

2014 Digital Inclusion Survey: Survey Findings and Results

October 1, 2015

by

John Carlo Bertot, Ph.D. Co-Director and Professor jbertot@umd.edu

Brian Real Graduate Research Associate

Jean Lee Graduate Research Associate

Abigail J. McDermott Graduate Research Associate

Paul T. Jaeger Co-Director and Professor



Acknowledgment

The study team wishes to express their gratitude to the U.S. Institute of Museum and Library Services (IMLS) for their generous support of this survey through a National Leadership Grant. It would not have been possible to conduct the Digital Inclusion Survey – and related products found at <u>digitalinclusion.umd.edu</u> – without their support. We also would like to specifically thank Carlos Manjarrez at IMLS for his support and insights throughout the study.

Although we collect data from public libraries throughout the U.S., it is the state library community that provides immeasurable assistance in encouraging public libraries to participate in the survey. We especially would like to recognize the significant efforts of the state librarians, the state data coordinators, and other state library agency staff members.

We also extend our appreciation to all the public librarians who completed the survey. We realize that it takes a great deal of time, effort, and commitment to participate in the survey. Without data, this study would have no ability to affect policy, practice, and engagement in discussions surrounding the role of public libraries in building digitally inclusive communities – which spans public access technologies, broadband, digital equity and readiness, and more. Nor would we be able to create innovative tools such as our interactive mapping application (<u>http://digitalinclusion.umd.edu/content/interactive-map</u>) that shows visually how libraries build digitally inclusive communities.

We are also in debt to the study's Advisory Committee (see Appendix A). These individuals assisted us in a number of key study areas including issue identification, question development, survey pretesting, pilot testing our interactive mapping and speed test tools, providing perspectives on study findings, and much more. Many thanks to all for their dedication and commitment.

We also want to thank our study partners – the American Library Association (ALA), the International City/County Management Association (ICMA), and Community Attributes International (CAI). Together, each partner enhanced the study in significant ways. In particular, we would like to thank Larra Clark, from the ALA Office for Information Technology and Policy, for her insights, tireless efforts on behalf of the study, and many other contributions.

Paragon New Media also deserves mention for their significant efforts in designing, developing, and maintaining the survey Website.

Finally, we wish to thank Ting Yan, of the Survey Methodology Program (SMP), Survey Research Center (SRC), and Institute for Social Research (ISR) at the University of Michigan-Ann Arbor for her work on survey design and weighting methodology.

John Carlo Bertot, Brian Real, Jean Lee, Abigail J. McDermott, & Paul T. Jaeger



Table of Contents

Acknowledgements	i
List of Figures	iii
Executive Summary	vii
Extended Summary	ix
Introduction	iх
Digital Divide, Equity, and Readiness	iх
Digital Readiness	. X
Digital Inclusion	xi
Public Access Computers and Infrastructure	xi
Public Access Computers	xi
Broadband	κiii
Building Infrastructure	XV
Digital Literacy, Training, and Readinessxv	/iii
Library Programs, Information Sessions, and Training	хх
Education and Learning	хх
Economy and Workforce Development	ΧХ
Community, Civic Engagement, and E-Government	xi
Health and Wellness	xi
Preliminary Conclusionsx	xii
A Note on Methodologyx	xiv
National Tables	.1
Sampling Data	.1
Public Access Technology & Infrastructure	15
Speed Test Results	13
Digital Literacy & Training Related to Public Access Technologies	20
Library Programs, Information Sessions & Events	31
Appendix A. Advisory Committee	73
Appendix B. Detailed Weighting and Adjustments for Non-Response	74
Appendix C. Copy of 2014 Digital Inclusion Survey	75



List of Figures

Figure S-1: Average Number of Available PACs	xii
Figure S-2: Upgrade to Technology-Related Infrastructure, by Percentage, 2014	xiii
Figure S-3: Average Subscribed Internet Download and Upload Speeds, by Locale	xiv
Figure S-4: Average Tested Internet Download and Upload Speeds, by Locale	XV
Figure S-5: Programs Related to Physical Space. Newly Renovated	
vs. Non-newly Renovated Libraries	xvi
Figure S-6: Library Program Offerings	xvii
Figure S-7: Training Offerings by Locale	xix
Figure S-8: Training Offered by Renovated vs. Non Renovated Libraries	xix
Figure 1: Public Library Locations and Survey Responses, by Locale	1
Figure 2: Range of Years Library Locations Opened, by Locale Code	1
Figure 3: Average of Years Library Locations Opened, by Locale Code	2
Figure 4: Median of Years Library Locations Opened, by Locale Code	2
Figure 5: Libraries Renovated in the Last Five Years, by Locale Code	2
Figure 6: Renovations to Public Library Locations within the Last Five years, by Locale Code	3
Figure 7: Figure 7: Adequacy of Public Library Location Buildings for Providing Public Access	
Technology-Related Services to Patrons - Overall	4
Figure 8: Adequacy of Public Library Location Buildings for Providing Public Access	
Technology-Related Services to Patrons – City	5
Figure 9: Adequacy of Public Library Location Buildings for Providing Public Access	
Technology-Related Services to Patrons – Suburban	6
Figure 10: Adequacy of Public Library Location Buildings for Providing Public Access	
Technology-Related Services to Patrons – Town	6
Figure 11: Adequacy of Public Library Location Buildings for Providing Public Access	
Technology-Related Services to Patrons – Rural	7
Figure 12: Number of Public Access Computers (Including Laptops), by Average Age,	
and Locale Code	7
Figure 13: Public Library Locations Reporting Daily Wait Times for Public Access Computers,	
by Locale Code	8
Figure 14: Technologies that Public Library Locations Make Available to Patrons,	
by Locale Code	9
Figure 15: Technology Services and Resources that Public Library Locations Make Available to	
Patrons, by Locale Code	10
Figure 16: Public Library Locations Offering Public Wireless Internet Access (WiFi),	
by Locale Code	11
Figure 17: Public Library Locations Subscribed Download Speed, by Locale Code,	
in Kilobits Per Second	12
Figure 18: Public Library Locations Subscribed Upload Speed, by Locale Code	
in Kilobits Per Second	13
Figure 19: Public Library Locations Reporting Fiber Optic Internet Connection, by Locale Code	14

INFORMATION POLICY & ACCESS CENTER

Figure 20: Frequency with which the Public Internet Service Connection Speed Meets Patron	
Demand, by Locale Code	15
Figure 21: Factors that affect the ability of Public Library Locations to Increase Broadband	15
Figure 22: Public Library Locations Reporting Librardes to Public Access Technology-Related	10
Infrastructure in the past 2/ Months, by Locale Code	16
Figure 23: Public Access Technology Infrastructure Ungraded by Public Library Locations	10
within the past 24 Months, by Locale Code	17
Figure 24: Impacts of Public Access Technology Infrastructure Ungrades at Public Library	
Locations by Locale Code	18
Figure 25: Public Library Locations Reporting Access to Information Technology Support Staff	10
by Locale Code	10
Figure 26: Technology Training Offerings by Tonic, by Locale Code	13 20
Figure 20. Technology Training Offerings by Format Overall	20 21
Figure 28: Technology Training Offerings by Format – City	·····21 22
Figure 20: Technology Training Offerings by Format – Oily	22 23
Figure 20: Technology Training Offerings by Format – Suburban	20 24
Figure 30: Technology Training Offerings by Format – Town	2 4 25
Figure 32: Technology Training Offerings by Conductor Overall	25 26
Figure 32: Technology Training Offerings by Conductor – Overall	20 27
Figure 34: Technology Training Offerings by Conductor – Suburban	21
Figure 35: Technology Training Offerings by Conductor – Suburban	20
Figure 36: Technology Training Offerings by Conductor – Rural	29
Figure 37: Education and Learning Programs offered to Patrons, by Locale Code	
Figure 38: Education and Learning Programs offered to Patrons, by Eocale Code	
Figure 30: Education and Learning Programs offered to Patrons, by Format – City	
Figure 30: Education and Learning Programs offered to Patrons, by Format – Suburban	
Figure 40. Education and Learning Programs offered to Patrons, by Format – Suburban	
Figure 41: Education and Learning Programs offered to Patrons, by Format – Power Figure 12: Education and Learning Programs offered to Patrons, by Format – Rural	
Figure 42: Education and Learning Programs offered to Patrons – Overall	
Figure 43.1 Toviders of Education and Learning Programs offered to Patrons – City	
Figure 45: Providers of Education and Learning Programs offered to Patrons – Suburban	
Figure 46: Providers of Education and Learning Programs offered to Patrons	
Figure 40.1 Towalders of Education and Learning Programs offered to Patrons	
Figure 48: Formal Online Education Content provided to Patrons in the last 12 months	40
by Localo	11
Figure 40: Economy and Workforce Development Programs offered to Patrons	
by Locale Code	12
Figure 50: Economy and Workforce Dovelopment Programs offered to Patrons	42
hy Format – Overall	/12
Figure 51: Economy and Workforce Development Programs offered to Patrons	4 J
hy Format – City	11
by Format – Oity	



Figure 52: Economy and Workforce Development Programs offered to Patrons,	45
by Format – Suburban	45
by Format Town	15
Figure 54: Economy and Workforce Development Programs offered to Patrons	40
hy Format – Rural	46
Figure 55: Providers of Economy and Workforce Development Programs offered	+0
to Patrons – Overall	47
Figure 56: Providers of Economy and Workforce Development Programs offered	
to Patrons – City	48
Figure 57: Providers of Economy and Workforce Development Programs offered	
to Patrons – Suburban	49
Figure 58: Providers of Economy and Workforce Development Programs offered	
to Patrons – Town	49
Figure 59: Providers of Economy and Workforce Development Programs offered	
to Patrons – Rural	50
Figure 60: Small Business Development Services provided to Patrons in the last 12 months,	
by Locale	51
Figure 61: Community, Civic Engagement, and E-Government Programs offered to Patrons,	
by Locale Code	52
Figure 62: Community, Civic Engagement, and E-Government Programs offered to Patrons,	
by Format – Overall	53
Figure 63: Community, Civic Engagement, and E-Government Programs offered to Patrons,	F 4
Dy Format – Uity	54
Figure 64: Community, Civic Engagement, and E-Government Programs offered to Patrons,	51
Dy Fullial – Subuldal	
by Format Town	55
Figure 66: Community, Civic Engagement, and E-Government Programs offered to Patrons	
hy Format – Rural	56
Figure 67: Providers of Community, Civic Engagement, and E-Government Programs	
offered to Patrons – Overall	57
Figure 68: Providers of Community, Civic Engagement, and E-Government Programs	
offered to Patrons – City	58
Figure 69: Providers of Community, Civic Engagement, and E-Government Programs	
offered to Patrons – Suburban	59
Figure 70: Organizations Conducting Community, Civic Engagement, and E-government Programs	
offered to Patrons – Town	59
Figure 71: Providers of Community, Civic Engagement, and E-Government Programs	
offered to Patrons – Rural	60
Figure 72: E-government Services Provided to Patrons in the last 12 months, by Locale	61
Figure 73: Health and Wellness Programs offered to Patrons, by Locale Code	62
Figure 74: Health and Wellness Programs offered to Patrons, by Format – Overall	63



Figure 75: Health and Wellness Programs offered to Patrons, by Format – City	64
Figure 76: Health and Wellness Programs offered to Patrons, by Format - Suburban	65
Figure 77: Health and Wellness Programs offered to Patrons, by Format - Town	66
Figure 78: Health and Wellness Programs offered to Patrons, by Format - Rural	67
Figure 79: Providers of Health and Wellness Programs offered to Patrons - Overall	68
Figure 80: Providers of Health and Wellness Programs offered to Patrons - City	69
Figure 81: Providers of Health and Wellness Programs offered to Patrons - Suburban	70
Figure 82: Providers of Health and Wellness Programs offered to Patrons - Town	70
Figure 83: Providers of Health and Wellness Programs offered to Patrons - Rural	71
Figure 84: Healthcare Screening Services provided to Patrons in the last 12 months, by Locale	72

Recommended report citation:

Bertot, J.C., Real, B., Lee, J., McDermott, A.J., & Jaeger, P.T. (2015). *2014 Digital Inclusion Survey: Findings and Results*. College Park, MD: Information Policy & Access Center, University of Maryland College Park. Available at <u>http://digitalinclusion.umd.edu/</u>.



Executive Summary

This year marks 20 years of Public Libraries and Internet data. Over this time, we have seen libraries in a constant evolution in tandem with advances in technology. Just as libraries offered word processing software before personal computers were commonplace in homes and offered many people their first chance to try the Internet, public libraries now enable many patrons to explore e-readers, tablets and maker spaces. Many challenges remain, such as the scant capacity faced by many small and rural libraries and a persistent digital divide that continues to strongly impact Americans with the lowest incomes. Public libraries, whose services have innovatively adapted to the shifting economic and social landscape of the past two decades, are well positioned to act as a national network supporting communities in an age of digital disruption.

Broadband is the great technology equalizer of our time, but it can only be so if everyone has access. – FCC Commissioner Mignon Clyburn.

Libraries act as technologically enabled hubs where people - including librarians, partner organization staff,

and community volunteers – offer services to the public. These services include both training on how to make use of new technologies, and assistance with their application to a range of learning, work, health, and government services contexts. The study finds that most libraries, for example, offer basic technology training and nearly two-thirds have a specific focus on familiarizing community members with new technologies. Teaching online safety and building social media skills also are supported in a majority of all libraries. This broad range of digital literacy training meets people "where they are" and builds the skills needed to thrive in the Digital Age.

1994: 21% of libraries provide free public Internet access

Today: nearly *all* libraries provide free public Internet & Wi-Fi

Those who receive formal digital literacy training were significantly more likely to use the internet to pursue economic opportunities and cultivate social ties. Those who received formal training were 15 percentage points more likely to use the internet to look for a job. – Internet researcher John Horrigan

In an age in which books continue to exist alongside digital devices, libraries excel at blending the old with the new. When it comes to education and learning, summer reading programs for children lead all

36% After-school programs

35% GED courses

34% STEAM events

categories, with 95% of libraries offering the service. More than one-third of all libraries support GED preparation, basic literacy development, STEAM (science, technology, engineering, art and math) events, and afterschool programs. On the digital end of the spectrum, a similar proportion of libraries today (33%) support formal online education content and use, with over 70% of these libraries offering assistance in accessing online degree courses and exam proctoring or testing services. These services are offered in the context of geography: while city libraries are likely to provide more services generally, town libraries lead the pack with formal



online learning at 40%, and rural libraries are the most likely to provide assistance in accessing online degree courses, such as virtual high school or online higher education.

When it comes to supporting health-related activities, libraries (60%) offer programs to help Americans identify health insurance resources and get better informed on health topics (more than 56% of libraries offer programs on locating and evaluating free health information and using subscription health databases). Libraries also host services designed to directly meet physical health needs. Close to one in five libraries, for instance, offer fitness classes or bring in health providers to offer screenings. As the needs and interests of our communities shift, so do libraries transform to meet these demands.

A library's ability to provide these services is closely related to the quality of its infrastructure. Overall, advances have been seen in recent years both in terms of infrastructure and associated technology, but challenges still remain, especially for rural libraries. This year's survey reflects that virtually all libraries (98%) now offer Wi-Fi. Median subscribed download speeds all inched up over last year, as well. Forty-four percent of libraries report fiber optic connections, up five percentage points from one year earlier, and roughly two-thirds of libraries report upgrades to technology infrastructure in past 24 months. Rural libraries lag 15-20 percentage points behind all others.

Significantly, this year's survey provides the first data in recent memory on library building age and renovation. Because the average age of libraries (1970) predates the digital age, they face the ongoing challenge of upgrading and adapting buildings to today's requirements. One in five libraries report renovations in the last five years, with city libraries more than twice as likely (33%) to report this than rural libraries (15%). The most common renovations were upgrading the physical plant (electric/network) at 72% – likely correlated with the need to accommodate greater technology— and

1970 Average age of a public library 20% Libraries renovated in past 5 years

enhanced or added general use spaces (69%). Survey analysis further suggests that libraries are significantly more likely to offer certain types of services to patrons, including new and emerging technology activities, if their buildings have been constructed or renovated within the last five years. The reasons for these differences deserve further investigation, but the data demonstrate libraries' abilities to offer modern services cannot be divorced from the state of their facilities.

In sum, as libraries prepare for the next two decades – likely to bring as much or more change than the past two – we can expect them to continue building on their adaptive strengths: blending the physical and the digital, children's story time and 3D printing, and enabling people to harness technology for education, employment, entrepreneurship, individual empowerment and community engagement—also known as *The E's of Libraries*®. At the same time, we must work to ensure this promise extends from our largest urban libraries and cities to our most geographically remote rural libraries and small towns.



Extended Summary

Introduction

Individuals who have Internet access 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

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 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 individuals 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.

I. Public Access Computers and Infrastructure

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.

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.





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 (40.0 Mbps) Suburb: 25,600 kbps (25.0 Mbps) Town: 15,360 kbps (15.0 Mbps) Rural: 10,240 kbps (10 Mbps)

Median subscribed upload speed:

City: 30,720 kbps (30.0 Mbps) Suburb: 20,480 kbps (20.0 Mbps) Town: 10,240 kbps (10.0 Mbps) Rural: 3,072 kbps (3 Mbps)





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 (41.9 Mbps) Suburb: 27,033 kbps (26.4 Mbps) Town: 11,038 kbps (10.8 Mbps) Rural: 7,900 kbps (7.7 Mbps)

Median tested upload speed:

City: 19,451 kbps (19.0 Mbps) Suburb: 11,694 kbps (11.4 Mbps) Town: 4,639 kbps (4.5 Mbps) Rural: 1,843 kbps (1.8 Mbps)

Results, however, should only be viewed as indicators of connectivity speed at the device level.





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

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-todate 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 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 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.



II. 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).









III. 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) or 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. 47.9 percent of libraries assist patrons in accessing and using online business information resources (e.g., SBA.gov, Business Source Complete, ReferenceUSA), with this ranging from a high of 67.0 percent of city locations offering such services to a low of 31.9 percent of rural libraries providing access to these types of



resources. Likewise, 32.2 percent of libraries conduct activities to support small business development (e.g. assistance on business plan development, assistance on how to start a small business, and market research services). City libraries are the most likely to assist patrons with these needs, with 43.0 percent of locations providing these services, while rural libraries being the least likely to do so, as 22.8 percent of these locations help patrons with small 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 or 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.

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.

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).

⁴ John Carlo Bertot, Ursula Gorham, Paul T. Jaeger, and Natalie Greene Taylor, "Public Libraries and the Internet 2012: Key Findings, Recent Trends, and Future Challenges," *Public Library Quarterly* 31, no. 4 (2012): 309.

⁵ "Broadband Technology Fact Sheet," Pew Research Center, accessed August 17, 2015, <u>http://www.pewinternet.org/fact-sheet/sheets/broadband-technology-fact-sheet/</u>; Aaron Smith, "U.S. Smartphone Use in 2015," National Public Radio, April 1, 2015, <u>http://www.npr.org/sections/thetwo-way/2015/05/28/410351224/fcc-chairman-wants-to-help-low-income-americans-afford-broadband</u>.

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

⁷ "Broadband Technology Fact Sheet," Pew Research Center, accessed August 17, 2015, <u>http://www.pewinternet.org/fact-sheet/</u>.

⁸ Kathryn Zickuhr, "Who's Not Online and Why," Pew Research Center, September 25, 2013, http://www.pewinternet.org/2013/09/25/whos-not-online-and-why/.

⁹ "Summary of the E-Rate Modernization Order," Federal Communications Commission, accessed August 17, 2015, <u>https://www.fcc.gov/page/summary-e-rate-modernization-order</u>; Brian Naylor, "FCC Chairman Wants to Help Low-Income Americans Afford Broadband," *National Public Radio*, May 28, 2015, <u>http://www.npr.org/sections/thetwo-</u>

way/2015/05/28/410351224/fcc-chairman-wants-to-help-low-income-americans-afford-broadband; "FCC Releases Order Preempting TN & NC Municipal Broadband Restrictions," Federal Communications Commission, last modified March 12, 2015, https://www.fcc.gov/document/fcc-releases-order-preempting-tn-nc-municipal-broadband-restrictions.

¹⁰ "Connecting America: What High-Speed Internet Means in the 21st Century," The White House, accessed August 17, 2015, https://www.whitehouse.gov/connect-america.

¹¹ Bertot, J.C., Lee, J., Pawar N., Jaeger, P.T. (2015). *Broadband Quality in Public Libraries: Speed Test Results and Findings.* College Park, MD: Information Policy & Access Center, University of Maryland College Park. Available at http://ipac.umd.edu/.

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

³ John Carlo Bertot, Charles R. McClure, and Paul T. Jaeger (2004). "Public Libraries and the Internet 2004." Available at: <u>http://plinternetsurvey.org/sites/default/files/publications/2004_plinternet.pdf</u>.



A Note on Methodology

The Digital Inclusion Survey collected data from libraries at the branch/location level. The 2014 survey used the FY2012 Public Library Survey file released in June 2014 by the U.S. Institute of Museum and Library Services (IMLS) as the sample frame for the survey, modified by:

- Removing bookmobiles;
- Removing libraries designated as closed in the file;
- Removing branches that did not have a LOCALE (urban, suburban, town, rural) designation; and
- Removing territory libraries (e.g., Puerto Rico, Virgin Islands), but including the District of Columbia.

These modifications left a total of 16,695 service locations (branches) from which to draw a sample.

The goal of the survey was to be able to provide state and national estimates of the survey data. To do this, the study team drew a sample that considered three factors: 1) National distribution of public library branches; 2) State distribution of public library branches; and 3) Locale (aggregated into town, rural, suburban, and city) status of public library branches. For states that had small numbers of libraries (e.g., Alaska, Delaware, Hawaii), we invited all libraries to participate.

In all, the study included 5,195 library outlets in its sample. The survey was open to all public libraries to participate. However, the national analysis conducted and presented in this report only used data from sampled libraries. The survey received 2,304 responses from sampled libraries, for a 44.4% response rate. Weighted analysis was used to present national estimates (see Appendix B for additional detail).

Self-Reported Data

It is important to note that the data reported in the ensuing pages are self-reported by libraries. To the extent possible (i.e., checking for outliers, seeking corrections from libraries for outlier data), the study team sought to ensure valid and reliable data for analysis purposes.

Comparing 2013 and 2014 Survey Data

The 2014 survey differed in a number of key ways as compared to the 2013 survey, and thus direct data comparisons between the surveys is limited. For example, it is not possible to make comparisons between 2013 and 2014 data regarding digital literacy (e.g., public access technology and content development training) and programming in areas of health, education, workforce/employment, and civic engagement. Although the survey questions broadly focused on the same topics and content, questions were redesigned in ways to facilitate survey response and thus do not allow for comparison.



National Tables

Sampling Data

Figure 1: Public Library Locations and Survey Responses, by Locale Code						
Locale Code	Sampled Responding Locations as a Proportion of Sampled Survey Respondents	Distribution of Library Locations as a Proportion of National Population				
City	15.3% (353)	16.6% (2779)				
Suburban	21.0% (484)	26.2% (4369)				
Town	17.0% (391)	19.8% (3298)				
Rural	46.7% (1076)	37.4% (6249)				
Overall	100.0% (2304)	100.0% (16695)				
Overall Response Rate =	= 44.4%					

Figure 1 shows the distribution of survey responses received from sampled libraries in the United States across the four different locale types. In all, 5,648 library locations participated in the survey, of which 2,304 were sampled locations. Of those sampled library locations, 37.4% were from Rural library locations, 26.2% from Suburban library locations, 19.8% from Town library locations, and 16.6% from City library locations. Weighted analysis (as described in Appendix B) was used for the national data analysis presented in this report.

Public Access Technology & Infrastructure

Figure 2: Range of Years Library Locations Opened, by Locale Code							
Locale Code							
City Suburban Town Rural Overall							
1885-2014	1812-2014	1868-2013	1803-2014	1803-2014			

Figure 2 indicates that the earliest library location opening in the United States was in 1803, and the latest, or most recent opening date was in 2014. Out of surveyed libraries, the earliest city library location opening was in 1885, the earliest suburban library location in1812, the earliest town library location in 1868, and the earliest rural library location in 1803. City, suburban, and rural library locale types all reported having locations that opened as recently as 2014. Towns were the only locale type that did not report having locations that opened in 2014, with the most recent town library location opening in 2013.



Figure 3: Average of Years Library Locations Opened, by Locale Code*						
		Loca	le Code			
City	Suburban	Town	Rural	Overall		
1975 (n=266)	1974 (n=327)	1965 (n=279)	1969 (n=629)	1970 (n=1501)		
Unweighted analysis	for this data point using	ng sampled library res	ponses.			

Figure 3 gives the average years that library locations opened, with 1970 as the average for overall survey respondents. 1975, the average year that city library locations opened was the most recent. The average opening year for suburban library locations was 1974. The average year that town library locations opened was 1965, and the average year for rural libraries was 1969.

Figure 4: Median of Years Library Locations Opened, by Locale Code						
	Locale Code					
City	Suburban	Town	Rural	Overall		
1976 (n=266)	1982 (n=327)	1974 (n=279)	1980 (n=629)	1978 (n=1501)		
Unweighted analysis for this data point using sampled library responses.						

Figure 4 shows that the median of the opening years of libraries overall was 1979, indicating that some of the earliest years of opening weighed down the majority of library opening dates based on the averages given (see Figure 3). The median of the years that library locations opened is higher than the average opening year across all library locations. The difference is marginal for city libraries, with a median opening year of 1976. The median opening year is 1980 for suburban libraries, 1974 for town libraries, and 1983 for rural libraries

Figure 5: Libraries Renovated in the Last Five Years, by Locale Code							
	Locale Code						
City	Suburban	Town	Rural	Overall			
33.4%	22.4%	23.0%	14.8%	21.3%			
(n=860)	(n=981)	(n=757)	(n=953)	(n=3551)			
Table only displays percentages for affirmative responses.							

Figure 5 shows that 21.3 percent of overall public library respondents reported that renovations occurred within the last five years, with the highest percentage (33.4 percent) reported by city libraries. 22.4 percent of suburban libraries reported that renovations were made in the last five years, and 23.0 percent of town libraries reported renovations in that time period. Rural libraries reported the lowest percentage (14.8 percent) of renovations in the last five years. Relatively few 2014 survey respondents indicated changes made to the physical library space in the past two years, like adding public access computer lab space (10.9 percent overall) or adding public engagement space (8.7 percent overall).



Figure 6: Renovations to Public Library Locations within the Last Five years, by Locale Code						
	Locale Code					
Renovations	City	Suburban	Town	Rural	Overall	
Enhanced/added general use space (e.g., reading spaces, sitting spaces)	70.3% (n=598)	70.0% (n=687)	63.7% (n=483)	69.8% (n=666)	68.7% (n=2434)	
Enhanced/added meeting rooms/meeting spaces for public use (e.g., for community members to reserve and use)	58.7% (n=499)	49.1% (n=482)	54.4% (n=412)	38.5% (n=367)	49.7% (n=1760)	
Enhanced/added auditorium or large space (e.g., for the library to host events or community members to reserve and use)	29.5% (n=251)	31.6% (n=310)	26.1% (n=197)	16.7% (n=159)	25.9% (n=917)	
Enhanced/added maker space (e.g., for the library or community members to host maker events)	9.4% (n=80)	15.3% (n=150)	10.8% (n=82)	11.3% (n=108)	11.9% (n=420)	
Enhanced/added digital media production lab (e.g., for the creation and editing of digital content)	8.7% (n=74)	15.9% (n=156)	8.7% (n=66)	10.8% (n=103)	11.3% (n=399)	
Enhanced/added work/office spaces for business users (e.g., co-working spaces, mobile office spaces)	18.6% (n=158)	20.1% (n=197)	19.0% (n=144)	18.2% (n=174)	19.0% (n=673)	
Upgraded physical plant (e.g., electric supply, additional electrical outlets, network capacity)	63.5% (n=540)	83.4% (n=817)	82.8% (n=627)	60.4% (n=576)	72.3% (n=2560)	
Other	29.0% (n=249)	10.2% (n=100)	19.3% (n=146)	19.4% (n=185)	19.1% (n=680)	

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figure 6 shows the kinds of renovations that were made in the past five years by public library respondents who reported renovations. The most commonly reported renovation was upgrading the physical plant at 72.3 percent, with suburban libraries (83.4 percent) and then town libraries (82.8 percent) reporting the highest percentages of physical plant upgrades. This was followed by adding or enhancing general use space at 68.7 percent for libraries overall, where city libraries (70.3 percent) reported the highest and town libraries reported the lowest rate (63.7 percent). The overall response rate for enhancing/adding meeting rooms/meeting spaces for public use was at 49.7 percent, where city libraries reported the highest percentage at 58.7 percent. Suburban libraries reported the highest percentage for enhancing/adding an auditorium or a large space (31.6 percent), enhancing/adding maker space (15.3 percent), enhancing/adding a digital media production lab (15.9 percent), and enhancing/adding work/office spaces for business users (20.1 percent). In 2013, city (11.4 percent) and suburban (10.3 percent) library respondents reported higher percentages of affirmative responses for adding public engagement space for things like maker spaces or networking events, while town library respondents reported 6.5 percent and rural libraries reported 7.7 percent.



