AGENDA NEBRASKA INFORMATION TECHNOLOGY COMMISSION Varner Hall - Board Room 3835 Holdrege Street Lincoln, Nebraska Thursday, November 4, 2021 10:00 a.m. CT

Broadcast via Zoom: https://nebraska.zoom.us/j/96163900276

I. ROLL CALL; MEETING NOTICE; OPEN MEETINGS ACT INFORMATION

- II. PUBLIC COMMENT
- III. APPROVAL OF JULY 8, 2021 MEETING MINUTES (Attachment III) *

IV. REPORTS

- A. EDUCATION COUNCIL (Attachment IV-A)
 - 1. Digital Education and Network Nebraska updates.
- B. GIS COUNCIL (Attachment IV-B)
- C. COMMUNITY COUNCIL (Attachment IV-C)
 - 1. Broadband update.

D. TECHNICAL PANEL

- 1. Technical standards and guidelines.
 - a. Proposal 20. Amend the remote access standard. (*Attachment IV-D-I-a*) *
- 2. Projects.
 - Approval of enterprise project designation for the following project: Transfer of OPS Retirement Systems to NPERS (Nebraska Public Employees Retirement System). (Attachment IV-D-2-a) *
 - b. Enterprise project status dashboard report. (Attachment IV-D-2-b)

E. CHIEF INFORMATION OFFICER

- V. OTHER BUSINESS
- VI. ADJOURN [12:00 p.m.]
- * Action item.

The Commission will attempt to adhere to the sequence of the published agenda but reserves the right to adjust the order and timing of items and may elect to take action on any of the items listed. If you need interpreter services or other reasonable accommodations, please contact the Commission at 402-471-3560 at least five days prior to the meeting to coordinate arrangements.

Meeting notice was posted to the <u>NITC website</u> and the <u>Nebraska Public Meeting Calendar</u> on October 28, 2021. The agenda was posted to the NITC website on October 29, 2021.

Nebraska Open Meetings Act | Commission Meeting Documents

Attachment III

NEBRASKA INFORMATION TECHNOLOGY COMMISSION

Varner Hall - Board Room 3835 Holdrege Street, Lincoln, Nebraska Thursday, July 8, 2021, 10:00 a.m. CT Webcast via Zoom **MINUTES**

MEMBERS PRESENT:

Ed Toner, Chief Information Officer, Chair Senator Suzanne Geist, Nebraska Legislature Shane Greckel, Greckel Farms, LLC Dr. Terry Haack, Bennington Public Schools Dorest Harvey, US Strategic Command / J84 Gary Warren, Hamilton Telecommunications Walter Weir, University of Nebraska

MEMBERS ABSENT: LaShonna Dorsey, Mutual of Omaha; Dan Spray, Precision Technologies, Inc.; Tom Nutt, Phelps County Commissioner

ROLL CALL; MEETING NOTICE; OPEN MEETINGS ACT INFORMATION.

The Chair called the meeting to order at 10:01 a.m. Roll call was taken. A quorum existed to conduct official business. The meeting notice was posted to the NITC website and the Nebraska Public Meeting Calendar on June 22, 2021. The agenda was posted to the NITC website on July 2, 2021. The Nebraska Open Meetings Act was posted on the south wall of the room and a link was included with the agenda.

PUBLIC COMMENT

There was no public comment.

APPROVAL OF MARCH 11, 2021 MEETING MINUTES

Commissioner Weir moved to approve the March 11, 2021 minutes as presented. Commissioner Harvey seconded. Roll call vote: Toner-Yes, Greckel-Yes, Haack-Yes, Harvey-Yes, Warren-Yes, and Weir-Yes. Results: Yes-6, No-0, Abstained-0. Motion carried.

REPORTS FROM THE ADVISORY COUNCILS AND TECHNICAL PANEL

EDUCATION COUNCIL REPORT Tom Rolfes

Approval of membership nominations. The Education Council memberships change every two years. The council also had two members retiring this summer. The nominations to serve on the council for the 2021-23 term are listed below.

Higher Education 2021-23 term Nominations: Bret Blackman, UN System; Derek Bierman, Independent Colleges & Universities; Edward Koster, Community College System; and Dr. Paul Turman, State College System

K-12 Education 2021-23 term Nominations: Dr. Ted DeTurk, Educational Service Units; Trent Kelly, School Administrators; Stephen Hamersky, Private Education; and Matt Chrisman, Public Teachers

Mary Niemiec's replacement has not been determined yet. Derek Bierman and Edward Koster are new members to the council.

Commissioner Haack moved to approve the Education Council's membership nominations for the 2021-23 term. Commission Harvey seconded. Roll call vote: Weir-Yes, Warren-Yes, Harvey-Yes, Haack-Yes, Greckel-Yes, and Toner-Yes. Results: Yes-6, No-0, Abstained-0. Motion carried.

Digital Education and Network Nebraska updates. Mr. Rolfes provided the Network Nebraska and Digital Education updates. The University of Nebraska engineering team drafted a set of infrastructure upgrades that may be eligible for the U.S. Treasury Capital Project Section 604 funding which will be coming to Nebraska. The Office of the CIO has been involved in the Nebraska statewide eduroam pilot project for 2021-23. A nationwide news release is being prepared by Internet2 and a statewide news release is being prepared by the Nebraska Dept of Education for 7/21/2021. Information about the FCC Emergency Connectivity Fund, FCC Emergency Broadband Benefit program, ESSER III Technology funding, and the U.S. Treasury Capital Projects funding has been distributed to ESUs for sharing with school districts. Presentations are scheduled for the Administrator Days Conference, July 28 in Kearney.

