



STATE DIGITAL EQUITY IMPLEMENTATION

MANUAL

2024



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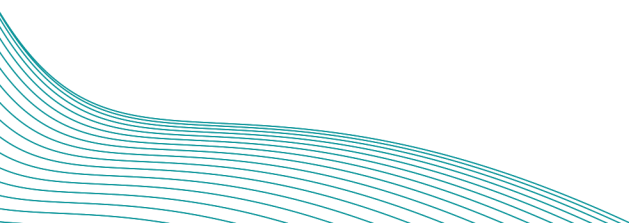
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Introduction and Background



Photo Credit: Center for Digital Equity

Background

On November 15th, 2021, President Biden stood on the [South Lawn at the White House](#) and signed the historic bipartisan \$1.2 trillion Infrastructure Investment and Jobs Act (IIJA) into law¹. Within the massive bill, Congress dedicated \$65 billion to advancing digital equity throughout the country, expanding broadband infrastructure, and making broadband more affordable for all US residents. Before IIJA, the federal government hadn't directly addressed digital equity on this scale. President Biden changed that with the stroke of a pen, allocating \$2.75 billion for digital equity programs via the [Digital Equity Act](#) (DEA) and elevating the once niche issue to a national-level priority. In a prelude to the text of the Act, Congress outlined why they chose to include the DEA in the IIJA and why they think digital equity is important. They said:

It is the sense of Congress that—

- (1) a **broadband connection** and digital literacy are increasingly critical to how individuals—
 - (A) participate in the society, economy, and civic institutions of the United States; and
 - (B) access health care and essential services, obtain education, and build careers;
- (2) **digital exclusion**—
 - (A) carries a high societal and economic cost;
 - (B) materially harms the opportunity of an individual with respect to the economic success, educational achievement, positive health outcomes, social inclusion, and civic engagement of that individual; and health care and essential services, obtain education, and build careers;
 - (C) exacerbates existing wealth and income gaps, especially those experienced by covered populations;
- (3) achieving **digital equity** for all people of the United States requires additional and sustained investment and research efforts;
- (4) the Federal Government, as well as State, Tribal, territorial, and local governments, have made social, legal, and economic obligations that necessarily extend to how the citizens and residents of those governments access and use the internet; and
- (5) achieving digital equity is a matter of social and economic justice and is worth pursuing.²



(1) Infrastructure Investment and Jobs Act § 60102, 47 USC § 1702 (2021).

(2) Infrastructure Investment and Jobs Act, 47 USC § 60303 (2021)

After ten years of advocating for policymakers to address digital inequities throughout our country, we at NDIA were thrilled. Congress explicitly stated that “digital equity is...worth pursuing.” And we adamantly agree.

Achieving digital equity means a K-12 student in rural New York is just as likely to excel as their peers in New York City. An elder in an Alaskan village can share their language and culture with future generations in new ways. An aspiring entrepreneur in Cincinnati, Ohio, can launch a successful tech startup without paying the high rents in Silicon Valley. A Veteran in a border town in Texas can bypass traveling long distances to the Veterans Affairs (VA) Hospital and see a doctor online. A senior citizen in Maine can order groceries from a website and have them delivered. And a Pacific Islander living in the ‘lower 48’ can stay connected with family and friends back home.



Achieving digital equity in the United States would ensure that every individual and community in our nation—from the Pacific Islands to the Northeast—has the information technology capacity needed for full participation in our society, democracy, and economy.

As Congress noted, the costs are too high not to address this issue—not only would too many individuals, but our global competitiveness would be damaged beyond repair if we don’t act. Our collective *thriving* hinges on our ability to systematically and comprehensively address and redress digital exclusion. Yet, as Congress rightly notes, this is an expensive and long-term endeavor. Because the rapid evolution of technology means future digital inequities are inevitable, additional and sustained investments and research beyond the IIJA programs will be required. However, if implemented well, the current investments have the potential to establish sustainable digital inclusion programs within strong digital equity ecosystems, both of which will be essential for addressing new digital inequities as they arise.

About the Digital Equity Act

In the IIJA, Congress rightly acknowledges the instrumental role States, Territories, the District of Columbia (DC), and Tribal entities have in designing and developing sustainable, resilient, and robust digital equity ecosystems that address the unique needs of their residents and grants states the funds and flexibility to meet those needs through the DEA and Broadband Equity Access and Deployment (BEAD) programs. These and other IIJA programs—including BEAD and the [Tribal Broadband Connectivity Program \(TBCP\)](#)—now fall under the Biden-Harris [Internet for All Initiative](#).

The DEA's \$2.75 billion is divided between two programs: the State Digital Equity Capacity Grant Program (\$1.5 billion) and the Digital Equity Competitive Grant Program (\$1.25 billion)³. The [National Telecommunications and Information Administration \(NTIA\)](#) within the [US Department of Commerce \(USDOC\)](#) administers the DEA programs and the BEAD, TBCP, and other broadband programs.



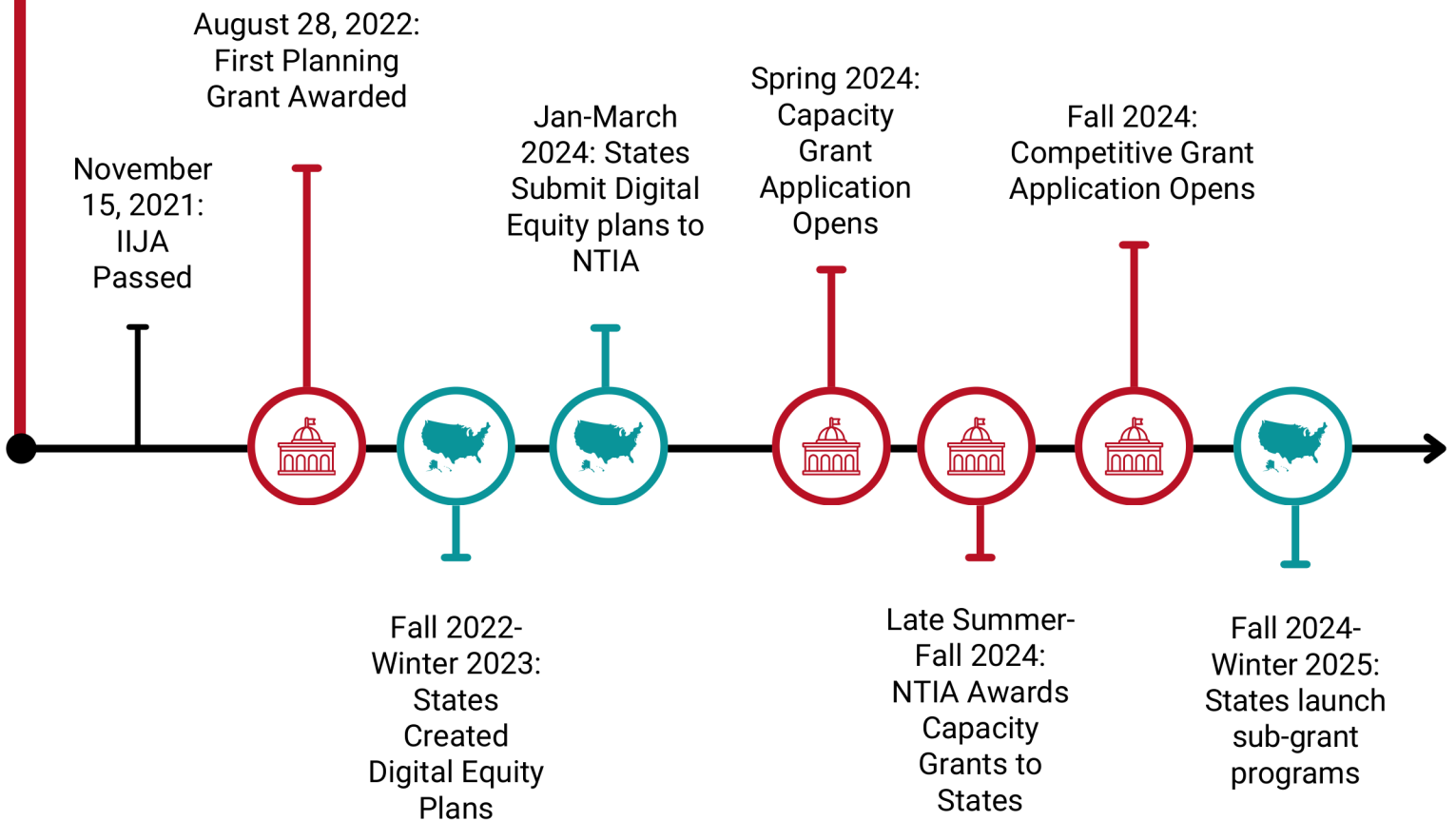
State Digital Equity Capacity Grant Program Timeline



