

2014

# Digital Inclusion in Native Communities: The Role of Tribal Libraries



*This report is based on a national needs assessment survey conducted by the Association of Tribal Archives, Libraries, and Museums, with funding from the Institute of Museum and Library Services*



Suquamish Tribal Library

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*Community-oriented and truly effective deployment of communications technologies within Indian Country has the potential to level the negative social, cultural, and economic impacts that history has caused Tribal Nations and Native communities to endure. New commercial, educational, and health care opportunities, as well as social stability and quality of life issues, may genuinely be addressed through broadband and other communications mediums.*

*—Office of Native Affairs and Policy  
Consumer and Governmental Affairs Bureau Federal Communications  
Commission 2012 Annual Report*



## Acknowledgements

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- Mary Alice Ball, Senior Program Officer, Institute of Museum and Library Services
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- Jeanie Whitehorse, Tribal Librarian, New Mexico State Library
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## About the Association of Tribal Archives, Libraries, and Museums (ATALM)

ATALM is an international non-profit organization that maintains a network of support for indigenous institutions, provides culturally relevant programming and services, encourages collaboration among tribal and non-tribal cultural institutions, and articulates contemporary issues related to developing and sustaining the cultural sovereignty of Native Nations. More information is available at [www.atalm.org](http://www.atalm.org).

## About the report authors

Miriam Jorgensen is Research Director of the Harvard Project on American Indian Economic Development and of its sister program, the Native Nations Institute for Leadership, Policy, and Management at the University of Arizona. Traci L. Morris is a member of the Chickasaw Nation, founder of Homahota Consulting LLC, and Director of the American Indian Policy Institute at Arizona State University. Susan Feller is Development Officer for the Oklahoma Department of Libraries and President of the Association of Tribal Archives, Libraries, and Museums.

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Members of the Multimedia Club at the Yakama Nation Library.

## Contact for further information

Susan Feller, President  
Association of Tribal Archives, Libraries, and Museums  
6308 Harden Drive  
Oklahoma city, OK 73118  
susanfeller@msn.com  
405-401-8293  
www.atalm.org



In order to provide connectivity on the reservation, the Hopi Public Library's newest mobile technology lab delivers Wi-Fi to remote communities via a satellite connection.

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# Digital Inclusion in Native Communities: The Role of Tribal Libraries

## Executive Summary

Several recent national surveys have given public libraries a strong voice in policymaking conversations concerning digital inclusion. Unfortunately, tribal libraries and tribal populations were not included in these data collection efforts. As a result, the needs of tribal libraries and Native community members have not been considered along with those of public libraries and the general population in national policymaking or funding processes.

This study, which primarily draws on data from a national survey of tribal librarians conducted by the Association of Tribal Archives, Libraries, and Museums in 2013, examines the capacity of tribal libraries to drive digital inclusion activities for tribal citizens. It identifies needs and recommends steps for improving broadband capacity and technology access in Native communities, thereby leveling the technological playing field. It also provides data that can strengthen the voices of tribal libraries and of the communities they serve—and may help give Native Nations a seat at the table where policy and investment decisions are made.

## Organization

The report has seven major sections:

(1) *The Role of Tribal Libraries: Cultural Resources and Digital Inclusion.* Tribal libraries have a primary mission to serve the information needs of their respective Native communities, a mission that includes serving as “culture keepers” for tribal-specific information and history. Like public libraries, however, they are expected to provide access to public computers and Internet services and be key drivers of digital inclusion.

(2) *Technology Offered by Tribal Libraries: A Snapshot.* Until this study, little was known about the technology offered by tribal libraries or their efforts to ensure that the digital inclusion needs of tribal citizens are met. In fact, substantial numbers of tribal libraries offer patrons access to the Internet, computers, mobile technology, free public Wi-Fi, and electronic institutional resources.

(3) *Tribal Libraries’ Digital Capacities and Needs. A Closer Look.* While most tribal libraries provide various kinds of digital access, it is not always *quality* access. In nearly every category of technology service—from the availability of public computers and the Internet to tribal library Internet speeds and bandwidth, digital literacy and digital adoption, and technology training—tribal libraries are less well equipped than mainstream public libraries to help their communities meet essential digital literacy, digital inclusion, and digital citizenship goals.

(4) *Internet Use by Tribal Libraries.* Libraries are expected not only to offer Internet and technology access to patrons but also to use technology themselves. Survey respondents noted

that technology is used for administrative purposes, communication, and collections management. Nonetheless, far fewer tribal libraries than public libraries have websites, provide for remote access to catalogs or collections, or utilize social media.

(5) *Resourcing Tribal Libraries*. Tribal libraries are sorely lacking in resources—not only financial resources but also technically trained and knowledgeable staff. Many tribal libraries rely primarily on the Institute of Museum and Library Services for funding. Few have been able to take advantage E-rate funds (“E-rate” is the commonly used name for the Universal Service Fund Schools and Libraries Program) or donations, although both hold promise for the future.

(6) *Opportunities and Strategies for Improving Digital Inclusion in Native Communities*. This section reports on librarians’ and patrons’ impressions of tribal library digital access needs and on their suggestions for strategies to meet those needs.

(7) *Building Digital Native Communities: An Initial Action Plan*. Proactively, the report proposes activities that may help tribal libraries address their communities’ technology needs. The plan has five action areas leadership, training, resources, policy and advocacy, and research.

Appendix A presents testimony on the ways computer and Internet access at tribal libraries is strengthening Native nations and changing tribal citizens’ lives. Appendix B provides a list of self-identified respondent libraries.

### **Selected findings**

Statistics that help make the case for focusing increased policy and funding attention on tribal libraries include:

- One hundred percent of public libraries offer patrons access to the Internet, but only 89 percent of tribal libraries in the study sample were able to do so.
- One hundred percent of public libraries offer patrons access to public computer workstations, but only 86 percent of tribal libraries in the study sample were able to do so.
- Sixty-eight percent of tribal libraries in the study sample were able to provide free public WiFi, as compared to 86 percent of rural public libraries; however, only 17 percent of tribal libraries in the study sample were able to provide WiFi access when the library was closed.
- Only 36 percent of tribal libraries in the study sample were able to offer e-book access, as compared to 76 percent of public libraries, and only 11 percent of respondent tribal libraries were able to support remote access to e-books.
- Only 46 percent of tribal libraries in the study sample offered access to licensed electronic databases (such as journal indices, science learning tools, and genealogical data) as compared to 98 of rural public libraries.



- At least 40 percent of tribal libraries in the study sample did not have a broadband Internet connection. The actual figure may be as high as 89 percent.
- Only 42 percent of tribal libraries in the study sample were able to provide patrons with technology training, as compared to 87 percent of rural public libraries and 90 percent of all public libraries.
- Only 34 percent of tribal libraries in the study sample had a website.
- Only 45 percent of tribal libraries in the study sample had a Facebook presence as compared to 65 percent of rural public libraries; nonetheless, it was far and away the most frequently reported means of social media communication.
- Federal and tribal government funding are the two most common sources of revenue for tribal libraries; respectively, 89 percent and 54 percent of survey respondents reported these sources of funds.
- Sixteen percent of tribal libraries in the study sample reported that IMLS was their *only* source of support.
- Only 15 percent of tribal libraries in the study sample received E-Rate discounts; statistics suggest that the limited uptake of E-rate support can be attributed, in part, to complicated eligibility requirements and a general lack of awareness.

# Digital Inclusion in Native Communities: The Role of Tribal Libraries

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## Introduction

Several recent national surveys have given public libraries a strong voice in policymaking conversations concerning digital inclusion. Unfortunately, tribal institutions and tribal populations were not included in these data collection efforts, and their voices are now excluded from key policymaking conversations.

For example, the Federal Communication Commission's *2010 National Broadband Plan* charges public libraries across the country with helping to bridge the digital divide. Public libraries, including rural libraries, are well equipped to participate in follow-on policy discussions but tribal libraries (which are a unique type of public library) are not. Previous studies have established that gaps exist in terms of broadband penetration and access in Native communities,<sup>1</sup> but there is little information about the capacity of tribal libraries to intervene in support of Internet access and digital literacy.<sup>2</sup> As a result, the needs of tribal libraries and Native community members are not considered along with those of public libraries and the general population, and there is a substantial risk that tribal citizens will fall even farther behind mainstream America in terms of digital access, adoption, and applications. To level the playing field, tribal libraries need data that will allow them to drive digital inclusion in Native communities and give them a seat at the table where policy and investment decisions are made.

In 2013-2014, the Association of Tribal Archives, Libraries, and Museums (ATALM) conducted a national survey in response to this need. Questions were designed to complement mainstream data and to address field-specific concerns. The data collected create the needed raw material for tribal libraries to participate meaningfully in policy discussions and are a baseline for measuring progress.

This report presents overall findings from the survey. It provides information on tribal libraries' present capacity to provide technology services and Internet access and on tribal libraries' needs relevant to digital inclusion goals. It also offers examples of digital inclusion excellence in Native communities, demonstrating how appropriate tribal library infrastructure, services, and training can help Native community members gain the same quality of life benefits that mainstream American citizens achieve through digital inclusion. Finally, this report sets a strategic agenda for strengthening tribal libraries as leaders in digital inclusion across Native America.

# The Role of Tribal Libraries: Cultural Resources and Digital Inclusion

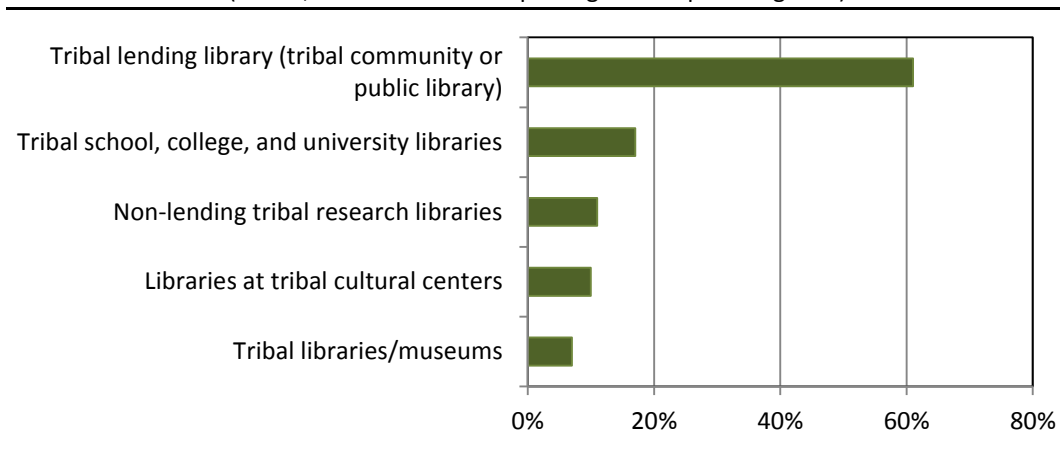
## Tribal library services

As institutions whose primary mission is to serve Native communities, tribal libraries have distinctive characteristics:

- They are responsible for addressing diverse tribal needs, including language and life ways preservation.
- Their collections may include sacred materials to which culturally appropriate access must be assured.
- Their staff members may be knowledgeable “culture keepers” but have limited experience or professional training in traditional library sciences.
- They serve geographically diverse areas, some of which are as large as states. Many are located in remote areas where access to training and resources, including Internet access, are not readily available.
- They may be hybrid institutions (Figure 1), working in partnership with museums, archives, cultural centers, tribal colleges and universities, schools, among other entities.
- As tribal-government affiliated entities, they often are not eligible for the same services and funding afforded public libraries; in particular, they are unlikely to have connections or receive services from state library agencies.

**Figure 1. Classification of Tribal Libraries in ATALM Survey**

(n=167, with 11 libraries reporting in multiple categories)



Nonetheless, most tribal libraries can be understood as a type of public library. They provide public access to book and document collections, offer programming to support literacy and reading, provide access to government information, and serve as meeting places for community functions.<sup>3</sup> Another commonality is the expectation that both public and tribal libraries will serve as agents of broadband deployment and adoption in areas where more comprehensive

infrastructure investments are as yet infeasible because of terrain, distance, rights of way, etc., and where socioeconomic conditions make free public Internet access a necessity.

## Digital inclusion

This expectation is made clear in the *National Broadband Plan*, issued by the Federal Communications Commission (FCC) in 2010. The Plan envisions that all governments—federal, state, local, and tribal—have a role to play in broadband deployment, and that public and tribal libraries will help provide this leadership. The goal is for them to both do more and become better at what they already do. The Plan states, “public computing centers [which include public and tribal libraries] provide more than just free access to the Internet. They provide supportive environments for reluctant and new users to begin to explore the Internet, become comfortable using it and develop the skills needed to find, utilize and create content.”<sup>4</sup>

The higher bar for library services reflects the importance of “digital inclusion,” a term that reflects the “ability of individuals and groups to access and use information and communications technologies.”<sup>5</sup> It acknowledges that the digital divide is not just about access to computer hardware and Internet service. Bridging the digital divide also requires digital literacy and the availability of relevant content and services.

Where there is digital inclusiveness, all people, businesses, and institutions have access to digital technologies and content that enable them to create and support healthy, prosperous, and cohesive 21st century communities. With digital inclusion:

- Internet access will be high speed, affordable, physically accessible, and capable of supporting current demand and future growth.
- Public access will be available for those who, under normal circumstances or in an emergency, have little or no communication technology at home or who need to supplement their home connectivity.
- Broader opportunities for economic development will be available through full use of information and communication technologies.
- Technology will be used to foster social connections, education and employment opportunities, access to health care, civic participation, and innovation, as well as to drive efficient and effective government services.<sup>6</sup>

Figure 2 graphically represents the pathway from technology access and use to civic, economic, and quality of life outcomes. Essentially, the contemporary demand is for tribal and public libraries to work within the inner ring, helping to ensure foundational access and education, a role that leads to the question, “Are they prepared?”

**Figure 2. Principles of Digital Inclusion and Digitally Inclusive Communities**

**Inner Ring: Foundational Principles**

The foundations are what individuals and communities can hope to achieve. They are outputs of investments in digital inclusion.

**Outer Ring: Targeted Principles**

The targets are the public areas affected by digital inclusion or results. They are the products of effective technology deployment and user outreach.



Source: Institute of Museum and Library Services, University of Washington, and the International City/County Management Association, *Building Digital Communities: A Brief Guide to the Proposed Framework for Digitally Inclusive Communities*, 2012, p. 3.

### Research on library capacities

Two recent national studies give data-rich answers concerning public libraries' capacities to support digital inclusion. The University of Maryland's Information Policy and Access Center study, *2011-2012 Public Library Funding & Technology Access Study*, conducted in collaboration with the American Library Association (ALA), provides a "state of the field" report on Internet connectivity in public libraries.<sup>7</sup> It describes how patrons use technology at their public libraries and discusses year-on-year changes in use. The findings indicate that U.S. citizens depend on their local public libraries for physical access to technology infrastructure, electronic content, and information professionals who can help them interpret and use available content. The Pew Research Center (Pew) 2013 study, *How Americans Value Public Libraries in Their Communities*,<sup>8</sup> finds that for the vast majority of Americans over the age of 16, public libraries play an important role in promoting literacy, improving the quality of life, and providing resources that help give everyone a chance to succeed. It also finds that Americans value a wide range of library services, but have varying degrees of enthusiasm for them and may be unfamiliar with all the services their libraries offer. In combination, results from both studies point to variegated needs across library locations and types for technology access and education.

Neither effort included tribal libraries in its survey population. As a consequence, policymaking based on the ALA and Pew studies has proceeded without regard to tribal libraries' needs and perspectives. This hurts tribal libraries. Government officials, policymakers, and regulators must have a better understanding of tribal libraries' unique service populations, challenging geographies, broad missions, severe human capital and financial resource constraints, and limited technology capacities in order to create a level playing field for Native communities.