Figure 7: Adequacy of Public Library Location Buildings for Providing Public Access Technology-Related Services to Patrons - Overall

	Overall					
Building Infrastructure	Poor	Fair	Good	Excellent	Don't Know	
Availability of general use space (e.g.,	10.5%	27.5%	39.7%	22.2%		
reading spaces, sitting spaces)	(n=1732)	(n=4522)	(n=6536)	(n=3651)	*	
Availability of meeting rooms/meeting						
spaces for public use (e.g., for	27.3%	22.0%	28.8%	21.6%		
community members to reserve and use)	(n=4370)	(n=3519)	(n=4619)	(n=3455)	*	
Availability of maker spaces (e.g., for						
design, prototype, and creation of	70.0%	17.6%	9.5%	2.8%		
various works)	(n=9901)	(n=2495)	(n=1348)	(n=394)		
Availability of work/office spaces for						
business users (e.g., as co-working	50.7%	28.4%	12.8%	4.2%	3.9%	
spaces, mobile office spaces)	(n=8002)	(n=4491)	(n=2016)	(n=657)	(n=621)	
Adequacy of physical plant (e.g., electric						
supply, additional electrical outlets,	15.6%	29.6%	37.8%	16.0%		
network capacity)	(n=2534)	(n=4811)	(n=6135)	(n=2598)	*	
Other	34.3%	16.5%	12.2%	37.0%		
Utilei	(n=79)	(n=38)	(n=28)	(n=85)		
Key: *: insufficient data to report; : no data to report						

As Figure 7 shows, a majority of public library locations (61.9 percent) report good or excellent availability of general use space in regards to public access technology-related services to patrons, with more good (39.7 percent) than excellent (22.2 percent). This is comparable to the 61.7 percent reported in 2013. The distribution of libraries reporting from poor to excellent availability of meeting rooms for public use was relatively even—49.3 percent for poor or fair and 50.4 percent for good or excellent—while the availability of public engagement space in 2013 was 57.7 percent for poor or fair and 39.1 percent for good or excellent. The majority (87.6 percent) of public libraries report poor or fair availability of maker spaces and work/office spaces for business users (79.1 percent). The availability of group work spaces, which is a slight shift in focus from space for business users, was reported at 58.7 percent for poor or fair in 2013. Around half (53.8 percent) of public libraries reported good or excellent adequacy of the physical plant in 2014, whereas a higher percentage of public libraries had reported poor or fair availability of electrical outlets (52.6 percent) and cabling (51.2 percent) in 2013.



Figure 8: Adequacy of Public Library Location Buildings for Providing Public Access Technology-							
Related Services to Patrons – City							
			City				
Building Infrastructure	Poor	Fair	Good	Excellent	Don't Know		
Availability of general use space (e.g.,	9.7%	27.0%	37.1%	25.8%			
reading spaces, sitting spaces)	(n=248)	(n=690)	(n=947)	(n=658)	*		
Availability of meeting rooms/meeting							
spaces for public use (e.g., for	17.2%	17.8%	40.7%	23.8%			
community members to reserve and use)	(n=424)	(n=438)	(n=1002)	(n=586)	*		
Availability of maker spaces (e.g., for							
design, prototype, and creation of	69.1%	15.4%	9.8%	5.8%			
various works)	(n=1502)	(n=334)	(n=212)	(n=125)			
Availability of work/office spaces for							
business users (e.g., as co-working	53.5%	19.6%	13.9%	4.6%	8.3%		
spaces, mobile office spaces)	(n=1267)	(n=464)	(n=329)	(n=110)	(n=197)		
Adequacy of physical plant (e.g., electric							
supply, additional electrical outlets,	18.8%	26.4%	35.7%	17.2%	1.7%		
network capacity)	(n=474)	(n=666)	(n=900)	(n=434)	(n=44)		
Other	7.4%	29.6%	37.0%	25.9%			
Ourer	(n=2)	(n=8)	(n=10)	(n=7)			
Key: *: insufficient data to report:: no data to report							

fficient data to report; -- : no data to report

* Adequacy of public engagement space, electrical outlets, cabling, and other were not reported for less than 1.0% of reporting libraries.

Figures 8 to 11 detail the building infrastructure of public library locations. The majority of city libraries (62.9 percent), suburban libraries (67.3 percent), town libraries (63.1 percent), and rural libraries (57.1 percent) had good or excellent availability of general use space, with more libraries reporting good than excellent... The availability of meeting rooms/meeting spaces for public use was reported to be poor or fair for around half of libraries at 45.2 percent for suburban libraries, 48.9 percent for town libraries, and 57.8 percent for rural libraries—the exception to this was city libraries at 35 percent, which may be attributed to the higher percentage of renovations to meeting rooms (see Figure 6). In 2013, 47.6 percent of city libraries reported poor or fair availability of public engagement space.

Most city (84.5 percent), suburban (88.5 percent), town (87.2 percent), and rural libraries (88.7 percent) reported fair or poor availability of maker spaces, with more libraries reporting poor than fair adequacy, 73.1 percent of city libraries, 77.4 percent of suburban, 78.3 percent of town, and 83.1 percent of rural libraries reported availability as either poor or fair, with more poor than fair responses for the availability of work/office spaces for business users. In 2013, the availability of group work spaces was reported to be poor or fair at a range from the lowest of 52.7 percent for city libraries to 61.9 percent for rural libraries. Consistent with overall results, around half of all public libraries reported good or excellent adequacy of the physical plant, with city libraries at 52.9 percent, suburban libraries at 49.6 percent, town libraries at 51.7 percent, and rural libraries at 51.3 percent.



Figure 9: Adequacy of Public Library Location Buildings for Providing Public Access Technology-Related Services to Patrons – Suburban

	Suburban						
Building Infrastructure	Poor	Fair	Good	Excellent	Don't Know		
Availability of general use space (e.g.,	10.8%	21.5%	43.0%	24.3%			
reading spaces, sitting spaces)	(n=466)	(n=930)	(n=1858)	(n=1051)	*		
Availability of meeting rooms/meeting							
spaces for public use (e.g., for	21.6%	23.6%	34.7%	19.8%			
community members to reserve and use)	(n=905)	(n=989)	(n=1451)	(n=828)	*		
Availability of maker spaces (e.g., for							
design, prototype, and creation of	71.6%	16.9%	10.4%	1.2%			
various works)	(n=2661)	(n=629)	(n=386)	(n=43)			
Availability of work/office spaces for							
business users (e.g., as co-working	49.2%	28.2%	14.9%	4.0%	3.7%		
spaces, mobile office spaces)	(n=2049)	(n=1174)	(n=620)	(n=168)	(n=153)		
Adequacy of physical plant (e.g., electric							
supply, additional electrical outlets,	11.5%	27.7%	38.4%	21.2%	1.1%		
network capacity)	(n=491)	(n=1179)	(n=1634)	(n=900)	(n=48)		
Othor	100.0%						
Ourer	(n=28)						

Key: *: insufficient data to report; --- : no data to report

* Adequacy of public engagement space, electrical outlets, cabling, and other were not reported for less than 1.0% of reporting libraries.

Figure 10: Adequacy of Public Library Location Buildings for Providing Public Access Technology-Related Services to Patrons – Town

	Town				
Building Infrastructure	Poor	Fair	Good	Excellent	Don't Know
Availability of general use space (e.g.,	6.8%	30.1%	39.6%	23.5%	
reading spaces, sitting spaces)	(n=220)	(n=981)	(n=1287)	(n=765)	*
Availability of meeting rooms/meeting					
spaces for public use (e.g., for	24.6%	24.3%	25.8%	25.2%	
community members to reserve and use)	(n=789)	(n=777)	(n=826)	(n=807)	*
Availability of maker spaces (e.g., for					
design, prototype, and creation of	70.9%	16.3%	10.4%	2.4%	
various works)	(n=1978)	(n=454)	(n=289)	(n=67)	
Availability of work/office spaces for					
business users (e.g., as co-working	43.3%	35.0%	12.8%	5.8%	3.1%
spaces, mobile office spaces)	(n=1363)	(n=1100)	(n=403)	(n=181)	(n=98)
Adequacy of physical plant (e.g., electric					
supply, additional electrical outlets,	18.7%	28.6%	37.3%	14.4%	1.1%
network capacity)	(n=605)	(n=925)	(n=1205)	(n=464)	(n=34)
Other		58.3%	41.7%		
		(n=14)	(n=10)		

Key: *: insufficient data to report; --- : no data to report

* Adequacy of public engagement space, electrical outlets, cabling, and other were not reported for less than 1.0% of reporting libraries.



libraries.

Figure 11: Adequacy of Public Library Location Buildings for Providing Public Access Technology-Related Services to Patrons – Rural

			Rural		
Building Infrastructure	Poor	Fair	Good	Excellent	Don't Know
Availability of general use space (e.g.,	12.6%	30.3%	38.5%	18.6%	
reading spaces, sitting spaces)	(n=798)	(n=1921)	(n=2444)	(n=1177)	
Availability of meeting rooms/meeting					
spaces for public use (e.g., for	36.5%	21.3%	21.7%	20.0%	
community members to reserve and use)	(n=2252)	(n=1315)	(n=1340)	(n=1234)	*
Availability of maker spaces (e.g., for					
design, prototype, and creation of	68.9%	19.8%	8.4%	2.9%	
various works)	(n=3760)	(n=1078)	(n=461)	(n=159)	
Availability of work/office spaces for					
business users (e.g., as co-working	54.4%	28.7%	10.9%	3.2%	2.8%
spaces, mobile office spaces)	(n=3323)	(n=1753)	(n=664)	(n=198)	(n=173)
Adequacy of physical plant (e.g., electric					
supply, additional electrical outlets,	15.5%	32.8%	38.5%	12.8%	
network capacity)	(n=964)	(n=2041)	(n=2396)	(n=800)	*
Othor	32.5%	10.6%	5.3%	51.7%	
Other	(n=49)	(n=16)	(n=8)	(n=78)	
Key: *: insufficient data to report; : no data	ata to report				
* Adequacy of public engagement space, electrical outlets, cabling, and other were not reported for less than 1.0% of reporting					

Figure 12: Number of Public Access Computers (Including Laptops), by Average Age, and Locale

Code								
	Average Number of Public Access Internet Computers							
Average Age	City	Suburban	Town	Rural	Overall			
4 years old or less	26.4 (n=2574)	17.3 (n=4375)	10.8 (n=3297)	5.7 (n=6443)	12.7 (n=14339)			
More than 4 years old	5.8 (n=2574)	5.2 (n=4375)	6.7 (n=3297)	2.8 (n=6443)	4.7 (n=14342)			
Overall	37.0 (n=2574)	23.6 (n=4375)	17.9 (n=3297)	8.8 (n=6443)	18.8 (n=15531)			
* Some library data not reported in 2014 replaced with 2013 survey reported public access computer data.								

Overall, Figure 12 shows that libraries have an average of 12.7 public access computers that were 4 years old or newer and 4.7 computers that were older than 4 years for a total average of 18.8 public access computers. This varies (but within the margin of error) from the overall 20.2 total public access computers reported overall in 2013, with 14.4 public access computers that were 4 years old or newer and 5.9 that were older than 4 years. City libraries have an average of 37.0 public access computers, with 26.4 public access computers that were newer than or equal to 4 years old and 5.8 computers that were older than 4 years. One notable difference from 2013 survey results is the decrease in computers that are older than 4 years old at city libraries, from 10.3 computers to 5.8 computers according to the 2014 survey results. Suburban libraries have an average of 17.3 public access computers that were 4 years old or newer and



Don't Know

5.2 computers that were older than 4 years for a total of 23.6 public access computers—slightly fewer than the 25.2 public access computers reported in 2013. Town libraries have an average of 17.9 public access computers, with 10.8 public access computers that were 4 years old or newer and 6.7 computers that were older than 4 years—consistent with the 17.6 computers reported last year. Rural libraries continued to have the smallest average number of computers, with 8.8 public access computers (5.7 that were newer than 4 years and 2.8 that were older)—slightly fewer than the average total of 10.1 computers reported last year. Consistent with results from 2013, there are more public access computers that are 4 years old or newer, compared to older than 4 years, across all locale types.

Figure 13: Public Library Locations Reporting Daily Wait Times for Public Access Computers, by Locale Code							
	Locale Code						
Wait Times	City	Suburban	Town	Rural	Overall		
Yes	54.1% (n=1360)	31.9% (n=1369)	35.3% (n=1130)	18.4% (n=1166)	30.7% (n=5025)		
No	40.5% (n=1019)	66.2% (n=2844)	62.5% (n=2001)	79.6% (n=5044)	66.7% (n=10908)		
	5.4%	1.9%	2.2%	1.9%	2.5%		

(n=70)

(n=123)

As Figure 13 shows, 30.7 percent of overall 2014 public library survey respondents reported that patrons experienced daily wait times for public access computers, which is slightly lower than the 35.9 percent reported in 2013. 66.7 percent reported that patrons did not experience wait times, while 2.5 percent were unsure. This indicates an improvement since 2013, when 58.4 percent of libraries reported no wait times. The percentage of city public libraries that reported wait times was down to 54.1 percent from 62.1 percent in 2013, 31.9 percent for suburban libraries from 38.3 percent, 35.3 percent for town libraries from 35.4 percent, and 18.4 percent for rural libraries from 24.0 percent. Wait times continue to appear to be experienced more as the density of the population of a library location increases.

(n=81)

(n=135)

(n=409)



Figure 14: Technologies that Public Library Locations Make Available to Patrons, by Locale Code					
	Locale Code				
Resources Offered	City	Suburban	Town	Rural	Overall
Color printer(s)	78.3%	80.0%	71.4%	79.7%	77.9%
	(n=1989)	(n=3489)	(n=2315)	(n=5105)	(n=12898)
Large format printer(s)	3.7%	7.4%	11.9%	8.8%	8.3%
Large-format printer(s)	(n=94)	(n=321)	(n=383)	(n=564)	(n=1362)
3 D printer(s)	2.2%	4.3%	4.2%	0.8%	2.6%
	(n=57)	(n=186)	(n=136)	(n=49)	(n=428)
Wireless printing	49.6%	41.7%	34.3%	36.5%	39.4%
	(n=1253)	(n=1815)	(n=1103)	(n=2335)	(n=6506)
Scapper(c)	54.3%	62.3%	69.1%	62.6%	62.5%
Scallier(s)	(n=1368)	(n=2698)	(n=2222)	(n=4011)	(n=10299)
l anton(s)	36.7%	40.3%	47.6%	41.4%	41.6%
	(n=929)	(n=1753)	(n=1528)	(n=2651)	(n=6861)
Tablet computer(s) (e.g. iPads Chromobooks)	19.5%	28.1%	17.2%	18.0%	20.7%
Tablet computer(s) (e.g., IPads, Chromebooks)	(n=489)	(n=1219)	(n=554)	(n=1150)	(n=3412)
E reader(s) (a.g. Kindle Neek)	19.6%	32.9%	23.7%	23.8%	25.5%
	(n=497)	(n=1408)	(n=764)	(n=1523)	(n=4192)
Early learning technology(ies) (e.g., AWE or	53.6%	52.5%	53.5%	31.2%	44.8%
tablet computers dedicated to pre-K)	(n=1168)	(n=1928)	(n=1498)	(n=1665)	(n=6259)
Digital media production lab (e.g., lab with					
hardware/software for creating videos, scanning	6.7%	6.2%	5.7%	4.2%	5.4%
content, editing digital photos, etc.)	(n=168)	(n=269)	(n=182)	(n=266)	(n=885)
Recreational gaming console(s) (e.g., Xbox,	33.8%	27.6%	25.6%	16.4%	23.8%
PlayStation, DS)	(n=852)	(n=1197)	(n=822)	(n=1049)	(n=3920)
Smart technology object(s) (e.g., LittleBits,	9.1%	11.1%	7.0%	3.5%	7.0%
Arduino)	(n=229)	(n=480)	(n=223)	(n=225)	(n=1157)
Digital display(s) (e.g., Christie MicoTiles, digital	31.5%	23.3%	15.2%	7.1%	16.7%
signage, touch screen displays)	(n=788)	(n=1006)	(n=487)	(n=456)	(n=2737)
Development technology/ies (e.g., sandbox	4.4%	2.1%	4.4%	2.4%	3.0%
machines, maker/creator spaces)	(n=111)	(n=91)	(n=141)	(n=152)	(n=495)
	1.7%	2.0%	2.1%	1.4%	1.7%
Other	(n=45)	(n=87)	(n=68)	(n=88)	(n=288)
Mill not total 1000/, an entergation are not mutually evolutive. Table and y displayers				ffirmativa raanan	

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figure 14 shows the different technologies public library locations make available for patron use. The most frequently offered technology, after color printer(s) at 77.9 percent (down from 91.1 percent in 2013), are scanners, with 62.5 percent of all libraries (up from 56.1 percent) offering this service technology to patrons. This was followed by early learning technologies (e.g., AWE or tablet computers dedicated to pre-K) at 44.8 percent. While town libraries continue to have the lowest access to color printers (71.4 percent in 2014 versus 67.2 percent in 2013), there was a drop for city libraries (78.3 percent, as opposed to 100 percent) and rural libraries (from 97.0 percent to 79.7 percent), leaving suburban libraries as having the highest (80 percent in 2014 from 96.3 percent). The overall rate of availability for large-format printers was 8.3 percent in 2014 (from 9.8 percent in 2013), with the largest change in distribution being the drop for city libraries from 6.0 percent to 3.7 percent. Wireless printing availability was up from 33.2 percent to 39.4 percent. Tablet availability increased (20.7 percent, from 16.5 percent), while the availability of laptops and



e-readers was almost the same (from 41.8 percent overall to 41.6 percent and 25.4 percent to 25.5 percent, respectively).

A small number of libraries offer development technologies, with the lowest rate of 2.1 percent for suburban libraries (a drop from 4.7 percent in 2013), to 4.4 percent for city libraries (from 3.7 percent). Few libraries offered digital media production labs, ranging from 4.2 percent for rural libraries to 6.7 percent for city libraries. In 2013, libraries reported offering an audio/visual editing common(s) from a range of 2.4 percent for rural libraries to 5.3 percent for city libraries. Fewer libraries appear to be offering smart technology objects overall, with 9.1 percent for city libraries (from 22.0 percent in 2013), 11.1 percent for suburban libraries (from 24.0 percent), 7.0 percent for town libraries (from 12.8 percent), and 3.5 percent for rural libraries (from 8.2 percent). Slightly more libraries reported offering recreational gaming consoles, ranging from 16.4 percent for rural libraries (from 9.3 percent in 2013) to 33.8 percent for city libraries (from 24.5 percent). As was the case in 2013, more city (31.5 percent, down from 33.4 percent in 2013) and suburban (23.3 percent, from 28.6 percent in 2013) libraries offered digital displays than town and rural libraries.

	Locale Code				
Services and Resources Offered	City	Suburban	Town	Rural	Overall
E-books (e.g., via 3M Cloud Library, Overdrive, or	98.3%	97.6%	92.3%	81.2%	90.3%
other platform)	(n=2529)	(n=4270)	(n=3042)	(n=5229)	(n=15070)
Digital modia content (o.g., Zinia, franzal, haanla)	82.7%	67.7%	43.9%	36.0%	53.1%
Digital media content (e.g., Zinio, neegal, noopia)	(n=2129)	(n=2960)	(n=1448)	(n=2322)	(n=8859)
Opling homowork assistance (o.g., tutor.com)	98.2%	96.0%	95.0%	93.8%	95.3%
	(n=2527)	(n=4200)	(n=3133)	(n=6044)	(n=15904)
Online job/employment resources (e.g.,	77.7%	68.6%	61.3%	52.3%	62.3%
Brainfuse, JobNow)	(n=2000)	(n=3000)	(n=2021)	(n=3369)	(n=10390)
Online language learning (e.g., Mango	84.0%	75.3%	48.6%	35.5%	56.0%
Languages, powerSpeak)	(n=2162)	(n=3294)	(n=1603)	(n=2285)	(n=9344)
Online health resources (e.g., EBSCO Consumer					
Health Complete, Gale Health & Wellness	92.3%	84.9%	75.5%	65.9%	76.8%
Center)	(n=2375)	(n=3716)	(n=2491)	(n=4244)	(n=12826)
Video conferencing service(s) (e.g., WebEx,	6.3%	6.5%	17.3%	14.3%	11.6%
GoToMeeting, Connect)	(n=161)	(n=285)	(n=572)	(n=921)	(n=1939)
Print on Demand (POD) (e.g., Espresso Book	2.3%	1.9%	3.4%	1.4%	2.1%
Machine, Xerox DocuTech)	(n=58)	(n=83)	(n=112)	(n=90)	(n=343)
Mobile device-enabled Website (e.g., designed	59.8%	59.6%	44.3%	33.6%	46.5%
for use by smartphones, tablets)	(n=1538)	(n=2607)	(n=1459)	(n=2164)	(n=7768)
Mobile apps (e.g., iPhone, iPad, Android) to	63.0%	54.0%	37.3%	29.8%	42.7%
access library services and resources	(n=1621)	(n=2363)	(n=1231)	(n=1917)	(n=7132)
Scanned codes (e.g., QR codes or Microsoft Tag	36.1%	35.6%	23.3%	13.1%	24.6%
codes)	(n=930)	(n=1558)	(n=769)	(n=842)	(n=4099)
Other		1.1%			
	*	(n=47)	*	*	*
Key: * insufficient data to report					

Figure 15: Technology Services and Resources that Public Library Locations Make Available to Patrons, by Locale Code

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses. * Other services and resources offered was not reported for less than 1.0% of reporting libraries.



Figure 15 shows examples of technology-related services and resources that public library locations offer to patrons. The most frequently offered services or resources were online homework assistance (95.3 percent), (e-books (90.3 percent), online health resources (76.8 percent), and online job/employment resources (62.3 percent). The percentages overall for other technology-related services and resources are generally about the same or slightly higher than what was reported in 2013. The exception was online job/employment resources at 62.3 percent (down from 95.6 percent). The figure also reflects that city and suburban libraries continue to be more likely to report offering technology services and resources than less densely populated locales. There are two instances where town libraries—for video conferencing service(s) at 17.3 percent and Print on Demand (POD) at 3.4 percent. An overall low number of libraries offered Print on Demand (POD), ranging from 1.4 percent to 3.4 percent, but this indicates a slight increase from the rate or 1.8 percent overall from 2013. Over half of all libraries also offered online language learning (56.0 percent)—slightly higher than the rate of 55.1 percent from 2013—and digital media content (53.1 percent). City libraries continued to report the highest percentage of libraries offering mobile-device enabled websites (59.8 percent) and mobile apps to access library services and resources (63.0 percent).

Figure 16: Public Library Locations Offering Public Wireless Internet Access (WiFi), by Locale Code							
Locale Code							
City Suburban Town Rural Overall							
100.0%98.5%99.4%95.5%97.8%(n=2573)(n=4309)(n=3279)(n=6155)(n=16316)							
Table only displays percentages for affirmative responses.							

Figure 16 shows that a significant majority of public libraries offer WiFi, with this total reaching 97.8 percent of locations. This is very close to results from 2013, where 97.5 percent of libraries overall reported offering WiFi access to patrons. Rural libraries continue to fall slightly behind more populated areas (95.5 percent in 2014 versus 95.3 percent in 2013), while all city library respondents report that they offer WiFi (up from 99.2 percent in 2013). The percentages of respondents for suburban libraries and town libraries are very close, from 99.3 percent in 2013 to 98.5 percent for suburban and 98.3 percent to 99.4 percent for town libraries.


Figure 17: Public Library Locations Subscribed Download Speed, by Locale Code, in Kilobits Per Second						
			Downloa	d Speeds		
Locale Code	Mean Speed	Median Speed	Minimum Speed	Maximum Speed	Don't Know	Not Provided by Provider
City	162,866 kbps	40,960 kbps	1,536 kbps	3,072,000 kbps	13.0%	1.7%
	(n=2197)	(n=2197)	(n=2197)	(n=2197)	(n=334)	(n=43)
Suburban	95,592 kbps	25,600 kbps	100 kbps	1,048,576 kbps	29.6%	2.2%
	(n=2986)	(n=2986)	(n=2986)	(n=2986)	(n=1293)	(n=96)
Town	39,807 kbps	15,360 kbps	184 kbps	1,024,000 kbps	19.5%	1.9%
	(n=2592)	(n=2592)	(n=2592)	(n=2592)	(n=643)	(n=62)
Rural	25,691 kbps	10,240 kbps	100 kbps	1,331,200 kbps	35.9%	1.9%
	(n=4010)	(n=4010)	(n=4010)	(n=4010)	(n=2310)	(n=123)
Overall	72,082 kbps	16,384 kbps	100 kbps	3,072,000 kbps	27.4%	1.9%
	(n=11785)	(n=11785)	(n=11785)	(n=11785)	(n=4580)	(n=324)
1024 Kbps=1Mbps Key: *: insufficient data to report						

* Some library data not reported in 2014 replaced with 2013 reported broadband connectivity data.

Figure 17 depicts trends in Internet connection download speeds for public library locations within the United States. The average download speed for public libraries in the United States increases with the size of the corresponding population base, from rural as the smallest to city as the largest. These trends are consistent with the findings of the 2013 survey, although the findings also reflect that the speeds have generally increased since 2013, especially for city libraries (110.7 Mbps in 2013). The mean speed for city libraries is 159 Mbps, while rural libraries average less than a sixth of this speed at about 25.1 Mbps (up from 24.1 Mbps in 2013). The download speeds at suburban libraries was reported at 89.8 Mbps in 2013, which was up to 93.4 Mbps this year. Town libraries reported an increase, from 25.6 Mbps to 38.9 Mbps this year. The median speeds indicate that more than half of all city libraries have Internet connection speeds at or greater than 40 Mbps (up from 30 Mbps in 2013), while half of all rural libraries have a median speed of 25 Mbps (up from 20 Mbps) and town libraries have a median of 15 Mbps (up from 10 Mbps).



Figure 18: Public Library Locations Subscribed Upload Speed, by Locale Code, in Kilobits Per Second							
			Uploa	ad Speeds			
Locale Code	Mean Speed	Median Speed	Minimum Speed	Maximum Speed	Don't Know	Not Provided by Provider	
City	158,457 kbps	30,720 kbps	512 kbps	3,072,000 kbps	13.0%	1.8%	
	(n=2193)	(n=2193)	(n=2193)	(n=2193)	(n=334)	(n=47)	
Suburban	89,879 kbps	20,480 kbps	100 kbps	1,048,576 kbps	28.7%	2.9%	
	(n=2994)	(n=2994)	(n=2994)	(n=2994)	(n=1254)	(n=127)	
Town	38,585 kbps	10,240 kbps	92 kbps	2,048,000 kbps	19.5%	2.6%	
	(n=2568)	(n=2568)	(n=2568)	(n=2568)	(n=643)	(n=86)	
Rural	21,686 kbps	3,072 kbps	79 kbps	1,331,200 kbps	36.0%	2.1%	
	(n=3987)	(n=3987)	(n=3987)	(n=3987)	(n=2323)	(n=134)	
Overall	68,317 kbps	10,240 kbps	79 kbps	3,072,000 kbps	27.3%	2.4%	
	(n=11742)	(n=11742)	(n=11742)	(n=11742)	(n=4554)	(n=394)	
1024 Kbps=1Mbps Key: *: insufficient * Some library data	data to report a not reported in 2	014 replaced with 2	013 reported broa	adband connectivity d	ata.		

Figure 18 shows the trends in Internet connection upload speeds for public library locations within the United States. These results are similar to those described for download speeds in Figure 17, above, with more densely populated locales showing greater speeds, and speeds generally being higher. City libraries have an average speed of 154.7 Mbps (up from 102.5 Mbps in 2013), which is more than seven times the average speed of rural libraries at 21.2 Mbps (from 19.7 Mbps in 2013). Suburban libraries had an average upload speed of 87.8 Mbps (from 80.8 Mbps in 2013) and there was a notable increase for the upload speed at town libraries (from 16.6 Mbps to 37.7 Mbps). City libraries have a median upload speed of 30 Mbps (from 20 Mbps in 2013), versus 20 Mbps for suburban libraries (up from 10 Mbps), 10 Mbps for town libraries (up from 5 Mbps), and 3 Mbps for rural libraries (which shows no change in the median since 2013). Similar to last year, a large percentage of libraries also reported "don't know" or "not provided by provider" to this question, thus responses are not technically missing a survey response.

Speed Test Results

As part of the survey, we asked libraries to conduct a speed test using speedtest.net. Participating libraries were asked to go to a public access computer or connect via a WiFi-enabled device while the libraries were closed to ensure a uniform methodology. This was voluntary, and the below analysis is provided for *illustrative* purposes to get some sense of the user experience.

Mean download speed test results

- City: 45,922 kbps (44.8 Mbps)
- Suburb: 37,646 kbps (36.8 Mbps)
- Town: 22,449 kbps (21.9 Mbps)
- Rural: 16,420 kbps (16.0 Mbps)



Mean upload speed test results

- City: 34,947 kbps (34.1 Mbps)
- Suburb: 27,012 kbps (26.4 Mbps)
- Town: 14,305 kbps (14.0 Mbps)
- Rural: 13,341 kbps (13.0 Mbps)

These results reflect conducting the speed test with one device. One would envision different results with the library open and multiple computers/WiFi-connected devices using the library's connection simultaneously. These results generally indicate a slight increase in both download and upload speed from the 2013 survey speed test results, with the exception of the download speed at suburban libraries, which went down to an average of 37,646 kbps from 38,870 kbps in 2013. The greatest increase in average download speed appears to be for rural libraries at 16,420 kbps from 14,298 kbps. The greatest increase in average upload speed is also for rural libraries at 13,341 kbps from 5,785 kbps last year, although the increase for city libraries is also notable at 34,947 kbps from 27,493 kbps.