State action

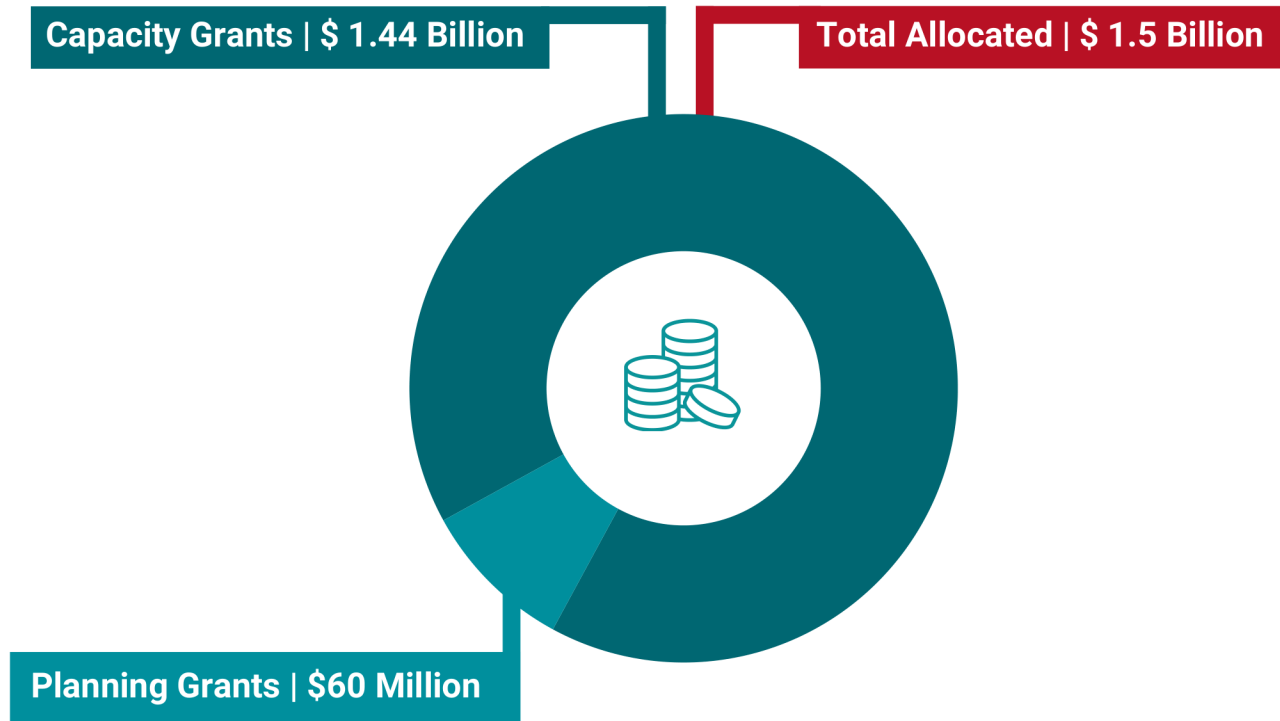


NTIA action



(3) "Digital Equity Act Programs." BroadbandUSA. Accessed December 20, 2023. <https://broadbandusa.ntia.doc.gov/funding-programs/digital-equity-act-programs>.

State Digital Equity Capacity Grant Program



According to Congress, the purpose of the State Digital Equity Capacity Grant Program (hereafter referred to as 'state capacity program') is:

to promote the achievement of digital equity, support digital inclusion activities, and build capacity for efforts by States relating to the adoption of broadband by residents of those States.⁴

The first phase of the program was 'planning;' it launched on May 13th, 2022 with the publication of the [State Digital Equity Planning Grant Program](#) Notice of Funding Opportunity (NOFO) and distributed roughly \$60 million to states, territories, and the District of Columbia to develop digital equity plans.⁵ All 50 US states, the District of Columbia, and five US territories (hereafter 'states') applied for the planning grants in the summer of 2022 and, by December, received their planning awards. They had one year to complete their plan unless they requested an extension, which many did. We expect all states to submit their plans to NTIA by the first quarter of 2024.⁶

The second phase is for 'capacity' (\$1.44 billion total). Capacity grants will fund the plans' implementation strategies. States must submit a complete and NTIA-approved digital equity plan to be eligible for a Capacity Award.

The capacity grant NOFO will be published sometime in Q1 of 2024. Once this occurs, states will have up to 60 days to apply for the capacity grant by responding to the NOFO, then NTIA will make the awards beginning "not later than two years after" the date the first planning grant was made (August 29, 2022).⁷ We expect NTIA to begin awarding the capacity grants sometime between Q2 and Q3 of 2024. However, they may award the grants on a rolling basis, so some states may not receive their award until Q3-Q4 2024.



NOTE: The DEA required governors (or an equivalent official) to select an "Administering Entity for the state" to be the primary planning grant recipient and administrator. The Administering Entity is responsible for developing, implementing, and overseeing the digital equity plan for the state. In most cases, the Administering Entity for the planning grant will remain the Administering Entity for the capacity grants. In most states, the Administering Entity is the Broadband Office, but some exceptions exist. For an up-to-date list of Administering Entities and their staff, [see NTIA's list](#)

The Capacity Grant NOFO will provide more information on how NTIA will administer the capacity grants, reporting expectations for the states, application and materials instructions, and the allocation amount each state will receive. NTIA will use the [same formula](#) to calculate the allocations for capacity awards as they used for the planning awards (see page 11).⁸ The grants are five-year grants, and the period of performance will begin when NTIA awards the state its funds.



According to the statute, States may use the Capacity Award for the following purposes:

1. To update or maintain the State Digital Equity Plans of the State
2. To implement the State Digital Equity Plans of the State
3. To award a grant to an eligible entity (see list below) located in the state to:
 - a. Assist in the implementation of the State Digital Equity Plan
 - b. Pursue digital inclusion activities in the State consistent with the State Digital Equity Plan
 - c. Report to the State regarding the digital inclusion activities of the entity.

(4) Infrastructure Investment and Jobs Act § 60304, 47 USC § 1723 (2021)

(5) State Digital Equity Planning Grant Program, Notice Of Funding Opportunity, 47 USC § 1702

(6) "State Digital Equity Planning Grant." BroadbandUSA. Accessed December 21, 2023.

<https://broadbandusa.ntia.doc.gov/funding-programs/digital-equity-act-programs/state-digital-equity-planning-grant>.

(7) 47 C.F.R. § 1723 - State Digital Equity Capacity Grant Program; Jake Varn and Lily Gong. 2023. "States Getting Ready to Spend Broadband and Digital Equity Dollars." Pew.org. May 17, 2023. <https://www.pewtrusts.org/en/research-and-analysis/articles/2023/05/18/states-getting-ready-to-spend-broadband-and-digital-equity-dollars>.

(8) NTIA, Notice of Funding Opportunity: State Digital Equity Act Planning Grant Program (NTIA-DE-PLAN-2022, 11.032)

The State can use up to 20 percent of the total allocation to update the plan, up to five percent for program evaluation of the efficacy of the grant-funded efforts, and up to three percent to cover the administrative costs incurred by the Administering Entity.

See the *Subgranting Best Practices* section for more information on subgrants and entities eligible for subgrants.

Next Steps for States and this Manual

Digital equity programming—at this scale—has never been attempted. Many States now have dedicated digital equity staff, a few have established dedicated digital equity offices, and soon, each will have a digital equity plan that provides a baseline understanding of the current landscape—including the assets and gaps—and strategies for developing equitable, robust ecosystems to fill those gaps.

A sequel to our [State Digital Equity Plan Toolkit](#), this manual aims to support you—the Administering Entities—as you implement your digital equity plans and create sustainable, robust statewide digital equity ecosystems. In other words, as you turn your plans into action.

This manual does not provide official guidance for meeting the requirements that NTIA will outline in the NOFOs. Instead, it provides general best practices for establishing and implementing digital inclusion strategies statewide.



States must comply with all requirements in the forthcoming Capacity Grant NOFO once it is published. This manual should supplement, not supersede, NTIA's requirements in the forthcoming NOFO.

As novel and exciting as the nationwide, simultaneous implementation of digital equity plans will be, the implementation phase of the DEA will not solve digital exclusion overnight. Some strategies, as outlined in your plans, will take many years, even decades, to bear fruit. Others may have a more immediate impact. Yet, each milestone or implementation phase met means we're one step closer to achieving digital equity.

As Congress aptly said,

achieving digital equity is a matter of social and economic justice and is worth pursuing.

So, let's pursue it together.



NOTE: Many Tribal entities submitted Letters of Intent to NTIA to receive planning funds to create digital equity plans. However, due to overwhelming interest, NTIA reconfigured the program and plans to release digital equity NOFOs with more information for Tribal entities in 2024. To date, NTIA has published little information on expectations for digital equity planning or implementation for Tribal entities. Because any guidance provided would be premature, this manual does not contain explicit guidance for Tribal entities. All readers, including Tribal entities, are encouraged to glean what best practices they can from this guide and apply them to their community.



State Digital Inclusion Ecosystem



Scientists use the word, 'ecosystem' to [describe](#) “the complex of a community of organisms and its environment functioning as an ecological unit.”⁹ Outside the natural world, 'ecosystem' is often used to describe communities or industries with complex, interdependent parts that must align and sync for all aspects of the system to thrive.

The NDIA community defined a Digital Inclusion Ecosystem as “a combination of programs and policies that meet a geographic community’s unique and diverse needs. Coordinating entities work together in an ecosystem to address all aspects of the digital divide, including affordable broadband, devices, and skills.”¹⁰ This ecosystem includes the ongoing support people often need to use technology and successfully navigate information online.

This section provides recommendations for developing a healthy digital inclusion ecosystem, including the collaboration needed across various entities. No two digital inclusion ecosystems are identical, and certain indicators may exist to greater or lesser degrees based on the needs and capacities of a given community or state.

