

# Leverage Libraries to Achieve Digital Equity for All

**NEW FEDERAL FUNDING CAN POWER PROGRESS** 

#### **Executive Summary**

New federal programs and resources through the Infrastructure Investment and Jobs Act (IIJA) provide an unprecedented opportunity to build on the existing infrastructure and expertise of our nation's libraries to inform state digital equity plans and accelerate broadband adoption and skills building for all nationwide.

Libraries provide:

- Reach with a physical presence in communities of all sizes, as well as in K-12 schools, colleges and universities, military bases, and more that provide high-speed internet access, computers, specialty software applications, central meeting spaces, and trusted hubs for information and community referrals for people across diverse backgrounds and interests;
- Expertise and resources with trained staff experienced in tackling digital equity gaps, boosting literacies and digital skills needed to survive and thrive in today's networked world, and developing collections and resources relevant to local needs; and
- Sustainable, flexible collaboration ranging from digital equity coalitions to state workforce development plans to telehealth collaborations that strengthen networks and support sustainability.

These assets align with the goals of the IIJA and must be leveraged as part of upcoming state planning efforts, as well as efforts to boost awareness of and enrollment in the Affordable Connectivity Program. Not only do library staff have deep

experience enabling digital access and skills building, they have a proven track record of stewarding public funding to successfully meet the needs of local residents of all ages and backgrounds.

Accordingly, the American Library Association (ALA) recommends that:

- State broadband leaders and policymakers include state library agencies in statewide digital equity planning groups and leverage their unparalleled reach into all public libraries to strengthen communications and outreach statewide;
- State and local education agencies include K-12 school librarians and college and university library leaders in digital equity planning and deployment;
- Libraries increase awareness of their local technology assets to improve coordination across all levels of government and develop proposals for forthcoming funding programs;
- Congress enable sustainable funding for digital equity through measures like the Digital Equity Foundation Act;
- Federal agencies continuously work to reduce administrative and record-keeping barriers that limit participation by small libraries and other community-based entities; and
- National library support organizations aggregate, amplify and advocate with and for state and local libraries to ensure full participation in digital equity planning and implementation and synthesize and share best practices to create scalable models.

More related information and resources can be found online at ala.org/advocacy/broadband.

## INTRODUCTION

In the wake of the pandemic, the federal government is making historic investments in advancing digital equity, literacy, and inclusion. One such investment is the Infrastructure Investment and Jobs Act (IIJA), which includes \$65 billion to support expanding broadband access to unserved and underserved communities. It also provides funding to support community anchors, like libraries, to help individuals build their skills and confidence to fully engage in and benefit from the digital economy. With a long history of enabling and advancing equitable access to information, literacy, and broadband-enabled services, America's libraries are essential to fulfilling national, state, and local digital equity goals.

#### Infrastructure Investment and Jobs Act

Of the \$65 billion made available through the IIJA, approximately \$45 billion will be allocated directly to the states and territories. It starts with planning funds, which each state or territory will use to develop its digital equity plan for the next five years. This plan must include how the state will:

- build broadband infrastructure that is affordable, reliable, and high-speed, not only meeting the demands of today but robust enough to support future growth;
- facilitate the adoption of high-speed internet in unserved and underserved communities;
- implement and support digital skills training and workforce development, and;
- make equipment, software, and support for highspeed internet service available.

Each state and territory must engage community partners in its plan, including libraries, to achieve its digital equity goals. Once the digital equity plans are approved by the National Telecommunications and Information Administration (NTIA), states will receive federal funding to implement their plans.

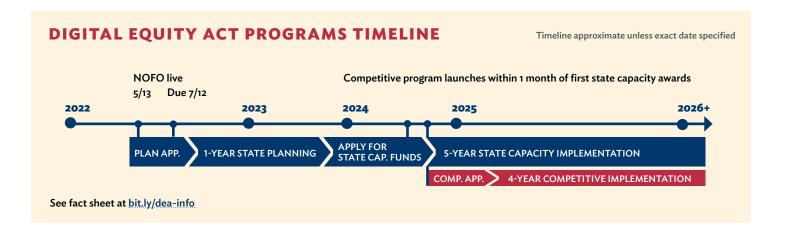
With aggressive timetables and requirements for diverse input, outreach, and coordination, libraries are well-positioned to assist state policymakers in successful planning and implementation.

There also is funding that will be accessible to libraries directly from NTIA, but the competitive grant program won't be available until 2024 at the earliest (see timeline below).

## **Libraries Champion Digital Equity**

We must work together to create a digitally equitable future for our communities, states, and nation. Libraries have been at the forefront of digital equity for decades, so it makes sense that they are at the center of this work at this historic time. Our nation's 117,000 libraries support digital equity by:

- Enabling access to broadband and devices within the library and beyond. Whether it's no-fee Wi-Fi within the library's walls, extending access into neighboring public space, loaning hotspots, or creating MESH networks in the community, libraries find creative solutions to connect underand unserved residents.
- Building digital skills and developing informed internet users. Libraries have expert staff experienced in providing instruction, coaching, and information resources to help people build basic digital skills, critically evaluate online information, and master emerging technologies.
- Supporting workforce development and entrepreneurship. Libraries have community-relevant information resources, needed technology, and community partnerships that support workforce development, jobseekers, aspiring and existing entrepreneurs and small business owners, and economic advancement.
- Serving as hubs and spokes in delivering services.
   Through strategic collaboration at the national, state, and local levels with service providers,



government agencies, and other partners, local libraries provide needed resources and services to their communities. Libraries also act as hubs when they connect residents to relevant services provided by community partners. These networks and referrals also are essential to addressing underlying systemic issues such as low literacy, houselessness, food insecurity, and mental and physical health services that may be substantial barriers to social, economic and educational opportunity.

