

Homework Gap and Leveraging Funding Subcommittee

Findings and Recommendations

Draft—September 13, 2019

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

- As more services move online, internet access is becoming a necessity. Students who need to use the internet to complete homework are especially impacted. The term “homework gap” is used to describe the challenge that students who lack home internet access face in completing online assignments.
- Approximately 16% of Nebraskans and 12% of Nebraskans under 18 years of age lack a home internet subscription.¹ In addition, approximately 17% of Nebraskans only have mobile-broadband internet, which may be limited by data caps.² Mobile-only broadband users may also lack a computer or tablet which can make some tasks like applying for jobs or completing homework online more difficult.
- In some schools, the percent of students without internet access may be greater than 30%.³
- Libraries are key community partners in providing internet and computer access to students and the general public—especially in rural areas.
- 84% of Nebraska public libraries serving populations less than 2,500 reported internet speeds of less than 24 Mbps down, with 68% reporting speeds of less than 13 Mbps.⁴

¹ Source: U.S. Census Bureau 2017 American Community Survey 5-Year Estimate Data available at <https://factfinder.census.gov/>. Note: The percent population with broadband internet subscription from the U.S. Census Bureau 2017 American Community Survey 5-Year Estimate includes those who subscribe to cable, fiber optic, or DSL, satellite or a fixed wireless service as well as those who only use mobile broadband plans for internet access.

² Pew Internet Research Center. Internet/Broadband Fact Sheet. Available at <https://www.pewinternet.org/fact-sheet/internet-broadband/>

³ In a recent survey of Nebraska teachers, 49% of teachers from ESU 19 (Omaha Public Schools) and 32% of teachers from ESU 1 (Wakefield/Northeast Nebraska) estimated that over 30% of their students lacked internet access at home. See Appendix 10 Supplemental Information--Addressing the Homework Gap and Leveraging Funding.

⁴ 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>

- Having high bandwidth of at least 100 Mbps available in public libraries would not only provide patrons with ample bandwidth for internet-dependent applications, but would also demonstrate high bandwidth capabilities to community members.
- Some school districts, ESUs, public libraries, and communities in Nebraska and in the United States are exploring or implementing 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.
- Strategies which address the homework gap can also help improve internet access for other demographic groups who lack internet access as well.
- The federal E-Rate program provides support for broadband connections in schools and libraries under two categories of service: Category 1 services to a school or library (telecommunications, telecommunications services and Internet access), and Category 2 services that deliver Internet access within schools and libraries (internal connections, basic maintenance of internal connections, and managed internal broadband services). Discounts for support depend on the level of poverty and whether the school or library is located in an urban or rural area. The discounts range from 20 percent to 90 percent of the costs of eligible services.
- The E-Rate program is underutilized by Nebraska libraries with only 25% of public libraries in Nebraska applying for Category 1 (external connections) funding, and 3% of Nebraska public libraries applying for Category 2 (internal connections) funding in 2019-20.
- 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.

Key Recommendations

- *Increase the number of public libraries applying for E-Rate support;*
- *Fund four regional technicians to assist public libraries with technology support, upgrades, digital literacy training, and E-Rate filing;*
- *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.*
- *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.*
- *Encourage education leaders and public library staff to be part of local community discussions involving broadband services and digital inclusion.*

- The E-Rate Program includes a matching program for special construction charges for high-speed broadband. The E-Rate Program will increase an applicant's discount rate for these charges up to an additional 10 percent to match the state funding on a one-to-one dollar basis. States participating in the matching program include Arizona, California, Colorado, Florida, Idaho, Illinois, Indiana, Kansas, Massachusetts, Maryland, Maine, Michigan, Missouri, Montana, Nevada, North Carolina, New Hampshire, New Mexico, New York, Oklahoma, Texas, Virginia, Washington, and Wisconsin.
- If the State of Nebraska provided matching funds for the construction of fiber network facilities to 22 libraries per year for 4 years (estimated at \$55,000 per year or \$220,000 over 4 years), the FCC would contribute a match of \$220,000, the E-Rate program would contribute an additional \$1.54 million in support, and libraries would contribute \$220,000 (based on a statewide average E-Rate discount of 70%).
- Nearly all Nebraska public school districts applied for E-Rate Category 1 (100%) and E-Rate Category 2 funding (98%) for 2019-20.⁵

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 in FY 2020-21 and beyond.
- 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.
- 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.
- 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.
- Encourage education leaders and public library staff to be part of local community discussions involving broadband services and digital inclusion.
- 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.

Metrics

Percent of Nebraskans Lacking Home Internet Subscriptions or Subscribing to Mobile Only	
Measure	Most Recent Data
Percent of Nebraskans who lack a home internet subscription	16% 2017, ACS 5-Year

Percent of Nebraskans under 18 years of age who lack a home internet subscription	12% 2017, ACS 5 Year
Percent of U.S. adults with a mobile only broadband subscription	17% 2019, Pew Research Center

Percent Nebraska Libraries and School Districts Applying for E-Rate	
Measure	Most Recent Data
Percent of Nebraska Libraries Applying for Category 1 (External Connections) E-Rate	25% 2019-20, USAC
Percent of Nebraska Libraries Applying for Category 2 (Internal Connections) E-Rate funding	3% 2015-20, USAC
Percent of Nebraska K-12 public school districts Applying for Category 1 (External Connections) E-Rate	100% 2019-20, USAC
Percent of Nebraska K-12 public school districts Applying for Category 2 (Internal Connections) E-Rate funding	98% 2015-20, USAC

Nebraska Library Broadband	
Measure	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
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
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

⁵ Source: Universal Service Administrative Corporation (USAC) Data Retrieval Tools:
<https://slpin.universalservice.org/DRT/Default.aspx>