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INFORMATION POLICY & ACCESS CENTER

2014 Digital Inclusion Survey: Survey Findings and Results Extended Summary

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by

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ABOUT THE SURVEY

The Digital Inclusion Survey addresses the efforts of a particular set of community-based institutions — public libraries — to address disparities and provide opportunity to individuals and communities by providing free access to broadband, public access technologies, digital content, digital literacy learning opportunities, and a range of programming that helps build digitally inclusive communities. Whereas previous research emphasized access to infrastructure, the Digital Inclusion Survey addresses emergent dimensions of the digital equity, and the response of libraries to these challenges.

Funded by the Institute of Museum and Library Services (IMLS), and conducted by the American Library Association (ALA), the Information Policy & Access Center (IPAC) at the University of Maryland, and the International City/County Management Association (ICMA), this study conducted a national survey of public libraries that explored the digital inclusion roles of public libraries in four key areas:

- Public access technology infrastructure resources and capacity (e.g., public access workstations; broadband connectivity).
- Digital content, services, and accessibility.
- Digital literacy (including languages in which instruction is offered).
- Domains-specific services and programs (civic engagement, education, health and wellness, and workforce/employment).

In addition to presenting survey results, a key feature of this survey is showing library data in the context of the communities that libraries serve through interactive mapping tools. The mapping tool, as well as other data products, is available at [HTTP://DIGITALINCLUSION.UMD.EDU](http://digitalinclusion.umd.edu)



INTRODUCTION

INDIVIDUALS WHO HAVE ACCESS TO THE INTERNET in their homes, at work, and in their pocket have easy access to information about government services, employment, education and virtually any other topic they can imagine. Providers of information and services often assume that virtually everyone can easily access and use Internet-enabled technologies, increasingly shifting their activities from traditional to digital-only delivery models. Many employers now accept applications only in digital form, and government services are often available only on the Web. Despite these assumptions about the ubiquity of the Internet and its ease of use, 30 percent of Americans lack home broadband Internet access, and many of these individuals do not possess the skills needed to easily use digital platforms.¹ Public librarians recognize these gaps, and a significant part of their service mandate is to provide patrons with the technologies and assistance needed to ensure that they can accrue the benefits the Internet offers.

Public libraries provide access to broadband, WiFi, and a range of public access technologies. By providing free and equitable access to Internet-enabled technology, public libraries help close the digital divide. But equally important, librarians ensure that a lack of basic or more advanced technology skills is not a barrier to individual economic, learning, or other success. By offering training in how to use computers, the Internet, emerging technologies such as 3D printers, and various forms of software, librarians help individuals build technology competencies and capacities that transcend barriers to digital readiness.

When patrons overcome the digital divide and become digitally ready to better interact with modern society, digital inclusion has occurred. Digital inclusion ensures that members of a community:²

- Understand the benefits of advanced information and communication technologies;
- Have equitable and affordable access to high-speed Internet-connected devices and online content; and
- Can take advantage of the educational, economic, and social opportunities that are facilitated by these technologies.





In providing these services, libraries act as a bridge that connects individuals and communities to opportunities for success. Individuals are able to find jobs that employers must fill, governments are able to achieve their mission of assisting the public, and health care specialists are able to reach the people who need their expertise the most. The Digital Inclusion Survey has attempted to document these interactions, demonstrating the ways in which public libraries serve and benefit the public and their communities.

The remainder of this overview of the Digital Inclusion Survey provides selected findings from the study, discussing how public libraries leverage digital technologies to benefit the public.

Digital Divide, Equity, and Readiness

Libraries quickly realized the potential of the Internet in assisting patrons. In 1994, 20.9 percent of public libraries had some form of Internet connection. By 1997 this increased to 72.3 percent, and by 2004 this had reached 98.9 percent, at that point encompassing virtually all public libraries in the United States.³ Wireless Internet adoption lagged behind, but this has increased from 54.2 percent of libraries offering such access in 2007 to 97.8 percent at present.⁴



Aspects of Digital Inclusion



All members *understand the benefits* of advanced information and communication technologies



All members have *equitable and affordable* access to high-speed Internet-connected devices and online content.



All members can take *advantage* of the *educational, economic, and social opportunities* available through these technologies.

Although patrons can access wireless Internet service at non-library locations, this does not normally include access to personal computing technologies or productivity software. Considering that many online activities remain a challenge on a smart phone or tablet device, this provision of public access computers (PACs) remains essential to the 30 percent of Americans who do not have home broadband access, including the 10 percent of the population that has smart phones but does not subscribe to home broadband services.⁵

In 1998, the average American library had only 6.5 PACs per location, versus an average of 18.8 at present.⁶ 30.7 percent of public libraries experience some form of wait time for their computers on an average day. Despite seeming appearances that the Internet is everywhere and everyone can access it, patron demand for hardware and software provided by libraries can indicate capacity and access constraints.

Broadband access has risen considerably among American homes due to an increase in the availability of local connections, combined with a decline in the cost of personal computers and other Internet-enabled devices. 30 percent of American households lack broadband, and this rises to 38 percent for rural households.⁷ In

Public libraries are essential community hubs for and gateways to our networked information society.

