Rural Broadband Task Force **Progress on Recommendations and Metrics** August 31, 2021

The Rural Broadband Task Force would like to thank Governor Ricketts, the Nebraska Legislature, the Nebraska Public Service Commission, Nebraska Department of Economic Development, Office of the Chief Information Officer, Nebraska Information Technology Commission, Nebraska Library Commission, Nebraska Department of Education, and other entities in Nebraska for their efforts to implement recommendations of the Rural Broadband Task Force.

Highlights

\$29.5 million in grants was awarded 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.

LB 388 which was passed by the Legislature and signed by Governor Ricketts on May 26, 2021 created the Broadband Bridge Grant Program. \$20 million a year for two years was appropriated for the program. The deadline for the first round of applications is Oct. 1, 2021.

Since 2019, 19,583 households have been connected through broadband projects funded through the Nebraska Universal Fund.

<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.

Reforms to the NUSF contribution method for residential services increased remittances from \$32.8 million in 2018 to \$46.8 million in 2020. On May 11, 2021, the Nebraska Public Service Commission approved <u>an order reforming the NUSF contribution method</u> for business services to a per connection surcharge of \$1.75 effective Jan. 1, 2022.

The Public Service Commission is taking steps to initiate a reverse auction of \$3 million in NUSF support allocated to Frontier.

The Nebraska Public Service Commission established the E-Rate Special Construction Matching Program in 2020. Public libraries in Bancroft, Bayard, Beatrice, Clay Center, Verdigre, and Wymore and the Southwest Public Schools' Elementary School at Indianola were successful in getting fiber for the first time in 2021-22 through 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 internet-enabled devices as well as implement connectivity projects.

LB 992 made the process of leasing dark fiber less burdensome. LB 992 also specified that leases of dark fiber to provide broadband in unserved areas do not need to contribute a portion of the proceeds

to the Nebraska Universal Service Fund. LB 992 was passed by the Legislature and signed by Governor Ricketts on August 15, 2020.

LB 992 established a process to use private utility easements for communications.

Progress on Public-Private Partnership Recommendations and Metrics

Identify funding for public-private partnerships.

- <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 passed by the Legislature and signed by Governor Ricketts on May 26, 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.

Establish a state broadband coordinator position to provide assistance to local and regional broadband coordinators and to coordinate with state agencies, telecommunications providers, local governments and other stakeholders.

• <u>LB 992</u> which was passed by the Legislature and signed by Governor Ricketts on August 15, 2020 established a state broadband coordinator effective on July 1, 2022. The Legislature did not include funding for the coordinator position in the OCIO's general funds.

Encourage local and regional broadband planning.

- **Broadband planning resources have been developed.** Several entities including the Nebraska Information Technology Commission Community Council, Nebraska Library Commission, Nebraska Department of Economic Development, Nebraska Public Service Commission, and the University of Nebraska partnered to develop resources to encourage broadband planning, including:
 - <u>Broadband case studies</u> (NITC Community Council)
 - <u>County broadband fact sheets</u> (Nebraska Library Commission and NITC Community Council)
 - <u>Six Steps to Better Broadband</u> (NITC Community Council and Nebraska Broadband Initiative)
 - o <u>Digital Inclusion Planning Guide and Workbook</u> (NITC Community Council)

Retain the existing prohibition on retail provision of broadband service by public entities.

• <u>LB 992</u> retained the existing prohibition on retail provision of broadband by public entities.

The public power industry, telecommunications industry, and the Transportation and Telecommunications Committee should work together to reach an agreement on what steps which should be taken to make it less burdensome for public entities to lease dark fiber.

• <u>LB 992</u> made the process of leasing dark fiber less burdensome. LB 992 also specified that leases of dark fiber to provide broadband in unserved areas do not need to contribute a portion of the proceeds to the Nebraska Universal Service Fund.

The NREA and NPPD should work with the members of the Transportation and Telecommunications Committee to explore legislation clarifying communications as an approved use for private easements set up for telephone and electric use.

• <u>LB 992</u> established a process to use private utility easements for communications.

Encourage communications planning between telecommunications providers and public entities, such as public power districts and other private entities, such as cooperatives. This could be done in a number of ways, including:

- Convening local or regional meetings of telecommunications providers and public power districts to explore how the communications needs of public power could be leveraged to improve broadband availability in rural areas.
- Developing a joint RFP for public power districts which could be put out for bid by Network Nebraska or the Nebraska Office of the CIO.
 - NPPD and NRTC have worked with Loup Power District/Cornhusker Public Power District, South Central Public Power District, and NPPD's Retail Division to issue an RFI and complete feasibility studies.

