

Bringing Broadband to New York's Libraries

New York State Library Proposal

RFP CIO/OFT 001-2007

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**Partner Organizations:
Public Library Systems of New York State
New York Library Association**

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EXECUTIVE SUMMARY

The New York State Library, under the auspices of the State Education Department, is requesting funding through the New York State Universal Broadband Access Grant Program for a statewide project entitled **Bringing Broadband to New York's Libraries**.

Project Description

This project directly targets rural and urban public libraries that have been identified as serving high-need communities. The State Library is requesting a portion of the funds available “to provide equal and universal access to broadband Internet services for underserved rural and urban areas, including schools and libraries.”

The majority of the funds for **Bringing Broadband to New York's Libraries** will be designated to enable public libraries to create or upgrade broadband access. The remaining funds will provide such libraries with the resources to integrate Community Technology Centers that offer digital literacy training and services (including E-Government services) to their communities.

This important statewide project is designed to accomplish the five goals listed below. These goals support the goals and objectives of the Universal Broadband Access Grant Program outlined in section 1.1 of the RFP as well as the Principles of the Broadband Strategy outlined in section 5.2 of the working draft document produced by the New York State Chief Information Office/New York State Office for Technology (CIO/OFT).

1. To provide broadband access to public libraries serving identified high-need rural and urban communities currently lacking any kind of reliable Internet access in accordance with state-prescribed minimum connectivity standards.
2. To upgrade broadband access (including voice service and wireless access) to public libraries serving identified rural and urban high-need communities in accordance with state-prescribed minimum connectivity standards.
3. To provide funds so that rural and urban public libraries in high-need communities can offer digital literacy training according to state-prescribed standards and identified best practices, thereby becoming Community Technology Centers, working in partnership with local schools, universities, and businesses to increase the level of digital literacy for all households across the state, including members with disabilities.
4. To increase the ability of libraries participating in the grant project to deliver E-Government services to their communities.
5. To increase opportunities for participating libraries to form partnerships with other state and private funding entities in their communities so that they can sustain their digital literacy services.

Under the management of the New York State Library, New York's 23 public library systems, encompassing 1,100 member libraries and branches, and the New York Library Association will collaborate in a statewide effort. The project will focus on 421 of the library systems' member public libraries that have been identified as having a minimum 10-percent poverty level in their

service areas. It will permit these libraries to obtain reliable broadband access or upgrade their broadband access (including wireless access) and enable them to provide digital literacy services, including E-Government services, to their communities. A partial draft list of the eligible libraries is available at www.nysl.nysed.gov/libdev/gateslib/hardware/eligible.htm.

Through a combination of state, federal, and private funding, the State Library can show evidence of a five-year sustainability effort beyond the grant period and can provide a **6:1 match ratio**.

The collaborating library systems will be required to demonstrate a good-faith effort to the State Library that they will employ vendors that are minority-owned and women-owned businesses as a condition for receiving grant funds.

The State Library and the project partners will demonstrate the impact of the grant funds by means of an evaluation process that uses outcome-based evaluation (OBE) methods. OBE methods go beyond performance-based evaluation methods, which merely count numbers, to reveal the effects on and value to communities. (More information on OBE is available at www.nysl.nysed.gov/libdev/obe/index.html).

Needs Assessment

The final report issued in 2000 by the New York State Board of Regents Commission on Library Services, *Meeting the Needs of All New Yorkers: Library Service in the New Century* (<http://www.nysl.nysed.gov/rcols/finalrpt.htm>), includes the Commission's recommendations for 21st century library services in New York State. It emphasized the need for libraries to meet the changing information needs of New Yorkers and the growing role of libraries' technology services in meeting those needs.

Libraries serve an increasingly critical leadership role in telecommunications. They provide a major outlet for critical information services, services that offer benefits, efficiencies, and cost savings to state and local governments. Because a majority of Americans frequent their public library, providing libraries with the means to become Community Technology Centers enables preparation of an informed public able to take advantage of E-Government and economic services that ultimately benefit state and local government.

