

Building Digitally Inclusive Communities

*A Guide to the
Proposed Framework*



What is digital inclusion — and why does it matter?

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 effective use of information and communication technologies. The cost of digital exclusion is great. Without access, full participation in nearly every aspect of American society — from economic success and educational achievement, to positive health outcomes and civic engagement — is compromised.

This guide is designed to help communities attain the vision of digital inclusion.

What does digital inclusion mean for people in a community?

All people, businesses, and institutions will have access to digital content and technologies that enable them to create and support healthy, prosperous, and cohesive 21st century communities.

Specifically, digital inclusion means that:

- All members understand the benefits of advanced information and communication technologies.
- All members have equitable and affordable access to high-speed Internet-connected devices and online content.
- All members can take advantage of the educational, economic, and social opportunities available through these technologies.

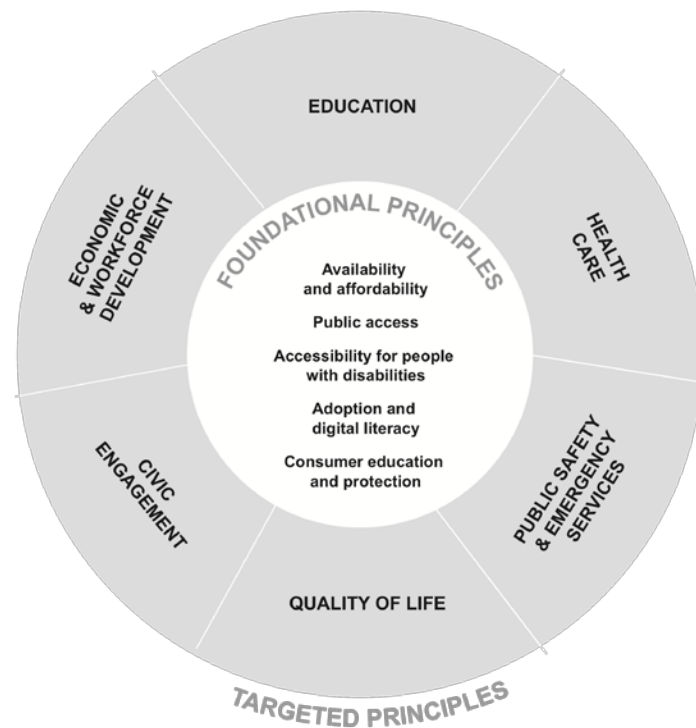
Not all members of a community benefit equally, and some communities have been left out altogether. Recognizing the cost to American competitiveness in a global economy, Congress directed the Federal Communications Commission (FCC) to develop a plan to ensure that every American has “access to broadband capability.” Issued in March 2010, the *National Broadband Plan* recommended that the Institute of Museum and Library Services (IMLS) take the lead in supporting libraries and community-based organizations as they improve digital inclusiveness.

This guide was developed with input from over one hundred organizations and individuals with deep knowledge about public access technology and the diverse information needs of communities. It presents a set of overarching principles (and associated goals) and identifies the key characteristics of organizations and communities that foster digital inclusion.

Principles of digital inclusion

Five **foundational principles** describe how a community supports its members in accessing and using digital technologies.

In addition, a set of **targeted principles** articulate how the foundational principles will be experienced in specific areas of activity and community life (see diagram).



Foundational principles

Principle 1: Availability and affordability

Communities need reliable and affordable access to broadband technology infrastructure in order to be fully engaged and competitive in today's information-based world.

GOALS

- Access to high speed Internet in every household, business, and community anchor institution at actual download speeds that meet or exceed the service goals and milestones set by the FCC.
- Pricing structures that enable businesses, institutions, and households to afford access to digital technologies.
- Uniform Internet Service Provider (ISP) pricing information that is accessible and usable for consumers to compare plans available in the community.
- Competitive deployment of infrastructure through right-of-way policies that remove barriers to market entry and system upgrades.

Principle 2: Public access

In a world connected by technology, all people, regardless of income, need access to information and communication technologies in order to be fully engaged members of society, both economically and socially.

GOALS

- Sufficient, convenient free access to computers, Internet, wireless networks and other communication technologies to support the needs of residents, workers, and visitors.
- Public access technology in safe facilities, with adequate levels of privacy, security, and accessibility for people with disabilities.
- Broad community awareness of the availability of public access technologies.

Principle 3: Accessibility for people with disabilities

Communities should ensure the full participation of all their members, by embedding accessibility to digital technology for people with disabilities throughout their institutions, processes, and public awareness efforts.

