Digital Inclusion Community Needs Assessment Summary

In October 2011, the FCC (Federal Communications Commission) announced a sweeping digital inclusion initiative to increase broadband connectivity and Internet access across the United States in order to boost our competitive advantage in the world economy. As part of that initiative to address the digital divide, the Institute of Museum and Library Services (IMLS) developed principles for Building Digital Communities. Under a grant from IMLS, the partnership of WebJunction[i], ICMA[ii] (International City/County Management Association), and TechSoup Global[iii] conducted a nationwide community needs assessment to understand more about the level of awareness of digital inclusion issues, to identify priorities for getting started or continuing existing efforts, and to learn about current projects and the attendant challenges and successes.

The assessment looks broadly across the landscape of digital inclusion in the U.S., which encompasses infrastructure, access, affordability and adoption. In an effort to define the scope, the following definitions were offered at the beginning of the survey:

> *Digital Inclusion* is the ability of individuals and groups to access and use information and communication technologies. Digital inclusion encompasses not only access to the Internet but also the availability of hardware and software, relevant content and services, and training for the digital literacy skills required for the adoption and effective use of information and communication technologies.
>
> *Digital technologies* refer to the ever-evolving suite of digital software, hardware and architecture systems that enable users to create, access, store, manipulate and share electronic information. Examples of digital technologies include
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> - computerized devices, such as laptops, smartphones, tablets, digital cameras and digital TV
> - connections to the Internet and the World Wide Web
> - computer software and web-based programs, such as word processing, photo/video editing, conferencing and social networking tools.

A copy of the Digital Inclusion Community Needs Assessment questions is available.

HIGHLIGHTS

The assessment, which garnered 670 responses from state and public library directors, city managers, and community-based organizations from 50 U.S. states, provided insights into the ways in which organizations are prioritizing and addressing digital inclusion. Overall, the findings indicate a high level of awareness of digital inclusion issues across organization types, both in prioritizing specific objectives and in recognizing key challenges. The 492 responses to the question about current projects indicate that there is a lot of forward motion on digital inclusion across the country, and quite a bit of pride in the achievements.

Although public library responses greatly outnumber responses from other sectors, there are interesting comparisons to be made when sorted by organization type.

- The top *priorities* correspond rather predictably, with libraries focused on providing free public access, city/county managers looking to digital technologies to enhance emergency preparedness and civic engagement, and non-profits most concerned about educational opportunities and career preparation for all ages.
- There is more convergence between organization types in the identification of top *challenges* and most useful resources. The need for ongoing IT support ranks in the top two challenges for all sectors; CBOs and libraries (public and state) share the need for training for staff and community members. The city/county sector and state libraries share availability of high-speed networks as their number one challenge.
- When asked about the most *useful tools and resources* to achieve digital inclusion, all sectors except city/county managers ranked operational funding as the most needed resource; for the city administrators, it ranked second to the need for capital funding. Training for staff and volunteers showed up in the top three needed resources for all except the CBOs.
- *Current projects* of the library field are heavily concentrated on providing free public broadband access to the Internet, including computer stations and training. The current projects described by city/county and non-profit respondents, although fewer in number, address a broader spectrum of digital inclusion areas, such as emergency services and medical facilities.
- All sectors seem to be relying on *funding* from a wide variety of sources. The sources most frequently cited are BTOP, LSTA and E-rate funding, local dollars and Foundation funding.
- *Partnerships* abound across all sectors, with the public library as the most frequently cited partner for most; the sole exception is the non-profit sector, which partners somewhat more frequently with schools than with public libraries.

Distribution Process

The project team solicited input from a variety of perspectives, including state libraries, public libraries, city/county/town managers, and community-based organizations. The assessment was sent to directors and community leaders, and thus is their *perception* of community needs, rather than a direct survey of community members themselves. Because respondents were self-selected, it is likely that they approached the survey with an already strong awareness of the importance of digital inclusion.

The assessment garnered 670 responses from 50 states. Responses represent a fairly even distribution among community sizes: less than 5K (17.4%); 5-25K (27.2%); 25-100K (26%); and over 100K (26.6%). Tallies from the different organization types are dominated by library responses:

Public libraries	497
State libraries	39
CBOs	36
City/county admin	51
Other	25

The disparity in the number of responses from each organization type may be the result of different distribution methods employed by the project partners. Direct emails sent to approximately 5000 public and state library directors yielded about a 1.0% return. The return on direct email sent to an abbreviated list of about 650 members of ICMA yielded close to a .8% return, which belies the large quantitative difference. For the non-profit community, the dissemination was predominantly through Web and social network channels—e-newsletters, Twitter feeds, blogs and a listserv. The less individualized approach may account for the low return, but there may be other factors. It suggests that the library field has well-established channels of communication and a deep understanding that digital literacy is an inherent part of their work. In contrast, community-based organizations cover a wide spectrum of services; they are not as networked or organized as libraries and not as linked by a unified mission. ICMA has a notably different relationship with its members, who pay for memberships; there is an understandable sensitivity to overwhelming their audience with communications and requests.