So, how can libraries and policymakers build on these assets and leverage new funding to enable and sustain internet for all in the United States?

## THE CONVENING

In June 2022, the American Library Association, with the financial support of the Mellon Foundation, hosted the ALA Workshop on Digital Inclusion & Broadband in Washington, D.C. The convening brought together library leaders, policy advocates, and other experts in broadband and digital inclusion. Participants came from across the United States and represented schools; public, academic, and tribal libraries; and partner organizations.

Through panels, discussions, and informal conversations, participants worked together to plan for the future of digital equity, literacy, and inclusion at the local, state, and national levels. They explored what we have learned from past and current digital equity, literacy, and inclusion efforts and how we can use those experiences to advance the work libraries do in the future.

The goals of the convening included:

- highlighting library initiatives on broadband and digital inclusion;
- exploring opportunities for libraries to advance digital equity, literacy, and inclusion in the future;
- identifying how ALA can support libraries in promoting, supporting, and advancing digital equity, literacy, and inclusion;
- identifying how ALA can advocate for libraries at the local, state, and national levels; and
- exploring how libraries can best prepare to apply for funds available through NTIA.

This opportunity to share promising practices and connect with colleagues and collaborators has advanced the ALA's efforts to identify and amplify library-led initiatives for digital equity and inclusion. This report captures and shares examples from convening participants and related research and explores how libraries and policymakers can build on and expand this foundation over the coming five years of the IIJA implementation and beyond.

# **Digital Equity Act Definitions**

**Digital Equity:** The condition in which individuals and communities have the information technology capacity that is needed for full participation in the society and economy of the United States.

**Digital Inclusion:** Digital inclusion refers to the activities that are necessary to ensure that all individuals in the United States have access to, and the use of, affordable information and communication technologies, such as:

- Reliable fixed and wireless broadband internet service
- Internet-enabled devices that meet the needs of the user; and
- Applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration.

Digital inclusion includes obtaining access to digital literacy training, the provision of quality technical support, and obtaining basic awareness of measures to ensure online privacy and cybersecurity.

#### THE MOMENT

Signed into law by President Joe Biden on November 15, 2021, the IIJA includes a historic investment in advancing digital equity and an opportunity for libraries to leverage and expand their roles in that work. The Act includes \$65 billion to support multiple programs to bring broadband connectivity across the country. Particularly relevant to libraries are the Digital Equity Act (DEA) and the Broadband, Equity, Access, and Deployment (BEAD) programs, which are both administered by NTIA.

#### **Digital Equity Act**

The DEA<sup>2</sup> provides \$2.75 billion over five years to promote digital equity, literacy, and inclusion initiatives at the local, state, and national levels. Libraries of all types will be eligible to apply. The program includes:

- Step 1: \$60 million for State Digital Equity Planning Grants. States should receive funding by October 2022. At this point, the designated administering entity (often, but not always, the state's broadband office) will have one year to gather input and develop plans to promote digital equity, support digital inclusion activities, and build capacity for broadband adoption for state residents.
- Step 2: \$1.44 billion for the State Digital Equity Capacity Grant Program. Once the State's Digital Equity Plan is approved by the NTIA, states and

- territories will receive funding based on a formula to implement their digital equity plans. Over the next five years, states will implement digital equity plans.
- Step 3: \$1.25 billion for the Digital Equity Competitive Grant Program. This program is for eligible entities, including libraries, to promote digital inclusion and spur greater broadband adoption among covered populations. It also strongly encourages community collaboration. Examples include:
  - training programs that cover basic and advanced digital skills;
  - workforce development programs;
  - free or low-cost equipment provided to covered populations; and
  - constructing, upgrading, or expanding public access computing centers

#### Broadband, Equity, Access, and Deployment Grant

The BEAD program<sup>5</sup> includes \$42.5 billion to expand high-speed broadband access infrastructure, deployment, and adoption. Like the DEA, states will first receive funds to develop their 5-year action plan and build capacity to support their efforts. The Federal Communications Commission (FCC) is currently updating its broadband availability maps. Based on these maps delineating unserved and underserved

# Key Stakeholder Groups<sup>4</sup>



As part of the Digital Equity Act, administering entities are required to engage with key stakeholders as part of developing and implementing their digital equity plans. Key stakeholder groups may include:

- Community anchor institutions (examples include libraries, public schools, medical or healthcare providers, community colleges, institutions of higher education, state library agencies, etc.)
- County and municipal governments
- Local educational agencies
- Indian Tribes, Alaska Native entities, or Native Hawaiian organizations, where applicable
- Nonprofit organizations
- Organizations that represent covered populations
- Civil rights organizations
- Entities that carry out workforce development programs
- State agencies that administer or supervise adult education or literacy activities
- Public housing authorities

This list is not exhaustive but provides libraries with examples of the types of organizations they can partner with to achieve their community's digital equity goals.