Healthy Digital Inclusion Ecosystem Indicators



Affordable broadband service options



Cost continues to be the leading barrier to broadband adoption, particularly for low-income individuals and families.¹¹ A healthy digital inclusion ecosystem requires affordable options for internet service.

Congress created the Affordable Connectivity Program (ACP) in 2021 to assist low-income households in accessing affordable internet service and access to devices.

ACP is the only program in history that has addressed affordability nationally at this scale. Congress tasked the Federal Communications Commission (FCC) with managing and administering the program.

As of this writing, the ACP is officially winding down; however, we mention it here because it remains the best national solution to the affordability challenge in our nation’s history. In *Chapter IV*, we address the current state of ACP and other mechanisms for addressing affordability at the state level.

(9) Merriam-Webster, "Ecosystem," Accessed March 11, 2024, <https://www.merriam-webster.com/dictionary/ecosystem>.

(10) Yvette Scorse, "NDIA Community Defines 'Digital Inclusion Ecosystem,' National Digital Inclusion Alliance (blog), August 27, 2021 <https://www.digitalinclusion.org/blog/2021/08/27/ndia-community-defines-digital-inclusion-ecosystem/>

In some local communities, Internet Service Providers (ISPs) provide low-cost internet plans for low-income consumers. For example, [Comcast Internet Essentials](#) is an affordable broadband service option that existed long before ACP.

Affordable and subsidized device ownership programs



The ability to pay for devices, particularly personal computers, can also be a significant challenge. Working with affordable and subsidized device providers is another essential component of any digital inclusion ecosystem. *Chapter IV* of this manual provides best practices for establishing an effective community-based device distribution and deployment ecosystem. Providers of low-cost, high-quality devices that adhere to environmentally sustainable principles and practices can be key partners in broader digital inclusion ecosystems.

Multilingual and culturally appropriate digital skill training



Healthy digital inclusion ecosystems provide effective programs and policies that allow people to access digital skills training in relevant and culturally appropriate contexts. This includes a multilingual curriculum and instructors who can meet the needs of learners in safe, supportive, and trusted learning environments. In *Chapter IV*, we discuss best practices for digital skills training.

Hardware and software technical support



A trusted community organization or business providing hardware and software technology support, especially for technical challenges, is critical to a vibrant digital inclusion ecosystem. While smaller rural and Tribal communities may not have access to a physical support location, access to local support via digital navigators, digital inclusion practitioners, and remote or virtual resources is essential.

Digital navigation services to guide residents



Digital navigators are trusted guides who address the whole digital inclusion process—including connectivity, devices, and digital skills—with individual community members through repeated interactions. Typically affiliated with trusted community-based organizations, digital navigators can be volunteers, cross-trained existing staff, or dedicated new hires; they are familiar with their community’s digital inclusion resources and support help residents as they learn to use critical online services. *Chapter IV* shares best practices and examples from NDIA’s Digital Navigator Model and community.

(11) Anna Read, “How Can the United States Address Broadband Affordability?,” The Pew Charitable Trusts, April 29, 2022

Collaboration Across Various Entities

Creating a statewide digital inclusion ecosystem requires “projects and activities that support local and regional coordination, digital inclusion coalition building, digital inclusion planning efforts, and other activities that build local digital inclusion ecosystems.”¹² Successful partnerships and collaborations are key in this process. Individual entities involved in statewide digital inclusion ecosystems engage in specific activities to support local and regional coalition and community building.



Photo Credit: Center for Digital Equity

The following roles and collaborations are needed to enable a statewide digital inclusion ecosystem:



Local digital inclusion services

Collaboration between trusted digital inclusion service providers benefits the state ecosystem. For example, one or two affordable and subsidized device ownership programs might be enough to provide device access to an entire state.



State and Local Policymakers

Engaged state and Local policymakers are essential advocates for their communities’ needs and aspirations. As arbiters of state and local governments’ resources, they are essential in funding and sustaining digital inclusion programs and can be critical to ecosystem success.



Advocates

State and local governments are often convinced of the importance of digital equity by passionate advocates, many who work for community-based organizations or are lived experts. State or national coalitions may work with advocates to make digital equity an issue for their local, state, and federal representatives. See the *Community Capacity Building Strategies* section for more information on digital inclusion coalitions.



Social service providers

Because of their strength in providing wraparound services related to housing, health care, nutrition, and family support, often to the same people most impacted by digital inequities, social service providers are critically important collaborators.

(12) Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, § 60102, 135 Stat. 429, 797-807 (2021).



Community leaders

Committed and passionate leaders are often the voice for those unable to speak about the issues impacting their communities. Because of the role they play on the ground, they often know the solutions to problems. These leaders play a vital role in the success of local digital inclusion ecosystems and can be essential collaborators with other entities statewide. A statewide ecosystem can provide them with additional expertise, knowledge, and wisdom.

Once established, robust and healthy digital inclusion ecosystems will provide ongoing support and programming to address all facets of the digital divide.

Developing Implementation Strategies



Photo Credit: Senior Planet

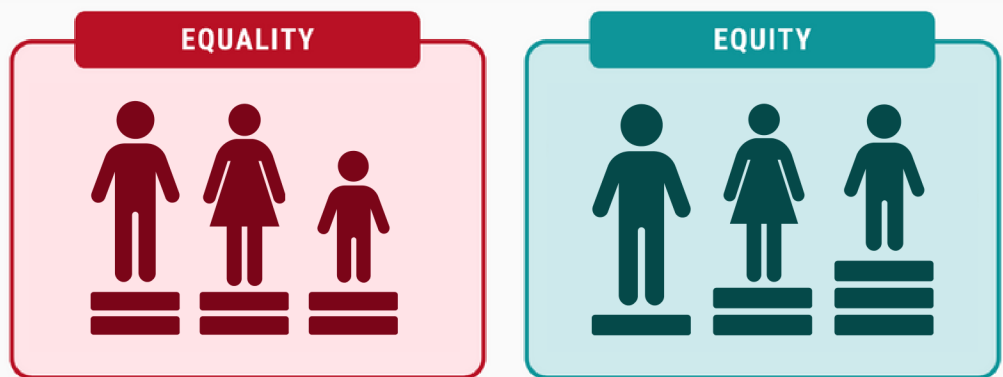
This section includes best practices and tips for developing strategies, a decision tree to support decision-making on how to structure funds, and a breakdown of possible roles and responsibilities for the Administering Entity and partners.

But before diving into the details, we've identified five general best practices to consider as you refine your implementation strategies.

Best Practices

Centering Equity

Leading with and centering equity, operationalizing it in daily work, and weaving it throughout all digital equity and broadband programs is essential.



The programs you design, and your organization's culture, structures, practices, and services should be grounded in and centered on equity.

The remaining best practices for developing implementation strategies are tactics for centering equity. Still, some additional general strategies for centering equity [suggested by Stanford researchers](#) are:



- Ground the work in data, context, and target solutions (see *Chapter IV* for more)
- Focus on systems change, in addition to programs and services
- Shift power within the collaborative
- Listen to and act with the community
- Build equity leadership and accountability¹³

Continue Meaningful Community Engagement and Co-Creation

In our [State Digital Equity Plan Toolkit](#), we suggested the most important thing you could do to ground your digital equity plan in the needs of your residents was to engage your community meaningfully throughout the entire planning process and beyond.

Lived experts are members of covered populations, particularly individuals from historically disconnected communities with direct, lived experiences of the digital divide. As with your planning process, a robust implementation strategy will meaningfully engage these lived experts to ensure the implementation strategies continuously reflect their evolving needs.

Additionally, the community and subgrantees should define what success is for in their communities and determine how to get there. It will be necessary to ensure the funded strategies meet their needs. You should continue gathering accurate data from covered populations to identify areas of opportunity, measures of success, and desired impacts throughout the implementation period.

In addition to co-creating with trusted institutions and organizations, continue to check in with the covered populations via media outreach, surveys, public meetings, focus groups, interviews, and other community engagement strategies (see [State Digital Equity Plan Toolkit](#) for more strategies).

Partner with and Invest in Trusted Organizations

As you found in your planning process, partnerships with organizations most trusted and entrenched in their communities are critical for getting digital inclusion services to covered populations. They may be a Community Anchor Institution (CAI), a place of worship, a food bank, a literacy center, or another community based organization. Continue to partner with and invest in building capacity with these organizations to support your aims of serving covered populations.



Communicate Clearly and Often

Potential grantees and the community need to hear your implementation progress from the State early, often, and with detail. You should explain how the State intends to spend its Capacity Award, whether it intends to establish a subgrant program, and if so, who will be eligible.



Provide as much information and guidance as early as possible. For instance, if you plan to develop a digital inclusion grant program and launch it on December 1st, begin providing information about the program in September or October to organizations that may be interested and fit the application requirements.

In addition, how you communicate matters. Focus on translating materials, distributing information about your implementation plans and grants via multiple modalities (i.e., email, in-person events, etc.), using plain language, and always being transparent.

(13) Kania, John, Junious Williams, Paul Schmitz, Sheri Brady, Mark Kramer, and Jennifer Splansky Juster. "Centering Equity in Collective Impact." *Stanford Social Innovation Review* 20, no. 1 (2021): 38–45. <https://doi.org/10.48558/RN5M-CA77>.

Document Everything, Especially Processes

Every process you establish should be documented, from your budget compilation to your subgrant selection decision-making process. Doing so will help you improve and identify inefficiencies and ensure all current and future staff and partners operate uniformly, intentionally, and efficiently. You should also document lessons learned, best practices, and success stories you learn as you go instead of waiting until the end of a performance period.

