

Digital Inclusion, Homework Gap and Leveraging E-Rate Funding

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

–Nebraska Revised Statutes 86-1102(3)(g)

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

–Nebraska Revised Statutes 86-1102(3)(e)

Findings

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 according to data from the U.S. Census Bureau American Community Survey 2019 5-Year estimates.

- The population without a home broadband connection includes 32,000 Nebraskans under 18 years old, 102,000 Nebraskans between 18 and 64 years old, and 81,000 Nebraskans 65 years or older.
- Those under 18 are the most likely to have a home broadband connection. 93% of Nebraskans under 18 have a broadband connection at home compared to 70% of Nebraskans 65 years and older.
- Those with lower incomes and lower levels of education as well as minority populations are also less likely to have an internet subscription.
- The percent of residents with a broadband subscription varies by county from a high of 94.2% in Sarpy County to a low of 67.6% in Garfield County. See the table below for a list of the 10 Nebraska counties with the lowest subscription rates.

**Nebraska Counties with Lowest Subscription Rates
2019 American Community Survey 5-Year**

	% Population with Broadband Subscription	Margin of Error
Deuel County	78.1%	5.0
Hitchcock County	76.1%	4.1
Loup County	75.4%	9.2
Cuming County	75.3%	3.3
Pawnee County	74.0%	4.8
Sioux County	73.9%	6.8
McPherson County	72.2%	9.4
Thurston County	70.2%	2.5
Hooker County	68.7%	9.9
Garfield County	67.6%	7.7

Federal funding helped close the device gap for students.

- 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 internet-enabled 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,

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.ⁱ

Federal funding from the CARES Act and the Nebraska Universal Service Fund E-Rate Special Construction matching fund helped libraries improve their broadband connections and start/expand hotspot lending programs.

- 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 Remate Access Rural Broadband grant program administered by the Nebraska Department of Economic Development.
- Funding from the Nebraska Universal Service Fund E-Rate Special Construction matching fund and federal E-Rate program enabled 6 public libraries and one school to get fiber connections in the first year (2021-2022) of the matching fund program. The Nebraska Library Commission reports increased interest in the program and expects the number of libraries applying for funding through the E-Rate Special Construction matching program to increase.

The federal E-Rate program which provides support for broadband connections in schools and libraires is underutilized by Nebraska libraries. Only 24% of public libraries in Nebraska applied for Category 1 (external connections) funding in 2021-22, and 2% of Nebraska public libraries applied for Category 2 (internal connections) funding in year one of the latest 5-year funding period for this program. Reasons cited for not participating in the E-Rate program include the perceived difficulty in applying for funding, lack of time to learn the process and apply, and concerns about requirements for filtering internet content for children. If all Nebraska libraries fully participated in the E-Rate program, it would increase the level of USF support by:

- an estimated \$210,000 in Category 1 E-Rate support per year;
- and an estimated \$3.25 million in E-Rate support for Category 2 over the next five years.

Increased support for low-income households is currently being provided through the FCC Emergency Broadband Benefit Program. Over [15,000 Nebraska households enrolled in this temporary program](#). The federal infrastructure bill infrastructure bill currently pending in Congress includes provisions for a longer-term program which would provide a \$30 per month subsidy for broadband for low-income households.

The Broadband Bridge Grant Program requires applicants proposing to provide service to underserved areas to include a digital inclusion plan. The plan must describe the carrier's efforts to ensure members of the community to be served will be able to afford the services offered, and must describe any discounts and/or support programs to be offered for low-income individuals.

Closing the connectivity gap—especially in rural areas without broadband access—remains a challenge.

Recommendations

- 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.
- Encourage public libraries and schools without fiber connections to apply for support for new fiber construction from the E-Rate Special Construction matching fund program administered by the Nebraska Public Service Commission.
- 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 alternative wireless deployments for student access on school-issued devices in order to reduce the number of unserved and underserved students.
- Encourage education leaders and public library staff to be part of local community discussions involving broadband services and digital inclusion.
- Encourage communities and regions to develop digital inclusion plans to address multi-generational needs.
- Encourage higher education institutions, Network Nebraska, and other partners to pursue all available funding opportunities to increase the capacity and reach of the Network Nebraska backbone, build advanced cyberinfrastructure, and foster collaboration within the statewide research community to advance institutional research and economic development missions.

Homework Gap and Digital Inclusion Metrics

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

**New Metric for 2021*

Percent Nebraska Libraries and School Districts Applying for E-rate		
Measure	2019 Report Data	2021 or Most Recent Data
Percent of Nebraska Libraries Applying for Category 1 (External Connections) E-rate	25% 2019-20, USAC	24% 2021-22, USAC
Percent of Nebraska Libraries Applying for Category 2 (Internal Connections) E-rate funding	3% 2015-20, USAC	2% 2021-22, USAC 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 districts Applying for Category 1 (External Connections) E-rate	100% 2019-20, USAC	100% 2021-22, USAC
Percent of Nebraska K-12 public school districts Applying for Category 2 (Internal Connections) E-rate funding	98% 2015-20, USAC	49% 2021-2022, USAC (year 1 of a 5 year budget period)

Nebraska Library Broadband		
Measure	2019 Report Data	2021 or Most Recent Data
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

¹ Information on library broadband availability is from the Nebraska Library Commission. See Appendix 9 for more information on Broadband Adoption Data and Broadband in Nebraska Libraries or the map at <https://www.zeemaps.com/view?group=3499369&x=-100.053561&y=43.439597&z=11>