Figure 19: Public Library Locations Reporting Fiber Optic Internet Connection, by Locale Code						
Locale Code						
City	Suburban	Town	Rural	Overall		
62.3%	50.3%	42.6%	32.6%	43.8%		
(n=1603)	(n=2200)	(n=1405)	(n=2097)	(n=7305)		
Table only displays percentages for affirmative responses						

Figure 19 depicts the rate at which libraries stated that fiber optic Internet connectivity was available given the library's locale type, with 62.3 percent of city libraries reporting the availability of fiber optic networks at almost twice that of rural libraries (32.6 percent). A similar trend was reported in 2013, with city libraries reporting 58.4 percent—however it also appears there was a slight increase in the availability of fiber optic networks for rural and town libraries (rural libraries up from 26.7, and town libraries up to 42.6 percent from 34.9 percent). Suburban libraries gave very similar reports from year to year, with 50.2 percent in 2013 versus 50.3 percent in 2014. This also continues to support the likelihood of a library having access to fiber optic Internet increasing with the size of its population base. Less populated areas may not have the same quality of infrastructure as their urban counterparts. It also indicates a need for Internet providers' to reliably serve greater population bases in major population centers. 3,628 respondents reported not knowing if their institution had fiber optic Internet. This ranged from a high of 25.5 percent for rural libraries and a low of 15.7 percent for city libraries, with 22.1 percent of suburban and 28.6 percent of town libraries reporting they were uncertain of their connection type. As was the case last year, this uncertainty may alter the figures above.



Figure 20: Frequency with which the Public Internet Service Connection Speed Meets Patron Demand, by Locale Code

		Locale Code				
Frequency that Internet Speed meets Demand	City	Suburban	Town	Rural	Overall	
Rarely (e.g., Web pages consistently take a long time to load, patrons frequently complain about the slowness of the connection)	7.0% (n=181)	4.2% (n=183)	6.4% (n=211)	9.5% (n=611)	7.1% (n=1186)	
Some of the time (e.g., Web pages take a long time to load at different times in the day, patrons complain about the slowness of the connection at certain times of day)	23.9% (n=614)	22.8% (n=999)	26.9% (n=888)	23.5% (n=1514)	24.1% (n=4015)	
Most of the time (e.g., patrons can access the	65.6%	62.9%	59.5%	58.1%	60.8%	
content that they want when they want it)	(n=1688)	(n=2753)	(n=1961)	(n=3744)	(n=10146)	
Don't Know	3.5% (n=91)	10.1% (n=440)	7.2% (n=237)	8.9% (n=574)	8.0% (n=1342)	
Table only displays percentages for affirmative resp	onses.					

Figure 20 shows that while the majority of U.S. public libraries (60.8 percent) report that the library's public Internet service connection speed meets patron demand most of the time, nearly one quarter (24.1 percent) report insufficient speed at certain times during the day, or some of the time. Nearly 10 percent of rural public libraries report that their Internet speed rarely meets patron demand, while city libraries are the most satisfied with their Internet speed (65.6 percent).

Figure 21: Factors that affect the ability of Public Library Locations to Increase Broadband Connectivity, by Locale Code

	Locale Code								
Factors Affecting Broadband	City	Suburban	Town	Rural	Overall				
This is the maximum speed available to the	22.8%	28.7%	34.0%	41.3%	33.7%				
library location	(n=588)	(n=1255)	(n=1122)	(n=2660)	(n=5625)				
The library cannot afford the cost of increasing	34.9%	30.4%	50.5%	42.2%	39.6%				
the locations bandwidth	(n=899)	(n=1332)	(n=1664)	(n=2722)	(n=6617)				
City/county/other entities make(s) decisions	32.2%	31.7%	25.7%	24.7%	27.9%				
regarding the locations bandwidth	(n=829)	(n=1385)	(n=847)	(n=1592)	(n=4653)				
The library does not have the technical									
knowledge to increase the bandwidth in the	6.9%	10.1%	14.8%	16.9%	13.2%				
location	(n=177)	(n=442)	(n=487)	(n=1090)	(n=2196)				
Other	7.7%	5.0%	4.8%	4.4%	5.1%				
	(n=198)	(n=220)	(n=157)	(n=284)	(n=859)				
Will not total 100%, as categories are not mutually e	exclusive. Table	onlv displavs per	Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.						

As Figure 21 shows, among factors reported as affecting broadband connectivity by survey respondents: being unable to afford the cost of increasing bandwidth continues to be the most significant (39.6 percent overall); followed by the current speed being the maximum speed available (33.7 percent overall); and other entities making decisions regarding the branch's bandwidth (27.9 percent overall). These three factors were also cited as most significantly impacting desired broadband speed increases in 2013—overall libraries agreeing or strongly agreeing that: the library was unable to afford the cost was at 58.8 percent; the current bandwidth was the maximum available was at 30.6 percent; and other entities made decisions



regarding their bandwidth at 30.5 percent. While all library types agreed that cost most impacts their ability to increase the locations bandwidth, town libraries (50.5 percent) cited this factor by the widest margin over other factors. Libraries also continued to maintain that a lack of technical knowledge to increase the bandwidth was not a factor (13.2 percent overall), which was similarly reflected in the results from 2013 where libraries tended to disagree or strongly disagree that the library did not have the technical knowledge necessary (90.4 percent of city libraries, 74.7 percent of suburban libraries, 67.2 percent of town libraries, and 69.6 percent of rural libraries).

Figure 22: Public Library Locations Reporting Upgrades to Public Access Technology-Related Infrastructure in the past 24 Months, by Locale Code						
Locale Code						
City	Suburban	Town	Rural	Overall		
76.3%	71.0%	70.4%	55.5%	65.7%		
(n=1963)	(n=3107)	(n=2320)	(n=3576)	(n=10966)		
Table only displays perc	centages for affirmative respo	onses.				

Figure 22 shows that 65.7 percent of overall public library respondents reported that upgrades were made to public access technology-related infrastructure in the past 24 months, consistent with the percentage reported by libraries in 2013 (66.5 percent). 76.3 percent of city public libraries reported that upgrades were made, followed by 71.0 percent of suburban libraries, 70.4 percent of town public libraries, and 55.5 percent of rural libraries (a 6.0 percent drop from 2013 in the case of rural libraries). The distribution of the responses in 2013 showed cities with the highest rate of affirmative responses at 73.5 percent, followed by suburban at 70.3 percent, then town at 66.9 percent, and rural libraries at 61.2 percent.



Figure 23: Public Access Technology Infrastructure Upgraded by Public Library Locations within the past 24 Months, by Locale Code

Locale Code				
City	Suburban	Town	Rural	Overall
63.0%	55.2%	62.2%	53.3%	57.4%
(n=1236)	(n=1715)	(n=1442)	(n=1906)	(n=6299)
65.6%	61.7%	58.8%	53.6%	59.1%
(n=1289)	(n=1916)	(n=1363)	(n=1915)	(n=6483)
47.6%	45.3%	43.2%	36.4%	42.4%
(n=934)	(n=1409)	(n=1003)	(n=1301)	(n=4647)
23.9%	33.5%	34.1%	31.2%	31.1%
(n=470)	(n=1040)	(n=791)	(n=1114)	(n=3415)
18.7%	15.0%	22.2%	16.7%	17.8%
(n=367)	(n=467)	(n=516)	(n=597)	(n=1947)
18.5%	21.1%	14.1%	12.2%	16.3%
(n=363)	(n=656)	(n=326)	(n=438)	(n=1783)
67.8%	73.1%	65.5%	64.7%	67.8%
(n=1330)	(n=2271)	(n=1520)	(n=2312)	(n=7433)
22.0%	10.5%	10.6%	8.9%	12.0%
(n=432)	(n=325)	(n=245)	(n=318)	(n=1320)
3.7%	2.3%	2.2%	1.2%	2.2%
(n=72)	(n=73)	(n=51)	(n=43)	(n=239)
8.0%	13.4%	10.0%	7.8%	9.9%
(n=158)	(n=415)	(n=232)	(n=280)	(n=1085)
9.6%	10.4%	6.6%	4.5%	7.5%
(n=188)	(n=324)	(n=153)	(n=162)	(n=827)
4.3%	3.7%	9.2%	5.4%	5.5%
(n=85)	(n=114)	(n=214)	(n=192)	(n=605)
1.9%	1.1%	4.1%	2.5%	2.3%
(n=37)	(n=32)	(n=92)	(n=89)	(n=250)
	City 63.0% (n=1236) 65.6% (n=1289) 47.6% (n=934) 23.9% (n=470) 18.7% (n=367) 18.5% (n=363) 67.8% (n=1330) 22.0% (n=432) 3.7% (n=432) 3.7% (n=72) 8.0% (n=158) 9.6% (n=158) 9.6% (n=158) 9.6% (n=85) 1.9% (n=37)	City Suburban 63.0% 55.2% (n=1236) (n=1715) 65.6% 61.7% (n=1289) (n=1916) 47.6% 45.3% (n=934) (n=1409) 23.9% 33.5% (n=470) (n=1040) 18.7% 15.0% (n=367) (n=467) 18.5% 21.1% (n=363) (n=656) 67.8% 73.1% (n=1330) (n=2271) 22.0% 10.5% (n=432) (n=325) 3.7% 2.3% (n=72) (n=73) 8.0% 13.4% (n=158) (n=415) 9.6% 10.4% (n=85) (n=114) 1.9% 1.1% (n=37) (n=32)	Locale CodeCitySuburbanTown 63.0% 55.2% 62.2% $(n=1236)$ $(n=1715)$ $(n=1442)$ 65.6% 61.7% 58.8% $(n=1289)$ $(n=1916)$ $(n=1363)$ 47.6% 45.3% 43.2% $(n=934)$ $(n=1409)$ $(n=1003)$ 23.9% 33.5% 34.1% $(n=470)$ $(n=1040)$ $(n=791)$ 18.7% 15.0% 22.2% $(n=367)$ $(n=467)$ $(n=516)$ 18.5% 21.1% 14.1% $(n=363)$ $(n=656)$ $(n=326)$ 67.8% 73.1% 65.5% $(n=1330)$ $(n=2271)$ $(n=1520)$ 22.0% 10.5% 10.6% $(n=432)$ $(n=325)$ $(n=245)$ 3.7% 2.3% 2.2% $(n=72)$ $(n=73)$ $(n=51)$ 8.0% 13.4% 10.0% $(n=158)$ $(n=415)$ $(n=232)$ 9.6% 10.4% 6.6% $(n=188)$ $(n=324)$ $(n=153)$ 4.3% 3.7% 9.2% $(n=85)$ $(n=114)$ $(n=214)$ 1.9% 1.1% 4.1% $(n=37)$ $(n=32)$ $(n=92)$	Locale CodeCitySuburbanTownRural 63.0% 55.2% 62.2% 53.3% $(n=1236)$ $(n=1715)$ $(n=1442)$ $(n=1906)$ 65.6% 61.7% 58.8% 53.6% $(n=1289)$ $(n=1916)$ $(n=1363)$ $(n=1915)$ 47.6% 45.3% 43.2% 36.4% $(n=934)$ $(n=1409)$ $(n=1003)$ $(n=1301)$ 23.9% 33.5% 34.1% 31.2% $(n=470)$ $(n=1040)$ $(n=791)$ $(n=1114)$ 18.7% 15.0% 22.2% 16.7% $(n=367)$ $(n=467)$ $(n=516)$ $(n=597)$ 18.5% 21.1% 14.1% 12.2% $(n=363)$ $(n=656)$ $(n=326)$ $(n=438)$ 67.8% 73.1% 65.5% 64.7% $(n=1330)$ $(n=2271)$ $(n=1520)$ $(n=2312)$ 22.0% 10.5% 10.6% 8.9% $(n=432)$ $(n=325)$ $(n=245)$ $(n=318)$ 3.7% 2.3% 2.2% 1.2% $(n=72)$ $(n=73)$ $(n=51)$ $(n=43)$ 8.0% 13.4% 10.0% 7.8% $(n=158)$ $(n=324)$ $(n=153)$ $(n=162)$ 4.3% 3.7% 9.2% 5.4% $(n=85)$ $(n=114)$ $(n=214)$ $(n=192)$ 1.9% 1.1% 4.1% 2.5% $(n=37)$ $(n=32)$ $(n=28)$

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figure 23 shows the public access technology upgrades that were made in the past 24 months by public library respondents who reported having made upgrades. The most commonly reported infrastructure upgrade was replacing public access computers/laptops/tablets at 82.0 percent, a 5.2 percent increase over 2013 data (76.8 percent). Similarly, 11.6 percent more public libraries added new public access computers/laptops/tablets in 2014 (65.2 percent in 2014 versus 53.6 percent in 2013). In 2013, increased bandwidth was reported at a rate of 54.8 percent overall, versus 57.4 percent in 2014. The 2014 survey asked about upgrades to the public libraries internal network, and that was the second most frequently reported upgrade overall (59.1 percent). 13.4 percent of suburban libraries added public access computer lab space, while only 9.9 percent of overall libraries made that upgrade. It is also worth noting that 22.2 percent of city libraries replaced public access laptops, well above the overall 12.0 percent.



Figure 24: Impacts of Public Access Technology Infrastructure Upgrades at Public Library Locations, by Locale Code

Locale Code				
City	Suburban	Town	Rural	Overall
27.5%	37.7%	38.5%	44.0%	38.1%
(n=540)	(n=1171)	(n=891)	(n=1571)	(n=4173)
61.1%	59.8%	63.4%	54.4%	59.1%
(n=1199)	(n=1859)	(n=1468)	(n=1944)	(n=6470)
12.3%	10.6%	15.7%	10.1%	11.9%
(n=242)	(n=330)	(n=364)	(n=362)	(n=1298)
41.1%	45.9%	46.6%	39.2%	43.0%
(n=806)	(n=1426)	(n=1077)	(n=1401)	(n=4710)
41.1%	43.4%	39.5%	34.1%	39.2%
(n=806)	(n=1349)	(n=913)	(n=1219)	(n=4287)
1.8%	2.5%	9.2%	5.3%	4.7%
(n=35)	(n=79)	(n=213)	(n=189)	(n=516)
26.1%	22.6%	29.1%	17.1%	22.8%
(n=513)	(n=702)	(n=673)	(n=610)	(n=2498)
15.4%	18.0%	15.7%	12.5%	15.2%
(n=303)	(n=560)	(n=362)	(n=445)	(n=1670)
	1.7%	1.7%		1.3%
*	(n=53)	(n=39)	*	(n=140)
	City 27.5% (n=540) 61.1% (n=1199) 12.3% (n=242) 41.1% (n=806) 41.1% (n=806) 1.8% (n=305) 26.1% (n=513) 15.4% (n=303) *	City Suburban 27.5% 37.7% (n=540) (n=1171) 61.1% 59.8% (n=1199) (n=1859) 12.3% 10.6% (n=242) (n=330) 41.1% 45.9% (n=806) (n=1426) 41.1% 43.4% (n=806) (n=1349) 1.8% 2.5% (n=35) (n=79) 26.1% 22.6% (n=513) (n=702) 15.4% 18.0% (n=303) (n=560) * (n=53)	Locale Code City Suburban Town 27.5% 37.7% 38.5% (n=540) (n=1171) (n=891) 61.1% 59.8% 63.4% (n=1199) (n=1859) (n=1468) 12.3% 10.6% 15.7% (n=242) (n=330) (n=364) 41.1% 45.9% 46.6% (n=806) (n=1426) (n=1077) 41.1% 43.4% 39.5% (n=806) (n=1349) (n=913) 1.8% 2.5% 9.2% (n=35) (n=79) (n=213) 26.1% 22.6% 29.1% (n=513) (n=702) (n=673) 15.4% 18.0% 15.7% (n=303) (n=560) (n=362) * (n=53) (n=39)	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Key: *: insufficient data to report

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses. * Other impacts of upgrades was not reported for less than 1.0% of reporting libraries.

Figure 24 depicts the impacts experienced by public library locations due to infrastructure upgrades during the past 24 months. 59.1 percent of overall libraries reported they increased the speed/quality of the public access Internet connection, while town libraries surpassed that amount, with 63.4 percent reporting an increase in Internet speed/quality. Public access technology infrastructure upgrades allowed libraries to train more patrons in digital literacy skills at approximately the same rate in 2013 and 2014 (43 percent and 42.3 percent, respectively), while 38.2 percent of public libraries reported in 2014 that they were able to train more patrons in other topics. Infrastructure upgrades did not have nearly as significant impacts on decreasing wait times for public access computers/laptops/tables in 2014 (38.1 percent) as they did in 2013 (53.9 percent). 9.2 percent of town libraries were able to add videoconferencing capacity to connect patrons remotely, while only 4.7 percent of overall libraries reported adding videoconferencing capacity (town libraries had also reported adding videoconferencing capacity in 2013 at a higher rate than other locales at 7.7 percent).



Figure 25: Public Library Locations Reporting Access to Information Technology Support Staff, by Locale Code

Locale Code						
City	Suburban	Town	Rural	Overall		
90.6% (n=2332)	88.1% (n=3856)	78.6% (n=2591)	66.2% (n=4266)	78.2% (n=13045)		
Table only displays perce	entages for affirmative respo	nses.		·		

As Figure 25 shows, 78.2 percent of overall public library respondents reported that information technology (IT) support staff were available, consistent with 2013 data (76.9 percent overall). City public libraries reported the highest access to IT support staff at 90.6 percent (a 4.5 percent point drop from 95.1 percent in 2013), followed by suburban libraries at 88.1 percent (up from 85.2 percent), 78.6 percent for town libraries (up from 77.9 percent), and 66.2 percent for rural libraries (up from 64.1 percent).



Digital Literacy & Training Related to Public Access Technologies

The 2014 survey differed in a number of key ways as compared to the 2013 survey, and thus direct data comparisons between the surveys is limited. More specifically, it is not possible to make comparisons between 2013 and 2014 data regarding digital literacy (Section B of the survey – see Appendix C). Although the survey questions broadly focused on the same topics and content, questions were redesigned in ways to facilitate survey response and thus do not allow for comparison.

Figure 26: Technology Training Offerings by Topic, by Locale Code							
			Locale Code				
Training/Instructional Topics	City	Suburban	Town	Rural	Overall		
General computer skills (e.g., how to use a	88.9%	88.8%	88.7%	84.0%	86.9%		
mouse and keyboard)	(n=2288)	(n=3886)	(n=2906)	(n=5372)	(n=14452)		
General computer software use (e.g., word	85.9%	90.1%	83.2%	80.7%	84.4%		
processing, presentation)	(n=2210)	(n=3940)	(n=2728)	(n=5156)	(n=14034)		
General Internet use (e.g., set up e-mail, Web	89.2%	93.3%	92.3%	86.6%	89.9%		
browsing, Web searching)	(n=2296)	(n=4084)	(n=3027)	(n=5539)	(n=14946)		
Using online databases (e.g., EBSCO							
Biography Collection, InfoTrac Newsstand,	86.9%	86.0%	78.9%	73.5%	79.9%		
Heritage Quest, Tutor.com)	(n=2237)	(n=3762)	(n=2583)	(n=4674)	(n=13256)		
Safe online practices (e.g., privacy, Internet	60.2%	58.1%	57.4%	55.2%	57.2%		
safety)	(n=1551)	(n=2542)	(n=1874)	(n=3508)	(n=9475)		
Social media (e.g., blogging, Twitter, Facebook,	62.2%	58.6%	59.6%	49.7%	55.9%		
YouTube)	(n=1601)	(n=2565)	(n=1944)	(n=3172)	(n=9282)		
General familiarity with new technologies (e.g.,							
digital petting zoo, using e-readers, tablet	68.5%	73.0%	63.4%	50.6%	61.8%		
devices)	(n=1762)	(n=3193)	(n=2075)	(n=3225)	(n=10255)		
Assistive Technology use (e.g., JAWS, Fire	17.9%	12.7%	6.4%	5.5%	9.5%		
Vox, Click-n-Type)	(n=462)	(n=555)	(n=210)	(n=351)	(n=1578)		
Using video conferencing technologies (e.g.,							
Adobe Connect, GoToMeeting, Skype, Google	10.2%	11.8%	15.3%	9.2%	11.2%		
Hangout)	(n=262)	(n=515)	(n=501)	(n=594)	(n=1872)		
Website development (e.g., HTML, Drupal,	7.0%	9.5%	9.2%	5.3%	7.4%		
Joomla)	(n=181)	(n=416)	(n=300)	(n=340)	(n=1237)		
Digital content creation (e.g., Adobe Premiere	10 101	10 101	10.00/				
Pro, GarageBand, mobile app development,	13.4%	12.1%	10.6%	5.2%	9.3%		
digital photography tools)	(n=346)	(n=529)	(n=348)	(n=334)	(n=1557)		
Other	2.8%	1.0%	1.2%		1.2%		
	(n=72)	(n=44)	(n=39)	*	(n=196)		
Key: *: insufficient data to report							
Table only displays percentages for affirmative responses.							

Figure 26 shows that the most common technology training activity for public libraries in the United States is teaching patrons general Internet-use skills (e.g. e-mail, Web searching, etc.), with 89.9 percent of all public library locations offering such training. The next most common instructional topic reported in 2014 is the related category of general computer skills training, which 86.9 percent of overall libraries offered, followed by general computer software use training at 84.4 percent. While public libraries clearly focus their



training efforts on these essential and basic computer/Internet skills, 9.3 percent also offer training in digital content creation (mobile app development, digital photography editing, etc.), and 7.4 percent offer Website development training.

Figure 27: Technology Training Offerings by Format – Overall						
	Overall					
Training/Instructional Topics	Formal classes	Individual help by appointment	Informal point of use	Online training materials		
General computer skills (e.g., how to use a mouse and keyboard)	43.4%	36.9%	78.3%	16.1%		
	(n=6268)	(n=5335)	(n=11319)	(n=2278)		
General computer software use (e.g., word processing, presentation)	40.7%	37.1%	79.1%	16.8%		
	(n=5711)	(n=5203)	(n=11099)	(n=2334)		
General Internet use (e.g., set up e-mail, Web browsing, Web searching)	38.9%	38.2%	79.3%	11.7%		
	(n=5816)	(n=5707)	(n=11852)	(n=1732)		
Using online databases (e.g., EBSCO Biography Collection, InfoTrac Newsstand, Heritage Quest, Tutor.com)	29.5% (n=3912)	30.7% (n=4068)	84.0% (n=11135)	14.3% (n=1890)		
Safe online practices (e.g., privacy, Internet safety)	53.9%	23.5%	73.8%	11.7%		
	(n=5094)	(n=2214)	(n=6965)	(n=1102)		
Social media (e.g., blogging, Twitter, Facebook,	42.6%	38.3%	74.4%	11.5%		
YouTube)	(n=3950)	(n=3556)	(n=6905)	(n=1066)		
General familiarity with new technologies (e.g., digital petting zoo, using e-readers, tablet devices)	49.8%	51.7%	75.2%	18.5%		
	(n=5107)	(n=5303)	(n=7716)	(n=1896)		
Assistive Technology use (e.g., JAWS, Fire Vox,	11.7%	27.3%	82.5%	12.9%		
Click-n-Type)	(n=185)	(n=431)	(n=1301)	(n=203)		
Using video conferencing technologies (e.g., Adobe Connect, GoToMeeting, Skype, Google Hangout)	28.2% (n=528)	41.0% (n=768)	55.8% (n=1046)	10.7% (n=201)		
Website development (e.g., HTML, Drupal, WordPress)	44.0%	31.1%	51.2%	28.3%		
	(n=544)	(n=385)	(n=633)	(n=350)		
Digital content creation (e.g., Adobe Premiere Pro, GarageBand, mobile app development, digital photography tools)	53.3% (n=830)	33.4% (n=520)	57.6% (n=897)	28.0% (n=436)		
Other	59.5%	15.3%	61.7%	4.6%		
	(n=116)	(n=30)	(n=121)	(n=9)		
Will not total 100%, as categories are not mutually ex	clusive					

Figure 27 shows technology training by format for libraries throughout the United States. Informal point of use interactions are the most common forms of training for all technology trainings and technology topics, by a wide margin in the majority of cases. This shows that for the most basic computer functions within libraries, libraries make themselves available based on customer needs. In addition, 82.5 percent of public libraries overall offer assistive technology training on a informal point of use basis, while only 11.7 percent offer assistive technology training in formal classes, which is appropriate for accessibility-related subject area. While informal point of use of training is more prevalent across the board than formal training, formal training is more popular for activities that involve advanced, specialized skills, such as digital content creation (53.3 percent formal) and Website development (44.0 percent formal).



Figure 28: Technology Training Offerings by Format – City						
		C	ity			
Training/Instructional Topics	Formal classes	Individual help by appointment	Informal point of use	Online training materials		
General computer skills (e.g., how to use a mouse and keyboard)	60.6% (n=1387)	39.4% (n=902)	80.4% (n=1839)	24.4% (n=549)		
General computer software use (e.g., word processing, presentation)	58.8% (n=1299)	38.3% (n=846)	80.9% (n=1787)	23.1% (n=502)		
General Internet use (e.g., set up e-mail, Web browsing, Web searching)	58.4% (n=1342)	39.0% (n=896)	82.4% (n=1891)	19.7% (n=448)		
Using online databases (e.g., EBSCO Biography Collection, InfoTrac Newsstand, Heritage Quest, Tutor.com)	39.8% (n=890)	33.0% (n=738)	88.6% (n=1983)	18.0% (n=403)		
Safe online practices (e.g., privacy, Internet safety)	56.3% (n=863)	27.4% (n=416)	78.7% (n=1195)	18.1% (n=275)		
Social media (e.g., blogging, Twitter, Facebook, YouTube)	49.5% (n=793)	33.1% (n=530)	81.6% (n=1307)	14.0% (n=224)		
General familiarity with new technologies (e.g., digital petting zoo, using e-readers, tablet devices)	55.3% (n=974)	43.9% (n=774)	77.0% (n=1356)	17.3% (n=304)		
Assistive Technology use (e.g., JAWS, Fire Vox, Click-n-Type)	20.6% (n=95)	25.9% (n=120)	77.3% (n=357)	18.4% (n=85)		
Using video conferencing technologies (e.g., Adobe Connect, GoToMeeting, Skype, Google Hangout)	34.7% (n=91)	32.4% (n=85)	55.3% (n=145)	21.4% (n=56)		
Website development (e.g., HTML, Drupal, WordPress)	53.6% (n=97)	51.9% (n=94)	58.6% (n=106)	44.8% (n=81)		
Digital content creation (e.g., Adobe Premiere Pro, GarageBand, mobile app development, digital photography tools)	61.0% (n=211)	33.7% (n=117)	72.3% (n=250)	38.4% (n=133)		
Other	70.8% (n=51)	11.1% (n=8)	70.8% (n=51)			
Key:: no data to report						

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figures 28 to 31 show technology training by format for libraries throughout the United States by locale. For city libraries, the division is roughly the same for all training/instructional topics, with informal point of use training being most frequently offered. Website development is the exception, with city libraries offering all four training types, from formal classes to online training materials, at approximately the same rate. City libraries most often offered formal training classes in the other category (70.8 percent), and when offering instruction in digital content creation (61.0 percent) and general computer skills (60.6 percent), which could be viewed as technology skills at both extremes of the beginner to advanced user spectrum. Suburban library technology training formats follow roughly the same pattern, except they place an even stronger emphasis on informal point of use training for assistive technologies (90.3 percent). Suburban libraries most frequently offer formal class instruction for digital content creation (58.0 percent) and safe online



practices. 56.0 percent of town libraries offer formal classes in safe online practices while 66.2 percent also offer such instruction as informal point of use training. 63.2 percent of town libraries now offer formal classes in digital content creation. Generally, rural libraries place the greatest emphasis on informal point of use training, with formal classes offered most frequently for safe online practices instruction (48.5 percent).

Figure 29: Technology Training Offerings by Format – Suburban					
	Suburban				
Training/Instructional Topics	Formal classes	Individual help by appointment	Informal point of use	Online training materials	
General computer skills (e.g., how to use a mouse and keyboard)	49.5%	39.3%	80.4%	21.1%	
	(n=1923)	(n=1526)	(n=3123)	(n=805)	
General computer software use (e.g., word processing, presentation)	48.8%	41.1%	80.3%	22.6%	
	(n=1921)	(n=1621)	(n=3164)	(n=881)	
General Internet use (e.g., set up e-mail, Web	47.4%	43.3%	80.9%	16.5%	
browsing, Web searching)	(n=1935)	(n=1768)	(n=3303)	(n=669)	
Using online databases (e.g., using resources to search and find content)	34.3%	36.5%	84.8%	18.6%	
	(n=1289)	(n=1374)	(n=3190)	(n=700)	
Safe online practices (e.g., privacy, Internet safety)	58.2%	24.3%	71.2%	16.1%	
	(n=1479)	(n=617)	(n=1809)	(n=409)	
Social media (e.g., blogging, Twitter, Facebook,	53.4%	44.8%	74.9%	16.6%	
YouTube)	(n=1370)	(n=1149)	(n=1921)	(n=426)	
General familiarity with new technologies (e.g., digital petting zoo, using e-readers, tablet devices)	59.4% (n=1897)	61.6% (n=1966)	76.7% (n=2450)	23.0% (n=734)	
Assistive Technology use (e.g., JAWS, Fire Vox, Click-n-Type)	6.7%	25.9%	90.3%	13.2%	
	(n=37)	(n=144)	(n=501)	(n=73)	
Using video conferencing technologies (e.g., Adobe Connect, GoToMeeting, Skype, Google Hangout)	33.0% (n=170)	31.1% (n=160)	63.7% (n=328)	9.1% (n=47)	
Website development (e.g., HTML, Drupal, WordPress)	56.4%	21.9%	48.6%	33.0%	
	(n=234)	(n=91)	(n=202)	(n=137)	
Digital content creation (e.g., Adobe Premiere	58.0%	28.5%	58.6%	34.9%	
Pro, GarageBand, mobile app development)	(n=307)	(n=151)	(n=310)	(n=185)	
Other	48.8%	13.6%	51.2%	11.4%	
	(n=21)	(n=6)	(n=22)	(n=5)	
Will not total 100%, as categories are not mutually exclusive.					