# **Covered Populations**<sup>3</sup>

The DEA promotes digital inclusion and spur greater adoption of broadband among covered populations and communities who have been disproportionally impacted by digital inequity. These populations include:

- Aging populations (60 and above)
- Incarcerated individuals (other than individuals who are incarcerated in a Federal correctional facility)
- Low-income households
- People with disabilities
- People with language barriers (including individuals who are English learners; and have low levels of literacy)
- Racial and ethnic minorities
- Rural inhabitants
- Veterans



areas, states will be informed of the amount they will receive to support their broadband initiatives. States will then submit plans on how to achieve their broadband goals with a priority on providing broadband access to unserved areas (those below 25/3 Mbps) and then underserved areas, followed by community anchor institutions. BEAD plans must also align with the state's digital equity plan, and NTIA strongly encourages collaboration with community organizations, like libraries, to achieve program goals.

## **Affordable Connectivity Program**

The IIJA also included funding for the Affordable Connectivity Program (ACP), administered by the FCC. The ACP provides qualifying low-income households with a monthly discount of up to \$30 per month (and up to \$75 per month for households on qualifying Tribal lands), as well as a one-time \$100 discount toward a laptop, desktop computer, or tablet. In August 2022, the FCC voted unanimously to establish the Affordable Connectivity Outreach Grant Program<sup>6</sup> to support eligible partners, such as libraries, in their outreach efforts to increase awareness of the ACP.<sup>7</sup> The FCC is expected to issue the Notice of Funding Opportunity for the \$100 million program and related pilots in fall 2022.

# LEVERAGING LIBRARIES TO ADVANCE DIGITAL EQUITY

America's state library agencies and the more than 117,000 libraries, including public, school, academic, special, and tribal in communities of all sizes, have deep experience in meeting digital equity needs for people of all ages and backgrounds—including specific "covered populations" prioritized in the IIJA—with unparalleled reach and trust across the nation.

Libraries are actively involved in a larger digital equity ecosystem, and often have long-established partnerships and relationships with local and regional groups that can be leveraged to achieve community broadband equity goals for vulnerable populations. Considering libraries successful history in advancing digital equity, states should leverage libraries' expertise, experience, services, and existing connections at the state and local levels to avoid costly program duplication and accelerate planning, development, implementation, and operational efficiency.

## **Holistic Approaches to Digital Equity**

To create a future where everyone is fully connected and engaged online, each community needs to leverage all its assets including non-profits, internet service providers, businesses, government agencies, schools, state libraries, etc. to work together to understand the problems and implement appropriate solutions. Community-based digital equity coalitions are growing in number and sophistication throughout the nation. They combine the unique experiences and expertise of diverse organizations, as well as the lived experiences of unconnected and marginalized communities that may include people with disabilities, people of color, and low-income and/or rural residents to create a connected future. Libraries often lead and/or contribute to these coalitions.

In 2016 two librarians and a public-school teacher wanted to bring attention to the digital divide in Durham, North Carolina. They wanted to create a Durham where "everyone is equally engaged in the digital world." Their work led to the creation of Digital Durham, whose guiding principle is to "bridge the digital divide for all people in the city and county of Durham, NC." This group now has 15 member organizations, including the library, Durham Public Schools, Durham Housing Authority, colleges and universities, and community

organizations all working toward the established goal. These groups work to advance Digital Durham's digital equity plan, which includes four guiding strategies: "expand broadband access and adoption, . . . increase the number of people who have a device that allows them to participate fully online..., increase digital knowledge and skills among all groups in the community to encourage lifelong learning..., and implement and assess the outcomes of the Digital Equity Plan."

As part of this collaboration, Digital Durham and the Durham County Library were awarded funds through the Library Services and Technology Act (LSTA) to support a Digital Navigator "pilot program to aid in bridging the digital divide in Durham. These federal funds represent an investment in libraries' capacity to deliver relevant and up-to-date services to their communities."

As the pandemic was taking hold in April 2020, several Franklin County, Ohio, organizations began participating in informal, virtual meetings to more closely examine the status of broadband challenges for area residents. The group organically grew over time to become the Franklin County Digital Equity Coalition and includes more than 30 "business, government, education, non-profit and social sector representatives." Columbus Metropolitan Library (CML) is on the Steering Committee.

Early in the pandemic, CML donated computers that were then refurbished by PCs for People and given to low-income families. This was part of a larger city-wide collaboration with PCs for People, which included funds from the City of Columbus, Franklin County, and multiple corporate funders to provide computers to low-income families with K-12 students.<sup>15</sup>

Through a strategic collaboration in Harris County, Texas, thousands of households can access free broadband through an innovative partnership between Harris County IT, Harris

# TOOLS YOU CAN USE

# **Collaborative Action**



imls.gov/publications/building-digital-communities-framework-action. The Framework encourages engagement across all community sectors so that "all people, businesses, and institutions have access to digital content and technologies that enable them to create and support healthy, prosperous, and cohesive 21st-century communities.