According to a 2007 survey published by the Pew Internet & American Life Project and the University of Illinois entitled "Information Searches That Solve Problems: How People Use the Internet, Government Agencies, and Libraries When They Need Help," more than half of American adults said they had visited their local public library in the past 12 months. New Yorkers visited their libraries 107 million times in 2006. (For a complete report, see www.pewinternet.org.) These users tend to be younger adults (ages 18 to 30) who are either still in school or have lower-paying jobs and who turned to their local public library for help in solving problems, such as job searches and the use of E-Government resources. The survey found these users to be African American (50 percent) and Latinos (42 percent), compared to 24 percent white Americans. "The reports of public libraries' death due to the rise in the Internet have been greatly exaggerated," said Anne-Imelda Radice, PhD, Director of the federal Institute of Museum and Library Services (IMLS).

Based on the 2007 survey results, a key challenge for libraries is supporting the technology resources needed to serve their diverse populations so that they can continue to be the valued problem-solving resource they are perceived to be by their communities. Seven in 10 people surveyed indicated that they required assistance from library staff in using the library's technology resources. This indicates a clear need for local public libraries not only to offer robust technology resources (including wireless access) but also to become Community Technology Centers.

Other states already have statewide programs to provide their libraries with access to broadband connectivity funding. In December 2007, California announced the most recent statewide initiative called the California Advanced Services Fund (CASF). Under the terms of the initiative, libraries are eligible to apply for broadband connectivity funds in unserved and underserved regions of California. Funds up to \$100 million will be awarded over a two-year period.

Many of New York State's public libraries still do not have adequate broadband Internet access or enough public-access computers to meet the information needs of their diverse communities. Many of these communities are in an information void due to geographical factors (rural areas far from the New York State Thruway without reliable Internet access), socioeconomic conditions (communities unable to afford appropriate technology equipment), or lack of essential computer skills.

There is strong evidence that the demand for adequate broadband access is rising in New York's libraries. A primary example is the increased use of the NOVELNY pilot database program (a pilot program for the Statewide Internet Library). This program provides free access to thousands of current online publications, plus health, business, news, and consumer information resources. Since the program's inception, database usage statistics show a 1,300-percent increase, with annual use recorded at more than 25 million searches. (NOVELNY is at www.novelnewyork.org.)

In 2007, a study done by Florida State University (FSU) in conjunction with the American Library Association (ALA) surveyed the connectivity needs New York's public libraries. The purpose of the ALA-FSU Survey was to examine, in some detail, the issues and challenges facing library connectivity nationwide. Over 90 percent of New York's 1,100 public libraries and branches participated. Preliminary survey results show that library connectivity inadequacies are serious and widespread. This survey confirms both the lack of availability and affordability of high-speed connections and the growing demands of websites and Internet-based services and applications for greater bandwidth. Audio and video applications present additional demand on library bandwidth.

The preliminary survey results found that 95.23 percent of New York's public libraries lacked adequate broadband access services for their patrons due to lack of funding.

Connectivity cost is a major issue for public libraries. The American Library Association has found that simple T1 service (1.5 mbps) can cost more than \$1,000 per month, with a wide

disparity in cost from one area of the state to another. And, as might be expected, the cost of connectivity in rural areas served by smaller libraries with smaller budgets is the highest.

A cost study done in May 2007 by the New York State Empire State Development entitled “Policy Alternatives Supporting Deployment of Broadband Services in Rural Areas of New York State” stated that for rural areas, satellite broadband was recommended over terrestrial broadband even though initial installation fees were higher (up to \$600 per customer site) and monthly fees were higher. Satellite broadband was also faster to install (up to one week) compared to terrestrial broadband (for which construction can take up to two years).

The Metiri Report, a study concerning the use of technology in New York State schools published in July 2007, reported that BOCES Regional Information Centers in New York State were spending a minimum of \$1,000 per month for broadband access fees. The goal of 20 mbps by 2015 stated in the RFP currently costs approximately \$2,500 per month (as reported by Metiri). These minimum fees, coupled with high installation costs, are not affordable for the majority of small rural libraries unless they receive financial assistance.

