DEPARTMENT OF INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS TESTIMONY BEFORE THE CITY COUNCIL COMMITTEE ON TECHNOLOGY OVERSIGHT ON BROADBAND ADOPTION: CLOSING THE DIGITAL DIVIDE MONDAY, APRIL 23, 2012

Good morning Chairman Cabrera and members of the City Council Committee on Technology. My name is Nicholas Sbordone, Director of External Affairs at the Department of Information Technology and Telecommunications, or DolTT. Thank you for the opportunity to testify today about DolTT's work to expand sustainable broadband adoption across the five boroughs. With me today are Kate Hohman, DolTT's Broadband Project Manager, and Stanley Shor, Assistant Commissioner for Franchise Administration.

Each day across New York City and around the world, City government is accessed by more than 100,000 visitors to NYC.gov. Countless more contact us through 3110nline and by various social media channels. The underlying, common technical denominator in all these interactions is broadband connectivity. As DoITT Commissioner and New York City CIO Carole Post recently noted: "A digital world made smaller than ever by common technologies we can all use and share still remains an awfully big place for those without access to broadband."

Accordingly, the Bloomberg Administration has developed a comprehensive strategy focused on targeted initiatives to expand access to the vital infrastructure of the 21st Century – broadband technology. DoITT helps lead these efforts to enhance broadband adoption in underserved communities across the City. By tapping the City's regulatory authority over cable franchise providers, we help bring free and low-cost Wi-Fi and other tech improvements to public parks, community centers, and commercial sectors valued at more than \$60 million; and by securing \$42 million in Federal Stimulus monies, we are helping increase broadband access for public school students and families, and to launch new, free public computing centers citywide.

First, the Federal Stimulus Awards. As part of the American Recovery and Reinvestment Act of 2009, approximately \$4.7 billion was made available through the Broadband Technologies Opportunities Program, or "BTOP," in the form of competitive grants in three main categories: Infrastructure; Sustainable Broadband Adoption; and Public Computer Center projects. Despite lobbying by New York and other cities, only several hundred millions of this funding was made available for programs that target adoption-related initiatives in the latter two categories. Nonetheless, the City secured \$42 million in funding for programs to increase access to affordable broadband service across underserved communities and among low-income public school students. The aggressive lobbying efforts of both the City Council and the City's Congressional delegation were also instrumental to the City's success in this regard.

The same programs are also benefitting from nearly \$16 million in additional "matching" funds from the City, private-sector, and non-profit partners in these programs, including all three of the City's franchised cable providers: Time Warner Cable, Cablevision Systems, and Verizon.

BTOP Awards & "NYC Connected" Initiatives

In March 2010, the Department of Commerce awarded DoITT \$22 million in BTOP funding for the **NYC Connected Learning** initiative. Over two and a half academic years, **NYC Connected Learning** will provide more than 18,000 low-income sixth grade students and 40,000 public school household members with free home computers, access to discounted broadband service, high-quality digital educational resources, and digital literacy training to support sustainable adoption of broadband and boost educational outcomes.

As of March 31, 2012, the program had served 72 schools and 16,365 students (or 35,717 students and household members). We also estimate that to date, 6,976 families have become new broadband adopters through the program, 1,410 of which have subscribed through the attendant discount program offered.

In September 2010, the Department of Commerce awarded DoITT \$20 million in additional BTOP funding. Fourteen (\$14) million dollars of this total was awarded for the **NYC Connected Communities** initiative, to significantly expand the availability and capacity of public computer centers in the City's highest poverty areas. The program is anticipated to serve 40,000 new users weekly across approximately 100 libraries, public housing facilities, senior centers and community centers. Benefits include more than 1,000 new workstations and an array of new resources for digital literacy, employment support, and other critical services.

As of March 31, more than 60 centers across the City had been opened or enhanced. In these centers, work has included installation of new or improved computer equipment and other technologies, upgrades to broadband service speeds, and the introduction of a wide range of new training programs and outreach efforts.

Six (\$6) million of the September 2010 BTOP award went to fund NYC Connected Foundations. This program targets New York City's transfer school students, those between the ages of 16-21, who have disengaged from high school and are not on track to graduate. To help these students develop necessary skills for graduation, a successful transition to college, and a career, students and their families at up to 43 transfer high schools will receive computer training, free netbook computers, and access to discounted broadband service upon completing a credit-bearing digital literacy training course. To date, 36 locations, and more than 2,400 students have enrolled in the program, with 714 of these students having completed the course and received home computers and discounted broadband offers. Measurement of new broadband adoption within this group is still underway.

Taken together, this \$42 million in Federal BTOP funding, and the additional \$16 million "match," are key components of the City's strategic commitment to identify innovative means and funding methods to foster greater digital inclusion. The work of several City agencies, including the Department of Education, Department of Parks and Recreation, Department for the Aging (DFTA) — as well as the City's Housing Authority (NYCHA) and all three public library systems — was and remains indispensible to developing these innovative programs.

As we enter the final year of our March 2010 award, and the second half of our September 2010 awards, the City is working to assess program successes and challenges, and to identify both program updates for the final years of implementation and plans for sustaining program components after grant funds have been expended.

Cable Television Franchise-Related Initiatives

As the City's telecommunications agency, DoITT negotiates and administers franchises with private companies that use the City's streets and sidewalks to provide public services – including cable television providers. The second major component of the City's broadband strategy derives from this authority. While Federal law caps at 5% the maximum amount of revenue municipalities across the country can receive from cable companies, as part of its recent franchise renewals with Time Warner Cable and Cablevision Systems, DoITT negotiated approximately \$60 million in additional commitments from these companies for a range of broadband-specific public benefits. These include:

Adoption/Expansion of Affordable Broadband Service – To provide free broadband access to low-income communities across the City, Time Warner Cable will fund 40 public computer centers located in facilities run by local not-for-profit organizations. Earlier this month, for example, Commissioner Post joined NYCHA, the Department of Youth and Community Development, and local elected officials to open a Time Warner Cable Learning Lab at the James Weldon Johnson Community Center in Harlem. The state-of-the-art facility will serve as a vital community service, providing children and adults with access to computers, e-learning programs and high-speed Internet.

The James Weldon Johnson Center, and facilities like it, is in addition to the approximately 100 centers being expanded and/or created under the *NYC Connected Communities* program as described earlier. And for its part, Cablevision Systems will expand access to high speed broadband in its service areas by upgrading the free Internet service it provides to 75 public library branches in the Bronx and Brooklyn.

Broadband in Public Spaces – Together, Time Warner Cable and Cablevision Systems will spend approximately \$10 million by autumn, 2013 to create Wi-Fi access points in City parks across the five boroughs – and to maintain the systems through 2020. This service will be free to all users for up to 30 minutes a month, with a nominal fee of 99 cents per day thereafter, and free at all times to Time Warner Cable and Cablevision subscribers.

The expansion of Wi-Fi in public spaces as part of the cable franchise renewals is in addition to AT&T's five-year commitment to the City of free Wi-Fi in 26 park locations in 20 parks across the five boroughs. Currently, 20 locations in 15 parks – at least one in each borough – are providing the public free Wi-Fi today, with another half-dozen coming online by year's end.

Broadband in Traditionally Underserved Areas — Both cable companies will invest an additional nearly \$2 million each year of their contracts to bring fiber into commercial or industrial buildings not currently being served by them, as directed by the City. Time Warner Cable has also committed to installing fiber optic cable down 20 miles of street per year to upgrade non-residential blocks, and will this year also be wiring the whole of the Brooklyn Navy Yard. We expect these investments to improve — and improve in a sustainable way — the service options in a number of the City's non-residential areas.

Moreover, the cable franchise renewal agreements help also to foster a more vibrant marketplace by solidifying for the first time long-term, direct competition among the City's cable television providers. This stage was set with the historic citywide cable television franchise the City granted Verizon in 2008 for buildout of FiOS to all New York City households, a deployment which remains on track today.

Conclusion

In addition to the initiatives described above, our supporting role continues on innovative broadband accessibility programs like the Virtual Senior Center at Ben Rosenthal Senior Center in Flushing, Queens. A partnership between DFTA, Selfhelp, and corporate sponsor Microsoft, the Virtual Senior Center enhances the lives of homebound older adults by using computer, video and Internet technology to help them interact with their peers. Since its launch in 2010 the program has tripled in size, with each participating senior receiving a desktop computer with broadband Internet service, a touch screen monitor, webcam and microphone – tools that allow them to see, hear and interact with seniors and staff.

Targeted programs like these are at the heart of the City's broadband strategy, a strategy that employs an array of diversified measures and resources at underserved communities citywide to ensure access to, and promote continued adoption of, broadband technology. Building upon these initiatives gives us an amazing opportunity to further solidify New York City as a leader in digital inclusion for communities that need it most, and we look forward to further delivering on that promise with public, private and non-profit sectors alike.

Thank you very much for your time this morning. We are pleased to address your questions.



