

Broadband Opportunities for New York Public Libraries

***Statewide Technology Sustainability Plan
for New York Libraries***

Opportunity Online Broadband Grant Program

from the

New York State Library

Grant Award # OPPLi009

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Since the submittal in August 2009 of the New York State Library's grant proposal to the Bill & Melinda Gates Foundation for the Opportunity Online Broadband grant program, multiple activities were undertaken to further define and obtain support for a sustainable statewide plan for New York's libraries.

In June 2009, through Executive Order 22, New York Governor David A. Paterson established the New York State Broadband Development and Deployment Council, to be chaired by Dr. Melodie Mayberry-Stewart, Chief Information Officer for the Governor's Office for Technology (OFT). The Council's primary goal is to provide strategic direction to ensure all New Yorker's have access to high-speed networks capable of accessing the Internet and are able to fully participate in today's digital age. Council members represent State agencies such as the Public Service Commission, the Department of Transportation, and the Office of Cyber Security and Critical Infrastructure Coordination.

In fall 2009, the State Librarian, Bernard A. Margolis, was appointed to the New York State Broadband Development and Deployment Council. He serves on one of the working groups, along with the executive director of the New York Library Association (NYLA). The first meeting of the Council was held on December 14, 2009. This Council appointment enables Mr. Margolis and NYLA to create strategic contacts and partnerships to gain support for increased library connectivity and sustainability for New York's libraries.

On February 22, 2010, the State Library held a meeting of the Broadband Advisory Group. This Group was formed in February 2009 and was instrumental in planning the New York Broadband Summit held in June 2009. The State Library had been periodically communicating with this Group through a listserv. Group members represent a wide variety of State agencies, including OFT and the Public Service Commission. At the February meeting, the Group held a discussion concerning issues surrounding library connectivity sustainability and provided input for a sustainability plan.

There are several other projects underway around the State that have potential benefits for increasing library connectivity. We feel that activities conducted as part of the Gates Foundation's Broadband Grant program have helped bring attention to the need of libraries for higher capacity broadband and for the leadership role played by the New York State Library.

The New York State Library, a unit of the State Education Department (SED), has a long-term connectivity goal. The goal is for every public library building in the State to have adequate, affordable and sustainable connectivity capacity, with a minimum of 100Mbps to each library building by the year 2015. This goal is congruent with other State agency goals, such as with the Governor's Office for Technology (OFT), NY State Universal Broadband Strategic Roadmap (see http://www.cio.ny.gov/assets/documents/Final_Broadband_Strategy_June2009.pdf) and with the State Education Department's Statewide Learning Technology Plan (see

<http://www.regents.nysed.gov/meetings/2010Meetings/February2010/0210bra3.pdf>). This goal is also in line with the recently released National Broadband Plan developed by the Federal Communications Commission (FCC). The FCC plan's long-term goals include providing 100Mbps to U.S. homes and affordable access to at least 1 gigabit per second to anchor institutions.

Since the submittal of the State Library's Opportunity Online Broadband grant proposal in August 2009, the State Library has been awarded \$947,517 by the Gates Foundation to increase the connectivity speeds for 70 public libraries to a minimum of 1.5Mbps. The project began in December 2009 and will end December 2011. The State Library has submitted and has been awarded \$9.5 million from the National Telecommunications and Information Administration (NTIA) through their Broadband Technology Opportunities Program (BTOP). This funding will create/expand 30 public computing centers in public libraries and includes increasing their broadband connectivity speeds. The BTOP project began in February 2010 and will end in 2013. The State Library has also been awarded \$235,500 from OFT as part of OFT's Broadband Access Grant Program, for the purpose of creating broadband access for libraries and their local communities in multiple parts of the State. These projects began in January 2010 and will end in 2011.

When the State Library submitted its proposal in August 2009 for the Gates Foundation Opportunity Online Broadband grant program, State Library staff were involved with the preparation of two BTOP proposals and did not have the time or resources to focus and refine the multi-level approach to sustainability mentioned in the submitted Gates proposal. At that point in time, sustainability efforts were merely broken down between types of local and State level activities. Since then, State Library staff have had internal discussions, as well as discussions with Broadband Advisory Group members, regarding how sustainability efforts should be focused.