Prioritize Sustainability from the Beginning

Sustainability is a critical feature of success – and there may be many paths to get there. Utilize your Capacity Grant to create long-term impacts and sustain the momentum the DEA funds catalyzed.

The historic \$2.75 billion for digital equity won't bring us to our end goal. It is only the beginning, but it is an incredible opportunity for laying the groundwork for digital inclusion ecosystems that can exist long beyond the life of the DEA. The individual programs or projects may, and in many cases should, evolve. However, the systems, capacity, and leadership built through the DEA funds should remain in communities long after the grant terms end.

For more specifics on operationalizing sustainability, see the section on Sustainability in *Chapter VI*.

Roles & Responsibilities

Achieving digital equity is too big a job for any organization or person, and implementing your plan will require many partnerships and collaborators. Below are key partners and the potential roles they can assume.



The Administering Entity

The Administering Entity is the de facto lead for digital equity in the State government. Congress encourages the Administering Entity to:



- Serve as the recipient of, and administering agent for, any grant awarded to the State under this section (the Capacity Awards)
- Develop, implement, and oversee the State Digital Equity Plan for the State
- Make subgrants in support of the State Digital Equity Plan and digital inclusion activities in the State generally
- Serve as ‘an advocate for digital equity policy and digital inclusion activities’
- Be a ‘repository of best practice materials’ regarding digital equity policy and activities¹⁴

In addition to these suggested roles, we recommend the Administering Entity take on the following responsibilities:



- **Coordinate:** The Administering Entity should coordinate digital inclusion activities on behalf of the state collaborating with other state and local partners to collectively address barriers identified in the plan. Coordination is important to ensure state activities align and are not duplicative.
- **Create Visibility:** Drive media attention and awareness to the issues and the work of digital inclusion practitioners across the state.
- **Build Partnerships:** Partner with sister state agencies, local governments, digital inclusion practitioners, and organizations whose mission is intersectional with digital inclusion.
- **Encourage Partnerships and Collaboration:** Be the voice that encourages organizations to work together to increase digital equity.
- **Convene:** Bring together policymakers, collaborators, and partners around digital inclusion topics.

State Agencies

Sister state departments/agencies will be integral partners in implementing the plan. In some cases, the Administering Entity or sister agencies may be a natural fit to support and sustain programs started with Capacity Grants that should continue beyond the life of the specific grants. For example, the state library may be a natural home for a statewide digital navigator program or a natural partner supporting the expansion of digital skills programming throughout the state. Additionally, the State Department of Aging or the Department of Social Services can integrate aspects of the digital equity plan into its overall goals.

(14) Infrastructure Investment and Jobs Act § 60304, 47 USC § 1702 (2021)

Digital Inclusion Coalitions and Local Partners

Both digital inclusion coalitions and local partners—including community-based organizations, CAIs, and other local trusted institutions—play valuable roles in implementation and sustainability efforts. Coalitions can provide feedback on trends and best practices and are key partners in program evaluation.

They can skillfully mobilize partners for data collection or community engagement and support the State in realizing the strategies outlined in the plan. Effective digital inclusion coalitions leverage various member organizations' diversity, expertise, and capacity. NDIA estimates more than 100 digital inclusion coalitions (local, regional, and statewide) exist. See the *Community Capacity Building Strategies* section for more information on digital inclusion coalitions. Local and trusted organizations will be essential partners in reaching the covered populations with the strategies you've outlined in your plan. As we said earlier, partnerships with organizations deeply trusted by community members are critical. Without them, many individuals within the covered populations will remain unserved.



Photo Credit: San Jose Library

Local Governments and Regional Organizations

Local governments and regional organizations (like regional councils of governments, economic development districts, etc.) are natural conveners within their footprint. They often form coalitions to ensure community voices are heard throughout their projects, making them ideal partners to form and lead digital equity coalitions. They can quickly gather and share best practices, find needed areas of improvement, and assess impact within their communities. They also have the ability and relationships to push the development and implementation of digital equity plans down to the local level. Effective local government and regional organizations leverage the diversity, expertise, and capacity of their already existing partnerships.



Spotlight: [BroadbandOhio](#)

As part of its planning efforts, the State of Ohio created its five Regional Digital Inclusion Alliances. Local and regional organizations, including the Toledo Lucas County Public Library in the Northwest, the Cleveland Foundation in the Northeast, Smart Columbus in the Central region, The United Way of Greater Cincinnati in the Southwest, and Buckeye Hills Regional Council in the Southeast, lead these Alliances. Each of these organizations used existing relationships within their communities to perform 32 in-person listening sessions, six virtual listening sessions, 20 stakeholder interviews, and ten community pop-up events across the state. These regional and local organizations will be instrumental in the implementation and sustainability of digital inclusion efforts during the implementation of Ohio's plan.

Tribal Nations and Entities

Tribal nations are sovereign nations. Today, 574 federally recognized Tribal nations are in the US and have a nation-to-nation relationship with the US government protected by treaties and other legal agreements. Native American Tribes are political groups, not racial groups, and treaties and 'federal trust responsibility' obligates the federal government to protect Tribal self-governance, treaty rights, lands, assets, and resources.¹⁵ Tribes manage their resources, establish their governments, and build their economies.

When consulting with and engaging Tribes, use [intergovernmental collaboration best practices](#). Formal consultations are essential, not just as a response to the grant opportunity, but to establish working partnerships among states, territories, and Tribes that last beyond the grant period and should include education about the grant requirements, the intentions, and the potential outcomes of the implementation opportunities (i.e., information on Capacity Awards). Remember that requesting, preparing for, holding, and following up after a formal consultation meeting will take some time, so plan accordingly.

Some Tribal governments have limited capacity, with staff serving multiple roles, and in many cases, digital equity may not fit clearly into existing defined roles. Ensure you contact the appropriate people in leadership to communicate the State's goals. It might require multiple meetings to achieve meaningful consultation.

When possible, Administering Entities should engage Tribal leadership in person. They should also conduct outreach to other Tribal entities beyond the official Tribal government representatives, such as health clinics, schools, libraries, Tribal colleges and universities, Tribal-owned and operated internet providers (ISPs), urban Indian centers, workforce development departments, and elder centers. Like other communities, these Tribal entities or organizations are distinct from the Tribal governments.

Administering Entities should also consult with and support digital inclusion efforts from state-recognized Tribes. "Much like federal recognition, [state recognition] operates as a means for states to acknowledge the longstanding existence of tribes within their borders and to establish a government-to-government relationship to coordinate and communicate with tribes" and allow them to be eligible applicants for any subgrant program as they do not qualify for federal funds reserved for federally recognized tribes, so including them as eligible applicants for your subgrant program will be important to extend digital inclusion efforts within their communities.¹⁶

Tribal/Indigenous-owned or operated ISPs are embedded in their communities and are often mission-driven instead of profit-driven, and often deliver digital inclusion services in addition to internet service. As such, they should be approached and engaged differently than non-Tribal/Indigenous-owned ISPs.

(15) Sarah L. Hicks, "Intergovernmental Relationships: Expressions of Tribal Sovereignty," in *Rebuilding Native Nations: Strategies for Governance and Development*, ed. Miriam Jorgensen (The University of Arizona Press, 2007), 246-271.

(16) Alexa Koenig and Jonathan Stein, *Federalism and the State Recognition of Native American Tribes: A Survey of State-Recognized Tribes and State Recognition Processes across the United States*, 48 *Santa Clara L. Rev.* 79 (2008).



NOTE: Tribal, Native, and Indigenous are used interchangeably in this document to refer to Native American, Alaska Native, and Hawaiian Native peoples. In consultation with Tribal Nations and their people, please note how they wish to be represented and adjust language and publications accordingly.

Preparing for Implementation

You've already finalized your implementation strategies in your digital equity plans and outlined how they connect to your measurable objectives to achieve your vision for digital equity. If you're still developing or editing your plan, we recommend consulting our [State Digital Equity Planning Toolkit](#) (see p. 90) for more best practices. Before you implement your plan, there are several steps you should take to prepare and set your implementation period up for success. They are as follows.