Oversight: Broadband Adoption in New York City

New York City Council Committee on Technology

FO. LACORD

April 23, 2012

My name is Cathleen Sims DeVito, Senior Director of Government Relations for Time Warner Cable NYC and I would like thank Chair Cabrera and members of the committee for the opportunity to submit testimony on this important topic.

As a leading communications and technology company, Time Warner Cable is committed to raising awareness about the benefits of Broadband Adoption through education, outreach and Broadband Adoption programs. I am pleased to share some Time Warner Cable's success supporting education and outreach to non-adopters, and future plans to expand those efforts. We are helping non-adopters bridge the digital divide by addressing the most significant barriers: Relevance, Digital Literacy and Cost.

The New York State Broadband Study tells us that about 67% of New Yorkers who have access to broadband adopt it at home. In NYC that figure is slightly lower, at approximately 64%. But as you may expect, New Yorkers over 65 years old, those with incomes below \$20,000 per year, and New Yorkers who have never been to college adopt broadband at significantly lower rates. Our lowest income group has the highest proportion of people who say they do not desire broadband service, even if available.

Relevance or the recognition that broadband can bring value to one's life, livelihood and future is lacking among these groups. This lack of knowledge or interest creates an enormous barrier to broadband adoption. That is why Time Warner Cable is providing free and discounted broadband service to thousands of New York City families in partnership with the NYC Department of Information Technology and Telecommunications (DoITT) the Department of Education (DOE) and the non-profit CFY.

Known as NYC Connected Learning, this initiative provides computer training, desktop computers, educational software, and free broadband access to 18,000 low income students and their families (40,000 residents total) at 100 high need public middle schools in New York City. As we entered the second year of this program in early 2011, Time Warner Cable expanded its reach by participating in an expansion of Connected Learning known as Connected Foundations. NYC Connected Foundations is being implemented across NYC's transfer high schools, which are small, academically-rigorous, full-time high schools designed to re-engage students who are behind in high school or have dropped out. To date, this program has served over 500 high school students.

We are a proud partner of the City of New York and CFY on these two important initiatives. To that end, Time Warner Cable recently matched \$1Million dollars to the Federal Stimulus funds that help to run these programs.

Beginning in 2009, Time Warner Cable partnered with the Police Athletic League (PAL), the Jewish Community Council and various other community based, non-profit organizations throughout New York City in launching a series of Learning Labs. By 2020 there will be 40 similar labs throughout Time Warner Cable's service area in New York City. We provide a \$75,000 grant to the host organization for equipment and also supply ongoing business-class video and HSD to the labs free of charge. We have partnered with the non-profit Common Sense Media to bring its digital literacy training curriculum into the labs where TWC employees also volunteer their time teaching youth and adults. For example, at the Learning Lab located in Sunnyside Community Services Center, our employees teach a class for seniors on alternate Sundays on how to use the Internet.

In the fall of 2011 Time Warner Cable and its industry partners announced an exciting new nationwide broadband adoption initiative called Connect to Compete (C2C). This public-private partnership was convened by the FCC with the goal of closing the broadband gap by providing low cost broadband connectivity on a nationwide basis to families with a child or children in the National Free Lunch Program. In New York City, Time Warner Cable will provide eligible families with high speed internet for \$9.95 per month and a free cable modem beginning in 2013.

Raising awareness is also central to Time Warner Cable's plan and in the summer of 2011 we announced a pledge of \$1 Million dollars of screen time to the Broadband Opportunity Coalition (BBOC). The BBOC's PSA series emphasizes the importance of Internet adoption for economic success, particularly for struggling communities. Time Warner Cable will carry these PSA's in English, Spanish and five other languages over a two year period.

Time Warner Cable recognizes the importance of getting all New Yorkers online and will continue to work to find new and creative ways to encourage broadband adoption. We have seen firsthand the success of programs like Connected Youth and Connected Foundations and eagerly anticipate the launch of Connect to Compete. Bridging the digital divide requires investment, commitment and innovation and that is precisely what Time Warner Cable is doing here in New York City to bring the benefits of broadband adoption to those that need it most.

I thank you for your interest and look forward to continued collaboration with the members of this committee and the City of New York.

Cathleen Sims DeVito
cathleen.sims@twcable.com
(212) 379-5984

for the record

NYC Council Committee on Technology

Testimony of Cablevision Systems New York City Corporation

April 23, 2012

BROADBAND ACCESS: CLOSING THE DIGITAL DIVIDE

As one of the nation's largest cable providers, Cablevision delivers a full suite of digital television, voice and high-speed Internet services to millions of residential and business customers throughout eight states including New York, New Jersey and Connecticut and we are particularly proud of our long history in New York City. In the initial franchising process in the early 1980's, Cablevision won the right to provide service to both Brooklyn and the Bronx, having been the only company willing to serve the Bronx. Over the years, we have invested heavily in both boroughs, including two complete upgrades of our network to state-of-the-art levels. Today, Cablevision's fiber rich network passes more than 1.3 million households in Brooklyn and the Bronx including many of the most ethnically diverse and economically challenged neighborhoods in the City. Cablevision is proud to report that it serves hundreds of thousands of customers with robust video, voice, and broadband services -- reaching a percentage of homes passed comparable to more affluent suburban areas. We have long recognized the increasingly important role that the Internet plays in the lives of individuals and businesses and we are committed to supporting efforts to expand the use of broadband throughout our New York City service area.

It is important to appreciate how far and how fast we have come with respect to the availability and adoption of broadband services. Just 15 years ago, consumers had a choice of dialup modems delivering speeds of 28 kbps to 58 kbps, expensive ISDN digital phone lines delivering speeds of 128 kbps, or T-1 lines –typically just for small businesses then – that delivered speeds up to 1.5 mbps for anywhere from \$800 to \$2,500/month.

Today, everything is different. Over the past decade, Cablevision has invested billions of dollars to build out our network, ensuring that every neighborhood in our service area has access to some of the nation's fastest Internet speeds. Recognizing that more and more people are accessing the Internet through mobile devices, we have robustly deployed WiFi access points, both outdoor and indoor, across our NY metropolitan area footprint, including thousands in heavily trafficked areas of the city – an extension of our home and business broadband service that allows customers to access the Internet for free while on the go. Our significant investments in WiFi, starting in 2008, began just as WiFi-enabled devices like smartphones and iPads began to proliferate, and demand for reliable and fast mobile data exploded. Importantly, the benefits of all of our investments have been expanded to the city's small and medium-sized businesses, helping them to compete in an increasingly technology-driven economy.

This kind of investment in broadband has completely changed the nation and New York City. The adoption rate of broadband is nearly unprecedented. More people are getting more broadband more quickly than nearly anything that preceded it. It has reached mass participation faster than the telephone, electricity, the radio, the refrigerator, the television, and the PC.

The services we offer today – up to 100Mbps – are nearly 1,000 times faster than what was available only 15 years ago.

With broadband ubiquitously deployed throughout our service area, including the Bronx and Brooklyn, Cablevision has been pleased to support initiatives that are addressing the full range of obstacles to adoption, including access to hardware, digital literacy, relevance, and cost. Through an exciting partnership with Connected Learning, a collaboration between CFY, New York City's Department of Education and DoITT, Cablevision is offering deeply discounted broadband service to more than 18,500 low-income sixth, seventh and eighth grade students and their families - approximately 40,000 residents. The other partners of Connected Learning provide the rest of the comprehensive program including a computer and digital literacy training to eligible households. Cablevision also provides discounted broadband service in connection with Connected Foundations, a sister program recently implemented in partnership with the Department of Education, CFY and DoITT focusing on the city's transfer high schools – small, academically-rigorous, full-time high schools designed to re-engage students who are behind or have dropped out. Importantly, these programs embrace the reality that many factors, not just price, contribute to the lack of adoption and seek to address all barriers to adoption including the lack of digital literacy and the lack of relevance.

The success of programs like Connected Learning has spurred plans for a national broadband adoption program developed through a partnership between the Federal Communications Commission and the cable industry. Connect to Compete is modeled on the Connected Learning program in that it recognizes the importance of comprehensive approaches that address digital literacy, relevance, and cost in order to increase broadband adoption. Through Connect to Compete cable companies throughout the country will promote education and broadband adoption by providing low-cost, discounted broadband Internet service to millions of K-12 students that don't currently have broadband in their homes. Cablevision looks forward to partnering with the FCC and One Economy in this exciting new initiative.

Through our education initiative, *Power to Learn*, Cablevision has provided free Internet service to more than 400 schools and almost 40 libraries throughout Brooklyn and the Bronx, enhancing the education experience by bringing digital resources to the classroom. Recognizing that increasing numbers of New Yorkers are turning to their public libraries for Internet access, we now offer in all public libraries in our service area an upgrade to 101 mbps, the fastest speeds we offer and some of the fastest Internet speeds in the nation.

MSG Varsity, Cablevision's multi platform suite of services dedicated to high school sports and activities, provides students and their families access to relevant content through a dedicated linear television network, a comprehensive online destination and interactive television services. Putting local high school-related content online drives students and their families to the Internet, connecting them to their community and enhancing their Internet experience.