What little research there is on connectivity in Native communities demonstrates that the United States' 5.2 million Native Americans<sup>9</sup> are tech savvy: Native Americans appear to use digital communications technologies at rates much higher than national norms.<sup>10</sup> Yet according to the FCC, "The best evidence indicates that the broadband deployment rate on tribal lands is less than 10 percent."<sup>11</sup> Given the lack of physical access, tribal members could only have gained this level of engagement through resourcefulness and innovation. These qualities bode well for Native communities in the long run. If advocates, policymakers, and funders can effectively enhance tribal libraries' capacities to meet "foundational" goals (Figure 2), tribal citizens may be well primed to translate access, availability, and adoption into improved community outcomes. *But first we need data.*

Recognizing the need for current and comprehensive data, the Institute of Museum and Library Services (IMLS) funded the Association of Tribal Archives, Libraries, and Museums (ATALM) to conduct research on technology availability and digital access in tribal libraries. This report is one result. It summarizes findings from a 42-question Survey Monkey instrument sent via email to just over 250 tribal library entities, ATALM's known universe of tribal library and library-like institutions. Many survey items were modeled after questions in the *2011-2012 Public Library and Technology Access Survey* and the survey for ATALM's 2012 study, *Sustaining Indigenous Culture: The Structure, Activities and Needs of Tribal Archives, Libraries, and Museums*. The survey was open from October 15 to December 5, 2013. One hundred and seventy-five tribal libraries started the survey, generating between 80 and 167 responses to each survey item analyzed in this report. (In other words, "n," the number of survey respondents, varied from question to question.) This report also includes several findings from a brief, pencil-and-paper supplemental survey of 237 tribal library patrons representing 23 tribal libraries, which was administered in early 2014.<sup>12</sup>

## **Technology Offered by Tribal Libraries: A Snapshot**

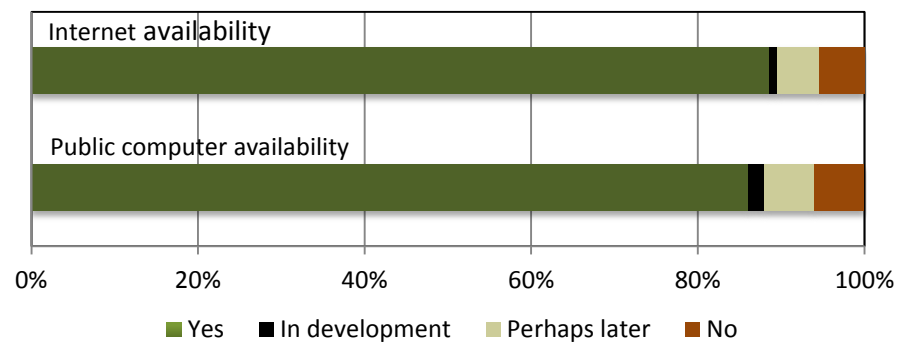
As community anchor institutions, tribal libraries offer a variety of on-site and virtual services to patrons. These services include direct access to technology, access to the resources that technology provides, and training that facilitates both. Survey data collected by ATALM, presented below, provides a baseline for measuring progress and, where possible, a comparative understanding of the ways tribal libraries currently support digital inclusion.

### **Access to the Internet**

Eighty-nine percent of reporting tribal libraries offer patrons access to the Internet (Figure 3), up from 80 percent of reporting libraries in ATALM's 2011 study.<sup>13</sup> Nonetheless, the figure for tribal libraries stands in stark contrast to comparable data for public libraries. One hundred percent of responding public libraries in the *2011-2012 Public Library Funding and Technology Access Survey* offered public Internet access.<sup>14</sup> In many communities, tribal libraries are the only place where public computers with free Internet access are available. The current survey data indicate that 43 percent of tribal libraries that offer Internet access are the only access sites in their regions, an improvement over 51 percent in 2011.<sup>15</sup> As a comparison, 70 percent

of rural public libraries indicated in 2011 that their institution was the only provider of free public access Internet in the region.<sup>16</sup>

**Figure 3. Availability of Public Computers and the Internet at Tribal Libraries (n=144)**



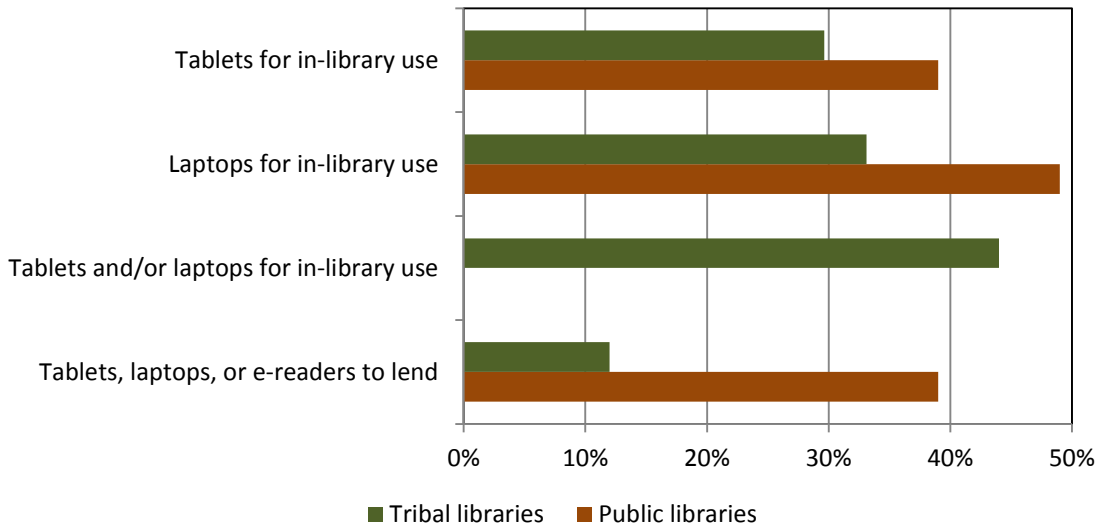
### Access to computers and basic computer functions

Access to basic word processing, printing, and other computer functions is important in tribal libraries because patrons may not have access to a computer in their homes or elsewhere. Eighty-six percent of respondents offered this service to their patrons in 2013 (Figure 3), up from 76 percent in the 2011 ATALM survey.<sup>17</sup> Two percent reported that their capacity to offer basic computer access to patrons was “in development,” and another 6 percent noted that “perhaps later” they would offer this service. The reporting tribal libraries had an average (mean) of 6.6 public computer workstations available for patron use, although the median was only four computers per library.<sup>18</sup>

### Access to mobile technology

Mobile technology is gaining in popularity for everything from basic computer functions to viewing films. In 2013, 30 percent of tribal libraries provided in-library access to mobile devices such as tablets or e-readers, and 33 percent provided in-library access to laptop computers (Figure 4).<sup>19</sup> Because many libraries choose to provide one or the other, it also is useful to know the overall in-house availability of mobile technology. This calculation is not possible from published data for public libraries, but the ATALM survey data show that approximately 44 percent of tribal libraries offer access to either laptops or tablets. Notably, this is still fewer than the percentage of public libraries that offer in-library access to laptops alone. Only 12 percent of tribal libraries lend mobile technology. By comparison, 39 percent make e-readers available for checkout.<sup>20</sup>

**Figure 4. Availability of Mobile Technology at Tribal Libraries (tribal library n=145)**

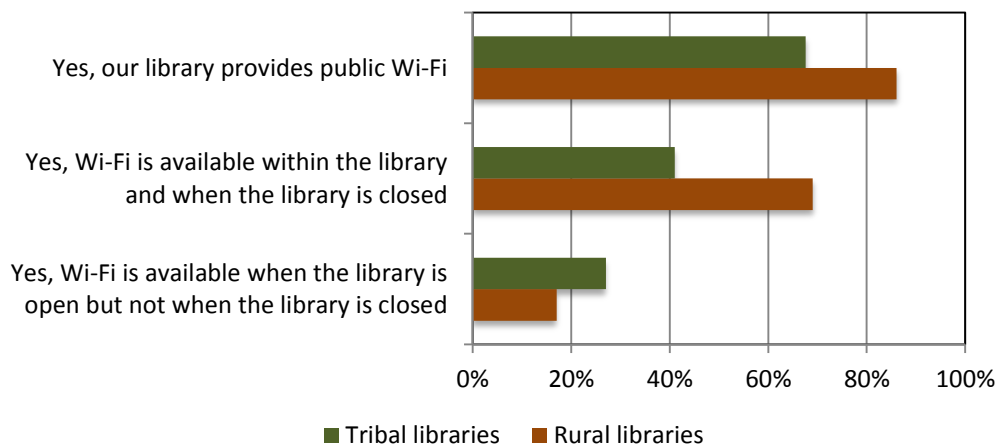


Sources for public libraries data: Bertot, et al., *2011-2012 Public Library Funding and Technology Access Survey*, Figure 21, p. 32.; Hoffman, et al., "Libraries Connect Communities," 2012, p. 6.

### Access to free public Wi-Fi

Sixty-eight percent of responding tribal libraries provided free public Wi-Fi that patrons with personal laptops or wireless devices could use to access the Internet (Figure 5), as compared to 86 percent of rural public libraries.<sup>21</sup> Among both groups, Wi-Fi often continues to be available when the library is closed; although a greater fraction of rural libraries offer this service than do tribal libraries. Approximately 13 percent of tribal libraries indicated that wireless access is not available, although they had plans to make it available within the year. Another 19 percent of tribal libraries had no plans to make wireless access available in the next year.

**Figure 5. Availability of Free Public Wi-Fi at Tribal Libraries (tribal library n=145)**





## Access to electronic institutional resources

Figure 6 summarizes access to other electronic resources and services that tribal libraries may offer. Here, the differences between tribal and public libraries are even more striking. Because ATALM modeled some of its survey items after questions in the *2011-2012 National Survey of Public Library Funding and Technology Access*, direct comparisons can be made between the services of tribal and public libraries. Figure 6 also breaks out the responses of rural libraries, whose situations may be most comparable to that of tribal libraries. Except for digitized special collections, tribal libraries are disadvantaged as compared to public libraries in their ability to provide access to the polled technology-based services.

**Figure 6. Electronic Resources/Services Available to Library Patrons (tribal library n=142)**

Access provided to...	Tribal libraries	Rural public libraries	All public libraries
Homework resources	68%	78%	82%
Audio content (music, books)	63%	78%	83%
Digitized special collections (photographs, letters)	54%	45%	53%
Connect digital cameras & manipulate photos	47%	69%	64%
Licensed electronic databases	46%	98%	99%
Burn CDs & DVDs	45%	61%	56%
E-books	36%	65%	76%
Online instructional courses/tutorials	36%	50%	54%
Access gaming consoles, software, websites	30%	64%	69%
Web or business conferencing	19%	29%	27%

Sources for non-ATALM data: Bertot, et al., *2011-2012 Public Library Funding and Technology Access Survey*, Figure 24, p. 35 (rural libraries data) and Figure 21, p. 32 (all public libraries data).

- Like public libraries, tribal libraries are committed to providing homework resources to students. Sixty-eight percent offer this service. Nonetheless, a still larger number of rural public libraries—78 percent—offer homework support.
- Audio content—music, audio books, or other resources—is a growing part of library resources. A majority of tribal libraries, 63 percent, offer access to audio content either in the library or through remote access.
- Digitized special collections, which include photographs, letters, documents, and other archival materials, are a special focus for tribal libraries as compared to public libraries. This access is the third most common type of technology-facilitated service provided at tribal libraries (of out 10 ranked services) as opposed to the ninth most common at public libraries. Often, these materials are components of the cultural and historical collections that are core to many tribal libraries’ missions—and that distinguish tribal libraries from public libraries.
- These three services—homework resources, audio content, and digitized special collections—are the only technology-based services to which more than half of

tribal libraries provide access. By contrast, a majority of rural public libraries are able to provide access to all but two of the listed technology-related services.

*“Our library started a GED program...the main focus of the project is our youth and providing a homework lab and online tutoring.”*

—A respondent to the 2013 ATALM Survey

- Libraries often are the *only* place where private citizens can access licensed databases (business guides, magazine and journal indices, historical timelines, encyclopedias, biographical data, genealogy information, and science learning tools, among many others). In fact, they are the most common type of technology-facilitated access offered by public libraries. They are much less common at tribal libraries. Ninety-eight percent of rural libraries and 99 percent of all public libraries provide access as compared to only 46 percent of tribal libraries. Cost is one explanation for this difference<sup>22</sup>; mission may be another.

*“We have such a beautiful space here and it is full of life and museum items. However, we have no Wi-Fi or Internet for patrons to use. The capability of this space is well beyond what we are able to provide. We would also love to be able to help patrons with genealogy searches through a public access station with a subscription to ancestry.com and other searchable sites. We have such a high demand for these two things but little funding and support from our tribal leadership.”*

—A respondent to the 2013 ATALM Survey

- Pew Research Internet Project reported in January 2014 that 28 percent of U.S. adults had read an e-book in the last year.<sup>23</sup> Further demonstrating their growing popularity, 76 percent of public libraries and 65 percent of rural public libraries offer e-book access. Only 36 percent of tribal libraries do so, although in open-ended questions, an additional 9 percent of respondents specifically commented that they would like to offer access to e-books and e-reading devices.
- Approximately half of public libraries and a third of tribal libraries offer online instructional courses and tutorials. Much instruction is geared toward digital literacy, but some libraries also offer subject-specific training—on topics ranging from health and wellness to GED completion, language learning, and digital photography. Online education is an area in which both public and tribal libraries have substantial room to grow. In increasing their offerings, libraries support both lifelong learning and labor force skill development.
- To improve outreach to young people, two-thirds of public libraries offer access to recreational gaming consoles, software, and websites. By contrast, only 30 percent of tribal libraries do so.
- Web and video conferencing facilitates collaboration over long distances and has become an important 21st century business tool. Public and tribal libraries could

be hubs for such activity, especially for small businesses. Nonetheless, only a few offer this service—27 percent of public libraries and 19 percent tribal libraries (although in open-ended comments, additional tribal libraries noted their desire to offer web-conferencing services). Perhaps underscoring differences in patron needs, or perhaps pointing to the future, rural public libraries are the most likely of all to offer web and video conferencing services (29 percent of rural libraries).

## Tribal Libraries’ Digital Capacities and Needs: A Closer Look

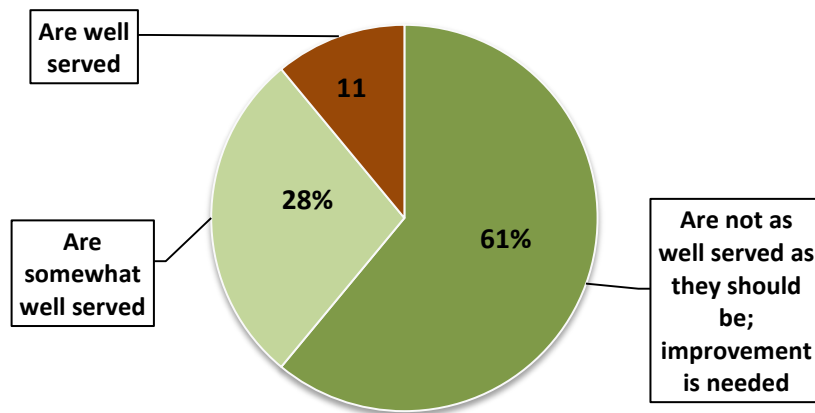
Diverse indicators—general and specific, qualitative and quantitative—point to the acute need for improved public computer availability and Internet access at tribal libraries.

### General perceptions of patron needs

Answers to the survey question, “Are the needs of your community members who want access to computers and the Internet being well served?” provide an all-encompassing measure of tribal library digital capacities. A small number of tribal librarians (11 percent) reported that needs were well served, but most (61 percent) felt that in order to truly meet community needs, improvements in library computer and Internet offerings were necessary (Figure 7).