Currently, New York State's 1,100 individual public libraries and branches receive no direct annual state funding specifically for technology purposes. Although New York State's public library systems receive over \$77 million in state aid, only a small percentage, approximately 1.9 million or 2.4 percent, is specified for technology-related costs. The majority of these funds are consumed by staffing and hardware-replacement costs. Most public libraries already have trouble maintaining their current level of technology services, and are unable to upgrade technology without receiving some help to obtain broadband access or upgrade their current access.

Project Methodology and Management

Bringing Broadband to New York's Libraries is an innovative initiative of statewide partnerships. Under the direction of the New York State Library, the 23 public library systems (see systems locations in Appendix A) and the New York Library Association will collaborate to achieve the project goals described earlier:

- Establishment of reliable broadband access
- Libraries becoming Community Technology Centers
- Libraries delivering E-Government services
- Libraries creating further partnerships for community funding to sustain their broadband access services

The library systems and the New York Library Association have committed their organizations to secure the success of the project (see attached letters of support). The assets of established governance and administrative infrastructure characterize all the partners in **Bringing Broadband to New York's Libraries**. Each partner is an autonomous institution or state agency with longstanding credibility within the library community and in New York State, effectively covering all upstate and downstate regions.

The State Library, through the State Education Department (SED), will serve as the fiscal agent for the project and will administer all grant funds according to the prescribed grant award timeline and the fiscal guidelines of SED and CIO/OFT.

Through an application process, funds will be awarded to the 23 public library systems, which will direct the funds to their appropriate member libraries. New York State's public library systems have a proven history of providing statewide and regional technology-related services to their member libraries. They facilitate sharing of library resources so that all New Yorkers have access to information and library services that advance and enhance their lives as workers, citizens, family members, and lifelong learners. Public library systems also provide cooperative programs and services that help local communities take advantage of economies of scale. System staff provide professional expertise that helps local libraries achieve their full potential. (For more information on New York State's public library systems, go to www.nysl.nysed.gov/libdev/libs/publiclibs/1pls.htm. Also see Appendix A, attached to this proposal.)

Awarding the grant funds to the 23 public library systems is the most expedient, streamlined means of getting the grant funds awarded and expended; it also provides a way to incorporate the greatest accountability into the process. Through a verification process included in their periodic reporting requirements, the library systems will ensure to the State Library that they will pay the appropriate fund amounts to their participating member libraries. The systems will also work with the member libraries to ensure that broadband access projects are completed according to the overall project timeline.

The participating library systems will be required to demonstrate a good-faith effort to the State Library and CIO/OFT that they and their member libraries will employ technology-related vendors that are minority-owned and women-owned businesses as a condition for receiving grant funds.

The majority of the funds will be designated for public libraries that meet the poverty/high-need criteria for the purpose of creating or upgrading their broadband access. The remaining requested funds will be used to provide such libraries and their library systems with the resources to offer digital literacy training and E-Government resources, thereby integrating Community Technology Centers into their local libraries. Only public libraries that have been designated as serving high-need communities, i.e., with a minimum of either 3,000 people or 10 percent of their service population living in poverty according to recent federal statistics, will be eligible to receive the requested broadband access grant funds.

The New York Library Association (NYLA) will enter a contractual agreement with the State Library to provide negotiation services with broadband access providers on behalf of libraries to ensure they are receiving competitive rates and to provide additional digital literacy training at statewide venues (such as conferences and regional meetings). NYLA will also offer libraries participating in **Bringing Broadband to New York's Libraries** new opportunities to discuss and showcase best practices.