At the February 2010 Advisory Group meeting, it was decided that there would be a "three-legged stool" approach to sustainability efforts, which would involve local, State, and national activities, with each "stool leg" supporting the activities of the other – giving overall strength to the desired outcome. The three-legged approach is as follows:

- **1) Build librarian and community leader support for the value of libraries having sufficient connectivity to meet community demand and need;**
- **2) Support efforts at the federal and State level for regulations, legislation, and financial support;**
- **3) Increase E-rate funding for New York State's public libraries.**

At its meeting on February 22, the Advisory Group had a lengthy in-depth and intensive discussion about the criteria to be used in choosing sustainability strategies. They suggested the following criteria that contributed to choosing these three strategic directions. Such considerations involved viability (likelihood of success), political feasibility, the opportunity for inclusion in future Board of Regents recommendations, the ability of State Library staff, library and library system staff to be part of the outcomes, the need for facilitating an

educational environment that involves digital literacy and is adequately connected, and the potential for internet sustainability at low cost rates. These three strategies also provide opportunities for collaboration, synergy, and inclusion.

1) Build librarian and community leader support for the value of libraries having sufficient connectivity to meet community demand and need

Multiple research studies regarding internet use have cited that one of the major obstacles to having access to adequate internet is the perception that such access is not necessary. One such study was published in February 2010 by the National Telecommunications and Information Administration entitled "Digital Nation", seen at:

http://www.ntia.doc.gov/files/ntia/publications/ntia_internet_use_report_feb2010.pdf.

Unfortunately, this is an idea that is held by many library staff, library trustees, and their local officials in many smaller library service areas around the State. The Broadband Advisory Group believes that before change can be effected at State and federal levels, there must be a "grass roots" support network at the local level. Identified stakeholders are: library staff, library trustees, library users, New York library system staff, local elected officials, library friends groups, local education leaders (school administrators and teachers), local Department of Labor One Stop career center staff, the business community, vulnerable and underserved local populations, tourists, and local non-profits.

While it is difficult to offer precise numbers, the State Library knows that many of the State's public libraries that lack adequate broadband are located in rural areas, are open limited hours during the week, and are managed by non-certified personnel. Many of these libraries lack the necessary middle mile and/or last mile infrastructure to obtain adequate broadband services. Many also lack adequate staffing resources to attend training sessions which would include learning assessment skills to identify community needs. Many are economically challenged and lack the funds necessary to purchase increased broadband service. And, unfortunately, many libraries face all of these problems. All of these factors present a significant challenge toward upgrading broadband services in their library service areas.

To achieve local level support that would result in increased broadband connections for these underserved libraries, the Advisory Group developed a list of activities they believe will assist in achieving the above-mentioned goal:

- Develop a toolkit that contains materials supporting broadband that have a clear, consistent message, accompanied by appropriate materials (which include technology lexicons), that local library staff and trustees can use with their local officials and library users to communicate the importance and value of having access to adequate broadband. This toolkit will also contain examples of collaborative models that library staff and local officials can use that require community outreach and distance learning capacity. Such toolkit will be posted on the State Library's Gates Broadband project website (<http://www.nysl.nysed.gov/libdev/gateslib/broadbnd/>).
- Provide assistance to local library staff, trustees, and local officials to help aggregate broadband demand to achieve lower costs for services.

- Leverage the public computer center (PCC) model (increased connectivity and public computer access with the capability of teleconferencing services) that is contained in the State Library's BTOP project so that benefits are extended beyond the 30 PCCs in the grant project into more libraries.
- Work with local broadband vendor companies to encourage such vendors to raise the speed levels of internet access they are currently providing to libraries free of charge. Ask local communities who award franchises to broadband and cable companies to request higher speeds as a condition of the franchise.
- Work in partnership with the 23 New York public library systems, organizations that provide technical support and other cost-saving services to their individual member libraries. Library systems are sources of education information and consulting for their members and initiators of meaningful partnerships on both a regional and local level.
- Develop partnerships with State agencies and organizations that have local affiliates (e.g., Department of Labor and Small Business Administration or statewide organizations representing ethnic groups). Work with public libraries at the local level to help them benefit from these partnerships.
- Integrate requirements that demonstrate connectivity sustainability into all appropriate technology grant applications and projects submitted to the State Library, such as LSTA grants, Plans of Service, and annual reports.

2) Support efforts at the federal and State level for regulations, legislation, and financial support

At the same time local support for broadband is being developed, efforts need to be taken at the State and federal levels to enact changes in regulations and legislation that will result in permanent and/predictable funding for library connectivity costs. This strategic direction involves but is not limited to the following key stakeholders: individual libraries and their local officials, New York library systems, the Board of Regents, the Public Service Commission, the New York Library Association, the Library Trustees Association of NYS, the University of the State of New York (USNY), the State Legislature, the Upstate Rural Resources Council, the Governor's Office for Technology, and the Office of General Services (a State procurement agency).