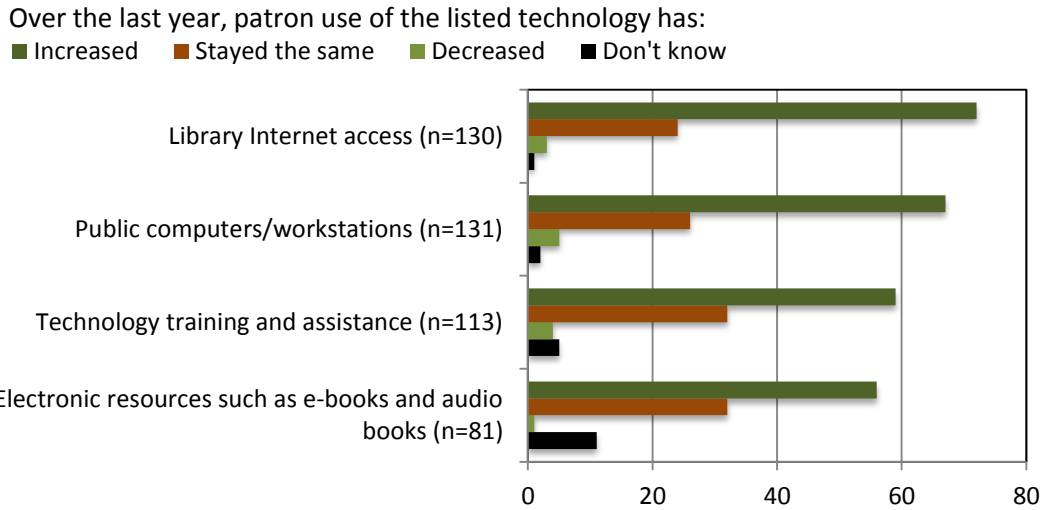
**Figure 7. Tribal Librarians’ Perceptions of Tribal Library Digital Services (n=161)**

Needs of community members who want to access computers and the Internet:



Patron demand is a key factor in assessing the sufficiency of tribal libraries’ technology services (Figure 8). Among tribal libraries that offer access to public workstations and the Internet, more than 60 percent reported that patrons’ use had increased over the last year (2013); 48 percent noted an increase in the need for patron technology training or assistance; and 32 percent reported increased use of electronic resources such as audiobooks and e-books. These figures are comparable to data from public libraries. In the US as a whole, “public computer and Wi-Fi use increased last year [2011] at more than 60 percent of libraries.”<sup>24</sup>

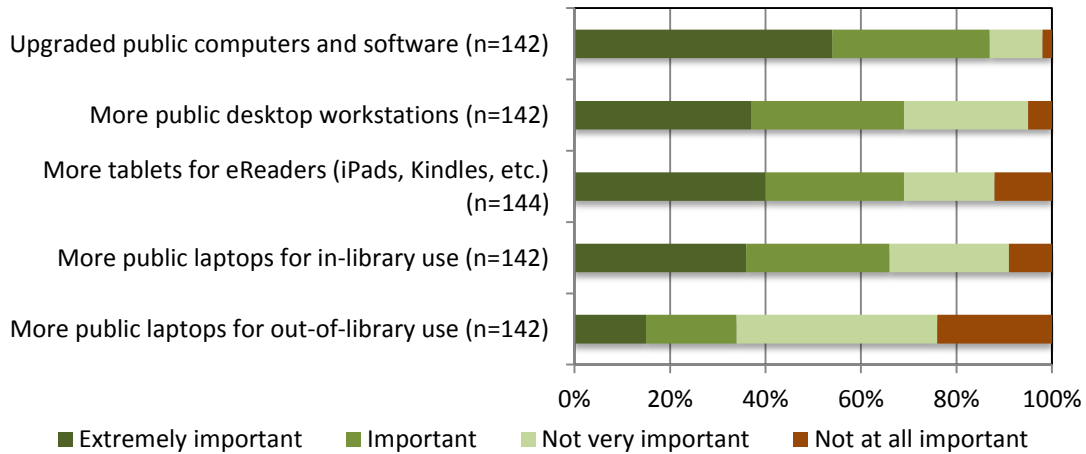
**Figure 8. Tribal Librarians’ Perceptions of Change in Patrons’ Use of Library Technology**



**Public computers: Internet workstations, desktops, laptops, and tablets**

Survey respondents are clear that tribal libraries need more and upgraded “in-house” computers of all types—Internet workstations, desktops, laptops, and tablets (Figure 9).

**Figure 9. Librarians’ Perceptions of the Tribal Library Technology Needs**



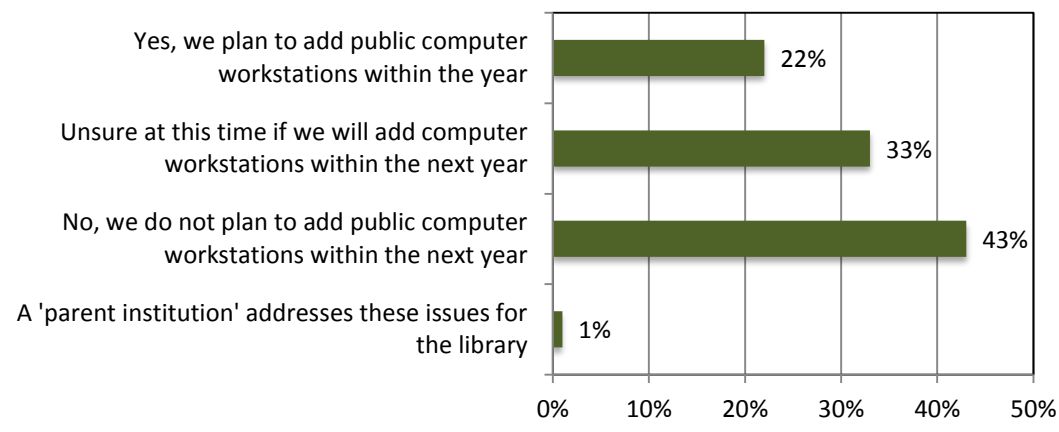
More than 65 percent of respondents ranked these needs as either “extremely important” or “important.” However, most did not perceive a need to provide more laptop computers for use outside the library, and some expressed concern that laptop lending could result in damage or theft.

Time limits on patron computer use are another window onto tribal library technology needs. Forty-three percent of responding tribal libraries (61 of 142) reported that they *do* impose time limits, although often these limits are imposed only if other patrons are waiting to use the

workstations or only during certain hours (usually when students need computers for homework). Among libraries that reported specific time limits, the average limit was 45 minutes. Several other libraries reported that they do not yet impose a time limit on public computer use but may do so in the future.

Twenty-two percent of tribal libraries indicated that in the next year, they plan to add more public computing workstations to better meet patron needs (Figure 10). Another 33 percent are unsure if they will, and 43 percent report that they have no plans to do so. A very small fraction of respondents (1 percent) indicated that the larger institutions in which they are embedded (an education center in one instance, a community center in another) provide computers and Wi-Fi services, reducing the tribal library’s responsibility to do so.

**Figure 10. Tribal Libraries Plans to Add Public Computer Workstations (n=145)**



*“The library is helping bridge the digital divide thanks to the proceeds from an IMLS Enhancement Grant. The library now has four public access computers, with plans to purchase an additional two more within the next year. However, with the population growing in our community at a rapid pace, this will not be sufficient to meet the growing technological needs of our community.”*

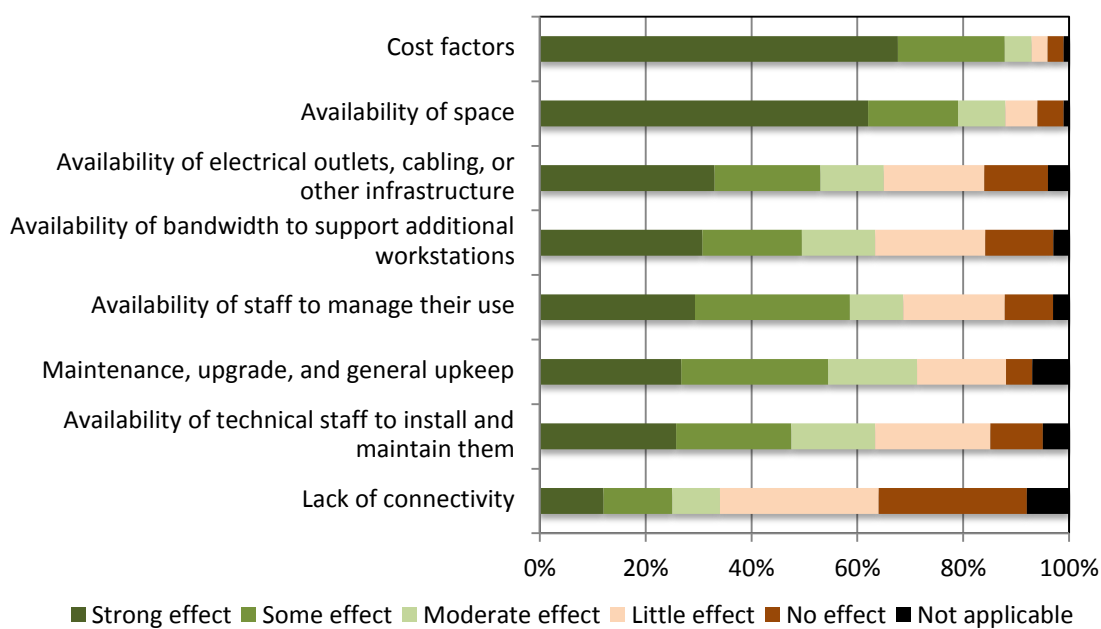
—A respondent to the 2013 ATALM Survey

Of course, a tribal library still may need public computers even if it has uncertain plans or no plans to add them: commenting on this survey item, several tribal librarians explained that a lack of funding or of space was the only reason they were not planning to purchase computers. A follow-up question explicitly addressed the issue of barriers. It is in fact the case that across all respondents, cost and space are the most important barriers to increasing the number of public computers in tribal libraries (Figure 11). More than 60 percent of tribal libraries reported that cost and space factors had a strong effect on their ability to add more public computer workstations. Half as many libraries reported that constraints such as a lack of electrical outlets and cabling, limited bandwidth, maintenance concern, and a lack of technical staff were barriers. Lack of connectivity appears to be the least important factor affecting tribal libraries’

ability to add more public computer workstations; however, as the next section demonstrates, even if a tribal library is connected, it may not have a *quality* connection.

As points of comparison, cost and space also rank as the most important barriers to technology capacity expansion at public libraries. In 2011, 57 percent of public libraries ranked cost factors as one of the “most important” barriers to technology capacity expansion, while in 2013, 67 percent of tribal libraries cited cost as having a “strong effect” on their ability to make additional purchases. Forty-five percent of public libraries said space is among the “most important” barriers, as compared to 62 percent of tribal libraries that note a “strong effect” from space constraints. Even more telling, 21 percent of public libraries say that concerns about space are “not applicable” or “unimportant” while only six percent of tribal libraries note that space is “not applicable” or has “no effect” on their purchase decisions.<sup>25</sup>

**Figure 11. Barriers to the Increasing the Number of Public Computer Workstations at Tribal Libraries (n=144)**



*“We only have room for eight computers, and we are the only organization that provides free access to the whole population. We would have more computers but are lacking the space.”*

*“The cost for reliable and somewhat fast Internet in our community is quite high. Many people rely on the library for this access.”*

—Respondents to the 2013 ATALM Survey

## The quality of Internet connectivity

Tribal libraries with Internet access are connected in a variety of ways, including via dial-up modems, T-1 and T-3 lines, Digital Subscriber Lines (DSL), cable modems, Integrated Services Digital Network (ISDN) access, wireless broadband, fiber optic cable, and satellite (Figure 12).

The National Broadband Map, compiled by the National Telecommunications and Information Administration (in collaboration with the FCC), includes any technology “with advertised speeds of at least 768 kilobits per second (Kbps) downstream and at least 200 Kbps upstream to end users.”<sup>26</sup> By this standard, most tribal libraries offer broadband—but it is not really an up-to-date standard. Since 2010, the FCC has specifically defined broadband as 4 megabits per second (Mbps) downstream and 1 Mbps upstream<sup>27</sup>—and even this rate is under challenge. For example, the California Public Utilities Commission has adopted a 6/1.5 Mbps standard and classifies lower rates as under- and unserved.<sup>28</sup> According to these measures, many tribal libraries do not have broadband Internet connections. Using the FCC 4/1 Mbps standard, approximately 40 percent of tribal libraries do not (Figure 12). Based on equipment type, the proportion without broadband may be as high as 89 percent. In Figure 13, only T-3 lines and fiber optic cable always provide a broadband connection. A review of respondents provides further support for the higher estimate of tribal libraries that lack broadband. Because the pool contains those tribal libraries most likely to have faster connection speeds, the data underestimate the proportion lacking adequate broadband access and capacity.

**Figure 12. Tribal Library Internet Connection Speeds (n=99)**

Speed	Distribution
768 Kbps or less	7%
769 Kbps–1.4 Mbps	4%
1.5 Mbps	10%
1.6 Mbps–3.0 Mbps	11%
3.1 Mbps–4.0 Mbps	8%
4.1 Mbps–6.0 Mbps	7%
6.1 Mbps–10 Mbps	9%
10.1 Mbps–20 Mbps	10%
20.1 Mbps–30Mbps	5%
30.1 Mbps–40 Mbps	4%
40.1 Mbps–99.9 Mbps	9%
100 Mbps or greater	15%

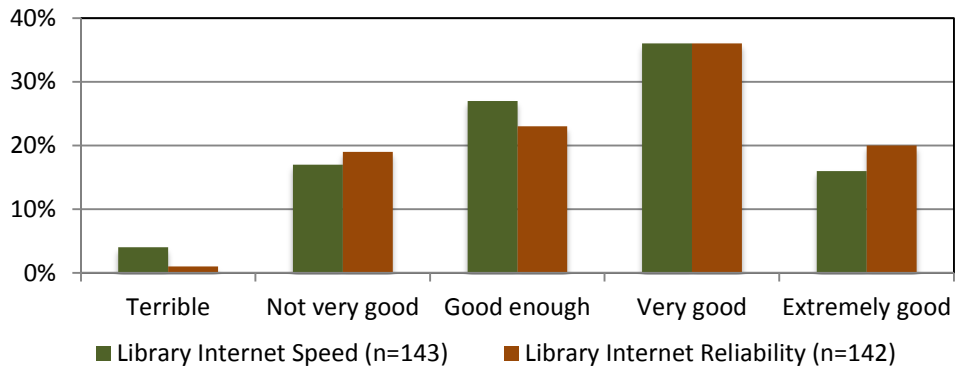
**Figure 13. Tribal Library Internet Connection Types (n=122)**

Type	Distribution
Dial-up modem	2%
Satellite	6%
Integrated Services Digital Network (ISDN)	4%
T-1 lines	15%
Digital Subscriber Line (DSL)	21%
Cable modem	8%
Wireless broadband	33%
T-3 lines	6%
Fiber optic cable	5%

Notes: 1) If a library reported more than one connection type, the higher-speed connection was counted. 2) How a library’s “wireless broadband” is connected to the Internet is unknown.

Librarians’ and library patrons’ impressions are another telling measure of Internet quality. Figure 14 presents tribal librarians’ assessments of the speed and reliability of their Internet connections. One out of five responding tribal librarians characterized the speed and reliability of their libraries’ Internet connections as either “not very good” or “terrible.” Over 50 percent reported that their libraries’ connections were either “very good” or “extremely good.”

**Figure 14. Tribal Librarians’ Ratings of Library Internet Connections (last 90 days)**

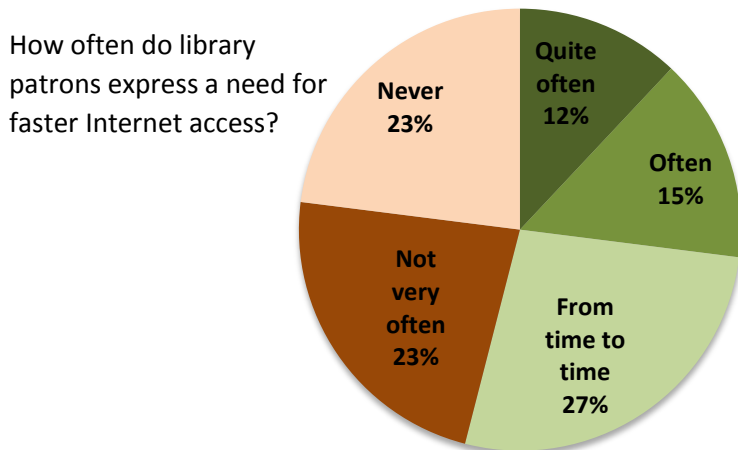


These appear to be quite good outcomes—yet they are *not*. The goal of the ConnectED Initiative, launched in 2013 by President Obama, is for the libraries and schools serving America’s students to have “high-capacity wireless and high-capacity broadband (at speeds no less than 100 Mbps and with a target of 1Gbps) within five years.”<sup>29</sup> In other words, the aspiration is for all tribal libraries to have “extremely good” connections. The ConnectED goal may be one reason that a majority of tribal librarians (94 of 137 respondents, or 69 percent) indicated that it is “extremely important” or “important” to obtain more bandwidth. Only 10 percent reported that increased bandwidth was “not at all important”—and half of these responses came from libraries that already have higher speed Internet connections.<sup>30</sup>

*“We are working on increasing our bandwidth to ensure better service for our library users.”*  
 —A respondent to the 2013 ATALM Survey

Figure 15 captures feedback from library patrons. One in four tribal libraries noted that patrons “often” or “quite often” express a need for greater connection speeds at the tribal library. Just under half said that patrons rarely, if ever, expressed such concerns.