In addition, 52 percent of homes with incomes under \$25,000 do not have broadband access, while only 2 percent of households with incomes of over \$150,000 lack such amenities. Reasons for this lack of access vary across households but include the high costs of connecting, broadband providers not offering service in their areas, or a lack of desire for home Internet.⁸

The Federal Communications Commission (FCC) has recently taken action on these first two barriers, seeking to expand access to broadband in communities across the Nation. Through modernization on the Education (E-rate) Rate discount structures originally established in late 1990s, a proposal to expand the Lifeline program to include reduced costs in-home broadband access, and issuing an order preempting restrictions regarding municipal broadband initiatives in North Carolina and Tennessee, the FCC has sought to ensure access to broadband technologies throughout the US.⁹ In addition, President Obama recently announced the ConnectHome initiative being piloted in 27 cities and one tribal nation that will initially reach over 275,000 low-income households – and nearly 200,000 children – with the support they need to access the Internet at home.¹⁰ While these actions are significant and may

lessen the digital divide in terms of home broadband, they are unlikely to eliminate the problem entirely.

Access to the Internet has improved for the majority of the U.S. population, aided by a range of public, private, and collaborative initiatives. For the disconnected, those who lack the skills and abilities necessary for participation in and interaction with an increasingly digital society, or those who simply wish to learn more about technologies and digital content creation, public libraries are essential community hubs for and gateways to our networked information society.

Digital Readiness

Access to broadband and associated hardware and software is necessary, but not sufficient, for all individuals to take full advantage of the benefits the Internet offers. Individuals who are not acclimated to the Internet through their home or workplace can often have difficulty in using Web-based services. Librarians provide essential guidance to these individuals, helping them to obtain the digital skills essential to finding information about government, employment, education; creating digital content; completing online forms; taking online courses; and more.



Digital resources can be found through means other than libraries, but rarely do these other venues have the combination of public access technologies, digital content, and professionals who are ready to help individuals effectively navigate and use digital resources to meet their educational, employment, health, or other goals and needs. A core benefit of providing technology training through libraries is that librarians can personally work with individuals to determine their skill level and address individual needs. Whether a person needs assistance acquiring basic skills like using a keyboard or mouse or assistance in navigating more complex Websites, America's public libraries are there to help. 86.9 percent of public libraries offer assistance with basic computer skills, while 89.9 percent help patrons with basic Internet skills.

Digital Inclusion

When librarians provide individuals with the hardware, software, and broadband and WiFi connectivity needed to interact with online information and services, they have bridged the digital divide through access to technologies. When librarians help patrons use these systems to find the information they need and understand how to use a

range of technologies and information sources, they improve adoption in their communities. Digital inclusion combines these two concepts that transcends just meeting the needs of individuals, instead giving them the resources needed to succeed in the digital age.

This survey has documented the ways in which public libraries actively support digital inclusion to help strengthen their communities, more specifically through providing the following:

- Quality of access to digital technologies;
- Access to a variety of digital content;
- Services and programs that promote digital literacy;
- Programs that specifically address important community needs, including health and wellness, education, workforce development, and civic engagement.

By using this data, librarians and their allies can advocate for continued or advanced support in this area, helping legislators and other decision makers to design policies with the social benefits provided by libraries in mind.

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I.

PUBLIC ACCESS COMPUTERS

THIS SECTION FOCUSES ON HOW LIBRARIES BRIDGE THE DIGITAL DIVIDE. By providing broadband access, PACs, and other resources, libraries serve as critical community hubs that ensure access to basic and emerging technologies and connectivity that individuals may not otherwise have in the home or elsewhere. speeds, and WiFi availability.

Public Access Computers

The average number of available PACs increases with the size of libraries' population service bases. City libraries have the highest average number of PACs, averaging 37.0 each, followed by 23.6 for suburban locations, 17.9 for town locations, and 8.8 for rural libraries. 30.7 percent of all public libraries experience at least some patron wait times for PACs on an average day, ranging from a high of 54.1 percent of city libraries dealing with such issues to a low of 18.4 percent of rural libraries facing such challenges. Despite initial appearances suggesting that city libraries have greater capacity for providing individuals with access to public access computers than their rural counterparts, in reality these urban locations face the most difficulty meeting patron demand.

A greater challenge to libraries that serve smaller population bases is maintaining up-to-date PACs and other technology offerings. 65.7 percent of public libraries

report having made some form of upgrade to technology-related infrastructure. There is relatively little difference between city (76.3 percent), suburban (71.0 percent), and town libraries (70.4 percent) for this matter, but rural libraries (55.5 percent) clearly face the most difficulties in upgrading their technology.

Additionally, 37.0 percent of PACs in American libraries are more than four years old. This is the case for 22.0 percent of computers in city libraries, versus 30.1 percent for suburban locations, 62.0 percent for town locations, and 49.1 for rural libraries. Libraries in less populated areas are not only more likely have older PACs, but they also face greater challenges in maintaining these systems. 90.6 percent of city libraries have dedicated staff for this purpose, versus 88.1 percent of suburban locations, 78.6 percent of town locations, and 66.2 percent of rural libraries.