RESULTS

It is fascinating to unwrap more details of community digital inclusion needs by looking at the results for each question. Since the grant project is erected on the foundation of the IMLS Framework for Building Digital Communities, many of the questions in the assessment derive from the principles and strategic areas of digital inclusion as delineated in the framework. Respondents were asked to assign priorities to a list of objectives that align with the spectrum of principles identified by the IMLS policy document as critical to achieving the full vision of a digitally connected community. Questions about current projects and challenges also echo the framework language and structure.

[In the data tables, entry choices are listed in the same order in which they appear in the original assessment question. In each column, the result is given as a ranking of #1, 2 or 3, with the percentage of respondents who chose that entry listed in parentheses. For example, "**#3** (53%)" in the "City/County" column below indicates that 53% of city/county administrators selected that entry, making it their third highest priority objective.]

PRIORITIES FOR ACHIEVING DIGITAL INCLUSION OBJECTIVES

Question: For each specific objective related to digital inclusion, indicate the level of priority for your organization.

Table 1: Top Priorities	**City/ County**	**Non-profits**	**Public Libraries**	**State Libraries**		**Rural (<5K)**	**Large (>100K)**
Businesses and institutions have access to high speed Internet.	**#3** (53%)					**#3** (54%)	
Free public access is available through publicly available computers and/or through free wireless connections.		**#3** (60%)	**#1** (96%)	**#1** (93%)		**#1** (86%)	**#1** (89%)
Programs are available to teach people basic digital skills, including how to use the Internet productively and safely.		**#2** (63%)	**#2** (69%)				**#2** (73%)
Digital technologies expand educational opportunities and career preparation for all ages.		**#1** (66%)	**#3** (66%)	**#3** (73%)		**#2** (55%)	**#3** (72%)
Digital technologies enhance and support local economic and workforce development.		**#2** (63%)					
Digital technologies enhance emergency preparedness and support efforts of public safety agencies.	**#1** (57%)						
Digital technologies connect people with government and its agencies and promote civic engagement.	**#2** (55%)			**#2** (85%)			

Respondents were directed to consider what was most important to achieve from the perspective of their *organization*, rather than for the community as a whole. The resulting top priorities correspond rather predictably to organization type, with libraries overwhelmingly focused on providing free public access, city/county managers looking to digital technologies to enhance emergency preparedness and civic engagement, and non-profits most concerned about educational opportunities and career preparation for all ages. There is notable commonality, especially in the strongly shared priorities of free public access and application to education and career preparation. The close alignment of responses from the largest and smallest communities with the library responses reflects the preponderance of data from that sector; that makes it all the more interesting to see the agreement between rural communities and the city/county sector on the importance of providing community business and institutions with high-speed Internet.

While the city/county sector appears as the outlier in this response set, it is actually encouraging to see how its priorities broaden the focus and scope of what the community as a whole might strive to achieve for digital inclusion. Remembering that these 7 objectives were selected from a longer list of 12, what does that mean for those objectives that are a lower priority for all of the community sectors? Having healthcare

providers use digital technologies to improve patient care ranked at the bottom, along with enhancing people's social connections and expanding their personal networks.

CURRENT PROJECTS

Question: Indicate whether or not your organization is currently engaged in any of these objectives (including planning, regulation, or direct provision of services)
[Note: objectives listed were the same as the previous question about priorities. Data represents the numbers of respondents who selected "Yes," indicating they are currently engaged in these projects.]

Table 2: Current projects	**City/ County**	**Non-profits**	**Public Libraries**	**State Libraries**		**Rural (<5K)**	**Large (>100K)**
Free public access is available through publicly available computers and/or through free wireless connections.	**#3** (58%)		**#1** (99%)	**#1** (100%)		**#1** (90%)	**#1** (94%)
Programs are available to teach people basic digital skills, including how to use the Internet productively and safely.		**#1** (82%)				**#3** (74%)	**#3** (89%)
Digital technologies expand educational opportunities and career preparation for all ages.		**#2** (78%)	**#3** (85%)	**#1** (100%)			**#2** (91%)
Digital technologies enhance and support local economic development and workforce development.	**#3** (58%)			**#2** (97%)			
Digital technologies enhance emergency preparedness and support efforts of public safety agencies.	**#2** (81%)						
Digital technologies connect people with government and its agencies and promote civic engagement.	**#1** (91%)		**#2** (86%)	**#3** (91%)			**#2** (91%)
Digital technologies enhance people's social connections and expand their personal networks.		**#3** (70%)				**#2** (76%)	

To some extent, the organizational sectors are currently engaged in projects that align with the priorities identified in the earlier question.