Encourage each county or region to have a broadband coordinator to facilitate broadband planning and coordination.

• No action taken

Explore the creation of broadband cooperatives in unserved and underserved localities.

• No action taken

Explore the creation of a statewide broadband association. The association could include telecommunications providers, public power districts, schools, hospitals, municipalities, counties, and other stakeholders interested in advancing broadband in Nebraska. The association could convene regional and statewide discussions and develop and distribute resources such as model or sample agreements.

• No action taken

Encourage local governments to review their rights of way and permitting processes and take steps if necessary to make the processes less burdensome for telecommunications providers.

• No action taken

Measure	2019 Report	2021 Report
Number of leases of dark fiber from public entities	1 July 2019, Nebraska Public Service Commission	1 August 2021, Nebraska Public Service Commission
Number of projects funded through state grant programs*	N/A	60 Remote Access Rural Broadband Grant Program 2020
Number of households and businesses connected through state grant programs*	N/A	17,600 households Remote Access Rural Broadband Grant Program 2020
Total amount of grant funding awarded*	N/A	\$29.5 million Remote Access Rural Broadband Grant Program 2020

Public-Private Partnership Metrics

*New Metric for 2021

Progress on NUSF Recommendations and Metrics

Support the Nebraska Public Service Commission's efforts to stabilize the Nebraska Universal Service Fund by modernizing the contribution system.

• Reforms to the NUSF contribution method for residential services increased remittances from \$32.8 million in 2018 to \$46.8 million in 2020. On May 11, 2021, the Nebraska Public Service Commission approved <u>an order reforming the NUSF contribution method</u> for business services to a per connection surcharge of \$1.75 effective Jan. 1, 2022.

Support the Nebraska Public Service Commission's efforts to modernize the distribution method and improve provider accountability through the system of grant-like awards for broadband infrastructure projects.

• <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. LB 338 was passed by the Legislature and signed by Governor Ricketts on May 5,2021

Encourage the Nebraska Public Service Commission to continue to investigate, through their Rules and Regulations 202 docket, a state-run reverse auction as a mechanism to spur broadband build out in rural areas.

• The Public Service Commission is taking steps to initiate a reverse auction of \$3 million in NUSF support allocated to Frontier. On November 4, 2020, the Commission approved <u>an order</u> initiating a challenge process. The order required carriers to provide notice of projects that use 95% of their available buildout support for that year. If that threshold is not met, any remaining support would be forfeited to fund a reverse auction to bring 25/3 broadband to exchanges within that carrier's territory that do not have projects planned.

Price cap carriers were required to notify the Commission how they planned to use their broadband deployment support for 2021 by July 16, 2021. Approximately \$3 million of support allocated to Frontier is expected to be redirected in 2022.

Encourage the Nebraska Public Service Commission to explore alternate methods for redirecting support that allow for more collaboration between not only the incumbent and competitive carriers, but also the local business community, both main street and agriculture, as well as hospitals, schools, libraries, municipalities, counties, and public power providers.

• <u>LB 338</u> authorized redirection of support via rural-based plan.

Monitor the implementation of the FCC's Connect America Fund II Reverse Auction to evaluate the success of the program and to identify any key lessons learned.

• **The NUSF Subcommittee received update on CAF II buildouts.** Members of the Rural Broadband Task Force's NUSF Subcommittee met with representatives of NextLink on February 2, 2021 to get an update on NextLink's build out of its CAF II reverse auction requirements. NextLink representatives told subcommittee members that NextLink is on schedule to meet its buildout requirements.

NUSF Metrics

NUSF			
Measure	2019 Report Nebraska Public Service Commission	2021 Report Nebraska Public Service Commission	
Annual contributions to the Nebraska Universal Service Fund (By Calendar Year)	2017 - \$35,321,380 2018 - \$32,796,228 2019 - \$18,333,749 (Through 1 st Half, 2019)	2019 - \$43,915,240 2020 - \$46,796,572 2021 - \$22,951,506 (Through June, 2021)	
Annual allocations from the Nebraska Universal Service Fund (By Calendar Year)	2017 – \$40,087,483 2018 - \$33,139,591	2019 - \$42,040,143 2020 - \$45,674,733 2021 - \$45,300,854	
NUSF-108 (Rate of Return Carrier) project- specific households covered, by year		2019 – 500 2020 – 1,020 2021 – 367 (for project notices received through July, 2021)	
NUSF-99 (Price Cap Carrier) project-specific households covered, by year	2017 – 643 2018 – 1,981	2019 – 7,769 2020 – 6,833 2021 – 3,094	

Progress on Broadband Mapping Recommendations

Leverage the FCC's Digital Opportunity Data Collection program or an alternate broadband mapping program created through federal legislation to improve Nebraska's broadband map.