#### **Advancing Digital Equity For All**

tech.ed.gov/advancing-digital-equity-for-all/

Led by the U.S. Department of Education's Office of Educational Technology, this resource identifies promising strategies and action steps for community action.

#### **Turning Outward Resources for Libraries**

ala.org/tools/librariestransform/libraries-transforming-communities/resources-for-library-professionals

This tool was designed to help libraries strengthen their role as community leaders and bring about positive change in their communities.

#### **Digital Inclusion Coalition Guidebook**

digitalinclusion.org/blog/2022/02/24/ndia-publishes-new-digital -inclusion-coalition-guidebook

This updated guidebook provides an in-depth look at successful digital inclusion models across the nations and includes best practices, lessons learned, and recommendations communities can use to build their own coalitions.

County Public Library (HCPL), and local community centers. More than 13 percent of households, or roughly 640,000 people in Harris County, do not have access to the internet, and another 8 percent do not have a computer, smartphone, or tablet.<sup>16</sup>

Using a mix of public and private funds, Harris County created HCPL Connect, which combines private LTE/5G, "MiFi" hotspots, a "mesh" Wi-Fi network of parks, libraries, and community centers and mobile/bus hotspots." The service broadcasts the LTE service using Citizen Broadband Radio Service. Local schools identify families who qualify for the free service and provide them vouchers that they bring to the public library to pick up the equipment they need to connect to the service. Future enhancements include distributing Chromebooks to eligible families and increasing the program to include other populations who currently lack access to the internet in the home.<sup>18</sup>

## **Broadband to the People**

Public libraries play a vital role in providing access to the internet, devices, and digital content—particularly to people of color and those in low-income households. In 2019, nearly 54 million Americans<sup>19</sup> accessed the internet in public places, and public libraries alone hosted nearly 224 million public internet use sessions.<sup>20</sup> During the pandemic, libraries of all kinds explored new and innovative ways to further extend broadband beyond the library walls, including amplified Wi-Fi, hotspot lending, library vehicles with internet access, and underwriting home internet access for low-income families.<sup>21</sup>

Bethlehem Public Library in Delmar (New York) is one such example. They extended the library's Wi-Fi network to multiple spots throughout the town, including the library parking lot, several parks, a town administrative building, and the Town Hall playground. The Wi-Fi service is available 24 hours a day, 365 days a year, so even when the library is closed, the internet is still available.<sup>22</sup> In addition, if a resident does not have a laptop, they can check one out at the library and connect it to the internet, including the community Wi-Fi network.<sup>23</sup>

To encourage library users to subscribe to internet service in the home, some libraries subsidize the monthly service fee for eligible residents. Through a grant from the IMLS and CARES Act funds, the Dayton (Ohio) Metro Library created Get Connected, which provided four months of free internet access to 800 local households in need. The library subscribed to a local internet service provider for access to each household. Once the four months were done, the participants were given the option to transfer the service to their name or end it.<sup>24</sup>

About one-third of public libraries provide internet hotspots for check out.<sup>25</sup> San Jose Public Library in California

#### **TOOLS YOU CAN USE**

## **Broadband Access**



#### **Toward Gigabit Libraries Toolkit**

internet2.edu/community/community-anchor-program/.cap-library-resources/toward-gigabit-libraries

This tool helps librarians become better equipped to improve their broadband services and become stronger advocates for their libraries' broadband infrastructure needs.

#### **BKLYNCONNECT Playbook**

bklynlibrary.org/sites/default/files/documents/general/.BKLYNConnect\_Playbook.pdf

A resource for researching, designing, and implementing a public Wi-Fi pilot program in your neighborhood.

#### Edge

libraryedge.org

Edge is a management tool that guides libraries of all sizes to set measurable, strategic goals for digital inclusion and to engage government and local leaders in meaningful conversations about 21st-century community needs.

developed two programs—one specifically designed for students and the other available to all library patrons. The student hotspots can be checked out for the school year, <sup>26</sup> and the library member hotspots are available for 90 days with one renewal if there are no holds. <sup>27</sup> The library's website includes videos about how to use the service and FAQ's. <sup>28</sup>

Broward County (Florida) Libraries provide free mobile hotspots for Veterans, Active Military, and their dependents to check out with valid military identification. The Veterans Connect Hotspot program was created "to assist veterans in transitioning to civilian life by encouraging education, self-development and career advancement through technology. It also encourages the use of Broward County Libraries' vast resources and services by members of the military community."<sup>29</sup>

Many libraries utilized the federal Emergency Connectivity Fund (ECF)<sup>30</sup> program to improve internet access in many of the ways described above. This \$7.17 billion program allowed K-12 schools and public libraries to purchase and distribute technologies so users who lack the necessary internet access and computer devices can get online. Corpus Christi (Texas) Public Libraries is using ECF resources to develop a program with the housing authority to lend Wi-Fi hotspots to residents to build digital skills and support their educational needs.<sup>31</sup> Funding for the ECF program is now expended and home internet access provided by libraries and schools will be discontinued without additional support.

