

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of )  
)  
Inquiry Concerning the Deployment of Advanced )  
Telecommunications Capability to All Americans in a ) GN Docket No. 12-228  
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 )

**Reply Comments of the American Library Association Regarding the  
*Ninth Broadband Progress Notice of Inquiry***

The American Library Association (ALA) – the world’s oldest and largest library association, representing 60,000 members– is pleased to provide these reply comments in response to the Federal Communications Commission’s (FCC) Ninth Broadband Progress Notice of Inquiry. Our comments focus on issues our nation’s public libraries still have with attaining the broadband they need at affordable costs. The ALA believes that the National Association of Telecommunications Officers and Advisors (NATOA) stated it best in its initial comments<sup>1</sup> filed in this docket. “[W]e continue to believe that the Commission should examine the availability of broadband at community anchor institutions, such as schools and libraries....” We only add a clarifying comment that the Commission examine the availability of *adequate* broadband at *affordable prices* to community anchor institutions, including libraries.

Public libraries are quintessential community anchor institutions (CAIs). The nation’s 16,698 public libraries serve everyone, and each week these libraries host more than 30.6 million visits for a variety of purposes, including access to online resources via the libraries’ Internet connection.<sup>2</sup> And in a large majority of communities (62 percent) the library is the only source of no-fee access to computers and the Internet.<sup>3</sup> Ensuring that each of our public libraries has

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<sup>1</sup> Comments of the National Association of Telecommunications Officers and Advisors Regarding the Ninth Broadband Progress Notice of Inquiry. GN Docket No. 12-228. Filed September 20, 2012. <http://apps.fcc.gov/ecfs/document/view?id=7022018052>.

<sup>2</sup> Institute of Museum and Library Services. *Public Libraries in the United States: Fiscal Year 2009*. October 2011. Available online at: <https://harvester.census.gov/imls/pubs/Publications/pls2009.pdf>.

<sup>3</sup> Hoffman, Judy, John Carlo Bertot, and Denise M. Davis. Libraries Connect Communities: Public Library Funding & Technology Access Study 2011-2012. Digital supplement of American Libraries magazine, June 2012. Available at <http://viewer.zmags.com/publication/4673a369>.

adequate and affordable broadband is essential for each library to address the information needs of any resident who chooses to use the library's resources.

On September 6, 2011, the ALA filed extensive comments with the Commission in response to its previous inquiry, the Eighth Broadband Progress Notice of Inquiry.<sup>4</sup> Many of the issues the association documented in its September 2011 filing are still very relevant today. Thus, while we provide some updates and more recent statistics below, we encourage the Commission to review our more substantive 2011 comments.

The impact of the Internet and related issues like broadband connectivity in libraries has been well documented in surveys the library community has conducted since 1994.<sup>5</sup> At that time just 13 percent of the nation's public libraries offered public Internet access, often just a dial-up connection to one or two workstations. Today over 99 percent of public libraries provide access to the Internet, almost all via a broadband connection.<sup>6</sup> Therefore, the issue for libraries—like many community anchor institutions—is not Internet access and broadband connectivity, per se. Rather, it is providing an acceptable and affordable level of connectivity as the demands of Internet-based services, applications and users grow and evolve. Several critical factors driving demand include:

- *Multiple Internet connected workstations and greater public use.* In 2012 public libraries reported an average of 16 public access workstations. Furthermore, 60 percent of libraries report that patron use of the library's Internet workstations has increased in the past year.
- *Cloud-based resources and services.* Over the past decade, there has been a steady increase in patrons accessing information over the Internet. For example, 60 percent of public libraries offered access to online periodical and reference databases in 2000. In the latest survey, this figure has increased to 99 percent. Many of these databases offer the full-text of articles, including images, that often result in large downloads, placing more pressure on limited bandwidth. Libraries also increasingly offer online audio (83 percent) and video content (60 percent) for their patrons.

Integrated library systems (ILS), which include such core library functions as the online catalog and automated circulation, also impact broadband sufficiency. Almost all ILS vendors offer the option to host the library's ILS in the cloud which is only viable if there is bandwidth to support it. Because of the time-sensitive nature of some ILS transactions, it is important to have not just adequate bandwidth but high-quality bandwidth (e.g., low latency) and the technical knowledge to manage it. For libraries that do host their own ILS, website or other content, adequate synchronous bandwidth is essential.

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<sup>4</sup> Comments of the American Library Association Regarding the Eighth Broadband Progress Notice of Inquiry. GN Docket No. 11-121. Filed September 6, 2011. <http://apps.fcc.gov/ecfs/document/view?id=7021707461>.

<sup>5</sup> Previous studies are available at <http://www.ala.org/research/initiatives/plftas/previousstudies>. Most have been conducted by ALA in cooperation with other organizations.

