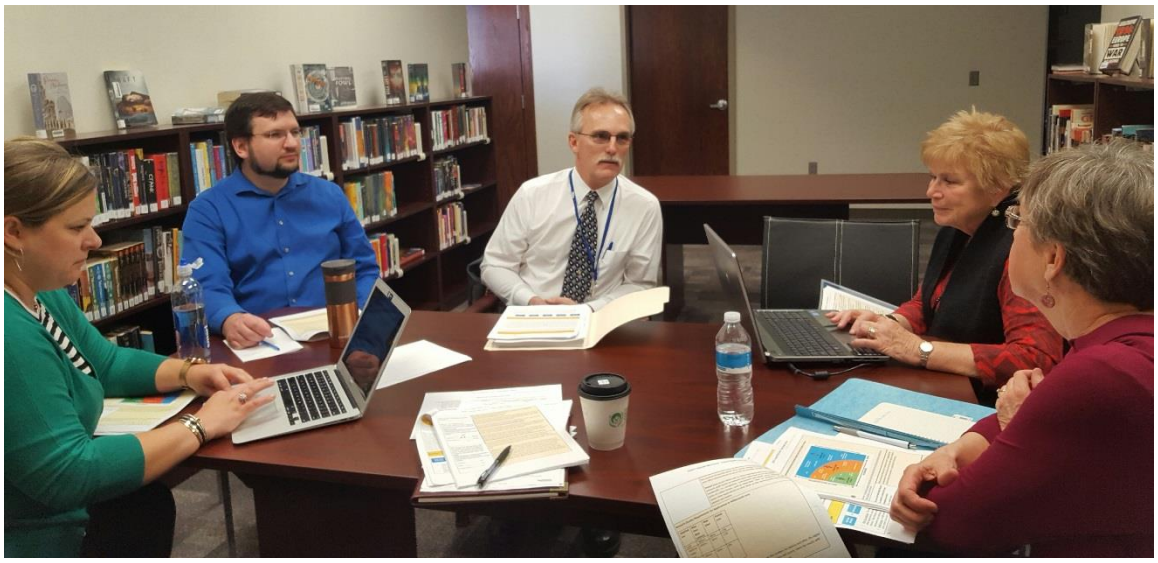
The primary objective of the Digital Education Initiative is to promote the effective and efficient integration of technology into the instructional, learning, and administrative processes and to utilize technology to deliver enhanced digital educational opportunities to students at all levels throughout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



In March, 2017 five Nebraska public libraries participated in a pilot program to develop a broadband toolkit through an IMLS grant awarded to Internet2. Left to Right: Susannah Spellman, Internet2; Garren Hochstetler, Valley Public Library; Tom Rolfes, NITC; Holly Woldt, Nebraska Library Commission; and Claire Bushong, Valley Public Library.

Establishing a Digital Education environment is critical to Nebraska's future. Internet has gone from a "nice to have" educational application of the 1990's to the "must have" mission critical application of the 2010's. So much of what teachers, students, and administrators do today is dependent upon Internet-based information and communication. Nebraska has continued to make progress in the ratio of students per

high speed, Internet-connected computers in the classroom. However, it still makes it challenging for students to complete their digital assignments when they are expected to share two or three students to a computer, or to wait their turn to be able to use a computer. Educators and administrators are urged to work to achieve the goal of attaining 1:1 computer (or Internet-connected device) availability.

The benefits of the Digital Education Initiative would include:

- Greater technical capacity for schools and colleges to meet the increasing demands of a more diverse customer base;
- More equitable and affordable Internet access for Nebraska schools and colleges;
- A comprehensive web-based approach to curriculum mapping and the organization and automation of student assessment data gathering and depiction;
- The availability of rich, digital media to the desktop that is indexed to Nebraska standards, catalogued, and searchable by the educator or student;
- A more systematic approach to synchronous video distance learning that enables Nebraska schools and colleges to exchange more courses, staff development and training, and ad hoc learning opportunities.

Student equity of access to the internet has become a high priority action item of the Education Council since the most recent update to the NITC Statewide Technology Plan. So, the Office of the CIO partnered with the Nebraska Library Commission and was awarded an Institute for Museum and Library Services (IMLS) Leadership Sparks Grant to improve internet speeds for public libraries.