Figure 30: Technology Training Offerings by Format – Town					
	Town				
Training/Instructional Topics	Formal classes	Individual help by appointment	Informal point of use	Online training materials	
General computer skills (e.g., how to use a mouse and keyboard)	43.6%	45.4%	77.4%	15.5%	
	(n=1268)	(n=1318)	(n=2249)	(n=438)	
General computer software use (e.g., word processing, presentation)	42.2%	44.4%	77.1%	15.2%	
	(n=1151)	(n=1212)	(n=2102)	(n=409)	
General Internet use (e.g., set up e-mail, Web browsing, Web searching)	39.1%	45.1%	75.8%	9.2%	
	(n=1184)	(n=1365)	(n=2294)	(n=278)	
Using online databases (e.g., EBSCO Biography Collection, InfoTrac Newsstand, Heritage Quest, Tutor.com)	30.2%	34.7%	83.5%	12.8%	
	(n=779)	(n=896)	(n=2158)	(n=331)	
Safe online practices (e.g., privacy, Internet safety)	56.0%	26.9%	66.2%	10.5%	
	(n=1050)	(n=505)	(n=1242)	(n=197)	
Social media (e.g., blogging, Twitter, Facebook,	43.6%	47.6%	68.9%	8.6%	
YouTube)	(n=847)	(n=926)	(n=1340)	(n=167)	
General familiarity with new technologies (e.g., digital petting zoo, using e-readers, tablet devices)	50.8% (n=1054)	58.0% (n=1204)	72.3% (n=1500)	17.7% (n=367)	
Assistive Technology use (e.g., JAWS, Fire Vox, Click-n-Type)	11.4%	41.0%	67.0%	21.5%	
	(n=24)	(n=86)	(n=140)	(n=45)	
Using video conferencing technologies (e.g., Adobe Connect, GoToMeeting, Skype, Google Hangout)	31.1% (n=156)	60.5% (n=303)	52.9% (n=265)	10.0% (n=50)	
Website development (e.g., HTML, Drupal, WordPress)	40.3%	34.7%	53.7%	18.3%	
	(n=121)	(n=104)	(n=161)	(n=55)	
Digital content creation (e.g., Adobe Premiere	63.2%	46.4%	38.2%	14.4%	
Pro, GarageBand, mobile app development)	(n=220)	(n=161)	(n=133)	(n=50)	
Other	44.7%	23.1%	66.7%	10.5%	
	(n=17)	(n=9)	(n=26)	(n=4)	
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					



Figure 31: Technology Training Offerings by Format – Rural					
	Rural				
Training/Instructional Topics	Formal classes	Individual help by appointment	Informal point of use	Online training materials	
General computer skills (e.g., how to use a mouse and keyboard)	31.5% (n=1690)	29.6% (n=1589)	76.5% (n=4108)	9.3% (n=486)	
General computer software use (e.g., word processing, presentation)	26.0% (n=1340)	29.6% (n=1524)	78.5% (n=4046)	10.6% (n=542)	
General Internet use (e.g., set up e-mail, Web browsing, Web searching)	24.5% (n=1355)	30.3% (n=1678)	78.8% (n=4364)	6.1% (n=337)	
Using online databases (e.g., EBSCO Biography Collection, InfoTrac Newsstand, Heritage Quest, Tutor.com)	20.4% (n=954)	22.7% (n=1060)	81.4% (n=3804)	9.8% (n=456)	
Safe online practices (e.g., privacy, Internet safety)	48.5% (n=1702)	19.3% (n=676)	77.5% (n=2719)	6.3% (n=221)	
Social media (e.g., blogging, Twitter, Facebook, YouTube)	29.6% (n=940)	30.0% (n=951)	73.7% (n=2337)	7.8% (n=249)	
General familiarity with new technologies (e.g., digital petting zoo, using e-readers, tablet devices)	36.7% (n=1182)	42.1% (n=1359)	74.7% (n=2410)	15.2% (n=491)	
Assistive Technology use (e.g., JAWS, Fire Vox, Click-n-Type)	8.3% (n=29)	23.1% (n=81)	86.3% (n=303)		
Using video conferencing technologies (e.g., Adobe Connect, GoToMeeting, Skype, Google Hangout)	18.7% (n=111)	37.0% (n=220)	51.8% (n=308)	8.1% (n=48)	
Website development (e.g., HTML, Drupal, WordPress)	27.1% (n=92)	28.2% (n=96)	48.2% (n=164)	22.6% (n=77)	
Digital content creation (e.g., Adobe Premiere Pro, GarageBand, mobile app development)	27.5% (n=92)	27.2% (n=91)	61.1% (n=204)	20.4% (n=68)	
Other	64.3% (n=27)	17.1% (n=7)	52.4% (n=22)		
Key: : no data to report Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					



Figure 32: Technology Training Offerings by Conductor – Overall				
		Overall		
Training/Instructional Topics	Library Staff	Volunteer(s)	Partner Organization	
General computer skills (e.g., how to use a mouse	90.6%	16.7%	12.4%	
and keyboard)	(n=7936)	(n=1462)	(n=1083)	
General computer software use (e.g., word	90.3%	16.6%	13.0%	
processing, presentation)	(n=7376)	(n=1356)	(n=1061)	
General Internet use (e.g., set up e-mail, Web	92.0%	16.2%	11.6%	
browsing, Web searching)	(n=8010)	(n=1416)	(n=1015)	
Using online databases (e.g., EBSCO Biography				
Collection, InfoTrac Newsstand, Heritage Quest,	96.1%	7.3%	8.4%	
Tutor.com)	(n=5761)	(n=436)	(n=503)	
Safe online practices (e.g., privacy, Internet safety)	90.1%	11.4%	13.6%	
Sale online practices (e.g., privacy, internet salety)	(n=5495)	(n=696)	(n=832)	
Social media (e.g., blogging, Twitter, Facebook,	92.7%	13.5%	10.0%	
YouTube)	(n=5286)	(n=770)	(n=570)	
General familiarity with new technologies (e.g.,	95.6%	9.9%	7.1%	
digital petting zoo, using e-readers, tablet devices)	(n=7091)	(n=733)	(n=530)	
Assistive Technology use (e.g., JAWS, Fire Vox,	99.6%	13.9%	10.2%	
Click-n-Type)	(n=525)	(n=73)	(n=54)	
Using video conferencing technologies (e.g., Adobe	96.5%	11.1%	8.4%	
Connect, GoToMeeting, Skype, Google Hangout)	(n=1059)	(n=121)	(n=92)	
Website development (e.g., HTML, Drupal, Jeemla)	79.9%	15.6%	21.9%	
website development (e.g., minic, Drupal, Joonia)	(n=624)	(n=122)	(n=171)	
Digital content creation (e.g., Adobe Premiere Pro,				
GarageBand, mobile app development, digital	83.5%	22.0%	26.9%	
photography tools)	(n=820)	(n=216)	(n=264)	
Other	70.1%	18.5%	31.1%	
	(n=94)	(n=25)	(n=42)	
Will not total 100%, as categories are not mutually exclu	sive			

Table only displays percentages for affirmative responses.

Figure 32 shows technology training by conductor for public libraries in general in the United States. Overall, library employees continue to be the most likely individuals to train patrons in technology use. Some of the most popular areas for libraries to work with volunteers or partner organizations are also priority areas for library staff-led training offerings. While 90.6 percent of libraries that offer general computer skills training have library staff members who lead these programs, 16.7 percent of these libraries use volunteers and 12.5 percent work with partner organizations to help patrons acquire these skills Likewise, 92.0 percent of libraries that offer general internet use training have staff conduct these trainings, in addition to 16.2 percent of libraries that offer such training using volunteers and 11.6 percent partnering with outside organizations to offer such training. Those percentages indicate that even if libraries have employees who are capable of conducting trainings, they are still likely to reach out to other individuals and organizations to fully meet patron technology training needs. Partner organizations offered training in the other category 31.1 percent of the time, and in 2014, they were reported to provide digital content creation training 26.9 percent of the time.



Figure 33: Technology Training Offerings by Conductor – City					
	City				
Training/Instructional Topics	Library Staff	Volunteer(s)	Partner Organization		
General computer skills (e.g., how to use a mouse	91.5%	20.8%	14.6%		
and keyboard)	(n=1445)	(n=328)	(n=231)		
General computer software use (e.g., word	92.2%	20.8%	13.5%		
processing, presentation)	(n=1404)	(n=316)	(n=206)		
General Internet use (e.g., set up e-mail, Web	94.1%	18.7%	10.6%		
browsing, Web searching)	(n=1438)	(n=285)	(n=162)		
Using online databases (e.g., EBSCO Biography					
Collection, InfoTrac Newsstand, Heritage Quest,	97.7%	5.8%	6.6%		
Tutor.com)	(n=1074)	(n=64)	(n=72)		
Safe online practices (e.g. privacy Internet safety)	92.1%	17.9%	11.5%		
Sale olime practices (e.g., privacy, internet salety)	(n=885)	(n=172)	(n=110)		
Social media (e.g., blogging, Twitter, Facebook,	95.7%	15.6%	8.1%		
YouTube)	(n=921)	(n=150)	(n=78)		
General familiarity with new technologies (e.g.,	98.8%	9.9%	3.7%		
digital petting zoo, using e-readers, tablet devices)	(n=1263)	(n=126)	(n=47)		
Assistive Technology use (e.g., JAWS, Fire Vox,	100.0%	13.5%	4.5%		
Click-n-Type)	(n=178)	(n=24)	(n=8)		
Using video conferencing technologies (e.g.,					
Adobe Connect, GoToMeeting, Skype, Google	94.8%	6.6%	5.3%		
Hangout)	(n=147)	(n=10)	(n=8)		
Website development (e.g., HTML, Drupal,	97.0%	2.4%			
WordPress)	(n=161)	(n=4)	*		
Digital content creation (e.g., Adobe Premiere Pro,					
GarageBand, mobile app development, digital	94.1%	16.3%	18.9%		
photography tools)	(n=209)	(n=36)	(n=42)		
Other	32.2%	35.6%	62.7%		
Other	(n=19)	(n=21)	(n=37)		
Key: * : insufficient data to report					

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figures 33 to 36 show technology training by conductor for public libraries in general in the United States, by locale code. When offering any form of technology instruction listed on the 2014 survey, city libraries report that they rely on library staff to conduct such training over 90.0 percent of the time. 100.0 percent of city library staff provide assistive technology training when the library offers such training, and 98.8 percent assist patrons with general familiarity with new technologies, when the library offers such training.

Suburban libraries also rely on library staff to provide technology instruction at or close to 90.0 percent of the time across all technology topics, except for Website development (59.0 percent) and digital content creation (67.6 percent). Suburban libraries rely on volunteers and partner organizations to provide training in those more advanced technology areas at higher rates than city libraries.

Town libraries follow the same pattern as city libraries, with library staff offering training across all technology instruction topics over 90 percent of the time. 100.0 percent of town libraries report that library staff lead assistive technology instruction when it is offered. 30.2 percent of town libraries report that they rely on volunteers to provide Website development training when such training is offered to patrons.



The percentage of technology training offerings conducted by library staff is slightly lower for rural libraries across all instruction topics. However, rural libraries reported that when instruction was offered in other technology training categories not listed in the survey, 100.0 percent of such training was conducted by library staff (likewise for town libraries). Similar to suburban libraries, rural libraries report that partner organizations offer digital content creation training 30.5 percent of the time when such training is offered.

Figure 34: Technology Training Offerings by Conductor – Suburban					
	Suburban				
Training/Instructional Topics	Library Staff	Volunteer(s)	Partner Organization		
General computer skills (e.g., how to use a mouse	93.2%	17.7%	8.9%		
and keyboard)	(n=2442)	(n=463)	(n=233)		
General computer software use (e.g., word	93.2%	18.6%	8.5%		
processing, presentation)	(n=2452)	(n=489)	(n=223)		
General Internet use (e.g., set up e-mail, Web	94.2%	16.1%	9.0%		
browsing, Web searching)	(n=2636)	(n=451)	(n=251)		
Using online databases (e.g., EBSCO Biography					
Collection, InfoTrac Newsstand, Heritage Quest,	97.0%	7.6%	7.2%		
Tutor.com)	(n=1959)	(n=153)	(n=146)		
Safe online practices (e.g. privacy, Internet safety)	89.3%	11.9%	17.0%		
Sale online practices (e.g., privacy, internet salety)	(n=1576)	(n=210)	(n=300)		
Social media (e.g., blogging, Twitter, Facebook,	96.7%	12.3%	8.9%		
YouTube)	(n=1794)	(n=228)	(n=165)		
General familiarity with new technologies (e.g.,	96.9%	10.8%	7.5%		
digital petting zoo, using e-readers, tablet devices)	(n=2555)	(n=284)	(n=198)		
Assistive Technology use (e.g., JAWS, Fire Vox,	98.8%	18.9%	13.1%		
Click-n-Type)	(n=158)	(n=30)	(n=21)		
Using video conferencing technologies (e.g.,					
Adobe Connect, GoToMeeting, Skype, Google	95.5%	17.3%	18.7%		
Hangout)	(n=277)	(n=50)	(n=54)		
Website development (e.g., HTML, Drupal,	59.0%	19.7%	41.4%		
WordPress)	(n=147)	(n=49)	(n=103)		
Digital content creation (e.g., Adobe Premiere Pro,					
GarageBand, mobile app development, digital	67.6%	30.2%	33.0%		
photography tools)	(n=219)	(n=98)	(n=107)		
Other	100.0%	17.4%	21.7%		
	(n=22)	(n=4)	(n=5)		
Will not total 100%, as categories are not mutually ex	clusive.				
Table only displays percentages for affirmative responses.					



Figure 35: Technology Training Offerings by Conductor – Town					
	Town				
Training/Instructional Topics	Library Staff	Volunteer(s)	Partner Organization		
General computer skills (e.g., how to use a mouse	90.5%	18.9%	13.7%		
and keyboard)	(n=1741)	(n=363)	(n=264)		
General computer software use (e.g., word	89.4%	17.7%	16.6%		
processing, presentation)	(n=1543)	(n=305)	(n=287)		
General Internet use (e.g., set up e-mail, Web	90.2%	19.5%	13.4%		
browsing, Web searching)	(n=1754)	(n=379)	(n=261)		
Using online databases (e.g., EBSCO Biography					
Collection, InfoTrac Newsstand, Heritage Quest,	95.4%	10.1%	11.7%		
Tutor.com)	(n=1236)	(n=131)	(n=152)		
Safe online practices (e.g. privacy, Internet safety)	90.0%	13.1%	14.8%		
Sale online practices (e.g., privacy, internet salety)	(n=1128)	(n=164)	(n=186)		
Social media (e.g., blogging, Twitter, Facebook,	91.7%	12.1%	13.0%		
YouTube)	(n=1254)	(n=166)	(n=178)		
General familiarity with new technologies (e.g.,	92.6%	10.7%	8.7%		
digital petting zoo, using e-readers, tablet devices)	(n=1457)	(n=168)	(n=137)		
Assistive Technology use (e.g., JAWS, Fire Vox,	100.0%	2.1%	10.6%		
Click-n-Type)	(n=94)	(n=2)	(n=10)		
Using video conferencing technologies (e.g.,					
Adobe Connect, GoToMeeting, Skype, Google	97.3%	13.7%	3.9%		
Hangout)	(n=327)	(n=46)	(n=13)		
Website development (e.g., HTML, Drupal,	88.6%	30.3%	18.5%		
WordPress)	(n=163)	(n=56)	(n=34)		
Digital content creation (e.g., Adobe Premiere Pro,					
GarageBand, mobile app development, digital	93.6%	23.8%	24.1%		
photography tools)	(n=264)	(n=67)	(n=68)		
Other	100.0%				
	(n=26)				
Key: : no data to report					

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.



Figure 36: Technology Training Offerings by Conductor – Rural					
	Rural				
Training/Instructional Topics	Library Staff	Volunteer(s)	Partner Organization		
General computer skills (e.g., how to use a mouse	87.4%	11.7%	13.4%		
and keyboard)	(n=2308)	(n=308)	(n=355)		
General computer software use (e.g., word	86.3%	10.7%	15.1%		
processing, presentation)	(n=1977)	(n=246)	(n=345)		
General Internet use (e.g., set up e-mail, Web	89.5%	12.3%	14.0%		
browsing, Web searching)	(n=2182)	(n=301)	(n=341)		
Using online databases (e.g., EBSCO Biography					
Collection, InfoTrac Newsstand, Heritage Quest,	94.3%	5.6%	8.4%		
Tutor.com)	(n=1492)	(n=88)	(n=133)		
Safe online practices (e.g., privacy, Internet safety)	89.7%	7.1%	11.1%		
Sale online practices (e.g., privacy, internet salety)	(n=1906)	(n=150)	(n=236)		
Social media (e.g., blogging, Twitter, Facebook,	87.0%	14.9%	9.8%		
YouTube)	(n=1317)	(n=226)	(n=149)		
General familiarity with new technologies (e.g.,	94.0%	8.0%	7.7%		
digital petting zoo, using e-readers, tablet devices)	(n=1816)	(n=155)	(n=148)		
Assistive Technology use (e.g., JAWS, Fire Vox,	100.0%	17.9%	15.8%		
Click-n-Type)	(n=95)	(n=17)	(n=15)		
Using video conferencing technologies (e.g.,					
Adobe Connect, GoToMeeting, Skype, Google	97.5%	4.7%	5.4%		
Hangout)	(n=308)	(n=15)	(n=17)		
Website development (e.g., HTML, Drupal,	84.1%	7.1%	18.1%		
WordPress)	(n=153)	(n=13)	(n=33)		
Digital content creation (e.g., Adobe Premiere Pro,					
GarageBand, mobile app development, digital	83.1%	9.8%	30.5%		
photography tools)	(n=128)	(n=15)	(n=47)		
Other	100.0%				
	(n=27)				
Key: : no data to report					

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.



Library Programs, Information Sessions & Events

The 2014 survey differed in a number of key ways as compared to the 2013 survey, and thus direct data comparisons between the surveys is limited. More specifically, it is not possible to make comparisons between 2013 and 2014 data regarding library programs (Section C of the survey – see Appendix C). Although the survey questions broadly focused on the same topics and content, questions were redesigned in ways to facilitate survey response and thus do not allow for comparison.

Figure 37: Education and Learning Programs offered to Patrons, by Locale Code							
		Locale Code					
Education and Learning	City	Suburban	Town	Rural	Overall		
Accessing and using formal online education							
content (e.g., distance education courses,	34.3%	35.6%	40.9%	26.8%	33.0%		
online Advanced Placement courses)	(n=882)	(n=1558)	(n=1348)	(n=1725)	(n=5513)		
Basic literacy skills (e.g., basic math, basic	54.5%	42.2%	42.7%	30.4%	39.6%		
reading, basic writing)	(n=1403)	(n=1846)	(n=1409)	(n=1957)	(n=6615)		
Provided GED preparation courses and services	48.4%	35.2%	40.0%	26.6%	34.9%		
(e.g., literacy and math development)	(n=1247)	(n=1540)	(n=1318)	(n=1716)	(n=5821)		
Summer reading programming for children	97.2%	98.5%	97.7%	91.5%	95.4%		
	(n=2504)	(n=4311)	(n=3220)	(n=5894)	(n=15929)		
Summer reading programming for adulta	66.2%	63.9%	49.1%	32.3%	49.1%		
Summer reading programming for addits	(n=1705)	(n=2796)	(n=1619)	(n=2079)	(n=8199)		
After school programs (e.g., Let's Move!,	51.4%	44.1%	33.2%	26.5%	36.3%		
learning labs, homework help)	(n=1323)	(n=1930)	(n=1095)	(n=1708)	(n=6056)		
ESL/ESOL/ELL (e.g., conversational groups,	42.5%	35.5%	21.4%	12.6%	24.9%		
literacy tutoring, citizenship)	(n=1095)	(n=1553)	(n=705)	(n=810)	(n=4163)		
Science, Technology, Engineering, Arts, Math				· · · ·			
(STEAM) events (e.g., robotics, LittleBits,	48.9%	47.7%	32.8%	19.7%	34.2%		
Arduino, Maker Spaces)	(n=1260)	(n=2088)	(n=1083)	(n=1272)	(n=5703)		
Other	3.0%	1.7%	2.1%	1.8%	2.0%		
Other	(n=76)	(n=74)	(n=69)	(n=119)	(n=338)		
Will not total 100% as categories are not mutually	exclusive Tab	le only displays r	percentages for a	affirmative respon	Ses		

Figure 37 shows education and learning programs currently offered to patrons by their library location, organized by locale. One notable trend is that while libraries are leaders in providing access to Internetenabled technologies to the public, they are far from abandoning their dedication to encouraging reading in their communities. 95.4 percent of all public libraries offer summer reading programs for children, ensuring that local youth remain active readers when school is out of session. This is nearly double the popularity of the second most popular education program, adult summer reading, which is offered by 49.1 percent of U.S. public libraries. A large number of libraries also offer basic literacy training (39.6 percent), GED education programs (34.9 percent) and after school programs for secondary school students (36.3 percent). 34.9 percent of U.S. public libraries offer English as a Second Language (ESL) programs, but this ranges widely from a high of 42.5 percent for city locations to a low of 12.6 percent for rural locations. Future research should analyze how differences in populations of immigrant residents across different locales affects the decisions of libraries when it comes to offering ESL programs.



Figure 38: Education and Learning Programs offered to Patrons, by Format – Overall					
	Overall				
Education and Learning	Formal program/session	Individual help by appointment	Informal point of use		
Accessing and using formal online education content (e.g., distance education courses, online Advanced Placement courses)	11.4% (n=631)	29.0% (n=1596)	72.2% (n=3983)		
Basic literacy skills (e.g., basic math, basic reading, basic writing)	26.9%	25.9%	70.2%		
	(n=1781)	(n=1710)	(n=4645)		
Provided GED preparation courses and services (e.g., literacy and math development	24.4%	18.4%	72.6%		
	(n=1422)	(n=1070)	(n=4225)		
Summer reading programming for children	94.3%	4.7%	17.4%		
	(n=15021)	(n=746)	(n=2769)		
Summer reading programming for adults	84.2%	6.5%	29.9%		
	(n=6901)	(n=534)	(n=2455)		
After school programs (e.g., Let's Move!, learning labs,	67.1%	16.2%	41.5%		
homework help)	(n=4060)	(n=981)	(n=2512)		
ESL/ESOL/ELL (e.g., conversational groups, literacy	70.6%	24.0%	30.4%		
tutoring, citizenship)	(n=2939)	(n=998)	(n=1264)		
Science, Technology, Engineering, Arts, Math (STEM)	91.9%	8.3%	20.6%		
events (e.g., robotics, LittleBits, Arduino, Maker Spaces)	(n=5240)	(n=471)	(n=1176)		
Other	98.8% (n=334)	1.5% (n=5)	*		
Key: * : insufficient data to report Will not total 100%, as categories are not mutually exclusiv	/e. Table only displays pe	ercentages for affirmative	responses.		

Figure 38 shows that libraries offering education and learning programs that focus on enhancing established learning, such as that provided by secondary school, are most likely to do so through formal programs. This includes summer reading for children (94.3 percent), adult summer reading (84.2 percent), and STEM activities (91.9 percent). Assistance focused on basic education and life skills, meanwhile, is more likely to be offered through informal point of use training. This includes basic literacy skills (70.2 percent) and GED preparation (72.6 percent). An exception to this trend is ESL programming, with 70.6 percent of libraries that offer such services doing so through formal programs, versus 24.0 percent relying on individual help by appointment and 30.4 percent offering aide through informal point of use training.



Figure 39: Education and Learning Programs offered to Patrons, by Format – City					
	City				
Education and Learning	Formal program/session	Individual help by appointment	Informal point of use		
Accessing and using formal online education content					
(e.g., distance education courses, online Advanced	9.4%	19.3%	80.0%		
Placement courses)	(n=83)	(n=170)	(n=706)		
Basic literacy skills (e.g., basic math, basic reading,	38.2%	24.2%	64.4%		
basic writing)	(n=536)	(n=340)	(n=904)		
Provided GED preparation courses and services (e.g.,	33.4%	13.6%	73.0%		
literacy and math development	(n=417)	(n=170)	(n=910)		
Summer reading programming for shildren	96.2%	3.4%	28.5%		
Summer reading programming for children	(n=2409)	(n=85)	(n=713)		
Summer reading programming for adults	84.1%	3.0%	36.6%		
	(n=1433)	(n=52)	(n=623)		
After school programs (e.g., Let's Move!, learning labs,	77.1%	22.4%	39.2%		
homework help)	(n=1020)	(n=296)	(n=519)		
ESL/ESOL/ELL (e.g., conversational groups, literacy	83.6%	22.1%	24.6%		
tutoring, citizenship)	(n=915)	(n=242)	(n=269)		
Science, Technology, Engineering, Arts, Math (STEAM)	96.3%	9.5%	22.6%		
events (e.g., robotics, LittleBits, Arduino, Maker Spaces)	(n=1213)	(n=119)	(n=285)		
Other	100.0%				
Other	(n=76)				
Key: : no data to report					
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					

Figures 39 through 42 show the frequency with which libraries that offer education and learning programs do so through formal programs, individual help by appointment, or informal point of use training. There is not considerable variance in locale types, showing relatively consistent trends in programming design. Town libraries that offer summer reading programs are the most likely to do so through formal programming, with 96.8 percent of locations doing so, while rural libraries are less likely to do so, with 92.8 percent of locations preferring this method. Differences in the likelihood of libraries offering GED training through informal point of use assistance are also relatively small, with suburban libraries that offer such services being the most likely to use this method (74.3 percent) while town libraries are the least likely to do so (71.3 percent).



Figure 40: Education and Learning Programs offered to Patrons, by Format – Suburban					
	Suburban				
Education and Learning	Formal program/session	Individual help by appointment	Informal point of use		
Accessing and using formal online education content					
(e.g., distance education courses, online Advanced	13.6%	30.0%	75.5%		
Placement courses)	(n=212)	(n=467)	(n=1176)		
Basic literacy skills (e.g., basic math, basic reading,	29.6%	26.6%	71.3%		
basic writing)	(n=546)	(n=491)	(n=1317)		
Provided GED preparation courses and services (e.g.,	26.3%	19.8%	74.3%		
literacy and math development	(n=404)	(n=304)	(n=1143)		
Summer reading programming for children	93.8%	7.3%	21.7%		
	(n=4043)	(n=314)	(n=934)		
Summer reading programming for adults	84.7%	7.3%	32.1%		
Summer reading programming for addits	(n=2367)	(n=204)	(n=898)		
After school programs (e.g., Let's Move!, learning labs,	66.8%	14.8%	46.1%		
homework help)	(n=1288)	(n=285)	(n=889)		
ESL/ESOL/ELL (e.g., conversational groups, literacy	70.5%	20.9%	34.1%		
tutoring, citizenship)	(n=1094)	(n=324)	(n=530)		
Science, Technology, Engineering, Arts, Math (STEAM)	91.6%	6.9%	20.6%		
events (e.g., robotics, LittleBits, Arduino, Maker Spaces)	(n=1913)	(n=144)	(n=429)		
Other	100.0%	1.4%	1.4%		
Other	(n=74)	(n=1)	(n=1)		
Key: : no data to report					
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					



Figure 41: Education and Learning Programs offered to Patrons, by Format – Town					
		Town			
Education and Learning	Formal program/session	Individual help by appointment	Informal point of use		
Accessing and using formal online education content					
(e.g., distance education courses, online Advanced	13.6%	30.5%	68.1%		
Placement courses)	(n=184)	(n=411)	(n=918)		
Basic literacy skills (e.g., basic math, basic reading,	24.3%	31.3%	70.7%		
basic writing)	(n=342)	(n=441)	(n=997)		
Provided GED preparation courses and services (e.g.,	20.4%	19.1%	71.3%		
literacy and math development	(n=269)	(n=252)	(n=941)		
Summer reading programming for children	96.8%	5.2%	10.8%		
	(n=3116)	(n=168)	(n=348)		
Summer reading programming for adults	85.9%	9.7%	21.5%		
	(n=1390)	(n=157)	(n=348)		
After school programs (e.g., Let's Move!, learning labs,	66.2%	16.2%	36.4%		
homework help)	(n=725)	(n=177)	(n=399)		
ESL/ESOL/ELL (e.g., conversational groups, literacy	59.9%	34.1%	34.8%		
tutoring, citizenship)	(n=422)	(n=240)	(n=245)		
Science, Technology, Engineering, Arts, Math (STEAM)	91.1%	9.3%	19.2%		
events (e.g., robotics, LittleBits, Arduino, Maker Spaces)	(n=987)	(n=101)	(n=208)		
Other	100.0%				
Other	(n=69)				
Key: : no data to report					
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					



Figure 42: Education and Learning Programs offered to Patrons, by Format – Rural					
	Rural				
Education and Learning	Formal program/session	Individual help by appointment	Informal point of use		
Accessing and using formal online education content					
(e.g., distance education courses, online Advanced	8.8%	31.8%	68.6%		
Placement courses)	(n=152)	(n=548)	(n=1183)		
Basic literacy skills (e.g., basic math, basic reading,	18.3%	22.4%	72.9%		
basic writing)	(n=357)	(n=438)	(n=1427)		
Provided GED preparation courses and services (e.g.,	19.3%	20.0%	71.7%		
literacy and math development	(n=332)	(n=344)	(n=1231)		
Summer reading programming for children	92.5%	3.0%	13.1%		
	(n=5453)	(n=179)	(n=774)		
Summer reading programming for adults	82.3%	5.8%	28.2%		
Summer reading programming for addits	(n=1711)	(n=121)	(n=586)		
After school programs (e.g., Let's Move!, learning labs,	60.1%	13.1%	41.3%		
homework help)	(n=1027)	(n=223)	(n=705)		
ESL/ESOL/ELL (e.g., conversational groups, literacy	62.7%	23.7%	27.2%		
tutoring, citizenship)	(n=508)	(n=192)	(n=220)		
Science, Technology, Engineering, Arts, Math (STEAM)	88.5%	8.4%	20.0%		
events (e.g., robotics, LittleBits, Arduino, Maker Spaces)	(n=1127)	(n=107)	(n=254)		
Other	96.6%	3.4%			
Other	(n=115)	(n=4)			
Key: : no data to report					
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					



Figure 43: Providers of Education and Learning Programs offered to Patrons – Overall				
	Overall			
Education and Learning	Library Staff	Volunteers	Partner Organization	
Accessing and using formal online education content (e.g.,				
distance education courses, online Advanced Placement	85.0%	11.0%	21.5%	
courses)	(n=1682)	(n=217)	(n=426)	
Basic literacy skills (e.g., basic math, basic reading, basic	60.6%	40.5%	35.2%	
writing)	(n=1774)	(n=1186)	(n=1029)	
Provided GED preparation courses and services (e.g., literacy	45.8%	34.0%	47.7%	
and math development	(n=977)	(n=726)	(n=1017)	
Summer reading programming for shildren	97.8%	24.9%	14.0%	
Summer reading programming for children	(n=14795)	(n=3763)	(n=2120)	
Summer reading programming for adults	98.6%	15.8%	13.9%	
Summer reading programming for addits	(n=6928)	(n=1108)	(n=974)	
After school programs (e.g., Let's Move!, learning labs,	91.7%	22.0%	19.3%	
homework help)	(n=4129)	(n=992)	(n=871)	
ESL/ESOL/ELL (e.g., conversational groups, literacy tutoring,	56.9%	46.9%	38.3%	
citizenship)	(n=1917)	(n=1581)	(n=1292)	
Science, Technology, Engineering, Math (STEM) Maker	88.3%	23.3%	34.9%	
Spaces (e.g., robotics, LittleBits, Arduino)	(n=4670)	(n=1234)	(n=1843)	
Other	90.2%	13.6%	23.9%	
	(n=305)	(n=46)	(n=81)	
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.				