Mr. Rolfes entertained questions from the Commissioners. Commissioners discussed the need to coordinate and collaborate computing device purchases within the ESSER funding. In addition, minimum standards for equipment should be established. Funding can be used not only for equipment but also to improve the student learning environment and increasing achievement.

Mr. Rolfes and Network Nebraska were acknowledged for their accomplishments.

GIS COUNCIL REPORT

John Watermolen

Mr. Watermolen provided a report of the OCIO's and GIS Council's activities with other agencies: the Nebraska State Patrol, the University of Nebraska, the Game and Parks Commission, the Department of Natural Resources, Sarpy, Douglas and Lancaster Counties, the Department of Transportation, the Department of Revenue, the Department of Health and Human Services, the Public Service Commission, and Legislative Research.

The GIS Council is still interested in doing a new strategic plan by an outside vendor. Mr. Watermolen is checking into funding sources.

Mr. Watermolen provided a demonstration of the COVID dashboard, NebraskaMAP and other web mapping applications. Commissioner Toner stated that other states are impressed by Nebraska's collaboration and cooperative efforts with other agencies and entities to share their information.

Mr. Watermolen entertained questions from the Commissioners.

COMMUNITY COUNCIL REPORT

Anne Byers

Broadband update. LB388 Broadband Bridge Grant was passed and signed by the Governor on May 26, 2021. The legislation established the Broadband Bridge Grant Program and the Nebraska Broadband Bridge Fund. The Legislature appropriated \$20 million a year for two years for the Broadband Bridge Grant Program. Eligible areas include (in order of priority):

- (1) Unserved areas lacking broadband of 25/3 which need further support but have not received public assistance for development of a broadband network
- (2) Unserved areas that have received federal support for development of a broadband network, and that will not be completed within twenty-four months after the grant application deadline if the commission determines that a grant under the program will accelerate the deployment of the broadband network

(3) Underserved areas below 100/20 that the commission determines have a digital inclusion plan. The deadline for the first round of applications is October 1, 2021. The Nebraska Public Service Commission has opened a docket to establish rules for the grant program.

The Community Council has developed a Digital Inclusion Planning Guide and Workbook to help rural communities, counties, and regional develop digital inclusion plans.

Rural Broadband Task Force. The Task Force established an Agriculture Subcommittee. The subcommittee has prepared a preliminary report. The report found that agriculture has different needs and will require different methods of connectivity, including:

- Low-bandwidth connectivity for devices like sensors or monitors often called internet of things (IoT) devices
- High speed, centralized broadband with upload speeds of at least 30 Mbps up for targeted agricultural operational headquarters such as a farm or ranch operations center
- High-speed decentralized coverage over large agricultural areas

Ms. Byers entertained questions from the Commission.

EHEALTH COUNCIL REPORT

Anne Byers

Ms. Byers provided a brief overview of LB 411 which was passed by the legislature and signed by Governor Ricketts on May 24, 2021. LB 411 requires most health care facilities to participate in CyncHealth (formerly NeHII). Additionally, on or before January 1, 2022, each health insurance plan would be required to participate in the designated health information exchange through sharing of information.

Approval of membership nomination. CyncHealth has nominated their chief operating officer, Paul Hakenkamp, to represent them on the eHealth Council. A brief resume was included in the meeting materials.

Commissioner Warren moved to approve the nomination of Paul Hakenkamp to serve on the eHealth Council. Commissioner Weir seconded. Roll call vote: Greckel-Yes, Haack (not present at time of vote), Harvey-Yes, Warren-Yes, Weir-Yes, and Toner-Yes. Results: Yes-5, No-0, Abstained-0. Motion carried.

TECHNICAL PANEL REPORT

Kirk Langer, Technical Panel Chair

TECHNICAL STANDARDS AND GUIDELINES

Approval of Proposal 18. Amend the Information Security Policy.

Mr. Langer introduced the proposal. The Technical Panel recommends approval.

Patrick Wight, State Information Security Officer, provided additional background information about the proposal and was available to answer questions.

Commissioner Haack moved to approve Proposal 18. Commissioner Greckel seconded. Roll call vote: Harvey-Yes, Haack-Yes, Greckel-Yes, Toner-Yes Weir-Yes, and Warren-Yes. Results: Yes-6, No-0, Abstained-0. Motion carried.

Approval of Proposal 19. Amend the minimum server configuration standard.

Mr. Langer introduced the proposal, and Mr. Wright was available to answer questions.

Commissioner Weir moved to approve Proposal 19. Commissioner Harvey seconded. Roll call vote: Warren-Yes, Harvey-Yes, Haack-Yes, Greckel-Yes, Toner-Yes, and Weir-Yes. Results: Yes-6, No-0, Abstained-0. Motion carried.

Technology access clause update.

The technical access clause has not been updated in 20 years. This clause is required to be included in certain contracts entered into by state government agencies. By statute, the Commission for the Blind and Visually Impaired, the Chief Information Officer, and the NITC are responsible for developing the clause. These three entities, along with other agencies, have been working on updating the clause over the last year. Jeremy Sydik from the Technical Panel participated in the discussions representing the NITC. The Technical Panel endorsed the revised clause at their meeting on June 8, 2021.

ENTERPRISE PROJECTS

Approval of enterprise project designation for the Financial Systems Modernization Project (Department of Transportation).