- The name of the Sparks Grant was ***Nebraska Schools and Libraries*—Breaking the Ice and Igniting Internet Relationships**;
- The grant paid for two new desktop computers for each of the five public library partners;
- The grant provided for fixed base wireless transmission and installation between the public

October16, 2018: Governor Ricketts speaks at an open house event in the Verdigre Public Library. Verdigre is one of six libraries participating in Nebraska's Sparks Grant.

library and the public school district;

- Homework Hotspot spaces were created within each public library for K-12 students and staff to use during non-school hours and on weekends;
- The augmented internet speeds from the school district to the library sites increased the libraries' internet speeds by 200 to 1500%;
- School districts and public libraries now get to consider whether to continue their partnership and even apply together for federal E-rate support.

The furthering of the Digital Education initiative and completion of the Digital Education action items requires the participation of many education-related entities. The Educational Service Unit Coordinating Council (ESUCC) and the Nebraska Department of Education (NDE) are cooperating on a comprehensive instructional improvement plan that includes a 2017-2019 biennial budget request.

Rural Broadband and Community IT Development

The NITC Community Council continues to work with the University of Nebraska, Nebraska Public Service Commission, Nebraska Library Commission, and NITC Education Council as part of the Nebraska Broadband Initiative to help communities better understand the importance of broadband. The initiative partnered with the Nebraska Telecommunications Association to organize the 2017 Nebraska Broadband Today! Conference, videotaping two of the most popular sessions.

The NITC Community Council has also worked with the initiative to highlight best practices and success stories. A list of the success stories highlighted follows:

1. Ravenna Leverages Social Media, Wireless Broadband (March 2018)
2. Seward County Attracts Investments in Broadband Infrastructure (March 2018)
3. Lincoln Leverages Partnerships, Becomes Smart Gigabit Community (December 2017)
4. Hartington, Hartelco Receive Smart Rural Community Recognition (December 2017)
5. Lincoln Public Schools Hotspot Lending Program Expands Home Access (Jan 2017)
6. Norfok Public Library Lends Hotspots, Starts Community Discussions (Jan 2017)
7. NSF Grant Brings Makerspace, Collaborative Opportunities to Sidney (December 2017)
8. Gallup Builds IT Talent Pipeline (March 2018)

Additionally a series of blog articles examined broadband availability data.

1. Small Nebraska Counties with Greater Broadband Availability Have Higher Average Per Capita Income (June 2018)
2. Rural Nebraska Counties with Widespread Broadband Availability Have Greater Population Density (June 2018)
3. How Does Nebraska Compare to Our Neighboring States in Population Density and Broadband Availability? (June 2018)
4. Nebraska Is in the Top Five for Business Broadband, But Lags in Residential Broadband Speeds (May 2018)
5. Broadband Availability at Higher Speed Tiers Increases, Widens Speed Gap (May 2018)
6. Broadband Availability—How Does Nebraska Compare to Neighboring States? (May 2018)
7. What Counties Have the Greatest Broadband Availability, Least Broadband Availability, and Most Improved Broadband? (May 2018)
8. Broadband Availability—A Look at the Nebraska Broadband Map (May 2018)
9. How Has Broadband Availability in Nebraska and the U.S. Improved between 2014 and 2016? (May 2018)
10. Broadband Available to 88.9% of Nebraskans, 65.5% of Rural Nebraskans (March 2018) (pdf)
11. FCC report finds 78% of Nebraska households subscribe to fixed Internet service (March 2018)
12. Nebraska Broadband Special Report: Nebraska and the Digital Divide Index (March 2017) (pdf)

The Nebraska Broadband Initiative also worked with the University of Nebraska Lincoln to develop questions about broadband availability and use to be included in the 2018 Nebraska Rural Poll (https://ruralpoll.unl.edu/). The survey found:

- Eighty-four percent of rural Nebraskans report subscribing to high-speed Internet service at home, about the same as in 2016. Seven percent say they only use their cell phone data plan. Eight percent do not subscribe to any Internet service at home and do not have a cell phone data plan. One percent have only dial-up Internet service.