**Figure 15. Patron Demand for Improved Tribal Library Internet Connection Speeds (n=130)**





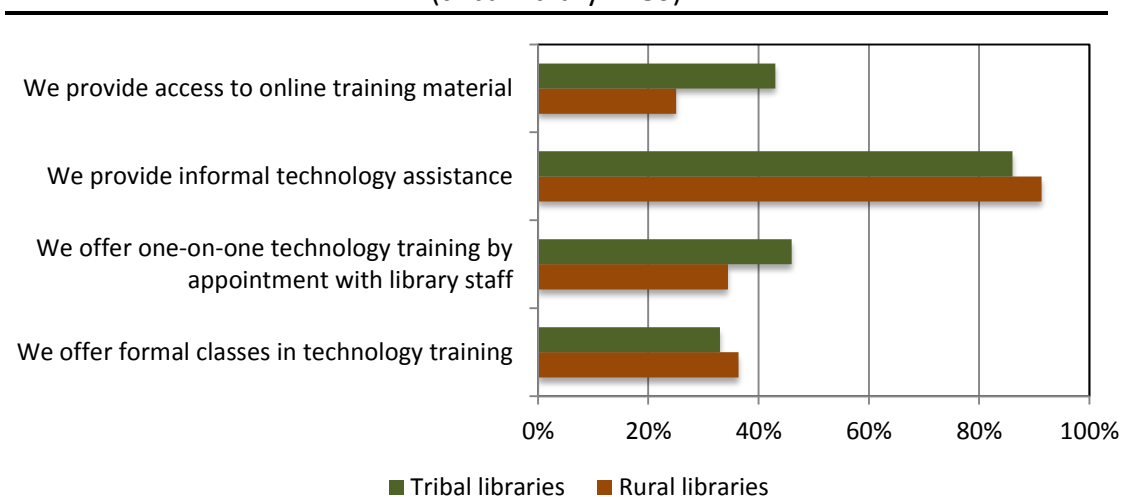
## Digital literacy and digital adoption

As the concept of digital inclusion underscores, access alone is insufficient; digital literacy, or an understanding of how to use technology and the Internet, also is necessary. An assessment of tribal libraries' digital capacities, capabilities, and needs therefore takes account of both physical infrastructure (number of computers, means of connecting to the Internet) and libraries' abilities to help patrons make the most of technology and digital resource access.

More than 80 percent of 144 responding tribal librarians noted that it was either "extremely important" or "important" to provide access to online and in-library digital literacy training.<sup>31</sup> Nonetheless, only 58 percent of 138 respondents reported that they offered technology training (of any type). By comparison, 87 percent of rural public libraries and 90 percent of all public libraries offered technology training in 2011.<sup>32</sup>

Tribal libraries offer a mix of informal, online, one-on-one, and formal instruction (Figure 16). Considering only those libraries that offer training, tribal libraries are somewhat more likely than are rural public libraries to offer online classes and one-on-one tutoring, while rural libraries are more likely to offer informal assistance and formal classes. Notably, most tribal libraries engaged in technology training offer more than one type of instruction (64 percent).

**Figure 16. Technology Training Methods Used by Tribal & Rural Public Libraries**  
(tribal library n=80)



Source for rural libraries data: Bertot, et al., *2011-2012 Public Library Funding and Technology Access Survey*, Figure 19, p. 29.

Figure 17 shows that the most common training topics are quite general, aimed at familiarizing patrons with basic hardware, software, and Internet functions. For example, more than half of the 130 libraries responding to this item train patrons on how to use a mouse and keyboard, print, set up email, and browse the Internet. It also is clear from Figure 17 that as topics become more specific, fewer tribal libraries are able to offer training. Only 39 percent offer instruction that helps patrons access job- and career-related services online, 36 percent offer

training that helps citizens access government information (for example, Social Security, Medicare, and income tax information), and 34 percent offer instruction in how to access health and wellness information. Still fewer tribal libraries offer instruction in safe online practices (23 percent).

**Figure 17. Topics Addressed in Tribal Library Technology Training**

	Libraries that train	
	All tribal libraries (n=130)	Tribal (n=80) Rural
General computer skills (for example, how to use a mouse and keyboard, printing)	54%	88% 88%
General Internet use (for example, setting up e-mail, browsing the Internet)	50%	81% 87%
General online Internet searching (for example, using search engines to locate information)	44%	71% 75%
General computer software use (for example, word processing, spreadsheets, presentations)	44%	71% 72%
Accessing online job-seeking and career-related information	39%	64% 42%
Accessing online government information (for example, Social Security, Medicare, income taxes)	36%	59% 30%
Accessing online health and wellness information	34%	55% 22%
Using online databases (for example, using subscription databases to search and find content)	32%	51% 49%
Using the Online Public Access Catalog (OPAC)	27%	44% 42%
Social media (for example, Facebook, YouTube, Twitter, blogging)	26%	43% 43%
Safe online practices (for example, not divulging personal information)	23%	38% 36%
Accessing genealogy information	21%	34% 41%
Accessing consumer information	17%	28% 18%
Digital photography, photo software, and online photo applications	16%	26% 28%
Accessing investment information	4%	6% 12%

Source for rural libraries data: Bertot, et al., *2011-2012 Public Library Funding and Technology Access Survey*, Figure 20, p. 30.

These topics are key aspects of digital literacy and adoption. In the modern economy, most information for job seekers is online, and an individual’s chances of finding a job or moving up in a profession are hampered without access. Increasingly, the Internet is the primary source of information about federal and state government services and a standard medium for civic engagement. Trusted sources of health information on the Internet help patients become more active participants in their own care. Knowledge of safe online practices can help prevent the disastrous consequences of identity theft and minimize the chances of victimization through

other predatory online practices. Moreover, if a tribal community is relatively isolated, access to the information made available through the Internet and to information about how to safely use the Internet may be even more critical than it is elsewhere. Meeting the need for more training and instruction services in all of these areas is a capacity challenge for tribal libraries.

But there is good news, too. The final two columns of Figure 17 hone in on the subset of libraries that provide training and show that tribal and rural public libraries' training profiles are similar. Furthermore, for the subset of training types with a large gap between tribal and rural libraries' offerings (differences range from 19 to 23 percentage points for training on accessing online job and career-related information, training on accessing government information, and training on accessing health and wellness information), a much *larger* fraction of tribal libraries than rural libraries offer instruction. This suggests that if a tribal library is able to offer training, it also is able to adapt to the specific demands of its service population. The real challenge seems to be getting tribal libraries to the point of being able to offer instructional services.

So who provides technology training to tribal library patrons, and how are those providers trained? Tribal library staff appear to be the primary trainers of library patrons (59 of 70 respondents to an open-ended question). In 22 cases, that staff person is the library director or top library administrator. Looking across tribal libraries, however, in addition to library staff, a wide array of "helpers" has been recruited to assist with patron technology training. Seven libraries reported using volunteers, and six reported being able to rely on information technology (IT) professionals who variously worked for the library, tribal administration, or education center computer lab. Other libraries rely on still other resources or personnel including local contractors, Microsoft Academy Online, tribal college instructors, and various tribal departmental and program staff.

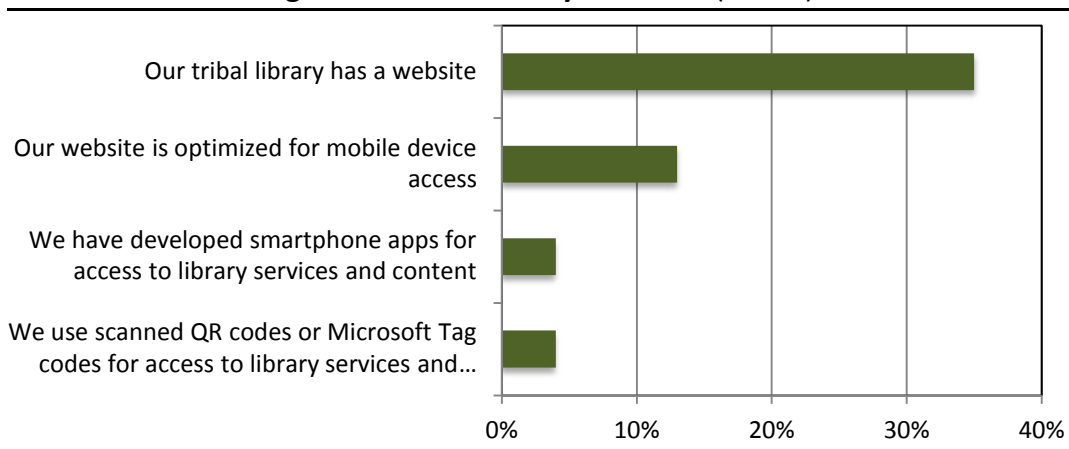
Among the 56 libraries providing substantive responses to an open-ended question about trainers' training, nearly half (24) reported that the individuals who train patrons are self-trained. Many enhanced their skills through attendance at conferences and workshops. State libraries appear to be important partners in these efforts: ten tribal libraries listed their state libraries as providers of training, largely through workshops. Peer training also is common. Other responses ranged from training provided by tribal IT staff or contractors to training provided by volunteers or online sources. Significantly, responding tribal librarians view themselves as having substantial training needs. Fifty-two percent of 140 respondents said that staff technology training was "extremely important," and 35 percent rated it as "important."

## Internet Use by Tribal Libraries

Tribal libraries have a key role in facilitating digital adoption among their patrons—but that is not their only digital adoption challenge. They also must address the question of how, as institutions, they can use the Internet to increase the visibility of their resources, increase tribal-citizen access to those resources, and improve administrative operations.

ATALM survey data suggest that there is potential for growth in institutional digital adoption. Only 34 percent of tribal libraries (46 of 136 respondents to this item) have a website (Figure 18). Only half of these (22 libraries) have begun to modernize their websites: 17 reported mobile-optimized websites, five reported mobile apps, and five reported Quick Response (QR) code use. Open-ended comments also stressed the rudimentary nature of many tribal library websites. One respondent stated, “[We] have a bare bones website for [our] combined library/archives/museum, none for the other research library.” Another wrote, “It is a tribal website, with limited information.” Some libraries reported that they were using alternative Internet vehicles to stand in for websites: “We post on Livestream, YouTube, and Facebook and Twitter at times. These sites provide what we consider websites.”

**Figure 18. Tribal Library Websites (n=136)**



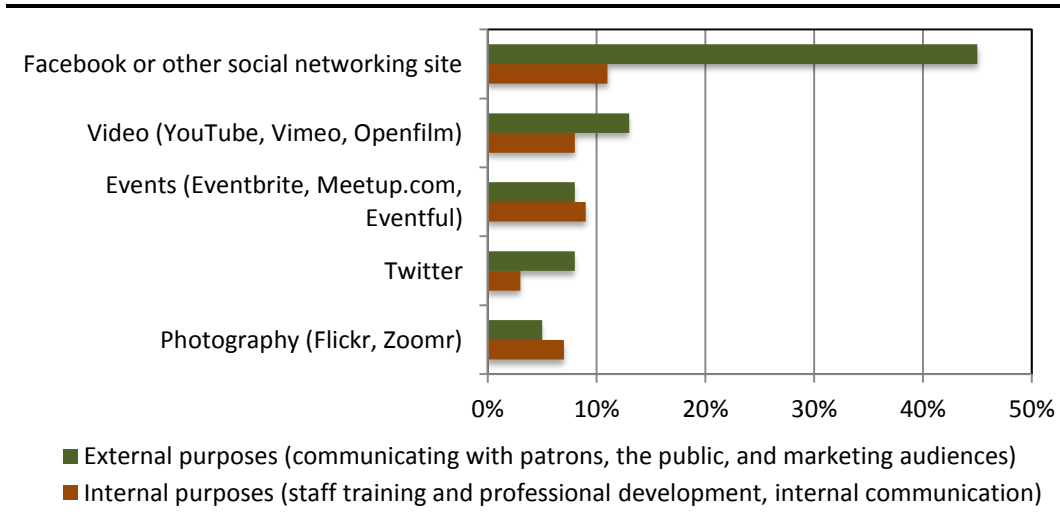
Tribal library websites are best able to support the goals of digital inclusion if patrons can use them to access library services. Given their limited web presence, it is not surprising that few tribal libraries are able to offer remote access (Figure 19). The overall conclusion from survey data is that most tribal library services can be accessed *only* at the library.

**Figure 19. Remote Access to Tribal Library Services (n=142)**

	# of libraries that offer remote access to this service
E-books	16
Licensed databases	12
Reference services	11
Digitized special collections	11
Homework resources	10
Online courses/tutorials	8
Audio content	7
Book or reading clubs	7
Web/business conferencing	2

Increasingly, public and tribal libraries are turning to social media as a means of communication. In 2011, 65 percent of rural public libraries reported using Facebook, largely for external communication.<sup>33</sup> In 2013, 45 percent of tribal libraries had a Facebook presence. While the percentage of tribal libraries using Facebook is lower, it is far and away their most typical method of social media communication (Figure 20).

**Figure 20. Tribal Libraries' Use of Social Media (n=151)**



## Resourcing Tribal Libraries

### Sources of financial support

In 2013, 89 percent (135 of 152 respondents) received some type of federal funds, making the federal government the most common source of financial support for tribal libraries. The Institute of Museum and Library Services (IMLS) is the lead federal funder: 133 of the 135 tribal libraries that received federal support were recipients of IMLS grants, and only 21 percent of these libraries also received money from another federal source. Among all 152 respondents to the funding question, 16 percent (25 libraries) reported that IMLS was their *only* source of support.

