Before the
FEDERAL COMMUNICATIONS COMMISSION

In the Matter of	)	
	)	
International Comparison and Survey Requirements	)	GN Docket No. 09-47
In the Broadband Data Improvement Act	)	
	)	
Inquiry Concerning the Deployment of Advanced	)	GN Docket No. 09-137
Telecommunications Capability to All Americans	)	
In a Reasonable and Timely Fashion, and	)	
Possible Steps to Accelerate Such Deployment	)	
Pursuant to Section 706 of the Telecommunications	)	
Act of 1996, as Amended by the Broadband Data	)	
Improvement Act	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51

REPLY COMMENTS OF THE
SCHOOLS, HEALTH AND LIBRARIES BROADBAND COALITION

NBP PUBLIC NOTICE #1

The Schools, Health and Libraries Broadband (SHLB) Coalition respectfully submits these reply comments in the above-captioned proceedings to re-emphasize the critical importance of measuring and providing high-capacity broadband capabilities to community anchor institutions such as schools, colleges, universities, libraries, hospitals and other health care providers. These institutions need bandwidth that is far greater than the bandwidth needed by individual households; they need high-capacity broadband capabilities to provide essential services to rural, low-income, disabled, the elderly, students, immigrants and many other underprivileged and vulnerable segments of the population.

1. The definition of broadband should take into account that community anchor institutions need high-capacity broadband.

When the SHLB Coalition was launched on June 11, 2009, it issued a set of principles that it suggested should guide the nation's broadband policy. The first principle in that document set forth the critical importance of defining broadband speeds in a manner that recognizes anchor institutions' need for high-capacity broadband:[1]

> First, it is extremely important for policy-makers to adopt policies that encourage the deployment of very high capacity broadband capabilities for these institutions. Our policy should be focused on building "future-proof" high-capacity broadband to these institutions, meaning networks that can provide a minimum of 100 Mbps to small entities and 1 Gbps service or faster to larger entities. These needs are very different from the needs of residential consumers. The FCC should develop a broadband standard for anchor institutions that is separate and distinct from that for residential consumers.

The Internet has become a fundamental cornerstone of modern education, learning, health care delivery, economic growth, social interaction, job training, government services, and the dissemination of information and free speech. High-capacity broadband is the key infrastructure that K-12 schools, universities and colleges, libraries, hospitals, clinics and other health care providers need to provide 21st century education, information and health services.

The SHLB Coalition is dedicated to ensuring that each and every school (including K-12 schools, colleges and universities), library and health care provider has robust, affordable, high-capacity, broadband connections. These anchor institutions use broadband services to provide essential services to millions of people every day. Providing high-capacity broadband to these institutions is a way to bring the benefits of broadband to the general public. For example,

- Health care providers can use high-capacity broadband to exchange detailed medical records, provide out-patient medical monitoring (telemedicine), and many other health-

[1] The entire Mission Statement of the SHLB Coalition and our current list of members is attached as Appendix A.

related services. Broadband capabilities can enhance the doctor-patient relationship, provide immediate access to health information, reduce the costs of health care, and save lives.

- Libraries provide Internet access at no charge to millions of people every day, including those who cannot afford to purchase computers or broadband access at home and others who need assistance, training or education about on-line services. Library patrons use public access computers to do homework, apply for jobs and e-government benefits, conduct research, and engage in all that the Internet has to offer.
- Schools use broadband connections to provide distance learning and offer multimedia teaching programs that address many learning styles and capabilities. In the 21st century, educators and students require more access to information, people, tools and resources. Broadband connections are redefining the education model for administrators, teachers, students and parents alike. "Networked education" makes education personalized, equitable, relevant and cost-efficient, enabling improved 21st century outcomes for students.

Furthermore, building broadband to these institutions promotes jobs and economic recovery. Whether it is laying fiber optic cable or constructing antennas to provide high-bandwidth wireless capabilities, these investments in our future will provide thousands of American workers with high-tech employment. Building broadband networks to these anchor institutions will have the additional benefit of promoting economic growth in the region.

2. The SHLB Coalition disagrees with those commenters who support a single, static, low-bandwidth definition of broadband for all users.