GOALS

- Technology managed in ways that ensure access by people with disabilities, including, at a minimum, full compliance with the letter, intent, and spirit of accessibility laws and regulations.
- Businesses and community-based organizations equipped with the skills and know-how to comply with accessibility standards and design technology-based services using universal design.
- Assistive technologies available at public access locations.
- Disabled persons equipped with the skills and assistive devices necessary to access technology and create content.

Principle 4: Adoption and digital literacy

Beyond having access to technologies, people, businesses, and institutions need to understand digital technologies and how to use them effectively to achieve their educational, economic, and social goals.

GOALS

- Digital literacy training needs and assets in the community identified and evaluated.
- Digital literacy training provided through formal classes and real-time virtual help, as well as through one-to-one assistance for individuals, business, and institutions.
- Information literacy instruction embedded in all aspects of curriculum for K–12 and higher education, as well as in life-long learning activities.
- Training and assistance in finding information and evaluating resources, tailored for the needs of a community.

Principle 5: Consumer education and protection

Consumers — both individual and institutional — need accurate, unbiased information to understand the technology options available to them, including how to buy and maintain equipment and how to safely navigate the digital world.

GOALS

- Training for consumers on the purchase, maintenance, and repair/recovery of technology equipment and services.
- Strategies for training and educating community members about safeguarding personal information, using parental controls, protecting vulnerable populations from cyber-bullying, maintaining systems free from viruses, and protecting against other forms of online abuse.
- Privacy policies adopted by businesses and government that are visible, easily accessible, and comprehensible to consumers.
- Local law enforcement agencies equipped with strategies and authority to pursue cybercriminals while protecting individual civil rights.

Targeted principles

Principle 6: Education

Educational institutions should ensure that students have the digital skills to fill the jobs of today and tomorrow, and to reap the potential rewards of lifelong digital learning.

GOALS

- Sufficient bandwidth to ensure that schools and other educational institutions can support current and future demand for broadband-enabled technology.
- Technology embedded in curriculum development and instruction, in both formal K-12 and post-secondary institutions and in informal educational activities, to prepare students for 21st century opportunities and challenges.
- Coordination between schools, libraries, and community-based technology centers to maximize delivery of in-school and out-of-school student learning tools.

Principle 7: Economic and workforce development

Technology is a powerful engine of innovation and economic growth in today's world. In order for individuals and businesses to succeed in this environment, communities need to foster the mastery of 21st century skills and encourage the use of technology for economic development.

GOALS

- Technology training targeted to employers' requirements and to the needs of the workforce in order to promote economic development and create job opportunities.
- Public-private partnerships and cross-agency collaborations to make use of workforce training capacity of public libraries and community-based organizations.
- Development of small businesses and local entrepreneurs by better supporting existing eCommerce and eGovernment tools.

Principle 8: Civic engagement

Residents should be easily able to interact electronically with community institutions, government agencies, and one another, to allow them to participate actively in community affairs.

GOALS

- Opportunities for the public to connect directly with each other, as well as with legislators and government agencies, in order to deliberate and make choices together to improve policy and administration.
- Online access to government services that is appropriate for users of all skill levels, that meets the language needs of the community, and that is available for use on a variety of devices.
- Technology that enhances government and institutional transparency in decision-making processes and outcomes.
- Stable and easy-to-use financial and performance data that enhance accountability.

Principle 9: Public safety and emergency services

Communities can increase their emergency responsiveness through effective deployment of digital technologies, ensuring the public the best possible emergency preparedness.

GOALS

- Sufficient wireless broadband capacity for emergency responders to support secure, resilient, and redundant networks capable of sustaining emergency services throughout planning, preparing, responding, and recovering from an emergency.
- Interoperable emergency alert networks with redundancies across mobile, wireless, and wired networks via Common Alerting Protocols.
- Public libraries, schools, and other community institutions able to provide full digital access to residents or evacuees during emergencies.

Principle 10: Health care

Communities should have the digital technologies necessary to support the health care needs of their populations, especially in areas with limited health care facilities, to afford all their members access to the best possible health care.

GOALS

- Broadband communication available for medical facilities, with sufficient capacity to support bandwidth-intensive telehealth applications.
- Secure systems for local medical professionals and community-based health clinics to share medical records among health care providers.
- Patient-centered design that allows patients easy access to online health information systems and medical records.
- Technology training offered to health care providers and patients to facilitate better health care.

Principle 11: Quality of life

Individual members of a community should have access to technologies that promote social engagement and the pursuit of productive and creative interests.

GOALS

- Interactive, high-quality multi-cultural content available through public libraries, museums, archives, and other cultural institutions.
- Programs that encourage vulnerable and diverse populations to develop local content and to participate in social networks.
- Intergenerational ties strengthened through technology-mediated interaction between youth and older residents.
- An enhanced sense of community, through encouraging the digital preservation and sharing of local history and contemporary culture that convey belonging and continuity.

