

ALA American Library Association

July 7, 2014

Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: WC Docket No. 13-184

Dear Chairman Wheeler, Commissioner Clyburn, Commissioner O’Rielly, Commissioner Pai, and Commissioner Rosenworcel:

The American Library Association (ALA) is the largest library association in the United States, and, in fact, is the largest library association in the world, with more than 57,000 members. ALA has provided leadership for nearly 140 years in connection with the development, promotion, and improvement of library and information services and the profession of librarianship in order to greatly benefit, in innumerable ways, students, educators and people of all ages and backgrounds in communities of all sizes across the country.

Throughout the E-rate Modernization proceeding, ALA has been in continual contact with librarians from urban, rural, and suburban libraries to gain input on the issues related to increasing broadband capacity “to” the library and “within” the library building. ALA has also engaged with other library organizations.

Regarding the development of a formula for calculating the cap for Category 2 funding for libraries, ALA has continued its due diligence and respectfully submits the following analysis and recommendation for a square footage formula, including a floor for small public libraries.

In its analysis, ALA undertook to understand the nature of library Wi-Fi networks including: the Wi-Fi and related services recently purchased by libraries to support current levels of wireless service within the library; similar services purchased by libraries that recently upgraded to 100 Mbps and 1 Gbps of service; estimated costs for libraries with inadequate Wi-Fi capacity to significantly upgrade; current list costs of such services; and a variety of library equipment configurations, corresponding costs, and different discounts libraries may receive from vendors. In some cases, library data included equipment not currently eligible for E-rate discounts, but which is important to a high-performing network, and so we needed to exclude these elements for our purposes.

We also note, however, that historical data are informative, but not predictive, as the Commission and ALA are actively promoting a significant improvement in broadband capacity for many libraries (100 Mbps / 1 Gbps). As a result, we must allow for higher costs than in the past. The shift from a “priority” to a “category” system of funding also will likely spur overdue and larger-scale projects to improve library internal networks and Wi-Fi access. Moreover, looking at a five-year time horizon, we must allow for some upward funding flexibility to account for inflation and uncertainty in future upgrade costs.

The result of this broad-ranging analysis is a large variation in costs per square foot, which is illustrated by several scenarios below. **However, through further refinement of the given data, ALA recommends the Commission adopt a \$2.30/square foot formula and a \$9,200 floor (which occurs at 4,000 square feet).**

For illustrative purposes, a summary of our available data to show what influenced our ultimate decision is as follows:

For a small branch or library (e.g., 8,000 square feet) the costs for supporting a major upgrade to 100 Mbps come to \$18,304 or \$2.29 per square foot. For the 1 Gbps scenario at a larger branch or library (e.g., 17,500 square feet) the total comes to \$37,639 or \$2.15 per square foot. The hypothetical 41% discount derives from vendor negotiations or by virtue of being part of a consortium:

Scenario 1 – Small Branch/Library (possibly with its own connection to the internet) with 100 Mbps throughput. (All prices listed at 41% discount.)

- \$ 6,298 Cisco ISR G2 2951 router with firewall
- \$ 8,160 Cisco WS-C3850-24U-E 24 port switch
- \$ 882 Cisco AIR-CAP3702I-A-K9 Wi-Fi access point per unit X 3 units
- \$ 1,200 Cabling for access points
- Total: \$ 18,304

Scenario 2 – Large Branch/Library (with its own connection to the internet) with 1 Gbps throughput (All prices listed at 41% discount.)

- \$ 11,523 Cisco ISR 3945E Router with firewall
- \$ 14,178 Cisco WS-C3850-24U-E 48 port switch
- \$ 882 Cisco AIR-CAP3702I-A-K9 Wi-Fi access point per unit X 9 units
- \$ 4,000 Cabling for access points
- Total: \$ 37,639

Similar data exist from a state-wide upgrade for 33 libraries (costs average \$1.79 per square foot to support 100 Mbps to each library). Finally, a mid-size library system in the Mountain states reported costs that came to about \$1.88 per square foot.

ALA supports the notion that a formula for Category 2 services will help allocate limited funds in a more equitable way such that all library (and school) applicants will receive some funding for eligible services in a fairly predictable manner. Finally, ALA understands this system will be in

place for the next five years. If this system is renewed or extended beyond this period, then the dollar amounts should be adjusted for inflation or renegotiated. ALA also understands that Category 2 services will be funded independently from the Commission's commitment to fully funded Category 1 services.

ALA supports the Commission moving forward on the current proposed order as an important first step in a multi-step process to fully accomplishing the goal of connecting our nation's students and the broader public to high-capacity broadband. We look forward to the Commission's continued commitment to addressing the full spate of issues confronting libraries later this year.

If you have any questions or need additional information, please do not hesitate to contact me.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read 'Marijke Visser', followed by a horizontal line.

Marijke Visser
Assistant Director, Office for Information Technology Policy
American Library Association
Washington Office

cc: Gigi Sohn
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