Beyond the investments made in our own network and the public/private partnerships we have supported to bring Internet access to more and more New Yorkers, Cablevision joined with the City to provide free connectivity to the City's public computer centers in our service area which were funded in part through a \$1 million contribution the company made through our recently renewed franchise agreement. These centers will provide another important vehicle for New York residents to access the Internet.

Whether it is enhancing the learning experience for children at home and at school, helping individuals to better communicate with friends and relatives or allowing businesses to compete in an increasingly technology-driven economy, the Internet brings tremendous value to people's lives and is becoming an increasingly necessary resource in today's digital age. Cablevision is deeply committed to helping individuals and businesses in the communities we serve attain access to this critically important resource and we look forward to continuing to work with the City of New York to advance this priority.

Thank you for this opportunity to provide testimony to the Committee.



168 Seventh Street, #3A Brooklyn, New York 11215 718.360.1707 www.oats.org

Transforming the Lives of Older Adults Through Technology

Testimony for the City Council Committee on Technology

Thomas Kamber, PhD

April 23rd, 2012

In order to reap the substantial benefits that digital technologies can produce in their lives, such as higher levels of social integration and improved health outcomes, older adults require ready access to technology, training that fosters its adoption and use, and ongoing opportunities to engage more deeply with technology to maximize the positive outcomes that informed and frequent use can yield in specific areas of their lives.

OATS "harnesses the power of technology to change the way we age." By engaging, training, and supporting senior citizens in using technology to improve their lives, OATS has created a national model for addressing the vital health, socialization, financial, civic, and creative needs of older adults. OATS is deeply committed to community partnerships and has delivered programs at more than 70 locations across New York City. Since it was founded in 2004, the organization has taught over 11,000 free classes, trained over 7,500 individuals, and given away more than 1,300 free computers to seniors and community centers. OATS also maintains an online digital community at SeniorPlanet.org, which has over 26,000 unique users, and which is being re-launched with new design features and expanded content this summer.

The results of OATS' programming are remarkable. A study by New York Academy of Medicine found that:

- 93 percent of our participants are still online six months after completing their classes;
- 71 percent are doing health research on the internet;
- 65 percent have more contact with friends and family;
- 25 percent reported that they are finding more community events and getting out more; and
- 100 percent would recommend OATS programs to their friends and family.

OATS' programming was cited as a model for community engagement of seniors in the federal government's National Broadband Plan.

As a key partner in the City of New York's Connected Communities project, OATS is collaborating with the Department for the Aging to develop infrastructure and deliver services that will enable thousands of older New Yorkers to embrace and use digital technology to improve their lives.

This project is funded by a \$2.7 million Broadband Technology Opportunities Program (BTOP) award from the U.S. Department of Commerce, and requires OATS to raise \$550,000 in matching funds.

During the grant period (which ends August 2013) OATS is:

- Establishing or upgrading 23 public computer centers at senior centers throughout New York City
- Opening a state-of-the-art Technology Exploration Center in Manhattan, where more than 5,000 older adults will interact with emerging technologies and benefit from educational events and programs
- Providing a mobile computer lab to deliver laptops and training to sites without a permanent computer center
- Delivering 150 courses consisting of 20 sessions led by OATS instructors using curriculum developed specifically for seniors
- Launching Senior Planet, a digital community and resource for older adults, which will reach more than 25,000 older New Yorkers

We know that technology offers powerful, evidence-based solutions that empower seniors to improve their own health conditions, contribute to our economy, and promote a more integrated, just society. Yet fewer than 50 percent of older Americans are online today, and the numbers are even worse when we consider the interaction of poverty and education with age. A study a few years ago found that only five percent of senior-headed households in public housing developments had adopted broadband service—a rate 12 times lower than younger households in the same developments. An AARP study found that, while 83 percent of seniors said they wanted technology training, only 36 percent had enrolled in any programs to date.

That's why OATS is working so intensively in partnership with Speaker Quinn and Councilmember Lappin, the City Council, the NYC Departments of Aging and Information Technology, philanthropic supporters including FJC Foundation, Verizon, and Google, and 22 community partner sites to create and sustain the nation's largest and most successful municipal technology program for seniors. Together we are providing training, internet access, online content, and community space serving tens of thousands of older New Yorkers. The new Technology Exploration Center promises to be a national model of high-quality technology training and programming.

We applaud the leadership and commitment of Speaker Quinn, Commissioner Barrios-Paoli, and Commissioner Post in making this program a reality, and we support their current efforts to ensure the long-term success and continuation of these initiatives. At the same time, there are no currently ongoing sources of agency-based funding to support technology programs for seniors, which means that these programs are at real risk of termination after the ending of federal support in 2013. It is critical that stakeholders and policy makers generate sustainability solutions this year in order to maintain these vital initiatives for Older New Yorkers into the future. OATS stands ready to support any and all efforts to achieve these goals.

Thank you.

1



Broadband Access: Closing the Digital Divide COMMITTEE ON TECHNOLOGY

Hon. Fernando Cabrera, Chair

April 23rd, 2012

Remarks by Mike Capobianco, Director of Development
MOUSE Inc (www.mouse.org)
[Making Opportunities for Upgrading Schools & Education]

Thank you to the Committee on Technology for allowing me to make some brief remarks.

Good afternoon, my name is Mike Capobianco and I am the Director of Development at MOUSE – a national nonprofit based in New York City. As many of you probably know, MOUSE is an innovative youth development organization that empowers underserved students to provide technology support and leadership in their schools, supporting their academic and career success. We are the MOUSE Squad and we are currently in 140 New York City schools in all five boroughs. We appreciate all the members of the City Council who have supported us over the almost 15 years that we have dedicated ourselves to serving New York City's schools, students and the communities they live in.

Since moving from the corporate sector to dedicate myself to the nonprofit sector almost 10 years ago I have seen firsthand the impact of providing access to technology, including broadband connections, to individuals, families and institutions, especially schools. As someone that has worked for three of the organizations represented on this panel I understand the critical

importance that access to technology, including a reliable, fully-supported, broadband connection, can be in the home and in the school environment for youth and their families living in underserved neighborhoods.

We must do everything to ensure every person has access. Initiatives such as the Connected Learning program, part of "BTOP", are an important step in this direction. An initiative where private/public partnerships including joint cooperation between federal and local government agencies has sent a powerful message about the need for broadband access for all citizens in New York City regardless of economic status. We should continue to make programs like this possible until every citizen has the access to the infinite information and economic opportunity provided by today's high speed/broadband connection.

Let me end by saying once again, we applaud you for taking the lead on such an important initiative – and thank you again for the opportunity to speak in front of all you today.

Testimony Regarding Broadband Access & The Digital Divide Presented By Cindy Menz-Erb, Executive Director CFY-NYC

Good Morning Honorable Council Members,

My name is Cindy Menz-Erb. I am the Executive Director of CFY-NYC, which is part of a national education non-profit based in New York City. On behalf of the CFY team, I want to personally thank the council for the opportunity to speak today.

CFY partners with low-income schools to help students, families, and teachers to harness the power of digital learning to improve educational outcomes. CFY is a partner of the New York City Connected Learning and Connected Foundations initiatives. These initiatives are managed by the NYC Department of Information Technology and Telecommunications and the NYC Department of Education, funded by a grant from the American Recovery and Reinvestment Act's Broadband Technology Opportunity Program under the U.S. Department of Commerce.

The vast majority of the students we serve are Black and Latino, over 80% have family incomes below \$35,000, and more than 70% have parents/guardians who have no credential beyond a high school diploma. Through our Connected Learning partnership we currently serve over 70 high poverty middle schools throughout New York City. We served over 8,700 families last year and are on track to serving over 9,000 families this year. Through the Connected Foundations partnership, we will serve more than 5,000 families and aim to improve the post-secondary readiness and to increase access to and adoption of web-based technologies of students who attend NYC's transfer schools.

One of our nation's biggest challenges is how to encourage more learning to take place outside of the four walls of the school-building. Since 1999, CFY has developed innovative solutions to this challenge, with proven impact on student academic achievement and engagement. I'd like to discuss our Digital Learning Program which we run through the Connected Learning initiative.

CFY's Digital Learning Program is a unique, research-based initiative that drives student engagement and academic achievement. CFY Digital Learning Program provides:

- Support for school leaders in driving new instructional approaches and developing deeper school-home connections.
- **Professional development for educators** to help them adopt blended learning strategies within the classroom, extend learning beyond the classroom, and engage families in the learning process.
- Innovative Family Learning Workshops in which families and children learn together about a wide range of digital learning activities and experience a learning partnership model that they can continue in the home.
- Home technology support for families, a free refurbished home computer loaded with educational software, free online subscriptions to additional educational software, 24x7 bilingual help desk support, and special broadband discounts.

As part of the Digital Learning Program, CFY leverages its free digital learning platform, **PowerMyLearning**, with more than 1,000 high-quality digital learning activities tagged by

Testimony Regarding Broadband Access & The Digital Divide Presented By Cindy Menz-Erb, Executive Director CFY-NYC

subject, grade, and the Common Corm. PowerMyLearning enables teachers to meet the specific learning needs of their students and helps students and families to discover fun and engaging activities that reinforce classroom learning and spark new areas of interest.