Fig. 1: Average Number of Available Public Access Computers, Per Branch

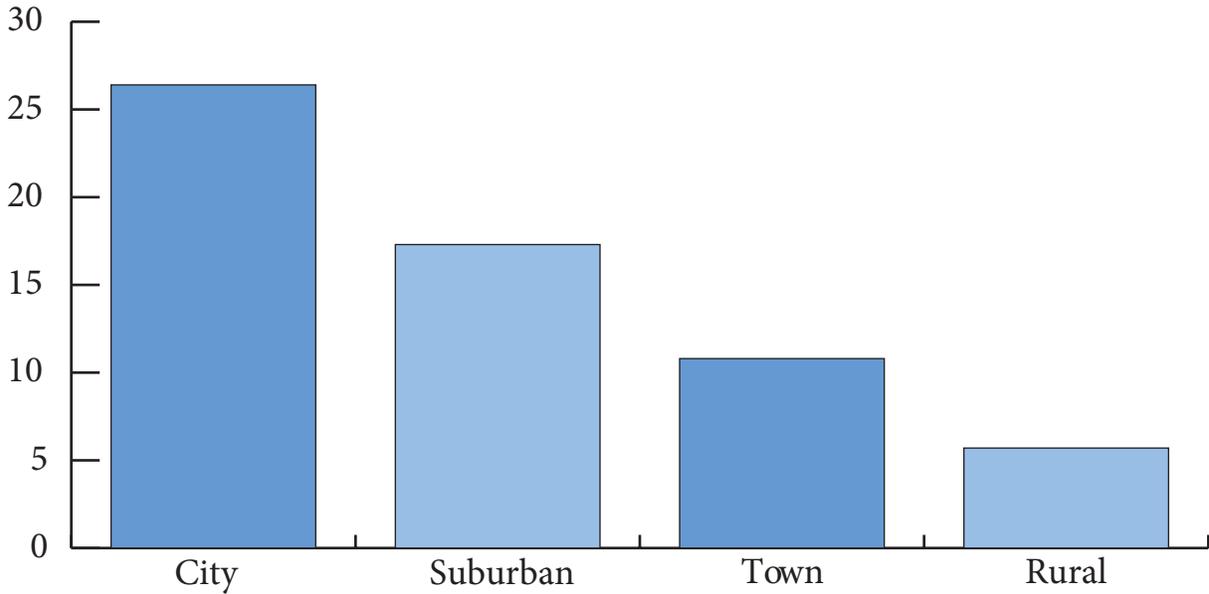
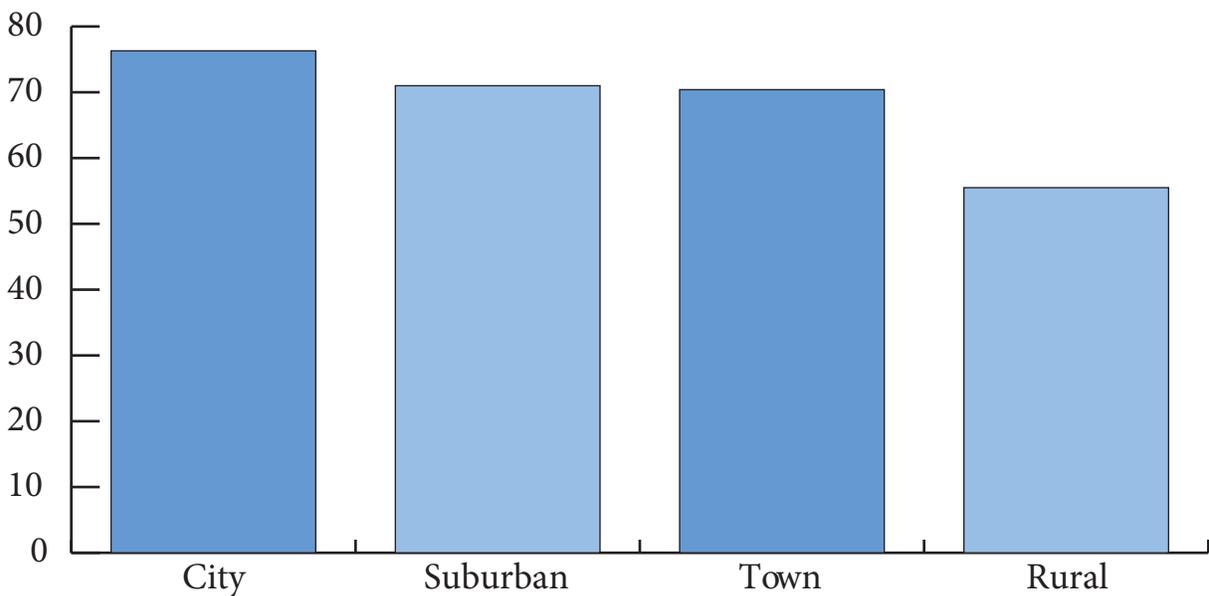


Fig. 2: Upgrades to Technology-Related Infrastructure, by Percentage



Broadband

Libraries across different locales also vary considerably in the strength of their broadband connections. As part of the survey, respondents were asked to report subscribed broadband connection speeds for their libraries. Although both mean and median connection speeds are documented in the full Digital Inclusion Survey report, median speeds are more representative of typical library infrastructure, since these measurements mitigate the effect of outliers that can skew the results.

Median subscribed download speed:

- City: 40,960 kbps
- Suburb: 25,600 kbps
- Town: 15,360 kbps
- Rural: 10,240 kbps

Median subscribed upload speed:

- City: 30,720 kbps
- Suburb: 20,480 kbps
- Town: 10,240 kbps
- Rural: 3,072 kbps

Libraries were also asked to test their broadband connection speeds using a PAC when the library was closed, thereby eliminating high local demand as a factor that could decrease tested speed. The results of these tests show considerable differences between subscribed speeds and actual speeds obtained by locations.

Median tested download speed:

- City: 42,881 kbps
- Suburb: 27,033 kbps
- Town: 11,038 kbps
- Rural: 7,900 kbps

Median tested upload speed:

- City: 19,451 kbps
- Suburb: 11,694 kbps
- Town: 4,639 kbps
- Rural: 1,843 kbps

Despite significant variances in tested and subscribed connection speeds across locals, there were only minor differences between averages for the number of libraries reporting inadequate connection speeds. 31.2 percent of public libraries reported that their connections rarely or only sometimes met patron demand. This was the case for 30.9 percent of city libraries, 27.0 percent of suburban locations, 33.3 percent of town locations, and 33.0 percent of rural libraries.

