

Project Title: Nebraska Schools and Libraries—Breaking the Ice and Igniting Internet Relationships

Project Summary: The Nebraska Library Commission, in partnership with the State Office of the Chief Information Officer, plans to use the SPARK Grant of \$25,000 to incentivize up to five rural public school districts and five rural public libraries to work together to increase the internet speeds at the public library, provide homework hotspots for students who lack internet at home, and empower the public library to become a key Community Anchor within the community. The **Nebraska Schools and Libraries—Breaking the Ice and Igniting Internet Relationships** project will result in a replicable model for school/library partnerships and collaboration, interagency communication, diagnosis and resolution of technical impediments, and maximization of Category 1 and Category 2 E-rate funding for public libraries.

Statement of National Need: Rural citizens, with and without school children at home, generally do not have access to the same internet speeds or affordability as their urban counterparts, and hence, do not have access to the same educational, economic, informational, and cultural opportunities. According to the FCC's 2016 Broadband Progress report, 39% of rural Americans (23 million) lacked access to the FCC broadband definition of 25Mbps up/3Mbps down service, compared to only 4% of urban Americans. On rural tribal lands, 68% lack access. In 18 rural Nebraska counties, over 95% of residents are unable to reach the 25Mbps/3Mbps speeds. Public libraries are often the only community internet access location for small, rural communities.

A rural, sparsely populated state, Nebraska has 269 public libraries and 244 public school districts with a population of 1.9 million people spread out over 77,368 square miles. Sixteen of 93 counties have a population density of less than two persons per square mile. Two-thirds of the public school districts have fewer than 500 students, yet 100% of the districts are connected to the statewide network through scalable fiber optic connections and all file for the Universal Service Fund's School and Library Program (E-rate). In stark contrast, 82% of Nebraska's public libraries receive internet through DSL or cable modems, with speeds less than 25Mbps, and an overwhelming majority do not file for E-rate support for external or internal connections. Correspondingly, a 2017 report by the American Library Association found that rural libraries had a median download speed of just 10 Mbps in 2014.

Quite surprisingly, these two community anchor institution subsets do not communicate or collaborate on anything internet-related, yet they are often located within close geographical proximity. Since it is believed that public school districts and public libraries can collaborate and co-apply for E-rate funding within existing FCC and USAC rules, there is no need to seek complex FCC waivers. There is a high national need for successful school/library projects that demonstrate that E-rate funding can be secured for both Category 1 (external) and Category 2 (internal) upgrades at the public library, with a minimum amount of risk.

Project Design, including Work Plan: The **Nebraska Schools and Libraries—Breaking the Ice and Igniting Internet Relationships** project will use an aggressive one-year implementation plan to:

1. Advertise for proposal submissions from school district and public library partners (January, 2018);
2. Accept and evaluate proposal submissions (March, 2018);
3. Notify five selected partners of funding approval (April, 2018);
4. Inaugurate project partner planning meetings (May, 2018);
5. Kickoff five Spark Grant projects (July 1, 2018);
6. Conduct E-rate training, local project planning, Form 470 and RFP procurements (Fall, 2018)
7. File E-rate forms for Category 1 and Category 2 services (Spring, 2019)
8. Implement Category 1 and Category 2 projects (June, 2019)
9. Complete projects, submit final report of best practices and replication models (June 30, 2019)

Projected National Impact: Public libraries can become much stronger community anchors if these libraries, themselves, have faster internet to share with patrons to promote civic engagement, cultural opportunities, continuing education, and economic vitality. This pathway to faster internet can be shorter and more affordable if school districts and public libraries work together on a community-wide, interconnection strategy and implement interdependent support mechanisms to manage internal and external networks.

While the USF School and Library Program (E-rate) was set up to support both schools and libraries, there are no program incentives for these two political subdivisions to work together. And, of the 56 states and territories eligible for E-rate, 48 (86%) listed separate State E-rate Coordinators employed by separate agencies <http://e-ratecentral.com/us/default.asp> who seldom collaborate. With fiscal challenges and scarce resources, it is high time that public schools and public libraries be inspired to work together for the good of the community.

It is believed that more technical cooperation between schools and libraries would lead to enhanced programmatic outcomes: A) Faster, more affordable internet would attract more library patrons with greater usage; B) more sophisticated internal networking would allow for differential filtering options to achieve CIPA compliance; C) cloud videoconferencing solutions present untapped educational resources for public libraries; and D) revitalization of the public library as “the place to go” for educational and informational resources.

The **Nebraska Schools and Libraries—Breaking the Ice and Igniting Internet Relationships** project will function as a national demonstration project with key features that will improve the internet speeds of rural public libraries, test an inter-organizational support model that focuses on updated internal and external networks, and increase the level of E-rate participation, particularly by public libraries.

Performance Goals and Outcomes: Using five rural school/library project sites, this project will:

- Augment rural public library internet speeds to the FCC minimum of 25Mbps down/3Mbps up or greater;
- Upgrade internal public library networks to 802.11ac and Cat 6 and/or 6a wiring;
- Create at least one supervised homework hotspot in each public library so that K-12 students can access public school networks and resources while in a public library setting;
- Improve the equity of access and digital inclusion of rural community citizens by increasing the speed of public Wi-Fi locations, and enable selected partners’ staff to travel to share their experiences;
- Deliver training and assistance in establishing credentials within the USAC E-rate Productivity Center (EPC) so that E-rate applications and funding can be maximized to improve external and internal networks;
- Explore cloud-based videoconferencing to bring virtual field trip programs to rural communities.

Budget Summary:

Entities	Spark Grant Funds	Matching Funds	Total Project Funds
Project Site 1	\$ 4,800.00	\$ 960.00	\$ 5,760.00
Project Site 2	\$ 4,800.00	\$ 960.00	\$ 5,760.00
Project Site 3	\$ 4,800.00	\$ 960.00	\$ 5,760.00
Project Site 4	\$ 4,800.00	\$ 960.00	\$ 5,760.00
Project Site 5	\$ 4,800.00	\$ 960.00	\$ 5,760.00
Reimbursable Travel	\$ 1,000.00	\$1,000.00	\$ 2,000.00
Total	\$25,000.00	\$5,800.00	\$30,800.00