Some commenters in this proceeding offer the view that the FCC should not change its definition of broadband from the low threshold of 768 kilobits per second. This definition does not come close to capturing the needs of community anchor institutions. According to the American Library Association, the "average" library has 11 "public access" computers available for use by the public, and many libraries have wireless access points that allow consumers to bring their own laptop computers into the library.[2] Even a T1 connection (1.5 Mbps) is inadequate for these needs.

Similarly, schools require high-bandwidth connections to serve the needs of teachers, students and administrators. The State Educational Technology Directors Association (SETDA) recommends the following benchmarks:

> In a technology-rich learning environment for the next 2-3 years, SETDA recommends:
> - An external Internet connection to the Internet Service Provider of 10 Mbps per 1,000 students/staff
> - Internal wide area network connections from the district to each school between schools of at least 100 Mbps per 1,000 students/staff
>
> In a technology-rich learning environment for the next 5-7 years, SETDA recommends:
> - An external Internet connection to the Internet Service Provider of 100 Mbps per 1,000 students/staff
> - Internal wide area network connections from the district to each school between schools of at least 1 Gbps per 1,000 students/staff.[3]

The comments of Internet2 in this proceeding accurately reflect the need that larger institutions, including community anchor institutions, have for high-capacity broadband:

[2] See, http://www.ala.org/ala/research/initiatives/plftas/issuesbriefs/IssuesBrief-Egov.pdf.
[3] See, http://www.setda.org/web/guest/2020/broadband.

> Businesses and community anchor institutions generally have a multitude of simultaneous broadband users. Accordingly, if those entities and organizations simply receive the same bandwidth as an individual consumer, each user of the service at a business or community anchor institution would receive much poorer service than the individual consumer (because the business users are sharing the service). Yet, businesses' use of broadband services is critical to our economy, and community anchor organizations are at the heart of the broadband revolution. Community anchor organizations generally provide the public with a place to learn how to use broadband for educational, health and job-related purposes, for no fee whatsoever. Two of the most commonly cited reasons for refusing to use broadband services is lack of knowledge of how to utilize broadband and affordability. Community anchor institutions effectively address both of these concerns. Therefore, it is critical that these institutions have bandwidth available that enables them to utilize all of the applications the public needs not just a few of them.[4]

3. Building high-capacity broadband to anchor institutions will also benefit the residential community.

Providing high-capacity broadband to anchor institutions will also benefit residential consumers in the surrounding community because these broadband facilities can be open to interconnection with other broadband networks. Building broadband connections to these anchor institutions and making them open to interconnection can be a "stepping stone" or a "jumping off point" that makes it easier to build broadband facilities to homes and small businesses in the nearby neighborhood.

[4] Comments of Internet2, at 5-6.

4. Conclusion.

In developing a national broadband policy and a definition of broadband in particular, the Federal Communications Commission should ensure that the needs of schools, health-care providers and libraries for very high-capacity broadband are measured and satisfied. The needs of these anchor institutions for next-generation, "future-proof" broadband facilities are very different from the needs of residential consumers and should be taken into account in any definition of broadband in the national broadband plan.

Sincerely,

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September 8, 2009

APPENDIX A

Mission Statement
of the
Schools, Health and Libraries Broadband Coalition
June 11, 2009

The mission of the Schools, Health and Libraries Broadband Coalition is to improve the broadband capabilities of schools, libraries and health care providers so that they can enhance the quality and availability of the essential services they provide to the public and serve underserved and unserved populations more effectively.

The Internet has become a fundamental cornerstone of modern education, learning, health care delivery, economic growth, social interaction, job training, government services, and the dissemination of information and free speech. High-capacity broadband is the key infrastructure that K-12 schools, universities and colleges, libraries, hospitals, clinics and other health care providers need to provide 21st century education, information and health services. The Coalition is dedicated to ensuring that each and every library, health care provider and school (including K-12 schools, colleges and universities) has robust, affordable, high-capacity, broadband connections.

Connecting these anchor institutions with high-capacity broadband will generally provide the greatest benefits to those people who need it most – rural, low-income, disabled, elderly, societally and economically disadvantaged, and other unserved and underserved segments of the population. Building high-capacity broadband to these anchor institutions will also create jobs. Whether it is laying fiber optic cable or constructing antennas to provide high-bandwidth wireless capabilities, these investments in our future will provide thousands of American workers with high-tech employment.