A Project Manager (chosen from State Library staff who possess grant management experience) will be appointed to oversee the project under the leadership of Janet M. Welch, New York State Librarian, and Carol Ann Desch, Coordinator of Statewide Library Services. Upon receiving the grant award, the Project Manager will appoint a Project Team consisting of other State Library

staff members, who will work with the participating project partners. The Project Manager, in cooperation with the Project Team and the project partners, will facilitate communications about the project, plan meetings and events, and work together to complete all project activities according to the project timeline and fiscal requirements. Various electronic methods, e.g., listservs, blogs, and the creation of a project website, will facilitate communication.

The Project Manager, along with the Project Team, will award all grant funds in compliance with grand award guidelines and monitor the use of those funds through regularly required interim reports from all project partners. Continued partnership funding will depend on compliance with all grant requirements. The Project Manager will be the contact person for all communication with SED and CIO/OFT.

Project Evaluation and Impact

As previously stated, the State Library will show the impact of the grant funds through an evaluation process that employs outcome-based evaluation (OBE) methods to show community impact and value.

The State Library will contract with an experienced, independent evaluator, selected through a competitive bidding process as required by New York State finance law. The evaluator, working with the Project Manager, will provide an OBE evaluation plan for the overall project and will work with each project partner to develop individual OBE evaluation plans as needed to support common project goals. The project evaluation process will be closely monitored on a regular basis to assess progress and implement corrections, if necessary, ensuring that project goals are achieved. Project outcomes must be measurable and must show project impact. Outcomes will include but not be limited to the following:

- By 2010, 421 New York State public libraries and their users will benefit from those libraries achieving a broadband connectivity speed of at least 1 megabit per second in each direction, or increasing to a minimum of 20 megabits per second each way for those libraries in the “Digital Corridor.”
- By 2013, New York State public library users will benefit from Community Technology Centers that have been integrated as a component of their local libraries.
- By 2013, public library systems and individual public libraries will benefit from funding partnerships that permit them to deliver increased technology services to their users.
- By 2013, public library users will benefit from an increased ability to use E-Government resources through their local libraries.

The Project Manager and the contracting evaluator will closely monitor desired outcomes to track project status and progress toward achieving project goals. Monitoring will include, but not be limited to, interim reports, onsite visits, and regularly scheduled conference calls with project partners. The Project Manager will ensure that individual project partners support the overall project goals and supply needed evaluation information on a timely basis, as required by the State Library and CIO/OFT.

Community Technology Centers

A primary goal of **Bringing Broadband to New York's Libraries** is the integration of the Community Technology Centers:

To provide funds so that rural and urban public libraries in high-need communities can offer digital literacy training according to state-prescribed standards and identified best practices, thereby becoming **Community Technology Centers**, working in partnership with local schools, universities, and businesses to increase the level of digital literacy for all households across the state, including members with disabilities.

As previously stated, libraries provide a major outlet for critical information services, services that offer benefits, efficiencies, and cost savings to state and local government. Libraries provide cost-effective access to key information resources available only through expensive online subscription services.

The American public has learned to view public libraries not only as providers of information resources but also as places where they can receive technology training. Since 2000, with the help of private Gates Foundation funding, libraries have been offering their patrons training classes in basic computer use, general software skills, and basic Internet searching skills. Librarians and library staff have become skilled in training techniques and addressing the needs of their users in all age groups and from many ethnic backgrounds.

In 2006 and 2007, New York's public libraries offered more than 1,800 technology-related training sessions, with more than 31,000 people participating, as reported in library system and individual public library 2006 and 2007 Annual Reports submitted to the State Library. Adequate broadband access would enable these libraries, which already have a proven track record in technology training, to increase the scope and sophistication their training to include such topics as Web 2.0 applications and offer training to the public in using E-Government services. Such training could occur in a formalized group setting or on an individual need-to-know basis. Skilled library staff would be available to help the public during library business hours, in addition to holding training sessions in the evenings and on weekends. Training would also be available 24/7 through online tutorials and webinars on the Internet.

E-Government is a growing and important service for public-access computing and is another source of new stresses on available library connectivity. An important form of E-Government service is emergency response. As a result of recent hurricane disasters off the Gulf Coast, policy makers increasingly see public libraries as locations where local people can go for emergency services and even for access to the outside world in times of crisis and displacement.