This strategic direction involves multiple challenges. The current economic landscape in New York State is one of fiscal crisis, with the State facing a multi-billion dollar deficit over the next five years and there is a prevailing "Tea Party" point-of-view that is advocating "No new taxes!" Additionally, there are several broadband vendors in New York State, each licensed to serve multiple regional areas, and these vendors are not supportive of legislation amending their service areas or rates.

To meet these challenges, the Advisory Group has proposed the following activities in order to achieve the above-mentioned goal:

- Reintroduce State legislation first introduced in the State Legislature in 2009 effecting a regulatory change with positive benefits for public library connectivity, allowing such libraries to contract with school districts or regional school services providers for broadband connectivity. Currently, public libraries are not able to purchase broadband services from educational entities such as Boards of Cooperative Educational Services (BOCES).
- Submit a capital request for \$20 million for the FY 2011-2012 State budget to the Board of Regents. This request was submitted to the Board of Regents for the first time for the FY 2010-2011 State budget, but was not approved. Such funds would assist many public libraries to obtain the broadband infrastructure necessary to meet the 100Mbps goal by 2015.
- Work with the Public Service Commission to encourage such vendors to change their contract policies to increase the speed levels of internet access they are currently providing to libraries free of charge.
- Investigate the possibility of a State surcharge to promote universal broadband service/access.
- Promote the development of connectivity standards at both the federal and State levels for schools and libraries.
- Promote funding at the State level for the New York State Education Department's Statewide Learning Technology Plan (developed in 2009 - See <http://www.regents.nysed.gov/meetings/2010Meetings/February2010/0210bra3.pdf>). This plan looks to libraries and other cultural institutions to create content and offer learning experiences. Infrastructure that provides adequate connectivity and broadband services to deliver the content and training is an integral part of the plan. The New York State Board of Regents will discuss the possibility of making this plan a priority and seek funding for its enactment from the State Legislature in the 2011-2012 legislative session.
- Promote the use of state-funded public library construction grant projects to fund library infrastructure projects that support increasing broadband connectivity.
- Promote at the State level that libraries become eligible to receive Excels State Aid, which is aid for school construction. Currently, school districts use the Excels Aid to fund infrastructure projects involving internet access and initial connectivity within their school buildings. Many library infrastructure projects are similar to such school building projects. The State aid formula is based on poverty levels and oftentimes the aid is not entirely used within a funding year.

3) Increase E-rate funding for New York State's public libraries

The State Library considers full utilization of available E-rate discounts by New York libraries an important part of its sustainability plan. E-rate discounts help support increasing connectivity costs in challenging economic times and help sustain the affordability of those costs. Approximately 76% of the library outlets eligible for E-rate in New York participate in the program. The State Library's goal is to have 100% of eligible New York libraries receive E-rate discounts by 2015.

The New York State Library currently has a designated staff person, Maribeth Krupczak, a Library Development Specialist, who has been the State Library's E-rate Coordinator for more than four years. Her responsibilities include general oversight of the E-rate program, which could involve a maximum of 755 public libraries, with a total of 1069 outlets/buildings, as well as other types of library systems. E-rate coordination is only one of many job responsibilities assigned to this position. Ms. Krupczak has attended the Gates Foundation funded E-rate training offered by ALA's Office for Information Technology Policy (OITP), and found the information learned and peer relationships formed very valuable. Continuation of this communication network would have a positive effect on state support of program participation. It is important to note that Ms. Krupczak is not responsible for providing daily technical assistance to libraries with filing applications, etc. Technical assistance is provided to local libraries through the state's 23 public library systems. However, given the number of libraries throughout the state, additional support is needed in order to target activities to improve participation. One activity in this plan focuses on improving State Library facilitation of training and support for the corps of 23 public library system staff who work with E-rate applications in their regions. More information regarding the State Library's current E-Rate program can be found at: <http://www.nysl.nysed.gov/libdev/univsvc/index.html>

The State Library, being a unit of the State Education Department (SED), has use of the services of an SED-contracted consultant firm – E-Rate Central (www.eratecentral.com/us/nys/default.asp). This contract covers technical assistance to schools and libraries, but because of the much larger number of school applications and dollars involved, more direct service has gone to schools. Training sessions are dominated by school-specific questions and conditions.

