

# ALA Study on Library Internet Bandwidth Issues\*

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Access to adequate Internet bandwidth has emerged as a key issue for public libraries nationwide, including here in Wisconsin. This article provides a summary of a 2007 American Library Association study on this issue and briefly reviews several more recent follow-up activities. The study was funded by a grant from the Bill & Melinda Gates Foundation. It is available at [www.ala.org/ala/washoff/oitp/papersa/public\\_version\\_final.pdf](http://www.ala.org/ala/washoff/oitp/papersa/public_version_final.pdf).

### Summary of the ALA Public Library Internet Bandwidth Study

From January through June 2007 the ALA's Office for Information and Technology Policy (OITP) conducted the study to examine both the barriers to adequate Internet bandwidth in the nation's public libraries and to explore possible solutions. The study team undertook a number of activities to develop a more complete picture of what is actually happening in the public library community in relation to adequate Internet connectivity. These activities included:

- Holding focus groups with state librarians
- Meeting with national organizations and telecommunications and Internet service providers
- Visiting seven states where the study team met with state library staff, government officials, state networks and Internet service providers
- Conducting in-depth phone interviews with six other states, including Wisconsin.

Ninety-eight percent of public libraries nationwide provide Internet access at no cost to their patrons. Thus, as the ALA report aptly states, "The problem is not basic Internet connectivity, but obtaining and sustaining adequate bandwidth to the Internet as demands of the medium and its users grow rapidly." The ALA study revealed that acquiring and managing adequate bandwidth is a complex issue and different states and regions within states approach this issue from varied perspectives. Within the context of these different perspectives, the ALA study did reveal certain key findings on Internet connectivity applicable to most states and regions. These findings include the following.

1. *Collaboration and aggregation work.* A collaborative approach to adequate library Internet connectivity—at a state or regional level—is often more successful than individual libraries working to obtain more bandwidth by themselves. Libraries in states with statewide or regional networks generally had fewer problems in maintaining adequate Internet connectivity. (Ninety-three percent of Wisconsin public libraries get Internet access via a regional wide area network managed by their library system.)
2. *The need for higher bandwidth is increasing dramatically.* Along with the general increase in Internet use is the growing popularity of image and video sites (e.g., Flickr, YouTube), online gaming and wireless access for patron laptops. Accessing or using these newer services and applications requires substantially more bandwidth than the older, text-only Web. (This more interactive Web environment is sometimes referred to as "Web 2.0"). What was considered sufficient bandwidth just a year or two ago is no longer adequate. And the need for constantly increasing bandwidth is not expected to slow in the foreseeable future.

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\* A version of this article appeared in the September 2007 *Channel*, available at <http://dpi.wi.gov/channel/pdf/chn4301.pdf>. Bob Bocher is on the ALA's Office for Information Technology Policy's Advisory Committee. He assisted ALA staff in conducting the study and Wisconsin is one of the states highlighted in the report.

3. *The minimum threshold for library Internet bandwidth should be 1.5Mbps.* This minimum is only for the smallest libraries. Most libraries will need substantially greater bandwidth. (All Wisconsin public libraries are at or above this minimum.)
4. *There is a need for planning.* Some type of planning process or modeling should be undertaken to help libraries better determine their bandwidth needs. The amount of bandwidth needed is a complex issue and it depends on a variety of factors including the number of computers in the library and the Internet-based services or applications offered by the library. The library's bandwidth needs should be analyzed in relation to the options and costs for broadband that are available. In some locations adequate bandwidth is simply not available or is available only at exorbitant costs.
5. *There is a lack of awareness of the roles of libraries.* Interviews with public officials and telecommunication providers showed that many do not understand the critical role of libraries in providing access to resources and information on the Internet. An awareness campaign needs to be targeted at key decision makers and providers about this role.

The dramatically increased need for ever more bandwidth is being driven primarily by the ever-changing nature of the Internet and its use. The Web has become a critical access tool for a wide range of purposes, including access to financial services, government services, health care, shopping, submitting job applications, and many more. As the ALA report states, "People simply have more things to do on the Internet."

### **Follow-up ALA Activities**

*December 2007 meeting:* The study's findings clearly show the value of regional library consortia in the provision and ongoing support of Internet connectivity for their member libraries. To follow up on this, the Office for Information Technology Policy (OITP) held an invitational meeting in Denver in December. Staff from ten regional consortia representing five states attended. (Staff from three Wisconsin library systems were invited but only one was able to attend because a snowstorm forced flight cancellations.) The meeting explored such issues as:

- The cost models for supporting Internet connectivity and increased bandwidth
- The services and applications offered by library consortia that are delivered via broadband networks
- The challenges faced by consortia and their member libraries related to broadband issues.

*May 2008 meeting:* To help meet the ever increasing need for more bandwidth, OITP is sponsoring a "Capacity Planning Panel" of experts in library networks, telecommunications and Internet technology. The panel will convene in late May to start developing a *Bandwidth Capacity Tool*. This will be a toolkit intended to help library staff better predict their bandwidth needs and help them in their ongoing bandwidth planning processes. From a broader perspective, the study indicates that there is considerable confusion and a lack of information in the industry and in the policy arena about library bandwidth and connectivity needs. To address this, the panel will also work on a *Policy Briefing Tool*. This will be an advocacy tool designed to address the general question of why libraries need such high levels of broadband connectivity.