Libraries provide Internet access to those who do not have access, particularly poor and minority communities. Libraries providing high-speed connectivity offer a range of sites and services unavailable to individuals who may have basic, low-speed access. Libraries providing their identified high-need communities with access to adequate bandwidth, coupled with their already proved training skills, will serve as Community Technology Centers, enabling an informed public to take advantage of E-government and economic services that ultimately benefit state and local government.

With adequate bandwidth, public libraries can strengthen their already existing partnerships with local schools, universities, and businesses and offer the higher-quality online services needed by those customer groups. Libraries will be able to serve the access needs of a much broader continuum of the public than they can currently serve with limited broadband access.

Project Sustainability and Match Requirement

The New York State Library will use a combination of means to sustain and ensure the success of Bringing Broadband to New York's Libraries beyond the duration of the funding period.

Through a 2007 Opportunity Online Hardware Grant from the Bill & Melinda Gates Foundation, the New York State Library will receive \$4.1 million to strengthen public-access computing in New York's public libraries. With grants to be distributed in 2008 and 2009, 421 rural and urban public libraries across the state will receive funds for the purchase of more than 2,100 public-access computers and related computer peripherals. Those 421 libraries have been identified by the Gates Foundation as serving high-need communities in all parts of New York State that have a minimum of either 3,000 people or 10 percent of their service population living in poverty according to recent federal statistics. The libraries have committed to creating partnerships with their local community groups to provide the required matching funds for their computer purchases, bringing the value of the Gates Foundation grant award to \$6.1 million.

The Gates Foundation grant award will provide the required match for **Bringing Broadband to New York's Libraries** at a 6:1 ratio, a level higher than the 4:1 ratio suggested for the Universal Broadband Access Grant Program. (Additional award information is at www.nysl.nysed.gov/libdev/gateslib/hardware/index.html.)

The Gates Foundation Opportunity Online Hardware Grant award specifies that grant funds may NOT be used for broadband access costs. However, it does provide libraries identified as serving high-need communities with the necessary upgraded computers and related hardware required to connect to the Internet at increased bandwidth speeds. In addition, it will help libraries to form community funding partnerships that will help to sustain **Bringing Broadband to New York's Libraries** beyond the grant period.

In 1997, the Federal Communications Commission (FCC) adopted a Universal Service Order implementing the Telecommunications Act of 1996. The Order, commonly referred to as "E-Rate" (Education Rate) ensures that all eligible schools and libraries (as defined by reduced and free lunch national statistics) have affordable access to modern telecommunications and information services. The program is authorized to distribute \$2.25 billion annually. Discounts can be applied to all commercially available telecommunications services, Internet connectivity, and internal connections. Discounts to libraries range from 20 percent to 90 percent, depending on economic need and location (urban or rural).

New York's libraries have benefited from E-Rate. An average total of 387 libraries and library systems in New York State received an average total of \$12.7 million in the first nine years of the program. In the current program year, 307 libraries and library systems have received a total of \$18.4 million to date.

Because the E-Rate program has a cap on spending, the number of libraries funded and the discount level the program will reach in any given year depend on the total number of applicants nationally. Discounts for Internet connections (E-Rate program priority 2 funds) have seldom extended to the 80-percent mark or lower before funds ran out. Therefore, many libraries receive no discounts even though they are eligible.

The 421 New York libraries in high-need areas receiving new equipment through the Gates Opportunity Online Hardware Grant and improving their connection speed through the Universal Broadband Access Grant Program will sustain their improved broadband access services, in part, by regular, successful, application to the E-Rate program. The State Library will encourage and assist these libraries in that effort. These libraries are likely to receive discounts at the highest end of the program's limits.