Figure 43 shows the frequency with which libraries partner with outside organizations to promote education and learning. Libraries most commonly use their own staff to offer programs that build on education that individuals receive elsewhere, with this being especially true of programs oriented towards children. Library staff coordinates summer reading programs for children in 97.8 percent of cases in which locations offer such activities, versus 24.9 percent of locations working with volunteers and 14.0 percent partnering with outside organizations. By contrast, libraries are more likely to work with community partners for activities that provide basic level education oriented towards adults. For libraries that offer GED training courses, 45.8 percent have their own employees lead such training, while 34.0 percent ask for assistance from volunteers and 47.7 percent form partnerships with outside organizations.



Figure 44: Providers of Education and Learning Programs offered to Patrons – City				
	City			
Education and Learning	Library Staff	Volunteers	Partner Organization	
Accessing and using formal online education content (e.g.,				
distance education courses, online Advanced Placement	100.0%	100.0%	100.0%	
courses)	(n=195)	(n=51)	(n=42)	
Basic literacy skills (e.g., basic math, basic reading, basic	62.0%	39.1%	44.0%	
writing)	(n=458)	(n=289)	(n=325)	
Provided GED preparation courses and services (e.g., literacy	55.9%	39.2%	49.9%	
and math development	(n=268)	(n=188)	(n=239)	
Summer reading programming for children	99.0%	16.9%	21.8%	
	(n=2387)	(n=407)	(n=525)	
Cummer reading programming for adulta	98.8%	14.4%	22.7%	
Summer reading programming for addits	(n=1416)	(n=207)	(n=326)	
After school programs (e.g., Let's Move!, learning labs,	89.6%	30.0%	31.1%	
homework help)	(n=996)	(n=333)	(n=346)	
ESL/ESOL/ELL (e.g., conversational groups, literacy tutoring,	55.5%	47.4%	45.3%	
citizenship)	(n=542)	(n=463)	(n=443)	
Science, Technology, Engineering, Arts, Math (STEAM) events	91.7%	18.6%	41.6%	
(e.g., robotics, LittleBits, Arduino, Maker Spaces)	(n=1112)	(n=226)	(n=504)	
Other	89.3%		21.3%	
Other	(n=67)		(n=16)	
Key: : no data to report				
Will not total 100%, as categories are not mutually exclusive. Tabl	le only displays perce	ntages for affirmativ	e responses.	

Figures 44 through 47 show the frequency with which libraries that offer education and learning assistance rely on their own staff, volunteers, and partner organizations. A notable trend is that as population density declines, libraries are less likely to rely on partner organizations. City libraries are more likely than their rural counterparts to work with outside groups to offer GED assistance programs (49.9 percent versus 39.7 percent), provide ESL training (45.3 percent versus 12.2 percent), and support basic literacy skills (44.0 percent versus 29.7 percent). Rural libraries do not only have the problem of less overall resources, but also less partners to rely on to enhance services.



Figure 45: Providers of Education and Learning Programs offered to Patrons – Suburban					
	Suburban				
Education and Learning	Library Staff	Volunteers	Partner Organization		
Accessing and using formal online education content (e.g.,					
distance education courses, online Advanced Placement	100.0%	100.0%	100.0%		
courses)	(n=529)	(n=71)	(n=105)		
Basic literacy skills (e.g., basic math, basic reading, basic	61.9%	53.3%	32.9%		
writing)	(n=504)	(n=434)	(n=268)		
Provided GED preparation courses and services (e.g., literacy	38.8%	47.7%	51.2%		
and math development	(n=226)	(n=278)	(n=299)		
Summer reading programming for children	99.3%	17.9%	13.6%		
	(n=4029)	(n=725)	(n=550)		
Summer reading programming for adults	100.0%	11.9%	10.5%		
Summer reading programming for addits	(n=2398)	(n=285)	(n=251)		
After school programs (e.g. Let's Move!, learning labs,	92.6%	22.5%	20.6%		
homework help)	(n=1288)	(n=313)	(n=286)		
ESL/ESOL/ELL (e.g., conversational groups, literacy tutoring,	59.2%	53.8%	33.4%		
citizenship)	(n=722)	(n=656)	(n=408)		
Science, Technology, Engineering, Math (STEM) Maker	91.7%	18.9%	37.4%		
Spaces (e.g., robotics, LittleBits, Arduino)	(n=1763)	(n=363)	(n=719)		
Other	91.9%	1.4%	34.7%		
	(n=68)	(n=1)	(n=26)		
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					

Figure 46: Providers of Education and Learning Programs offered to Patrons				
	Town			
Education and Learning	Library Staff	Volunteers	Partner Organization	
Accessing and using formal online education content (e.g.,				
distance education courses, online Advanced Placement	100.0%	100.0%	100.0%	
courses)	(n=415)	(n=34)	(n=128)	
Basic literacy skills (e.g., basic math, basic reading, basic	54.0%	34.5%	36.1%	
writing)	(n=353)	(n=226)	(n=236)	
Provided GED preparation courses and services (e.g., literacy	36.3%	25.6%	51.9%	
and math development	(n=160)	(n=113)	(n=229)	
Cummor roading programming for shildren	97.8%	30.9%	13.6%	
Summer reading programming for children	(n=3074)	(n=970)	(n=427)	
Summer reading programming for adulta	96.5%	22.5%	12.6%	
Summer reading programming for addits	(n=1400)	(n=327)	(n=183)	
ESL/ESOL/ELL (e.g., conversational groups, literacy tutoring,	94.5%	14.4%	11.6%	
citizenship)	(n=783)	(n=119)	(n=96)	
Science, Technology, Engineering, Arts, Math (STEAM) events	55.6%	36.1%	41.9%	
(e.g., robotics, LittleBits, Arduino, Maker Spaces)	(n=293)	(n=190)	(n=221)	
Other	91.5%	26.7%	24.2%	
	(n=913)	(n=266)	(n=242)	
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.				



Figure 47: Providers of Education and Learning Programs offered to Patrons				
	Rural			
Education and Learning	Library Staff	Volunteers	Partner Organization	
Accessing and using formal online education content (e.g.,				
distance education courses, online Advanced Placement	100.0%	100.0%	100.0%	
courses)	(n=543)	(n=61)	(n=151)	
Basic literacy skills (e.g., basic math, basic reading, basic	63.9%	33.1%	27.9%	
writing)	(n=459)	(n=237)	(n=200)	
Provided GED preparation courses and services (e.g., literacy	51.3%	23.3%	39.7%	
and math development	(n=323)	(n=147)	(n=250)	
Summer reading programming for children	96.2%	30.1%	11.2%	
Summer reading programming for children	(n=5305)	(n=1661)	(n=618)	
Summer reading programming for adults	98.1%	16.5%	12.2%	
Summer reading programming for addits	(n=1714)	(n=289)	(n=214)	
ESL/ESOL/ELL (e.g., conversational groups, literacy tutoring,	90.5%	19.3%	12.2%	
citizenship)	(n=1062)	(n=227)	(n=143)	
Science, Technology, Engineering, Arts, Math (STEAM) events	55.8%	42.2%	34.1%	
(e.g., robotics, LittleBits, Arduino, Maker Spaces)	(n=360)	(n=272)	(n=220)	
Othor	76.2%	32.8%	32.7%	
	(n=882)	(n=379)	(n=378)	
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.				



Figure 48: Formal Online Education Content provided to Patrons in the last 12 months, by Locale					
			Locale Code	9	
Formal Online Education Content	City	Suburban	Town	Rural	Overall
Provided assistance in accessing online degree					
courses (e.g., virtual high school, university,					
college, community college, technical school,	61.2%	73.8%	67.1%	74.7%	70.4%
online certification program)	(n=539)	(n=1150)	(n=905)	(n=1290)	(n=3884)
Provided assistance in accessing online					
certification courses (e.g., Network+ certification,	54.2%	60.4%	58.3%	59.2%	58.5%
project management, health care)	(n=478)	(n=940)	(n=787)	(n=1022)	(n=3227)
Offered assistance in accessing online materials	58.0%	50.2%	38.3%	38.2%	44.8%
for Advanced Placement (AP) course exams	(n=512)	(n=782)	(n=516)	(n=659)	(n=2469)
Provided assistance in accessing MOOCs	29.7%	30.7%	12.2%	14.0%	20.8%
(Massive Open Online Courses)	(n=262)	(n=479)	(n=165)	(n=242)	(n=1148)
Provided exam proctoring/testing services (e.g.,	59.9%	73.6%	83.5%	65.6%	71.4%
online course, GED)	(n=528)	(n=1147)	(n=1127)	(n=1133)	(n=3935)
Other		1.7%		2.3%	1.4%
Utilei		(n=26)	*	(n=39)	(n=77)
Key: : no data to report: * : insufficient data to report					

Key: --- : no data to report; * : insufficient data to report.

Will not total 100%, as categories are not mutually exclusive

Table only displays percentages for affirmative responses. Includes programs or services that library partners provide/offer as well as those offered by library staff

As noted in Figure 37, 33.3 percent of American public libraries provide some form of formal online education content. Figure 48 shows that the types of formal online educational content offered by these libraries often varies more within locales than across different types of geographic areas. 58.5 percent of these locations provide assistance with online certification courses, ranging from a high of 60.4 percent of suburban libraries to a low of 54.2 percent of city locations, a difference of only 6.2 percent. Additionally, some online education support programs do not fall into the common trend of being tied to population density, with 59.9 percent of city libraries that provide formal online education content to patrons offering exam proctoring services for the GED and other tests, versus 73.6 percent of such suburban libraries, 83.5 percent of town locations, and 65.6 percent of rural libraries.



Figure 49: Economy and Workforce Development Programs offered to Patrons, by Locale Code					
-	-	-	Locale Code		
Economy and Workforce Development	City	Suburban	Town	Rural	Overall
Accessing and using employment databases					
and other job opportunity resources (e.g.,					
Federal and state job banks, Monster.com,	78.6%	76.0%	69.5%	58.3%	68.3%
Indeed.com)	(n=2023)	(n=3326)	(n=2292)	(n=3757)	(n=11398)
Applying for jobs (e.g., interviewing skills,					
resume development, completing online job	81.1%	77.7%	79.8%	63.4%	73.1%
applications)	(n=2086)	(n=3398)	(n=2631)	(n=4086)	(n=12201)
Applying for unemployment benefits online (e.g.,	61.5%	53.8%	62.6%	48.0%	54.5%
eligibility, maintaining benefits)	(n=1582)	(n=2354)	(n=2064)	(n=3092)	(n=9092)
Accessing and using online business					
information resources (e.g., SBA.gov, Business	67.0%	63.7%	43.3%	31.9%	47.9%
Source Complete, ReferenceUSA)	(n=1725)	(n=2785)	(n=1426)	(n=2057)	(n=7993)
Supporting small business development (e.g.					
assistance on business plan development,					
assistance on how to start a small business,	43.0%	41.0%	30.3%	22.8%	32.2%
market research services)	(n=1107)	(n=1794)	(n=999)	(n=1472)	(n=5372)
Providing work space(s) for mobile workers	34.8%	37.6%	38.3%	34.5%	36.1%
(e.g., co-working spaces)	(n=896)	(n=1645)	(n=1264)	(n=2225)	(n=6030)
Other	1.6%	1.3%		1.8%	1.3%
Ullei	(n=42)	(n=56)	*	(n=114)	(n=224)
Key: * : insufficient data to report					

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figure 49 shows economy and workforce development programs offered to patrons, organized by locale. The most popular of these focus directly on obtaining jobs, with 73.1 percent of libraries assisting patrons with their applications and interviewing skills, and 68.3 percent helping patrons to use databases to find career openings. Considering that the impact of the 2008 global recession is still being felt by many communities, the fact that many locations (54.5 percent) help patrons to apply for unemployment benefits demonstrates librarians' responses to contemporary patron needs.



Figure 50: Economy and Workforce Development Programs offered to Patrons, by Format – Overall				
	Overall			
Economy and Workforce Development	Formal program/session	Individual help by appointment	Informal point of use	
Accessing and using employment databases and other job opportunity resources (e.g., Federal and state job banks, Monster.com, Indeed.com)	15.2% (n=1736)	23.9% (n=2720)	89.9% (n=10244)	
Applying for jobs (e.g., interviewing skills, resume development, completing online job applications)	19.2% (n=2338)	24.3% (n=2965)	87.6% (n=10690)	
Applying for unemployment benefits online (e.g., eligibility, maintaining benefits)	8.0% (n=730)	19.6% (n=1786)	90.2% (n=8199)	
Accessing and using online business information resources (e.g., SBA.gov, Business Source Complete, ReferenceUSA)	13.7% (n=1095)	19.1% (n=1526)	91.2% (n=7288)	
Supporting small business development (e.g. assistance on business plan development, assistance on how to start a small business, market research services)	25.0% (n=1343)	20.4% (n=1094)	81.0% (n=4351)	
Providing work space(s) for mobile workers (e.g., co- working spaces)	5.5% (n=334)	19.6% (n=1181)	89.1% (n=5373)	
Other	7.2% (n=16)	7.6% (n=17)	42.0% (n=94)	
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.				

Figure 50 illustrates that most of the career related services offered by public libraries are conducted on an as-needed basis. 90.2 percent of locations that assist patrons with applying for unemployment benefits do so through informal point of use help versus only 8.0 percent of libraries offering such services through formal classes, which is unsurprising considering that this is often a personal matter. Some of the more popular job and business related services offered through formal classes included small business development (25.0 percent), job application skills including developing resume writing and interview skills (19.2 percent), and accessing job databases (15.2 percent).



Figure 51: Economy and Workforce Development Programs offered to Patrons, by Format – City					
	City				
Economy and Workforce Development	Formal program/session	Individual help by appointment	Informal point of use		
Accessing and using employment databases and other job opportunity resources (e.g., Federal and state job banks, Monster.com, Indeed.com)	26.0% (n=526)	24.8% (n=501)	87.7% (n=1775)		
Applying for jobs (e.g., interviewing skills, resume development, completing online job applications)	37.8% (n=788)	25.6% (n=533)	81.8% (n=1706)		
Applying for unemployment benefits online (e.g., eligibility, maintaining benefits)	8.2% (n=130)	20.7% (n=328)	91.5% (n=1446)		
Accessing and using online business information resources (e.g., SBA.gov, Business Source Complete, ReferenceUSA)	19.0% (n=327)	18.8% (n=325)	92.1% (n=1588)		
Supporting small business development (e.g. assistance on business plan development, assistance on how to start a small business, market research services)	25.8% (n=286)	18.3% (n=203)	88.2% (n=977)		
Providing work space(s) for mobile workers (e.g., co- working spaces)	13.2% (n=118)	13.4% (n=120)	93.3% (n=836)		
Other	22.0% (n=9)	22.0% (n=9)	31.7% (n=13)		
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					

Following an overall trend of this survey, Figures 51 to 54 show that libraries are far more likely to offer formal training programs if they have a larger population base, allowing a larger number of people to meet at an appointed time. 37.8 percent of city libraries that offer assistance with interviewing skills, developing job applications, and other activities essential to applying for jobs do so via formal training classes, versus 22.7 percent of such suburban libraries, 18.4 percent of town locations, and 7.3 percent of rural locations. However, for all types of economy and workforce development programs throughout locales, informal point of use training is the preferred form of assistance. These as-needed training programs are offered at least twice as much and individual help by appointment or formal programs in all pre-determined categories.



Figure 52: Economy and Workforce Development Programs offered to Patrons, by Format – Suburban

	Suburban			
Economy and Workforce Development	Formal program/session	Individual help by appointment	Informal point of use	
Accessing and using employment databases and other				
job opportunity resources (e.g., Federal and state job	15.8%	27.3%	92.3%	
banks, Monster.com, Indeed.com)	(n=524)	(n=907)	(n=3071)	
Applying for jobs (e.g., interviewing skills, resume	22.7%	29.1%	89.3%	
development, completing online job applications)	(n=770)	(n=989)	(n=3035)	
Applying for unemployment benefits online (e.g.,	8.8%	21.9%	90.2%	
eligibility, maintaining benefits)	(n=206)	(n=515)	(n=2123)	
Accessing and using online business information				
resources (e.g., SBA.gov, Business Source Complete,	13.0%	23.8%	91.0%	
ReferenceUSA)	(n=362)	(n=663)	(n=2535)	
Supporting small business development (e.g. assistance				
on business plan development, assistance on how to	35.2%	27.3%	75.9%	
start a small business, market research services)	(n=631)	(n=490)	(n=1361)	
Providing work space(s) for mobile workers (e.g., co-	7.7%	16.4%	91.5%	
working spaces)	(n=127)	(n=269)	(n=1505)	
Other	1.8%	1.8%	19.3%	
	(n=1)	(n=1)	(n=11)	
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.				

Figure 53: Economy and Workforce Development Programs offered to Patrons, by Format – Town					
	Town				
Economy and Workforce Development	Formal program/session	Individual help by appointment	Informal point of use		
Accessing and using employment databases and other job opportunity resources (e.g., Federal and state job banks, Monster.com, Indeed.com)	16.4% (n=375)	25.7% (n=590)	87.1% (n=1997)		
Applying for jobs (e.g., interviewing skills, resume development, completing online job applications)	18.4% (n=483)	26.3% (n=691)	87.5% (n=2303)		
Applying for unemployment benefits online (e.g., eligibility, maintaining benefits)	10.1% (n=209)	22.9% (n=472)	87.9% (n=1815)		
Accessing and using online business information resources (e.g., SBA.gov, Business Source Complete, ReferenceUSA)	16.3% (n=232)	16.9% (n=241)	88.4% (n=1261)		
Supporting small business development (e.g. assistance on business plan development, assistance on how to start a small business, market research services)	22.6% (n=226)	16.0% (n=160)	76.9% (n=768)		
Providing work space(s) for mobile workers (e.g., co- working spaces)	1.5% (n=19)	16.2% (n=205)	91.3% (n=1155)		
Other	8.3% (n=1)	8.3% (n=1)	91.7% (n=11)		
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					



Figure 54: Economy and Workforce Development Programs offered to Patrons, by Format – Rural					
· · · ·	Rural				
Economy and Workforce Development	Formal program/session	Individual help by appointment	Informal point of use		
Accessing and using employment databases and other job opportunity resources (e.g., Federal and state job banks, Monster.com, Indeed.com)	8.3% (n=311)	19.2% (n=722)	90.5% (n=3401)		
Applying for jobs (e.g., interviewing skills, resume development, completing online job applications)	7.3% (n=297)	18.4% (n=752)	89.2% (n=3646)		
Applying for unemployment benefits online (e.g., eligibility, maintaining benefits)	6.0% (n=185)	15.2% (n=471)	91.1% (n=2815)		
Accessing and using online business information resources (e.g., SBA.gov, Business Source Complete, ReferenceUSA)	8.5% (n=174)	14.4% (n=297)	92.6% (n=1904)		
Supporting small business development (e.g. assistance on business plan development, assistance on how to start a small business, market research services)	13.6% (n=200)	16.4% (n=241)	84.6% (n=1245)		
Providing work space(s) for mobile workers (e.g., co- working spaces)	3.1% (n=70)	26.4% (n=587)	84.4% (n=1877)		
Other	4.4% (n=5)	5.3% (n=6)	51.8% (n=59)		
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					



Figure 55: Providers of Economy and Workforce Development Programs offered to Patrons - Overall					
	Overall				
Economy and Workforce Development	Library Staff	Volunteers	Partner Organization		
Accessing and using employment databases and other job					
opportunity resources (e.g., Federal and state job banks,	89.8%	6.5%	30.9%		
Monster.com, Indeed.com)	(n=3366)	(n=243)	(n=1159)		
Applying for jobs (e.g., interviewing skills, resume	89.8%	13.2%	30.9%		
development, completing online job applications)	(n=3918)	(n=576)	(n=1347)		
Applying for unemployment benefits online (e.g., eligibility,	95.0%	8.2%	19.6%		
maintaining benefits)	(n=2142)	(n=186)	(n=443)		
Accessing and using online business information resources	88.5%	3.8%	29.2%		
(e.g., SBA.gov, Business Source Complete, ReferenceUSA)	(n=1932)	(n=84)	(n=637)		
Supporting small business development (e.g. assistance on					
business plan development, assistance on how to start a small	66.0%	8.3%	58.1%		
business, market research services)	(n=1363)	(n=171)	(n=1199)		
Providing work space(s) for mobile workers (e.g., co- working	91.3%	5.8%	14.6%		
spaces)	(n=1287)	(n=82)	(n=206)		
Other	64.5%	3.2%	41.9%		
	(n=20)	(n=1)	(n=13)		
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.					

Figure 55 shows libraries dependence on their own employees, volunteers, and outside organizations for those locations that provide job seeking and small business development assistance. Library staff are the most likely to provide such services in all cases, with this being especially true for assisting patrons with applying for unemployment benefits (95.0 percent), helping patrons to develop application and interviewing skills (89.8 percent), and teaching individuals to use online databases to find available careers (89.8 percent). Libraries are far more likely to connect with outside organizations to offer training and programs to support small business development, with 66.0 percent of libraries that offer such services relying on their own staff and 58.1 percent partnering with other community groups.


Figure 56: Providers of Economy and Workforce Development Programs offered to Patrons – City				
	City			
Economy and Workforce Development	Library Staff	Volunteers	Partner Organization	
Accessing and using employment databases and other job				
opportunity resources (e.g., Federal and state job banks,	98.2%	11.4%	23.6%	
Monster.com, Indeed.com)	(n=781)	(n=91)	(n=188)	
Applying for jobs (e.g., interviewing skills, resume	94.9%	21.7%	37.0%	
development, completing online job applications)	(n=986)	(n=225)	(n=384)	
Applying for unemployment benefits online (e.g., eligibility,	99.5%	12.0%	12.1%	
maintaining benefits)	(n=412)	(n=50)	(n=50)	
Accessing and using online business information resources	96.8%	2.6%	34.5%	
(e.g., SBA.gov, Business Source Complete, ReferenceUSA)	(n=521)	(n=14)	(n=186)	
Supporting small business development (e.g. assistance on				
business plan development, assistance on how to start a small	76.9%	3.1%	78.3%	
business, market research services)	(n=297)	(n=12)	(n=303)	
Providing work space(s) for mobile workers (e.g., co- working	99.5%	5.0%	10.0%	
spaces)	(n=199)	(n=10)	(n=20)	
Othor	100.0%		5.6%	
	(n=18)		(n=1)	
Key: : no data to report; Will not total 100%, as categories are not mutually exclusive. Tab	ole only displays percei	ntages for affirmative	e responses.	

Figures 56 through 59 show which entities conduct economy and workforce development programs offered to patrons, broken down by locale type. A strong majority of libraries that offer assistance in applying for jobs or accessing and using employment databases do so with library staff. City libraries are the most likely to rely on their staff for such trainings, with 94.9 percent and 98.2 percent doing so, respectively. Suburban locations that help patrons apply for jobs and use employment databases are the least likely to do so, with 85.8 percent and 86.3 percent of locations asking employees to perform these services. However, dependence on outside organizations for small business development assistance declines significantly as population density decreases. 78.3 percent of city libraries rely on partner organizations, versus 59.8 percent of suburban locations, 54.1 percent of town locations, and 38.9 percent of rural libraries.



Figure 57: Providers of Economy and Workforce Development Programs offered to Patrons – Suburban

	Suburban			
Economy and Workforce Development	Library Staff	Volunteers	Partner Organization	
Accessing and using employment databases and other job				
opportunity resources (e.g., Federal and state job banks,	86.3%	7.3%	35.6%	
Monster.com, Indeed.com)	(n=1043)	(n=88)	(n=430)	
Applying for jobs (e.g., interviewing skills, resume	85.8%	12.4%	37.1%	
development, completing online job applications)	(n=1207)	(n=174)	(n=521)	
Applying for unemployment benefits online (e.g., eligibility,	92.5%	12.7%	25.6%	
maintaining benefits)	(n=596)	(n=82)	(n=165)	
Accessing and using online business information resources	89.2%	7.2%	27.0%	
(e.g., SBA.gov, Business Source Complete, ReferenceUSA)	(n=784)	(n=63)	(n=237)	
Supporting small business development (e.g. assistance on				
business plan development, assistance on how to start a small	65.9%	14.6%	59.8%	
business, market research services)	(n=603)	(n=134)	(n=547)	
Providing work space(s) for mobile workers (e.g., co- working	94.6%	12.7%	18.1%	
spaces)	(n=334)	(n=45)	(n=64)	
Othor	100.0%	100.0%	100.0%	
	(n=1)	(n=1)	(n=1)	
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.				

Figure 58: Providers of Economy and Workforce Development Programs offered to Patrons – Town				
	Town			
Economy and Workforce Development	Library Staff	Volunteers	Partner Organization	
Accessing and using employment databases and other job				
opportunity resources (e.g., Federal and state job banks,	89.6%	1.9%	36.8%	
Monster.com, Indeed.com)	(n=718)	(n=15)	(n=295)	
Applying for jobs (e.g., interviewing skills, resume	87.9%	7.7%	28.1%	
development, completing online job applications)	(n=828)	(n=73)	(n=265)	
Applying for unemployment benefits online (e.g., eligibility,	94.2%	2.4%	24.8%	
maintaining benefits)	(n=540)	(n=14)	(n=142)	
Accessing and using online business information resources	87.0%		19.0%	
(e.g., SBA.gov, Business Source Complete, ReferenceUSA)	(n=334)		(n=73)	
Supporting small business development (e.g. assistance on				
business plan development, assistance on how to start a small	49.4%	2.9%	54.1%	
business, market research services)	(n=170)	(n=10)	(n=186)	
Providing work space(s) for mobile workers (e.g., co-working	87.7%	2.7%	10.0%	
spaces)	(n=192)	(n=6)	(n=22)	
Other	100.0%			
	(n=1)			
Key: : no data to report				



Figure 59: Providers of Economy and Workforce Development Programs offered to Patrons – Rural			
	Rural		
Economy and Workforce Development	Library Staff	Volunteers	Partner Organization
Accessing and using employment databases and other job			
opportunity resources (e.g., Federal and state job banks,	87.2%	5.2%	26.0%
Monster.com, Indeed.com)	(n=824)	(n=49)	(n=246)
Applying for jobs (e.g., interviewing skills, resume	92.0%	10.7%	18.2%
development, completing online job applications)	(n=897)	(n=104)	(n=177)
Applying for unemployment benefits online (e.g., eligibility,	95.2%	6.4%	13.8%
maintaining benefits)	(n=594)	(n=40)	(n=86)
Accessing and using online business information resources	76.9%	1.8%	36.9%
(e.g., SBA.gov, Business Source Complete, ReferenceUSA)	(n=293)	(n=7)	(n=141)
Supporting small business development (e.g., assistance on			
business plan development, assistance on how to start a small	69.8%	3.6%	38.9%
business, market research services)	(n=293)	(n=15)	(n=163)
Providing work space(s) for mobile workers (e.g., co- working	88.2%	3.3%	15.7%
spaces)	(n=562)	(n=21)	(n=100)
Other			100.0%
Other			(n=11)
Key: : no data to report			
Will not total 100%, as categories are not mutually exclusive			
Table only displays percentages for affirmative responses.			