Step 1: Determine and Balance the Right Strategies

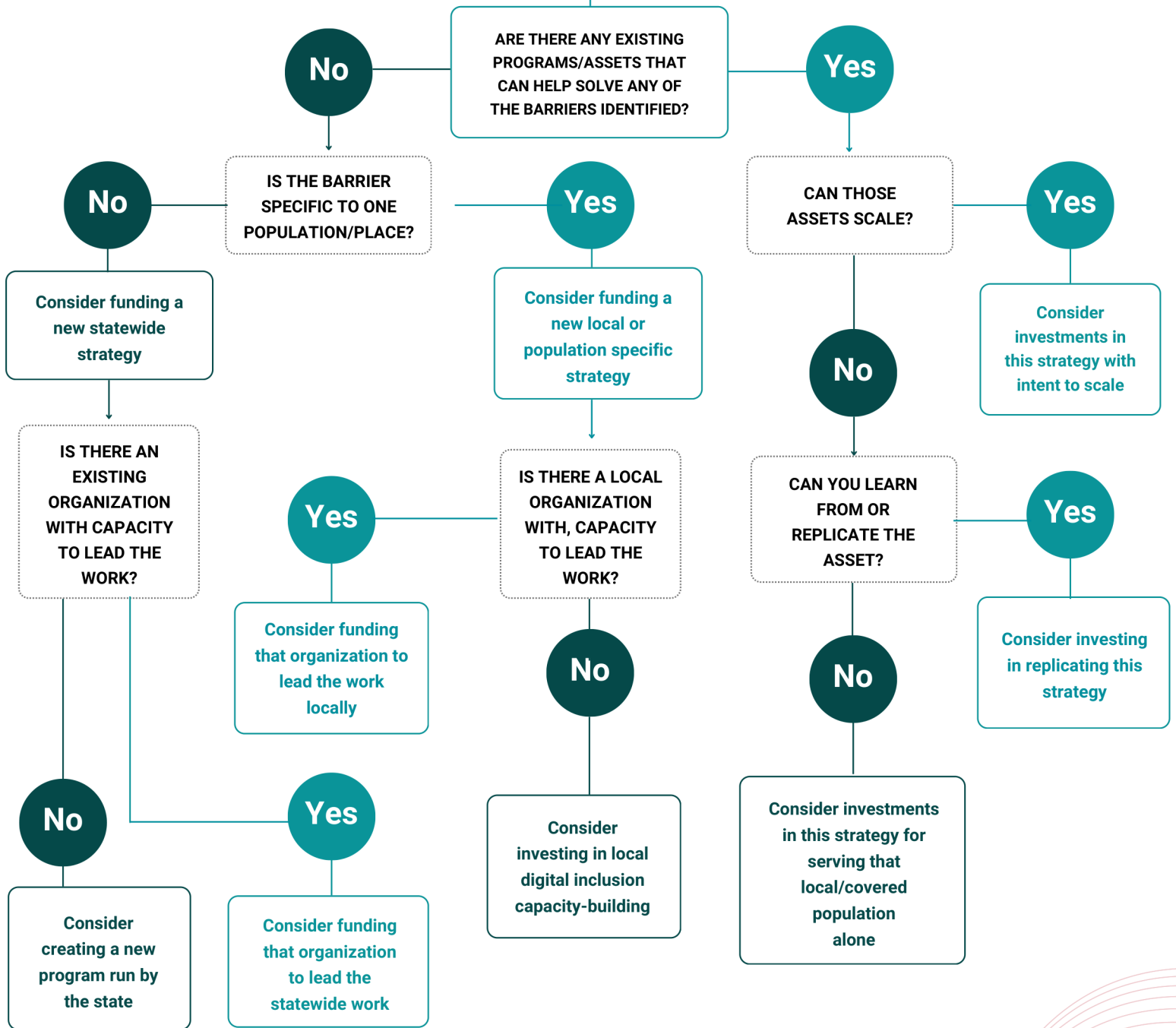
Before adding detail to your implementation strategies, you must decide how and where to invest your Capacity award. With limited funds, you'll have hard choices to make.

The decision tree below may assist in weighing the trade-offs and striking a good balance for each strategy. As you work through the decision tree, know there are no universal right or wrong answers. It's simply a tool for helping you make decisions on the investments you will make. Ultimately, within each strategy, you should:



- **Balance statewide and local program investments.** Some strategies are well-suited for statewide deployment; others to the local community or covered population. Some communities have multiple existing digital inclusion organizations or programs ready for investment, while others have none. Addressing dichotomies will require simultaneous investments in local programs and organizations and statewide programs, perhaps through state agencies (like state libraries) or other organizations. These investments are essential to achieve the right balance—based on what you learned through your planning process.
- **Balance investments in proven models with new, innovative strategies.** We will need new, innovative solutions for addressing the digital inequities, challenges, and gaps you identified in your plan. That said, many tested best practices and solutions do exist. Whether you subgrant or implement your strategies yourself, balancing new, innovative strategies with tried and true practices will increase your effectiveness.
- **Balance investments in solutions for covered populations and those serving the general population.** As the State, you are responsible for all residents, so your goal is to reach as many communities and residents as possible while prioritizing the covered populations. They are the most underserved and adversely affected populations, and as we've highlighted before, sometimes centering equity means investing more in services for disadvantaged populations.
- **Balance the scope of strategies.** You're likely to use some strategies that target multiple issues at once and others with a singular focus. For example, a digital navigator program is often a comprehensive solution, while a device distribution program addresses a singular digital equity barrier. Digital equity needs are interconnected—home connectivity is only effective for a person with a device and skills that fit the tasks they need to complete online—so simultaneously addressing the barriers is crucial.

IMPLEMENTATION STRATEGY DECISION TREE



Step 2: Create Individual Project Plans

Before implementation, we recommend creating detailed project plans **for each of your strategies** (i.e., if you have ten strategies, you'll have ten detailed project plans). Your project plans should include the following:

- **Goals, Objectives, and Metrics:** Anchor each project plan with the measurable objectives and goals you outlined in your plan. Include the short-term, mid-term, and long-term benchmarks or key performance indicators (KPIs) you outlined in your plan.
- **Organizational Owner:** Which organization will be responsible for the project? Where will it be housed? Will the Administering Entity house and manage all the strategies and projects within the plan, or will different partners own some of the strategies and projects?
- **Individual Owner:** Which staff person will lead the project and shepherd it through the life of the grant? Regardless of whether the Administering Entity or a subgrantee implements a project, one person at the Administering Entity will need to lead to ensure the project stays on track, meets deadlines, completes deliverables, collects data, compiles reports, and aligns the project with the other projects and strategies.
- **Partners:** Who are the project partners? What role will they have? Who will coordinate with the partners, and how?
- **Jurisdiction:** Who has jurisdiction over the project's outcomes and goals? The jurisdiction does not always equal who should lead and shepherd the project, but knowing both is important. For example, if the strategy is a state policy change, your organization may lead the project by drafting language and goals for the policy change. In contrast, the state lawmaking body would have jurisdiction.
- **Reporting Lead:** How will you collect and compile data? Who will compile and submit the reports to NTIA? Who will ensure all the data is collected for the reports promptly?



A KPI is used to measure progress. Measurements can vary based on available dates and your State's priorities. For example, see the following from Connecticut's plan:

- KPI: Currently Incarcerated Residents, Number of re-entering citizens referred to DE-funded digital literacy or technical support programs.
- Year 0/Baseline: (2023) = 0
- Year 3 (2026) = 3,000
- Year 5 (2028) = 5,000
- Yr 10 (2033) = 10,000¹⁷

(17) "Digital Equity", CT.GOV, accessed March, 7, 2024, <https://portal.ct.gov/DAS/CTEdTech/Commission-for-Educational-Technology/Initiatives/Digital-Equity>



TIP: Reporting to the federal government often entails fiscal and programmatic reports. As such, it is essential to coordinate closely with your budget department to gather the required financial information. You'll also need to establish systems and a plan for collecting performance data and programmatic reports (how the projects are going, metrics, etc.). We recommend coordinating with the other departments before the grant application and receipt so all parties are aware of and prepared for all future reporting.

Step 3: Create A Master Project Plan

Now, it's time to create a master project plan. Don't worry, you're not starting from scratch. The implementation section of your state digital equity plan is your first draft of a master project plan. Combine the implementation section with your developed individual project plans and roll them into one master project plan.

You should designate one person to coordinate the overall plan implementation. While you'll have several individual project and program leads, the overall lead will be responsible for the bigger picture—ensuring all projects and strategies are on track, intersecting and complementing each other in the ways you intended them to, and that cohesive reports and evaluations are completed and submitted to funders and partners.

Step 4: Make Software Decisions

You'll need several different types of software to manage and execute the strategies for the capacity program. Your IT department may have existing contracts with vendors that provide software solutions for the various things you'll need. Work with your IT department to determine whether the existing software options you have access to are the right solution for the task and your team. If the product available isn't the right fit for your needs, there may be a process for justifying a purchase outside existing state contracts in addition to the (often lengthy) procurement process. As such, it's wise to begin this process prior to receipt of your Capacity Award.

We recommend considering the following categories and then reviewing and testing different software options.

- **Data collection, analysis, and management:** What software will you use to collect, analyze, and aggregate data for reporting to NTIA, your partners, and stakeholders? There may be multiple types of software for specific activities. Software options for collecting data include Google Forms, Jotform, Survey Monkey, and Qualtrics. Some survey software includes basic quantitative data analysis; spreadsheet tools like Excel or Google Sheets could also be appropriate for working with your data and calculating descriptive statistics. More advanced functionality for quantitative analysis is available in software like [SPSS](#). [Tableau](#) or [Power BI](#) may be useful tools for visualizing quantitative data through graphs, charts, and dashboards. Software like [Dedoose](#) or [nVivo](#) offers advanced text analysis functionality to analyze qualitative data. Data management software includes database management systems like [Airtable](#) or [Microsoft Access](#).
- **Grant applications and management:** If you deploy subgrants, you will need software for the grant application and management process. As the primary software external partners will interface with, this software must be user-friendly and robust enough to handle all your grant-making needs. Examples include [Salesforce](#), [Blackbaud](#), and [Good Grants](#). If your IT department does not have a solution, a philanthropic partner may have advice.
- **Project management:** What project management software will you use? Will it only be used by your internal team, or would you like external partners to have access to the projects, too? Many different types of project management platforms exist. Examples include [Wrike](#), [Microsoft Project](#), [Asana](#), and [Monday](#).