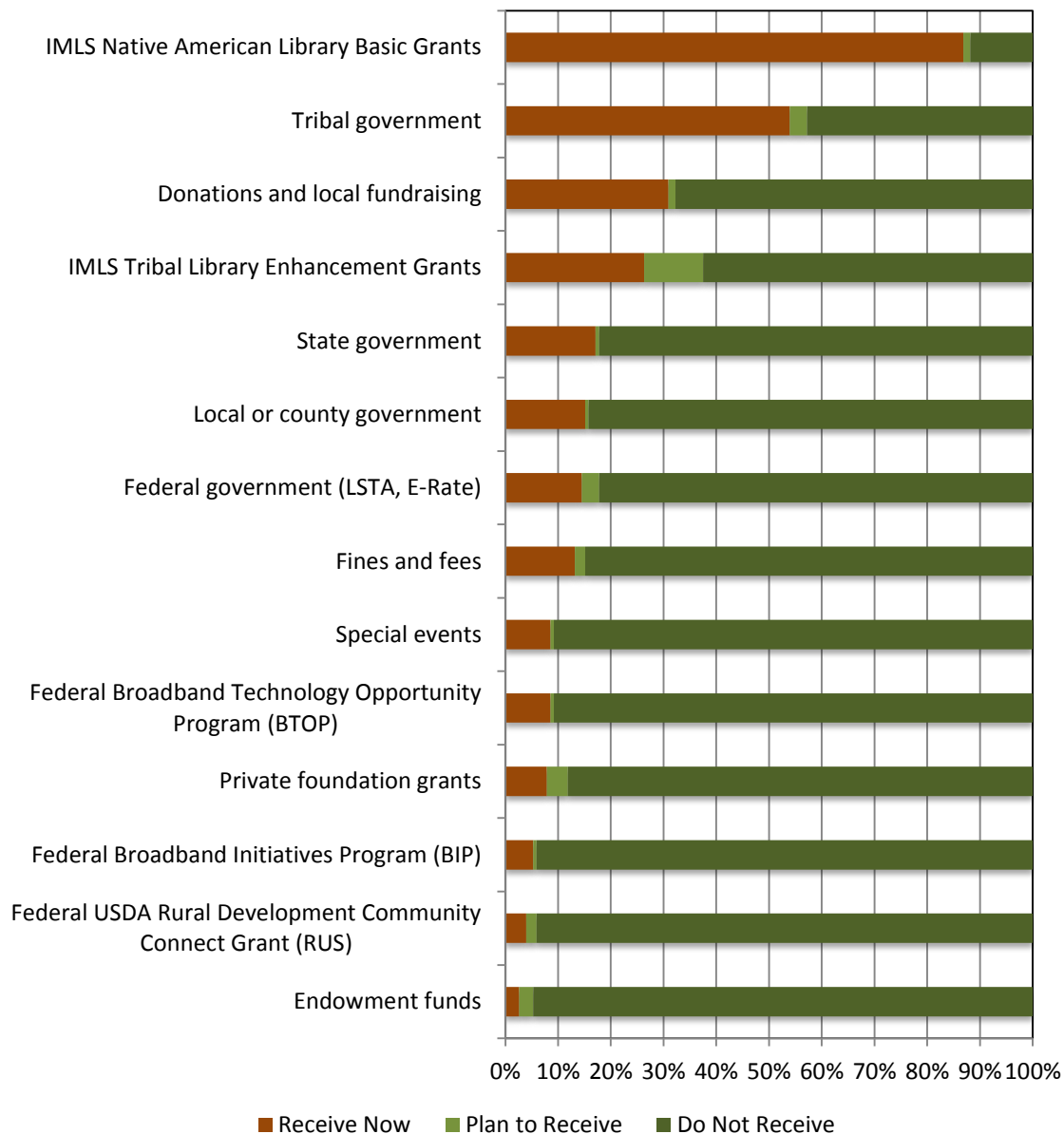
Figures 21 and 22 provide more detail on tribal libraries' funding sources. After IMLS, tribal governments are the next most common source of financial support. Fifty-four percent of tribal libraries already receive funding from

In 1984, Congress amended Title IV of the *Library Services and Construction Act (LSCA)*, adding funding for Indian tribes and Hawaiian Natives (U.S. Code 20, §361b). The amendments promote the establishment, ongoing operation, and expansion of tribal and Native Hawaiian library programs. The *Library Services and Technology Act (LSTA)*, enacted in 1996, extends and supersedes the LSCA.

The Institute for Museum and Library Services administers funds authorized under the LSTA. Its Native American Library Services Basic Grants program provides annual, non-competitive grants of up to \$7,000 per tribe for the core library services. The IMLS Native American Library Services Enhancement Grants program provides larger, competitive grants of up to \$150,000 to expand services or undertake new projects. Since their inception, these grants have funded library services for more than 300 tribal nations.

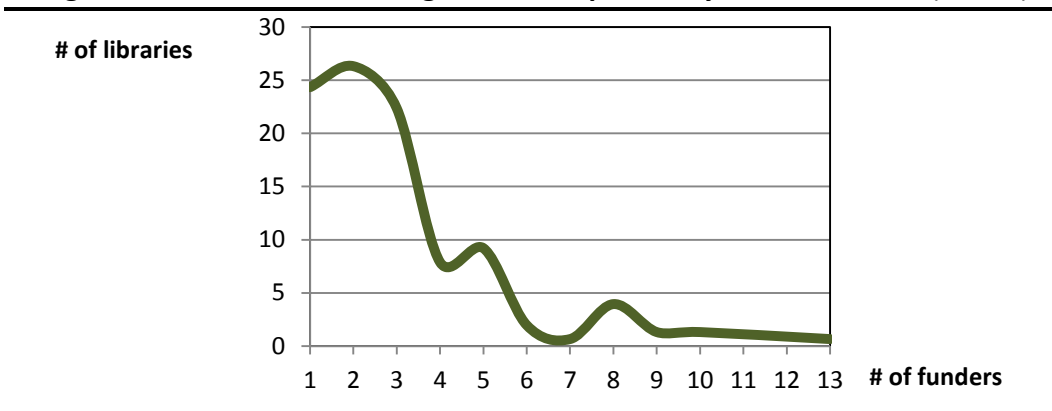
their tribal governments; another three percent anticipate future support. Donations, which benefit 31 percent of tribal libraries, are their third most common source of support.

**Figure 21. Funding Sources for Tribal Libraries (n=152)**



As the analysis of IMLS and other federal funding signals, however, this diversity of funding sources for the field does not equate with a diversity of funding sources for individual libraries. Ten percent of respondent libraries (15 of 152) reported funding from six or more sources; 90 percent reported funding from five or fewer sources. The median number of tribal library funding sources is two.

**Figure 22. Number of Funding Sources Reported by Tribal Libraries (n=152)**



While the 2013 ATALM survey did not gather data on the size of tribal library budgets, the best available data suggest that limited sources of support go hand-in-hand with limited budgets overall. ATALM has used other data to estimate that, on average, tribal libraries receive less than \$3 per capita per year.<sup>34</sup> In contrast, public libraries receive \$38 per capita.<sup>35</sup>

### E-rate

Many public libraries rely on “E-rate,” the Schools and Libraries portion of the Universal Service Fund, to help fund their technology needs. Authorized as part of the *Telecommunications Act of 1996*, E-rate provides discounts that make digital access more affordable for schools and public libraries. Priority One E-rate funding supports telecommunications services and Internet access. Priority Two funding supports internal connections and basic maintenance and is available when Priority One projects do not exhaust the annual budget. Discounts range from 20-90 percent of cost and vary with the service population’s poverty level and urban/rural status.

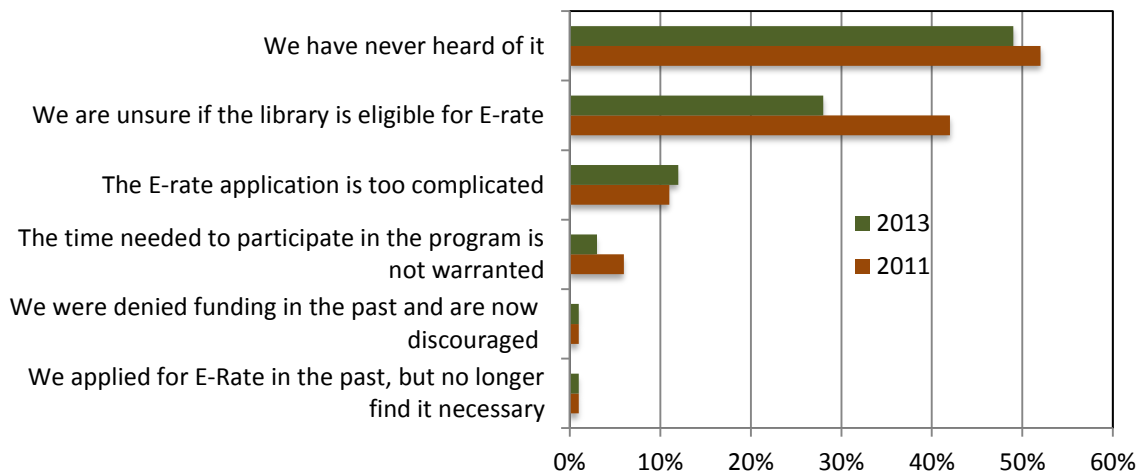
By providing nearly \$2.3 billion in support each year for schools and public libraries,<sup>36</sup> and over time assisting over 90 percent of the nation’s public libraries,<sup>37</sup> the E-rate program has helped change the public library information technology landscape. As noted above, 100 percent of public libraries offered free public Internet access in 2011, up from only 28 percent in 1996<sup>38</sup>—a change that has narrowed the digital divide for many minority populations.

The same cannot be said for the United States’ Indigenous populations. Both the 2011 and 2013 ATALM surveys found that at most, only 15 percent of reporting tribal libraries received E-Rate discounts.<sup>39</sup> The 2013 study also found that only 17 percent of tribal libraries had ever applied for E-rate. Extrapolating from the experience outside Native communities, tribal libraries’ limited use of E-rate *perpetuates* the digital divide experienced by many of the U.S.’s 5.2 million Indigenous people, especially those residing on tribal lands.

Tribal libraries’ limited uptake of E-rate support can be attributed, in part, to complicated eligibility requirements and a general lack of awareness (Figure 23), barriers that remained relatively unchanged over the 24 months between ATALM’s surveys. This is unsurprising given that, prior to 2014, information about E-rate had never been disseminated specifically to tribal

libraries. As testimony demonstrates, however, when tribal libraries are able to access E-rate, it makes a significant contribution to digital access and opportunities in Native communities.

**Figure 23. Reasons Tribal Libraries Do Not Use E-Rate** (n<sub>2011</sub>=71, n<sub>2013</sub>=116)



*“Two years ago our elementary school students were an average of two years behind their peers in public school. We incorporated an online curriculum that is aligned to the Common Core Standards to supplement our classroom instruction. We are very pleased to say that in the last two years we have seen great growth in our test results and our students are now at grade level. I attribute much of our success to the online curriculum, which ensures that the students are meeting all the standards. These services are only available because we have high-speed Internet through the E-rate program.”*

*“Because we are on a remote island in the Bering Sea that is accessible only by air and water, the Internet provides us access to a world we otherwise would not be able to reach. We would not have Internet connections without E-Rate funding. We receive approximately \$200,000 a year for our schools and library.”*

*“We are very thankful for the \$5,000 in funding we receive. Because of the E-rate funding, we are able to offer a faster Internet connection to our patrons (T-1 line). Before we started receiving E-rate funding, our Internet connection was DSL, which is much slower. Not having to pay for Internet service means we are able to spend more on library materials.”*

*“Many of the patrons in our community don't have computers or Internet at home. Many have not wanted to learn how to use the Internet, but realize they have to learn in order to fit in with today's society. So they come to the library where we have public computers and fast Internet, thanks to E-Rate. One of my patrons is a Vietnam vet, and he is disabled. He comes to the library where he likes to read and watch movies. One day he came in and said that he needed help applying for employment. We helped him. We didn't want to do it for him. We wanted him to learn how to use the computer for his own good. So, we taught him, hand over hand. We taught him to fill out his first online form. We helped him get an email account as well. It took four hours, but he did it! He came back the next day to check his email, and the next day after that. I have many patrons just like this one. It is very common in my community, very.”*

—Respondents to the 2013 ATALM Survey

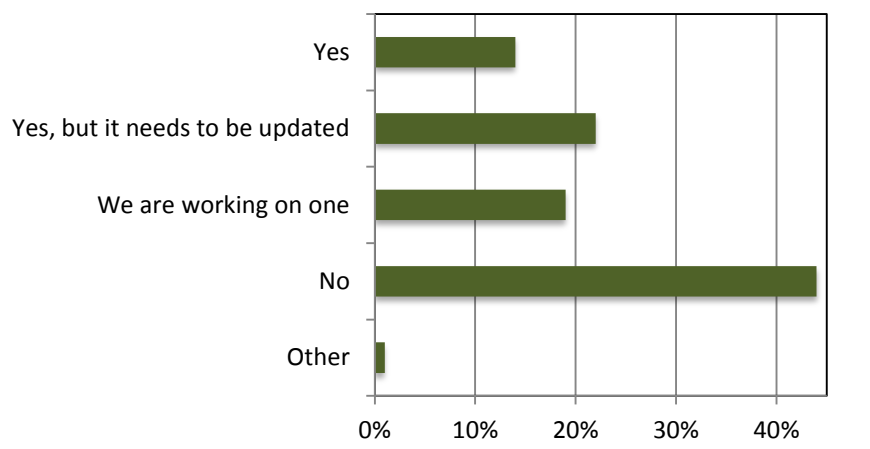


## Other resource issues

Financial resources are not the only resources that affect a tribal library’s ability to provide digital access. Human capital in the form of appropriately skilled technology support staff also makes a difference. These are the individuals who can effectively take responsibility for troubleshooting workstation problems, contracting for Internet connectivity, and managing the library’s webpage. Remarkably, the majority of tribal libraries appear to have access to professional technology support—because they are able to rely on support from their tribal government’s information technology staff (62 percent of 153 respondent tribal libraries) or the IT staff of an affiliated school, college, or university (5 percent of respondents). Other notable sources of technology support listed by survey respondents are the library director (20 percent), other library staff (25 percent), outside vendors (22 percent), and volunteers (9 percent).

It is also the case that resources—financial and otherwise—are deployed most effectively when there is a strategic plan for their use. Under current rules, in order to receive E-rate funds, a library must have an “approved” technology plan in place.<sup>40</sup> Thirty-six percent of 146 responding tribal libraries report that they have a library technology plan to guide equipment and software purchases, data management, backup, security, public access policies, and other information technology issues, although more than half of these plans require updates (Figure 24). Nineteen percent of responding libraries said they are working on a plan but do not yet have one, and 44 percent neither have a technology plan nor are they working on one. In the comments, several tribal libraries indicated that technology planning is taken care of by the tribal government IT department, the tribal school or college with which they are affiliated, or by another tribal program or enterprise. Only one library said they had done technology planning but did not find it useful.

**Figure 24. Does Your Tribal Library Have a Technology Plan?**



## Opportunities and Strategies for Improving Digital Inclusion in Native Communities

Also based on the results of the ATALM surveys, and as a complement to the more quantitative data presented above, this section reports on the ideas offered by librarians and patrons concerning tribal libraries' technology needs and strategies to meet those needs. Librarians' and patrons' impressions are additional raw material for action planning that can help tribal libraries better meet digital inclusion goals (which is the focus of the final section of this report).

### Needs of tribal libraries

The ATALM study collected 422 responses from 123 librarians about their priorities for improving tribal library digital services. The top three priorities were:

1. More funding for updated equipment and software
2. Faster and more reliable/affordable broadband connections
3. Training for staff and patrons

Additional noteworthy priorities included:

- A network to coordinate efforts to identify and obtain quality resources, including vetted digital literacy software and successful digital learning projects
- More space within the library for public computers; ideally, separate spaces for children and adults
- Assistance with developing and implementing sustainable adoption strategies, with an emphasis on efforts to inform community members of the digital services offered by tribal libraries
- More support from tribal leaders
- More "middle or last mile" funding (for linking the core broadband network with local network providers and linking local providers with consumers)
- More equitable access to E-rate funding
- Access to digital media such as e-books, games, and other electronic resources

Related observations:

- Lack of high-speed Internet is impeding broadband adoption. *"People can't get anything done—especially when it comes to things like eGov applications and grants. Without speed, we might as well be using a stone tablet."*

- *“In this community, we still have really no Internet access... That’s why our computers are so important...that’s how people find out what’s going on here and around the nation.”*
- More ISP vendors are needed in tribal communities, and *“not just one vendor who has a monopoly on providing internet to the communities.”*
- Just as low-income individuals have access to discounted telephone service, they need access to discounted mobile applications.

### Needs of tribal library patrons

Data from the secondary survey of 237 tribal library patrons provides additional perspective on the needs and strategies. According to their feedback:

- 94 percent of tribal library patrons believe access to free public computers and the Internet is essential/very important
- 20 percent do not have Internet access at home
- 37 percent connect to the Internet at their tribal library
- 30 percent do not have access to free WiFi within a 10-mile radius of their homes
- 44 percent are not satisfied with the type of Internet services available in their area
- 69 percent have a smart phone, and 12 percent of patrons without a smart phone intend to have one within the year
- 91 percent of patrons prefer face-to-face training with hands-on computers, with some indicating that web-based training is not practical because of slow-speed Internet connections
- Patrons primarily use tribal library computers to access email and social media, read the news and weather reports, shop, conduct research, listen to music, and play games

When asked how access to public computers and the Internet at their tribal libraries could be improved, surveyed tribal library patrons (237 from 23 different tribal libraries) provided these responses:

- Tribal libraries need to provide after-hours access to Wi-Fi.
- Tribal libraries need to have a consistent time when public computers are available.
- Tribal libraries need to extend their hours beyond Monday through Friday, 8 am to 5 pm, as many people who work do not have home computers.
- Public computers are old and need to be updated and better maintained.

- Fewer restrictions need to be placed on computer time.
- More space is needed where the public computers are located.
- Basic face-to-face computer training must be offered in an unthreatening environment. Internet speeds are not sufficient so support on-line training.
- Laptop computers or tablets, fully loaded with common software programs and digital learning programs to take home on loan are needed (*Nb*: This is contrary to “checkbox” survey feedback from tribal librarians but consistent with some tribal librarians’ open-ended comments.)