<sup>6</sup> The 2002 study was the last one to report dial-up access data. At that time 6.5% of libraries reported they still had dial-up access.

- *Changing patron needs.* High-bandwidth applications like videoconferencing and services like YouTube are popular with patrons, but these sites require considerably more bandwidth than static, text-only websites. Several patrons engaged in interactive videoconferencing can saturate a 1.5Mbps broadband circuit – impacting not only the quality of the video but all other public Internet users, too. As user-generated content creation and sharing through social media continue to expand, upload speeds also increasingly need to match download speeds.
- *Wireless Internet access.* In the latest ALA survey, 90.5 percent of libraries offer wireless Internet access compared to just 29 percent in 2005. Wireless access is a very popular service, but it places additional pressure on the library’s limited broadband circuit because in 82 percent of libraries, the wireless access shares the same bandwidth as the library’s wired workstations.

Over the past year libraries have made some progress in addressing their broadband needs. In documenting this progress we highlight the following statistics comparing key results from the 2010-2011 study to the most recent 2011-2012 study.<sup>7</sup>

- *Bandwidth speed:* The latest study shows that 23.4 percent of libraries are at 1.5Mbps or less, compared with 34.7 percent only one year earlier.<sup>8</sup> More than half of libraries now offer greater than the 4Mbps residential benchmark set by the FCC, but this has not brought significant increases in sufficiency to meet community needs.
- *Bandwidth sufficiency:* The latest study shows that 41.4 percent of libraries report their bandwidth—regardless what it is—is *not sufficient* to meet patron needs. In the 2010-2011 study, 44.9 of libraries reported they had insufficient bandwidth. Thus modest progress has been made over the past year, but it is obvious that much more still needs to be done.<sup>9</sup> (We would be remiss if we did not acknowledge the critical role the E-rate plays in helping support library and school bandwidth increases.)
- *Fiber connectivity:* As the demand for bandwidth shows no signs of slowing, most libraries will need to have fiber broadband connectivity. Progress has been made over the past year in this area. For example, the 2010-2011 study showed that 31 percent of libraries reported having fiber. This increased to 36.2 percent in the 2011-2012 study. (Some of this increase in fiber connections was funded by the Broadband Technology Opportunities Program through projects that were awarded to library applicants or in which libraries were included by other applicants).

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<sup>7</sup> Data for these studies are collected in surveys conducted during the fall and released the following year. Thus the most recent study is based on data collected in the fall 2011 and released in June 2012. Public Library Funding & Technology Access Study, 2011-2012. [http://www.ala.org/research/plftas/2011\\_2012](http://www.ala.org/research/plftas/2011_2012).

<sup>8</sup> Ibid.

<sup>9</sup> We note that the Commission's 2010 E-Rate Program and Broadband Usage Survey (DA 10-2414) found that nearly 80 percent of schools and libraries in the E-rate program say their broadband connections do not fully meet current needs. [http://transition.fcc.gov/010511\\_Eratereport.pdf](http://transition.fcc.gov/010511_Eratereport.pdf).

In the Ninth Broadband Progress Notice of Inquiry, the Commission asks, “Is Broadband Being Deployed to all Americans?” and specifically asks about deployment to libraries and schools. The ALA welcomes the Commission’s recognition of these vital community anchor institutions (CAIs) that directly support public access to online information and resources, as well as indirectly supporting broadband adoption at the home through increased awareness of personal relevance and digital skills training.

To better understand the availability and quality of broadband for libraries and other CAIs, the ALA respectfully requests the Commission add CAIs as a specific category of user in its future analysis, rather than focusing only on residential customers. Unlike residential customers, libraries support multiple users simultaneously pursuing diverse online activities ranging from distance education to e-government filings to uploading and sharing photos and videos. This additional analysis also is important for measuring progress against the National Broadband Plan’s goal calling for 1Gbps capacity to anchor institutions in every community by 2020.

The Commission’s E-Rate Program and Broadband Usage Survey offers a starting point for the types of questions that might be used in such a broader data collection effort. The ALA, with our technology survey partners at the University of Maryland Information Policy and Access Center, also has extensive experience in documenting library broadband issues and connectivity and would be pleased to work with the Commission to explore this vital area of broadband availability, affordability and quality to our nation’s libraries.

In summary, as the Commission continues to review residential broadband needs we strongly encourage it to keep in mind that the broadband needs of our libraries and other community anchors institutions often far exceed the demands of residential users. Thank you for the opportunity to comment on this important issue.

Respectfully submitted by,

A handwritten signature in black ink that reads "Emily Sheketoff". The signature is written in a cursive, slightly slanted style.

Emily Sheketoff  
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