TIP: Some software is better than others for managing complex projects of this type and scale. For instance, some project management software applications are designed to manage IT projects. While your projects are technology-related, they are not the same as building a website or web application, and software built to manage those types of projects will be frustrating.

- **Other:** In your project planning phase, you may determine you need other types of software to acquire to manage and implement your Capacity Award, such as budgeting software ([Quickbooks](#), [Netsuite](#)), communications platforms ([Microsoft Teams](#), [Slack](#), etc.), virtual meeting platforms ([Microsoft Teams](#), [Zoom](#), [WebEx](#)), or newsletter platforms ([MailChimp](#), etc.).

Step 5: Create a Draft Communications Plan

What are your plans for communicating the publication of your digital equity plan, the receipt of your Capacity Award, and implementation plans to all your partners and stakeholders? What is the timeline for these announcements? Which forms of media will you use (i.e., traditional forms of media, significant convening/gathering, email, social media, etc.), and how will you keep all parties informed throughout the implementation process?

If you have a communications department in your agency, they can support you in developing this communications plan (and may be able to do it for you!). If not, consider leveraging contractors to support communications. Remember to apply all the best practices we outlined in the [State Digital Equity Plan Toolkit](#) on meaningful community engagement (see pages 10-22) as you develop this communications plan, and remember your audience. For residents, especially those who participated in the planning process in some way, it's important to tell them about your implementation plans and how their feedback influenced your strategies. For potential subgrantees, your announcements and communications about the grant program must reach small, trusted organizations. So, use the many communication strategies and pathways available to reach them (highlighted in the Toolkit).

Step 6: Assess Capacity

Implementing your Capacity Award is an enormous amount of work. We recommend you assess your team's internal capacity to identify areas where you need to leverage external partners to support implementation.

Once you work through this assessment, consider what external partners or organizations may be well-suited to support in different areas. For instance, colleges and universities are often well-positioned to support program evaluation, given their research and data analysis expertise.



Areas of Expertise and Capacity to Assess:

- ✓ Project management
- ✓ Partner coordination
- ✓ Grants management
- ✓ Communications
- ✓ Budget/Financial
- ✓ Data analysis
- ✓ Templates/document creation (see Chapter IV for a suggested list)
- ✓ Program evaluation

Questions

1. Do you have a project lead for every implementation strategy your office will manage?



2. Is any one team member assigned too many projects to lead? 'Too many' is relative, of course, and many other factors contribute to this (i.e., other projects outside of the DEA plan your office is leading, the individual's efficiency, etc.). Still, if one team member is responsible for more than half the projects (for whatever reason), you should flag project management as a potential area for additional support.



3. Do partners responsible for implementing your DEA plan's strategies have the staff to manage the project effectively?



4. Does your team have fiscal expertise and support, i.e., a budget department or staff? How much capacity does that team or person have to support your efforts?



5. Does your team have communications expertise and support? A communications department or staff? How much capacity does that team or person have to support your efforts?



6. Does your team have grants management expertise and support? A grants management department or staff? How much capacity does that team or person have to support your efforts?



7. If you're subgranting awards, do you have staff who can provide technical assistance to prospective and future grantees before and during the grant application, award process, and grant period?



Questions Continued

8. If you're creating any standardized curricula, templates, or guides for distribution through or via grantees or another avenue, does your team have the capacity to create and distribute them?



9. Do you anticipate training or workshop needs for grantees or other partners? For example, any of the following training or workshops may be useful to offer to grantees or collaborators. Determining whether you will offer the training and who you'd like to do so (yourselves, an external subject matter expert, etc.) will help identify capacity needs:



- a. Digital Navigator training, including:
 - How to be a Digital Navigator
 - Digital Navigator program development and management
 - Digital Navigator data collection and management
- b. Local digital equity planning training
- c. Digital inclusion coalition building training
- d. Digital skills training best practices
- e. Program evaluation training
- f. Building digital inclusion community partnerships
- g. Exploring and building digital equity ecosystems
 - Asset Mapping
 - Establishing partnerships
 - Gap Analysis

10. Do you have research, data analysis, and program evaluation expertise on your team?



- a. Ideally, you should have a staff member responsible for leading digital equity research and analysis. If that's not possible, States should identify outside researchers to assist with these measurement and program evaluation efforts.

Step 7: Draft a Master Budget



REMINDER : Set-Asides

Next, create a draft budget—allocating your Capacity Award funds by strategy, program evaluation, plan updates, and administrative costs. Later, you'll add more details to your budget, but for now, you'll want to estimate how much of the total award you'll spend to achieve each strategy. You may find that your Capacity Award is insufficient to implement your outlined strategies, and you will have to identify additional funding sources or scale back your strategies.

- Up to 20% for Updating your Plan
- Up to 5% for Program Evaluation
- Up to 3% for Administrative Costs incurred by the Administering Entity

For instance, in their [draft plan](#), Pennsylvania's Strategy 2.2 indicates they will leverage \$20 million in Capital Project Funds (CPF) funds to purchase devices in bulk. Additional funding could include CPF, BEAD non-deployment funds, or other State funds. If you still do not have enough resources to cover your costs, scale your implementation strategies to fit your allocation. We also recommend considering how you could encourage philanthropic or business partners to support the plan's implementation and sustainability. Do not underestimate your influence in galvanizing support and encouraging funders to support digital inclusion work.

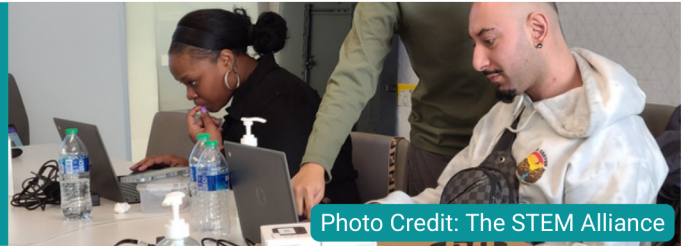
Each strategy and project will also need an individual budget. Attempt to outline potential budget items and anticipated costs. Doing so will ensure the master budget encompasses everything you'll need and will help you determine if the amounts you outlay in the master budget are feasible or if tweaks are necessary.

Throughout your project planning process, you'll continue to refine and add details to your budget.

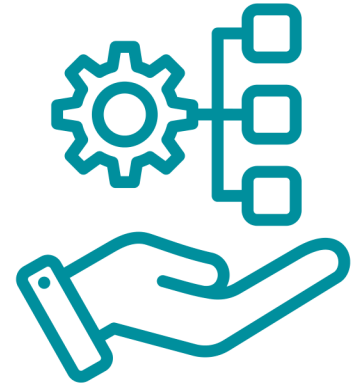


TIP: Remember that NTIA will have specific requirements for a budget they will detail in the Capacity NOFO, so don't get too in the weeds or too attached to a budget format yet.

Implementation



Your implementation strategies should address the barriers to digital equity you identified for each covered population, leverage the assets you found throughout your state, and help you achieve your measurable objectives. This chapter provides a few options for structuring subgrant programs, best practices for grantmaking, recommendations for building digital inclusion capacity across your state, and best practices for you or your subgrantees to consider. The DEA also requires States to address online accessibility, inclusivity of public resources and services, and cybersecurity and privacy measures for covered populations. This manual does not provide in-depth suggestions for achieving these measurable objective categories. However, suggestions for addressing these objectives are interwoven throughout other strategies.



Subgrant Models

As the official Administering Entity, you have the authority to make subgrants to: “(C) any entity described in subsection (c)(1)(D) that is located in the State in support of— (i) the State Digital Equity Plan for the State; and (ii) digital inclusion activities in the State generally; Congress drafted the law this way because they recognized that digital inclusion work is inherently local.”¹⁸



Tip: Directing funds to local community-based organizations trusted by the covered populations strengthens local digital inclusion ecosystems, increasing the potential for sustainability.

If you—the Administering Entity—do not intend to implement every project independently, you’ll need to determine the mechanisms by which you’ll make subgrants. Some options include a competitive grant process, MOUs to other state agencies (like state libraries), a combination of both, or some other mechanism. Your legal team will advise you on the structure and form of the MOUs you sign or subcontracts you award.

(18) Infrastructure Investment and Jobs Act § 60304, 47 USC § 1723 (2021)

You will also need to determine how you want to make funding decisions. We've identified three models to consider. Each has pros and cons, and each model could look wildly different from state to state, given the micro-decisions you will make. Within each model, you must determine the following:

- **Eligibility** - Who is eligible for the subgrant?
- **Eligible Activities** - What activities are eligible for funding?
- **Award Ranges** - How much funding will you allocate per award? Will you have pre-determined award ranges? What will the award ranges be?
- **Scoring Criteria** - What criteria will you use to make funding decisions?
- **Subawards and Partnerships** - Will you allow grantees to subaward? Will you prioritize partnerships and collaborations?
- **Grant application and performance timelines** - how many application rounds will you offer? How long will the grant periods of performance be?



NOTE: A 'Subgrant' differs from a 'Subcontract' and cannot be used interchangeably, according to NTIA. See their BEAD [Subgrantee Selection Primer](#) for more information.

Model 1: Activity-Based

The first option is to allocate funds according to the activity. In this model, you determine the activities you want to fund (based on your plan's strategies), establish and manage multiple sub-grant programs simultaneously, and pre-determine the eligible activities each grant program would fund. In some (but not all) cases, these decisions would determine the types of organizations eligible for each subgrant program. Combine separate federal funding sources (like DEA and CPF) to implement your digital equity plan. Bucketing funds by activity may make it simpler to meet the varying reporting and grant allocation requirements of the different federal grants.