Getting started on digital inclusion

The creation of a digitally inclusive community requires the involvement of all sectors of the community — and any of them can provide leadership and be a catalyst for action. Every community will take its own path to become digitally inclusive, and the following steps are likely to be part of the process.

1. Convene stakeholders

- The **local government**, including elected and appointed officials.
- **Public agencies, especially the public library**. Other important public agencies include the public schools (K–12), institutions of higher learning, economic development agencies, and public housing departments.
- Non-profit **community-based organizations**. Likely partners are non-profits that serve targeted populations within a community, and organizations that provide supportive housing, job training, and childcare.
- **The business community**: telecommunication companies; major employers in need of trained employees; Chambers of Commerce and other business groups.

- **Residents**, individually or representing neighborhood or housing associations. Residents' participation in committees and task forces can help institutions get a broader perspective.

2. Develop a shared community understanding of digital inclusion

- What does the term digital inclusion mean for the community?
- What digital technologies are currently available, and to whom?
- Where are the gaps? Who is left out and at risk of being left behind?
- What are the most important community goals of digital inclusion: economic development, education, job training, health care, social connection?

An initial “needs assessment” — based on systematic data collection and analysis — can lead to a shared vision of where the community wants to be in a technology-driven world.

3. Create a community action plan

Create a community action plan anchored by the shared vision (as detailed in the *Proposed Framework Report*) — with specific goals, measures of success (or “benchmarks”), timelines, and assignment of responsibility.

4. Implement the plan

Implement the plan by generating the needed resources — drawing on government appropriations, business contributions, philanthropy, or some combination of these sources. Create some early successes that can be celebrated to create awareness and build momentum.

5. Evaluate and revise the plan

Digital devices and transmission capabilities, workforce requirements, economic drivers, and population demographics are all constantly changing. As circumstances change, implementation plans must change as well.

Learn more

Want to learn more about building digital inclusion in your community? Up-to-date information on this initiative is provided at jmls.gov. And all the resources listed below, as well as a list of the individuals and organizations that contributed to this guide, can be found at the Digital Inclusion Project website:

tascha.uw.edu/inclusionframework.

The *Proposed Framework Report* is the companion report for this guide :

[*Proposed Framework for Digitally Inclusive Communities: Final Report*](#)

(Institute of Museum and Library Services, 2011). The report explains how the proposed framework and guide were developed, and gives additional details about the principles and goals. It outlines next-stage “expanded goals” for each of the principles as well as sample strategies, and includes a comprehensive bibliography.

You may also want to explore these influential documents:

[*Connecting America: The National Broadband Plan*](#)

(Federal Communications Commission, 2010). The technical and national aspects of broadband availability.

[*U.S. Lags Behind: Why It Will Be Hard to Close the Broadband Divide*](#)

(John Horrigan, 2007). Reasons for non-adoption – and the need for a comprehensive framework.

[*Digital Inclusion: Measuring the Impact of Information & Community*](#)

[*Technology*](#) (Mike Crandall & Karen Fisher, 2009). Overview of digital inclusion and public access to technology.

[*21st Century Skills, Education & Competitiveness: A Resource & Policy Guide*](#)

(Partnership for 21st Century Skills, 2008). The importance of digital literacy skills.



ABOUT THE PARTNERS

The Institute of Museum and Library Services is the primary source of federal support for the nation's 123,000 libraries and 17,500 museums. The Institute's mission is to create strong libraries and museums that connect people to information and ideas. The Institute works at the national level and in coordination with state and local organizations to sustain heritage, culture, and knowledge; enhance learning and innovation; and support professional development. To learn more about the Institute, please visit www.ims.gov.

University of Washington

The Technology & Social Change Group (TASCHA) at the University of Washington Information School explores the design, use, and effects of information and communication technologies in communities facing social and economic challenges. With experience in 50 countries, TASCHA brings together a multidisciplinary network of social scientists, engineers, and development practitioners to conduct research, advance knowledge, create public resources, and improve policy and program design. Our purpose? To spark innovation and opportunities for those who need it most.

ICMA, the International City/County Management Association, advances professional local government worldwide. Our mission is to create excellence in local governance by developing and advancing professional management to create sustainable communities that improve lives worldwide. ICMA provides member support; publications; data and information; peer and results-oriented assistance; and training and professional development to nearly 9,000 city, town, and county experts and other individuals and organizations throughout the world. The management decisions made by ICMA's members affect millions of individuals living in thousands of communities, from small villages and towns to large metropolitan areas.

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DOWNLOAD THE COMPANION REPORT

Proposed Framework for Digitally Inclusive Communities: Final Report — available at tascha.uw.edu/digital-inclusion-framework