## Building Digital Native Communities: An Initial Action Plan

Tribal libraries are remarkable institutions, doing much with little to meet the information and technology services needs of the Native communities they serve. In many cases, tribal libraries are the lifeline that provides vulnerable populations with their only access to computers and the Internet. Yet as the results of this study indicate, tribal libraries themselves have significant outstanding digital access needs—especially in terms of high-speed Internet connections and improved technology infrastructure. If unaddressed, these gaps stand to contribute to tribal communities’ vulnerability. When filled, technology and digital inclusion can help strengthen Native culture, provide new options for education and training, and support community development.

*“People are starting to transition over to the business part of working on the Internet. There are a lot of painters and crafts people out here. They’re starting to see the potential for building online enterprises. A lot of start-ups begin here because we have the technology.”*

*“My mom barely got on Facebook. She sews, does beadwork, and makes baby boards, ribbon shirts, and dresses. Now she has a business on Facebook where she shows all of her work and people buy stuff off of it. She’s been pretty successful. A lot of different people from around the country have been contacting her.”*

—Circle of Learning Student Case Studies by Burt, et al., September 2013

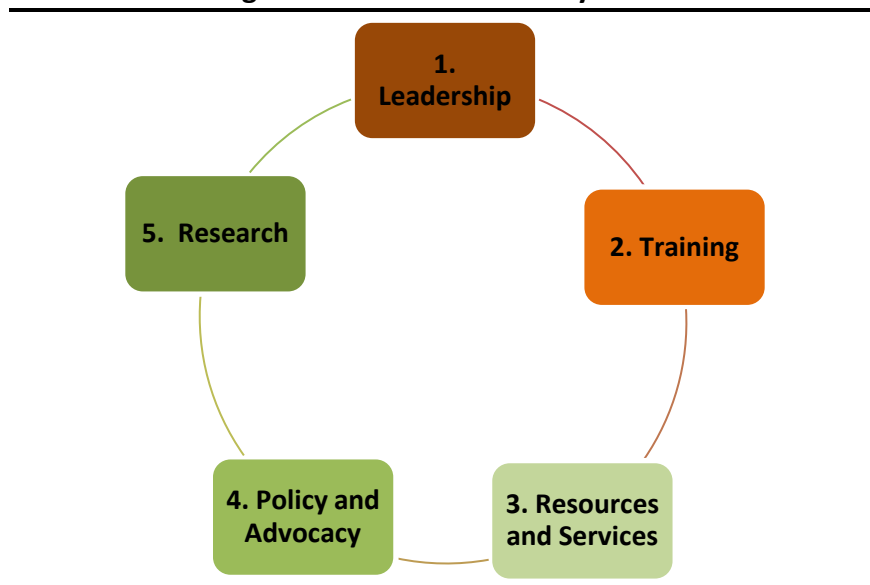
This section proposes an initial action plan for improving tribal libraries’ capacities to promote digital inclusion in Native communities. The proposed activities draw upon information gathered for this study, recommendations provided by tribal librarians and tribal library patrons, and guidelines established by the Institute of Museum and Library Services in *Building Digital Communities: A Framework for Action*.<sup>41</sup> As more input is received, the proposed activities will expand and be strengthened.

The Association of Tribal Archives, Libraries, and Museums (ATALM) is a non-profit organization that is unique in its efforts to help tribal libraries improve digital inclusion programs. Its primary focus is to identify needs and resources, develop networks of support, identify and promote

model programs, train library staff, advocate for sounder policies, and help tribal libraries build sustainable programs. Its activities are informed by needs assessment surveys and in consultation with tribal library staff and other stakeholders.

The proposed activities (action items) correspond with the role of ATALM in providing better digital inclusion services to tribal communities, as summarized in Figure 25.

**Figure 25. ATALM's Five Key Roles**



## 1. Leadership

Until ATALM became involved in digital inclusion issues, there was no centralized organization that coordinated efforts of tribal libraries, identified problems, or advocated on behalf of tribal libraries and their role in providing digital inclusion services. The lack of a coordinating body is a contributing factor to many of the issues tribal communities now face when it comes to providing adequate telecommunications services. To continue the momentum established by ATALM, two Leadership activities are proposed:

**Activity 1.1** *Create a designated **Tribal Library Action Network (TLAN)** to serve as a strategic voice for tribal libraries, allowing issues to be identified, solutions sought, and issues championed in partnership.* The TLAN, while operating under the auspices of ATALM, can oversee library-specific sub-committees, including a Digital Literacy Council.

**Activity 1.2** *Advocate for the development of a **Tribal Library Agency** that provides services similar to those State Library Agencies provide to public libraries. Those services include training, funding, cooperative purchasing, advocacy, interlibrary loans, collaborative public programs such as Summer Reading and Center for the Book, literacy services, resource sharing, access to electronic databases, data collection, and more. Unless specifically mandated by their state's legislature, most tribal libraries are not eligible to receive services from State Library Agencies, a*

*situation that has hampered the development of tribal libraries and restricted the level of services they provide.*

## **2. Training**

Tribal librarians are culturally knowledgeable but often have limited experience or professional training in library science and even less training in providing the information patrons need for expanding digital literacy. Nonetheless, tribal library staff are the primary trainers when both informal and formal training of patrons takes place. The Digital Inclusion Survey demonstrates that tribal librarians themselves recognize their substantial training needs with 87 percent saying that staff technology training was either “important” or “extremely important.”

With the proper funding in place, it is recommended that ATALM take on a stronger training role and create a certification program for tribal library staff.

**Activity 2.1** *Evaluate digital literacy training programs offered by State Libraries and other entities and explore ways of including tribal libraries.*

**Activity 2.2** *Work with TLAN’s Digital Literacy Council to develop a series of training programs for library staff, including “train the trainer” opportunities for library staff in the areas of basic computer skills and effective use of technology. Several layers of training programs are needed, ranging from certification programs to on-demand, self-directed training through recorded webinars.*

**Activity 2.3** *Provide consultation and support for tribal libraries in developing digital literacy training for community members.*

**Activity 2.4** *Incorporate a Digital Literacy track into each ATALM conference where model programs are presented, funding opportunities shared, and needs identified.*

## **3. Resources and services**

**Activity 3.1** *Identify and make available culturally appropriate tribal library digital literacy programs.*

**Activity 3.2** *Develop a module for ATALM’s website ([www.atalm.org](http://www.atalm.org)) that links tribal librarians and individuals to freely available online resources such as sample technology plans and policies, successful case studies, digital literacy resources, quality assurance tests, funding opportunities, and other information that will assist tribal libraries in providing the highest level of service.*

**Activity 3.3** *Assist libraries in identifying communication strategies to reach target populations, for example, people in need of digital literacy training and resources such as new users, elders, individuals with disabilities, children, and the functionally illiterate.*

**Activity 3.4** *Work with a corporate partner to develop a research and demonstration project in under-served libraries to demonstrate the impact of broadband and technology services on economic development, literacy rates, and community engagement.*

**Activity 3.5** *Work with foundations and corporations to obtain laptop computers, e-readers, and tablets for loan to community members.*

**Activity 3.6** *Work with a corporate partner to develop a template that can be used by tribal libraries to develop websites.*

**Activity 3.7** *Advocate that tribal libraries help increase connectivity for individual users by offering “always on” public-access Wi-Fi.*

**Activity 3.8** *Work with tribal communities lacking library services to develop facilities, with an emphasis on digital services.*

**Activity 3.9** *Inventory existing tribal library network infrastructures, including service quality, costs, and location. Tribal libraries and governments can use this information to inform decision making when selecting providers and services. Establish minimal requirements for broadband speeds, for example, a minimum of 100Mbps or higher connectivity to anchor institutions and the ability to scale beyond 10Gbps for the entire system.*

**Activity 3.10** *Work with funders and policy makers to ensure that tribal libraries have the financial resources necessary to assure access to digital technologies, including sufficient broadband connections, adequate public computers, access to digital literacy materials, and training and support for library staff.*

**Activity 3.11** *Organize an E-Book Task Force to investigate the possibility of a national tribal library cooperative and negotiate cooperative agreements to enable libraries to offer these high-demand services at a more affordable rate. Currently only 36 percent of tribal libraries offer access to e-books (Figure 6) and only 12 percent are offering e-readers or tablets for checkout as compared with 39 percent of public libraries (Figure 4).*

**Activity 3.12** *Engage tribal governments and tribal libraries in developing community-wide digital inclusion plans that address the role of tribal libraries in an overall strategy to develop viable solutions and economically and socially sustainable communities.*

**Activity 3.13** *Assist with hardware, software, and peripheral equipment acquisitions for tribal libraries, including working with non-profit organizations that provide donated laptop and tablet computers that can be loaned to library patrons.*

**Activity 3.14** *Monitor information collection by other entities regarding telecommunications connectivity in the United States. Advocate that tribal libraries be included in applicable national data collection activities.*

#### 4. Policy and advocacy

**Activity 4.1** *Convene an initial meeting of tribal libraries, funders, program partners, and influencers to further define the activities proposed in this document and to:*

- *Facilitate information sharing and partnering between tribal libraries*
- *Help tribal libraries, partners and stakeholders better understand the digital inclusion needs of tribal communities*
- *Establish or strengthen relationships with key influencers and stakeholders that can affect sustainability plans*
- *Identify basic standards of service*
- *Identify model programs and present case studies of successful programs*
- *Raise awareness about resources and funding opportunities*

**Activity 4.2** *Participate in FCC, USDA Rural Utilities Service, and other entities' processes that affect communications access for libraries. An ongoing activity is to advocate for improved access to E-rate funding. Eighty-five percent of tribal libraries do not receive E-Rate funding due to eligibility restrictions, lack of awareness, and application complexities. Current FCC rules also make the majority of tribal libraries ineligible for E-Rate participation.*

**Activity 4.2.1** *Advocate that the FCC's E-rate policies be amended to provide tribal libraries the same access now available to public libraries.*

**Activity 4.2.2** *Encourage the FCC to create an E-Rate Tribal Priority for communities that have the highest demonstrated need and have been denied opportunity in the past.*

**Activity 4.2.3** *Encourage the FCC to preserve the 90 percent funding rate for tribal schools and libraries and re-instate Priority 2 funding for tribal communities.*

**Activity 4.2.4** *Encourage the FCC to discontinue the use of the National School Lunch Program (NSLP) for determining eligibility and discount rate for the tribal priority and create new eligibility requirements that are more effective in targeting tribal communities.*

**Activity 4.2.5** *Work with the FCC's Office of Native Affairs and Policy via a Tribal Consultation process to increase awareness about E-rate programs; remove barriers by conducting outreach to tribal libraries, especially those that have not previously participated in the E-rate program.*

**Activity 4.2.6** *Encourage FCC representatives to attend national and regional ATALM gatherings for consultations and dissemination of information.*

**Activity 4.2.7** *Create and staff an ATALM-sponsored E-rate Task Force that will help develop sustainable training modules for the E-rate access funds, assist tribal libraries in developing technology plans, assist tribal library awardees with compliance with E-rate*



*regulations, and gather data on the effectiveness of E-rate in tribal communities. Address the existing eligibility requirements that prevent tribal libraries from accessing E-Rate funding.*

**Activity 4.2.8** *Encourage the FCC to create a designated tribal set aside that ensures adequate E-Rate funding for tribal libraries. ATALM estimates that \$10 million a year is needed if tribal libraries are to be funded at the same level as public libraries.*

**Activity 4.2.9** *Involve tribal library leadership in the policy making process.*

**Activity 4.3** *Advocate for tribal libraries to be included in the annual Public Libraries Survey that generates statistics on the status of public libraries in the United States. Libraries are polled on visits, circulation, size of collections, public service hours, staffing, electronic resources, operating revenues and expenditures and number of service outlets. Tribal libraries currently are not included in this survey and, therefore, their needs and services are unknown to researchers, journalists, the public, and policymakers at the federal, state, and local levels.*

**Activity 4.4** *Advocate with tribal leaders for more support for tribal libraries, and in particular, support for more operating hours. Many tribal libraries are open part-time, some only 10 to 15 hours a week. Many of these libraries are operated by volunteers. Tribal libraries cannot serve community needs unless their hours are expanded and services increased. Engage tribal leaders in strategizing about how to best meet the needs of tribal members.*

## **5. Research**

**Activity 5.1** *Periodically collect and update this report, using current information as baseline data.*

**Activity 5.2** *When appropriate and feasible, assist other entities with the collection of data on tribal libraries.*

*“Digital inclusion is a requisite for building healthy and prosperous communities across all important sectors—economic and workforce development, education, health care, public safety and emergency services, civic engagement, and social connections.”*

—Building Digital Communities: A Framework for Action (IMLS 2012, 3)

## Endnotes

<sup>1</sup> See, for example, Traci Morris and Sasha Meinrath, *New Media, Technology, and Internet Use in Indian Country: A Quantitative and Qualitative Analysis*, Washington, DC: New America Foundation, 2009, [http://oti.newamerica.net/sites/newamerica.net/files/policydocs/New\\_Media\\_Technology\\_and\\_Internet\\_Use\\_in\\_Indian\\_Country.pdf](http://oti.newamerica.net/sites/newamerica.net/files/policydocs/New_Media_Technology_and_Internet_Use_in_Indian_Country.pdf), accessed April 28, 2014; Federal Communications Commission, *Seventh Broadband Progress Report And Order On Reconsideration*, Washington, DC, May 20, 2011, especially pp. 31-32, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-11-78A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-78A1.pdf), accessed May 13, 2014; and Emily Guskin and Amy Mitchell, "Innovating New in Native Communities," *The State of the News Media 2012: An Annual Report on American Journalism*, Washington, DC: Pew Research Center, 2012, <http://stateofthemediamedia.org/2012/native-american-news-media/>, accessed May 13, 2014.

<sup>2</sup> ATALM's 2011 survey may provide the only such data; see Miriam Jorgensen, *Sustaining Indigenous Culture: The Structure, Activities, And Needs of Tribal Archives, Libraries, And Museums*, Oklahoma City: Association of Tribal Archives, Libraries, and Museums, June 2012, p. 10, [http://www.atalm.org/sites/default/files/sustaining\\_indigenous\\_culture.pdf](http://www.atalm.org/sites/default/files/sustaining_indigenous_culture.pdf), accessed April 27, 2014.

<sup>3</sup> Jorgensen, *Sustaining Indigenous Culture*, 2012.

<sup>4</sup> Federal Communications Commission, *National Broadband Plan*, Chapter 9, 2010, [http://www.broadband.gov/plan/9-adoption-and-utilization/#\\_edn89](http://www.broadband.gov/plan/9-adoption-and-utilization/#_edn89), accessed April 27, 2014.

<sup>5</sup> Institute of Museum and Library Services, University of Washington Technology and Social Change Group, and the International City/County Management Association, *Building Digitally Inclusive Communities: A Guide to the Proposed Framework*, Washington, DC, 2012, p. 1, <http://www.ims.gov/assets/1/AssetManager/DIC-FrameworkGuide.pdf>, accessed April 27, 2014.

<sup>6</sup> These points echo Institute of Museum and Library Services, University of Washington Technology and Social Change Group, and the International City/County Management Association, *Building Digital Communities: A Framework for Action*, Washington, DC, 2012, [http://www.ims.gov/assets/1/workflow\\_staging/AssetManager/2140.PDF](http://www.ims.gov/assets/1/workflow_staging/AssetManager/2140.PDF), accessed April 27, 2014.

<sup>7</sup> John Carlo Bertot, Abigail McDermott, Ruth Lincoln, Brian Real, and Kaitlin Peterson, *2011-2012 Public Library Funding and Technology Access Survey: Survey Findings and Results*, College Park, MD: Information Policy & Access Center, University of Maryland College Park, 2012, [http://ipac.umd.edu/sites/default/files/publications/2012\\_plftas.pdf](http://ipac.umd.edu/sites/default/files/publications/2012_plftas.pdf), accessed April 27, 2014. Also see Judy Hoffman, John Carlo Bertot, and Denise M. Davis, "Libraries Connect Communities: Public Library Funding & Technology Access Study," *American Libraries* (Digital Supplement), Summer 2012, <http://viewer.zmags.com/publication/4673a369#/4673a369/1>, accessed April 27, 2014.

