

## **Nebraska Library Commission**

### **Library Broadband Builds Nebraska Communities**

#### **Problem Statement**

Communities throughout Nebraska face a significant gap in access to adequate broadband Internet and computer services. For example, a large number of low income citizens cannot afford home broadband adoption and a high population of senior citizens does not understand the importance of these technologies. This lack of reliable Internet and computer access prevents these people and others from benefitting from valuable job search and job skills training, educational opportunities, crucial e-government information and high-quality health information.

Libraries throughout Nebraska address this challenge in their communities by offering free public access computer services. However, with the number of annual visits to Nebraska's libraries growing by 34% from 2003 to 2008 and the state having the fourth highest per capita use of Internet computers in public libraries, Nebraska libraries are struggling to meet high demand.

As a result, low-income, unemployed, aged and other populations that need free public computing services have insufficient access to broadband Internet on inadequate and outdated computers. In a survey of Nebraska libraries, 84% said that patrons experience significant wait times in a typical week, with 61% noting that patrons experience these waiting times four or more times per week. Furthermore, nearly one-half of computers in surveyed libraries were installed four or more years ago, making most computer performance sluggish for many of today's applications. In terms of Internet access, 53% (versus 17% nationally) of these libraries have broadband Internet service with a maximum speed of less than 1.5 megabits per second.

The story of Wymore Public Library, one of the public computer centers selected for this project, illustrates the problems caused by this inadequate access. Wymore's computing center users have multi-faceted needs: school children are bused to the library each day to complete their homework via an after-school program; unemployed persons fill out online forms to receive benefits; the local Army Reserve Unit uses the library's computers for training and test taking; the general public increasingly uses applications like Skype to speak to relatives located abroad; the local fire department uses computer time for training members; and senior citizens often express the desire to take basic computer courses.

But with just six computers and an Internet access speed of .5 Mbps, Wymore Public Library, like many others throughout Nebraska, is challenged to meet these needs. People are limited to just 30 minutes of computer use time, some groups are forced to use computers at odd hours when the library is closed, and bandwidth intensive applications such as online video and Internet telephony are often unusable.

#### **Addressing the Need**

The Nebraska Library Commission (NLC) seeks to transform the broadband and computing capabilities in 147 of 290 Nebraska's library outlets. These libraries were selected because they serve communities with high proportions of vulnerable and underserved populations. 143 of the libraries serve communities with a median income below the national average, and more than 70% are located in underserved communities where estimated home broadband penetration is 40% or less. These libraries serve 86% of all low income areas in Nebraska and 52% of Nebraska's underserved

broadband communities. Additionally, Little Priest Tribal College/Winnebago Public Library is included, serving the federally-recognized Winnebago tribe.

Libraries will be provided with a total of 1,096 new or replacement computer workstations equipped with office suite and security software, 45 broadband speed upgrades from existing service providers, and peripheral equipment, including 136 printers, 95 scanners and 73 video projectors. A detailed survey of current capabilities, user need and future demand of the project's 147 library public computer centers drive these proposed upgrades.

This technology will be supplemented by training programs in the areas of Internet and computer literacy, career advancement, economic development, distance education, health information and e-government. Key project partners – such as Central Community College, Nebraska Department of Labor, Nebraska Court Administrator's Office, Nebraska Community Foundation, Center for Rural Affairs, Center for Rural Entrepreneurship, University of Nebraska-Lincoln Extension, University of Nebraska Medical Center, and the National Network of Libraries of Medicine – will facilitate these programs. Library computer center locations will serve as the delivery platform for these programs by providing patrons with access to audio and video webinar content and interactive computer-based training. Furthermore, library staff will be trained by these expert partners so that they can continue to support these efforts after the grant period ends.

These enhanced computer centers and programs will combine to enable the project to achieve five primary goals:

- 1) Enhance Internet and computer literacy
- 2) Create opportunities to increase income status
- 3) Increase educational access and opportunities
- 4) Improve access to health information, with emphasis on seniors
- 5) Improve access to e-government information for vulnerable populations

Increasing the number of computers and equipment alone will instantly address the unsatisfied demand of current users, but this project also seeks to do more. The project will drive new users, particularly from vulnerable and underserved populations, to the library by increasing awareness of services in local communities and making centers more accessible. This will be accomplished by providing materials in 9 languages for English Language Learners (ELL), supplying 59 American Disabilities Act (ADA)-compliant workstations to libraries that do not have them to improve computer/broadband access for persons with disabilities, and providing programs and training on computer literacy and health information access targeted at traditionally underserved populations such as seniors. Additionally, mobile carts that can store laptops will be deployed to 33 public computer centers. This will allow these laptops to be used outside of the library in local communities, including training in other community anchor institutions.

### **Service Area Information and Demographics**

This project will reach 896,763 people, or 47% of Nebraska's total population. Within the project service area, an estimated 572,847 people live in households with a median income below the national median income, 333,249 are seniors, 99,348 are persons with disabilities, and 37,376 speak English as a second language. Little Priest Tribal College/Winnebago Public Library serves 1,435 Native Americans. Overall, we estimate that these library computer centers will receive 258,943 unique visitors, a 41% increase versus the current number of users. We expect 42,726 people to participate in one or more of the training programs we will offer.

### **Ability to Achieve Intended Results**

The NLC team has extensive experience in the areas of project management, technology, federal/state grant procurement and compliance, utilizing relevant federal/state programs, such as E-rate, and marketing. The NLC already works extensively with local library public computer centers and key project partners.