- The <u>FCC and Congress have taken steps</u> to improve broadband data collection, but the FCC has not yet begun collecting broadband deployment data from all providers.
 - Congress passed the Broadband Data Act in March 2020 and provided the FCC with funding in late December 2020.
 - The FCC is working with a number of broadband providers to obtain data to expedite the development of the IT systems and data structures and to help develop training and outreach for providers.
 - The FCC has launched a demo of a <u>new mobile wireless map</u> with coverage information from AT&T, T-Mobile, U.S. Cellular and Verizon.

The Nebraska Information Technology Commission, Nebraska Public Service Commission and other stakeholders should explore strategies to encourage Nebraskans to participate in crowdsourcing efforts developed to enhance federal broadband mapping.

- <u>LB 996</u> authorized the PSC to collect crowdsourced data and implement the Broadband Data Improvement Program. LB 996 was passed by the Legislature and signed by Governor Ricketts on July 24, 2020.
- The <u>Nebraska Regional Officials Council</u>, <u>UNK Rural Measures Project</u> and the <u>FCC</u> have established speed test programs.

Progress on Homework Gap Recommendations and Metrics

Encourage school districts, ESUs, public libraries, and communities to implement programs such as Wi-Fi on buses, hotspot lending programs, low cost pay-by-the-month internet access, or TV White Space deployments for student access on school-issued devices in order to reduce the number of unserved and underserved students.

- Governor Ricketts, the Nebraska Department of Education, Educational Service Units, and local school districts coordinated federal funding to purchase computing devices, hot spots, and internet-enabled devices as well as implement connectivity projects.
 - The ESU Coordinating Council has estimated that the Governor's Emergency Education Relief (GEER) Fund has reimbursed for 30,209 computing devices for public and nonpublic schools, 3,862 computing devices for exempt (home) schools and 3,411 hotspots overall.
 - Omaha Public Schools and other school districts have secured an additional 60,000 internetenabled computing devices using ESSER funding.
 - Nebraska public school districts submitted 92 applications for the FCC's Emergency Connectivity Fund, totaling \$19,896,915 in potential reimbursements, with a majority of the requests going for internet-enabled computing devices.
 - Pilot projects of wireless internet service for student homes included:
 - Nebraska Indian Community College, in partnership with the school districts of Bancroft-Rosalie, Pender, Santee, Umo N Ho Nation, and Walthill, created the Northeast Nebraska Tribal Educational Broadband Services (NNTEBS) project which brought Private LTE over EBS (2.5GHz) to over 750 student households in a two-county area;
 - ESU 10 in Kearney tested TV White Space transmission technologies using conventional height and power restrictions but found the throughput insufficient for educational purposes;
 - Grand Island Public Schools installed a Private LTE over CBRS (3.5GHz) base station for the economically challenged students living in proximity to one of their elementary schools;
 - ESU 5 in Beatrice assisted Tri County Public Schools with a 5GHz wireless transport and internet sharing project with Plymouth Public Library, for Tri County Public Schools students and Plymouth Public Library patrons.
- The Nebraska Library Commission awarded seven public libraries with up to \$165,000 in CARES Act grants to start and/or expand their library hotspot lending programs.

• Thirteen public libraries were connected to fiber for the first time funded by the Remote Access Rural Broadband grant program administered by the Nebraska Department of Economic Development.

Encourage the Nebraska Public Service Commission to implement an E-Rate Special Construction matching fund program with funding from the Nebraska Universal Service Fund to incentivize new fiber construction to public libraries and schools, starting in FY 2021-22.

The Nebraska Public Service Commission established the E-Rate Special Construction Matching Program in 2020. Public libraries in Bancroft, Bayard, Beatrice, Clay Center, Verdigre, and Wymore and the Southwest Public Schools' Elementary School at Indianola were successful in getting fiber for the first time in 2021-22 using the NUSF-117 E-rate Matching Fund program.