<sup>8</sup> Kathryn Zickuhr, Harrison Rainie, Kristen Purcell, and Maeve Duggan, *How Americans Value Public Libraries in Their Communities*, Washington, DC: Pew Research Center, December 11, 2013, [http://libraries.pewinternet.org/files/legacy-pdf/PIP\\_Libraries%20in%20communities.pdf](http://libraries.pewinternet.org/files/legacy-pdf/PIP_Libraries%20in%20communities.pdf), accessed April 27, 2014.

<sup>9</sup> Census Bureau, "Profile America, Facts for Features. American Indian and Alaska Native Heritage Month: November 2013," U.S. Department of Commerce, Washington, DC, October 31, 2013, [http://www.census.gov/newsroom/releases/pdf/cb13ff-26\\_aian.pdf](http://www.census.gov/newsroom/releases/pdf/cb13ff-26_aian.pdf), accessed March 13, 2014.

<sup>10</sup> Morris and Meinrath, *New Media, Technology, and Internet Use in Indian Country*, 2009.

<sup>11</sup> Federal Communications Commission, "Tribal Homepage," Washington, DC, 2013, <http://transition.fcc.gov/indians/>, accessed April 27, 2013.

<sup>12</sup> ATALM asked each tribal library participating in the patron survey to recruit at least ten survey respondents.

<sup>13</sup> ATALM data files for Jorgensen, *Sustaining Indigenous Culture*, 2011.

<sup>14</sup> Bertot, et al., *2011-2012 Public Library and Technology Access Survey Findings and Results*, Figure 2, p. 15.

<sup>15</sup> ATALM data files for Jorgensen, *Sustaining Indigenous Culture*, 2011.

<sup>16</sup> Bertot, et al., *2011-2012 Public Library and Technology Access Survey Findings and Results*, Figure 3, p. 16.

<sup>17</sup> ATALM data files for Jorgensen, *Sustaining Indigenous Culture*, 2011.

<sup>18</sup> Three libraries report that they make more than 40 computers available, numbers that skew the average.

<sup>19</sup> Data from a question later in the survey indicate that 37 percent (of 142) tribal libraries make laptops/netbooks available to patrons and 27 percent make e-readers available (both statistics are for in-library technology use). In combination (classifying laptops/netbooks and e-readers into a single “mobile computing” category), these data suggest that 49 percent of tribal libraries offer mobile options. However, *more* libraries responded to the earlier survey question—including four that reported that mobile devices were *not* available in their libraries. We have presented the data gathered earliest in the survey under the assumption that the larger number of respondents is a more accurate representation of the field.

<sup>20</sup> Hoffman et al., “Libraries Connect Communities,” p. 6.

<sup>21</sup> Bertot, et al., *2011-2012 Public Library Funding and Technology Access Survey*, Figure 13, p. 22.

<sup>22</sup> Public libraries gain access to many electronic databases through State Library Agencies, and State Libraries’ access is funded by IMLS through the Library Services and Technology Act. Since tribal libraries are not eligible for these funds, affordability is an important factor in the dearth of databases available to tribal library patrons.

<sup>23</sup> Kathryn Zickuhr and Lee Rainie, *E-Reading Rises as Device Ownership Jumps*, Washington, DC: Pew Research Center, January 2014, [http://www.pewinternet.org/files/2014/01/PIP\\_E-reading\\_011614.pdf](http://www.pewinternet.org/files/2014/01/PIP_E-reading_011614.pdf), accessed April 4, 2014.

<sup>24</sup> Hoffman et al., “Libraries Connect Communities,” p. 6.

<sup>25</sup> Bertot, et al., *2011-2012 Public Library Funding and Technology Access Survey*, Figure 40, p. 50. Figure 43, p. 53, provides data for rural libraries, which offer another interesting comparison for these data.

<sup>26</sup> National Telecommunications and Information Administration and Federal Communications Commission, “National Broadband Map: Broadband Classroom,” Washington, DC, no date, <http://www.broadbandmap.gov/nbm/classroom>, accessed May 15, 2014.

<sup>27</sup> Federal Communications Commission, *Sixth Broadband Deployment Report*, Washington, DC. July 16, 2010, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-10-129A1\\_Rcd.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-129A1_Rcd.pdf), accessed May 15, 2014.

<sup>28</sup> See, for example, California Public Utilities Commission, “CUPC Enhances Broadband Deployment Grant Program,” YubaNet.com, February 1, 2012, [http://yubanet.com/regional/CPUC-Enhances-Broadband-Deployment-Grant-Program\\_printer.php](http://yubanet.com/regional/CPUC-Enhances-Broadband-Deployment-Grant-Program_printer.php), accessed May 15, 2014, and Catherine Sandoval,

“Promoting Broadband in Rural Areas of California,” Testimony at the Rural Broadband Workshop, Federal Communications Commission, Washington, DC, March 19, 2014, slide 12, <http://www.fcc.gov/events/rural-broadband-workshop>, accessed May 15, 2014.

<sup>29</sup> The White House, “ConnectED: President Obama’s Plan for Connecting All Schools to the Digital Age,” Washington, DC, June 2013, [http://www.whitehouse.gov/sites/default/files/docs/connected\\_fact\\_sheet.pdf](http://www.whitehouse.gov/sites/default/files/docs/connected_fact_sheet.pdf), accessed May 17, 2014.

<sup>30</sup> Fourteen of 137 respondents said that the need for increased bandwidth was “not at all important.” Four of these libraries responded “Don’t know” when asked to report the speed of their libraries’ Internet connections. Seven of the remaining 10 had speeds greater than 6 Mbps, and 4 had speeds greater than 40 Mbps.

<sup>31</sup> Forty-four of 144 respondents said it was “extremely important” to provide access to online digital literacy training for library patrons, and 40 percent said it was “important” to do so. Forty-one percent of 141 respondents said it was “extremely important” to provide in-library digital literacy training for library patrons, and 41 percent said it was “important” to do so. The questions asked librarians to rate the value of these different types of digital literacy training on the scale “not at all important,” “not very important,” “important,” and “extremely important.”

<sup>32</sup> Bertot, et al., *2011-2012 Public Library Funding and Technology Access Survey*, Figure 19, p. 29.

<sup>33</sup> Bertot, et al., *2011-2012 Public Library Funding and Technology Access Survey*, Figure 45, p. 55.

<sup>34</sup> Association of Tribal Archives, Libraries, and Museums, 2013 tribal library profiles, Oklahoma City, OK.

<sup>35</sup> The ALA reports that in FY 2011, more than \$11.4 billions was invested in U.S. public libraries. This figure is used as a total revenues estimate. The ALA also uses a U.S. population estimate of 299.9 million. \$11.4 billion / 299.9 million = \$38 per US resident. See American Library Association, “ALA Library Fact Sheet 4,” May 2014, <http://www.ala.org/tools/libfactsheets/alalibraryfactsheet04>, accessed March 27, 2014.

<sup>36</sup> Federal Communications Commission, “E-Rate—Schools and Libraries USF Program,” Washington, DC, May 29, 2014, <http://www.fcc.gov/encyclopedia/e-rate-schools-libraries-usf-program>, accessed May 31, 2014.

<sup>37</sup> Carlos Manjarrez and Justice Grimes, “New Data: More than 90% of U.S. Public Libraries Have Used E-rate,” UpNext: The Official Blog of the Institute of Museum and Library Services, April 16, 2014, <http://blog.ims.gov/?p=4778>, accessed April 17, 2014.

<sup>38</sup> John C. Bertot and Charles R. McClure, “Moving Toward More Effective Public Internet Access: the 1998 Survey of Public Library Outlet Internet Connectivity,” U.S. National Commission on Libraries and Information Science and the American Library Association, Washington, DC, 1999, [http://ipac.umd.edu/sites/default/files/publications/1998\\_plinternet.pdf](http://ipac.umd.edu/sites/default/files/publications/1998_plinternet.pdf), accessed May 31, 2014.

<sup>39</sup> No more than 13 of 88 responding libraries received E-rate discounts in 2011, and no more than 22 of 152 responding libraries received E-rate discounts in 2013.

<sup>40</sup> E-Rate Central, “Technology Plans and the E-rate Program,” Westbury, NY, no date, <http://www.e-ratecentral.com/applicationTips/techPlan/>, accessed July 27, 2014.

<sup>41</sup> Institute of Museum and Library Services, University of Washington, International City/ County Management Association, *Building Digital Communities*, 2012.

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## Appendix A. Transforming Communities: Stories and Commentary

Statistics and priority lists are one way to justify the proposed plan for action: they provide powerful evidence that more must be done to assist tribal libraries in their work as champions of digital inclusion. Another kind of evidence is found in the stories of positive change that technology and Internet access already have produced. Several were used to emphasize points in the main body of this report. Many more are provided here. Some are personal, some are moving, and all signal how digital access in tribal libraries—properly strategized, supported, and funded—can transform tribal citizens and the communities in which they live.

*“We have a few patrons that have no computer experience and we take the time to show them the basics and tell them not to be afraid of the computer. As they progress and visit, they become more and more comfortable with working on the computer. So we see them visiting the library more often and some have come back and brought tablets they have purchased to learn more. They are eager to learn more since some are raising grandkids, and the grandkids are more tech savvy. They want to know more about what their kids and grandkids are doing. I have one lady that comes in and looks for bead patterns. She was afraid of the computer, but after showing her how it worked, she now comes in once a week to surf the net for more ideas for her art work.”*

*“Ak-Chin library has a Movie Club (LSTA grant), we loan e-Readers (Nooks) (LSTA grant), use technology in our preschool story times, have iPad parties (IMLS), and are preparing to showcase the 3M Library Cloud (IMLS). Our Movie Club movies are on YouTube and youth learn how to act, read and write scripts, write storyboards, etc. We teach our teen summer workers how to use movie/video editing software. At preschool storytimes, we introduce the preschool students to e-Books and utilize the iPad... At iPad parties, children can check out iPads and use them at the tables near the circulation desk. We have dozens of educational apps, and we avoid popular apps (Candy Crush, Angry Birds, etc.). Nooks are available to check out. In some cases, a young adult or adult needed a book for a class. We were able to instantly download a book to the Nook for the student/customer for immediate access. In addition, it alleviates the need for shelf space. We are ready to launch the 3M Library Cloud for our library customers to download e-books on their personal devices.”*

*“We have students, usually older than average, that come to our school without any computer experience. They come to the library to learn how to use the computer, access things like email, and feel comfortable learning with a one-on-one training.”*

*“Our cultural program—specifically basket making—used the Internet to look up baskets from our area, books on basketry, examples/directions, and basket meetings/conferences.”*



*“Our library offers the Internet to people in the community who cannot afford to purchase the Internet, let alone a computer. Through rain, snow, and shine we will have patrons walking to the library from ages five on up just to search the worldwide web. For a lot of the younger children they feel that they can come to the library like it’s their second home. We have such an overload of patrons that we are unable to meet everyone’s needs. I have been able to get on a personal level with many of the children, and when they don’t get a chance to get on a computer, it makes my day to see them reading a book.”*

*“The Library Director has been taking online college courses for the past three years and he is half-way to earning an Associate of Applied Science degree in Accounting. Two or more patrons are seriously thinking of enrolling in college courses through the library’s computer and Internet service. More patrons are using the library’s computers to either search for employment or to seek higher education and more patrons use the library to file unemployment benefits and to file their annual income returns.”*

*“Our public library services are unique. All our services are mobile. We have a bookmobile, which delivers print and non-print materials; and we have a mobile computer lab, which provides the public computer/ Internet access for the patrons and public. Our services have enriched many lives, especially the communities which still have no electricity or running water. They’ve utilized our services for recreational, educational, cultural, and professional needs. We strive to meet our communities’ technological needs with cultural sensitivity.”*

*“We have a grandfather that started coming into the library with his granddaughter and the grandfather didn’t know about the use of computers. But each day they come into the library, and now the grandfather sits next to his grandchild on his own computer and is using the computer to read—to just learn what a computer is and does. And there are early learning stations so the grandfather is learning with baby steps. As the librarian, this makes my day. It puts a smile on your face and heart.”*

*“Our computer lab has given children the opportunity to have access to technology they otherwise wouldn’t get anywhere else. The programs we offer are very limited; some computers don’t have the proper equipment to perform their daily education tasks. We find ways to make it work, if it takes children to use personal staff laptops/office computers, so be it. Our goal here is to give children all the proper tools to make their education path that much easier for them to succeed and reach their education dreams.”*

*“For families who reside within the tribal government area, our computers are a lifeline to the outside world. After an introductory course of social networking,*

*we had an elder who set up a Facebook page. We took his picture and he was surprised to see his face on the Internet. When we returned for a follow-up class, he needed our laptop to check his Facebook. He found some friends that he had not been in communication with for a long time since he was staying at a senior independent living center and had limited transportation.”*

*“Recently, we partnered with the Senior Center to offer "Super Basic Computer Skills for Seniors," a series of classes. One participant wrote, "I have never used a computer before. I learned computer vocabulary, how to open files, to send and receive emails, and how to safeguard myself on the computer. I feel more confident and am ready to take online bookkeeping!" In addition to these basic computer classes, through the support of an IMLS Enhancement grant, we have developed The Chilkoot-Chilkat Storyboard—Tlingit Aani—a multi-media place names map, using Microsoft Surface technology. This technology and the 40" Surface table has allowed us to preserve Tlingit place names, contemporary and historical photos, interviews with elders, and audio clips in Tlingit. The Storyboard is interactive and supports multiple users. When a user touches a pushpin, content about the place expands on the screen. The content includes photos, Tlingit pronunciation of the place name, and videos of elder interviews and stories of the place. Classrooms have taken field trips to the library to learn about the Storyboard and then ventured to the physical place to learn more about the area in which they live. One of our elders said, 'We're not just preserving, we're revitalizing our culture.' The work of the Storyboard is ongoing. We are able to continue to add content and a webpage has been developed so the information can be accessed from any computer at [cvstoryboard.org](http://cvstoryboard.org). A recent visitor said, 'This is incredible. Every library and museum in Alaska should have one of these.'”*

*“We are seeking partners to purchase an app for basic Tohono O'odham language, with Tinkr Labs. They have created similar apps for basics of a Native language for Navajo and Lakota.”*

*“We are very isolated in our rural location and our tribal library offers the only access to high speed Internet for local residents and tribal citizens to connect with technology. Several patrons use the service to contact deployed military family members and some are only able to take online classes as a result of having Internet access with our facility.”*

*“Our tribal library has transformed lives in many different aspects. Our tribe was very taken with tribal designs, Creek language books, and the Creek culture. The most popular program in the library is the genealogy program. We research for clients with the documents in our library. We average twenty phone calls, e-mails and walk-ins a week. The clients are very pleased with this program when they learn of their ancestors, and it is very rewarding to know they are pleased. Our computers are accessible to anyone and everyone.”*

*“We conduct an elderly computer class, and they learned how to use the mouse correctly, but the process was so funny. We conduct technology services based patron request, like ‘Teach the Teacher.’ [There is] nothing we won’t do that teaches staff in the process and learning new technology.”*

*“Our library assists many tribal members in genealogy and family history. Through subscription services like Ancestry.com and other online tools (both fee-service and free), we have helped people understand their own family's history, which also helps them understand tribal history. This often develops into discussions about their identity as a tribal member. In addition to understanding their own history, we have been able to use it as an outreach tool to bring family photos and documents into our collections and even connect family members who have lost contact with each other.”*

*“We are often seeing youth teaching their elders how to use computers. Multigenerational learning is a hallmark of our blended school/community library (We were a Giant Step Award winner in 2007). Substance rehab clients use our library when they need to access the Internet and to borrow books. Pre-readers have storytime with us. We also provide books for the senior center and nursing home.”*

*“We are providing training for our Middle School students on Digital Citizenship and online safety. We will soon be offering classes via the Microsoft IT Academy to students and community members.”*