The NLC successfully manages other related public computer center projects of similar in size and scope, including administering \$1.5 million through the federal Library Services and Technology Act State Program; providing administrative and training support for more than \$1.5 million worth of online computer services and products to 200+ libraries; and providing 300+ hours of library training and technology innovation through Technology and Access Services programs. Furthermore, several metrics will be tracked to ensure the project meets its objectives and solves defined problems, such as computer wait times; number of new library public computer center users; and program participation by demographic type.

### **Jobs Created**

We estimate that this project will create 40 jobs. Nine of these jobs will be direct jobs created through BTOP funding for project support roles, including program, compliance and IT management. Remaining jobs will be indirect or induced based on project spending. Training for individuals on job search and skills and for entrepreneurs and small businesses on business development will spur additional career and economic opportunities.

### **Cost of Project**

The total cost of this project is \$3,668,189. Notably, equipment expenditures – such as computers and networking equipment – account for \$2,238,642 of the project cost and broadband service related expenses make up an additional \$292,251. The NLC is \$2,416,403 in BTOP funding and the remaining \$1,251,786, or 34.1% of project costs, will be provided through a cash match from the Bill and Melinda Gates Foundation.

### **Project purpose**

Most of Nebraska's libraries serve their communities as free public computer centers and, in many instances, are the only available free Internet and computer access for Nebraska's high proportion of low income, senior, and other underserved populations. Nebraska has the fourth highest per capita use of Internet computers in public libraries and the number of annual visits to its libraries has grown by 34% from 2003 to 2008. These budget-constrained libraries, however, are struggling to keep up with growing demand for public computer center services.

As a result, citizens cannot access these computers and the Internet when and for how long they need. In a survey of libraries throughout the state, 84% said that patrons experience significant average wait times in a typical week, with 61% noting that patrons experience these waiting times four or more times per week. To combat this, most libraries are left with no choice but to place time restrictions on computer usage.

Nebraska libraries are not only challenged by quantity of bandwidth and computing, but by quality as well. Nearly one-half (48%) of computers in surveyed libraries were installed four or more years ago, making most computer performance sluggish for many of today's applications. In terms of Internet access, 53% of these libraries have broadband Internet service with a maximum speed of less than 1.5 megabits per second per library building.

This project will transform broadband and computing capabilities of 147 out of 290 library public computer centers throughout Nebraska and delivers new programs and services that address the state's most pressing needs. This grant will provide these libraries with a total of 1,096 new or replacement computers equipped with office suite and security software, 45 broadband speed upgrades from existing service providers, and peripheral equipment, including 136 printers, 95 scanners and 73 video projectors.

In all, the libraries included in this proposal serve 896,763 people, or 47% of Nebraska's total population. Each library is located in a community with a high percentage of vulnerable and/or underserved populations. 143 of the libraries serve communities whose median income is below the national average and more than 70% of them are located in underserved areas where estimated home broadband penetration is 40% or less. These libraries serve 86% of all low median income areas in Nebraska and 52% of Nebraska's underserved broadband communities.

With improved broadband and computing access, along with programs targeted at Nebraska's vulnerable and underserved populations, the project will achieve five primary goals:

1) **Enhance Internet and computer literacy.** Library staff will receive comprehensive Internet and computer training, so that they can, in turn, train computing center users on basic skills, making these technologies more relevant and accessible to non-broadband and computer users. Key partners and staff include Central Community College, the Omaha Public Library, project IT staff, and local library training staff.

2) **Create opportunities to increase income status.** The population served will have the opportunity to increase employment opportunities by receiving training on and better access to online job search databases and job skills programs. This will broaden their career opportunities and make people more valuable to employers. Training to develop and energize entrepreneurs will also be offered. Key partners include the Nebraska Department of Labor, the Center for Rural Entrepreneurship and the Center for Rural Affairs.

3) **Increase educational access and opportunities.** Distance learning is a growing channel for K-12, adult and higher education delivery in Nebraska. Increased broadband speeds will ensure that these distance learners can view all available online learning content. Key partners include various Nebraska community colleges, Network Nebraska, and the University of Nebraska-Lincoln Extension.

4) **Gain greater access to health information, with emphasis on seniors.** Sufficient broadband speed and Internet/computer literacy is required to access quality health content and services that are increasingly offered online. This creates a particularly acute problem for seniors, many of whom do not subscribe to broadband at home (140 library partners serve communities with a 65+ population above the national average), yet have a significant need for health information. Project program training will educate computer center users on how to search for and access online health information and services. Key partners include the University of Nebraska Medical Center McGoogan Library of Medicine and the National Network of Libraries of Medicine.

5) **Improve access to e-government information for vulnerable populations.** Libraries will leverage statewide partnerships, using outreach and support strategies to facilitate use of broadband by vulnerable populations for e-government information. These will result in a better understanding

of how to use of online forms, such as tax and court information. Key partners include the Nebraska State Court Administrator and local Health and Human Services offices.

This project strongly supports three distinct BTOP objectives:

- It provides improved access to broadband service to consumers residing in underserved areas of the country;
- It provides broadband education, awareness, training, access, equipment and support“ to a library while facilitating the use of broadband services by vulnerable populations; and
- It stimulates the demand for broadband, economic growth and job creation.