In addition to the staffing challenges above, there are three major challenges involved in achieving 100% participation. 1) Many libraries reject participation in E-rate because of their limited knowledge of the circumstances surrounding the filtering requirement; 2) Many libraries believe that E-rate applications too complicated, requiring technical knowledge beyond their expertise and they are frustrated by the E-rate filing process which is prolonged and confusing; and 3) Many libraries do not have the staffing resources to dedicate to filing and following up with E-rate applications. Staff turn-over and split responsibilities play havoc with successfully advancing the three separate concurrent cycles (previous, current and next year) of the E-rate application.

To meet these challenges, the Advisory Group has proposed the following activities to achieve the above-mentioned goal:

- State Library staff will take an active role in creating the State Education Department's RFP for E-rate consulting assistance. The new RFP will be issued in SFY2010-11. The State Library plans to include language for semi-annual training specifically for library staff, modeled after the OITP example.
- Recruit public library system staff to deliver E-rate application training and mentoring targeted to other public library system staff. In this train-the-trainer approach, public library system staff experienced in E-rate filing procedures will serve as resources for newer staff in other systems. The State Library depends on its library system partners to support individual members in their E-rate applications and technology planning.
- State Library staff will provide information on telecommunications and broadband issues via its website and communications through statewide listservs. A webpage for Recovery Act funding and other broadband initiatives has been created at <http://www.nysl.nysed.gov/libdev/btop/>
- State Library staff will annually assess the reasons for New York State E-rate application denials to libraries and focus training on those points.
- State Library staff will work with others in the State Education Department to comment to the FCC on proposed rulemaking affecting library participation in funding for E-rate.
- State Library staff will offer conference call opportunities for library system staff to allow them to ask questions on the E-rate program and for the State Library to share program updates.
- Advocate for E-rate application changes at the federal level, addressing the following possible scenarios:
 - Support the simplification proposal of the American Library Association's Office for Information Technology & Policy;
 - Advance a suggestion to make E-rate funding automatic, so that libraries would have to "opt out" instead of having to apply
- The State Library will offer a program at the annual New York Library Association conference in 2010 and beyond to discuss perceived barriers to E-rate participation and offer instruction on filing procedures.
- Where appropriate in the above activities, the State Library will include information and training to help librarians become smart consumers of technology: to first understand the services they want to deliver and the capacity those services require, and then negotiate for the necessary technology with their Board or with a vendor.

In summary, while there are many activities under each of the three strategies, it is felt that the support the State Library has from key New York government and education leaders, and the breadth and depth of the activities will, more likely, lead to success, rather than depending only one approach. Activities in each of the three strategies can build upon and support the success of activities in other strategies.

The State Library, working in partnership with other members of the Broadband Advisory Group and NYLA, will play a key leadership role in advancing a sustainability strategy for libraries in New York State. The State Librarian, the Coordinator of Statewide Library Services, and various library development staff have become educated regarding statewide broadband issues and will be periodically updated on ongoing connectivity activities around the State through monthly State Library staff meetings. State Library websites involving broadband issues and broadband project websites will be developed and updated in a timely manner. State Library staff will attend meetings and seminars relevant to broadband issues within the State Library and at other agencies, as well as appropriate library meetings around the State. State Library staff will also speak at meetings attended by library staff and system library staff to educate and update library constituents on broadband sustainability issues and statewide activities. State Library staff will commit time and resources to present a "Broadband Update Program" at the annual statewide New York Library Association Conference in 2010 and beyond, as appropriate.

The State Library's leadership role will be three-fold. 1) First, it will play a key role in implementing the "three-legged stool" and all the activities under each one. 2) Since these activities are intertwined, complex, and involve multiple partners, the second major leadership role will be as a coordinator of the activities, seeking opportunities for synergy, and tying the activities toward a common goal. 3) The third major role will be as an on-going advocate at the State level through membership on statewide broadband groups, testifying at government hearings, and keeping the needs of libraries at the forefront of all broadband activities.

The State Library has improved its capability to plan and think strategically with respect to library broadband issues, has developed its ability to foster collaborations, and has increased its participation in the national policy environment. As a consequence of the State Library's participation in the Gates Foundation Broadband grant program, its knowledge and influence regarding State broadband issues has been greatly strengthened.

The State Library believes that one of the major keys to success for achieving connectivity sustainability for the State's public libraries is to continue to nourish the connections, partners, and collaborations that have begun as a result of the Broadband Grant Program. Partnerships are an integral part to all the major strategies. It is believed that continued partnership with the Governor's Office for Technology (OFT) and the ongoing contacts made with the Broadband Advisory Group members (even among the members themselves) are the two major partnership activities that will be instrumental to successful statewide library connectivity sustainability.