*“The Ahtna Cultural Center houses and makes available the history, culture, and language of Ahtna people to Ahtna people and to the general public. Our library and archive houses audio/video recordings that are mostly unavailable elsewhere and makes them accessible. The library makes published and unpublished works related to Ahtna people available also. It also has some materials relevant to Alaska Natives in general. Few of these works are housed in our area. We have digitized 1000+ of the audio/video recordings ourselves. Metadata on each item is recorded and put into a Filemaker Pro database, which is searchable. Users of the archive can come and search for specific speakers, dates of recordings, content, etc. For the first time, tribal members can listen to recordings of their elders talking about old ways, trails, songs, stories, and many other subjects. Non-tribal members can begin to understand the history of the Ahtna people, which is not written in any layperson's history books. Some recordings are in the highly endangered Ahtna language; workshops focused on revitalizing the language have been held at the Cultural Center, and participants have used recordings from the archive to learn from.”*

*“Comanche Nation College is making a difference to members of the Comanche nation every day. For instance, we have quite a few adult learners. One person is studying American Indian Studies and working toward achieving an American Indian Law degree. He is very intelligent and very widely read and experienced. (He is over 60 years old.) He is eager to learn, but does not have computer skills. I teach him something new every day. One day it will be formatting his paper for an essay, or how to print from an e-mail, or how to copy and save his document to the USB drive. He is so appreciative and enthusiastic; he asked me what I want for Christmas! It makes me feel good to make a difference, one person at a time.”*

*“Children living in extreme poverty and stressful living conditions come from many communities to attend our school. Some ride on the bus over an hour. They are used to pitiful, unfair surroundings. Our tribal school library provides a comfortable, functional, aesthetically pleasing venue. Our students and community members have access in the library to technology and resources they do not have at home.”*

*“More people are using the library than in the past... Now all of the Anadarko [community] and surrounding community has access to the public access computers in the library. The Anadarko Public Library is always a busy place, and not enough time is allowed for customers to finish job applications or other information that you can only do on-line nowadays. Customers appreciate that the [tribal] library does have a time limit. We allow them extra time if no one else is waiting to use computers.”*

*“A beloved community health nurse felt she had to retire from her job because everything was becoming computerized and she didn't know how to use a computer. She was very thankful that our library provided basic computer training workshops. She said if we had offered these classes earlier, she might not have had to retire early. She was very thankful for the classes because they gave her new skills and confidence. Funding for these classes were provided by an IMLS Enhancement Grant.”*

*“In working on our heritage language revitalization efforts, much controversy is voiced regarding dialects. By digitizing our historic recordings of fluent speaking elders of the past, our tribal community is now able to watch and listen to the way our elders spoke. This online accessibility is providing enlightenment and inspiration to reclaim our dying languages. Thank you to IMLS and YouTube!”*

*“Because less than 10 percent of the homes in our community have Internet access, our public access computers are invaluable to many people doing job searches, online classes, etc.”*

*“Having broadband access and computers in the library has helped our tribal elementary, secondary, and college students in their isolated community at the top of a mountain in California enter the 20th century—finally—and then the 21st century that we now live in. The mid-year reports we submitted for our IMLS Enhancement grant includes photos and pages of information about how much this grant has meant to us. We have done more with it than almost any other tribal grant that we have ever received.”*

*“We have five individuals who are now working who weren't before because they were able to access practice tests for their professions or were able to use our resources to apply for jobs.”*

*“We created a homeownership literacy program in collaboration with our Housing Program, and we use a homeownership Wiki to provide information and resources interactively with participants. This was funded by IMLS.”*

*“Our library started a GED program and our students needed extra tutoring, had no jobs, or were in low paying jobs. I was able to purchase Learning Express ‘Job and Career’ and ‘Basic Computer Skills’ [modules] to help our students. Learning Express allows our library to share this database with five public libraries and one school library at no additional cost. The Job and Career [module] is very encouraging, sharing jobs that are local and helping with resume and educational tutoring. Our library just received a Native American Enhancement Grant—‘Gathering Hope.’ The main focus of the project is our youth and providing a homework lab and online tutoring. We will be purchasing Tutor.com and sharing it with five public libraries and one school library. Tutor.com is allowing us to share this at no charge. Through the libraries, the school children at Perkins-Tryon, Chandler, Tryon, Wellston, Meeker and Carney will all have access to Tutor.com—live online homework help. Our library just received a grant from NNLM [the National Network of Libraries of Medicine], ‘Home with Instructions.’ Our library will be placing laptops with five homebound elders and training them on the use of computers, Internet, and online health resources and social media. At the end of six months with the study results, our library will be applying for a long-term grant with NNLM to place laptops in all of our 31 homebound elders’ homes. This is a simple project that all tribal libraries could do. My hope too is to work with tribal members that are part of hospice and caring for love ones, by checking out laptops to them for access to online health resources and support groups.”*

*“[The tribal] library has done a photo enhancement project, with photos archived in through [vilda.alaska.edu](http://vilda.alaska.edu). Our elders have contributed photos for this project, and they are available online for our students and elders alike.”*

*“We can definitely talk about the many stories of people who have used our library to help them further their education for everything from a GED to a PhD. We provide an invaluable link for local people to connect with the wider world in a way that allows them to stay on Standing Rock.”*

*“The Internet has helped to remove the digital divide among communities and there is sharing of information unlike before. The example is social media like Facebook.”*

*“Each day our After School Program uses the computer access to do multiple things from networking to gaming. We have many youth under high school age who have a significant interest in programming and game design due to the free, virtually unlimited access they have here in our library. We will soon be starting beginner courses in the use of word and spreadsheet processing software and application development with our youth. Although this generation has grown up in technology, the interest to continue on in careers in the field is not always present; the mere fact that our youth are thinking about education and careers so early on is a magnificent shift in our community.”*

*“I like to think that having a computer lab in our library has brought some of the people in our community hope. I know of an individual who walked two miles from his home in the hot summer sun to come fill out a job application online, then checked back every day because he would be notified by email if he got the job. These jobs were truck-driving jobs, and he would land some of the jobs, but it would be only temporary so he would continue to job search through the year. We have had high school students who have dropped out of school because of a teenage pregnancy, come in with their babies, cradleboards, and later, portable playpens, to take and complete online high school courses to achieve their GEDs. We have had high school students who were lacking credits to graduate with their class take online high school classes to make up the credits needed. They then were able to walk with their graduating class to receive their diplomas. Then there are many adults who use the social network to catch up on world events and add their own footprints to the Facebook or Twitter trail. We also use our computers for our After School Tutoring Program by providing education worksites for the elementary children to sharpen their educational skills by playing academic games.”*

*“We provide our tribal community a welcoming atmosphere, where they use the donated reference computers to access the tribal H.R. employment online applications, social services resources, and college online homework... The computers allow them to access information that will improve their lives, knowledge not readily available to them because they do not have technology at home. Most connect to Internet via cell phone and hang around our library during off hours to access WiFi. Our computers are busy all day, from open to*

*close. It is beautiful to see our tribal people learn in that way, but it is sad that we do not have more than the six computers and they do not have them at home, especially for the students, both young and old and those in recovery, but our statistics reflect the need for more stations for our population base. And we will continue to look for more computers. If you run into Bill Gates, let him know.”*

## Appendix B. Tribal Library Survey Respondents

Libraries are listed in alphabetical order by organization name. Please note that not all respondents identified themselves.

**Ak-Chin Indian Community**, Maricopa, AZ  
**Akwesasne Library and Cultural Center**, Akwesasne, NY  
**Alaska Native Language Archive**, Fairbanks, AK  
**Alturas Indian Rancheria**, Alturas, CA  
**Annette Gore Library/Wah-Zha-Zhi Cultural Center**, Pawhuska, OK  
**Bayliss Public Library**, Sault Saint Marie, MI  
**Big Sandy Rancheria**, Auberry, CA  
**Blue Lake Rancheria Tribal Library**, Blue Lake, CA  
**Bug-O-Nay-Ge-Shig School**, Bena, MN  
**Campo Indian Library**, Campo, CA  
**Catawba Cultural Center**, Rock Hill, SC  
**C'ek'aedi Hwnax Cultural Center**, Copper Center, AK  
**Cheyenne and Arapaho Tribes**, Concho, OK  
**Chitimacha Tribal School**, Jeanerette, LA  
**College of the Muscogee Nation Library**, Okmulgee, OK  
**Colorado River Indian Tribes Library/Archives**, Parker, AZ  
**Comanche Nation College**, Lawton, OK  
**Coyote Valley Library Center**, Redwood Valley, CA  
**Craig Public Library**, Craig, AK  
**Dakota Club Library**, Eagle Butte, SD  
**D'Arcy McNickle Library**, Pablo, MT  
**Delaware Nation**, Anadarko, OK  
**Delaware Tribe of Indians**, Bartlesville, OK  
**Dillingham Public Library**, Dillingham, AK  
**Dr. Fernando Escalante Tribal Library/Pascua Yaqui Tribe**, Tucson, AZ  
**Dr. John Woodenlegs Library**, Lame Deer, MT  
**Duckwater Shoshone Elementary School**, Duckwater, NV  
**Fernandeno Tataviam Band of Mission Indians**, San Fernando, CA  
**Fort McDowell Yavapai Tribal Library**, McDowell, AZ  
**Fort Washakie School/Comm. Library**, Ft. Washakie, WY  
**Ft. Yuma Library**, Winterhaven, CA  
**Haines Borough Public Library**, Haines, AK  
**Holisso Research Center**, Sulphur, OK  
**Holy Cross Community-School Library**, Holy Cross, AK  
**Hopi Public Library**, Kykotsmovi, AZ  
**Igiugig Village**, Igiugig, AK  
**Inaja Tribal Library**, Escondido, CA  
**Innoko River School and Tribal Library**, Shageluk, AK  
**Iowa Tribe of Oklahoma**, Perkins, OK



**Irene Ingle Public Library**, Wrangell, AK  
**Jamestown S'Klallam Tribe**, Sequim, WA  
**Kalispel Tribe**, Usk, WA  
**Karuk Panamnik Library**, Orleans, CA  
**Kasaan Library and Cultural Resource Center**, Kasaan, AK  
**Kashia Library**, Stewarts Point, CA  
**Ketchikan Indian Community-Language Program**, Ketchikan, AK  
**Kumeyaay Community College**, El Cajon, CA  
**La Jolla Band of Luiseno Indians**, Pauma Valley, CA  
**Lac Courte Oreilles Ojibwa College Community Library**, Hayward, WI  
**Lac Du Flambeau Public Library**, Lac du Flambeau, WI  
**Library Learning Center**, Fallon, NV  
**Little Priest Tribal College Library/Winnebago Public Library**, Winnebago, NE  
**Los Coyotes Band of Cahuilla and Cupeno Indians**, Warner Springs, CA  
**Lower Elwha Tribal Library**, Port Angeles, WA  
**Makah Cultural and Research Center**, Neah Bay, WA  
**Mechoopda Tribal Library**, Chico, CA  
**Mescalero Community Library**, Mescalero, NM  
**Mezodan Research Library-Citizen Potawatomi Nation Cultural Heritage Center**, Shawnee, OK  
**Miami Tribe of Oklahoma**, Miami, OK  
**Middletown Rancheria Library**, Middletown, CA  
**Modoc Tribe of Oklahoma**, Miami, OK  
**Muscogee (Creek) Nation**, Okmulgee, OK  
**Muscogee Creek Nation Research Library**, Okmulgee, OK  
**Native Village of Scammon Bay and Scammon Bay Public Library, Inc.**, Scammon Bay, AK  
**Nenana Public Library**, Nenana, AK  
**Nisqually Tribal Library**, Olympia, WA  
**Nondalton School/Tribal Council**, Nondalton, AK  
**Northwestern Band of Shoshone Tribal Library**, Brigham City, UT  
**NTU Library**, Crownpoint, NM  
**Nuuma Adumui Nobi Library-Bishop Paiute Tribe**, Bishop, CA  
**Ojibwa Community Library**, Baraga, MI  
**Ojibwe Learning Center and Library**, Sault Ste. Marie, MI  
**Oneida Community Library**, Oneida, WI  
**Paiute Indian Tribe of Utah Library**, Cedar City, UT  
**Papakilo Database**, Honolulu, HI  
**Pawnee Nation Tribal/College Library**, Pawnee, OK  
**Poarch Creek Indians Library**, Atmore, AL  
**Port Graham Village Library**, Port Graham, AK  
**Pueblo of Pojoaque Public Library**, Santa Fe, NM  
**Pueblo de Cochiti**, Cochiti Pueblo, NM  
**Qualla Boundary Public Library**, Cherokee, NC  
**Quapaw Tribal Library**, Quapaw, OK  
**Ramona Band of Cahuilla**, Anza, CA

**Sac and Fox National Public Library**, Stroud, OK  
**San Pasqual Tribal Library**, Valley Center, CA  
**Sandia Pueblo Library**, Bernalillo, NM  
**Santa Rosa Indian Reservation**, Mountain Center, CA  
**Scotts Valley Tribal Library**, Lakeport, CA  
**Sealaska Heritage Institute**, Juneau, AK  
**SEALibrary Sun'aq Ecological Archives & Library**, Kodiak, AK  
**Seldovia Museum Library**, Seldovia, AK  
**Seminole Nation**, Seminole, OK  
**Seneca-Cayuga Tribe of Oklahoma**, Grove, OK  
**Shoalwater Bay Tribal Community Library**, Tokeland, WA  
**Sitting Bull College Library**, Fort Yates, ND  
**St. George and St. Paul Libraries**, St. George & St. Paul, AK  
**Stone Child College Library**, Box Elder, MT  
**Suquamish Tribal Library**, Suquamish, WA  
**The Mohegan Tribe Library & Archives**, Uncasville, CT  
**The Old School Studio**, Gwinn, MI  
**Tohono O'odham Community College**, Sells, AZ  
**Tolowa Family Resource Center**, Smith River, CA  
**Turtle Mountain Community College**, Belcourt, ND  
**United Keetoowah Band**, Tahlequah, OK  
**UTTC Library**, Bismarck, ND  
**Valerie Merrick Memorial Library**, Fort Totten, ND  
**Venito Garcia Library**, Sells, AZ  
**Wampanoag Tribe of Gay Head (Aquinnah)**, Aquinnah, MA  
**Whiteriver Public Library**, Whiteriver, AZ  
**WIEC Library**, Woodfords/Alpine, CA  
**Wyandotte Nation**, Wyandotte, OK  
**Yavapai-Apache Nation Cultural Resource Center**, Camp Verde, AZ  
**Ysleta del Sur Pueblo**, Ysleta del Sur Pueblo, TX



[www.atalm.org](http://www.atalm.org)

# About the Association of Tribal Archives, Libraries, and Museums (ATALM)



## MISSION

The Association of Tribal Archives, Libraries, and Museums (ATALM) is an international organization that serves the needs of those who work to protect and advance cultural sovereignty.

## ATALM WORKS TO:

- ◆ Raise public awareness of the contributions and needs of indigenous cultural institutions through its international network of partners, both indigenous and non-indigenous;
- ◆ Provide culturally responsive services and programs through regional and national training events, web resources, and individual consultations;
- ◆ Partner with national organizations that provide training and services related to archives, libraries, and museums to incorporate indigenous perspectives into programs and services; and
- ◆ Serve as an advocate for indigenous cultural institutions with tribal leaders, funders, and government officials.

## VISION

ATALM will ensure that every tribal nation will have its own archive, library, and museum to house locally its historical photographs, literature, songs, stories, and language recordings; its treaty documents, legal histories, historical data, ethnographies, and traditional information pertaining to each tribe. This critical body of knowledge—along with oral traditions and traditional art and artifacts—will be preserved and made readily accessible in a central locale and in a culturally appropriate manner. Materials will be housed in appropriate facilities and managed by professionally trained staff, thereby ensuring the political and cultural survival of tribal peoples in the 21st Century and beyond.

## GUIDING PRINCIPLES

- ◆ To operate from a position of integrity and accountability.
- ◆ To be the very best stewards of funds available to us.
- ◆ To be effective and passionate advocates for the cultural sovereignty of all indigenous nations.
- ◆ To be inclusive, respectful, and welcoming of everyone.
- ◆ To support the efforts of organizations that work to meet the needs of tribal archives, libraries, and museums.
- ◆ To have diversity in our officers and board.
- ◆ To strive for excellence in everything we do.

## Governing Board

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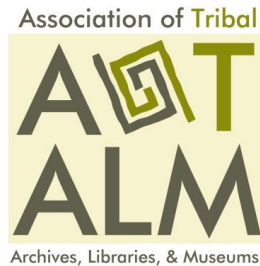
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