In addition to the findings above, the authors of this report conducted a public library broadband speed test survey in summer 2014. This study includes multiple measures of typical library connection speeds, providing more nuanced data about this issue. The full report from this study, *Broadband Quality in Public Libraries: Speed Test Findings and Results*, is available at ipac.umd.edu or digitalinclusion.umd.edu.¹¹





Fig. 3: Average Subscribed Internet Download and Upload Speeds by Locale

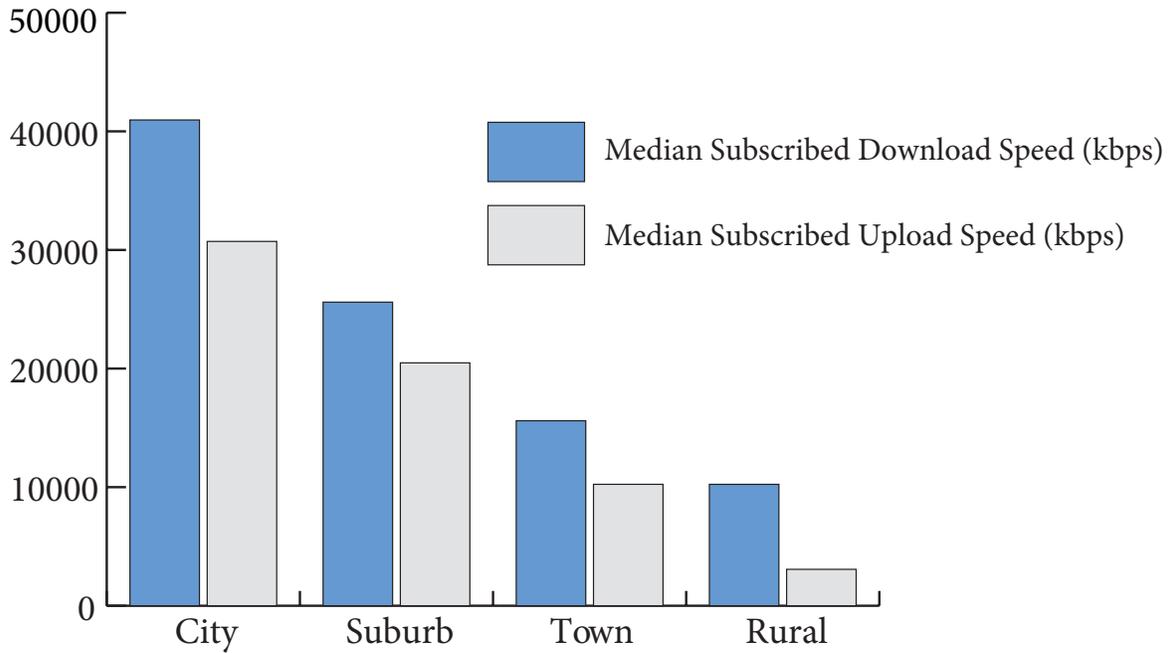
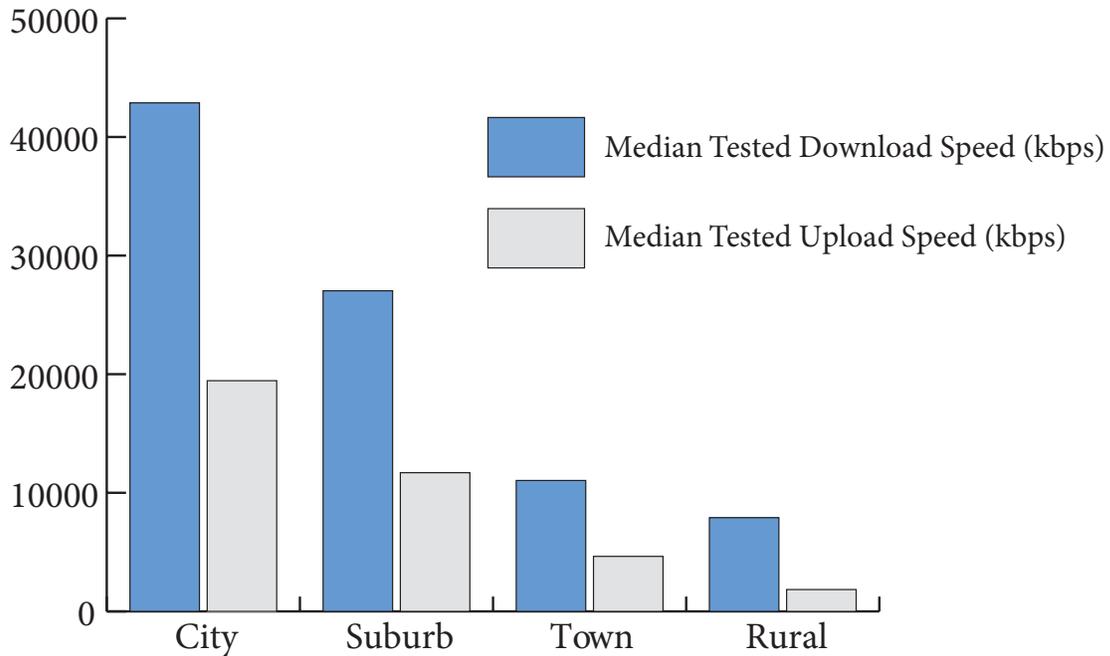


Fig. 4: Average Tested Internet Download and Upload Speeds by Locale



II. BUILDING INFRASTRUCTURE

PUBLIC LIBRARIES NEED SUITABLE PHYSICAL SPACES to support their efforts to bridge the digital divide and facilitate their ability to provide their local publics with a diverse range of programming.