Many community colleges and university libraries also lend hotspots. The Central Oregon Community College (COCC)

Barber Library provides hotspots that faculty, staff, and students can check out for one term.<sup>33</sup> COCC serves an area that is more than 10,000 square miles, and most students live in rural areas. This service helps connect students who "live in or near steep canyons or remote areas of the Warm Springs Reservation, where wi-fi access is nearly impossible."<sup>34</sup> The library also lends other tech like laptops, cameras, calculators, voice recorders, microphones, and more.<sup>35</sup>

Library staff, often in concert with digital navigators, also raise awareness of low-cost home internet options. Many libraries, like Fort Vancouver (Washington) Regional Libraries, have guides highlighting how their residents can utilize programs like the ACP to obtain low-cost internet in the home. Others have hosted webinars and events to promote and support ACP enrollment. Recent research found a correlation between the presence of public libraries in a 5-digit zip code and ACP enrollment. The "library effect" is associated with 6% higher ACP enrollment in 5-digit zip codes with a public library compared to those without.<sup>36</sup>

## **Technology Access**

In addition to having an internet connection, residents also need devices that can connect to the internet. Libraries of all types are lending or giving away the technology their community needs to meet their personal digital goals.

Santa Rosa (California) Junior College is a formally designated Hispanic Serving Institution<sup>37</sup> and provides technology and other tools their students need to support their academic success. The library includes public computers with specialty applications like the Adobe design software, graphing and scientific calculators, and students can check out laptops and iPads.<sup>38</sup> They also have Wi-Fi hotspots students can check out for the semester. The application to apply for this service is in both English and Spanish.<sup>39</sup>

Using ECF program funding, Charlotte Mecklenburg (North Carolina) Library "will be issuing 20,000 refurbished laptops to eligible adults in Mecklenburg County. Each laptop is free and includes preloaded productivity and education applications and all necessary hardware needed for set-up." When the recipient picks up their laptop, a partner organization will be on hand to provide information on the ACP, and recipients can schedule an appointment with a tech tutor, assess their technology literacy, and attend classes on various topics and software. 41

Many libraries also provide specialized hardware and software to support users who have disabilities. One example is the University of North Texas University Libraries. All public computers include JAWS, a screen reading application, and the Windows integrated adaptive software or Apple Accessibility. In addition, the library has an ADA Assistive Devices area that includes specialty keyboards, Perkin Brailler, TOPAZ Desktop Magnifier, and a refreshable braille display. There are trained staff available

to assist the user with adaptive equipment questions and problems.<sup>42</sup>

# DIGITAL AND INFORMATION LITERACY

Building digital skills is a vital component of digital equity and one that has historically received little federal attention or funding, particularly relative to broadband technology investments. Access to the internet and devices is necessary, but not sufficient for digital equity. Digital literacy and skill development work best with instruction to help learners use technology to accomplish their goals and are not tied to a specific tool.

Furthermore, digital literacy must be built on basic literacy and extend beyond technical skills to include critical thinking, problem-solving, and a mindset of lifelong learning. Technology is constantly changing, and residents need to stay abreast of these changes to stay connected, adapt and use new devices, platforms, and services. Sustainable broadband adoption and full participation in the digital economy demands increased attention on skills building.

Libraries are highly trusted as sources of information<sup>43</sup> and venues to acquire digital skills training. In a 2021 Pew survey, "26% of respondents reported they usually need someone else's help to set up or show them how to use a new computer, smartphone or another electronic device. One in ten reported they have little to no confidence in their ability

to use these devices to do the things they need to do online."44

Libraries meet
learners where they
are, from beginning
technology skills to
building critical thinking
and evaluation to
advanced coding and
digital creation. Modes
range from formal
classes to one-on-one
coaching to drop-in



88% of all public libraries offer formal or informal digital literacy programming to community residents. Staffing and funding are top challenges to providing or expanding these services.<sup>32</sup>

labs and on-the-fly technology assistance. This work is often resource-intensive, particularly to reach and support people starting with the fewest digital skills.

Emerging collaborative models allow libraries, often with community-based partners, to share resources and expertise across multiple locations. For instance, the New Jersey Library Association's Access Navigator program provides a cohort of skilled trainers that rotate through 12 participating libraries that cover nine counties to provide individualized assistance for digital skills and job training.

Programs also are geared to learners across ages and backgrounds, from students to English language learners to older adults. Illustrative examples of this work include:

- Silver STEAMers at Los Angeles County Library in California. The program "brings fun and educational experiences to older adults through STEAM (Science, Technology, Engineering, Arts, and Math) events." The Silver STEAMers program includes online and in-person classes and online tools to help them build new skills.<sup>45</sup>
- Some schools within the school district of Collier County (Florida) serve primarily rural, migrant, and immigrant students. Many students do not have internet access or computers at home, so the district designed programs to provide internet and devices. Once those services were in place, many of the district's school librarians noticed that the students, families, and caregivers did not have needed digital skills. In addition to the technical support the school librarians and district provided to these students and families, the librarians stepped in to help students strengthen their digital skills. As student confidence grows, school librarians and instructional resource teachers provide opportunities for students to explore their interests through classes, makerspaces, and hands-on activities focusing on coding, robotics, and circuitry.
- During the pandemic, many college and university libraries supported faculty as they transitioned courses from in-person to online. One such school was Davidson College (North Carolina). Their library's teaching staff supported faculty as they transitioned courses online and provided more in-depth support for faculty as they prepared for the next school year. The library created the Digital Learning Institute, an "intensive four-week program, more than 200 faculty members worked to fully redesign their courses for online learning." This team still exists and continues to support faculty build new digital skills through workshops and research so they can engage their students through emerging educational technologies. <sup>47</sup>