Figure 60: Small Business Development Services provided to Patrons in the last 12 months, by Locale

	Locale Code				
Small Business Services	City	Suburban	Town	Rural	Overall
Provided assistance with the development of small	58.4%	49.7%	52.6%	39.8%	49.3%
business plans	(n=646)	(n=891)	(n=525)	(n=586)	(n=2648)
Provided assistance on how to start a small					
business (e.g., developing, business plans,	63.5%	61.7%	64.3%	48.8%	59.0%
business laws, financing a business)	(n=704)	(n=1107)	(n=642)	(n=719)	(n=3172)
Dravidad market research sonvises	54.9%	39.5%	30.1%	26.1%	37.3%
Provided market research services	(n=608)	(n=709)	(n=301)	(n=385)	(n=2003)
Provided co-worker space (e.g., shared space for	34.9%	43.6%	32.9%	42.2%	39.4%
conducting business affairs)	(n=386)	(n=783)	(n=328)	(n=621)	(n=2118)
Provided access to fax and other equipment to	57.0%	68.0%	71.0%	67.6%	66.2%
facilitate business transactions	(n=632)	(n=1220)	(n=709)	(n=995)	(n=3556)
Provided access to 3D printers, textile studio,					· · · ·
digital photography studios, and other	9.4%	9.0%	3.8%	5.6%	7.2%
technologies for making and creating content	(n=104)	(n=162)	(n=38)	(n=82)	(n=386)
Provided networking events to connect					
entrepreneurs to funders, potential collaborations					
and/or other people/organizations that can help a	22.7%	28.5%	17.7%	15.3%	21.7%
business succeed	(n=251)	(n=512)	(n=177)	(n=225)	(n=1165)
Other	1.9%				
	(n=21)			*	*
Kev:: no data to report: *: insufficient data to report.					

Will not total 100%, as categories are not mutually exclusive

Table only displays percentages for affirmative responses. Includes programs or services that library partners provide/offer as well as those offered by library staff

As noted in Figure 49, 32.2 percent of public libraries in the United States offer some form of support for local small business development. Figure 60 shows some of the services these libraries offer to facilitate local small business development, broken down by locale. Locations in more populated areas are more likely to provide services that leverage knowledge of local business climates. 54.9 percent of these city libraries offer market research services versus 26.1 percent of rural locations, while 22.7 percent of these city locations and 28.5 percent of these suburban libraries offer business networking events, versus 17.7 percent of town and 15.3 percent of rural libraries that offer some form of small business support services. Meanwhile, suburban (43.6 percent) and rural (42.2 percent) libraries that support small business development are more likely to offer space for individuals to conduct business affairs than their city (34.9 percent) and town (32.9 percent) counterparts.



Figure 61: Community, Civic Engagement, and E-Government Programs offered to Patrons, by Locale Code

			Locale Code		
Community, Civic Engagement, and E-Government	City	Suburban	Town	Rural	Overall
Assisting patrons access and use online					
government (e-government) programs and					
services (e.g., completing online forms,	82.9%	77.1%	79.7%	69.4%	75.6%
Medicare, Immigration, Social Security, Taxes)	(n=2135)	(n=3376)	(n=2627)	(n=4474)	(n=12612)
Hosting community engagement events (e.g.,	49.1%	47.8%	42.6%	30.2%	40.2%
candidate forums, community conversations)	(n=1265)	(n=2090)	(n=1405)	(n=1943)	(n=6703)
Hosting social connection events for young					
adults (e.g., manga/anime, gaming, book	78.9%	76.6%	56.3%	42.6%	59.8%
discussion groups, etc.)	(n=2031)	(n=3353)	(n=1858)	(n=2743)	(n=9985)
Hosting social connection events for adults	69.7%	70.3%	64.0%	49.8%	61.1%
(e.g., book discussion groups, gaming, etc.)	(n=1795)	(n=3077)	(n=2109)	(n=3208)	(n=10189)
Hosting maker events (e.g., Arduino, Design	21.8%	21.8%	16.1%	7.4%	15.1%
Thinking, 3-D printing, etc.)	(n=561)	(n=953)	(n=530)	(n=475)	(n=2519)
Hosting hackathons or other coding/app					
development events (e.g., using open data, app	9.2%	6.8%	2.3%	1.1%	4.1%
program development)	(n=237)	(n=299)	(n=75)	(n=72)	(n=683)
Other		1.2%	2.3%	2.1%	1.7%
	*	(n=54)	(n=76)	(n=137)	(n=287)
Key: *: insufficient data to report					

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figure 61 shows the community, civic engagement, and E-government programs offered to patrons by their library locations, broken down by locale. City libraries are the most likely to assist patrons with accessing and using government programs and services via the Internet, with 82.9 percent of these locations doing so, followed by 79.7 percent of town locations, 77.1 percent of suburban locations, and 69.4 percent of rural libraries.

However, following overall trends in this survey, the likelihood of a library offering a formal event meant to attract groups of individuals generally declines significantly as libraries' population decreases. 78.9 percent of city libraries offer social connection events for young adults versus 42.6 percent of rural locations. 49.1 percent of city libraries host community engagement events, such as candidate forums, versus 30.2 percent of rural libraries. Relatively few libraries currently offer Hackathons, which is a fairly new and developing type of programming. With this said, city libraries are most likely to offer such programs, with 9.2 percent of these locations doing so versus a low of 1.1 percent of rural locations. In this case, it appears that larger population bases facilitate earlier adoption of innovations.



Figure 62: Community, Civic Engagement, and E-Government Programs offered to Patrons, by Format – Overall

		• "			
		Overall			
Community, Civic Engagement, and E-Government	Formal program/session	Individual help by appointment	Informal point of use		
Assisting patrons to access and use online government					
(e-government) programs and services (e.g., completing					
online forms, Medicare, Immigration, Social Security,	29.9%	27.0%	88.5%		
Taxes)	(n=3774)	(n=3406)	(n=11165)		
Hosting community engagement events (e.g., candidate	88.6%	5.7%	17.6%		
forums, community conversations)	(n=5940)	(n=385)	(n=1182)		
Hosting social connection events for young adults (e.g.,	81.5%	3.1%	26.4%		
manga/anime, gaming, book discussion groups, etc.)	(n=8139)	(n=313)	(n=2636)		
Hosting social connection events for adults (e.g., book	94.2%	3.7%	12.9%		
discussion groups, gaming, etc.)	(n=9598)	(n=378)	(n=1312)		
Hosting maker events (e.g., Arduino, Design Thinking,	97.7%	6.0%	24.6%		
3-D printing, etc.)	(n=2462)	(n=150)	(n=620)		
Hosting hackathons or other coding/app development					
events (e.g., using open data, app program	97.8%	7.9%	21.3%		
development)	(n=669)	(n=54)	(n=146)		
Other	100.0%	1.7%	10.1%		
	(n=287)	(n=5)	(n=29)		
Will not total 100%, as categories are not mutually exclusive.					
Table only displays percentages for affirmative responses.					

Figure 62 shows that community, civic engagement, and E-government services in public libraries are, in general, far more likely to be offered as formal programs. It is likely this trend is influenced by the community, civic engagement, and E-government services included in the 2014 survey, which, with the exception of "assisting patrons to access and use online government (E-government) programs and services," were all event-based services. Therefore, it is not surprising to see that when it comes to E-government services, U.S. public libraries overall provide informal point-of-use training and assistance most of the time (88.5 percent) with close to 30 percent offering help by appointment or formal programs that cover E-government services. This pattern of service format is consistent across U.S. public libraries, regardless of locale (city, suburban, town or rural), as shown in Figures 63 to 66.



Figure 63: Community, Civic Engagement, and E-Government Programs offered to Patrons, by Format – City

		City				
Community, Civic Engagement, and E-Government	Formal program/session	Individual help by appointment	Informal point of use			
Assisting patrons to access and use online government						
(e-government) programs and services (e.g., completing						
online forms, Medicare, Immigration, Social Security,	38.1%	27.6%	90.6%			
Taxes)	(n=813)	(n=589)	(n=1934)			
Hosting community engagement events (e.g., candidate	93.6%	2.4%	17.9%			
forums, community conversations)	(n=1184)	(n=30)	(n=227)			
Hosting social connection events for young adults (e.g.,	85.3%	1.3%	23.7%			
manga/anime, gaming, book discussion groups, etc.)	(n=1733)	(n=26)	(n=482)			
Hosting social connection events for adults (e.g., book	95.6%	1.5%	12.5%			
discussion groups, gaming, etc.)	(n=1716)	(n=27)	(n=225)			
Hosting maker events (e.g., Arduino, Design Thinking,	99.3%	4.3%	21.6%			
3-D printing, etc.)	(n=558)	(n=24)	(n=121)			
Hosting hackathons or other coding/app development						
events (e.g., using open data, app program	97.9%	4.2%	24.1%			
development)	(n=232)	(n=10)	(n=57)			
Other	100.0%					
Ullei	(n=20)					
Kev: · no data to report						

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figure 64: Community, Civic Engagement, and E-Government Programs offered to Patrons, by Format – Suburban

	Suburban			
Community, Civic Engagement, and E-Government	Formal program/session	Individual help by appointment	Informal point of use	
Assisting patrons to access and use online government (e-government) programs and services (e.g., completing				
online forms, Medicare, Immigration, Social Security, Taxes)	32.6% (n=1102)	29.1% (n=983)	91.9% (n=3102)	
Hosting community engagement events (e.g., candidate forums, community conversations)	88.2% (n=1843)	5.5% (n=114)	17.5% (n=366)	
Hosting social connection events for young adults (e.g., manga/anime, gaming, book discussion groups, etc.)	81.8% (n=2743)	2.2% (n=74)	26.4% (n=885)	
Hosting social connection events for adults (e.g., book	96.8%	2.0% (n=62)	11.2%	
Hosting maker events (e.g., Arduino, Design Thinking,	98.3%	6.0%	(n=343) 17.0% (n=162)	
Hosting hackathons or other coding/app development	(11-936)	(1-57)	(11-102)	
events (e.g., using open data, app program development)	97.3% (n=291)	6.4% (n=19)	12.7% (n=38)	
Other	100.0% (n=54)	9.3% (n=5)	53.7% (n=29)	
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.				



Figure 65: Community, Civic Engagement, and E-Government Programs offered to Patrons, by Format – Town

		Town	
Community, Civic Engagement, and E-Government	Formal program/session	Individual help by appointment	Informal point of use
Assisting patrons to access and use online government (e-government) programs and services (e.g., completing online forms, Medicare, Immigration, Social Security, Taxes)	29.2% (n=768)	31.3% (n=823)	84.2% (n=2213)
Hosting community engagement events (e.g., candidate forums, community conversations)	87.7% (n=1232)	9.1% (n=128)	18.4% (n=259)
Hosting social connection events for young adults (e.g., manga/anime, gaming, book discussion groups, etc.)	84.2% (n=1565)	4.7% (n=87)	24.2% (n=449)
Hosting social connection events for adults (e.g., book discussion groups, gaming, etc.)	95.2% (n=2007)	6.1% (n=129)	13.8% (n=290)
Hosting maker events (e.g., Arduino, Design Thinking, 3-D printing, etc.)	96.4% (n=511)	11.1% (n=59)	32.8% (n=174)
Hosting hackathons or other coding/app development events (e.g., using open data, app program development)	100.0% (n=75)	30.7% (n=23)	37.3% (n=28)
Other	100.0% (n=76)		
Key: : no data to report			



Figure 66: Community, Civic Engagement, and E-Government Programs offered to Patrons, by Format – Rural

		Rural	
Community, Civic Engagement, and E-Government	Formal program/session	Individual help by appointment	Informal point of use
Assisting patrons to access and use online government (e-government) programs and services (e.g., completing online forms, Medicare, Immigration, Social Security,	24.4%	22.6%	87.5%
Hosting community engagement events (e.g., candidate forums, community conversations)	86.5% (n=1681)	5.8% (n=113)	(n=3916) 17.0% (n=330)
Hosting social connection events for young adults (e.g., manga/anime, gaming, book discussion groups, etc.)	76.5% (n=2098)	4.6% (n=126)	29.9% (n=820)
Hosting social connection events for adults (e.g., book discussion groups, gaming, etc.)	90.2% (n=2896)	5.0% (n=159)	14.1% (n=452)
Hosting maker events (e.g., Arduino, Design Thinking, 3-D printing, etc.)	96.2% (n=457)	2.1% (n=10)	34.3% (n=163)
events (e.g., using open data, app program development)	97.3% (n=71)	2.7% (n=2)	31.5% (n=23)
Other	100.0% (n=137)		
Key: : no data to report			



Figure 67: Providers of Community, Civic Engagement, and E-Government Programs offered to Patrons – Overall

	Overall			
Community, Civic Engagement, and E-Government	Library Staff	Volunteers	Partner Organization	
Assisting patrons to access and use online government (e-				
government) programs and services (e.g., completing online	85.4%	17.2%	47.0%	
forms, Medicare, Immigration, Social Security, Taxes)	(n=5233)	(n=1051)	(n=2880)	
Hosting community engagement events (e.g., candidate	59.2%	20.4%	60.9%	
forums, community conversations)	(n=3618)	(n=1248)	(n=3725)	
Hosting social connection events for young adults (e.g.,	94.9%	18.4%	12.7%	
manga/anime, gaming, book discussion groups, etc.)	(n=7801)	(n=1516)	(n=1047)	
Hosting social connection events for adults (e.g., book	89.7%	19.7%	13.1%	
discussion groups, gaming, etc.)	(n=8727)	(n=1918)	(n=1274)	
Hosting maker events (e.g., Adruino, Design Thinking, 3-D	89.3%	21.9%	34.6%	
printing, origami, etc.)	(n=2229)	(n=547)	(n=862)	
Hosting hackathons or other coding/app development events	79.0%	19.0%	61.8%	
(e.g., using open data, app program development)	(n=528)	(n=127)	(n=412)	
Othor	75.3%	1.7%	34.7%	
Other	(n=217)	(n=5)	(n=100)	
Will not total 100% as categories are not mutually exclusive. Table only displays percentages for affirmative responses				

Figure 67 shows which organizations conducted community, civic engagement, and E-government programs offered to patrons. Overall, library staff is most likely to offer all types of these events, and partner organizations are generally more likely than volunteers to conduct these programs. Generally, programs that require specialized technical or community knowledge are more likely to be conducted by partner organizations than volunteers. 60.9 percent of libraries that host community engagement events, such as candidate forums and community conversations, work with outside groups to do so. Likewise, 79.0 percent of libraries that offer hackathons use their own staff to coordinate these events, but 61.8 percent of locations work with partner organizations.



Figure 68: Providers of Community, Civic Engagement, and E-Government Programs offered to Patrons – City

		City		
Community, Civic Engagement, and E-Government	Library Staff	Volunteers	Partner Organization	
Assisting patrons to access and use online government (e-				
government) programs and services (e.g., completing online	82.4%	19.0%	63.5%	
forms, Medicare, Immigration, Social Security, Taxes)	(n=1008)	(n=232)	(n=777)	
Hosting community engagement events (e.g., candidate	68.2%	19.3%	70.1%	
forums, community conversations)	(n=809)	(n=229)	(n=833)	
Hosting social connection events for young adults (e.g.,	98.2%	20.4%	16.2%	
manga/anime, gaming, book discussion groups, etc.)	(n=1702)	(n=354)	(n=281)	
Hosting social connection events for adults (e.g., book	91.8%	13.3%	14.9%	
discussion groups, gaming, etc.)	(n=1575)	(n=229)	(n=255)	
Hosting maker events (e.g., Adruino, Design Thinking, 3-D	93.4%	25.6%	47.6%	
printing, origami, etc.)	(n=521)	(n=143)	(n=265)	
Hosting hackathons or other coding/app development events	95.3%	9.1%	81.0%	
(e.g., using open data, app program development)	(n=221)	(n=21)	(n=187)	
Othor	100.0%			
	(n=20)			
Key: : no data to report				
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.				

Figures 68 to 72 show which organizations conducted community, civic engagement, and E-government programs offered to patrons broken down by locale. Following overall trends in this survey, city locations are the most likely to partner with outside organizations to provide services. 70.1 percent of city libraries that host community engagement events and 63.5 percent of such locations that help patrons access and use online government services do so through partnerships with outside organizations. By comparison, 53.3 of rural libraries that offer community engagement events do so with partner groups, and 35.9 of rural locations that help patrons find and use Internet based government services work with outside organizations to do so.



Figure 69: Providers of Community, Civic Engagement, and E-Government Programs offered to Patrons – Suburban

	Suburban			
Community, Civic Engagement, and E-Government	Library Staff	Volunteers	Partner Organization	
Assisting patrons access to and use online government (e-				
government) programs and services (e.g., completing online	82.7%	22.6%	49.9%	
forms, Medicare, Immigration, Social Security, Taxes)	(n=1433)	(n=392)	(n=865)	
Hosting community engagement events (e.g., candidate forums,	61.8%	19.5%	59.9%	
community conversations)	(n=1167)	(n=368)	(n=1131)	
Hosting social connection events for young adults (e.g.,	94.4%	17.5%	15.0%	
manga/anime, gaming, book discussion groups, etc.)	(n=2599)	(n=481)	(n=414)	
Hosting social connection events for adults (e.g., book discussion	93.5%	17.0%	12.6%	
groups, gaming, etc.)	(n=2795)	(n=508)	(n=378)	
Hosting maker events (e.g., Adruino, Design Thinking, 3-D	88.8%	15.8%	37.6%	
printing, origami, etc.)	(n=846)	(n=151)	(n=358)	
Hosting hackathons or other coding/app development events	69.1%	25.3%	60.1%	
(e.g., using open data, app program development)	(n=201)	(n=74)	(n=175)	
Othor	100.0%	9.3%	53.7%	
	(n=54)	(n=5)	(n=29)	
Will not total 100%, as categories are not mutually exclusive. Table	only displays percentad	es for affirmative res	ponses.	

Figure 70: Organizations Conducting Community, Civic Engagement, and E-government Programs offered to Patrons – Town

	Town			
Community, Civic Engagement, and E-Government	Library Staff	Volunteers	Partner Organization	
Assisting patrons access and use online government (e-				
government) programs and services (e.g., completing online	89.7%	12.4%	43.4%	
forms, Medicare, Immigration, Social Security, Taxes)	(n=1197)	(n=165)	(n=580)	
Hosting community engagement events (e.g., candidate forums,	55.5%	14.0%	64.3%	
community conversations)	(n=715)	(n=181)	(n=830)	
Hosting social connection events for young adults (e.g.,	96.2%	18.1%	11.6%	
manga/anime, gaming, book discussion groups, etc.)	(n=1524)	(n=287)	(n=184)	
Hosting social connection events for adults (e.g., book discussion	84.8%	22.3%	13.2%	
groups, gaming, etc.)	(n=1734)	(n=456)	(n=270)	
Hosting maker events (e.g., Adruino, Design Thinking, 3-D	91.6%	23.5%	17.7%	
printing, origami, etc.)	(n=481)	(n=123)	(n=93)	
Hosting hackathons or other coding/app development events	70.7%	34.7%	14.7%	
(e.g., using open data, app program development)	(n=53)	(n=26)	(n=11)	
Othor	84.2%		15.8%	
Other	(n=64)		(n=12)	
Key: : no data to report				



Figure 71: Providers of Community, Civic Engagement, and E-Government Programs offered to Patrons – Rural

	Rural				
Community, Civic Engagement, and E-Government	Library Staff	Volunteers	Partner Organization		
Assisting patrons to access and use online government (e-					
government) programs and services (e.g., completing online	87.0%	14.3%	35.9%		
forms, Medicare, Immigration, Social Security, Taxes)	(n=1595)	(n=262)	(n=658)		
Hosting community engagement events (e.g., candidate	53.1%	26.9%	53.3%		
forums, community conversations)	(n=927)	(n=470)	(n=931)		
Hosting social connection events for young adults (e.g.,	92.0%	18.3%	7.8%		
manga/anime, gaming, etc.)	(n=1976)	(n=394)	(n=168)		
Hosting social connection events for adults (e.g., book	88.1%	24.3%	12.5%		
discussion groups, gaming, etc.)	(n=2623)	(n=725)	(n=371)		
Hosting maker events (e.g., Adruino, Design Thinking, 3-D	82.6%	28.2%	31.7%		
printing, origami, etc.)	(n=381)	(n=130)	(n=146)		
Hosting hackathons or other coding/app development events	75.7%	8.5%	55.7%		
(e.g., using open data, app program development)	(n=53)	(n=6)	(n=39)		
Othor	57.2%		42.8%		
Other	(n=79)		(n=59)		
Key: : no data to report;					



Figure 72: E-government Services Provided to Patrons in the last 12 months, by Locale					
5			Locale Code)	
E-Government Services	City	Suburban	Town	Rural	Overall
Creating open data repositories for local					
government data (e.g., crime, education,	13.3%	11.2%	7.9%	5.5%	8.8%
transportation, or other local data)	(n=284)	(n=377)	(n=207)	(n=245)	(n=1113)
Accessing and using government programs and					
services (e.g., Medicare, Social Security,	88.7%	85.1%	85.3%	81.6%	84.5%
InfoPass)	(n=1893)	(n=2871)	(n=2241)	(n=3651)	(n=10656)
Completing online government forms (e.g., social	86.7%	82.8%	87.2%	83.4%	84.6%
services, immigration, tax)	(n=1851)	(n=2795)	(n=2291)	(n=3732)	(n=10669)
Accessing government information resources					
(e.g., USA.gov, FedSys, state government	86.3%	86.0%	75.7%	74.0%	79.7%
documents)	(n=1843)	(n=2902)	(n=1990)	(n=3311)	(n=10046)
Other		*	*	*	*

Key: --- : no data to report; * : insufficient data to report.

Will not total 100%, as categories are not mutually exclusive

Table only displays percentages for affirmative responses. Includes programs or services that library partners provide/offer as well as those offered by library staff

As noted in Figure 61, 75.6 percent of public libraries in the United States assist patrons with accessing and using online government services. Figure 72 shows the types of services these libraries offer. There is relatively little variance across different locales for certain services. 84.6 percent of libraries that assist patrons with E-government services provide guidance in completing online government forms, ranging from a high of 87.2 percent for town libraries versus a low of 82.8 percent for suburban locations. Meanwhile, 88.7 percent of city libraries that assist patrons with accessing and using online government services help patrons find and use government services such as Medicare and Social Security, making them the most likely to offer such assistance. 81.6 percent of these rural libraries offer such services, making them the least likely to do so.



Figure 73: Health and Wellness Programs offered to Patrons, by Locale Code						
		Locale Code				
Health and Wellness	City	Suburban	Town	Rural	Overall	
Locating and evaluating free health information	71.4%	66.9%	59.5%	45.1%	57.7%	
online (e.g. MedlinePlus, Mayo Clinic)	(n=1838)	(n=2929)	(n=1961)	(n=2903)	(n=9631)	
Using subscription health and wellness						
database(s) (e.g., EBSCO Consumer Health						
Complete, Salem Health, Gale Health &	74.5%	67.6%	58.7%	39.8%	56.2%	
Wellness Center)	(n=1918)	(n=2959)	(n=1936)	(n=2567)	(n=9380)	
Identifying health insurance resources (e.g.						
through public agencies or private providers, or						
the Affordable Care Act	76.8%	70.3%	57.8%	46.0%	59.4%	
marketplace/exchanges)	(n=1976)	(n=3074)	(n=1906)	(n=2963)	(n=9919)	
Understanding specific health or wellness topics						
(e.g. developing healthy lifestyles, managing a	59.6%	58.9%	45.0%	37.8%	48.1%	
health condition or disease)	(n=1533)	(n=2578)	(n=1484)	(n=2439)	(n=8034)	
Bringing in healthcare providers to offer limited						
healthcare screening services at the library	27.4%	26.6%	16.9%	9.2%	18.1%	
(e.g., weighing, blood pressure tests)	(n=705)	(n=1165)	(n=559)	(n=590)	(n=3019)	
Offering fitness classes (e.g., Zumba, Yoga, Tai	31.8%	33.9%	20.4%	12.6%	22.7%	
Chi, other)	(n=818)	(n=1482)	(n=674)	(n=810)	(n=3784)	
Other	1.9%					
Other	(n=50)	*	*	*	*	
Kev: * : insufficient data to report.						

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figure 73 provides a more detailed breakdown of the health and wellness programs public library locations offered to patrons during the preceding twelve months. Libraries are more likely to offer all types of health-related services, with the exception of fitness classes, if the locations have a greater population base. 59.4 percent of public libraries offer assistance with finding insurance providers, which is particularly important in the wake of the launch of Affordable Care Act (ACA) regulations. 76.8 percent of city libraries assist with such matters versus 46.0 percent of rural libraries, showing considerable differences between the availability of such services based on locale. Likewise, 74.5 percent of city libraries help patrons with subscription-based health databases and 71.4 percent offer guidance in finding free health information online, while for rural libraries this declines to 39.8 percent and 45.1 percent, respectively.



Figure 74: Health and Wellness Programs offered to Patrons, by Format – Overall					
		Overall			
Health and Wellness	Formal program/session	Individual help by appointment	Informal point of use		
Locating and evaluating <i>free</i> health information online (e.g. MedlinePlus, Mayo Clinic)	7.8% (n=753)	19.7% (n=1893)	92.8% (n=8934)		
Using <i>subscription</i> health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	7.9% (n=744)	18.0% (n=1690)	93.1% (n=8730)		
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	30.8% (n=3056)	22.9% (n=2273)	77.7% (n=7708)		
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	32.3% (n=2594)	11.2% (n=902)	77.8% (n=6254)		
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	63.5% (n=1915)	11.6% (n=350)	34.8% (n=1050)		
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	75.3% (n=2851)	2.7% (n=101)	26.4% (n=998)		
Other	73.0% (n=84)	26.1% (n=30)	27.0% (n=31)		
Will not total 100%, as categories are not mutually exclusi	ve.		, , ,		
Table only displays percentages for affirmative responses.					

Figure 74 shows that health and wellness services in public libraries are more likely to be offered on an asneeded basis if they require less specialized knowledge. Libraries that offer assistance with finding subscription and free health information do so through informal point of use training by 93.1 percent and 92.8 percent of libraries, respectively, versus less than 8.0 percent of these libraries providing such services through formal sessions. Library employees are slightly less likely to use informal point of use interactions if they offer assistance with identifying health insurance resources (77.7 percent) and understanding specific health and wellness topics (77.8 percent), while 30.8 and 32.3 percent of locations, respectively, offer these activities through formal programs.



Figure 75: Health and Wellness Programs offered to Patrons, by Format – City					
		City			
Health and Wellness	Formal program/session	Individual help by appointment	Informal point of use		
Locating and evaluating <i>free</i> health information online (e.g. MedlinePlus, Mayo Clinic)	11.0% (n=202)	18.0% (n=330)	96.1% (n=1766)		
Using subscription health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	7.7% (n=148)	13.8% (n=265)	95.0% (n=1822)		
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	38.8% (n=767)	20.2% (n=400)	80.7% (n=1594)		
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	33.7% (n=516)	7.0% (n=108)	78.3% (n=1200)		
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	65.0% (n=458)	19.1% (n=135)	27.7% (n=195)		
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	75.7% (n=619)		25.6% (n=209)		
Other	41.2% (n=21)	58.8% (n=30)	58.8% (n=30)		
Key: : no data to report					

Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.

Figures 75 through 78 show that informal point of use interactions are the preferred means for providing basic health information and there is relatively little variance between locales. City libraries that assist patrons with free and subscription health Websites are the more likely than their less populated counterparts to do so on an as-needed basis, with 96.1 and 95.0 providing such services. Rural libraries that offer these services are the least likely to do so through informal point of use interactions, with 88.5 percent and 90.9 percent of locations doing so. Much greater differences are seen in how libraries assist patrons with identifying health insurance resources, whether through public agencies, private providers, or Affordable Care Act (ACA) exchanges. 38.8 percent of city libraries provide these types of services through formal programs, versus 30.3 percent of suburban locations, 31.8 percent of town locations, and 25.4 percent of rural libraries.



Figure 76: Health and Wellness Programs offered to Patrons, by Format – Suburban				
		Suburban		
Health and Wellness	Formal program/session	Individual help by appointment	Informal point of use	
Locating and evaluating free health information online (e.g. MedlinePlus, Mayo Clinic)	6.8% (n=199)	20.5% (n=600)	95.9% (n=2809)	
Using subscription health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	7.1% (n=211)	21.3% (n=629)	94.8% (n=2806)	
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	30.3% (n=931)	19.7% (n=606)	80.5% (n=2475)	
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	38.0% (n=980)	11.8% (n=303)	74.3% (n=1916)	
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	63.1% (n=735)	8.0% (n=93)	37.9% (n=442)	
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	76.0% (n=1127)	1.6% (n=24)	25.6% (n=379)	
Other	50.0% (n=1)		50.0% (n=1)	
Key: : no data to report				



Figure 77: Health and Wellness Programs offered to Patrons, by Format – Town				
		Town		
Health and Wellness	Formal program/session	Individual help by appointment	Informal point of use	
Locating and evaluating <i>free</i> health information online (e.g. MedlinePlus, Mayo Clinic)	8.5% (n=167)	20.6% (n=404)	91.3% (n=1791)	
Using subscription health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	12.0% (n=232)	16.3% (n=316)	91.3% (n=1768)	
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	31.8% (n=605)	28.6% (n=545)	72.9% (n=1390)	
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	34.4% (n=511)	12.9% (n=192)	81.9% (n=1216)	
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	66.4% (n=371)	9.1% (n=51)	34.4% (n=192)	
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	75.9% (n=511)	5.6% (n=38)	30.0% (n=202)	
Other	100.0% (n=5)			
Key: : no data to report	vo. Tablo only displays p	proontagos for affirmativo	raspansas	



Figure 78: Health and Wellness Programs offered to Patrons, by Format – Rural					
		Rural			
Health and Wellness	Formal program/session	Individual help by appointment	Informal point of use		
Locating and evaluating <i>free</i> health information online (e.g. MedlinePlus, Mayo Clinic)	6.4% (n=185)	19.3% (n=559)	88.5% (n=2568)		
Using <i>subscription</i> health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	6.0% (n=153)	18.7% (n=480)	90.9% (n=2334)		
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	25.4% (n=753)	24.4% (n=722)	75.9% (n=2249)		
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	24.1% (n=587)	12.3% (n=299)	78.8% (n=1922)		
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	59.9% (n=351)	12.1% (n=71)	37.7% (n=221)		
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	73.3% (n=594)	4.8% (n=39)	25.7% (n=208)		
Other	100.0% (n=57)				
Key: : no data to report Will not total 100%. as categories are not mutually exclusi	ve. Table only displays pe	ercentages for affirmative	responses.		