Broadband adoption plays an important part in harnessing the power of digital learning, as such a very exciting part of the Connected Learning and Connected Foundations initiatives is that qualifying families are also given the opportunity to sign up for discounted broadband services through Time Warner Cable and Cablevision, making it easier for them to access digital learning activities.

CFY's program increases family broadband adoption significantly. The percentage of families with broadband in their homes increases from 45% prior to our program to more than 90% just three months after CFY's Family Learning Workshops. This impact occurs for two reasons: First, our program addresses the affordability challenge by providing families with equipment, training, and discounted broadband. Second, and just as important, our program also motivates families to use Internet in support of learning: 96% of parents report that our program makes them more confident in helping their children learn, and 98% state that our program makes them more interested in how the Internet can help their children's education.

One exciting result of our program is that teachers in the schools we serve are much more confidently able to assign engaging online homework assignments, since more than 90% of their children have broadband in their home and the remaining percentage have online access at their schools, in libraries, and in public computer centers. This means that the broadband impact of our program is self-sustaining, as the schools themselves continue to help families use broadband for positive educational purposes.

Broadband access along with training is critical in powering CFY's work because it enables:

- Teachers to increase student engagement by integrating digital learning activities into the curriculum.
- **Teachers to extend student learning** by assigning students activities on PowerMyLearning to complete outside the school day.
- Students become college ready by exploring and mastering new digital learning activities and thereby becoming self-directed learners.
- Parents engage in their child's learning by seeing what their child is learning both in class and at home, and by learning with their child on-line.

In closing, I hope I have painted a picture that shows the importance of broadband adoption and training in low-income communities. With federal funding set to end in 2013 for the Connected Learning and Connected Foundations partnership, CFY needs the city's support to ensure we are able to continue making a positive impact in the communities we serve.

Thank you for the opportunity to speak on behalf of CFY today.

TESTIMONY REGARDING BROADBAND ACCESS & THE DIGITAL DIVIDE

BEFORE THE NEW YORK CITY COUNCIL'S COMMITTEE ON TECHNOLOGY

By Michael J. Santorelli, Director
The Advanced Communications Law & Policy Institute
New York Law School

April 23, 2012

I. Introduction

Thank you, Mister Chairman, for allowing me to testify today. It is an honor to be here. I am a Director of the Advanced Communications Law & Policy Institute (ACLP) at New York Law School. The ACLP is an interdisciplinary public policy program that analyzes key legal, regulatory and public policy issues in the advanced communications arena in an effort to facilitate the development of sound policies that benefit all consumers.

Over the past few years, the ACLP has focused on broadband from a variety of vantages. We have studied the mechanics and feasibility of regulating this very dynamic technology¹; we have assessed its many impacts on specific user groups (e.g., senior citizens² and people with disabilities³) and discrete sectors of the economy (e.g., healthcare⁴, energy⁵, and education⁶); and, in a substantial filing to the FCC during preparation of its *National Broadband Plan*, we identified some 60 barriers to more robust adoption by these groups and across these sectors.⁷

All of our research supports one fundamental conclusion: enhancing broadband adoption and digital literacy skills in the United States must be a policy imperative for stakeholders in all arenas. Unfortunately, much of the national debate over broadband continues to focus on the issue of access, i.e., whether some form of high-speed Internet service – wireline (e.g., cable) or wireless – is available to every household in the country. Although critically important, these conversations – and subsequent policy responses – tend to focus almost exclusively on bringing broadband to the two or three percent of households without access⁸, and not on the 32 percent of the population that already has access but that has chosen not to adopt broadband. Among those 32 percent of non-adopters are majorities of key demographic groups like seniors, people with disabilities, African Americans, Hispanics, and low-income households.

This is a critical issue for New York City, and the entire state for that matter. It is respectfully submitted that the City Council and other local policymakers should (and can)

facilitate the development and deployment of comprehensive strategies aimed at bolstering the adoption and meaningful use of broadband across every community.

II. Best Practices for Increasing Broadband Connectivity

Adopting broadband, of course, is only a first step. Acquiring and honing digital literacy skills is essential for any user to be able to put their broadband connection to optimal, life-enhancing uses. Indeed, when properly harnessed, this technology has the ability to dramatically improve lives and transform entire sectors.¹¹

A common thread throughout the ACLP's work has been an attempt to identify best practices for enhancing adoption and meaningful use of broadband. Many best practices have been observed across the public, private, and nonprofit sectors, suggesting that there already is significant momentum around these issues in communities across the country. Several examples are illustrative of the multiplicity of efforts that have been deployed in recent years, all of which are aimed at addressing sector-specific barriers to adoption in an effort to bolster connectivity across every user group and sector of the economy.

In the private sector, some of the most ambitious programs have been launched by broadband service providers. AT&T, for example, has become a hub for the development of consumer-oriented telemedicine services. ¹³ Verizon has built a leading online resource for digital educational material. ¹⁴ Comcast has pioneered a model for connecting low-income households with school-age children to broadband ¹⁵ that will soon be rolled out across the country by all major cable companies, including Cablevision and Time Warner Cable. ¹⁶ Service providers are also working closely with device manufacturers and software designers to provide end-users with integrated solutions in a variety of contexts like home energy management and remote health monitoring services.

In the public sector, state and local officials have positioned themselves as key resources for connecting residents and harnessing broadband to jumpstart economic development, spur job creation, and enhance civic participation.¹⁷ In addition to working directly with constituents to raise awareness of the practical benefits of broadband connectivity, local policymakers also have the ability to address the legal and regulatory impediments that may be hindering more meaningful uses within a specific community or sector.¹⁸

As discussed in below, a key determinant of any successful broadband adoption program, though, is the robustness of the local social infrastructure – the array of technology-focused nonprofits, anchor institutions and other groups that work directly with the unconnected to bring them online. These groups are vital hubs that have the unique ability to bring together public and private resources and focus them on a particular under-adopting community or user group. Without a vibrant and well-developed social infrastructure that has been fully integrated into the process, most adoption-focused initiatives will likely fail.

III. Broadband Connectivity and Meaningful Use in New York City: Leveraging the City's Robust Social Infrastructure to Close the Digital Divide

These myriad adoption dynamics are evident in New York City as well. Indeed, even though nearly every resident has multiple options for broadband service, adoption lags among key user groups. 19 Even so, New York City offers a compelling case study in how to bolster broadband adoption and meaningful use.

The ACLP has studied numerous broadband outreach and training programs across the country and profiled dozens as part of our work.²⁰ No other city in the country has developed as robust a social infrastructure for enhancing meaningful technology adoption as New York.

Over the past decade, a group of New York City-based nonprofits has emerged as nationally recognized innovators in harnessing the power of technology to address critical social priorities and problems. These organizations, which form the core of the Social Impact Technology Network (SITN)*, represent diverse sectors but share a vision for applying advances in information and communications technology (ICT) to improve public service delivery, enhance program outcomes, and support vulnerable New Yorkers.

Members of SITN have achieved extraordinary success in developing workforce skills for young adults, achieving educational progress in schools and homes, helping senior citizens overcome social isolation, and providing critical digital literacy skills to wide swaths of the City's population. These programs, many of which have garnered national recognition for their achievements, have become *de facto* innovation agents that have developed technology strategies to advance City policy and the public interest across a number of sectors and demographic groups. Indeed, these programs have begun to shift the social service paradigm in the City, using broadband and an array of other ICT tools to empower residents and enhance the delivery of key services.

In recognition of the City's leadership in these areas, the U.S. Department of Commerce allocated tens of millions of dollars in stimulus grants to support the expansion of many of these initiatives. These funds are being used to deploy three separate but related programs aimed at increasing sustainable broadband adoption within several communities, including low-income families with school-age children²¹, young adults²², and senior citizens.²³ To date, these programs, which are being implemented via public-private partnerships with broadband service providers and others, have succeeded in connecting thousands of individuals to broadband for the first time. Equally as important, these efforts are augmented by digital literacy training programs and other support services aimed at assuring that new users are able to harness this technology in life-enhancing ways.

This short-term infusion of funds has had several important impacts on New York City's already robust social infrastructure for broadband adoption. First, it has attracted

^{*} SITN is a coalition of technology-focused nonprofits and other groups that are collaborating on ways to sustain and expand New York City's vibrant social infrastructure for broadband adoption.

additional support from key private-sector partners, allowing for further expansion of efforts.²⁴ Second, it has spurred more diversity in service offerings among other leading nonprofits also working in this space. Programs that have expanded their reach as a result of stimulus funding are partnering or seeking to partner with the array of groups working to improve digital literacy and raise awareness of the benefits of meaningful broadband use. Third, it has positioned New York City and its technology-focused nonprofits as models for enhancing sustainable broadband adoption.