• <u>LB 992</u> established the Nebraska E-Rate Special Construction Matching Fund Program and the Nebraska Public Service Commission approved the <u>program</u> in 2020, allocating \$1 million over four years. Public libraries in Bancroft, Bayard, Beatrice, Clay Center, Verdigre, and Wymore and the Southwest Public Schools' Elementary School at Indianola were successful in getting fiber for the first time in 2021-22 using the NUSF-117 E-rate Matching Fund program.

Support the efforts of the Nebraska Library Commission to increase the number of public libraries applying for Category 1 and Category 2 E-Rate support in FY 2020-21 and beyond.

• The percent of libraries applying for Category 1 (external connections) E-rate dropped slightly from 25% in2019-2020 to 24% in 2021-22.

Encourage education leaders and public library staff to be part of local community discussions involving broadband services and digital inclusion.

• The Nebraska Information Technology Commission Community Council has developed a <u>Digital</u> <u>Inclusion Planning Guide and Workbook</u> to help communities, counties and regions develop digital inclusion plans.

Support funding for four regional technicians to assist public libraries with technology support, upgrades, digital literacy training, and E-Rate filing, starting in FY2020-21.

• LB 992 as introduced included a section establishing four regional technician positions within the Nebraska Library Commission but was not included in the amended version of the bill enacted.

Network Nebraska should map its fiber Ethernet circuits showing the location, name of the provider, bandwidth capacity, monthly recurring costs, cost per Mbps, number of bidders, and kbps per student in order to determine areas where advanced services would be cost prohibitive.

• 2019-20 Network Nebraska Ethernet circuit map is available at: <u>https://gis.ne.gov/portal/apps/webappviewer/index.html?id=b21631e9bdc947fc82f7a7ef45c79b86</u>

Homework Gap and Digital Inclusion Metrics

Percent of Nebraskans Lacking Home Internet Subscriptions or Subscribing to Mobile Only		
Measure	2019 Report	Report
Percent of Nebraskans who lack a home	16%	11.9%
internet subscription	2017, ACS 5-Year	2019, ACS 5-Year
Percent of Nebraskans under 18 years of	12%	9.5%
age who lack a home internet	2017, ACS 5 Year	2019, ACS 5-Year
subscription		
Percent of Nebraska households with a	3.7%	6.2%
smart phone only*	2017 ACS 5-Year	2019, ACS 5-Year
Percent of Nebraska households with	7.9%	10.1%
mobile only broadband subscription*	2017, ACS 5-Year	2019, ACS 5-Year
Percent of U.S. adults with a mobile only	17%	15%
broadband subscription	2019, Pew Research Center	2021, Pew Research Center

*New Metric for 2021

Percent Nebraska Libraries and School Districts Applying for E-rate			
Measure	2019 Report	2021 Report	
Percent of Nebraska Libraries Applying for	25%	24%	
Category 1 (External Connections) E-rate	2019-20, USAC	2021-22,USAC	
Percent of Nebraska Libraries Applying for	3%	2%	
Category 2 (Internal Connections) E-rate	2015-20, USAC	2021-22,USAC	
funding		(Year 1 of a 5 year budget period)	
# of Libraries Applying for Special Construction E-rate Matching Program*	N/A	6	
Percent of Nebraska K-12 public school	100%	100%	
districts Applying for Category 1 (External	2019-20, USAC	2020-21, USAC	
Connections) E-rate			
Percent of Nebraska K-12 public school	98%	49%	
districts Applying for Category 2 (Internal	2015-20, USAC	2021-2022, USAC	
Connections) E-rate funding		(Year 1 of a 5 year budget period)	

Nebraska Library Broadband			
Measure	2019 Report	2021 Report	
Percent of Nebraska Libraries Serving Populations of Less than 2,500 with Internet Access of Less than 12 Mbps	42% FY 2017-2018, Nebraska Library Commission	23% 2020, Nebraska Library Commission	
Percent of Nebraska Libraries Serving Populations of Less than 2,500 with Internet Access of Greater than 24 Mbps	16% FY 2017-2018, Nebraska Library Commission	48% 2020, Nebraska Library Commission	
Percent of Nebraska Libraries Serving Populations of Less than 2,500 with Internet Access of 100 Mbps or Greater	.6% FY 2017-2018, Nebraska Library Commission	6.4% 2020, Nebraska Library Commission	
# of Nebraska Libraries Servicing Populations of Less than 2,500 with fiber connections*		26 2020, Nebraska Library Commission	