Figure 79: Providers of Health and Wellness Programs offered to Patrons – Overall				
	Overall			
Health and Wellness	Library Staff	Volunteers	Partner Organization	
Locating and evaluating free health information online (e.g. MedlinePlus, Mayo Clinic)	90.7% (n=2138)	7.3% (n=172)	20.2% (n=476)	
Using <i>subscription</i> health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	96.5% (n=2086)	6.2% (n=133)	8.6% (n=186)	
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	53.6% (n=2407)	13.3% (n=597)	75.0% (n=3366)	
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	50.9% (n=1612)	16.1% (n=511)	68.8% (n=2178)	
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	20.5% (n=433)	14.5% (n=307)	88.8% (n=1876)	
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	28.7% (n=828)	35.4% (n=1022)	59.7% (n=1723)	
Other	28.1% (n=32)	6.1% (n=7)	66.1% (n=76)	
Will not total 100%, as categories are not mutually exclusive. Tak	ole only displays percei	ntages for affirmative	e responses.	

Figure 79 delves deeper into the topic of health and wellness programming in public library locations by clarifying who exactly offers such programming. Partner organizations play an important role in health and wellness library programming provision, especially when it comes to the most commonly offered health related service, identifying health insurance resources; 75.0 percent of libraries that offer such services work with partner organizations, while 53.6 percent rely on library staff. In 76.1 percent of overall libraries, library staff serves as the primary service provider for accessing, assessing, and using online health information. When it comes to developing understanding of specific health and wellness topics, 68.8 percent of overall libraries rely on partners, while 50.9 percent expect library staff to provide such programming.



Figure 80: Providers of Health and Wellness Programs offered to Patrons – City							
	City						
Health and Wellness	Library Staff	Volunteers	Partner Organization				
Locating and evaluating free health information online (e.g.	88.4%	12.3%	28.8%				
MedlinePlus, Mayo Clinic)	(n=411)	(n=57)	(n=134)				
Using <i>subscription</i> health and wellness database(s) (e.g.,							
EBSCO Consumer Health Complete, Salem Health, Gale	95.6%	6.9%	15.7%				
Health & Wellness Center)	(n=347)	(n=25)	(n=57)				
Identifying health insurance resources (e.g. through public							
agencies or private providers, or the Affordable Care Act	50.6%	14.5%	85.1%				
marketplace/exchanges)	(n=477)	(n=137)	(n=802)				
Understanding specific health or wellness topics (e.g.							
developing healthy lifestyles, managing a health condition or	38.3%	15.4%	74.2%				
disease)	(n=226)	(n=91)	(n=438)				
Bringing in healthcare providers to offer limited healthcare							
screening services at the library (e.g., weighing, blood	29.1%	13.0%	89.9%				
pressure tests)	(n=161)	(n=72)	(n=498)				
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	19.1%	40.5%	66.6%				
	(n=118)	(n=251)	(n=412)				
Other	58.8%		41.2%				
	(n=30)		(n=21)				
Key: : no data to report.							
Will not total 100% as categories are not mutually exclusive. Tak	nla only displays narcai	ntanos for affirmativ	a rasnonsas				

Figures 80 through 83 show the type of individuals or organizations leading health and wellness programs in libraries, broken down by locale. A notable trend is that libraries are likely to reach out to partner organizations for assistance with providing patrons with specialized health information, but the likelihood of this decreases as libraries' population service sizes decline. 85.1 percent of city libraries that help patrons to identify health insurance resources do so with the aide of partner organizations, versus 76.4 percent for both suburban and town locations and 65.0 percent for rural locations. Likewise, 74.2 percent of city libraries to help patrons understand specific health and wellness topics, versus 72.3 percent of suburban locations, 64.9 percent of town locations, and 62.8 percent of rural libraries.



Figure 81: Providers of Health and Wellness Programs offered to Patrons – Suburban							
	Suburban						
Health and Wellness	Library Staff	Volunteers	Partner Organization				
Locating and evaluating free health information online (e.g.	95.8%	6.2%	19.2%				
MedlinePlus, Mayo Clinic)	(n=668)	(n=43)	(n=134)				
Using <i>subscription</i> health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	97.8% (n=716)	5.7% (n=42)	9.4% (n=69)				
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	63.2% (n=813)	15.7% (n=202)	76.4% (n=983)				
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	50.6% (n=570)	19.9% (n=224)	72.3% (n=815)				
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	19.7% (n=149)	15.6% (n=118)	94.3% (n=713)				
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	35.2% (n=397)	31.9% (n=360)	58.8% (n=662)				
Other		100.0% (n=1)					
Key: : no data to report.							

Figure 82: Providers of Health and Wellness Programs offered to Patrons – Town						
	Town					
Health and Wellness	Library Staff	Volunteers	Partner Organization			
Locating and evaluating free health information online (e.g.	90.0%	4.8%	17.9%			
MedlinePlus, Mayo Clinic)	(n=452)	(n=24)	(n=90)			
Using <i>subscription</i> health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	98.1% (n=477)	4.9% (n=24)	4.7% (n=23)			
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	42.8% (n=424)	7.8% (n=77)	76.4% (n=757)			
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	50.4% (n=323)	14.4% (n=92)	64.9% (n=416)			
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	17.4% (n=70)	3.2% (n=13)	92.3% (n=371)			
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	38.7% (n=203)	40.2% (n=211)	51.8% (n=272)			
Other			100.0% (n=5)			
Key: : no data to report. Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.						



Figure 83: Providers of Health and Wellness Programs offered to Patrons – Rural						
	Rural					
Health and Wellness	Library Staff	Volunteers	Partner Organization			
Locating and evaluating <i>free</i> health information online (e.g.	87.5%	6.9%	17.0%			
MedlinePlus, Mayo Clinic)	(n=607)	(n=48)	(n=118)			
Using <i>subscription</i> health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale	94.0%	7.2%	6.4%			
Health & Wellness Center)	(n=546)	(n=42)	(n=37)			
Identifying health insurance resources (e.g. through public						
agencies or private providers, or the Affordable Care Act	54.7%	14.3%	65.0%			
marketplace/exchanges)	(n=693)	(n=181)	(n=824)			
Understanding specific health or wellness topics (e.g.						
developing healthy lifestyles, managing a health condition or	60.9%	12.8%	62.8%			
disease)	(n=493)	(n=104)	(n=509)			
Bringing in healthcare providers to offer limited healthcare						
screening services at the library (e.g., weighing, blood	13.2%	25.9%	73.3%			
pressure tests)	(n=53)	(n=104)	(n=294)			
Offering fitness classes (e.g. Zumba Voga Tai Chi, other)	17.9%	32.4%	61.1%			
Oliening indess classes (e.g., Zumba, Toga, Tai Oli, Ouier)	(n=110)	(n=200)	(n=377)			
Other	3.5%	10.3%	86.2%			
	(n=2)	(n=6)	(n=50)			
Will not total 100%, as categories are not mutually exclusive. Table only displays percentages for affirmative responses.						



Figure 84: Healthcare Screening Services provided to Patrons in the last 12 months, by Locale								
	Locale Code							
Healthcare Screening Services	City Suburban Town Rural Overall							
Providing immunization clinics (e.g., for	9.8%	16.0%	11.4%	20.2%	14.5%			
vaccinations)	(n=69)	(n=186)	(n=64)	(n=119)	(n=438)			
Providing health screening services (e.g., blood	44.4%	35.4%	44.6%	30.0%	38.1%			
pressure, blood sugar, obesity)	(n=313)	(n=412)	(n=249)	(n=177)	(n=1151)			
Providing assistance with mental health issues	22.1%	18.9%	12.9%	13.2%	17.4%			
(e.g., social, behavioral, emotional needs)	(n=156)	(n=220)	(n=72)	(n=78)	(n=526)			
Providing diet and nutrition counseling services	30.1%	23.7%	21.5%	21.7%	24.4%			
(e.g., weight management, meal planning)	(n=212)	(n=276)	(n=120)	(n=128)	(n=736)			
Providing referrals to appropriate health and/or	48.9%	30.7%	34.1%	25.9%	34.6%			
social service agencies	(n=345)	(n=358)	(n=190)	(n=153)	(n=1046)			
Othor	1.4%	1.1%	2.5%	3.9%	2.0%			
	(n=10)	(n=13)	(n=14)	(n=23)	(n=60)			

Will not total 100%, as categories are not mutually exclusive

Table only displays percentages for affirmative responses. Includes programs or services that library partners provide/offer as well as those offered by library staff

As noted in Figure 73, 18.1 percent of public libraries in the United States provide some form of healthcare screening services. Figure 84 shows the types of healthcare screening services offered by these locations. The provision of these types of services in libraries is not currently a major trend, with health screenings for blood pressure, blood sugar, and obesity being the most commonly available. 38.1 percent of locations that provide some form of healthcare screening services support these types of activities. Likewise, 34.6 percent of these libraries provide referrals to health or social service agencies for patron needs. City libraries are the most likely to offer these referral services, with nearly half (48.9 percent) doing so, while rural libraries are the least likely to do so, with just over a quarter (25.9 percent) of locations assisting patrons with these matters. While city libraries that offer healthcare screenings are the most likely to provide a wider range of such services, a notable exception is immunization clinics, with 20.2 percent of rural locations hosting these events versus 9.8 percent of city locations.



Appendix A. Advisory Committee

Stacey Aldrich

Deputy Secretary for Libraries Office of Commonwealth Libraries Pennsylvania Department of Education

Andrea Berstler Past-President, Association for Rural & Small Libraries Director, Wicomico Public Library

Diane Carty Director Massachusetts Board of Library Commissioners

Mike Crandall Senior Lecturer University of Washington iSchool

Denise Davis Deputy Library Director Sacramento Public Library

Chrystie Hill Director, WebJunction Community Services

Michael Golrick State Library of Louisiana

Susan Mark Wyoming State Library

Jeremy Paley Senior Program Officer Global Libraries Bill & Melinda Gates Foundation

Charlie Parker Executive Director, Tampa Bay Library Consortium Scott Reinhart Assistant Director for Operations Carroll County Public Library

John Windhausen President, Telepoly

Liaison Carlos A. Manjarrez Director of Planning, Research and Evaluation Institute of Museum and Library Services



Appendix B. Detailed Weighting and Adjustments for Non-Response

The response rate of the libraries in the sample is 44.4%. To mitigate non-response biases, the survey deployed weighting techniques as described below.

Response propensity weighting

The notion of response propensity weighting is that there are inherent reasons as to why a respondent may participate in a survey and thus there is a need to balance those responses against those characteristics of non-responding respondents. We predict the response propensity by using a logistic regression model, given that the indicator of responding can be regarded as a dummy variable, and the auxiliary variables available for the full sample are applied as predictors. The predictive response propensity that we get from the logistic model will distribute from 0 to 1, and the response weight would be the inverse of the predicted response propensity.

Thus, the model of response propensity of library *i* is:

 $Pr\{Y_{i}=1\} = \frac{exp (\beta_{0} + \beta_{1} \dot{x}_{1i} + \beta_{2} \dot{x}_{2i} + \dots + \beta_{p} \dot{x}_{pi})}{1 + exp (\beta_{0} + \beta_{1} \dot{x}_{1i} + \beta_{2} \dot{x}_{2i} + \dots + \beta_{p} \dot{x}_{pi})}$

In this study, there are five library-specific auxiliary variables that serve as predictors of response propensity: *region of the library, location, size, MCA type,* and *outlet type*. Stepwise regression was used to select predictors that are significant at the 95% confidence level from among all five candidates.

Nationwide response propensity model

We first build a nationwide response propensity model for all of the libraries in the sample, and all five auxiliary variables are significant in this model at the 95% confidence level. The nationwide nonresponse adjustments are the inverses of the predictive response propensities for each responding library based on this model.

Expected precision

After obtaining the response propensity weights for each library, estimates for features of the distributions (means, proportions) were made using three variables from the survey, *wait, ttypecompind* and *civicformal*, using alternative forms of the weights. We also accounted for the sampling strata (*location*), when estimating the variances of the estimated descriptive parameters:

$$\bar{y} = \frac{\sum_{i=1}^{I} (y_i * W_i)}{\sum_{i=1}^{I} W_i}$$

Two estimates were computed: one using only unadjusted sampling weights, which are the inverses of the selection probabilities for each state, and one using the combined final weights (Final weight = sampling weight * response propensity adjustment). The standard errors of the estimated means were calculated so that confidence intervals for the means could be computed.



Appendix C. Copy of 2014 Digital Inclusion Survey

The 2014 Digital Inclusion Survey was entirely Web-based. The following pages include the "print" version of the survey that the study team made available to respondents via the survey Website for their information and use as a worksheet. The "printed" version includes all questions, but the Web-based survey had automatic branching features that guided the respondents through the survey dependent upon answers selected to questions (e.g., often a "yes" response to one question or part of a question would lead to an ensuing questions, whereas a "no" or "don't know" response might lead to skipped questions; glossary items were embedded at the question level, not in a central glossary). In short, it is difficult to recreate a Web-based survey in a print format. However, the questions and responses are provided here for review purposes.

50 East Huron Street Chicago, Illinois 60611-2795 USA Telephone (312) 944-6780 Fax (312) 440-9374 TDD (312) 944-7298 E-mail: ala@ala.org http://www.ala.org

ALAAmericanLibraryAssociation

September 17, 2014

Dear Library Director:

Actionable data is something every manager seeks to improve services and educate decision makers. I am proud the American Library Association supports timely, relevant research that documents the impact of libraries in the Digital Age, as well as the development of resources that leverage such research.

I am reaching out to you today about one such critical study – the Digital Inclusion Survey. Funded by the Institute of Museum and Library Services – 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 national survey of public libraries explores four key areas of digital inclusion:

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

Media outlets ranging from *Wall Street Journal* to *Fast Company* to *Government Technology* have used survey findings from 2013. ALA also is already using this new data in its advocacy efforts to secure additional funding for the E-rate program, enabling public libraries to benefit from funding opportunities related to workforce development and adult education, and sharing it at the ICMA annual conference. Thank you to everyone who participated last year and helped to make this possible. The survey had a 70% response rate last year, include responses from libraries of all sizes and in all 50 states. *Your participation in the research is what makes the data powerful and actionable.*

The ALA and iPAC also are developing resources to enable easy use by public library leaders at the local, state and national levels—including new interactive mapping tools, issues briefs, state reports, infographics and more. Links to these tools can be found at <u>http://www.ala.org/research/digitalinclusion</u> and <u>http://digitalinclusion.umd.edu</u>.

Thank you in advance for joining this important work. We believe it directly benefits our nation's public libraries in a range of important ways, and we look forward to sharing the results of the survey and data tools beginning in 2015.

PLEASE COMPLETE THE SURVEY(S) by November 21, 2014.

Kind Regards,

Keith Michael Fiels



2014 Digital Inclusion Survey of Public Libraries

With funding support from the Institute of Museum and Library Services (IMLS), the American Library Association (ALA), the Information Policy & Access Center (iPAC) at the University of Maryland, and the International City/County Management Association (ICMA) are surveying a national sample of public libraries regarding their role as builders of digitally inclusive communities. You may access the survey at http://digitalinclusion.umd.edu.

The survey Website provides specific instructions for completing the Web survey. The survey contains questions about public access technology infrastructure, technology instruction, and programming that public libraries make available to their communities at specific library locations (if applicable, as we realize that not all public libraries have more than one building open to the public). By location, we mean a building that is open to the public and provides services to the community (e.g., lends books, offers public access to the Internet and computers, other). The research team randomly selected libraries to form a survey sample, and the data from these sampled libraries will form the basis of our national and state reports. However, if you complete the survey for additional locations then we will use those data for our interactive digital inclusion map (http://digitalinclusion.umd.edu/content/interactive-map).

IMPORTANT: We have also incorporated a speed test to measure the connectivity experience at the user device level. PLEASE COMPLETE THE SURVEY AND THE SPEED TEST. Also, please note that we do not contact locations directly to solicit survey participation.

Complete the survey, and enter to win one of three Amazon Kindle Fire HD Tablets

To participate in the survey, please go to **http://digitalinclusion.umd.edu** and follow the "Take the Survey" button. You will need to enter your library's survey ID number (located on the back of the postcard form sent to your library). If you cannot remember and/or locate your library's survey ID number, the survey Website provides a link to locate your library ID by state.

The survey is not timed. You may complete part of it, save your answers, and return to it at a later time. You may also answer part of the survey and have other members of your library staff answer other parts, if appropriate. Please be sure to complete the survey by **NOVEMBER 21, 2014**. Once completed, you will be able to print or save the answers you provided and keep a copy for your own records.

Some questions will appear differently online than on this "print" version of the survey. Also, where you see "please go to question..." phrasing, note that such branching is automatic on the Web survey.

If you have any questions or issues regarding the survey, **please call (301) 405-9445 or e-mail ipac@umd.edu**.







Funded by:



Section A: Public Access Technology and Infrastructure

1. Is THIS LIBRARY LOCATION currently open to the public? (MARK ONE ● ONLY)

0	Yes the location is open to the public at this time (please go to question 2)
0	No, the location is closed to the public at this time (e.g., temporarily closed for renovation or
	permanently closed and will not reopen) (survey concluded, thank you)

2. In what year did THIS LIBRARY LOCATION open? (please specify):

	Year: (e.g., 1975)
0	Don't Know

3. Was THIS LIBRARY LOCATION **renovated within the last five (5) years** (e.g., added/enhanced a digital media production lab, added/enhanced maker spaces, upgraded electric supply)? (MARK ONE ● ONLY)

0	Yes (please go to question 4)
0	No (please go to question 5)
0	Don't Know (please go to question 5)

4. Please identify the renovations that occurred at THIS LIBRARY LOCATION within the last five (5) years: (MARK ALL ● THAT APPLY)

Building Renovations	Yes	No	Don't Know
Enhanced/added general use space (e.g., reading spaces, sitting spaces)	0	0	0
Enhanced/added meeting rooms/meeting spaces for public use (e.g., for community members to reserve and use)	0	0	0
Enhanced/added auditorium or large space (e.g., for the library to host events or community members to reserve and use)	0	0	0
Enhanced/added maker space (e.g., for the library or community members to host maker events)	0	0	0
Enhanced/added digital media production lab (e.g., for the creation and editing of digital content)	0	0	0
Enhanced/added work/office spaces for business users (e.g., co- working spaces, mobile office spaces)	0	0	0
Upgraded physical plant (e.g., electric supply, additional electrical outlets, network capacity)	0	0	0
Other (please specify):	0	0	0

5. Please assess the *adequacy* of THIS LIBRARY LOCATION's **building** in terms of the below criteria: (MARK ALL ● THAT APPLY)

Building Infrastructure	Poor	Fair	Good	Excellent	Don't Know
Availability of general use space (e.g., reading spaces, sitting spaces)	0	0	0	0	0
Availability of meeting rooms/meeting spaces for public use (e.g., for community members to reserve and use)	0	0	0	0	0
Availability of maker spaces (e.g., for design, prototype, and creation of various works)	0	0	0	0	0
Availability of digital media creation spaces (e.g., for the creation and editing of digital content)	0	0	0	0	0
Availability of work/office spaces for business users (e.g., as co-working spaces, mobile office spaces)	0	0	0	0	0
Adequacy of physical plant (e.g., electric supply, additional electrical outlets, network capacity)	0	0	0	0	0
Other (please specify):	0	0	0	0	0

6. Please indicate the total number and age (4 years old or less; greater than 4 years old) of PUBLIC access computers/laptops available at THIS LIBRARY LOCATION for patron use. If you cannot estimate the ages of the computers, please provide the total number of computers. Note: Include library-provided laptops and multi-purpose computers that allow access to the Internet. Exclude staff access computers/laptops and those that only access the library's Public Access Catalogs.

Number of Public Access Computers/Laptops (please estimate age as of September 1, 2014)

Public access computers/laptops 4 years old or less (*September 1, 2010 or newer*)

Public access computers/laptops more than 4 years old (*from before September 1, 2010*)

TOTAL public access computers/laptops at this location

7. **During a typical day,** do patrons experience wait times to use THIS LIBRARY LOCATION's **public access computers or laptops**? (MARK ONE ● ONLY)

0	Yes
0 1	No
0 I	Don't Know

8. Does THIS LIBRARY LOCATION make available the following **technologies for use by patrons?** (MARK ONE ● FOR EACH TECHNOLOGY)

Technologies for Patron Use	Yes	No	Don't Know
Color printer(s)	0	0	0
Large-format printer(s)	0	0	0
3D printer(s)	0	0	0
Wireless printing	0	0	0
Scanner(s)	0	0	0
Laptop(s)	0	0	0
Tablet computer(s) (e.g., iPads, Chromebooks)	0	0	0
E-reader(s) (e.g., Kindle, Nook)	0	0	0
Early learning technology(ies) (e.g., AWE or tablet computers dedicated to pre-K)	0	0	0
Digital media production lab (e.g., lab with hardware/software for creating videos, scanning content, editing digital photos, etc.)	0	0	0
Recreational gaming console(s) (e.g., Xbox, PlayStation, DS)	0	0	0
Smart technology object(s) (e.g., LittleBits, Arduino)	0	0	0
Digital display(s) (e.g., Christie MicroTiles, digital signage, touch screen displays)	0	0	0
Development technology/ies (e.g., sandbox machines, maker/creator spaces)	0	0	0
Other (please specify):	0	0	0

9. Does THIS LIBRARY LOCATION make available the following technology services or resources for use by patrons? (MARK ● ALL THAT APPLY). *Note: Please mark "yes" for services or resources provided through a state library agency, regional consortia, or other arrangements.*

Technology Services/Resources for Patron Use		No	Don't Know
E-books (e.g., via 3M Cloud Library, Overdrive, or other platform)	0	0	0
Digital media content (e.g., Zinio, freegal, hoopla)	0	0	0
Online homework assistance (e.g., tutor.com)	0	0	0
Online job/employment resources (e.g., Brainfuse, JobNow)	0	0	0
Online language learning (e.g., Mango Languages, powerSpeak)	0	0	0
Online health resources (e.g., EBSCO Consumer Health Complete, Gale Health & Wellness Center)	0	0	0
Video conferencing service(s) (e.g., WebEx, GoToMeeting, Connect)	0	0	0
Print on Demand (POD) (e.g., Espresso Book Machine, Xerox DocuTech)	0	0	0
Mobile device-enabled website (e.g., designed for use by smartphones, tablets)	0	0	0
Mobile apps (e.g., iPhone, iPad, Android) to access library services and resources	0	0	0
Scanned codes (e.g., QR codes)	0	0	0
Other (please specify):	0	0	0

American Library Association, Information Policy & Access Center, and the International City/County Management Association

10. Is wireless (WiFi) Internet access available (e.g., for use with patron laptops, tablets, or other wireless devices) at THIS LIBRARY LOCATION? (MARK ONE ● ONLY)

0	Yes
0	No
0	Don't Know

11. What is **the subscribed DOWNLOAD speed** (e.g., from the library's Internet service provider) of THIS LIBRARY LOCATION's **public access Internet connection?** (ENTER SPEED)

Enter subscribed speed:	 Kilobits per second (kbps) Megabits per second (mbps) 	
	 Gigabits per second (gbps) 	
Information not provided by carrier	0	
Don't know	0	

12. What is **the subscribed UPLOAD speed** (e.g., from the library's Internet service provider) of THIS LIBRARY LOCATION's subscribed **public access Internet connection?** (ENTER SPEED)

Enter subscribed speed:	• Kilobits per second (kbps)
	• Megabits per second (mbps)
	• Gigabits per second (gbps)
Information not provided by carrier	0
Don't know	0

13. Is THIS LIBRARY LOCATION'S public access Internet connection fiber optic? (MARK ONE ● ONLY)

0	Yes
0	No
0	Don't know

14. How often does THIS LIBRARY LOCATION's public Internet service connection speed meet patron needs? (MARK ONE ● ONLY)

0	Rarely (e.g., Web pages consistently take a long time to load, patrons frequently complain about the slowness of the connection)
0	Some of the time (e.g., Web pages take a long time to load at different times in the day, patrons complain about the slowness of the connection at certain times of day)
0	Most of the time (e.g., patrons can access the content that they want when they want it)
0	Don't know

15. Please indicate which below factors affect THIS LIBRARY LOCATION's ability to increase its broadband connectivity: (MARK ALL ● THAT APPLY)

Factors Affecting Broadband	Yes	No	Don't Know
This is the maximum speed available to the library location	0	0	0
The library cannot afford the cost of increasing the location's bandwidth	0	0	0
City/county/other entities make decisions regarding the location's bandwidth	0	0	0
The library does not have the technical knowledge to increase the bandwidth in the location	0	0	0
Other (please specify):	0	0	0

16. Within the past 24 months, was the public access technology-related infrastructure (e.g., added computers, increased broadband, new internal wiring or wireless access points) upgraded at THIS LIBRARY LOCATION? (MARK ONE ● ONLY)

0	Yes (please go to question 17)
0	No (please go to question 19)
0	Don't know (please go to question 19)

17. Within the past 24 months, in what ways was THIS LIBRARY LOCATION's public access technology infrastructure upgraded? (MARK ● ALL THAT APPLY)

Public Access Technology Upgrades		No	Don't Know
The library increased its bandwidth	0	0	0
The library upgraded its internal network (e.g., cabling, routers and/or wireless access points)	0	0	0
The library upgraded firewalls or other security measures	0	0	0
The library added public access computers (desktops)	0	0	0
The library added public access laptops	0	0	0
The library added public access tablets (e.g., iPADs, Galaxy)	0	0	0
The library replaced public access computers (desktops)	0	0	0
The library replaced public access laptops	0	0	0
The library replaced public access tablets (e.g., iPADs, Galaxy)	0	0	0
The library added public access computer lab space	0	0	0
The library set up a mobile computer lab	0	0	0
The library added videoconferencing capacity	0	0	0
Other (please specify):	0	0	0

18. What were **the** *impacts* **of the public access technology infrastructure upgrades** to THIS LIBRARY LOCATION? (MARK ● ALL THAT APPLY)

Upgrade Impacts	Yes	No	Don't Know	Too Soon to Tell
The library was able to decrease wait times for public access computers/laptops/tablets	0	0	0	0
The library was able to increase the speed/quality of the public access internet connection	0	0	0	0
The library was able to add new broadband-enabled services because of bandwidth upgrade (e.g., videoconferencing or streaming media)	0	0	0	0
The library was able to train more patrons in digital literacy skills (e.g., computer use, digital content creation)	0	0	0	0
The library was able to train more patrons in other topics (e.g., job training, seeking health information)	0	0	0	0
The library added videoconferencing capacity to connect patrons remotely (e.g., for training, online classes)	0	0	0	0
The library was able to create new community partnership opportunities (e.g., for health, job creation/training, immigration programs)	0	0	0	0
The library was able to offer more community engagement/networking events (e.g., maker spaces, forums)	0	0	0	0
Other (please specify):	0	0	0	0

19. Does THIS LIBRARY LOCATION have access to **information technology support staff** (e.g., full-time, assigned, contracted)? (MARK ONE ● ONLY)

0	Yes
0	No
0	Don't Know
Section B: Digital Literacy and Training related to Public Access Technologies

20. Did THIS LIBRARY LOCATION offer formal or informal **technology training on the following topics to its patrons in the last 12 months**? (MARK ONE ● FOR EACH TOPIC) *Note: Include technology training that library partners provide/offer as well as those offered by library staff*

Training/Instructional Topics	Yes	No	Don't Know
General computer skills (e.g., how to use a mouse and keyboard)	0	0	0
General computer software use (e.g., word processing, presentation)	0	0	0
General Internet use (e.g., set up e-mail, Web browsing, Web searching)	0	0	0
Using online databases (e.g., EBSCO Biography Collection, InfoTrac Newsstand, Heritage Quest, Tutor.com)	0	0	0
Safe online practices (e.g., privacy, Internet safety)	0	0	0
Social media (e.g., blogging, Twitter, Facebook, YouTube)	0	0	0
General familiarity with new technologies (e.g., digital petting zoo, using e-readers, tablet devices)	0	0	0
Assistive Technology use (e.g., JAWS, Fire Vox, Click-n-Type)	0	0	0
Using video conferencing technologies (e.g., Adobe Connect, GoToMeeting, Skype, Google Hangout)	0	0	0
Web site development (e.g., HTML, Drupal, WordPress)	0	0	0
Digital content creation (e.g., Adobe Premiere Pro, GarageBand, mobile app development, digital photography tools)	0	0	0
Other (please specify):	0	0	0

21. [Branch out question; only applicable response options will show in the online version for the training topics marked "yes" in question 20] For each of the following training topics, what type(s) of training did THIS LIBRARY LOCATION offer to its patrons in the last 12 months? (MARK ALL ● THAT APPLY FOR EACH TOPIC) Note: Include technology training that library partners provide/offer as well as those offered by library staff