In addition to federal E-Rate funds, the New York State Library also awards federal Library Services and Technology Act (LSTA) funds received from the federal Institute of Museum and Library Services (IMLS) to public libraries for the purposes of providing technology training to library system staff, library staff, and the general public. In April 2007, the State Library awarded a total of \$299,500 for this purpose, with additional funding scheduled to be awarded in 2008. An additional \$1.9 million in state funds allocated for technology purposes as part of the public library system aid is expected to be awarded in 2008.

Therefore, providing funding through the Universal Broadband Access Grant Program would leverage already existing federal and private funding sources to complement and expand a statewide public library technology funding initiative already begun through the New York State Library.

Proposed Implementation Timetable

Bringing Broadband to New York's Libraries—Project Timetable	
2008	
March 1:	State Library receives grant award.
March 1– April 30:	State Library appoints Project Manager, who develops Project Team.
	Project Manager and Project Team develop application process (including RFP) for public library systems to apply to State Library for subgranted broadband access funds.
	Application process is posted according to SED processes and guidelines.
	Project Manager and Project Team develop RFP for Project Evaluator; RFP is posted according to SED guidelines and processes.
	Project Manager and Project Team develop contractual agreement with New York Library Association according to SED processes and guidelines.
June 30:	Public library systems' applications for broadband access funds are due to State Library.
July 1– September 1:	Library systems' applications are reviewed and subgrants awarded.
	Project Evaluator RFP is awarded.
	Contractual agreement with New York Library Association is complete.
October 1:	Subgranted library systems receive broadband access funds and begin work with eligible member libraries.
	Project Evaluator begins work with Project Manager and library systems to develop evaluation process.
	New York Library Association begins work with library systems and participating individual libraries to identify cost-effective broadband access vendors and begins negotiation with broadband access vendors to ensure fair and equitable project costs.
October– December:	New York Library Association helps library systems and individual libraries identify broadband access vendors that are cost-effective and continues negotiations with broadband access vendors to ensure fair and equitable project costs
	Project Evaluator, Project Manager, and participating library systems refine evaluation process.
2009	
January– March:	Library systems continue to work with member libraries to identify broadband access vendors and identify infrastructure requirements.
	Project Evaluator continues to work with the Project Manager and participating library systems to develop evaluation process.
	New York Library Association continues to work with library systems and participating libraries to ensure project costs are fair and equitable.

2009 (continued)	
April– December:	Individual libraries begin installing broadband connections.
	Library systems work with individual libraries to integrate Community Technology Centers.
	New York Library Association offers at regional and statewide venues digital literacy training that showcases best practices and follows state-prescribed standards.
December 31:	Broadband installations for participating libraries are complete.
	Community Technology Centers are in place
2010	
January– June 30:	Project Evaluator, with Project Manager, Project Team, library systems, and individual libraries, collects information for project evaluation.
July 1:	Project evaluation is complete.



GLOSSARY

Community Technology Centers: Centers integrated into the public libraries that offer digital literacy training in all aspects of computer and Internet use to the general public (including people with disabilities) according to state-prescribed standards and identified best practices.

High-Need Communities: Communities served by a local public library that contain a minimum of 3,000 people in poverty or a minimum of 10 percent of people in poverty, according to national federal statistics.

Outcome-Based Evaluation (OBE): As defined by the federal Institute of Museum and Library Services (IMLS), a systematic way of assessing the extent to which a program has achieved its intended result.

OBE answers questions such as “What difference did the project make?” and “How did the participant benefit from the project?” It is useful both as a planning tool and as an evaluation tool. Outcomes are beneficial changes for project participants, including changes in skills, knowledge, behavior, attitude, status, or life condition. (More information on OBE is available at www.nysl.nysed.gov/libdev/obe/index.html.)

Public Library Systems: State-funded organizations that support and provide services and programs for member public libraries. New York State's 23 public library systems serve 1,100 individual public libraries and neighborhood branches. The systems provide cooperative programs and services such as resource sharing that help local communities take advantage of economies of scale. System staff provide professional expertise that helps local libraries serve their communities. (Detailed information on New York State's public library systems is available at www.nysl.nysed.gov/libdev/libs/publiclibs/1pls.htm.)