The most likely activities around which you would organize the programs are:

	Capacity building (including coalition and digital inclusion planning) activities
	Digital navigator activities
	Digital skills activities
	Device distribution activities
	Affordability activities

Your plan may have identified other activities you intend to fund, and your grant programs should reflect that. For example, you could create four grant programs dedicated to the following activities:

- **Subgrant 1** - Capacity-building
- **Subgrant 2** - Acquiring and distributing devices
- **Subgrant 3** - Digital skills
- **Subgrant 4** - Establishing and supporting digital navigator programs



Photo Credit: San Jose Library

Applicants would apply to the grant program most aligned with their expertise and interest. Each grant program would have its application, performance period, reporting requirements, outcomes, and goals and be managed separately. In this example, the grant activities may not limit the types of organizations eligible for each grant. For instance, a digital inclusion non-profit that already provides digital skills training to residents may be well-suited to be the backbone of a burgeoning digital inclusion coalition. Meanwhile, the organization may also want to begin a digital navigator program and thus seek to apply it to both the digital navigator and capacity-building programs. In this scenario, the State would determine whether applicants could apply for multiple grants or just one. Award ranges could be consistent across the grant programs, or if you determined it's necessary to invest more funds in digital navigators than devices, the ranges would reflect your priorities.



Spotlight: Connect Maryland

[Maryland Connect's](#) broadband and digital equity office, leveraged ARPA funds to establish five grant programs organized by activity. In Maryland's case, the grant structures naturally determine eligible applicants based on function. Maryland's grant programs are:

- 1. The Maryland Emergency Broadband Benefit Program** - the State's companion to the federal benefit program. Until it sunsetted in February 2024, it provided an additional \$15 per month to households enrolled in the ACP program. ACP enrollees were automatically eligible for the program but had to speak with their provider to receive the benefit. Like ACP, providers submitted claims to the State requesting reimbursement.
- 2. Digital Inclusion Grant Program (MD-DIG)** - the program funded two major types of activities 1) digital inclusion planning and 2) the implementation, expansion, or continuation of digital inclusion programs. For digital inclusion planning, grants could be between \$5,000-\$30,000; for digital inclusion implementation programs, grants could range between \$10,000-\$75,000. Local jurisdictions, 501-(c) organizations, and community-based anchor institutions were eligible.
- 3. Connected Communities Grant Program (MD-GAPS)** - funded Gap Networks and Community Network construction, deployment, expansion, and continuation to address broadband affordability for low to moderate-income households (particularly in multi-dwelling units). Grants ranged between \$25,000-\$250,000 and eligible applicants were local community-based organizations, non-profits, and anchor institutions.
- 4. Connected Devices Program (MD CDP)** - Connect Maryland purchased 145,000 devices (with specific specs and requirements via an Invitation For Bid (IFB)) and then allowed county and municipal governments to apply to the program to distribute to eligible households in their jurisdiction (Connect Maryland established household eligibility). The subgrantee could also receive a stipend of up to \$6.00 per device to cover the distribution costs.
- 5. Home Stretch - Public Housing Program** - Connect Maryland leveraged CPF funds to provide grants between \$500,000 to \$9,000,000 to provide broadband access to publicly owned low-income housing. It was a unique program because the funds were provided to get to the individual dwelling units (unlike many other programs that fund just the building). Eligible applicants are local jurisdictions (counties or municipalities) that own and maintain public housing. The grant provides 95 percent of project costs, and the applicants must provide a five percent match.

Pros ✓

- Program/project measurement will be simpler and potentially easier to report and demonstrate success.
- Easier to comply with differing requirements from federal grant programs by separating differing requirements into separate programs and combining programs with similar requirements (i.e, CPF requirements may differ from DEA requirements.)

Cons ✗

- Managing multiple grants requires robust internal capacity.
- Individual grant awards may be smaller as more programs could lead to more grantees and thus smaller award amounts.

Model 2: Eligibility-Based

The second option is to divide subgrants by organization type. In this model, you would determine your likely subgrant applicants and bucket funds so similar applicants are compared to each other rather than wildly different applicants competing against each other. In this model, you pre-determine the range of activities an organization can apply for funds for, and they propose a project that falls into those categories.

For example, you could establish four subgrant programs:



- **Subgrant 1** - open to state agencies and state higher education institutions (including Minority Serving Institutions ((MSIs))
- **Subgrant 2** - open to municipal, county, and regional governments
- **Subgrant 3** - open to Tribal governments and Tribal/Indigenous-led entities
- **Subgrant 4** - open to community-based organizations, CAIs, nonprofit foundations, nonprofits, Tribal serving organizations, or a partnership between these organizations

In this example, the subgrant programs are not limited to a specific activity. Instead, applicants could propose projects that align with your plan goals and implementation strategies. Subgrant award ranges could be scaffolded according to the organization type's size—in this example, the largest award range would be for Subgrant 1, and the smallest would be for Subgrant 4. Alternatively, award ranges could remain constant no matter the organization type size.

Pros ✓

- Allows for similar organizations to compete against each other, providing more equal opportunity.
- Allows for a wider range of activities that may better support the digital equity needs of local communities.

Cons ✗

- Managing multiple grants requires robust internal capacity.
- It may be more difficult to track progress and measure impact when activities are combined.

Model 3: Hybrid

The third grant structure option is a hybrid of the two previous models. A hybrid could be constructed in several ways, combining elements from the previous two models.

For example, you could establish two grant programs defined by activity type within them, applicants are only compared to similar applicants as follows:

1. **Subgrant 1** - Capacity Building Activities

- a. Applicants can apply for funds to implement digital inclusion-focused capacity-building activities
- b. Eligible applicants:
 - i. Municipal, county, and regional governments and their anchor institutions (CAIs)
 - ii. Tribal governments and Tribal/Indigenous-led entities
 - iii. Community-based organizations, non-profits, and foundations
 - iv. Higher education institutions
 - v. State agencies and institutions
- c. Applicants are compared to applicants in their category only.

2. **Subgrant 2** - Direct Service Activities

- a. Applicants can apply for funds to implement a digital inclusion project or program serving covered populations in one or a combination of the following categories:
 - i. Digital Skills
 - ii. Digital Navigators
 - iii. Devices
 - iv. Broadband affordability
 - v. Technical support
- b. Eligible applicants:
 - i. Municipal, county, and regional governments and their anchor institutions (CAIs)
 - ii. Tribal governments and Tribal/Indigenous-led entities
 - iii. Community-based organizations, non-profits, and foundations
 - iv. Higher education institutions
 - v. State agencies and institutions
- c. Applicants are compared to applicants in their category only.



Spotlight: North Carolina Division of Broadband and Digital Equity

[North Carolina's Division of Broadband and Digital Equity](#) within the State's Department of Information Technology leveraged ARPA funds to establish a digital equity grant program. It was one grant with two phases, different eligibility requirements, and award ranges for each. The eligible activities were the same for each phase, but the eligible applicants differed. The grants were designed to get funds out the door quickly, align with the forthcoming DEA requirements and state digital equity plan, build capacity, and further develop its digital inclusion ecosystem. North Carolina's hybrid approach is unique.

Eligible applicants were required to develop or expand digital equity programming and address at least one of the following elements of digital inclusion:

1. Affordability of reliable, high-speed internet
2. Internet-enabled devices (computers, laptops, etc.) that meet users' needs
3. Access to digital literacy and skills training
4. Quality technical support
5. Applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration

Phase 1: [Digital Equity Grant - State Government Entities](#) - \$9.9 million (total)

- Eligible entities:
 - All State government [entities](#)
 - The University of North Carolina System and/or schools within it (State-funded schools)
 - North Carolina Community College system
- Award range: up to \$2 million
- Applicants' projects were required to serve a statewide or regional audience.

Phase 2: [Digital Equity Grant - Digital Champions](#) - \$14 million (total)

- Eligible entities:
 - Community services (local governments, county libraries, K-12 school systems)
 - Nonprofits
 - Higher education institutions
 - Regional entities
- Award range: Up to \$400,000 per county, maximum request of \$1.5 million
- Applicants' projects were not required to serve more than one county or community but could if they chose to
- Applicants were only compared against other eligible entities of the same category. For example, nonprofit applicants were compared to other nonprofit applicants, not against eligible entity categories.

Pros ✓

- The hybrid model is flexible and can support your organization's values, goals, and strategies.

Cons ✗

- Merging models could confuse applicants and grantees, requiring excellent and repeated communication.



NOTE: If you use Model 2 or Model 3 as a template, we suggest establishing a set-aside or separate subgrant category for Tribal governments and Tribal/Indigenous-led and/or operated entities. States should interact with Tribal governments differently than other partners because they are sovereign nations. Thus, you should not compare Tribal government applicants to municipal governments or other applicants. Instead, you should create a separate category. Please note that Tribal/Indigenous-serving organizations are not always Tribal/Indigenous-led, owned, or operated, they are distinct from Tribal governments and Tribal/Indigenous-led, owned, or operated entities. Tribal/Indigenous-serving organizations should participate in the grant application category aligned with their organization type (i.e., nonprofit, etc.).

Subgranting Best Practices

Design with Your End Goal in Mind



All funded projects should support the State as you work towards the vision outlined in the plan. For example, if one of your goals is to increase access to devices for senior populations, but you do not allow grantees to purchase specific types of equipment with the funds, you may not reach your end goal. Keeping your end goal(s) in mind and designing backward from it will help inform programmatic and structural decisions.