Training/Instructional Topics	Formal classes	Individual help by appointment	Informal point of use	Online training materials
General computer skills (e.g., how to use a mouse and keyboard)	0	0	0	0
General computer software use (e.g., word processing, presentation)	0	0	0	0
General Internet use (e.g., set up e-mail, Web browsing, Web searching)	0	0	0	0
Using online databases (e.g., EBSCO Biography Collection, InfoTrac Newsstand, Heritage Quest, Tutor.com)	0	0	0	0
Safe online practices (e.g., privacy, Internet safety)	0	0	0	0
Social media (e.g., blogging, Twitter, Facebook, YouTube)	0	0	0	0
General familiarity with new technologies (e.g., digital petting zoo, using e-readers, tablet devices)	0	0	0	0
Assistive Technology use (e.g., JAWS, Fire Vox, Click-n-Type)	0	0	0	0
Using video conferencing technologies (e.g., Adobe Connect, GoToMeeting, Skype, Google Hangout)	0	0	0	0
Web site development (e.g., HTML, Drupal, WordPress)	0	0	0	0
Digital content creation (e.g., Adobe Premiere Pro, GarageBand, mobile app development, digital photography tools)	0	0	0	0
Other (please specify):	0	0	0	0

22. [Branch out question; only applicable response options will show in the online version for the training topics marked "Formal classes" or "Individual help by Appointment" in question 21] Who conducted the **formal or individual by appointment training class(es)** offered **in the last 12 months**? (MARK ALL ● THAT APPLY FOR EACH OPTION)

Training/Instructional Topics	Library Staff	Volunteer(s)	Partner Organization
General computer skills (e.g., how to use a mouse and keyboard)	0	0	0
General computer software use (e.g., word processing, presentation)	0	0	0
General Internet use (e.g., set up e-mail, Web browsing, Web searching)	0	0	0
Using online databases (e.g., EBSCO Biography Collection, InfoTrac Newsstand, Heritage Quest, Tutor.com)	0	0	0
Safe online practices (e.g., privacy, Internet safety)	0	0	0
Social media (e.g., blogging, Twitter, Facebook, YouTube)	0	0	0
General familiarity with new technologies (e.g., digital petting zoo, using e-readers, tablet devices)	0	0	0
Assistive Technology use (e.g., JAWS, Fire Vox, Click-n- Type)	0	0	0
Using video conferencing technologies (e.g., Adobe Connect, GoToMeeting, Skype, Google Hangout)	0	0	0
Web site development (e.g., HTML, Drupal, WordPress)	0	0	0
Digital content creation (e.g., Adobe Premiere Pro, GarageBand, mobile app development, digital photography tools)	0	0	0
Other (please specify):	0	0	0

Section C: Library Services/Programs and Glossary

23. In the past 12 months, did THIS LIBRARY LOCATION offer any of the following Education and Learning-related services or programs to its patrons either formally or informally? (MARK ONE
FOR EACH ONLY). Note: Include programs or services that library partners provide/offer as well

as those offered by library staff

Education and Learning	Yes	No	Don't Know
Accessing and using formal online education content (e.g., distance education courses, online Advanced Placement courses)	0	0	0
Basic literacy skills (e.g., basic math, basic reading, basic writing)	0	0	0
Provided GED preparation courses and services (e.g., literacy and math development)	0	0	0
Summer reading programming for children	0	0	0
Summer reading programming for adults	0	0	0
After school programs (e.g., Let's Move!, learning labs, homework help)	0	0	0
ESL/ESOL/ELL (e.g., conversational groups, literacy tutoring, citizenship)	0	0	0
Science, Technology, Engineering, Arts, Math (STEAM) events (e.g., robotics, LittleBits, Arduino, Maker Spaces)	0	0	0
Other (please specify):	0	0	0

24. [Branch out question; only applicable response options will show in the online version for the Education and Learning topics marked "yes" in question 23] For each of the following Education and Learning services and/or program(s) identified in Question 23, what type(s) of program or service did THIS LIBRARY LOCATION offer to its patrons in the last 12 months? (MARK ALL ● THAT APPLY FOR EACH TOPIC). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Education and Learning	Formal program/ session	Individual help by appointment	Informal point of use
Accessing and using formal online education content (e.g., distance education courses, online Advanced Placement courses)	0	0	0
Basic literacy skills (e.g., basic math, basic reading, basic writing)	0	0	0
Provided GED preparation courses and services (e.g., literacy and math development	0	0	0
Summer reading programming for children	0	0	0
Summer reading programming for adults	0	0	0
After school programs (e.g., Let's Move!, learning labs, homework help)	0	0	0
ESL/ESOL/ELL (e.g., conversational groups, literacy tutoring, citizenship)	0	0	0
Science, Technology, Engineering, Arts, Math (STEAM) events (e.g., robotics, LittleBits, Arduino, Maker Spaces)	0	0	0
Other (please specify):	0	0	0

American Library Association, Information Policy & Access Center, and the International City/County Management Association

2013 Digital Inclusion Survey

25. [Branch out question; only applicable response options will show in the online version for the Education and Learning topics marked "Formal" of "Individual by appointment" in question 24] Who conducted the Education and Learning programs and/or services that THIS LIBRARY LOCATION offered in the last 12 months? (MARK ALL ● THAT APPLY). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Education and Learning	Library Staff	Volunteer(s)	Partner Organization
Accessing and using formal online education content (e.g., distance education courses, online Advanced Placement courses)	0	0	0
Basic literacy skills (e.g., basic math, basic reading, basic writing)	0	0	0
Provided GED preparation courses and services (e.g., literacy and math development	0	0	0
Summer reading programming for children	0	0	0
Summer reading programming for adults	0	0	0
After school programs (e.g., Let's Move!, learning labs, homework help)	0	0	0
ESL/ESOL/ELL (e.g., conversational groups, literacy tutoring, citizenship)	0	0	0
Science, Technology, Engineering, Arts, Math (STEAM) events (e.g., robotics, LittleBits, Arduino, Maker Spaces)	0	0	0
Other (please specify):	0	0	0

26. [For libraries that said "yes" to Accessing and using formal online education content in question 23] Please identify **the Formal Online Education content** that THIS LIBRARY LOCATION **provided to patrons within the last 12 months**: (MARK ALL ● THAT APPLY). *Note: Include programs or services that library partners provide/offer as well as those offered by library staff*

Formal Online Education	Yes	No	Don't Know
Provided assistance in accessing online degree courses (e.g., virtual high school, university, college, community college, technical school, online certification program)	0	0	0
Provided assistance in accessing online certification courses (e.g., Network+ certification, project management, health care)	0	0	0
Offered assistance in accessing online materials for Advanced Placement (AP) course exams	0	0	0
Provided assistance in accessing MOOCs (Massive Open Online Courses)	0	0	0
Provided exam proctoring/testing services (e.g., online course, GED)	0	0	0
Other (please specify):	0	0	0

27. In the past 12 months, did THIS LIBRARY LOCATION offer any of the following Economy and Workforce Development-related services and/or programs to its patrons either formally or informally? (MARK ONE ● FOR EACH ONLY). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Economy and Workforce Development	Yes	No	Don't Know
Accessing and using employment databases and other job opportunity resources (e.g., Federal and state job banks, Monster.com,	0	0	0
Indeed.com) Applying for jobs (e.g., interviewing skills, resume development, completing online job applications)	0	0	0
Applying for unemployment benefits online (e.g., eligibility, maintaining benefits)	0	0	0
Accessing and using online business information resources (e.g., SBA.gov, Business Source Complete, ReferenceUSA)	0	0	0
Supporting small business development (e.g. assistance on business plan development, assistance on how to start a small business, market research services)	0	0	0
Providing work space(s) for mobile workers (e.g., co-working spaces)	0	0	0
Other (Please specify):	0	0	0

28. [Branch out question; only applicable response options will show in the online version for the Economy and Workforce topics marked "yes" in question 27] For each of the following Economy and Workforce Development-related services and/or program(s) identified in Question 27, what type(s) of program or service did THIS LIBRARY LOCATION offer to its patrons in the last 12 months? (MARK ALL • THAT APPLY FOR EACH TOPIC). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Economy and Workforce Development	Formal program/ session	Individual help by appointment	Informal point of use
Accessing and using employment databases and other job opportunity resources (e.g., Federal and state job banks, Monster.com, Indeed.com)	0	0	0
Applying for jobs (e.g., interviewing skills, resume development, completing online job applications)	0	0	0
Applying for unemployment benefits online (e.g., eligibility, maintaining benefits)	0	0	0
Accessing and using online business information resources (e.g., SBA.gov, Business Source Complete, ReferenceUSA)	0	0	0
Supporting small business development (e.g. assistance on business plan development, assistance on how to start a small business, market research services)	0	0	0
Providing work space(s) for mobile workers (e.g., co- working spaces)	0	0	0
Other (Please specify):	0	0	0

American Library Association, Information Policy & Access Center, and the International City/County Management Association

2013 Digital Inclusion Survey

29. [Branch out question; only applicable response options will show in the online version for the training topics marked "Formal" of "Individual by appointment" in question 28] Who conducted the **Economy and Workforce Development-related services and/or program(s)** that THIS LIBRARY LOCATION **offered in the last 12 months?** (MARK ALL ● THAT APPLY). *Note: Include programs or services that library partners provide/offer as well as those offered by library staff*

Economy and Workforce Development	Library Staff	Volunteer(s)	Partner Organization
Accessing and using employment databases and other			
job opportunity resources (e.g., Federal and state job	0	0	0
banks, Monster.com, Indeed.com)			
Applying for jobs (e.g., interviewing skills, resume		0	
development, completing online job applications)	0	0	0
Applying for unemployment benefits online (e.g.,	0	0	
eligibility, maintaining benefits)	0	0	0
Accessing and using online business information			
resources (e.g., SBA.gov, Business Source Complete,	0	0	0
ReferenceUSA)			
Supporting small business development (e.g.			
assistance on business plan development, assistance	-	6	
on how to start a small business, market research	0	0	0
services)			
Providing work space(s) for mobile workers (e.g., co-	0	6	0
working spaces)	0	0	0
Other (Please specify):	0	0	0

30. [For libraries that said "yes" to supporting small business development in question 27] Please identify the **Small Business Development Services** that THIS LIBRARY LOCATION **provided to patrons** within the last 12 months: (MARK ALL ● THAT APPLY). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Small Business Development Services	Yes	No	Don't Know
Provided assistance with the development of small business plans	0	0	0
Provided assistance on how to start a small business (e.g., developing business plans, business laws, financing a business)	0	0	0
Provided market research services	0	0	0
Provided co-worker space (e.g., shared space for conducting business affairs)	0	0	0
Provided access to fax and other equipment to facilitate business transactions	0	0	0
Provided access to 3-D printers, textile studio, digital photography studios, and other technologies for making and creating content	0	0	0
Provided networking events to connect entrepreneurs to funders, potential collaborators and/or other people/organizations that can help a business succeed	0	0	0
Other (please specify):	0	0	0

American Library Association, Information Policy & Access Center, and the International City/County Management Association

31. In the past 12 months, did THIS LIBRARY LOCATION offer any of the following Community, Civic Engagement, and E-government-related services and/or programs to its patrons either formally or informally? (MARK ONE ● FOR EACH ONLY). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Community and Civic Engagement	Yes	No	Don't Know
Assisting patrons access and use online government (e-government) programs and services (e.g., completing online forms, Medicare, Immigration, Social Security, Taxes)	0	0	0
Hosting community engagement events (e.g., candidate forums, community conversations)	0	0	0
Hosting social connection events for young adults (e.g., manga/anime, gaming, book discussion groups, etc.)	0	0	0
Hosting social connection events for adults (e.g., book discussion groups, gaming, etc.)	0	0	0
Hosting maker events (e.g., Arduino, Design Thinking, 3-D printing, etc.)	0	0	0
Hosting hackathons or other coding/app development events (e.g., using open data, app program development)	0	0	0
Other (Please specify):	0	0	0

32. [Branch out question; only applicable response options will show in the online version for the Community/Civic Engagement topics marked "yes" in question 31] For each of the following Community, Civic Engagement, and E-government-related services and/or programs identified in Question 31, what type(s) of program or service did THIS LIBRARY LOCATION offer to its patrons in the last 12 months? (MARK ALL ● THAT APPLY FOR EACH TOPIC). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Community and Civic Engagement	Formal program/ session	Individual help by appointment	Informal point of use
Assisting patrons access and use online government (e- government) programs and services (e.g., completing online forms, Medicare, Immigration, Social Security, Taxes)	0	0	0
Hosting community engagement events (e.g., candidate forums, community conversations)	0	0	0
Hosting social connection events for young adults (e.g., manga/anime, gaming, book discussion groups, etc.)	0	0	0
Hosting social connection events for adults (e.g., book discussion groups, gaming, etc.)	0	0	0
Hosting maker events (e.g., Adruino, Design Thinking, 3-D printing, origami, etc.)	0	0	0
Hosting hackathons or other coding/app development events (e.g., using open data, app program development)	0	0	0
Other (Please specify):	0	0	0

33. [Branch out question; only applicable response options will show in the online version for the training topics marked "Formal" of "Individual by appointment" in question 32] Who conducted the **Community, Civic Engagement, and E-government-related services and/or program** that THIS LIBRARY LOCATION offered in the last 12 months? (MARK ALL ● THAT APPLY). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Community, Civic Engagement, and E-government	Library Staff	Volunteer(s)	Partner Organization
Assisting patrons access and use online government (e- government) programs and services (e.g., completing online forms, Medicare, Immigration, Social Security, Taxes)	0	0	0
Hosting community engagement events (e.g., candidate forums, community conversations)	0	0	0
Hosting social connection events for young adults (e.g., manga/anime, gaming, book discussion groups, etc.)	0	0	0
Hosting social connection events for adults (e.g., book discussion groups, gaming, etc.)	0	0	0
Hosting maker events (e.g., Adruino, Design Thinking, 3-D printing, origami, etc.)	0	0	0
Hosting hackathons or other coding/app development events (e.g., using open data, app program development)	0	0	0
Other (Please specify):	0	0	0

34. [For libraries that said "yes" to "Assisting patrons access and use online government (e-government) programs and services" in question 31] Please identify the E-government Services that THIS LIBRARY LOCATION provided to patrons within the 12 months: (MARK ALL ● THAT APPLY). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

E-government Services	Yes	No	Don't Know
Creating open data repositories for local government data (e.g., crime, education, transportation, or other local data)	0	0	0
Accessing and using government programs and services (e.g., Medicare, Social Security, InfoPass)	0	0	0
Completing online government forms (e.g., social services, immigration, tax)	0	0	0
Accessing government information resources (e.g., USA.gov, FedSys, state government documents)	0	0	0
Other (Please specify):	0	0	0

35. In the past 12 months, did THIS LIBRARY LOCATION offer any of the following Health and Wellness -related services and/or programs to its patrons either formally or informally? (MARK ONE ● FOR EACH ONLY). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Health and Wellness	Yes	No	Don't Know
Locating and evaluating <i>free</i> health information online (e.g. MedlinePlus, Mayo Clinic)	0	0	0
Using <i>subscription</i> health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	0	0	0
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	0	0	0
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	0	0	0
Identifying or using local health resources available through health care agencies or other community organizations (e.g., locating health care providers, identifying health care providers)	0	0	0
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	0	0	0
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	0	0	0
Other (Please specify):	0	0	0

36. [Branch out question; only applicable response options will show in the online version for the Health and Wellness topics marked "yes" in question 35] For each of the following Health and Wellness-related services and/or programs identified in Question 35, what type(s) of program or service did THIS LIBRARY LOCATION offer to its patrons in the last 12 months? (MARK ALL ● THAT APPLY FOR EACH TOPIC). Note: Include programs or services that library partners provide/offer as well as those offered by library staff

Health and Wellness	Formal program/ session	Individual help by appointment	Informal point of use
Locating and evaluating <i>free</i> health information online (e.g. MedlinePlus, Mayo Clinic)	0	0	0
Using <i>subscription</i> health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	0	0	0
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	0	0	0
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	0	0	0
Identifying or using local health resources available through health care agencies or other community organizations (e.g., locating health care providers, identifying health care providers)	0	0	0
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	0	0	0
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	0	0	0
Other (Please specify):	0	0	0

37. [Branch out question; only applicable response options will show in the online version for the training topics marked "Formal" of "Individual by appointment" in question 36] Who conducted the **Health and Wellness-related services and/or programs** that THIS LIBRARY LOCATION offered in the last 12 months? (MARK ALL ● THAT APPLY). *Note: Include programs or services that library partners provide/offer as well as those offered by library staff*

Health and Wellness	Library Staff	Volunteer(s)	Partner Organization
Locating and evaluating <i>free</i> health information online (e.g. MedlinePlus, Mayo Clinic)	0	0	0
Using <i>subscription</i> health and wellness database(s) (e.g., EBSCO Consumer Health Complete, Salem Health, Gale Health & Wellness Center)	0	0	0
Identifying health insurance resources (e.g. through public agencies or private providers, or the Affordable Care Act marketplace/exchanges)	0	0	0
Understanding specific health or wellness topics (e.g. developing healthy lifestyles, managing a health condition or disease)	0	0	0
Identifying or using local health resources available through health care agencies or other community organizations (e.g., locating health care providers, identifying health care providers)	0	0	0
Bringing in healthcare providers to offer limited healthcare screening services at the library (e.g., weighing, blood pressure tests)	0	0	0
Offering fitness classes (e.g., Zumba, Yoga, Tai Chi, other)	0	0	0
Other (Please specify):	0	0	0

38. [For libraries that said "yes" to "Bringing in healthcare providers to offer limited healthcare screening services at the library" in question 35] Please identify the **Healthcare Screening Services** that THIS LIBRARY LOCATION **provided to patrons within the 12 months**: (MARK ALL ● THAT APPLY). *Note: Include programs or services that library partners provide/offer as well as those offered by library staff*

Healthcare Screening Services	Yes	No	Don't Know
Providing immunization clinics (e.g., for vaccinations)	0	0	0
Providing health screening services (e.g., blood pressure, blood sugar, obesity)	0	0	0
Providing assistance with mental health issues (e.g., social, behavioral, emotional needs)	0	0	0
Providing diet and nutrition counseling services (e.g., weight management, meal planning)	0	0	0
Providing referrals to appropriate health and/or social service agencies	0	0	0
Other (Please specify):	0	0	0

GLOSSARY OF SURVEY ABBREVIATIONS/KEY TERMS		
3D Printer	A printer that creates a solid, three-dimensional version of a digital model.	
	These machines allow for rapid prototyping and manufacturing.	
Арр	Abbreviation for "mobile application." A software application designed to	
	run on mobile devices, such as smart phones and tablet computers. Apps are	
	commonly used for information retrieval, communications, and gaming.	
ADA Accessibility Standards	The American Disabilities Act has standards that, according to access-	
	board.gov, "govern the construction and alteration of places of public	
	accommodation, commercial facilities, and state and local government	
	facilities. The Department of Justice (DOJ) maintains ADA standards that	
	apply to all ADA facilities except transportation facilities, which are subject to similar standards issued by the Department of Transportation (DOT)	
	To similar standards issued by the Department of Transportation (DOT).	
	issued under a different law, the Architectural Barriers Act (ABA)"	
Assistive Technology	Technologies that help people with disabilities adapt to processes or complete	
rissistive reenhology	tasks that would otherwise be difficult or impossible. Examples include	
	hearing aids, wheelchairs, speech to text reader software, etc.	
Bandwidth/Connectivity Speed	The speed or capacity of a data transmission rate, usually measured in bits per	
	second (i.e., Kbit/s or MBit/s).	
Broadband	A term used to describe high-speed Internet access.	
Cloud Computing Applications	Software application programs that allow information or files to be stored	
	remotely on a server and easily accessed on a variety of computing device.	
	Examples include Evernote, DropBox, or Mozy.	
Community, Civic Engagement,	A program available in or through the library that promotes awareness and	
and E-government Programs	action surrounding issues of public concern, community building, and/or	
	promotion of social interactions. Engagement programs may include hosting	
	community engagement events (e.g., candidate forums, community	
	conversations); nosting social connection events (e.g., manga/anime, gaming,	
	use government programs and services (e.g., Madicare Social Security	
	InfoPass): completing online government forms (e.g., social services	
	immigration tax)	
Community Partnership	A joint venture between multiple people or organizations in a community to	
	work together on one or a series of initiatives for a common cause. For the	
	purposes of this study, community partnerships will generally be ventures	
	between outside organizations and the library.	
Computer Software	Programs that run on a computer.	
Creation Events	Similar to hackathons; an event or program in which people come together to	
	collaborate on a project that leads to an innovative outcome or product.	
Development Technology	Technologies that facilitate the design, development, and/or programming of	
	other new and innovative technologies, like new applications and software.	
	For example, a virtual machine is a self-contained guest computing	
	environment that can run on a properly configured host system, while a	
	sandbox is generally a computer application that separates programs in order	
Digital Display	An interactive digital sign or display that allows natrons to see or interact	
Digital Display	with information on a large mounted touchscreen	
Digital Literacy	The ability to effectively and critically identify locate evaluate manage	
Digital Entracy	interpret, integrate, and create information using digital technology or media	
	that is presented in digital formats.	

Digital Inclusion Survey Glossary of Key Terms

GLOSSARY OF SURVEY ABBREVIATIONS/KEY TERMS		
Digital Media Editing Common(s)	Media production hardware, software, and other resources that give people	
	the opportunity to create or learn about audio or visual productions.	
Digital Reference/Virtual	Reference services for patrons via email, chat, or other electronic means.	
Reference		
E-Books	Digital documents, licensed or not, which can act as substitutes for print	
	books or periodicals and can easily be read on a personal computer, tablet, or	
Faanomy and Wankfanaa	Other device.	
Development Programs	advancement and the growth of husinesses, such as classes on how to apply	
Development i rograms	for jobs (e.g. interviewing skills resume development completing online job	
	applications); career fairs, business start-up incubators; information on how to	
	form an limited liability corporation, etc.	
Education and Learning Programs	A program available in or through the library that promotes learning and	
	instruction, such as providing resources for homeschooling families; after-	
	school tutoring programs; summer reading programs; English as a second	
	language, test preparation classes; Science, Technology, Engineering, Arts,	
E.C.	Math (STEAM) maker spaces; continuing education resources; etc.	
E-Government	The use of digital technologies (e.g., Web, mobile apps, devices) to provide	
	government information, services, and/or resources (e.g., apprying for social services, filing taxes)	
ESL/ESOL/ELL	Programming that is targeted towards a person who is in the process of	
	acquiring English language skills and whose native language is not English.	
	(ESL-English as a Second Language; ESOL-English for Speakers of Other	
	Languages; ELL-English Language Learners)	
Event	A planned function open to the public, such as a workshop, presentation,	
	speaker's series.	
Fiber Optic	A high-speed data transmission medium that uses pulses of light.	
Formal Class/Program	Class or program with pre-planned, structured content and design offered at a	
	specified time. The class or program may occur in the library or in another	
	the librory staff	
Gigabits per second (Gbps or Gb/s)	A unit of measure describing the rate of data transfer equal to 1,000,000,000	
Gigabits per second (Gops of Gb/s)	bits per second: 125 000 000 bytes per second: 1 000 000 kilobits per second:	
	or 1,000 megabits per second.	
Hackathons	An event that takes place either in-person or remotely in which people	
	usually computer programmers, developers, and designerscollaborate on an	
	intensive technology-related project.	
Health and Wellness Programs	Programs available in or through the library that promote good physical and	
	mental health as well as wellness. Topics may include accessing, assessing,	
	and using online health information; finding and assessing health insurance	
	information; managing a chronic health condition of a disease (e.g., diabetes,	
	screening services at the library (e.g. weighing blood pressure tests)	
Individual Help by Appointment	Technology training sessions offered or sponsored by the library for	
	individuals by appointment. The class may occur in the library or in another	
	facility, and the instructor may or may not be a member of the library staff.	
Informal Point-of-use Training	One-on-one technology help (e.g., Web browsing, using library databases,	
	etc.) upon patron request. Assistance may or may not be a member of the	
	library staff (e.g., a volunteer).	

GLOSSARY OF SURVEY ABBREVIATIONS/KEY TERMS		
Information Technology Support	Staff dedicated to the responsibility of maintaining the information	
Staff	technology services and resources available at the library, and assisting	
	library patrons with using these products. May include staff who are	
	contracted through the city/county, or assigned to the whole library system if	
	the library is part of a multi-location set up.	
Information Technology Training	Formal or informal training sessions that cover specific topics related to	
	acquiring, representing, storing, transmitting, and using information via	
	computer-based hardware and software systems, and communication systems	
	(e.g., Web browser basics, Internet searching, basic computing skills).	
Kilobits per second (Kbps or Kb/s)	A unit of measure describing the rate of data transfer equal to 1,000 bits per	
	second or 125 bytes per second.	
Large-format Printer	A printer with a print width between 17" and 100". It can be used to print	
	banners, posters, or signs.	
Library Location	A library facility. In the case of some public libraries, there is only one	
	facility. Other public libraries have several facilities, which are sometimes	
	referred to as locations of a library system. A location has at least all of the	
	following: 1. Separate quarters; 2. An organized collection of library	
	the public	
Library Staff	Employees or contractors of the library	
Library Stan	Collection of electronically stored information records (facts, hibliographic	
Licenseu Databases/ Resources	data and articles or other texts) with a common user interface and software	
	for the retrieval and manipulation of the data or online learning. Licensed	
	databases are those typically contracted through a yendor by the library for	
	natron access (e.g. Gale Cengage EBSCO ProQuest)	
Maker Spaces	A space and set of resources that encourage creation, experimentation, and	
	discovery. They are oftentimes associated with STEM-related activities, but	
	are not confined to only STEM experiments. Typical devices included in such	
	spaces can include 3D printers and small, programmable computer devices	
	such as Arduinos.	
Megabits per second (Mbps or	A unit of measure describing the rate of data transfer equal to 1,000,000 bits	
Mb/s)	per second; 125,000 bytes per second; or 1,000 kilobits per second.	
Mobile Device-Enabled Website	An alternative version of the library's website which is optimized to work on	
	cell phones and other devices with smaller screens, limited connection	
	speeds, or less processing power than typical personal computers.	
Mobile Devices	Handheld devices such as smartphones, PDAs, tablets, or other handheld	
	devices with internet connectivity.	
Online Homework Assistance	Tutoring and homework/job-help online resources designed to help students	
	complete their homework, schoolwork, and job-hunting assistance.	
Online Training Materials	Online technology training materials offered or sponsored by the library (e.g.,	
	web-based tutorials, web-based presentations, online technology services	
Onon Data Panasitarias	An archive or database in which all of the data stored is completely accessible	
Open Data Repositories	to anyone who wants to download use or manipulate it. There are no legal	
	restrictions on re-usage of the data. An example would be a collection of data	
	about a local public transit system, which an independent programmer could	
	then use to develop a public transit navigation cell phone app	
Partner Organization	Library partner, or an entity or institution separate and distinct from the	
	library that collaborates with the library on programs, training, or initiatives.	
	May include government agencies, non-profit organizations, or private	
	company.	
Print on Demand (POD) Machine	A technology that prints entire books or documents at one time. By allowing	
	people to pay for a fixed price per copy, POD machines have fostered a new	
	category of publishing companies that print books for self-publishing authors.	

GLOSSARY OF SURVEY ABBREVIATIONS/KEY TERMS		
Program(s)	An event, series of events, project, or system designed by the library to foster	
	community participation, discovery, or growth outside of the traditional	
	functions of a library (i.e. acquiring, organizing, preserving, and providing	
	access to information). Includes but not limited to exhibitions, reading and	
	discussion, civic engagement and public deliberation. Programs may include	
	non-technology enabled events such as candidate forums, summer reading	
	programs, creation events.	
Public Access Computers/ Laptops	A public access computer or laptop that provides public access to the Internet,	
	including those that provide access to a limited set of Internet-based services	
	such as online databases. This includes circulating laptops, but excludes	
	computers or laptops that only access the library's web-based public access	
	catalogs.	
Recreational Gaming Consoles	Recreational gaming includes modern consoles like current versions of Xbox,	
	Playstation, or Wii; retro consoles like Atari, NES/SNES, or Sega Genesis;	
	and personal computers with software like The Sims or World of Warcraft. It	
	does not refer to gambling.	
Scanned Codes	Bar codes that can be read by an imaging device, such as cameras on smart	
	phones or tablets, which represent encoded information. These usually link to	
	website URLs when scanned by a code-reader, such as smart phone	
C	applications that read QR codes.	
Scanner	A peripheral machine that converts physical printed documents, images, or	
	other two-dimensional objects into a digital image that can be viewed on a	
Tablet Commenterin	machine, such as a computer.	
l'ablet Computers	A flat computer that is controlled by a touchscreen with varying degrees of computing functionality. Tablets are differentiated from smart phones by their	
	larger screen size. Common variaties include Apple's iPad. Kindle Fire	
	Samsung Galaxy Tablets, and Barnes & Noble Nook	
Training	A class workshop or resource available in or through the library that provides	
Training	narticipants with instruction on a particular skill (i.e. using a computer	
	creating a resume filing taxes etc.) Can be conducted in-person one-on-one	
	in a group setting or remotely	
Video Conferencing Services	Computer-mediated telecommunications technologies that let people in two	
· · · · · · · · · · · · · · · · · · ·	different locations talk to and see each other on computers or comparable	
	technologies.	
Volunteer	Unpaid person under the supervision of library staff.	
Wait time	Any period of time in which library patrons are required to wait to use library	
	public access computers or laptops because all of the available machines are in	
	use.	
Wireless (WiFi) Internet Access	Internet access that does not require a direct connection (typically Ethernet)	
	for access. Most typically, wireless access adheres to the IEEE 802.11	
	standard (typically b, g, n) for interoperability and compatibility.	
Wireless Printing	The ability to print that does not require a direct connection to a computer via	
	wires and cables. Through a wireless system, it allows for people to print from	
	any computer connected to the system, including library owned laptops and	
	laptops or mobile devices owned by the patron.	

THANK YOU FOR YOUR PARTICIPATION!

For questions concerning the survey, please contact:

Information Policy & Access Center College of Information Studies University of Maryland 4105 Hornbake Building, South Wing College Park, MD 20742 (301) 405-9445 phone (301) 314-8620 fax <ipac@umd.edu> e-mail