- City/county governments have efforts under way to use digital technologies to enhance emergency preparedness and civic engagement with its citizens;
- Community-based organizations are providing programs to teach basic digital skills and to expand educational and career opportunities;

- Ninety-nine percent of public libraries are delivering on the mission to provide free public access, as well as educational and career opportunities. Looking beyond the top 3 project areas, the data shows that over 80% of public libraries report current projects addressing a number of digital inclusion objectives: connecting people with social services and consumer information (84%); enhancing people's social connections through digital technology (84%); and teaching basic digital skills (81%). It is no wonder that public libraries are perceived as vital centers for digital literacy.
- One hundred percent of the 39 state library respondents are engaged in projects to provide free public access and enhance educational and career opportunities. The high response percentage of other project areas demonstrates solidarity of purpose among state library agencies: 97% on workforce development efforts and 91% on connecting people with government.

It is a bit surprising to see relatively high numbers in the non-profit and rural community columns for projects that use digital technologies to enhance social connections and expand personal networks. Neither of these sectors ranked this as a particularly high priority.

Question: if you answered "Yes" in column 1, indicate how much progress your organization has made in each objective.

While the majority of respondents reported that their projects were in progress, an impressive number marked them as completed.

- City/county sector respondents have completed projects for all of the digital inclusion objectives on the list. The highest number of completions was for free public access (8), followed by access to high-speed Internet for businesses and institutions (6), digital technologies for emergency preparedness (6), and connecting people with government and its agencies (6).
- Community-based organizations reported at least one completion for all objectives with the exception of working with healthcare providers to use digital technologies to improve patient care. The highest number of completions was for free public access (7), followed by connecting people with government and its agencies (6), and enhancing people's social connections through digital technologies (6).
- With the large number of public library respondents, the odds that projects will have been completed are higher, and the numbers are much higher. The highest number of completions was for free public access (344), which equals a completion rate of over 80%; only 18% of respondents have public access projects in progress or just getting started. The next largest number of completions is for enhancing people's social connections through digital technologies (163), an objective rated as a medium priority.
- State libraries, like the CBOs, showed at least one completion for all objectives except healthcare. The highest number of completions was for free public access (18), followed by expanding educational opportunities and career preparation (8), and connecting people with government and its agencies (7).

Question: Please provide examples of or links to the digital inclusion programs or projects in which your organization is currently engaged (such as projects to extend high speed broadband to remote areas, build computer labs for public access, or provide digital skills training to community members).

Of 670 total respondents, 492 of them provided information about projects that they are currently engaged in. Coding the responses for key text filters, the highest incidence of terms are: training (38%); class (31.3%); wifi or wireless (24.6%); public access (22%); and free (22.2%). Given

that the majority of survey respondents were library representatives, the clear focus on public access and the provision of training/classes makes sense. The full response set of current projects can be browsed in a separate document.

In browsing the large set of public library responses, the dominant project themes are free public access to the Internet along the broadband and wireless networks to support it, computer labs and mobile laptop labs, and computer training on a variety of topics and levels. The following response is representative of the majority of projects:

- *We provide free public Internet computers as well as free wireless service within and in the immediate vicinity around our library building. We teach classes covering Internet basics (searching, safety, fundamentals); job resources utilizing the JobNow website and other online tools; and eBook readers and online sources for downloading eBooks. We plan on offering social networking classes this summer. We also own an AWE Early Literacy computer to help children learn computer and literacy skills.*

There is an impression that respondents are very focused on indicating what their organization does *independently,* but less descriptive of collaborative/partnership efforts (.06% of responses). A large number of respondents (15.9%*)* provided links to examples of their work, which may reveal deeper, more interconnected efforts with various entities in the community, as evidenced by this response:

- *"Our governmental boards and CEOs have been discussing digital inclusion for about 8 months now - based on Building Digitally Inclusive Communities and related documents from ICMA, IMLS, etc. As a result, we have started working more closely together on initiatives to enhance digital inclusion in the schools, social services for at risk individuals, workforce recovery services, working with vendors., etc. I would be glad to share our project documents."*

Examples of some less common public library projects:

- *We are working with our local government on a grant to bring assistive technologies to all our locations so that people can speak with an agency directly using cameras and headsets*
- *We are in the process of making accessible digital technologies to local businesses to promote themselves through digital media.*
- *Satelite location at MetroHealth Medical Center offering reference, a consumer health collection and a small computer lab for patients and staff.*
- *Our library has hosted the University of Arkansas Community Development task force assigned with trying to have broadband brought to our area of South Arkansas. We have conducted public surveys and produced feedback in this effort. Digital mapping of broadband area offerings have been produced by the University and are available on the Internet. There are several initiatives in the beginning stages to try and attract Internet providers to our rural (and remote) area.*
- *Our countywide strategic planning initiative, Advantage Livingston, is in progress of finding a way to provide wireless access countywide. Cromaine's director chairs the initiative. Our library cooperative, The Library Network, provides shared competitive pricing and just this year began a five-county purchasing program for cable and internet agreements. This library provides several one-on-one and group training for using computers, from Introduction to Computers to using Social Media. We also host a state employment network access point providing all of the state's resources for those who look for jobs or want to improve their employment.*

Among the limited responses from non-library organizations, there is a higher percentage of references to application of digital technologies to public safety, emergency services and health information, terms that are quite scarce in the public library results set. Many entries also referenced collaborations with libraries and other agencies as primary places of digital access.