Mr. Langer provided background information about the project. Devin Townsend and Lyn Heaton from the Nebraska Department of Transportation (NDOT) were available for questions. NDOT's current financial system's environment includes mainframe-based applications which are reaching end-of-life. NDOT would like to streamline their financial management business processes between NDOT systems and the State's E1 financial system.

Commissioner Warren moved to designate NDOT's Financial Systems Modernization Project as an enterprise project. Commissioner Weir seconded. Roll call vote: Toner-Yes, Greckel-Yes, Haack-Yes, Harvey-Yes, Warren-Yes, and Weir-Yes. Results: Yes-6, No-0, Abstained-0. Motion carried.

Enterprise project status dashboard report. Mr. Langer provided an update on the following projects: Centrex Conversion, Office of the CIO; and iServe, Department of Health and Human Services; and the Nebraska Regional Interoperability Network (NRIN) project.

Members discussed some of the dates provided in the dashboard report. Staff will verify the accuracy of the dates.

STATE GOVERNMENT COUNCIL REPORT

Ed Toner

NASCIO (National Association of State Chief Information Officers) 2021 State IT Recognition Awards nomination submission. The award nomination included with the agenda describes a project recently completed by the OCIO to consolidate servers previously located throughout the state in each county.

ADJOURNMENT

Commissioner Haack moved to adjourn. Commissioner Weir seconded. All were in favor. Motion carried.

The meeting was adjourned at 12:22 p.m.

Meeting minutes were taken by Lori Lopez Urdiales and reviewed by the NITC Managers of the Office of the CIO/NITC.

Attachment IV-A

TO:NITC CommissionersFROM:Tom Rolfes, Education I.T. ManagerDATE:11/04/2021RE:Network Nebraska and Digital Education Initiative Reports

Education Council update: The Education Council met on September 1 and October 13 over Zoom and will be meeting again on December 15. Progress is still being made on the NITC Action Items, even as schools and colleges grapple with the ongoing effects of the COVID-19 pandemic.

Network Nebraska Update:

- **1.** Prepare for the future of Network Nebraska as a statewide, multipurpose, high capacity, scalable telecommunications network
 - a. The newest Network Nebraska RFP is nearing final form. It contains about 40 leased lit fiber circuits and about 20 Special Construction Matching E-rate Fund circuits for public libraries.
 - b. Six public libraries took advantage of the Public Service Commission's Special Construction Matching E-rate funds for new fiber for 2021-22: Bancroft, Bayard, Beatrice, Clay Center, Verdigre, and Wymore. The average fiber construction cost per library was \$29,177, or an average of \$2,917 of State Matching Funds per library.
 - c. Plans are being developed for core network upgrades over the next five to ten years, which may necessitate additional (non-Participant) funding.
 - d. Network Nebraska has observed an uptick in Distributed Denial of Service attacks throughout the state, which is leading us to revisit our DDoS mitigation capacity.

2. Effectively communicate to current and potential Network Nebraska Participants

- a. The Office of the CIO has been involved in the Nebraska statewide eduroam pilot project for 2021-23 and is collaborating on the eduroam website and content to be shared with eligible K-12 entities.
 Participation Agreements approved since July 2021 = 38, with 17 more "in the works".
- b. The Network Nebraska status page (<u>https://status.networknebraska.net/</u>) has had favorable reviews, and the University of Nebraska's new AlertSense communications system is working well.

3. Identify needs and deliver advanced services to meet the growing needs of its membership

- a. Network Nebraska is in support of cybersecurity awareness training to be made available to all schools, as well as multi-factor authentication, and external vulnerability testing.
- b. Zoom licensing decreased slightly to 33,570 non-University licenses in 2021-22.

Digital Education Update:

- 1. Disseminate informational reports to insure the success of Nebraska digital education
 - a. Work is continuing with the Nebraska Department of Education and the ESU Coordinating Council on the Future Ready Digital Learning Collaborative Planning. Next steps include development of a proposal to reallocate unspent GEER funds for COVID-19 response activities through 2023.
- 2. Expand awareness and address the need for equity of access
 - a. Additional presentations have been given on digital equity data gathering and mapping of unserved and underserved student addresses. This will be a focused effort at least through 2023.
 - b. Office of the CIO staff have continued to monitor the development of wireless and satellite technologies to gauge their potential in narrowing the Homework Gap in sparsely populated areas where student households are unserved or underserved.

Attachment IV-B

November 4, 2021

To: NITC Commissioners

From: John Watermolen, State GIS Coordinator Casey DunnGossin, Chair, GIS Council Ryan Werner, Vice Chair, GIS Council

Subject: GIS Council Report

GIS Council Update - We had our GIS Council meetings on August 4th and yesterday (November 3rd. Our big focus on the strategic initiatives will be seeing if we can include local governments data into NebraskaMap and how to manage data that has been updated and keep the older versions.

In our August meeting we had a presentation from the US Census Bureau about the redistricting data was being released in Mid-August and about the differential privacy algorithms that were used on census data. Nebraska was well represented at the 2021 ESRI User conference this year, which was held virtually.

The state's GIS symposium was held Monday and Tuesday this week (November 1st and 2nd). There were a lot of good presentations. There were college students presenting their class projects along with the winners of last year's State Story Map contest.