#### **Foundational Literacy**

Digital skills building exists within a larger literacy ecosystem. Many libraries offer programs to help build literacy skills in their community for all levels. For instance, the Cuyahoga County (Ohio) Public Library created the program Kindergarten Club for kids and families who are beginning kindergarten. The program was "created for children who are not enrolled in classroom-based preschool, daycare, or Head Start programs to provide group learning experiences." The

# TOOLS YOU CAN USE Digital Literacy

#### PLA Digital Learn digitallearn.org

PLA Digital Learn is an online hub for digital literacy support and training. It includes a collection of self-directed tutorials for end-users to increase their digital literacy and training materials for libraries to use in workshop settings.

#### **Digital Navigator Toolkit**

digitalinclusion.org/wp-content/uploads/2021/09/ Digital-Navigators-Toolkit-Final.pdf

This toolkit, based on the experiences of Salt Lake City Public Library, includes information on how to identify training needs, hire a navigator, measure and assess the program, and more.

library offers family fun activities to help prepare the caregiver and child to enter kindergarten.

The Iditarod Area (Alaska) School District (IASD) received an Innovative Approaches to Literacy Program (IAL) grant from the Department of Education to increase the literacy level of their students. IASD includes seven schools across 75,000 square miles and supports many Native Alaskan groups. The district averages 11% proficiency in reading and language arts. To increase student literacy, the school is using the grant funds to launch the program Iditarod TRAIL: Thoughtful Readers are Iditarod Libraries!

This multiyear program will increase school library staffing and professional development activities, update collections and technology, increase literacy activities, expand hours to encourage caregivers and children to come to the library together, and create collections and programs that strive to preserve the local culture while building literacy skills. The school believes these investments will help lead the way to improve student scores in this region so they "can earn a living wage and participate in the modern global economy." 50

Even with strong literacy skills, it can be hard to identify if information online is credible. With the rise of misinformation, librarians are at the forefront of building skills so users are informed, engaged, and think critically about the information they consume and create online.

One such example is San Antonio College Library in Texas, which created the program Fearless Learning empowering first-time-in-college students. The program supports the "first-year experiences in and out of the classroom that help them develop integrated reading, writing, and research skills needed to succeed as information literate citizens, both academically and professionally" using the Framework for Information Literacy for Higher Education from the Association of College and Research Libraries. The librarians and faculty work together to help students develop student's information literacy skills in their first year of schooling to set them up for success during their college careers and beyond.

# TOOLS YOU CAN USE Information Literacy



# Association of Colleges and Research Libraries Framework for Information Literacy for Higher Education

ala.org/acrl/standards/ilframework

Community colleges, colleges, and university libraries use this framework with faculty to connect information literacy with student success and learning.

# American Association of School Librarians Standards Framework

standards.aasl.org/framework

Reflects a comprehensive approach to teaching and learning by demonstrating the connection between learner, school librarian, and school library standards.

#### **Civic Online Reason (COR)**

cor.stanford.edu

This tool provides lessons and assessments educators can use to teach students to evaluate online information.

In Connecticut, the Naugatuck Valley Community College, a Hispanic Serving Institution, and Waterbury Public High School librarians partnered to develop and deliver an information literacy instruction program for high school students to ensure they had the skills needed to be successful when entering college. This is part of a larger program that is preparing students for success in post-secondary education. The program is made possible by the GEAR UP grant from the U.S. Department of Education, which supports programs that "increase the number of low-income students who are prepared to enter and succeed in postsecondary education." 53

The IIJA programs, particularly the Digital Equity Act, bring overdue attention—and funding—to build the literacy and skills needed for educational and economic opportunity. Libraries are well-positioned to address this priority.

# WORKFORCE AND SMALL BUSINESS DEVELOPMENT

Libraries are critical anchors supporting workforce and economic advancement in their communities. The Digital Equity Act recognizes the importance of workforce development in helping residents achieve their digital goals by earmarking funds through the State Capacity and Competitive Grants to support the implementation of workforce development programs, especially for those populations who have been disproportionally impacted by digital inequity.

Libraries offer a variety of services and programs to support students, job seekers, small business owners, and entrepreneurs, including providing access to digital technology, such as high-speed internet, computers, cameras, specialty software, scanners, printers, etc., and traditional resources like books and specialty databases, hands-on training, individual and collaborative workspaces, and individual assistance.

A recent report by the National Skills Coalition stated that "nearly one-third (31 percent) of workers lack digital skills. This number includes the 13 percent of overall workers who have no digital skills and another 18 percent who have limited skills. An additional 35 percent have achieved a baseline level of proficiency." These findings illustrate that access to affordable, reliable internet service is insufficient. "Access to foundational and occupational-specific skills as well as reskilling is necessary to close the digital divide and achieve digital equity at work." 55

Workforce and small business development also encompass a range of programs and services that that stretch from high school equivalency or other certifications to adult literacy and entrepreneurship support. Libraries can and do play important roles in this spectrum of service, often in formal or informal collaboration with state and local workforce and economic development agencies. Illustrative examples include:

#### **GED**

Approximately 9% of the population age 25 and older in the United States had less than a high school diploma or equivalent. <sup>56</sup> Libraries like the Los Angeles County Library in California provide their residents "a second chance" to "earn an accredited high school diploma for free online in just 18 months or less." In addition to earning their degree, the library also provides personalized online career coaching.