The success of these expanded programmatic efforts highlights several critical aspects of the social infrastructure through which these services are being deployed. Foremost among these is whether and to what extent these efforts are sustainable after the stimulus grants end in 2013. Prior to the infusion of stimulus funds, SITN members faced a number of institutional barriers that prevented them from executing outreach and training programs in a scalable and sustainable fashion. Many of these groups typically do not receive funding from City agencies. Indeed, even when these programs partner with agencies, they are often implemented as add-ons to existing programs, many of which are not designed to fully exploit the ICT-centric nature of these groups. Consequently, social impact technology initiatives are often prioritized below other "core" activities within a partner agency, passed over for multi-year contracts or dedicated budget lines, and forced to allocate scarce resources overcoming the effects of episodic funding. Even organizations that have successfully secured stimulus funding face the prospect of rapidly sun-setting programs, mass layoffs, and program termination as soon as these one-off investments expire.

Sustaining these programs and growing them over time should be a priority for the City going forward. These organizations and their leaders represent critical links in a network of relationships that connect a wide range of schools, nonprofits, foundations, corporations, and government policymakers. As a group, the SITN shares myriad common goals and a strategic orientation for using technology to achieve priority social objectives. Devising and implementing a comprehensive post-BTOP strategy for leveraging these many unique resources and extending them via public-private partnerships would yield enormous benefits for the City's residents, businesses, and institutions. Properly implemented, such an approach could greatly accelerate the realization of the vast potential of broadband and the many services it enables. These include:

- > Facilitating the transition to digital healthcare interfaces and measuring impacts on at-risk groups like senior citizens.
- > Forging technology strategies for connecting teachers and parents, and for promoting sustainable home learning environments.
- > Ensuring City residents are adequately prepared for the 21st century workforce through a continuum of technology training opportunities.
- ➤ Developing and deploying Web-based and mobile programs and services that complement City agency efforts and multiply the reach and impact of public programs.
- Bolstering digital literacy skills across all user groups.

> Increasing adoption and effective utilization of key ICTs, including computers, mobile devices, and broadband, among under-adopting user groups.

By leveraging the SITN's existing programmatic resources and expertise and seeking to expand them via public-private partnerships, the City could create a coherent, sustainable program for developing and deploying technology-focused service delivery alternatives in priority sectors and communities.

Endnotes

¹ See, e.g., Michael J. Santorelli, Regulatory Federalism in the Age of Broadband: A U.S. Perspective, 2 Policy & Internet 99-128 (2010); Charles M. Davidson & Michael J. Santorelli, Seizing the Mobile Moment: Spectrum Allocation Policy for the Wireless Broadband Century, 19 CommLaw Conspectus 1-74 (2010); Michael J. Santorelli, Rationalizing the Municipal Broadband Debate, 3 ISILP 43-82 (2007).

² See Charles M. Davidson & Michael J. Santorelli, *The Impact of Broadband on Senior Citizens*, A Report to the U.S. Chamber of Commerce (2008), available at http://www.nyls.edu/user-files/1/3/4/30/83/BroadbandandSeniors.pdf.

³ See Charles M. Davidson & Michael J. Santorelli, *The Impact of Broadband on People with Disabilities*, A Report to the U.S. Chamber of Commerce (2009), available at http://www.nyls.edu/user_files/1/3/4/30/83/BroadbandandPeoplewithDisabilities.pdf.

⁴ See Charles M. Davidson & Michael J. Santorelli, *The Impact of Broadband on Telemedicine*, A Report to the U.S Chamber of Commerce (2009), available at http://www.nyls.edu/user-files/1/3/4/30/83/BroadbandandTelemedicine.pdf.

⁵ See Charles M. Davidson & Michael J. Santorelli, Realizing the Smart Grid Imperative: A Framework for Enhancing Collaboration Between Energy Utilities & Broadband Service Providers, Time Warner Cable Research Program on Digital Communications (August 2011), available at http://www.twcresearchprogram.com/pdf/TWC Davidson.pdf.

⁶ See Charles M. Davidson & Michael J. Santorelli, *The Impact of Broadband on Education*, A Report to the U.S. Chamber of Commerce (2010), available at http://www.nyls.edu/user-files/1/3/4/30/83/Davidson%20&%20Santorelli%20-%20The%20Impact%20of%20Broadband%20in%20Education%20-%20December%202010%20(FINAL).pdf.

⁷ See Charles Davidson and Michael Santorelli, Barriers to Broadband Adoption, A Report to the Federal Communications Commission, ACLP at New York Law School (2009), available at http://www.nyls.edu/user-files/1/3/4/30/83/ACLP%20Report%20to%20the%20FCC%20-%20Barriers%20to%20BB%20Adoption.pdf ("Barriers to Broadband Adoption").

⁸ This issue has driven major policy initiatives at the FCC and other federal agencies over the last few years. At the FCC, the Commission is in the process of shifting billions of dollars in federal universal service funding to support broadband deployment to unserved parts of the country. In the Matter Connect America Fund, Report and Order and Further Notice of Proposed Rulemaking, 26 F.C.C.R. 17663, 17667 (Nov. 18, 2011). Several years ago, the U.S. Department of Commerce, via its National Telecommunications and Information Administration (NTIA) and Rural Utilities Service (RUS), was responsible for allocating billions of dollars in federal grants to support similar network deployments. See, e.g., Broadband USA, About, http://www2.ntia.doc.gov/about.

⁹ See Exploring the Digital Nation: Computer and Internet Use at Home. NTIA, U.S. Dept. of Commerce (Nov. 2011), available at

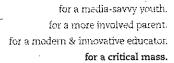
http://www.ntia.doc.gov/files/ntia/publications/exploring the digital nation computer and internet use at home 11092011.pdf.

¹⁰ *Id*.

- ¹¹ See Connecting America: The National Broadband Plan, Federal Communications Commission (2010), available at http://download.broadband.gov/plan/national-broadband-plan.pdf.
- ¹² See, e.g., Michael J. Santorelli, Charles M. Davidson & Thomas Kamber, *Toward a More Inclusive Measure of Broadband Adoption*, International Journal of Communications (forthcoming); Charles M. Davidson, Michael J. Santorelli & Thomas Kamber, *Broadband Adoption: Why it Matters & How it Works*, 19 Media L. & Pol'y 14-56 (2009).
- ¹³ See Broadband Service Providers Emerge as Drivers of Telemedicine Innovation, Oct. 4, 2011, Broadband Expanded, available at http://www.broadbandexpanded.com/2011/10/04/broadband-service-providers-emerge-as-drivers-of-telemedicine-innovation/.
- 14 See Thinkfinity, About Us, http://www.thinkfinity.org/about-us.
- ¹⁵ See Internet Essentials: Launch Report, Comcast (Jan. 2012), available at http://blog.comcast.com/assets/InternetEssentialsfromComcast.pdf.
- 16 See Connect to Compete, Home, http://connect2compete.org/.
- ¹⁷ See, e.g., Road Map for the Digital City: Achieving New York City's Digital Future, The City of New York (2011), available at http://www.nyc.gov/html/mome/digital/downloads/pdf/90dayreport.pdf.
- ¹⁸ Barriers to Broadband Adoption (discussing numerous legal and regulatory barriers impacting adoption decisions by senior citizens and people with disabilities, and across the education, energy, and healthcare sectors).
- ¹⁹ Data from the National Broadband Map (http://www.broadbandmap.gov/) indicate that at least 97 percent of households in every borough are served by at least three wireline broadband providers and 100 percent of the City is served by at least three wireless broadband providers.
- ²⁰ Many of these can be found at Broadband Expanded <u>www.broadbandexpanded.com</u> an online resource that the ACLP maintains in an effort to raise awareness of the benefits of and barriers to broadband adoption.
- ²¹ See New York City Dept. of Education, Connected Learning, http://schools.nyc.gov/community/innovation/ConnectedLearning/default.htm
- ²² See, e.g., Statement of Mayor Michael R. Bloomberg on \$20 Million in Federal Stimulus Awards for Broadband Adoption and Expansion, N.Y. City Mayor's Office, Sept. 13, 2010, available at <a href="http://www.nyc.gov/portal/site/nycgov/menuitem.c0935b9a57bb4ef3daf2f1c701c789a0/index.jsp?pageID=mayor-press-release&catID=1194&doc-name=http%3A%2F%2Fwww.nyc.gov%2Fhtml%2Fom%2Fhtml%2F2010b%2Fpr388-10.html&cc=unused1978&rc=1194&ndi=1.

²³ Id.

²⁴ Many of the federal grants required some level of matching funds from the private sector. As an example, the Connected Learning program is supported by Time Warner Cable and a variety of other entities, each of provides financial or in-kind support to the program. *See* NYC Connected Learning, Our Partners, http://schools.nyc.gov/community/innovation/ConnectedLearning/Partners/default.htm.