Examples of projects meeting the wider array of digital inclusion objectives:

- City/County*: multi-community Chamber of Commerce includes an econ. deve. marketing arm with webpage and digital infor access*
- City/County*: The police department has implemented and used technologies to contact all community members to inform of emergencies, city hall communicates with constituents across many digital platforms such as web and several social media platforms.*
- City/County*: Extend high speed broad band to medical facilities and Physicians as well as promote EMR conversion for all medical providers in 4 county region of WNY*
- Non-profit/CBO: *We work in Kenya. We are working on innovative information services for farmers (agriculture being the backbone of the economy in the area we work). In addition, we're working on a project to provide access to iPads for school kids.*
- Non-profit/CBO: *The Community Corps sources corporate IT professionals to nonprofits in need of probono assistance.*

Examples of collaborative municipal and/or CBO efforts include:

- City/County*: "The CO PEAK Outreach Initiative focuses on training county and community partners on how to use the state's new website for accessing human service benefit programs. We are also working with other state agencies to put laptops in libraries, food pantries, family resource centers, etc. As a county, we offer basic computer training through our workforce center."*
- City/County*: Library has 50+ computers for public access. Some are assistive devices. Programs in place for teaching computer and other technologies - some in one-on-one environment. Police and fire use laptops connected to GIS and other systems in vehicles. Muni sponsors alert system where people can sign up for areas of interest and have alerts sent to whatever device they select. Also use facebook and twitter to communicate with residents.*
- City/County: *City provides public access computers and some educational classes at public library and at senior center.*
- Non-profit/CBO: *We train non-profits on what they can do and how to do it. We do not actually sponsor the labs ourselves. We have helped local libraries and non-profits with these projects. http://www.palmettotechnologyhub.org/category/testimonials*
- Non-profit/CBO: *one example is that we're working with the Indiana Association of United Ways to build/refresh/expand hundreds of computer labs in nonprofits and libraries throughout the state.*

It is interesting to note that two respondents indicated that providing broader digital inclusion outside of the library is outside the "scope" of their services. This may be reflective of the funding challenges and of evolving mindsets regarding the importance of access to serve multiple functions, as opposed to lack of willingness to extend the reach of digital inclusion:

- *"I don't believe it's the public library's job to provide internet connections to the public or local businesses. We do have internet available for our patrons within the library. Last year we received a grant for a laptop computer lab. We have ongoing classes in computer skills and have had programs for displaced workers."*

- *"We are a public library and as such are not engaged with providing or extending services outside the scope of our business. We did qualify to participate in the statewide BTOP program and because of that we are able to offer our patrons access to the newest in computer technology and our broadband is in the 50Mbps range with an open wireless signal so that those who can't get to the library during working hours can use our signal from outside the library any time of the day."*

FUNDING SOURCES

Question: What is the source of funding support for these programs/projects? Examples include Broadband Technology Opportunity Program (BTOP) grants, Foundations, etc.

In the overall results, it is evident that respondents are relying on funding from a wide variety of sources. The sources most frequently cited are BTOP, LSTA and E-rate funding, local dollars and Foundation funding. These specific types of funding often appear in the form of grants, a term cited in 39.9% of the responses. With the preponderance of library responses, the Gates Foundation appears as the dominant Foundation funder.

In addition to funds provided by specific public or institutional budget allocations and taxes, some respondents report the primary use of existing operational budgets to fund their programs; others refer to in-kind and volunteer support. However, it is clear that respondents are generally reliant on numerous and significant outside investments to support their digital inclusion work. Responses indicate a general sense that budgets are very much cobbled together. While developing and maintaining funding relationships with investors is a critical reality of the non-profit and public sectors, this clear level of fiscal partnership and dependency presents a unique challenge for digital inclusiveness. Implementers of digital inclusion must be responsive to the unique needs of their communities, and therefore must be able to attract and maintain relationships with funders who are open to a high level of flexibility and customization of operations at the community level.