Considering that the average opening year for American libraries is 1970s, many locations' physical foundations predate the ubiquity of PACs in library locations and programming that depends on broadband access. As the varieties of programs libraries offer has expanded over the recent decades, one would expect that physical space and design concerns could act as a barrier to innovation in some locations. The findings of this survey suggest that this is the case, as libraries are significantly more likely to offer certain types of services to patrons if their buildings have been constructed or renovated within the last five years.

21.3 percent of public libraries have been renovated in the last five years. This is the case for 33.4 percent of city libraries, 22.4 percent of suburban locations, 23.0 percent of town locations, and 14.8 of rural libraries. As usual, rural libraries lag behind their counterparts in more populated areas in their ability to secure resources for renovations.

Certain programs are virtually unaffected by how recently a library was physically renewed. For example, 96.6 percent of public

libraries that have been constructed or renovated in the past five years offer summer reading programs for children, versus 95.6 percent of locations that have not been upgraded.

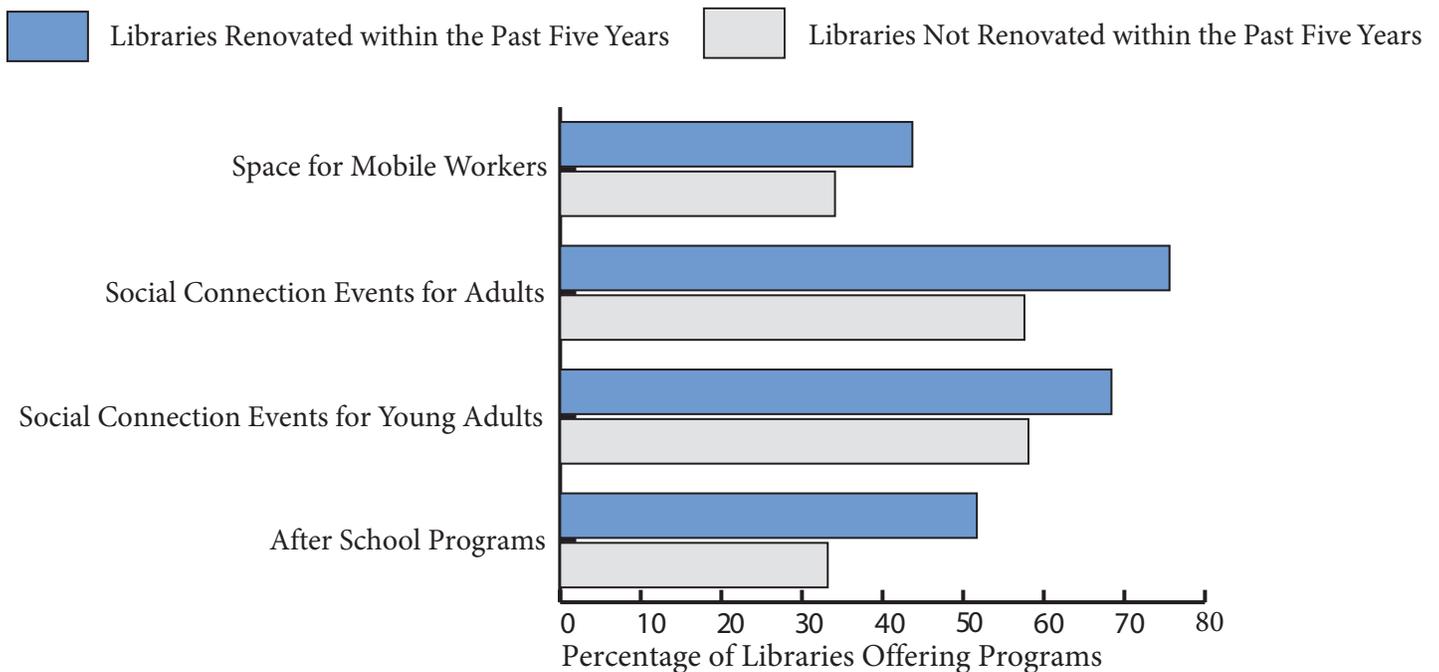
Some of the most obvious differences between newly renovated libraries and those with less up-to-date physical capacities are the frequency with which locations offer programs related to their physical space. 43.7 percent of recently updated libraries offer space for mobile workers, while only 34.1 percent of locations that have not been renovated in the past five years offer such services. 75.6 percent of libraries that have been built or renovated in the past five years offer social connection events for adults and 68.4 percent offer social events for young adults, versus 57.6 percent and 58.1 percent, respectively, of locations with older physical facilities. Likewise, 51.7 percent of recently updated libraries offer after school programs, while 33.2 percent of less up-to-date libraries do so.