Update from Council Members

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- Continue to monitor and manage NEGIS the state's GIS infrastructure. Our software vendor will be releasing a software update this month and we plan to upgrade in December using some new tools that we helped test for our vendor. These tools will help us deploy the software to our distributed server environment using native window. We were excited to be early testers of these tools.
- We continue to support agencies with application development and general technical support to the agencies.
- We have helped several counties by providing maps for their redistricting efforts and check in with the Secretary of State's office to offer support and guidance if needed.
- Continue to reach out to agencies such as the State Fire Marshall and Department of Labor to see how GIS could help their agencies
- Working with other OCIO teams such as the storage team to find ways to make to reduce operational costs.
- John was elected to the National States Geographic Information Council (NSGIC) board of directors.
- Presentation to NACO/MIPS on how GIS is used in local and state governments
- Created maps and a dashboard for the state budget office regarding allocations for the American Rescue Plan Act funding Nebraska is getting.
- Story map for History Nebraska buildings that were renovated using tax credits

Game and Parks Commission

• Finishing up their migration of the Public Atlas for access to fields and open waters for Nebraska's hunters and fisherman's

Department of Natural Resources

• DNR is working on a drought monitoring application for the lower Platte and has a decision support tool for managing water resources of the Platte River. DNR Floodplain division is going to be embarking on a large project to create detailed flood inundation maps based on flood event and have web tools and information to help citizens with information during a flood event

Department of Health and Human Services (DHHS)

• DHHS is hiring a GIS coordinator to help advocate for the utilization of GIS within the agency. They continue to provide maps for various public health issues.

Department of Transportation

• DOT continues to build applications to help. One new application that will go live next year is an E-ticket solution and tracking the amount of ashphalt that is used on a project. It tracks the ashpalt from the plant and when it arrives on site, an electronic form is filled out to help document the amount of material being used

Public Service Commission

• PSC continues to work on getting the data ready for Next Generation 911 implementation. They are also working on broadband maps and applications to help identify opportunites for rural broadband.

Nebraska State Patrol

• NSP is exploring some GIS solutions to help manage incidents and events

Department of Environment and Energy (DEE)

• working on using more drones and leveraging ESRI's site scan solution for drones. OCIO has been helping DEE with processing data and providing a summary of benefits that the state's GIS offerings can do to help the agency out.

Attachment IV-C

Oct. 27, 2021

То:	NITC Commissioners
From:	Anne Byers
Subject:	Community Council Report

Community Council Membership. The Community Council met on Monday, Oct. 25 and recommended the nominations of three new members: Debora Robertson, director of the Kilgore Memorial Library in York; Karen Connell, director of the Columbus Public Library; and Rick Nelson, general manager of Custer Public Power District and interim general manager of the Nebraska Rural Electric Association.

Résumés for Debora Robertson and Karen Connell are included in the following pages. A short bio for Rick Nelson is below.

Rick Nelson has been the general manager of Custer Public Power District in Broken Bow since 2004. He is also serving as the interim general manager of the Nebraska Rural Electric Association. He has a Bachelor of Business Administration from Iowa State University and an MBA from St. Ambrose University.

I will be asking you to approve their nominations.

Nebraska Broadband Bridge Grant Program. The Nebraska Broadband Bridge grant program was created by LB 388 which was enacted in 2021. \$20 million a year for two years was appropriated for the program. The first round of applications was due Oct. 1. Over 70 applications were received requesting approximately \$31 million. Challenges are due Nov. 5. Grants will be announced on January 4, 2022.

Rural Broadband Task Force Update. The Rural Broadband Task Force approved their 2021 report to the Legislature and Governor Ricketts on Oct. 18. The executive summary is included in the meeting documents. The report is available at

https://ruralbroadband.nebraska.gov/reports/2021/2021Report.pdf



CAREER SUMMARY

- City of York Nebraska
 Director of Kilgore Memorial Library
- Briar Cliff University, Sioux City, Iowa
 Director of Library and Information Services
- State of Virginia, Abingdon, Virginia
 - Director of Library and Instructional Services at Virginia Highlands Community College
- Northeast Community College, Norfolk, NE
 Director of Library Services

DEBORA ROBERTSON

LIBRARIAN

COMMUNITY SERVICE

York County Health Coalition

BOARD SECRETARY CHILDREN AND FAMILIES FOCUS GROUP MEMBER

United Way of York

BOARD MEMBER

PROFESSIONAL SERVICE

Nebraska Library Association

- STANDING ADVOCACY COMMITTEE APPOINTED CHAIR
- PUBLIC LIBRARIES AND TRUSTEES SECTION ELECTED SECTION CHAIR NOMINATING COMMITTEE MEMBER

APPOINTMENTS AND AWARDS

Leading Change Institute

CLIR/EDUCAUSE FELLOWSHIP - WASHINGTON, D.C.

NW Iowa STEM Advisory Board

GOVERNOR APPOINTMENT REPRESENTING LIBRARIES

PERSONAL LIFE

My time outside of work is all focused on family. My husband and I have two grown children and seven grandchildren.

My ultimate past time is shopping and I am training the grandchildren that there is nothing more fun than going to the mall with grandma!

EDUCATION

- Master's Degree in Library Science
 Emporia University, Kansas
- Bachelor's Degree in Business Administration
 Bellevue University, Nebraska

CONTACT INFORMATION

Mobile: (402) 646 0550 Office: (402) 363 2626 Email: drobertson@cityofyork.net Office Address: 520 N Nebraska Avenue York, NE 68467

Karen Connell Library Director at Columbus Public Library

Experience

Library Director, Columbus Public Library Apr 2019 – Present

Responsible professional and administrative work in planning, organizing, and directing all public library and information services activities of the Columbus Public Library.

Recommends policies, procedures, and actions to achieve program and plan goals and ensures that they conform to municipal, state, and federal laws and accepted library ethics and principles.