416 ocean ave suite 37 brooklyn, ny 11226 718-789-8170 thelampnyc.org

The LAMP Testimony for April 23 City Council Hearing on

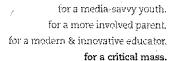
Broadband Access: Closing the Digital Divide

D.C. Vito, Executive Director, The LAMP

Giving people computers and broadband access is not enough to bridge the digital divide. It's a start, to be sure, but just as we wouldn't give our car keys to a teenager that hadn't passed the driving test, we can't throw equipment and connections around and expect our problems to be fixed. Young people—and their parents, and their teachers—need digital literacy skills in order to think critically about the world of new media that opens up with access to computers and high-speed Internet. There are many reasons why digital literacy training is so important, but one reason in particular is that people need to learn how to be responsible and productive citizens in the digital world of social networking, social gaming, blogs, news sites and more. Bullying and bias discrimination have-always been issues in schools, workplaces and public spaces, but now, this harmful behavior is crossing from the physical into the digital world. Increased broadband access allows people to build more relationships online. This power and freedom requires the ability to think critically about media, and comprehend how your behavior impacts others within the digital space. Called digital citizenship, this is where The LAMP comes in.

Recently, together with the New York City Commission on Human Rights, we have been running a series of workshops in Queens with a group of young people, and have been exploring this very concept. They have been analyzing popular media, and identifying the subtle ways in which media can reinforce stereotypes about gender, sexuality, race and religion that can impact the way we treat others. Not only can the teens completing this workshop now recognize harmful and misleading representations in advertising, music, television, video games and more, but they are also now using media to *talk back* to media. Since February, they have been working on Public Service Announcements, or PSAs, about the impact of bullying both online and offline. These PSAs are entirely written, shot and edited by these teens, and our goal with the Commission on Human Rights has been that they walk away empowered with critical thinking and digital literacy skills to practice and advocate for healthy digital citizenship.

For many of the young people we serve, The LAMP's workshops are among their first explorations with media as potentially positive and educational elements in their lives. This is somewhat remarkable, given that our students, many of which are black and Latino, spend an average of 13 hours a day with media — their white peers spend just over eight and a half hours. Nonetheless, most of our youth have been taught that computers, mobile phones and other technologies are mere toys.





416 ocean ave suite 37 brooklyn, ny 11226 718-789-8170 thelampnyc.org

In fact, these devices are tools, and powerful tools at that, capable of opening doors to homework help, social networking, health resources, breaking news and so much more. But when we hand them access to technologies like broadband, we need to teach them how to use these tools effectively and positively. Otherwise, it's as if we are just souping up their car, and sending them on their way. Meaningful use of increased broadband access depends on digital literacy training.

In order for work like ours to continue and expand, The LAMP needs support from leaders like you. Equipment and high-speed broadband alone are not enough to bridge the digital divide, much less gaps in education and job readiness. Education about digital citizenship and digital literacy training have to be part of the plan to level the technology playing field, or else the communities we mean to connect will remain on the sidelines.

Brooklyn Public Library

NEW YORK CITY COUNCIL COMMITTEE ON TECHNOLOGY

OVERSIGHT: BROADBAND ACCESS: CLOSING THE DIGITAL DIVIDE

250 BROADWAY

April 23, 2012

TESTIMONY OF BROOKLYN PUBLIC LIBRARY

Good morning. I am Linda E. Johnson, President and CEO of Brooklyn Public Library. Thank you to Committee Chair Fernando Cabrera and the members of the Committee for inviting Brooklyn Public Library to testify about broadband access and closing the digital divide. Thank you as well to the entire City Council for repeatedly advocating on our behalf. We hope we can count on your support again this year so that we will be able to continue to offer the digital resources our patrons need.

Brooklyn Public Library is a leader in providing free access to technology in the borough. System-wide, we offer approximately 1,300 public-access computers and each year, on average, we provide 2.3 million PC sessions. The Library is also the largest provider of free WiFi in Brooklyn, with high-speed wireless internet access available at all 60 of our locations. Since we last spoke about the subject of broadband access, the Library has successfully implemented a number of initiatives. Today, I am pleased to update the City Council on our progress and to inform you about some of our plans for the future.

Increased Internet Speed and Usage

Demand for Brooklyn Public Library's free wireless internet continues to grow. Since the fall of 2010, the number of system-wide monthly unique users of our WiFi has nearly doubled.

Testimony of BPL -2-

We have also expanded our broadband internet capacity by 77% since 2010. As a result of this upgrade, patrons who use our PCs can navigate more quickly between websites and use their computer sessions more productively.

3

Broadband Technology Opportunities Program (BTOP)

To close the digital divide, we must offer technology and computer classes where they are needed most. To this end, we recently partnered with the City's Department of Information Technology & Telecommunications, Queens Library, New York Public Library, and a number of city agencies in the NYC Connected Communities Project. With funding provided by the federal Broadband Technology Opportunities Program (BTOP), Brooklyn Public Library greatly increased its technological programs and resources at eight of its libraries located in underserved communities. Patrons visiting our libraries in Bushwick, Bedford-Stuyvesant and Ocean Hill-Brownsville can now enjoy 95 new lending laptops for use in the library, roughly three times as many computer classes and increased broadband internet speed. Since July 2011, these eight libraries have provided more than 40,000 laptop sessions, for a total of over 60,000 hours of laptop usage. In the coming months, we will install additional electrical outlets at the BTOP libraries to help accommodate the rising numbers of patrons who need to charge laptops.

While some patrons are adept at using computers, many others need assistance. Our expanded roster of classes in the BTOP branches covers an extensive range of subjects to ensure that all patrons can take advantage of the resources available to them. Our classes teach Brooklynites how to navigate the internet, gain proficiency in Word, Excel and PowerPoint and sign up for and use email accounts. Since July 2011, the BTOP libraries have offered over 800 computer-related programs that have reached more than 5,600 people.

Technological access is also imperative for searching for and applying to jobs. Since April 2011, the BTOP branches have offered over 450 job readiness programs, which have been attended by a total of more than 1,200 people. Upcoming programs range from one-on-one resume and interviewing skills sessions to workshops on crowdfunding with Kickstarter and online selling with Ebay and Brooklyn-based Etsy.

Testimony of BPL -3-

Central Library Computer Center

Last December, we relocated the Central Library staff lounge to open a state-of-the-art, 50-seat Computer Center. The new Center is the largest technology hub in the Brooklyn Public Library system and features the first rollout of the Library's next generation of public computers. The facility's new desktop computers offer Windows 7; Office 2010; several new software applications, including Audacity and Windows Live Movie Maker; and the ability to save files locally during a session. The Center's furniture and technology were made possible by funding from the federal Broadband Technology Opportunities Program and matching funds from the New York City Department of Information Technology and Telecommunications.

Leon Levy Information Commons

The Library is also making significant headway on one of its biggest technology-based initiatives: the Leon Levy Information Commons. The facility, which is scheduled to open in Central Library in 2013, will be the first of its kind in New York City's three public library systems. It will be a flexible, technology-rich center offering:

- A 30-seat wireless training space
- Seven private meeting rooms featuring electronic whiteboards
- Bar-style seating for laptop users
- 25 PCs featuring standard software and advanced editing programs
- A help desk providing reference and information services and on-demand training The Information Commons will offer extensive technology training for jobseekers, community college and distance learning students and other populations in need. It will be a groundbreaking new space for patrons to exchange ideas, learn new skills and access information.

Conclusion

Brooklyn Public Library is committed to closing the digital divide in the borough. Through initiatives like the Central Library Computer Center, BTOP and the Leon Levy Information Commons, we help ensure that all Brooklynites, regardless of their educational attainment or income, have equal access to the digital resources needed to improve their lives.

Thank you for the opportunity to testify. I am pleased to answer any questions.



NEW YORK CITY COUNCIL COMMITTEE ON TECHNOLOGY

HEARING: "Broadband Access: Closing the Digital Divide"

April 23, 2012

Good morning, my name is Jane Aboyoun. I am the Vice President and Chief Technology Officer for The New York Public Library (NYPL). The NYPL system provides library services to the boroughs of the Bronx, Manhattan and Staten Island, as well as the research libraries for the entire City. Thank you for the opportunity to testify today. It's great to be here today to talk about libraries and the essential services they provide. Before I begin, I would like to thank Speaker Christine Quinn, Committee Chair Fernando Cabrera, the members of the Committee and the members of the City Council for your great support of libraries.

Today's hearing focuses on the Digital Divide – specifically about access to technology and the divide that exists between those who have access and those who don't. Libraries play a critical role in bridging that gap by providing free access to computers and online information, as well as technology training. Underserved communities, such as immigrants, non-English speakers, and those living below the poverty line rely on libraries for access to technology and the wide array of online resources that they offer.

A recent study by the Pew Research Center, *Digital Differences*, highlights the disparities in technology access which exists for some groups. The study finds that, "Age (being 65 or older), a lack of a high school education, and having a low household income (less than \$20,000 per year) are the strongest negative predictors for internet use."

In New York City, we know that the number of people living below the federal poverty line surpasses the rest of the country. According to the American Community Survey from 2008-2010, in communities such as Northern Manhattan, 21.6% of all families and 25.6 % of all people are below the poverty level. In the South Bronx these numbers are even higher, with 36.8% of all-families and 38.9% of all people living below the poverty line. On Staten Island, the number is fewer, but still 9.3% of all families and 11.3% of all people there are living below the poverty line.

At NYPL, we continue to invest in the technology, infrastructure, and training to ensure that we provide internet access that can meet the growing needs of these communities, providing all New Yorkers with access, and many times guided access, to the information and assistance they need.