- The proportion of rural Nebraskans accessing the Internet using their cell phone has increased compared to two years ago. Just over three-quarters of rural Nebraskans access the Internet using their cell phone (77%), up from 70 percent in 2016.
- At least one in ten respondents report being limited significantly or not being able to play real time video games or stream online video content such as Netflix.
- Six in ten rural Nebraskans are using the Internet to save money and approximately one-third are generating income by occasionally buying or selling items online.

The report is available at https://ruralpoll.unl.edu/pdf/18economicdev.pdf

eHealth

On July 27, 2015, the Nebraska Information Technology Commission was awarded a $2.7 million Advance Interoperable Health IT Services to Support Health Information Exchange (HIE) cooperative agreement (Grant Number 90IX0008) from the Office of the National Coordinator for Health Information Technology to support the adoption of health IT, the exchange of health information, and the interoperability of health information technology. Partners in the two-year grant included the Nebraska Health Information Initiative (NeHII) and the University of Nebraska Medical Center (UNMC).

The grant supported the adoption of health information exchange through NeHII in 47 facilities and health systems—including 21 Critical Access Hospitals (CAHs)—in 31 counties in Nebraska and in Montgomery County, Iowa. Through the grant, the number of hospitals and providers sharing data with NeHII increased from 28 to 53. Over 700 providers and clinical staff were added as users. New functionality implemented included population health analytics, the use of C-CDA exchange to provide information to NeHII, and an HIE to HIE gateway with the Missouri Health Exchange. Two Critical Access Hospitals were also successfully implemented to share syndromic surveillance data with the State's syndromic surveillance system.

The grant also helped health care facilities integrate health information technology into their workflow. UNMC provided assistance in workflow integration to facilities participating in two rural communities selected as integrated communities. Lessons learned are being shared through use case-based training modules. UNMC partners also worked with NeHII to demonstrate the ability to utilize NeHII to conduct research.

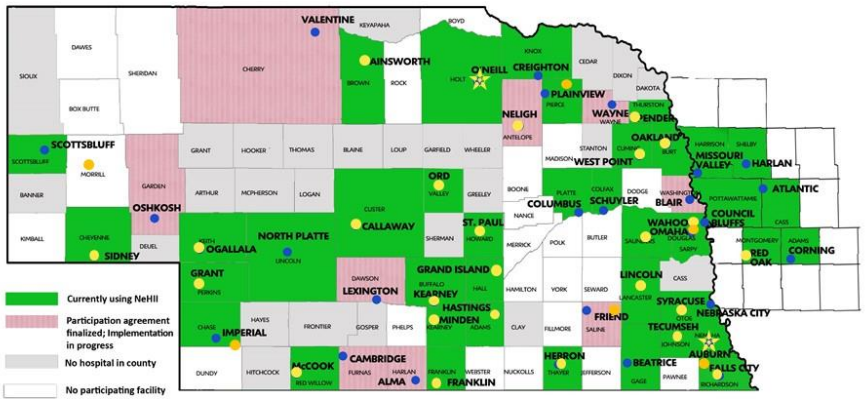
The map on the following page shows the implementations funded through this grant.

NeHII Adoption and ONC Grant Implementations

July 2017

The NITC received a 2-year $2.7 million Nebraska Advance Interoperable Health IT Services to Support Health Information Exchange grant from the Office of the National Coordinator in July 2015. Partners include NeHII and UNMC. Focus areas include: Critical Access Hospitals, long-term care facilities, and public health/researchers.

- Integrated Communities
- Grant Implementations—Data sharing (HL7 and C-CDA) syndromic surveillance and Spectrum
- Grant Implementations–Direct
- Other Hospitals Participating in NeHII



Updated July 27, 2017

Nebraska Health Information Initiative

Improved Coordination and Assistance to Policymakers

The statewide technology plan and other activities of the commission have improved coordination and assisted policymakers.

The statewide technology plan annually prepared by the NITC has been an effective vehicle for identifying key projects, building stakeholder support, coordinating efforts, and communicating with policy makers.

The current plan was approved in 2018. The plan focuses on seven strategic initiatives:

- State Government IT Strategy
- IT Security
- 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 plan is submitted to the Legislature and the Governor. 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.

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 one or more of the NITC's advisory councils and 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 systems.