A sampling of comments regarding the nature of funding include:
City/County

- *Private market -- city did not have to do anything -- high speed internet is provided to library and schools and govt buildings through Comcast private sector system - we do not have to do anything - Comcast and ATT Broadband also serve nearby communities that have medical and social services facilities located in those communities.*
- *Our team is funded by four grants from private foundations along with matching grants from two state agencies and the county where we reside. Our computer outreach is funded through a HRSA grant to our state department of Health Care Policy and Financing. Some application assistance is also supported by FNS Outreach grants to the state.*

Non-profit/CBO

- *We are mainly volunteer based training and support. So, we have very low costs since most everything we do is volunteer. Our one primary source of funding is by grant from a large technology firm with a local office - Google.*

- *Grants from foundations, corporations, Department of Education, and individual donations including cash, scholarships from universities, advertising avails, computers, and etc.*

Public Library

- *We get funding through federal LSTA grants. We are a small library and could not survive without these technology grants.*
- *Skokie I-Net originally funded by RCN, Cisco Systems, Sentinel Technologies, and IL Century Network. Funds to start the Digital Media Lab were provided through a grant from then State Rep Beth Coulson. Funds for the children's computer lab were provided through a grant from State Senator Ira Silverstein. Volunteers are used to augment our training and technology assistant positions serving the Computer Lab, DML, or at point of use at any of the many computers accessible throughout the Library.*

State Library

Responses from this sector are predictably uniform: BTOP funding is cited in 21 of 37 responses (57%); LSTA in 19 responses (51%); state funds in 16 responses (43%); and Gates Foundation in 13 responses (35%).

- *Bandwidth funding was from the Bill & Melinda Gates Foundation; LSTA funds were used for the Early Literacy Stations; Gates and local funds provides equipment and software for other projects.*
- *Library Services and Technology Act grant funds; Gates Foundation funds; State Funding; National Telecommunications and Information Administration's State Broadband Initiative through another state agency*