#### **STEM**

K-12, community college, and universities nationwide offer programs to engage students in problem-based learning that

integrates Science, Technology, Engineering, and Math (STEM) to solve real-world problems. Norman High School Library Learning Commons in Oklahoma created a maker lab where students can use 3D printers and scanners to create physical objects; video equipment to create short films, 360 videos, and



stop motion animation; audio mixing to create podcasts or albums; and design software to create art, advertisements and so much more. The maker lab includes software and hardware that supports students in their quest to build digital skills, support experiential learning, and spark creativity and innovation.<sup>58</sup>

The Peoria Public Library in Illinois received LSTA funds to purchase virtual reality headsets that will be used to support STEAM programming for children. Two mentors were hired to teach VR programming. While the VR technology can be used for various STEAM activities, the first year of the program will focus on space. Through VR headsets, students can walk on the moon, dock at a space station, and explore in a fun, safe environment. This branch serves a culturally diverse and low-income population.<sup>59</sup>

The North Carolina State University Hunt Libraries provides multiple services for faculty, staff, and students to explore current and emerging digital technologies. The digital media space focuses on audio/video production, gaming development, graphic design, and VR and AR development. 60 The Makerspace supports electronics, 3D printing, 3D scanning, textiles and cutting and drawing with digital tools. 61 In addition, the Data Experience Lab (DXL) is the libraries' community hub for data science, visualization, and digital research and scholarship. It offers collaboration space, computing resources, and support for the university community working with data, creating visualizations, using geospatial methodologies, or employing new digital methods and approaches. 62 In addition to providing these different spaces and tools, staff are on hand to support the faculty, staff, and students in the creation process with one-on-one assistance and hands-on workshops.

#### **Job Searching**

Libraries of all types provide workshops, services, and tools to provide employment support to residents in their community.

# TOOLS YOU CAN USE Programs and Services

#### **Libraries Build Business Playbook**

ala.org/advocacy/sites/ala.org.advocacy/files/ content/Workforce/LBB\_Playbook\_web\_013122.pdf Playbook for libraries that want to support small businesses and entrepreneurship at their library.

#### **Northstar Digital Literacy Assessment**

digitalliteracyassessment.org

A tool that defines, assesses, and includes tutorials to build the basic skills needed to use a computer and the internet in daily life, employment, and higher education.

# Shhhhhh! The Doctor's In: Guide to Connecting Library Patrons to Better Health

cjspeaks.com/wp/wp-content/uploads/2021/05/ LibraryTelehealthGuide.pdf

Telehealth expert Craig Settles outlines resources and partnerships to boost library telehealth services.

The Booth Library at Eastern Illinois University is working with the University's Career Services and the School of Extended Learning "to present a series of workshops designed to provide resources for the local work-



force. Topics include creating resumes, how to complete an online application, how to interview, etc."<sup>63</sup> The grant award was part of the Illinois State Library's grant program titled "Bouncing Back from the Pandemic: Developing Resources for the Local Workforce," which provides funds from ARPA to support libraries in providing essential resources and services to those seeking employment.

#### **English-Language Learning**

Queens Public Library in New York provides the course English for Speakers of Other Languages (ESOL) "that will help customers build the language skills they need to have a successful career." In these courses, participants learn how



to create resumes, interview, increase their comfort communicating at work, make suggestions, communicate better with supervisors and peers, and prepare presentations and reports. Once participants complete the ESOL for Health-

care course, the libraries "help connect students who have completed our English language course in health care with reputable home care agencies." <sup>65</sup>

# **Small Business and Entrepreneurship**

Notably, almost 1 in 2 public libraries provide services to entrepreneurs who wish to start or grow their businesses. <sup>66</sup> In 2020, ALA launched Libraries Build Business (LBB), a national initiative supported by Google.org, intended to build capacity in libraries offering programming or services to local entrepreneurs and the small business community, prioritizing low-income and underrepresented entrepreneurs. Over 18 months—during the pandemic—the 13 participating libraries reached and impacted 14,000 people with business development resources.

Yakama Nation (Washington) Library is one library that participated in this program. The library provides internet access, computers with specialty applications, training, and reference support to low-income, Alaska Native and American Indian populations to conduct business research. It is also developing an entrepreneurial maker space. The library includes a multimedia room with staff to assist individuals with digital media, audio, video, and photo projects. In addition, they are also a test site for people earning their Northstar Digital Literacy certificate.