The Governor's Office for Technology is the State agency that will provide leadership for broadband direction in the State. Important policy decisions affecting the direction of connectivity projects will be decided by this agency that could affect libraries. Continued partnership with the Governor's Office for Technology and the State Library representation on the OFT New York State Broadband Development and Deployment Council, will ensure that libraries are "at the table" when important connectivity issues and policies are discussed. The State Librarian will not only attend Council meetings, but also meet periodically with Dr. Melodie Mayberry-Stewart, CIO/OFT, to ensure that OFT understands State connectivity issues from a library perspective. Dr. Stewart will also be invited to speak at statewide library functions involving broadband issues so librarians can become familiar with OFT's statewide role. Dr. Stewart sits on the Advisory Group and spoke at the February meeting about her office's activities and her commitment to library connectivity.

As previously mentioned, the Broadband Advisory Group, with its diverse representation of State agencies and influential interest groups, will continue to be an important partner for connectivity success. It will be the Advisory Group's role to bring library connectivity issues back to their individual State agencies and local community groups and to facilitate the inclusion of libraries in local connectivity projects. The State Library will take steps to ensure that Advisory Group members remain committed through frequent communication, both individually and through a listserv (already in operation), and by scheduling periodic on-site meetings and conference calls. Advisory Group members will also be called upon to give presentations at statewide meetings, where appropriate, in order to update library leaders on local connectivity efforts. The State Library and New York State's library systems will also continue to work together as partners to expand and improve library services throughout the State.

It is believed that the biggest challenge facing the forward movement of increasing library connectivity and sustainability is the increasing budget deficit facing New York State. Library Aid declined by \$15.5 million for the 2009-2010 state fiscal year and will decline by an additional \$18 million for state fiscal year 2010-2011 if current Executive Budget proposed cuts are approved by the Legislature. However, the State Library will address this challenge by communicating more frequently with State legislators to mitigate funding cuts and by exploring private and federal grant opportunities, such as the federal BTOP program. The State Library's PCC application in Round 1 was awarded at \$9.5 million and an application has been developed for submission in the Round 2 BTOP program that involves libraries in broadband adoption. The State Library will continue to educate libraries as to how they can cover their connectivity costs through the federal E-rate program.

Another major challenge is that no statewide connectivity network for libraries currently exists in New York State. The State is challenged by a varied geography and by the presence and control of multiple broadband vendors. The State Library will address this challenge by forging partnerships with policy-makers both in the Public Service Commission (which regulates telecommunications and cable providers) and by working with local lawmakers and public officials to achieve local solutions that benefit library connectivity needs.

The New York State Library will know that the long-term goal for sustainability of library connectivity has been achieved by the results reported in two major data sets: by receiving federal E-rate reports that indicate all public library buildings in the State have applied for and received some level of E-rate funding; and by all public libraries reporting on their public library annual report that their connection speeds are 100Mbps or higher. The State Library is hopeful that such E-rate data and connection speeds will be achieved by 2015, as previously mentioned. In the meantime, these two annual data sets, upon the data being published, will be closely examined by State Library staff and “under-achieving” libraries will be contacted to see whether further E-rate training is needed or if the State Library can help facilitate an upgrade for their connectivity speeds with either their local connectivity vendor or another appropriate vendor.

The first milestone will come in August 2011, when the 70 libraries participating in the Gates Foundation Opportunity Online Broadband Grant Program all achieve the minimum connectivity standard of 1.5Mbps or higher. This means that all public libraries in the State will have met or exceeded the 1.5Mbps threshold and efforts can then be concentrated on further raising their connectivity. Connectivity speed data will be collected from these libraries.

The second milestone will come in 2013, when the BTOP infrastructure and PCC grant projects awarded to the State in 2010 will be completed, resulting in many more libraries having the capacity to upgrade their connectivity. A requirement of the PCC grant project is to purchase appropriate hardware and connectivity contracts so connectivity connections are upgraded. Connectivity speed data will be collected from the libraries involved in the various BTOP projects.

The third milestone will come in 2014 when State Library staff will closely examine the connectivity and E-rate data for all New York public libraries to determine connectivity “gaps”, contacting those libraries to verify data and explore options for increasing their connectivity.

There will be other indicators that the long-term goal for sustainability of library connectivity has been achieved. The State Library has been contributing connectivity data to the connectivity mapping initiative led in New York State by the Governor’s Office for Technology and such connectivity maps will indicate current speeds of libraries and other anchor institutions.

While these are key milestones and indicators, it should be noted that State Library staff will continually work with libraries to assess their needs, will continually seek opportunities for partnerships to advance library connectivity, and will continually seek funding to help libraries meet the State Library’s long-term connectivity goal.