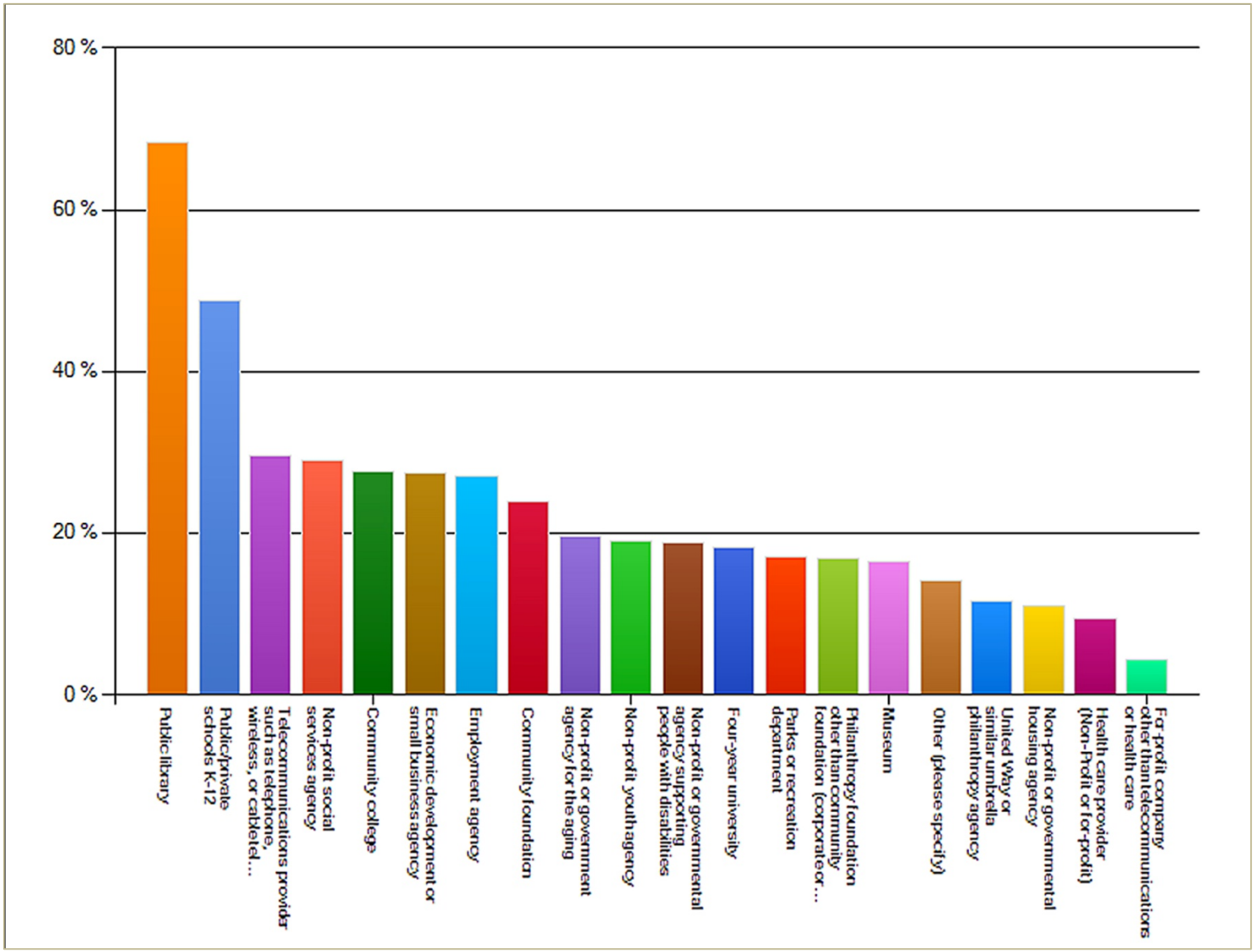
PARTNERS FOR DIGITAL INCLUSION

Question: Does your organization have active partnerships with any of the following for any digital inclusion objectives? (List of 19 choices)

Table 3: Partnerships	**City/ County**	**Non-profits**	**Public Libraries**	**State Libraries**		**Rural (<5K)**	**Large (>100K)**
Public library	**#1** (76%)	**#2** (52%)	**#1** (66%)	**#1** (100%)		**#1** (66%)	**#1** (74%)
Parks or recreation department	**#3** (45%)						
Public/private schools K-12		**#1** (59%)	**#2** (47%)	**#2** (57%)		**#2** (42%)	**#2** (57%)
Community college or Four-year university				**#3** (54%)			
Non-profit social services agency		**#1** (59%)	**#3** (29%)				**#3** (44%)
Non-profit youth agency		**#3** (38%)					
Non-profit or governmental agency supporting people with disabilities				**#3** (54%)			
Community foundation		**#2** (52%)					
Telecommunications provider such as telephone, wireless, or cable television company	**#2** (48%)					**#3** (34%)	

Public libraries rank as the most prevalent partner for digital inclusion efforts. It is not clear why public libraries selected that category as their top choice. Some comments in the "other" option suggest that it is self-referential to some extent: "We ARE a public library" was echoed in 8 out of 58 comments. There are some references to regional library systems and consortia. K-12 schools, both public and private, garner an energetic second place for partnerships across sectors.

In total, there is evidence of a healthy number and variety of collaborative efforts to work toward digital inclusion goals. Of 670 responses to the assessment, 505 reported at least one partnership. All sectors record partnerships with all 19 choices listed, as illustrated by the rainbow chart below. One notable exception is the minimal collaboration with for–profit companies (other than telecommunications or health care). This choice ranked consistently at the bottom with only 4% overall; none (0%) of the rural community respondents reported such a partnership.



Percentages of overall respondents who have partnered with a variety of agencies and institutions. Results in descending values.

BIGGEST CHALLENGES TO INCREASING DIGITAL INCLUSION

Question: Overall, what do you see as the biggest challenges (aside from funding) for your organization to increase digital inclusion in your community?

Table 4: Top Challenges	City/ County	Non-profits	Public Libraries	State Libraries		Rural (<5K)	Large (>100K)
Availability of high-speed networks	**#1** (42%)			**#1** (70%)			
Availability of hardware (computers, laptops, mobile devices, peripherals, assistive technologies)		**#1** (42%)	**#3** (51%)			**#2** (56%)	**#3** (45%)
Ongoing IT support and maintenance	**#2** (55%)	**#2** (36%)	**#1** (64%)	**#2** (62%)		**#1** (64%)	**#1** (59%)
Physical locations for public access computers	**#3** (35%)	**#3** (30%)					
Internet access for individuals	**#3** (35%)	**#2** (36%)					
Organization staff training to promote digital inclusion	**#3** (35%)	**#3** (30%)					
Training in digital skills for community members		**#1** (42%)	**#2** (53%)	**#3** (57%)		**#3** (52%)	**#2** (58%)
Interest/initiative of community members	**#3** (35%)	**#3** (30%)					

Although this question asks respondents to set funding issues aside, the implication of funding needs lies just below the surface of the loud and clear vote for the need to have ongoing IT support and maintenance. The strong second challenge across the board is the need for training in digital skills for community members, which correlates with the vital mission of libraries and many non-profits to advance digital literacy. Other information sources, such as the Minneapolis Community Technology Survey, have revealed that access to broadband is just a starting point; citizens need training to use the tools effectively for a variety of priorities, like education and workforce development. Funding is also underlying this challenge, with the impact of staff cuts and added workloads in these recession years. In fact, funding resounded through the majority of the 76 additional comments on this question.

The agreement in top priorities for the city/county sector and state libraries makes sense. Infrastructure is a main concern of city and county governments, with high-speed networks competing with highways for attention. State libraries' role in increasing connectivity in rural communities across their states has been aided in the last few years by major grants from the Gates Foundation and the federal BTOP (Broadband Technology Opportunity Program) funds.