The Gwinnett County Public (Georgia) Library launched the New Start Entrepreneurship Incubator program to help "community members who have served time in jail or prison



to create their own businesses."<sup>67</sup>
Over a six-month period, participants are part of a cohort who "receive assistance with developing business ideas, learn what is needed to run a successful business, and receive one on one support from successful entrepreneurs

and business experts." Participants will also "receive a laptop and hotspot kit while enrolled in the program." Key partners included the Greater Gwinnett Reentry Alliance, SCORE North Metro Atlanta, SmallBiz Ally, ACE Women's Business Center, and local business mentors. 99

# **TELEHEALTH**

Telehealth use increased dramatically during the pandemic, but access to telehealth services has been uneven, especially for populations disproportionately impacted by

digital inequity. To Telehealth allows those not near a medical facility or specialist who lack access to reliable transportation to meet virtually with a medical professional. However, many still experience barriers to this service due to inadequate broadband access in the home, lack of



technology, or not having the skills needed to connect to the service in rural and underserved communities. The Digital Equity Act recognizes this need and provides funding to support this service.

The Texas State Library and Archives Commission used some of their ARPA funds through IMLS to support telehealth initiatives in selected libraries. Jeff Davis County Library used its grant to soundproof their conference rooms and provided needed equipment and technical assistance so residents in this rural community can participate in confidential telehealth sessions. In addition, the library partnered with a social services agency to offer a private space, computer, internet connection, and technical assistance for a counseling service for veterans and their spouses.

Pottsboro Area Library, partnered with the University of North Texas Health Science Center to provide this rural community access to medical care that is a 90-minute drive one way. The library created private telehealth rooms that patrons with no or low bandwidth at home can use to meet with medical practitioners. The room includes a computer, lighting, webcam, etc. The health center manages reservations to ensure patron privacy. To support this service, the library increased its broadband connection. The library has also created a private space with the necessary technology and high-speed internet access for patrons to access licensed individual, marriage, and family counselors.

Charleston County Public Library and Women in the South-East Telehealth Network in South Carolina partnered to improve women's health and well-being by providing preventive care, health education, referrals, and community resources through local libraries and the Mobile Library in the rural Lowcountry. The program's goal is to "increase healthcare access and address health disparities through direct provision and referral, offering care management, and connecting women to available community and social services."

More than 150 libraries across New Jersey have joined to create NJHealthConnect @ Your Library, funded by ARPA through the New Jersey State Library. The program "will engage public libraries throughout New Jersey in addressing access to care and services as a barrier to health equity that Healthier Middlesex partners identified in their most recent Community Health Needs Assessment."75 The program utilizes the talents of the librarians and accessibility of library locations to bring health information to vulnerable communities, including seniors, immigrants, and low-income people. "Certified consumer health librarians at the East Brunswick Public Library . . . will facilitate and train NJ librarians to implement a telehealth program in their communities."76 Libraries will be provided iPads with access to telemedicine apps for patients to attend their doctor's appointments. The libraries will also provide access to multilingual health information.

Libraries should partner with health providers and other community partners to leverage existing infrastructure and explore new interventions to support their community health goals. Residents should not lack access to needed medical care because they lack the digital skills, technology, and broadband connection required to connect with their medical providers online.

# CONCLUSION

The federal government is making historic investments in advancing digital equity, literacy, and inclusion for all. As a cornerstone for equitable access to information and broadband-enabled services, libraries need to seize the moment so that we can continue to support and advance the work that we have been doing for decades. And policymakers and prospective partners should include libraries in their proposals because libraries represent an excellent return on investment—leveraging their existing physical, technological, and expert resources and community reputation.

This report highlights just some of the thousands of ways America's 117,000 libraries of all types—including school, public, community college, college & research, tribal, and special—are instrumental in supporting and advancing digital equity.

#### Libraries:

- Bring the internet to their community.
- Aid their community in building digital skills.
- Create informed internet users.
- Support workforce development and entrepreneurship.
- Support and connect their residents to social services and telehealth.
- Lend or provide technology like computers, tablets, hotspots, etc., to users who do not have one.
- Build coalitions of community partners to create digitally equitable communities.

Libraries have a proven track record over many decades of advancing these activities. Funding libraries will allow us to not only support these efforts in our community now but allow us to build and implement new approaches that can promote and support digital equity, literacy, and inclusion in the years to come.

Finally, ALA recommends that:

- State broadband leaders and policymakers include state library agencies in statewide digital equity planning groups and leverage their unparalleled reach into all public libraries to strengthen communications and outreach statewide;
- State and local education agencies include K-12 school librarians and college and university library leaders in digital equity planning and deployment;
- Libraries increase awareness of their local technology assets to improve coordination across all

- levels of government and develop grant proposal ideas for the forthcoming funding programs;
- Congress enable sustainable funding for digital equity through measures like the Digital Equity Foundation Act; and
- Federal agencies continuously work to reduce administrative and record-keeping barriers that limit participation by small libraries and other community-based entities and increase incentives and streamlining for consortial applications.

ALA will continue to synthesize and share policy information and best practices libraries and allies can use to build a digitally equitable future for all. Learn more online at ala.org/advocacy/broadband.

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# **ALA**AmericanLibraryAssociation

The American Library Association ("ALA") is the foremost national organization providing resources to inspire library and information professionals to transform their communities through essential programs and services. For more than 140 years, the ALA has been the trusted voice for academic, public, school, government and special libraries, advocating for the profession and the library's role in enhancing learning and ensuring access to information for all. For more information, visit ala.org.

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