Prepares the city and bookmobile budget with consultation/oversight of the library board; exercises purchasing and budgetary controls; prepares specifications for library equipment, supplies, and materials. Selects, supervises, and schedules, employees of the library.

Reference Librarian, Columbus Public Library Jan 2012 – Apr 2019

Head of the Reference Department, Working Supervisor: Schedule staff of 18 Assist patrons with their information needs Manage the computer lab Create and maintain website and digital repository Manage the Reference, Nonfiction, and Adult Fiction collections Manage and promote collection of electronic resources Plan and Facilitate Adult Programming Foundation Information Network location supervisor...

Computer Class Instructor Central Community College and Northeast Library System Jan 2013 – Feb 2013

Designed and taught computer classes to small area libraries. Funded through a grant with the Northeast Library System (now Three Rivers Library System).

Education

Emporia State University

Master of Library & Information Science (MLIS) 2009 – 2011

Northwest Missouri State University

Bachelor of Science (BS) Speech and Organizational Communication 2005 – 2009



Rural Broadband Task Force

Findings and Recommendations Executive Summary October 2021



Executive Summary

The Rural Broadband Task Force was created to "review issues relating to availability, adoption, and affordability of broadband services in rural areas of Nebraska" by LB 994, which was passed by the Legislature and signed by Governor Ricketts on April 17, 2018. The bill was introduced by Senator Curt Friesen, Chair of the Transportation and Telecommunications Committee. The task force is chaired by Ed Toner, CIO for the State of Nebraska and Chair of the Nebraska Information Technology Commission. This is the second report presenting the task force's findings and recommendations as required by LB 994.

Progress Since the 2019 Report

Considerable progress has been made in implementing many of the recommendations in the task force's 2019 report. The following list highlights the progress made:

- <u>\$29.5 million in grants was awarded</u> to 60 projects bringing broadband to 17,600 households through the Remote Access Rural Broadband Grant Program. The grant program was funded by the CARES Act and administered by the Nebraska Department of Economic Development.
- <u>LB 388</u> which was enacted in 2021 created the <u>Broadband Bridge Grant Program</u>. \$20 million a year for two years was appropriated for the program. The deadline for the first round of applications is Oct. 1, 2021.
- Broadband projects funded through the Nebraska Universal Service Fund have connected 19,583 households since 2019.
- Remittances to the Nebraska Universal Service Fund increased from \$32.8 million in 2018 to \$46.8 million in 2020 due to reforms to the residential contribution method.
- The Public Service Commission is taking steps to initiate a reverse auction of \$3 million in NUSF support.
- <u>LB 338</u> improved the accountability of the Nebraska Universal Service Fund by specifying build out requirements of 100 Mbps down and 100 Mbps up and by requiring recipients to conduct and submit speed tests.
- The Nebraska Public Service Commission established the E-Rate Special Construction Matching Program in 2020, providing matching funding for 6 public libraries and one public school in the first year of the program.
- Governor Ricketts, the Nebraska Department of Education, Educational Service Units, and local school districts coordinated federal funding to purchase computing devices, hot spots, and internetenabled devices as well as implement connectivity projects.
- <u>LB 992</u>, enacted in 2020, established a process to use private utility easements for communications and made the process of leasing dark fiber less burdensome.

Findings and Recommendations

Broadband Data and Mapping

Current state and federal broadband mapping efforts likely overstate broadband coverage and need to be improved. In 2019, the task force recommended waiting for the FCC to improve its broadband data collection. The State of Nebraska can no longer wait for the FCC to provide more accurate broadband availability data and mapping.

Key Recommendation

Initiate a program to map broadband availability for serviceable locations in the state augmented by speed test data.

Alternative Technologies and Providers

Several emerging technologies may be well-suited for rural areas. Fixed wireless technologies using midband spectrums could potentially provide service of 100 Mbps or greater in rural areas. SpaceX (Starlink) is the first company to provide broadband service via low Earth orbit satellites and is now offering its beta service to users at some locations in Nebraska. TV white space has received significant attention. However, it may be better suited for lower bandwidth or non-line-of-sight applications.

Nebraska Universal Service Fund and Reverse Auction

The Nebraska Universal Service Fund (NUSF) provides support to price cap, rate of return, and mobile wireless carriers in Nebraska. A total of \$36,545,562 is available for broadband projects in high cost areas through the NUSF in 2021. Since Key Recommendations 2019, 19,583 households have been connected through broadband projects funded through the Nebraska Universal Fund.

The total remittances to the NUSF have increased from approximately \$32.8 million in 2018 to \$46.8 million in 2020. The increase is due to the Nebraska Public Service Commission's actions to reform the contribution methodology for residential services. Further changes to the contribution mechanism for business services is projected to increase the size of the fund to approximately \$52 to \$55 million. Even with steps to stabilize the fund, however, the size of the fund is not sufficient to provide support

for fiber deployment to all Nebraska residences and businesses.

The Nebraska Public Service Commission is establishing rules and procedures for a reverse auction and is expected to move through the process of redirecting \$3 million of support in 2022.

Key Recommendations

- Evaluate the results of the Nebraska Public Service Commission's expected reverse auction of NUSF support.
- Coordinate the distribution of NUSF support with other funding sources to avoid duplication of funding and to target funding to areas most in need of support.
- As funding from multiple sources is being utilized for broadband deployment projects, state and federal policymakers will need to develop mechanisms to ensure that broadband networks are being supported.

Public-Private Partnerships and Broadband Planning

Grant programs such as the Remote Access Rural Broadband Grant Program and the Nebraska Broadband Bridge program which provide funding for broadband deployment projects in unserved and underserved areas are essentially a form of public-private partnerships. Governor Ricketts and the Legislature are expected to allocate any additional federal funding for broadband deployment projects in 2022.