The multiple third place ties for the city/county and nonprofit sectors is probably due largely to the small result set. It may also reflect the more diverse focus of community-based organizations, whose primary mission may be supporting a specific population, with digital inclusion secondary to other services. The nonprofits' top challenge of availability of hardware may also be tied to this more diffused mission. Lacking the

more unified networks and structures of city/county management and public libraries, they may have to act in more isolation to solicit funds for computer equipment.

Most Likely To Be Digitally Excluded

Question: Which of these groups are the most vulnerable to being digitally excluded in your community?

Table 5: Most Vulnerable to Exclusion	City/ County	Non-profits	Public Libraries	State Libraries		Rural (<5K)	Large (>100K)
Individuals with disabilities (physical or cognitive)				**#3** (46%)			
Immigrant populations and people with limited English language skills	**#2** (45%)	**#3** (49%)	**#3** (46%)	**#2** (65%)			**#2** (65%)
Low income households	**#1** (78%)	**#1** (67%)	**#1** (67%)	**#1** (70%)		**#1** (63%)	**#1** (69%)
People with a low level of education	**#3** (38%)	**#2** (55%)	**#2** (54%)	**#1** (70%)		**#3** (51%)	**#3** (56%)
Seniors, ages 60+						**#2** (60%)	

There is remarkable concurrence across sectors in identifying groups most vulnerable to being digitally excluded, with unanimous selection of low-income households as the most at risk. Immigrant populations and people with limited English language skills, and people with a low level of education vie for second and third place. Although state libraries is the only sector that placed individuals with disabilities in the top three, this group ranked fourth (39.6%) in the aggregated results. For rural libraries, seniors over the age of 60 ranked high for exclusion, perhaps reflecting the aging of rural communities in America.

In the additional comments, 40% suggested that all residents of a rural/remote community equate to a potentially excluded population. Studies confirm that rural areas lag behind in broadband access. The February 2011 report from the Department of Commerce found that "seventy percent of urban households had broadband at home, compared to 57 percent of rural households."

The lowest ranking groups are worthy of comment here. All sectors chose children (under 13) and/or youth (ages 13-25) as the least vulnerable to digital exclusion. It may be a reasonable assumption that schools are performing well in providing digital technologies and training to students. However, a study from Common Sense Media—Zero to Eight: Children's Media Use in America—reveals a persistent digital divide in home media access for children from low-income households, which may disadvantage them in school. As a subset of the low-income households group, they may be in need of special attention as a vulnerable population.

Most Useful Resources To Build Digital Communities

Question: What would be most useful for you in achieving digital inclusion priorities in your community?

Table 6: Most useful resources	City/ County	Non-profits	Public Libraries	State Libraries		Rural (<5K)	Large (>100K)
Training for staff and volunteers	**#3** (35%)		**#2** (67%)	**#2** (72%)		**#2** (67%)	**#3** (54%)
Access to outside expertise (e.g., technical consultants)				**#3** (67%)			
Capital funding	**#1** (89%)	**#2** (56%)	**#3** (65%)			**#3** (61%)	**#2** (67%)
Operational funding	**#2** (78%)	**#1** (78%)	**#1** (81%)	**#1** (94%)		**#1** (83%)	**#1** (85%)

The compactness of this table reveals the consensus in all sectors about the greatest needs for digital inclusion efforts. Operational funding is the vigorous top contender for all sectors except city/county. For the city/county managers, it is second relative to the greater need for capital funding. Note the percentage drop between their #2 and #3 choices; all other resources on the list are dwarfed by their top-of-mind need for funding. Training for staff and volunteers showed up in the top three needed resources for all except the nonprofits. State libraries appear to be alone in selecting access to outside expertise as a valued resource, but the overall survey results rank this in fourth place (40.8%). A national report card on the status of digital inclusion garnered the least number of votes across sectors, with the exception of non-profits, who rated a case study and best practices repository a notch lower.

Other useful resources identified in open-ended comments include

- tutors in other languages, translated training materials
- protection of e-rate funding so that “it not be used to subsidize cable company profits”
- cooperation from media companies
- advocacy tools for promoting digital inclusion with local stakeholders.

Additional Comments

Question: Is there anything else you would like us to know about digital inclusion in your community?

Respondents used this unstructured comment space to elaborate on particular barriers and challenges and to illuminate other facets of digital inclusion not specifically elicited in the rest of the assessment. Issues of affordability, access, transportation and language barriers were mentioned. There appear to be challenging dichotomies present in this work, and for digital inclusion efforts to be successful, these polarities must be balanced.

The challenges unique to rural and remote communities are detailed in a number of comments.

