

Executive Summary Closing the Broadband Gap: Lifelines for New Yorkers

In NY, the portrait of broadband adoption rests well below the national average of 62%. Minorities, seniors, rural and disabled populations trail well below broadband adopters statewide. The range of adoption hurdles, i.e., interest, age, access, affordability, computer availability, and rural location has been whittled away by a defined statewide broadband strategy, tremendous investment in computing at public libraries and a high rate of connectivity at more than 91% of public schools. The remaining obstacle is skillful use and integration into the professional and personal lives of New York citizens. In this proposal, the State Education Department will lead a statewide initiative to engage citizens, learners of all ages, to use broadband technologies effectively leveraging work, funding and leadership.

Our project consists of three primary components:

- Developing curricula targeted for different audiences, covering a broad demographic within New York, including those with special needs such as learners with first languages other than English, concentrating on student populations through community colleges and many vulnerable groups through community libraries;
- Provide Professional development programs for educators and librarians;
- Deliver digital literacy training and education using partner tested curricula across the state through the infusion of technology in the K-12 curriculum
- Encourage participation in broadband activities to stimulate broadband adoption

Our proposal is innovative because it:

- Crosses the lines of traditional education delivery
- Includes professional educators and the general public
- Proposes to use broadband 2.0 apps to raise social approval and endorsement to increase uptake; use broadband as a demonstration of its own value
- Identifies all learning strands and skill sets for the populations in different types of institutions: academic libraries, public libraries, schools, workforce development agencies, etc.
- Proposes a new means of civic engagement through "cyber-sage" training programs, enlisting youth, retirees, seniors and technology enthusiasts to model broadband use as trainers advance broadband uptake

Our project will develop education programs based on training, again targeted at specific and general audiences and available in multiple languages. Our education will be delivered through a variety of methods: leveraging the video capability of teleconferencing awarded in Round One funding of Public Computer Centers, through licensed use of webinar software, downloadable podcasts, and in-person training and education. In those cases where we deliver in-person training, we will use specialized peer-to-peer training methods through our "Cyber-Sages" training model. This model will provide a 30 to 40 hour training program to a corps of local technology literate trainers, using a replicable peer training model. Cyber-sages will conduct literacy classes at community college libraries and information commons, in continuing education classes, in PCC centers and in libraries and schools across the state. Training

coordinators will be responsible for the efficient administration of the program through school and public library systems and regional resource information centers.

The program will drive non-broadband adopters to education and training programs which stress enhanced career and work opportunities, public safety, and the better understanding of search strategies for living in a digital culture. Bringing the power of broadband to citizens through mentoring and testimony is a chosen strategy.

New York has benchmarks based on library data of the tremendous use and demand for Internet services, recording 20.3 million sessions at public access terminals in New York in 2008. In the 2009 calendar year, many isolated regions will now have broadband for the first time. These areas are particular targets for new adoption. A modest goal of 2,500,000 new broadband subscribers in 2010-11 would raise the percent of adoption by New Yorkers to 65%. Currently, between 49% and 52% of New Yorkers are broadband subscribers. At the conclusion of the project we anticipate adoption of broadband by nearly 5 million additional users. Individuals who are: economically disadvantaged, speakers of English as a second language, aged, blind, physically handicapped and children are specific targets for educational outreach, digital literacy and public awareness initiatives. These populations are over-represented in the population of New Yorkers who do not subscribe to broadband. Therefore, our outreach and education efforts will be focused to increase the adoption rate within these communities.

New York's Public Computer Center award in Round One ARRA funding focused on locating centers in hi-need geographic areas previously identified as economically disadvantaged. This will reinforce our ability to reach our target audiences. Unemployment in the period from December 07 to December 09 has increased by 4% on average in upstate communities to a statewide average near 10%. Urban locations in New York City, lower Westchester and Niagara are well above a 10% unemployment rate which has continued to rise through January 2010. New York ranks behind much smaller states in broadband penetration and has fallen in terms of economic competitiveness. Despite New York's populace and commerce, 25% of the states are ranked higher for Digital Economic competitiveness. An example of this decline is in New York City. With a population verging on 10 million, 2/3rds of the population do not have home broadband, and 48% of households are not high-speed broadband subscribers. Large minority and immigrant concentrations in many New York urban environments lag even further behind, a possible result of low personal income and the unprecedented unemployment.

While libraries are recognized as the broadband hub for citizens across the country, (in 72% of instances they provide the only free community access to the Internet) New York is well positioned to advocate for broadband through an infrastructure of 1100 library outlets, with technology infrastructure supported by 23 public library systems and resource information centers. Up to 2009, 24% of rural users indicated the infrastructure for hi-speed connectivity was not available (Broadband Report), but New York has leveraged infrastructure and private funding to address the lack of connectivity in many northern and western New York towns and communities. These developments have primed the pump for an educational and awareness initiative leading to greater broadband uptake, which may in turn spur positive economic growth. The proposed initiative will create a sustainable human infrastructure to build knowledge and access to a digital world. The program will develop and expand a corps of digital literacy

educators to reach the broadest array of citizens so they can become engaged participants in a broadband economy.

The program we propose is unique in that it combines and leverages the skills and resources of the many institutions that comprise the University of the State of NY (USNY) to provide a holistic approach to digital literacy education. Through New York's broad educational enterprise, this project will interconnect the many educational outlets in broadband education, including 7,000 K-12 schools; 37 community colleges and all public libraries. And to create awareness, USNY will leverage its seven public television stations and 240,000 certified public school teachers, counselors, and administrators. The impact of a broadband education program would parallel significant progress in New York's new education technology plan and ongoing efforts to improve broadband infrastructure and penetration at schools and libraries.

USNY has the capacity to manage statewide programs, providing over \$26 billion in aid to localities in NY. The State Library manages \$9 million annually in federal Library Services and Technology Act funds and other federal grants awarded by the Institute for Museum and Library Services. The State Library administers a network of 73 library systems, comprised of 7000 academic, public, school and special libraries and \$100 million in programs. The State Library has also managed \$20 million in private funds from the Bill & Melinda Gates Foundation in support of public access computing. Our project will create 178 new full and part-time jobs within partner organizations for outreach, curricula, web-based instruction, and using teachers, translators, librarians and cyber-sages, the project's human capitol for advocacy. The key partners endorse these projects and will strive to maintain the jobs and connectivity through e-rate, funds to localities and student jobs programs. A total of 44 FTE positions and 134 part-time opportunities within community colleges and libraries are planned. The budget for this statewide is \$12,989,597.