These differences also become particularly notable when analyzing new and emerging technology





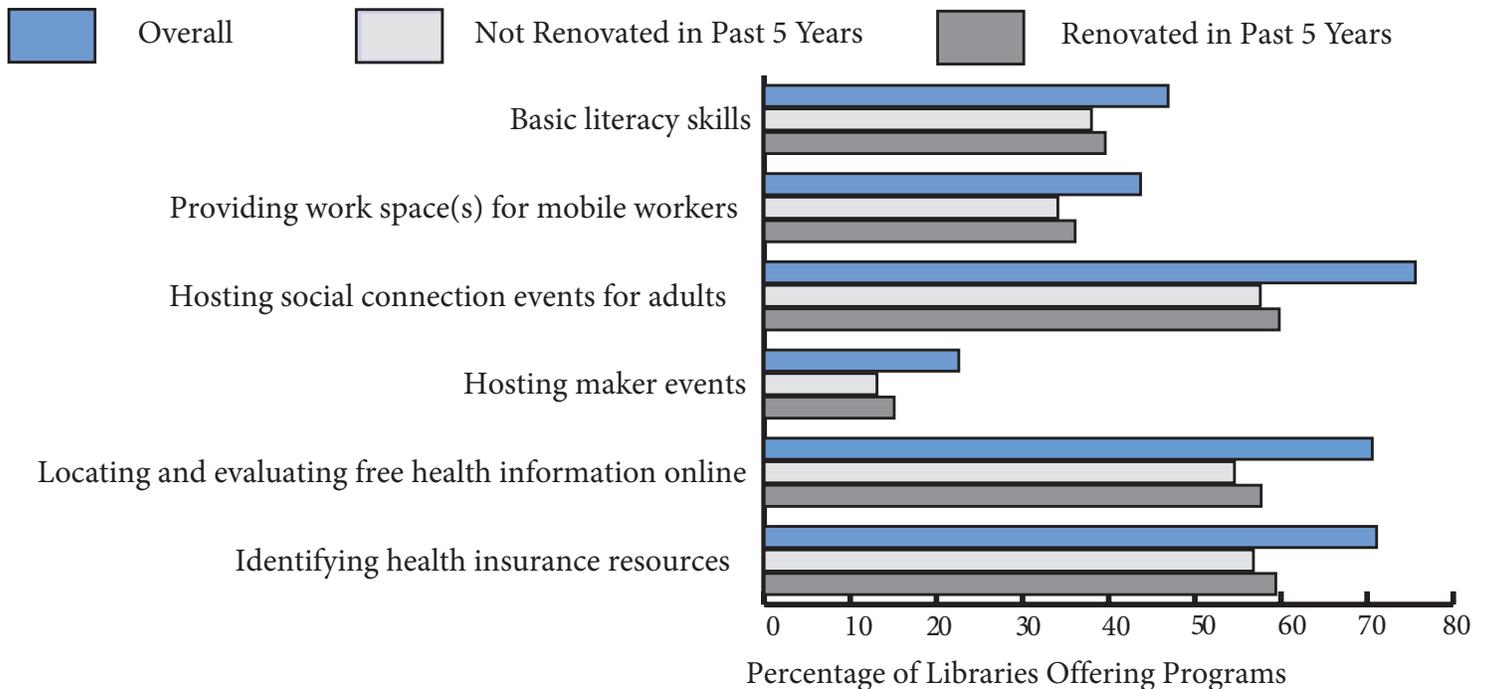
Fig. 5: Programs Related to Physical Space, Newly Renovated vs. Non-newly Renovated Libraries



activities. 48.1 percent of libraries that have been renovated in the last five years offer Science, Technology, Engineering, Arts, and Math (STEAM) events and 22.1 percent of such locations host maker events, versus 30.6 percent and 13.1 percent, respectively, of locations that have not been recently refreshed.

One of the other areas where these divisions become clear is the provision of services dealing with patron health. 70.6 percent of libraries that have been updated in the past five years help patrons with finding free health information online and 67.0 percent offer access to subscription based health databases. This declines to 54.6 percent and 53.9 percent, respectively, for libraries that have not been recently renovated. Additionally, 71.1 percent of recently updated libraries help patrons

Fig. 5: Programs Related to Physical Space, Newly Renovated vs. Non-newly Renovated Libraries



identify health insurance resources – whether through public or private providers – and 53.6 percent help patrons to understand specific health and wellness topics, versus 56.8 percent and 46.4 percent, respectively, of less recently updated locations offering such services.

It is not apparent whether these differences are purely caused by the physical space issue, if higher funding that leads to the ability to renovate spaces also allows for better support for library activities, or if this is caused by some combination of these factors. The reasons for these differences deserve further investigation, but the data show that there is a relationship between the ability of libraries to offer services and the state of their facilities.



III. DIGITAL LITERACY, TRAINING, AND READINESS

A vast majority of American public libraries offer training in basic computing and Internet skills. Nine out of ten locations (89.9 percent) assist patrons with basic Internet usage, ensuring that all members of the public are capable of taking advantage of libraries' broadband offerings. 86.9 percent of libraries offer training in the most basic computing skills, such as how to use a keyboard or mouse, while 84.4 percent of locations assist patrons with common productivity software. There is relatively little variance between libraries in different areas for these types of basic services. As a typical example, 93.3 percent of suburban libraries help patrons with basic Internet skills, making them the most likely to do so, while rural libraries are the least likely to provide assistance in this area, as 86.6 percent of such libraries offer these services.

Librarians prefer to offer these basic trainings on an as-needed basis, through informal point of use interactions. 79.3 percent of libraries report using this type of delivery method to provide training in basic Internet use, versus 38.9 percent offering instruction through formal classes and 38.2 offering individual help by appointment. Preferred training methods for basic computer skills and software use follow similar distributions. Conversely, libraries are more likely to offer instruction in more advanced topics through formal classes. 44.0 percent of libraries that offer training in Web development use formal classes as their delivery method, versus 51.2 percent using informal point of use training for the same topic. Likewise, 53.3 percent of libraries that help patrons create digital content, such as apps or the type of products that can be created through use of the Adobe Creative Suite, do so through formal classes, while 57.6 percent offer these services through informal point of use interactions.