Access:

The New York Public Library provides free public access to the Internet at each of our 91 locations, and offers onsite PCs and laptops, as well as a robust WiFi network. Since Fiscal Year 2007, the Library has spent over \$19 million on building and upgrading our technology systems to meet the growing demand for online information. In Fiscal Year 2012 alone, the Library used about \$2 million in City capital funds to upgrade bandwidth and network equipment, in addition to another \$1 million in other funds to replace the technology infrastructure at the Science, Industry and Business Library, and to expand free WiFi service at Mid-Manhattan to all five floors open to the public. Beginning in Fiscal Year 2013, the Library will invest over \$11 million in City capital funds and \$4 million in its own operating expense to implement the "Next Generation Desktop" initiative – a large-scale, system-wide upgrade of hardware, software, network equipment, WiFi and bandwidth. We plan to purchase new computers and replace out of date software to provide the latest in technology to our patrons.

The Library is also a partner with the City on the Broadband Technologies Opportunity Program (BTOP), a \$20 million federal stimulus fund focused on the expansion of broadband access in

underserved areas. Through NYPL's portion of this grant, and with matching City capital funds, we will substantially upgrade desktop and laptop equipment at 32 branches, provide digital literacy outreach and instruction at 24 libraries and provide technology training for all NYPL public service staff.

As we add capacity, we have seen demand increase, often by 100%, because of this added capacity. For example, our wireless sessions by patrons grew to over 232,749 in March of this year, compared to 109,000 in August of last year, as more patrons bring smart phones, iPads and other tablets into our libraries. Peak Internet usage, typically occurring weekday afternoons, grew from 500 Mbs to over 700 Mbs over the same nine-month period. I have attached a graph which illustrates this trend.

We currently offer 3,877 public access computers to our patrons, of which 62% are desktops and 38% are laptops that can be checked-out for use in the library by patrons. In Fiscal Year 2011, we provided approximately 4.42 million user sessions - 36% of those sessions were in the Bronx, 54% in Manhattan and 9% on Staten Island.

New Yorkers come to our libraries to access the Internet for information on public assistance, job search, taxes, homework help, and health care, just to name a few. We also know that many teens utilize our computers for academic purposes, as well as for social networking and gaming. It is an ongoing goal of the Library to invest in technology and to continue to add capacity so that all New Yorkers have access to the information and resources available to them through the Web.

Programming:

In addition to providing free public access to computers and the Internet, NYPL was one of the first public libraries to offer computer literacy classes to patrons. We began a coordinated effort to bridge the digital divide in NYC through public computer training in March 2001, with a 4-year grant from the Picower Foundation called Click-On @ the Library. This grant supported the development of a curriculum for classes, creation of computer labs in 10 library locations, targeted marketing to populations more likely to be digitally divided about computer access and training at NYPL, and a dedicated staff of administrators and trainers. Once grant funding concluded, we made the program a permanent part of the service by using operating funds. Classes are being offered in basic areas of computer literacy, such as Internet and web searching, e-mail, Microsoft Office Suite, social media, and eReading. In 2011 NYPL provided 4,732 computer classes to 47,676 patrons.

As technology continuously changes and develops, staff training is critical. We have created an educational program across the NYPL system dedicated to increasing librarian competencies. With past grant support, the Library provided specialized training to reference librarians and information assistants that increased staff competencies in using computers and online information sources and services and built staff confidence in providing this specialized reference assistance. From the recent expansion of social media sites to the comprehensive applications found on web pages, the digital age has produced a dynamic environment where the expertise of our staff is vital to the information services we provide to New Yorkers. Over the last year we have offered 169 technology training sessions to 373 librarians and information assistants.

These training sessions help us guarantee that patrons who come to our libraries are able to access online information, regardless of their computer competencies.

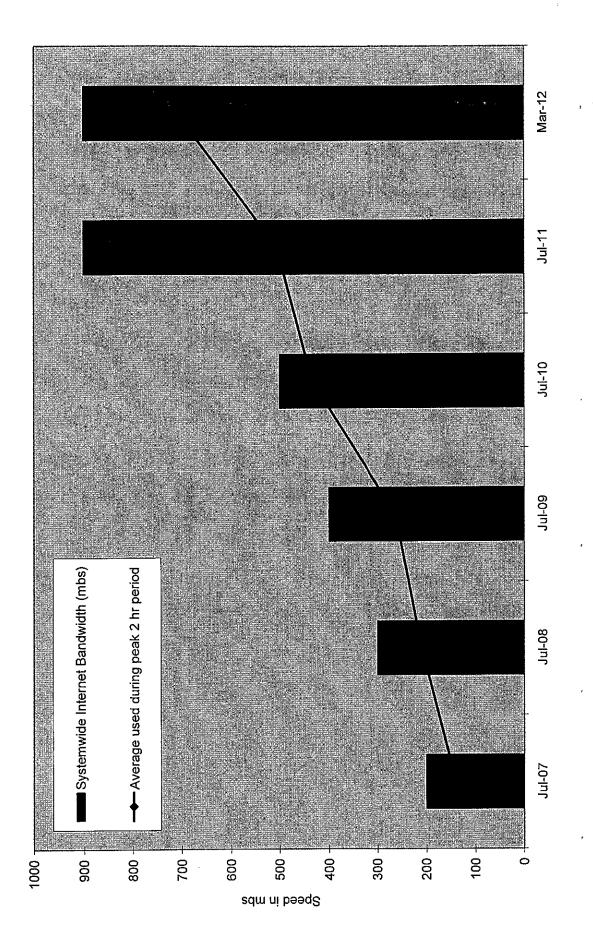
Conclusion:

With more than a quarter of New Yorkers living below the poverty line, the City's libraries play an absolutely essential role in delivering library services and information to the people of New York, especially to underserved communities. Increasingly, in today's world, the ability to access information electronically is the difference between the haves and have-nots. Everyday libraries serve on the front lines and in the trenches of this important battle. At the New York Public Library we continue to make substantial investments to our digital infrastructure so that New Yorkers can access the information they need. The technology, infrastructure, and training that I have discussed today just scratch the surface of what the NYPL has done and continues to do to make library resources available to the 17.5 million people who walked through NYPL's doors last year or the 31.2 million who visited us online at NYPL.org. Libraries are the only free educational provider for all New Yorkers.

In years past, Speaker Quinn and the City Council, have championed funding of this City's libraries, recognizing how truly essential the services are that libraries provide to New Yorkers. We are truly grateful for this support. However, if library doors do not remain open it won't make a difference if we utilize an MPLS Network or if we share a fiber ring, or if we have 3,600 computers or 36,000, because New Yorkers will not be able to come to the library and access information. We look forward to working with you to allow us to continue to deliver the quality library service that the residents of New York City need and deserve in these difficult times.

Once again, thank you for this opportunity to testify. I remain available to answer any questions that you may have.

Growth in Internet Capacity and Peak Usage





Statement by Thomas W. Galante President and Chief Executive Officer, Queens Library

Testimony before the New York City Council Committee on Technology "Broadband Access: Closing the Digital Divide"

April 23, 2012

Good Morning. I am Tom Galante, President and Chief Executive Officer of the Queens Library. Let me begin by thanking City Council Speaker Christine Quinn and the City Council Committee on Technology, particularly Chairman Fernando Cabrera, for the invitation here today. It is only with the City Council's tremendous support that we are able to provide quality library service to every Queens community. Libraries are more relevant to people's lives than ever before and we are constantly evolving to meet their needs. Our mission to provide free and fair access to information is a cornerstone of this City and indeed of our free society. It does not matter whether that information is contained within a bound leather tome or lives in the cloud. The library offers a place to find knowledge, no matter who you are or where you came from. It is the place where experts help you use that knowledge to inform you, enrich you and empower you.

I don't have to tell you that technology is reshaping the field of information services. Access to high speed Internet is no longer a luxury for our citizenry. Mobile devices, smartphones and tablets are ubiquitous. Literature is going digital.

Our challenge, as public libraries, is to ensure that these technologies do not become barriers to accessing information and enriching lives. We must ensure that we do not let technology divide our people into the information haves and the have nots. It is a real danger. Here in New York City, an estimated 74% of interactions with the government happen via NYC.gov. Yet, an unacceptable number of people can't even get to that resource at home. The United States Department of Commerce reports that nearly 38% of Americans still do not have access to the Internet at home. National trends also show that the two groups who most frequently rely on their public libraries for computer access are among the most vulnerable: the poor and teenagers.

Before I delve into specifics of the steps we are taking to shore up this divide, let me offer a little background on our system. Queens Library serves a borough of 2.2 million people from 62 community libraries, including Central Library in Jamaica, the Langston Hughes Community Library and Cultural Center in Corona and seven adult learning centers. Every day we are open, 40,000 people come through our doors and 8,000 people get on a computer. Every day we are open, 10,000 students visit for afterschool help and nearly 70,000 items are loaned, for free. We are grateful for the commitment of the City Council and the Mayor for providing the financial support for libraries to do all of this.