- Express appreciation to Governor Ricketts and the Legislature for recognizing the importance of broadband to Nebraska and for providing funding for broadband through the Nebraska Broadband Bridge grant program and the Remote Access Rural Broadband Grant program.
- Review the initial round of awards from the Broadband Bridge Grant Program to determine the impact of the program.
- Encourage local and regional broadband planning.

Agriculture

Farmers and ranchers need upload speeds of at least 30 Mbps to transfer large amounts of generated data to the cloud. In the future, even greater upload speeds may be required. Rural areas of most Nebraska counties—including many of Nebraska's top-producing agricultural counties lack broadband with upload speeds of greater than 25 Mbps or fiber connectivity.

Different methods of connectivity are required for agriculture, including:

- Low-bandwidth connectivity for devices like sensors or monitors often called internet of things (IoT) devices
- High speed, centralized broadband with upload speeds of at least 30 Mbps up for targeted agricultural operational headquarters such as a farm or ranch operations center
- High-speed decentralized coverage over large agricultural areas

Key Recommendations

- Establish a state goal of having broadband access to every farm or ranch headquarters.
- Focus a portion of broadband funding on the highest cost areas.
- Review the initial round of awards from the Broadband Bridge Grant Program to determine if adjustments to program requirements could aid in funding extremely high cost rural areas.

Digital Inclusion, Homework Gap and Leveraging E-Rate Funding

Those without broadband connectivity at home struggled to learn, access health care and work remotely during the COVID-19 pandemic. Approximately 12% of Nebraskans or 215,000 individuals do not have a broadband subscription at home. This includes 32,000 Nebraskans under 18 years old.

Governor Ricketts, the Nebraska Department of Education, Educational Service Units, and local school districts coordinated federal funding to close the connectivity gap for students by purchasing computing devices, hot spots, and internet-enabled devices. Federal funding also helped some libraries improve their broadband connections and start/ expand hotspot lending programs. Libraries are key community partners in providing internet and computer access to students and the general public—especially in rural areas, but just over half of Nebraska libraries serving communities with populations of less than 2,500 have internet access below 25 Mbps down and 3 Mbps up.

Increased support for low-income households is currently being provided through the FCC Emergency Broadband Benefit Program.

Key Recommendations

- Encourage public libraries and schools without fiber connections to apply for support for new fiber construction from the E-Rate Special Construction matching fund.
- Encourage school districts, ESUs, public libraries, and communities to implement programs such as Wi-Fi on buses, hotspot lending programs, low cost pay-by-themonth internet access, or alternative wireless deployments for student access on schoolissued devices in order to reduce the number of unserved and underserved students.
- Encourage communities and regions to develop digital inclusion plans to address multi-generational needs.

Broadband Technician Workforce

Nebraska, like the rest of the country, currently faces a shortfall of skilled workers needed to deploy broadband. Additional investments in broadband will likely increase the demand for skilled workers.

Key Recommendation

 The telecommunications industry, the state's community colleges, local school districts, and economic development and workforce development agencies should engage in conversations about recruitment of technicians as well as developing training and apprenticeship programs.

Rural Broadband Task Force Members



Ed Toner, Task Force Chair Chief Information Officer State of Nebraska Chair, Nebraska Information Technology Commission



Senator Bruce Bostelman Nebraska Legislature



Tony Goins Director Nebraska Department of Economic Development



Zachary Hunnicutt Farmer Hunnicutt Farms



Daniel Spray Owner Precision Technology, Inc.



Ron Cone Director of Network Information Services ESU 10

Staff

Anne Byers Nebraska Information Technology Commission Office of the CIO
 Lori Lopez Urdiales Nebraska Information Technology Commission Office of the CIO
 Cullen Robbins Nebraska Public Service Commission
 Tom Rolfes Nebraska Information Technology Commission Office of the CIO







Steve Wellman Director Nebraska Department of Agriculture

Senator Curt Friesen

Telecommunications

Nebraska Legislature

Nebraska Public Service

Committee

Mary Ridder Commissioner

Commission

Chair, Transportation and



Tom Shoemaker President Pinpoint Communications



Andrew Buker Assistant Vice President Infrastructure Services University of Nebraska

Attachment IV-D-1-a

State of Nebraska Nebraska Information Technology Commission Technical Standards and Guidelines

Proposal 20 Final

A PROPOSAL relating to the Information Security Policy; to amend subsection (134) of section

1-101 and section 8-301; and to repeal the original sections.

1 Section 1. Subsection (134) of section 1-101 is amended to read:

2 (134) "State network" has the same meaning as communications systemmeans the

3 public or private IP space that is owned, registered to, or managed by the State of Nebraska

4 <u>wherein restrictions are established to promote a secured environment.</u>

5 Sec. 2. Section 8-301 is amended to read:

6 8-301. Remote access.

7 It is the responsibility of all agencies to strictly control remote access from any device that 8 connects from outside of the state network to a desktop, server or network device inside the 9 state network and ensure that employees, contractors, vendors and any other agent granted 10 remote access privileges to any state network utilize only approved secure remote access tools 11 and procedures.

12 The following standards apply to all staff that connect to the state network through the

13 Internet. This includes all approved work-from-home arrangements requiring access to state

14 systems and agency office locations that use the Internet to access the state network. Each

15 state agency will be responsible for ensuring that remote access to state resources is secured

16 and compliant with this policy.