As a general trend, differences between libraries in training offerings become more pronounced when a particular type of service is less common among libraries overall. Suburban and town libraries often keep pace with or even surpass their city counterparts in certain service offerings, but rural libraries lag behind in almost all cases. 55.9 percent of all public libraries offer training in social media, with city (62.2 percent), suburban (58.6 percent), and town (59.6 percent) libraries all slightly exceeding this average, while rural libraries (49.7 percent) are considerably less likely to do so than locations in more populated areas. Similarly, 61.8 percent of public libraries help patrons to familiarize themselves with new technologies, such as tablets and e-readers. A noticeably higher proportion of city (68.5 percent), suburban (73.0 percent), and town (63.4 percent) libraries provide this service than rural locations (60.6 percent).

IV. LIBRARY PROGRAMS, INFORMATION SESSIONS, AND TRAINING

Education and Learning

Virtually all public libraries offer some form of education and learning training. The most popular of these types of programs is summer reading activities for children, which is provided by 94.5 percent of locations, followed by summer reading for adults, offered by 49.1 percent of library locations. 39.6 percent of libraries offer training in basic literacy skills, 36.3 percent offer after school programs, and 34.9 percent provide patrons with access to GED preparation courses and services.

Programs that build on established knowledge are most commonly offered through formal programs, with 94.3 percent of libraries that offer summer reading for children, 91.9 percent of libraries that offer Science, Technology, Engineering, Arts, and Math (STEAM) programming, and 67.1 percent of libraries that provide after school activities preferring this method. Conversely, programming that builds basic knowledge is most commonly offered through informal point of use training. 72.6 percent of public libraries that offer GED preparation assistance and 70.2 of those that provide help with basic literacy skills do so through as-needed interactions. An exception of this trend is English as a Second Language (ESL) training, which is taught through formal classes by 70.6 percent of libraries that offer such services versus 24.0 percent of these locations preferring to offer individual help by appointment and 30.4 percent of such libraries offering assistance through informal point of use training.

Following a common trend in the survey results, libraries in more populated areas tend to have more robust service offerings. 54.5 percent of city libraries are likely to offer training in basic literacy skills, versus 30.4 percent of their rural counterparts. 42.5 percent of city libraries offer ESL training versus 12.6 percent of rural locations, but this lower proportion of rural libraries offering such services may be due to a combination of lower demand and a lesser ability to find enough local participants to create class sizes large enough to justify such activities. Likewise, libraries in less populated areas are less likely to provide STEAM activities for young people, as nearly half (48.9 percent) of city libraries offer such services while just under a fifth (19.7 percent) of rural locations do so.





Economy and Workforce Development

American public libraries strengthen local economies by making deliberate efforts to help patrons with their employment and small business development needs. 62.3 of libraries offer access to subscription-based job training Websites. 73.1 percent of public libraries provide instruction in skills that are essential to applying for jobs (e.g., interviewing skills, resume development, completing online job applications) and 68.3 percent facilitate efforts to access and use employment databases (e.g., Federal and state job banks, Monster.com, Indeed.com). For patrons who have fallen on difficult times, more than half of all public libraries (54.5 percent) help these individuals with applying for unemployment benefits.

Just over one third (36.1 percent) of all libraries offer work space for mobile workers, with little variance between locations of different locale types. However, libraries show greater differences across varying service population sizes for other types of workforce support and business development.

Community, Civic Engagement, and E-Government

Three-quarters (75.6 percent) of American public libraries assist patrons with access and use of online government (E-government) programs and services, such as completing online forms and finding information about Medicare, Immigration, Social Security, and taxes. 40.2 percent of public libraries also make efforts to engage patrons in local civic issues in person by hosting community engagement events, such as candidate forums and community conversations.

Beyond government and civic engagement, many libraries offer various events to enhance social engagement in their communities. 59.8 percent of public libraries host social connection events for young people, including programming based around manga and anime, gaming, and book discussions. City libraries are the most likely to offer these types of programs, with 78.9 percent doing so, while rural libraries are the least likely to provide these young adult services, as 42.6 percent of these locations provide such services. Similarly, 61.1 percent of public libraries host events such as book discussions for adults, with city libraries being the most likely to do so at 78.9 percent, versus rural libraries being the least likely to do so, with 49.8 percent offering such programs.

City libraries are also the most likely to host maker events and hackathons. 21.8 percent and 9.2 percent do so respectively, versus a low of 7.4 percent and 1.1 percent of rural locations offering these types of events. City libraries' larger budgets – even if not larger per capita budgets – and larger population bases help to facilitate these locations' ability to experiment with new technologies and ideas. While these types of events cannot be said to be commonplace, it is clear that libraries are more willing to experiment with these new technology-based trends if they have a larger population base that may be interested. This trend of technological experimentation also correlates with how recently a library has been built or renovated, since 22.1 percent of libraries that have been refreshed in the past five years offer these programs, versus 13.1 percent of libraries that have not been updated.





Health and Wellness

A majority of libraries offer some form of health and wellness programming, but following an overall trend in much of this survey, locations are more likely to offer these types of services if they serve larger population bases. This commonly includes digital resources, as 56.2 percent of public libraries offer access to subscription-based online health databases, such as EBSCO Consumer Health Complete and Gale Health & Wellness Center. The popularity of these resources decreases as population service base declines, with 74.5 percent of city libraries offering these databases versus 39.8 percent of rural locations. 67.0 percent of libraries that have been newly constructed or renovated in the past five years offer access to these databases, while this declines to 53.9 percent for locations that have not been refreshed.