ACCESS: FREE PUBLIC ACCESS COMPUTERS & WI-FI

Queens Library currently has a network of 1,554 public access computers that provide free access to the Internet. These are used by patrons nearly 60,000 times every week. Additionally, all our 62 community libraries are equipped with unlimited free wireless for people who have their own computers or Wi-Fi enabled mobile devices. Many of the more recently renovated libraries are outfitted with counters and tables equipped with electrical

outlets to accommodate laptop users. We also have 593 laptops that we loan out for use within our facilities.

In order to meet increasing demand from library users, we continue to upgrade our bandwidth. With federal (e-rate) funding, we have moved 35 locations to 10-megabit broadband and 20 more libraries will be moved to 10 megabit from the current 1.5 megabit by 2013. This increased bandwidth makes a world of difference, allowing uninterrupted access to interactive online experiences like educational videos. The increased bandwidth also allows us to support more laptops on the library's wireless network at once. Even when people can afford their own computers, financial and infrastructure obstacles may exist to online access at home. We want to ensure that we are prepared to accommodate that growing need.

COMPUTER LITERACY & PROGRAMMING

In the last year, we have successfully built out our technology and associated educational components in large part through the Connected Communities Initiative funded through the Federal Broadband Technology Opportunities Program (BTOP) and implemented in partnership with the Department of Information Technology and Telecommunications (DOITT).

As you are aware, this initiative is aimed squarely at improving broadband access for underserved and high poverty communities. With the \$4 million committed to this program over three years, we have vastly expanded computer access and literacy in Long Island City, Jamaica and the Rockaway Peninsula. Since it launched just seven months ago, our dedicated team has helped over 7,500 people in a combination of one-on-one sessions and group workshops. The program focuses on workforce development and computer literacy skills.

Instruction on basic Internet skills, introductory computers skills and the basics of using the Microsoft office programs Word and Excel are among the most popular programs offered. Other program topics run the gamut from resume writing to social media networking, to civic service exam prep.

Our team has found that the demand for these programs far exceeds the capacity and patrons are coming in from every demographic group. Many teenagers, who are well versed on using their smartphones and social media, come in seeking instruction on basic word processing and other software. Many mid-career professionals who find themselves looking for a new job turn to the library when they discover their computer skills are outdated. Many older adults are coming in to dust off their resume and re-enter the workforce.

We have recently had our Central Library designated as a "Certiport Authorized Testing Center," which means we will be able to offer industry certifications in Microsoft Office, Adobe and other computer programs. Students who take the course and pass the tests will be much more qualified and attractive to potential employers. A series of classes and test administration in the private market for a single certification can cost on average of \$800. At the library, it will be totally free.

Our technology and associated instruction cater to every age group. We have "Early Literacy" computers, which are especially designed with simplified buttons and operating systems for small hands and young minds. Coupled with a special web interface called KidsLinQ, our youngest patrons can access the Internet and explore it in a productive and safe way. Our Children's Library Discovery Center, which opened last summer, incorporates technology in interactive STEM (science, technology, engineering, mathematics) learning for elementary

aged students. Computer literacy is incorporated into programs for teens after school, for our adults learning to speak, read and write in English and for new immigrants, with workshops presented in patrons' native languages.

DIGITAL CONTENT AND ACCESS

This month, Queens Library began loaning e-readers to library card holders for the first time. The pilot project is putting digital content, selected by librarians, directly into the hands of our patrons on an e-reader device they otherwise could not afford. We recognize that digital content and digital readers are the next method of information consumption. We must be able to provide access to that information, for free, on demand, to our patrons. If we don't, we risk leaving them behind as content becomes exclusively digital. As it is now, cuts to our budget have slashed our purchasing of books by 60%. Wait times for popular e-books are unacceptably high. Some people in Queens wait for more than a year to read information they seek. This just shouldn't be. Expanding our services to offer a robust and accessible digital collection to our nearly 900,000 card holders will not be easy; millions of new dollars are needed to meet growing demand. This must happen to reach our common goal, to close the digital divide, which keeps too many of our citizens from the information and education they want and deserve to improve their lives.

There is so much libraries do to provide digital access and literacy to the people of New York City, but there is so much more we could do. All the staff that teaches computer classes and provides workforce development that helped those 7,500 people in the last six months is funded through a grant that will run out in August of 2013. All the computers in all the libraries are in use every single hour we are open.

The current City Financial Plan for FY 2013 proposes a loss of funding to libraries of over 30%. This would, if adopted, force the outright closure of 18 community libraries in Queens, and drastically slash hours everywhere else. It would prevent more than 1.3 million people from getting online in their library each year, and shut out thousands more from the educational programs they take advantage of now to better their lives.

With so much work to do, we can't let such a scenario come to pass. You in the City Council have been true library champions in years past and we are grateful for that. We turn to you again this year to restore and expand needed funding so we can get on with the important work ahead of us for the people of this great City.

Thank you again for the opportunity to testify today and for your tireless work throughout the year.

THE COUNCIL THE CITY OF NEW YORK

en e	
a transport of the second of t	Appearance Card
I intend to appear and	speak on Int. No Res. No.
	in favor 🔲 in opposition
er en er en	Date: <u> </u>
Name: Mich	(PLEASE PRINT)
Address:	M/ Bro-duny
I represent: ACL	-P@ NY Law School
Address: / S	5 W BEJONWAL
ور معلق المام المام المام المام ال	and the second s
/ENERS	THE COUNCIL
THE (CITY OF NEW YORK
	Appearance Card
Lintend to appear and	markers Int. No.
	in favor
	Date:
Name: Michael ().	APoblar
	2) rd ST Sk 702 10010
I represent:	
Address:	
Address:	
	THE COUNCIL
THE (CITY OF NEW YORK
	Appearance Card
	n favor
	Date:
Lan Ca	(PLEASE PRINT)
Name: OW O	MAN PLI
Address: 89	WINT DING
I represent:	BULIBUTEY -
Address:	
Please complete th	his card and return to the Sergeant-at-Arms

THE COUNCIL THE CITY OF NEW YORK

Appearance Card
I intend to appear and speak on Int. No Res. No
in favor in opposition
Date: 234pd 2012
AT & Sh. I (PLEASE PRINT)
Name: Mick Sportone
Address: 75 Park Place, 9th Floor, NY
I represent: Voll
Address:
TUE COUNCIL
THE COUNCIL
THE CITY OF NEW YORK
Appearance Card
I intend to appear and speak on Int. No Res. No
in favor in opposition
Date: 23/pn/ Z0/2
Name: Kate Homan (PLEASE PRINT)
Address: 75 Pak Place 9th Place
I represent: NYC DOTT
Address:
Audress:
THE COUNCIL
THE CITY OF NEW YORK
THE CITY OF THE WAR
Appearance Card
I intend to appear and speak on Int. No Res. No
in favor in opposition
Date: 4 - 23-11
(PLEASE PRINT)
Name: LIndy Menz-Erb
Address: SdO 84 Hol
I represent: CFY
Address: 520 8th Ave NY, NY

THE COUNCIL THE CITY OF NEW YORK

e e e			
e e e e e e e e e e e e e e e e e e e	Appearance Card		
I intend to appear an	d speak on Int. No.	Res. No.	
·] in favor 🖫 🔲 in opposit	ion , ,	
	Date: _	4/23/12	_
	(PLEASE PRINT)		
Name:	VITO		
Address: 416 C	DCEAN AVENUE, ST	E 37 BROOKLYN	1155
I represent: TH	E LAMP	<u> </u>	
Address:			
		The same experience	
	THE COUNCIL		% -
THE	CITY OF NEW Y	ORK	
\	4		ר
	Appearance Card]
I intend to appear and	speak on Int. No.	Res. No	- -
. 🗅	in favor 🔲 in opposition		
		1/23/12	_
Name: Linda	(PLEASE PRINT)	s .	
	Johnson		-
Address:	11 0 1 1 1 0		-
I represent:	4n PLBIE Library		
Address:			
The same of the sa	THE CAINCEL		100 Marie 1
	THE COUNCIL		
THE	CITY OF NEW Y	ORK	
,	Appearance Card] ·
		<u> </u>]
	speak on Int. No.		_,
		1/22/12	
	Date:	7/25/12	-
Name: Stanle	(PLEASE PRINT)		
Address: 2 Met	ro Tech Center		
DT	-TT		•
I represent: 10			·.
Address:	<u> </u>		
Please complete	this card and return to the Ser	geant-at-Arms	

THE COINCIL

THE	CITY OF NEW YORK	
	Appearance Card	
I intend to appear and	speak on Int. No Res. No in favor [] in opposition	<u>Standard</u> (1906)
Name: Jane Al	Date:	
Address: I represent: Address: Please complete	St L 5th MC. Lethis card and return to the Sergeant-at-Arms	•
3	THE COUNCIL	
THE	CITY OF NEW YORK	
THE	Appearance Card	
I intend to appear and		
I intend to appear and	Appearance Card d speak on Int. No Res. No in favor in opposition Date:	
I intend to appear and	Appearance Card d speak on Int. No Res. No in favor in opposition Date:	5