In 2018, nine projects were reviewed as part of the biennial budget process. Recommendations on these requests were submitted to the Governor and the Legislature.

Policies, Standards, Guidelines, and Architectures

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

In order to encourage interoperability and standardization, over 90 standards and guidelines have been adopted. 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 approval of standards and guidelines to the NITC. All standards are approved at open NITC meetings after a 30-day comment period.

A full listing of the NITC Standards and Guidelines are listed at this website:
http://www.nitc.ne.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 (www.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 also publishes an electronic newsletter/blog which is available from the NITC website and uses social media to share information on broadband development. 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.

NITC Commissioners hear reports from its advisory councils at the November 9, 2017 meeting.

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 five 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 of Information Technology Work Group
- Technical Panel—Intergovernmental Data Communications Work Group
- GIS Council—Street Centerline-Address Database Work Group
- GIS Council—Imagery Work Group
- GIS Council—Land Records Work Group
- GIS Council—Elevation Work Group
- GIS Council—Geospatial Data Sharing and Web Services Work Group
- GIS Council—Strategic Planning Work Group
- Education Council—Network Nebraska Work Group
- Education Council—Digital Education Work Group
- Education Council—Network Nebraska Advisory Group

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 and by supporting the Rural Broadband Task Force.

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 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 sub-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 multipurpose statewide 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 Office of the CIO and the University of Nebraska each have 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 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.

Cullen Robbins gives an overview of broadband terms to members of the Rural Broadband Task Force, Sept. 24, 2018.

In particular, LB 994 specifies that the task force shall:

a. Determine how Nebraska rural areas compare to neighboring states and the rest of the nation in average download and upload speeds and in subscription rates to higher speed tiers, when available;

b. Examine the role of the Nebraska Telecommunications Universal Service Fund in bringing comparable and affordable broadband services to rural residents and any effect of the fund in deterring or delaying capital formation, broadband competition, and broadband deployment;

c. Review the feasibility of alternative technologies and providers in accelerating access to faster and more reliable broadband service for rural residents;

d. Examine alternatives for deployment of broadband services to areas that remain unserved or underserved, such as reverse auction programs described in section 4 of this act, public-private partnerships, funding for competitive deployment, and other measures, and make recommendations to the Public Service Commission to encourage deployment in such areas;

e. Recommend state policies to effectively utilize state universal service fund dollars to leverage federal universal service fund support and other federal funding;

f. Make recommendations to the Governor and Legislature as to the most effective and efficient ways that federal broadband rural infrastructure funds received

after the operative date of this section should be expended if such funds become available; and

g. Determine other issues that may be pertinent to the purpose of the task force.

The task force shall present its findings in a report by Nov. 1, 2019 and by November 1 every odd-numbered year thereafter.

The task force held its first meeting on Sept. 24, 2018. More information on the task force is available at https://ruralbroadband.nebraska.gov.

Awards and Recognition

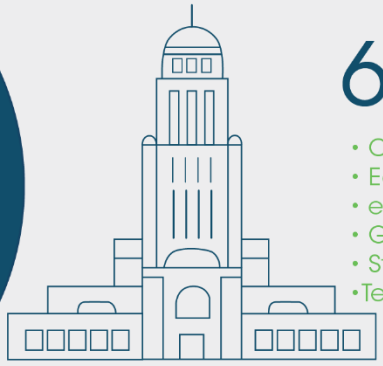
The NITC completed a health information exchange grant from the Office of the National Coordinator for Health IT in July, 2017. The grant supported the adoption of health information exchange through NeHII in 47 facilities and health systems.

State Scoop recognized "Step Up to Quality" in the Top 25 GIS Applications of 2017. The storymap was created by the Nebraska Department of Education-Early Childhood Development with assistance from the OCIO GIO team.

Nebraska received a grade of "B" in the Center for Digital Government's Digital States Survey in 2018.

The Nebraska Library Commission and the Office of the CIO were awarded a $25,000 Institute for Museum and Library Services Sparks Grant to interconnect public schools with public libraries to share internet and provide homework hotspots for students during non-school hours.

The State of IT: Nebraska 2018



6 advisory groups assist the NITC:

- Community Council
- Education Council
- eHealth Council
- GIS Council
- State Gov't Council
- Technical Panel

Over 90 standards and guidelines have been adopted by the NITC.