Beyond these databases, the next most popular type of health and wellness assistance offered by libraries is help with identifying health insurance resources, whether through public agencies, private providers, or Affordable Care Act (ACA) exchanges. 59.4 percent of all libraries offer such services. City libraries are the most likely to do so at 76.8 percent, versus a low of 46.0 percent of rural libraries providing this type of assistance. Likewise, 71.1 percent of libraries that have been renovated or built in the last five years offer such services, but this declines to 56.8 percent for libraries that have not been recently refreshed. The next most common types of assistance in this area are libraries aiding patrons with locating and evaluating free health information and using subscription health and wellness databases, with 57.7 percent and 56.2 percent of locations offering these services, respectively.

V. PRELIMINARY CONCLUSIONS

THE FINDINGS FROM THE 2014 DIGITAL INCLUSION SURVEY illustrate how U.S. public libraries benefit their communities in the digital age. Virtually all libraries provide basic technology and broadband access to bridge the digital divide, as well as training and assistance in basic Internet and computing skills that promote digital readiness. Although offerings vary throughout differing locales, public libraries also offer more advanced technologies and training in more complex concepts. Libraries meet these public needs and desires through a variety of delivery options, including informal training or formal classes when groups of patrons hope to acquire new skills. Libraries rely on librarian expertise when staff possess knowledge and abilities that can benefit the public, and they reach out and partner with local organizations and individuals when specialized knowledge is needed. These services are offered freely to the general public, allowing all individuals to fully engage in beneficial activities that may otherwise be unavailable to them due to various barriers to entry.

The data show divisions between libraries that deserve further study. Of particular note is the more robust variety of programming offered by libraries in city and suburban areas versus those in town and rural areas, libraries with less space, and locations that have been less recently constructed or renovated. Some variance is to be expected given the service environments of city and rural libraries. Indeed, rural libraries are less likely than their city counterparts to offer formal technology training classes, which require groups of individuals to need the same service and be available at the

same time. But the study shows that the impact of the library building – size and age – is notable. Smaller and older libraries tend to offer fewer services, resources, formal training, and programs that lead to more digitally inclusive communities. Regardless of these constraints, however, libraries began to offer Internet access when the Web was a new innovation that offered a relatively limited amount of information, and it has improved this access and accompanying services as the Internet has become an essential part of American life.





Thus, public libraries can be expected to have significant influence in the digital domain moving forward. As many individuals lack the resources or abilities to fully engage in an increasingly digitally dependent society, libraries will continue to act as not just promoters of digital inclusion, but guarantors of digitally inclusive communities. Meanwhile, as new technologies emerge that need to be tested and refined before they are adopted on a widespread level by the public, many libraries throughout the country will act as a place where patrons can familiarize themselves with and productively use these new digital tools. Just as libraries offered word processing software before personal computers were commonplace in many homes and offered many Americans their first chance to try the Internet before it was available to consumers in certain areas, public libraries are now allowing many patrons to have their first meaningful interactions with tablet computer devices and maker spaces.

More information about the Digital Inclusion Survey and related data products are available at digitalinclusion.umd.edu.

Libraries will continue to act as not just promoters of digital inclusion, but guarantors of digitally inclusive communities.

NOTES

1 "Broadband Technology Fact Sheet," Pew Research Center, accessed August 17, 2015, <http://www.pewinternet.org/fact-sheets/broadband-technology-fact-sheet/>.

2 Institute of Museum and Library Services, University of Washington Technology & Social Change Group, and International City / County Management Association. Proposed Framework for Digitally Inclusive Communities: Final Report. (Washington, DC: Institute of Museum and Library Services, 2011).

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6 Bertot et al., "Public Libraries and the Internet 2012," 310.

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INFORMATION POLICY & ACCESS CENTER

The Information Policy & Access Center (iPAC) is a response to the pressing need for research on the processes, practices, policies, and social issues that govern access to information in our increasingly digital information society. We at iPAC are committed to studying what policies and/or technologies lead to equitable and inclusive information access, a digitally-ready population, an informed and engaged public, access to Internet-enabled resources and technologies, or preservation of the cultural record, among key examples.

iPAC aspires to be an innovative and forward looking research and education facility that explores social, policy, and technology aspects of information access and use across cultural institutions, government agencies, and other information-based organizations; communities; and populations.

iPAC focuses on four major areas of research and education:

- **Libraries, Cultural, and Public Institutions** – Research on institutions, such as public libraries, school library media centers, archives, museums, and government agencies that are the sources of information, resources, services, and unifying space within their communities.
- **Policy** – Analysis of the policies that shape the ways in which these institutions can serve their communities, as well as the roles of these institutions as access points for and providers of government and other information and services in society.
- **Diverse Populations** – Advocacy and emphasis on the ways in which institutions and policies can promote inclusive information access and services for individuals and communities, including the underserved, underrepresented, and disadvantaged by embracing innovative approaches to diversity.
- **Preservation** – Research and best practices on the preservation of the cultural record, cultural objects, and the assessment and conservation of materials particularly in digital formats.

Through these core aspects of cultural institutions, iPAC seeks to contribute to scholarship and the information professions at the international and national levels, while also serving the local needs of libraries and cultural institutions in the Washington, DC metropolitan area and the state of Maryland.