Broadband plays a critical role in allowing consumers to benefit from the essential services provided by these anchor institutions in the following ways:

- Public libraries make wired and wireless broadband connections available to the public at no charge. These connections allow people to submit job applications, apply for e-government benefits, participate in distance education and complete school homework assignments, with the additional benefit of support from on-site professional librarians. Similarly, libraries in schools, colleges and universities depend on high-capacity broadband to deliver essential learning services.

- Primary and secondary schools need high-capacity broadband access to offer specialized courses and basic coursework through distance learning. New multimedia educational applications can help teachers address various learning styles and abilities, and tailor instructional programming to meet individual students' needs, if high-capacity broadband connections are available.

- Community colleges and higher education require high-capacity broadband to provide online degree programs and job training skills, to promote research and collaboration, and to give rural and low-income areas remote access to experts and laboratories. Research universities are often at the center of innovation in our economy; they need high-capacity broadband to propel the U.S. forward and to restore our global leadership in advanced technologies.

- Hospitals, clinics, and physician's offices need high-capacity broadband to exchange diagnostic information and medical records, and to provide remote monitoring of out-patients. The effectiveness of telemedicine depends upon quality, high-capacity broadband connections, and high-capacity broadband allows health professionals to obtain quality continuing medical education through the Internet. Rural health clinics have a great need for broadband connections to provide rural residents with immediate access to specialists in hospitals and other health care providers.

The Coalition believes that adhering to the following principles will help the U.S. to achieve this mission:

- Because of the essential services that they provide to the public, it should be a priority of federal policy that all schools, libraries and health care providers have affordable access to "future-proof" high-capacity, broadband technologies, especially in rural and low-income areas. Federal policy should encourage the deployment of high-capacity broadband networks that can provide a minimum of 100 Mbps to small entities and 1 Gbps or more to larger entities. Moreover, these broadband networks should be easily upgradable to meet the enormous growth in demand that is expected from high-definition video, distance learning, telemedicine, job-training and other societally-beneficial applications.

- Broadband networks deployed to serve these community anchor institutions should be open to interconnection by other broadband networks serving the community as a way to spur additional broadband investment. Ultimately, all homes and businesses should have access to affordable, high-capacity broadband. Allowing interconnection to networks serving community anchor institutions will provide jumping off points for distributing additional broadband services into surrounding neighborhoods, including residences and other community anchor institutions.

- As the statutory language recognizes, these community anchor institutions have unique needs for very high-capacity bandwidth that are different from those of residential consumers. The eligibility of community anchor institutions to apply for funding should not be dictated by geographic boundaries or definitions that are more appropriate for households.

- It is especially important that rural and low-income schools, libraries and health care providers are able to obtain high-capacity broadband connections because rural and low-income areas often lack any broadband capabilities at all or because the broadband that is available is not affordable. At the same time, other community anchor institutions may have access to low-speed broadband but simply cannot obtain enough bandwidth to carry out their mission because of a shortage of high-capacity broadband networks. Therefore, any of these community anchor institutions that lacks adequate high-capacity broadband to serve the public should have the right to apply for and/or receive broadband funding, and each application to provide broadband to these entities should be considered on its merits on a case-by-case basis.

- All entities, whether non-profit, commercial, or government, including non-profit research and higher education networks, should be encouraged to deploy high-capacity broadband facilities to meet this mission.

- Policy-makers should recognize and address the urgent need to fund the up-front construction costs of deploying broadband facilities, and they should also ensure that the provision of such funding results in lower monthly recurring charges so that the broadband service is affordable and sustainable.

- Community anchor institutions that receive government funding for broadband should be accountable and responsible for the proper use of these funds. The Government should have enforcement and monitoring procedures that are both rigorous and flexible to ensure that funding programs are implemented wisely, are administered efficiently, and are successful in serving the needs of the public.

MEMBERS OF THE SCHOOLS, HEALTH AND LIBRARIES BROADBAND COALITION:
(51 Members - Updated as of September 3, 2009)

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