4 & 44 Nebraska ranks 4th in the U.S. for business, but 44th for residential broadband download speeds.

292 education entities currently are served by Network Nebraska.

Network Nebraska-Education daily serves over 425,000 students and staff with Internet and distance learning courses.

Over 3.7 million patients have data in NeHII's master patient index.

11,000+ health care providers participate in NeHII, now covering 62% of the state's hospital beds.

Since the State and University began cooperatively bidding it in 2007, the proportionally reduced rate of the unit price of the State's Internet is 99%

Nebraska K-12 entities pay $0.22 per Mbps, per month for Internet access after E-rate discounts are applied.

88.9% of Nebraskans, but 65.5% of rural Nebraskans have access to broadband at 25 Mbps down and 3 Mbps up.

Dec. 2016 FCC Form 477 Data

NITC Nebraska Information Technology Commission

Advisory Group Members

Technical Panel

Kirk Langer, **Chair,** Lincoln Public Schools

Mark Askren, University of Nebraska Computer Services Network

Jeremy Sydik, University of Nebraska

Ed Toner, Office of the CIO

Michael Winkle, Nebraska Educational Telecommunications

Community Council

Rod Armstrong, Co-Chair, AIM, Lincoln

Phil Green, Co-Chair, City of Blair

Pam Adams, American Broadband

Chris Anderson, City of Central City

Jay Anderson, NebraskaLink

Brett Baker

Randy Bretz, TEDxLincoln Curator

Jessica Chamberlain, Norfolk Public Library

Shonna Dorsey, Talent Development Consultant

Steve Fosselman, Grand Island Public Library

Connie Hancock, University of Nebraska-Lincoln Extension

Steve Henderson, City of Lincoln

Johnathan Hladik, Center for Rural Affairs

Jacob Knutson, Department of Economic Development

Timothy Lindahl, Wheatbelt Public Power District

David Lofdahl, IT Consultant

Megan McGown, North Platte Area Chamber of Commerce and Development Corporation

Mary Ridder, Nebraska Public Service Commission

Holly Woldt, Nebraska Library Commission

Education Council

Bret Blackman, University of Nebraska-Omaha

Dr. Mike Baumgartner, Coordinating Commission for Postsecondary Education

Derek Bierman, Northeast Community College

Burke Brown, District OR-1 Palmyra/Bennet

Mike Carpenter, Doane University

Matt Chrisman, Mitchell Public Schools

Chad Davis, Nebraska Educational Telecommunications Commission

Dr. Ted DeTurk, ESU 2-Fremont

John Dunning, Wayne State College

Stephen Hamersky, Daniel J. Gross Catholic High School

Dr. Dan Hoesing, Schuyler Community Schools

Steve Hotovy, Nebraska State College System

Trent Kelly, Hastings Public Schools

Greg Maschman, Nebraska Wesleyan University

Gary Needham, ESU 9-Hastings

Mary Niemiec, University of Nebraska

Alan Moore, ESU 3-LaVista

Tom Peters, Central Community College

Ed Toner,
Office of the CIO, Nebraska Department of Administrative Services

SuAnn Witt, Nebraska Department of Education

eHealth Council

Kathy Cook, Co-chair, Lincoln-Lancaster County Public Health Department

Marty Fattig, Co-Chair, Nemaha County Hospital

Kevin Borcher, NeHII

Gary Cochran, University of Nebraska Mecial Center

Kevin Conway, Nebraska Hospital Association and NeHII

Mary Devany, University of Nebraska Medical Center

Joel Dougherty, OneWorld Community Health Centers

Kimberly Galt, Creighton University School of Pharmacy and Health Professions

Cindy Kadavy, Nebraska Health Care Association

Jan Evans, Blue Cross Blue Shield of Nebraska (nominated)

Dr. James McClay, Nebraska Medicine

Dr. Shawn Murdock, Midlands Family Medicine, North Platte

Ashley Newmyer, Nebraska Department of Health and Human Services, Division of Public Health

Dave Palm, University of Nebraska Medical Center

Jina Ragland, AARP (nominated)