- *The community will is there - people want to be involved in the digital world - but there is a growing broadband divide in this country. Rural areas have been left behind with regards to access, redundancy and cost, and it hurts our communities, including the schools, government and businesses.* (city/county respondent)
- *Biggest concern is for our rural communities. Many lack access to high speed broadband either because it is not available or affordable. Our small libraries also see a lot of staff turnover and funding problems. Approximately 90% of our libraries offer free ""WiFI. This is much appreciated. We have even heard stories where people have used it after hours from their car in the library parking lot."* (state library respondent)
- *We are remote, rural, and somewhat at the mercy of broadband providers. Budgets are extremely tight, physical space is often very limited for adding new computers. Staffing is so short that hours are limited in some cases. Simply having enough electrical outlets can be a barrier in some of our libraries.* (public library respondent)
- *How do I push "home rule" mindset that prevents our many townships and local units of government from making it easier to lay fiber and build cell towers? We have enough natural barriers (lots of lakes, iron in the ground) that get in the way of countywide wireless. We do not need the artificial barriers of my permit needs this, no ugly cell towers here.* (public library respondent)

The following responses highlight economic, transportation, consumer safety and social barriers:

- *The lack of broadband availability is our major issue. High fuel prices and lack of public and private transportation is a serious handicap for our customers. We can't take it to them because there is no internet service and they cannot get to us because of economic hardships. No public transportation exists in the rural areas.*
- *Our biggest concern with the digital age is the issue of identity theft and personal information security. It is hard to promote paying all your bills on your phone, or on public computers when identity theft is so easy. We need better safeguards in place and 4-digit pins are not the answer.*
- *Austin is very technologically savvy, but the inability to reach the under-served population is a great concern. Building the trust through bilingual (Spanish and other languages) classes and ease of access (located on bus routes) is essential to working with our clients.*
- *Our most consistent barrier to digital inclusion isn't low-income or age: it's fear. Our users often tell us how far they've come, saying they couldn't turn a computer on and were certain they would break it. Once we get past that initial fear and self-doubt, we can often find online resources to break down barriers of language, education, income, or whatever else keeps them digitally excluded. It's interesting that our most nervous users are also the people most excluded in society in general--the homeless, the elderly, the uneducated, the ex-convicts--even though they could benefit from digital inclusion the most. It's as if technology is just another element they don't expect to have in today's culture.*
- *Lack of digital inclusion and access to digital technologies is a huge barrier to low income workers and the unemployed obtaining truly gainful employment.*
- *Some of our city council members resist change and the idea of digital inclusion is beyond their ken.*

MOVING FORWARD

Despite the barriers and challenges, this assessment uncovered a host of existing efforts to increase digital inclusion on many fronts. Yet there is the accompanying perception that the efforts are still somewhat isolated from each other and lacking in cohesive, coordinated impact for the community as a whole. This sense of fragmentation is conveyed in the comment:

- *In a major metropolitan area there are dozens of like services. If there was only some way we could coordinate and share.*

Some respondents suggest a move toward more collective, cross-sector actions to realize the vision of a digitally connected community.

- *There is ingenuity among individuals and organizations. By networking and working together, organizations can share resources. This can alleviate much of the budget-related pressure, and cross-promotion can greatly help with marketing.*
- *This is an exciting time for the Iowa City Community. We have also just begun a partnership with our police department offering computer access at a police substation in a lower income area of town. We are very interested in partnerships as it helps us get the message out and created good will that can be used for more projects and initiatives in the future.*
- *As the director of a rural/small town public library system, I think that providing digital access and resources is a key element in the future of the public library. We've had great support from the Gates Foundation in the past, but the job of educating local and national leaders about this is an ongoing process. Digital inclusion depends upon active and continuing advocacy along with training new librarians to do this work during increasingly tough economic and social times.*

Advancing digital inclusion in the U.S. is definitely an ongoing process. It is likely to be all the more successful at the local level when local leaders and stakeholders from different sectors of the community determine a common agenda, integrate their priorities and work together to address barriers.

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[i] **WebJunction.org** is an open, online learning community for library staff. WebJunction's vision is to be the place where the library profession gathers to build the knowledge, skills, and support they need to power relevant, vibrant libraries. The mission is to make it possible for *all* public library staff to build the skills they need for today's libraries. Originally funded by the Bill & Melinda Gates Foundation, WebJunction is now a social enterprise hosted by OCLC and supported directly by the library community.

[ii] Founded in 1914, **ICMA** is the premier local government leadership and management organization. Its mission is to create excellence in local governance by advocating and developing the professional management of local government worldwide. In addition to supporting its nearly 9,000 members, ICMA provides publications, data, information, technical assistance, and training and professional development to thousands of city, town, and county experts and other individuals throughout the world.

[iii] **TechSoup Global** builds technology capacity for community-based organizations (CBOs) around the world. Its mission is to work towards the day when every community-based organization and library on the planet has the technology resources and knowledge they need to operate at their full potential.