17 (1) The following are the general requirements for remote access:

-1-

1	(1) Requests for remote access must be reviewed and approved by the state information
2	security officer and the agency information security officer prior to access being granted agency
3	and the Office of the CIO;
4	(2) All remote sessions must use access control credentials and an OCIO-approved form of
5	multi-factor authentication;
6	(3) All remote sessions must utilize OCIO-approved cryptographic mechanisms as defined
7	by NIST 800-140 to protect the confidentiality and integrity of remote access sessions;
8	(4) All remote sessions over open public networks must use a VPN when connecting to the
9	state network;
10	(a)
11	(b) Staff approved for remote connectivity are required to comply with all policies and
12	standards;
13	(5) All devices connecting to the network must have up-to-date anti-virus protection, active
14	firewalls, and appropriate security patch levels equivalent to those provided for state equipment;
15	(c)(6) All remote state owned or managed devices must be password protected and
16	full-disk encrypted using OCIO-approved technology;
17	(d)(7) All remote access sessions must be logged. The Office of the CIO or the agency
18	will perform periodic monitoring of remote access sessions with random inspections of the user
19	security settings and protocols to ensure compliance with this policy;
20	(e)(8) Remote access logon failures must be logged. Credentials must be disabled after
21	three (3) consecutive failed login attempts;
22	(9) Remote sessions must be locked after no more than 15 minutes of inactivity until the
23	user re-establishes access with the appropriate credentials and authentication procedures; and
24	(10) Mechanisms must be employed to ensure personally identifiable information, or
25	other sensitive information (e.g. SSA, FTI, PII, PHI) cannot be downloaded or remotely stored;
26	and

-2-

1	(f)(11) Restricted data types cannot be accessed by agency employees, agents,
2	representatives, or contractors located offshore—outside of the United States territories,
3	embassies or military installations.
4	(g) Staff with remote access privileges must ensure that their computer which is remotely
5	connected to the state network, is not connected to any other network at the same time, except
6	for personal networks that are under the complete control of the user.
7	(2) The following are additional requirements for remote access to data classified as
8	CONFIDENTIAL or RESTRICTED:
9	(a) Requests for remoted access must indicate if CONFIDENTIAL or RESTICTED data may
10	be accessed;
11	(b) Mechanisms must be employed to ensure personally identifiable information, or other
12	sensitive information cannot be downloaded or remotely stored;
13	(c) All state owned or managed devices must be password protected and full-disk encrypted
14	using approved technology. Encryption technology must be provided or approved by the Office
15	of the CIO; and
16	(d) Remote sessions that store, process, or access CONFIDENTIAL or RESTRICTED
17	information or systems must use access control credentials and an approved form of multi-
18	factor authentication before connecting to the state network. Remote sessions must employ
19	Office of the CIO approved cryptography during the entire session when connected to the state
20	network.
21	Sec. 3. Original sections 1-101 and 8-301 are repealed.

22 Sec. 4. This proposal takes effect when approved by the commission.

-3-

Attachment IV-D-2-a

OPS Retirement Plan Management Transfer

LB 147 Transfers administration of the Omaha Public Schools Retirement Plan to the Nebraska Public Employees Retirement System (NPERS) on September 1, 2024



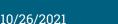
LB 147, 2021

- Directs NPERS and the Public Employees Retirement Board to take over management of the OPS retirement plan on September 1, 2024
- Currently managed by OSERS (Omaha School Employees Retirement System) and its Board of Trustees
- LB 31, 2019 directed NPERS to develop a work plan and estimate costs for the project. The LB 31 report estimated:
 - 23-month technology integration project
 - 12 months of post-implementation support to fully stabilize the system
 - Costs of \$4.2 million
- The costs for LB 147 will be covered by OPS



Project Environment

- The OPS retirement plan will be added as a new plan in our pension administration system
- NPRIS (Nebraska Public Retirement Information System) is currently used to administer 6 statewide retirement plans
 - Schools, State, County, Judges, State Patrol, Deferred Compensation
- OPS will be the 7th plan in NPRIS
 - Will not be merged with the statewide school plan



Project Work Streams

- Procurement of project oversight and integration vendors
- Programming and configuration
- Data conversion
- Document conversion



Project Stakeholders

- OPS administration, school Board, IT teams, active members, retired members, OSERS Board of Trustees, Director and staff
- NPERS Director, management, IT Team
- Public Employees Retirement Board (PERB)
- OCIO leadership and technical teams
- Nebraska senators on the Retirement Committee



Current Status

- In the October 18 Retirement Board meeting the PERB approved the selection of Gartner Consulting for procurement services
- Omaha has engaged a firm to complete a compliance audit of the Retirement System
- The APA will be conducting an audit of the retirement system
- Regular status meetings with OPS teams
- Reporting at the OCIO Project Management Meetings



Questions?