June Ryan, Retired

Todd Searls, Praesidio Healthcare Consulting

Brian Sterud, Faith Regional Health System

Anna Turman, Chadron Community Hospital

Linda Wittmuss, Nebraska Department of Health and Human Services, Division of Behavioral Health

Bridget Young, Visiting Nurse Association

GIS Council

Timothy Cielocha, Chair, Nebraska Public Power District

Vacant, Nebraska State Patrol

Steve Rathje, Department of Natural Resources

Claire Inbody, Department of Transportation

Chad Boshart, Nebraska Emergency Management Agency

Karis Bowen, Department of Health and Human Services

Lash Chaffin, League of Nebraska Municipalities

Trinity Chappelear, Governor's Policy Research Office

John Beran, State Surveyor

Tim Erickson, Clerk of the Legislature

Eric Herbert, Omaha Metro Area Sarpy County GIS

Les Howard, Conservation and Survey Division – UNL

Danny Pitman, Sarpy County Assessor's Office

Kea Morovitz, Public Service Commission

James Langtry, US Geological Survey

John McKee, Jefferson and Saline County Emergency Management

Jeff McReynolds, City of Lincoln, Lancaster County

Chuck Wingert, Nemaha Natural Resources District

James W. Ohmberger, Office of the CIO

Trish Schlake, Nebraska Game and Parks Commission

Lesli Rawlins, Nebraska Geospatial Professional Association

Mike Schonlau, Member at Large-Omaha/Douglas County

Ruth Sorensen, Department of Revenue

Gary Morrison, Department of Environmental Quality

Todd Whitfield, Lamp, Rynearson and Associates

Mike Preston, Member at Large-Trimble Energy

State Government Council

Ed Toner, Chair, Office of the CIO

John Albin, Department of Labor

Chris Ayotte, Department of Revenue

Col. John Bolduc, Nebraska State Patrol

Dennis Burling, Department of Environmental Quality

Trinity Chappelear, Governor's Policy Research Office

Ed Toner, Department of Administrative Services

Darrell Fisher, Crime Commission

Dean Folkers, Department of Education

John Gale, Secretary of State of Nebraska

Jill Gradwohl Schroeder, Workers' Compensation Court

Dorest Harvey, Private Sector

Chris Hill, Department of Health and Human Services

Steve Ingracia, Department of Transportation

Rhonda Lahm, Department of Motor Vehicles

Kelly Lammers, Department of Banking and Finance

Kim Menke, Department of Natural Resources

Jim Ohmberger, Office of the CIO, Enterprise Computing Services

Gerry Oligmueller, DAS—Budget Division

Jayne Scofield, Office of the CIO, Network Services

Robin Spindler, Department of Correctional Services

Corey Steel, Supreme Court

Rod Wagner, Library Commission

Appendix

Policy Objectives and Review Criteria

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 is offered in fulfillment of that requirement.

Section 86-524 further directs the Appropriations Committee and Transportation and Telecommunications Committee to conduct a joint review of the activities of the NITC by the end of the calendar year of every even-numbered year. Section 86-524 also provides three objectives and a list of criteria for evaluating progress. This report is intended to provide information to assist the Legislature in conducting its review.

Policy Objectives

Section 86-524 states: "It shall be the policy of the state to:

1. Use information technology in education, communities, including health care and economic development, and every level of government service to improve economic opportunities and quality of life for all Nebraskans regardless of location or income;
2. Stimulate the demand to encourage and enable long-term infrastructure innovation and improvement; and
3. Organize technology planning in new ways to aggregate demand, reduce costs, and create support networks; encourage collaboration between communities of interest; and encourage competition among technology and service providers."

Review Criteria

Section 86-524 states: "In the review, the committees shall determine the extent to which:

1. The vision has been realized and short-term and long-term strategies have been articulated and employed;
2. The statewide technology plan and other activities of the commission have improved coordination and assisted policymakers;
3. 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;

4. Policies, standards, guidelines, and architectures have been developed and observed;
5. Recommendations made by the commission to the Governor and Legislature have assisted policy and funding decisions;
6. Input and involvement of all interested parties has been encouraged and facilitated; and
7. Long-term infrastructure innovation, improvement, and coordination has been planned for, facilitated, and achieved with minimal barriers and impediments."