Jack Hardy IT Manager, Nebraska Public Employees Retirement System Jack.hardy@nebraska.gov



Attachment IV-D-2-b

Projects Status Dashboard October 2021

Enterprise Projects - Current

Agency/Entity	Project	NITC Designated
Nebraska Council of Regions	Nebraska Regional Interoperability Network	03/15/2010
Office of the CIO	Centrex Replacement	07/12/2018
Department of Health and Human Services	iServe Nebraska	11/12/2020

Note: Status is self-reported by the agency

Project Storyboar	d: Nebraska Reg	ional Interoperability I	Network (NRIN)						
Project Manager	Krogman, Sue	Status Report Date	10/21/21		Project Dates	Status Repo	Status Report Indicators		
Project Type	Major Project	Status	Approved		Start	Finish	Overall		-
Stage	Build	Progress	Started	Plan	10/1/10	8/31/23	Schedule		4
Total Estimated Cost	\$12,500,000.00	Estimate to Complete	83.24%	Baseline	10/1/10	8/31/23	Scope	•	-
Actual Cost To Date	\$10,405,204.00			Days Late	0	0	Cost and Effort	•	•
	Proje	ct Description				Key Accomp	olishments		
Public Safety Access Po network will be a true, se expectations; therefore t 99.999% availability for or currently in-place iter	bints (PSAP) across the Secure means of transferrin there is a required redund each site. It is hoped that	NRIN) is a project that will conn tate by means of a point to poin og data, video and voice. Speed ant technology base of no less the network will be used as the saving to local government. All pment of the OCIO.	t microwave system. The d and stability are major than 100 mbps with main transfer mechanism	Fiber installations	were complete in the	North Central area	and has given the network 3 n	nore redundant rir	∩gs.
	Status	Report Update				Upcoming	Activities		
 UPDATE FOR OCTOBER 2021 – Work has continued in the SE corner, specifically the Richardson County area – installation has stopped due to an FAA request on the new tower site. Fiber installations were completed in the North Central area and this has given the network 3 more redundant rings. \$1.2 million to finish the project - funded from Homeland Security UPDATE FOR MAY 2021 – Work priority has shifted to the far SE corner of the state. Requests have been made to finish up the Pawnee City to Falls City path in order to enable the City of Beatrice to dispatch for them. Line of sights have been driven and the Path Analysis are being completed. In the NC Region of the state, fiber is being added to the network and four major paths across the sandhills are in the process of being installed. This will enable a greater portion of the NC Region to have great coverage for the network. 				The project work h	has shifted to the sout	heast corner of the	State (Richardson County)		
Issues by Pr	iority	Risks by Priority	Current Issues						
			No matching records	were found					

Project Storyboar	d: Centrex Conve	rsion								
Project Manager	Kortus, Julie	Status Report Date	10/20/21	Project Dates				Status Report Indicators		
Project Type		Status	Approved		Start	Finish	Over	all		-
Stage	Build	Progress	Started	Plan	10/10/17	12/31/22	Sche	edule		-
Total Estimated Cost	\$2,800,000.00	Estimate to Complete	93.83%	Baseline	10/10/17	12/31/22	Scop	е	•	-
Actual Cost To Date	\$891,147.00			Days Late	0	0	Cost	and Effort	•	•
	Projec	t Description				Key Acc	omplishments			
solution will replace the s project is to provide pho	State's Centrex service thr	er Internet Protocol Telephony oughout the State of Nebraska e most up-to-date VOIP feature ance and service remaining wit	. The purpose of the es and functionality as a	* ALLO has a ded	icated resource to ass	ist with walkthr	oughs, working	g with the end c	ustomer, and creating) order:
	Status I	Report Update		Upcoming Activities						
400 lines belong to agen 614 lines were moved of 10,000 lines were in the territory. Project is 93.8% comple	RFP to be taken off of the te.	rting nd onto a new B1 contract. Centrex contracts from Windst		11/01/2021: Mee	ing with the PSC/OCI	J/ALLO/Lumei	n to discuss po	rt rejections.		
In parallel with this proje to this project.	ct, over 1000 softphones h	have been deployed using the s	same resources assigned							
Issues by Pri	ority	Risks by Priority	Current Issues						More	Issues
			1	Issue		Priority	Status	Target Resolution	Owner	
			Lumen port rejection	S		\$	Open	12/1/21	Kortus, Julie	

Project Storyboard	: iServe Nebrask	a							
Project Manager	Agarwal, Ankush	Status Report Date	10/28/21		Project Dates	Status Report Indicators			
Project Type		Status	Approved		Start	Finish	Overall		+
Stage	Design	Progress	Started	Plan	4/6/20	4/30/22	Schedule		+
Total Estimated Cost	\$33,500,000.00	Estimate to Complete	26.87%	Baseline	4/6/20	4/30/22	Scope		Ŧ
Actual Cost To Date	\$9,000,000.00			Days Late	0	0	Cost and Effort	•	-
	Project	Description				Key Accomp	olishments		
Program to improve access integrated, consumer-cent Program to be adaptive and from a siloed and program	es, outcomes, cost, account tric model of practice, acro and incrementally deliver ne a-based business model, t	ervices (DHHS) has embarked ntability and quality of DHHS s loss all programs. DHHS intend ew business capabilities, enab o an integrated service deliver nealth and well-being of all fam	ervices through an s the iServe Nebraska ling the state to move y model that is family and	Work Order 2 (Us Work Order 3 (Co Work Order 4 (Ide Program Increme Program Increme	nt 2 is in progress; 3 οι	is complete. is in progress; be gement) is in prog t of 4 sprints are	ehind schedule. gress; on schedule.		
	Status R	eport Update				Upcoming	Activities		
Work Orders 1 and 2 are complete. Work Order 3 activities are behind schedule. Work Order 4 activities are on track.				Establish State co Complete Work C Complete Security Complete Langua Complete Program Complete Program	tions for Work Order 3 ontingency developmen order 4 (Identity and Acc y Assessment vendor s age Translation vendor m Increment 2, Sprint 4 m Increment 3 planning odate to CMS and FNS	t team to mitigate cess Managemen election and docu onboarding and ir and start sprintin	vendor delays. t). Imentation inventory. Itegration work.		
Issues by Prio	rity	Risks by Priority	Current Issues						
			No matching records	were found					