Carefully Define Eligibility



The DEA lists types of organizations eligible for subgrants. However, depending on how you structure your subgrant program(s), you may determine certain organizations are best suited for one type of grant but not another. Your subgrant program(s) shouldn't be too restrictive or vague.

Organizations Eligible for Subgrants ¹⁹

- Political subdivisions, agencies or 'instrumentalities of the State (state agencies) etc. including public housing
- Indian Tribes, Alaska Native entities, or Native Hawaiian entities
- Foundations/corporations/institutions/associations that are:
 - Non-profits
 - Not a school
 - Community Anchor Institutions
 - Local Educational Agencies
 - Workforce development programs
- Partnerships between any of the above
- A partnership between any of the above and an entity the Assistant Secretary says is in the public interest and isn't a school

(19) Infrastructure Investment and Jobs Act, 47 USC § 1723 Sec.60304 (2021)

Be Nimble and Flexible



Project implementation often does not go as planned. And new lessons may surface during implementation that can and should shape how you implement the remainder of the projects. Allowing grantees to pivot or adjust their programs and strategies based on program evaluation will better serve the covered populations.

Limit the Red Tape



To encourage participation from smaller, trusted organizations, you'll need to limit the administrative burden or the 'red tape' as much as possible. Small, community-based organizations have strong relationships with covered populations but do not typically participate in federally funded grant programs. Make sure grant applications and requirements are simple and that the grant application, application process, reporting platform, and reporting requirements are user-friendly, intuitive, and not overly burdensome. If your State requires onerous reporting, consider granting a local foundation subgrants to manage the State's reporting requirements.

For example, to encourage small, trusted institutions to participate in your grant program, a complicated application process with a 30-day application window could be burdensome. Conversely, a longer application window (like 60-90 days), some targeted technical assistance for small organizations, and a simple application will enable more small, community-based organizations to engage.

Reimbursement-based grants—where the grantee does not receive some or all of the funds upfront—often prevent small organizations from participating in grant programs. Instead, consider providing some funds upfront and then the remaining funds at different milestones (either set by dates or deliverables) throughout the grant program.

Likewise, grantmaking is a time-intensive process and requires a lot of capacity from the organization administering grants, in this case—your organization. Simplifying processes and limiting the red tape will benefit the grantees and you.

Leverage the DEA Grants to Create a Community of Practice



With some intention and time, a subgrant program can naturally foster a state-wide community of practice. Provide subgrantees with opportunities to learn from each other and share best practices throughout the grant periods. Doing so can help subgrantees pivot, reduce the replication of strategies or methods that did not have the intended impact, and better deliver their solutions and strategies.

Consider budgeting funds and time for an annual convening in a central location and quarterly virtual convenings to foster the community of practice, provide space for sharing challenges and success, and provide updates from your team.

A community of practice can help support an ongoing digital inclusion ecosystem that could outlive the DEA grants and create a network of digital inclusion practitioners across the state to carry on the work into the future.

Provide Standardized Resources



Provide examples, templates, tools, and best practices for your grantees throughout the implementation period. Your support, guidance, technical assistance, tools, and best practices you provide to grantees will be critical for the program's success. You can aggregate and leverage resources from the NDIA community and NTIA, among other organizations. Some standardized resources to consider providing are:

- ✓ Low-cost internet plan outreach templates
- ✓ Templates for communication with covered populations, including translated materials
- ✓ Data collection templates for performance measurement
- ✓ Program evaluation plan outline or template and guide
- ✓ Reporting templates
- ✓ Storytelling templates
- ✓ Press release templates
- ✓ Sample/standard survey instruments for performance measurement
- ✓ Guidance/instructions for navigating your reporting platform/software

Don't Forget the 'Small' Stuff



Effective programs are flexible in curriculum and mode of delivery. Time, learning style, content, transportation, food, childcare, etc., are all factors that require consideration before the program launch. Ensuring these ancillary budget items are allowable expenses for grantees and encouraging grantees to consider and plan for them before the program launch will support successful project implementation.

Implementation Strategies

Regardless of your subgrant model, most States must invest in a mix of capacity building and direct service activities. Capacity-building strategies are necessary as many organizations, communities, and digital inclusion coalitions are not ready to provide direct services to residents. Meanwhile, others need additional funds to expand or continue direct service delivery. This section provides a detailed overview of capacity building and direct service strategies you may adopt and implement or subgrant to partner organizations.

Community Capacity Building Strategies



Among the DEA's most important and lasting impacts will be developing robust state and local digital inclusion ecosystems. Strong ecosystems will enhance the effectiveness of the direct service strategies you fund—more on those later—and will help sustain ongoing digital inclusion work beyond the expiration of the Capacity Grant funding. Investing in capacity-building strategies will establish necessary organizational infrastructure in communities where the digital inclusion ecosystem is underdeveloped and will enable already vital ecosystems to make even more effective use of Capacity Grant funding and other resources available to the community. Investing in capacity across different organization types will also help ensure sustainability by protecting against shifts in funding and policy priorities in government or at certain organizations.

Digital Inclusion Coalitions

As collectives working in a given area—community, region, or state—digital inclusion coalitions can uniquely build capacity and maximize impact. They achieve three distinct effects for their members and the communities they serve.



- **The advocacy effect.** Coalitions highlight and have the power to pay attention to the issue of digital inclusion as a specific area for public policy and community action.
- **The alignment effect.** Coalitions create a framework to align the perspectives and efforts of the varied community players who may initially share a concern about digital inclusion but little else.
- **The network effect.** By bringing a range of parties together in one room, coalitions allow their member organizations to understand each others' perspectives better, share information and strategic insights, and discover opportunities for new relationships—including collaborations and program partnerships.²⁰

Given their convening power, connection to practitioners, and holistic perspective on digital inclusion, coalitions can be particularly effective partners in supporting the implementation of your State's digital equity plan and Capacity Grant program. As you prepare for implementation, consider investing in coalitions to extend and supplement your capacity as the Administering Entity. Some potential roles that coalitions could play in the implementation process (and may have played during your planning process) include:

- Leading local community engagement and communications about DEA implementation and funding opportunities
- Facilitating the sharing of best practices and lessons learned
- Optimizing direct service programs by fostering collaboration between practitioners
- Centralizing and standardizing data collection and reporting
- Providing technical assistance to Capacity Grant Program subgrantees (e.g., grant writing, project planning, and program evaluation)
- Crafting proposals to attract additional funding

Understanding a coalition's level of development and formalization is critical to making impactful and lasting capacity-building investments. See our [Digital Inclusion Coalition Guidebook](#) (p.13) for details on coalition development phases. Newly formed coalitions may require funding for staff, administrative support from a backbone organization, or a consultant to help establish the coalition structure and organizing documents. Newer coalitions may also need to become registered nonprofit organizations or find a fiscal sponsor to receive funds. Established coalitions will have some of these exact support needs. Still, they may also require funding for specific initiatives and tools, such as community engagement and data collection or developing a website and online resources.

(20) Digital Inclusion Coalition Guidebook (National Digital Inclusion Alliance, 2022) <https://www.digitalinclusion.org/download/17110>

Statewide Coalitions Activities



Statewide digital inclusion coalitions are a separate but similarly useful type of coalition to consider funding, establishing, or delegating portions of your plan's implementation. Statewide coalitions can lead activities parallel to or directly with the State's efforts to support a healthy and vibrant statewide digital inclusion ecosystem. Some examples of activities they can lead are:

- Advising the State on digital inclusion policies and programs
- Identifying and maintaining a digital inclusion asset inventory
- Coordinating digital inclusion programs and services across the state
- Providing maps of cost-free Internet locations
- Identifying and compiling a list of low-cost internet deals/plans and mapping them against service availability
- Creating searchable, online digital inclusion resource webpages
- Helping people understand the nuances of digital inequities and best practices for achieving digital equity
- Offering up-to-date information on federal funding opportunities, State actions, and opportunities, along with other information to help the coalition members respond to local needs
- Advocating for digital inclusion policies to local, state, and federal policymakers
- Collaborating and leveraging knowledge and resources to further digital inclusion work²¹

Investing in new digital inclusion coalitions, adding capacity to existing ones, and measuring the impact of coalitions will support the growth and sustainability of healthy digital inclusion ecosystems throughout the US.²²

Local and Tribal Digital Equity Plans

Local and Tribal digital equity plans function as strong complements to the state plan by incorporating more in-depth community input and analyses and by identifying strategies more responsive to the specific needs of the local community.



(21) Colin Rhinesmith and Susan Kennedy (2020). Growing Healthy Digital Ecosystems During COVID-19 and Beyond. Benton Institute for Broadband & Society. <https://www.benton.org/digital-equity-ecosystems-report>

(22) Colin Rhinesmith and Rafi Santo. (2022). "Digital Equity Ecosystems Measurement Framework." Digital Equity Research Center, Metropolitan New York Library Council. https://metro.org/digital_equity_ecosystems

It is also important to remember that Tribal and local governments have the authority to develop their digital equity plans independent of the state digital equity plan. As sovereign nations, Tribal governments have full autonomy to plan for their communities. Tribal digital equity plans carry the same authority as those developed by any other State, Territory, or nation. To a lesser degree, local governments also retain certain governing powers (these vary by state), which may dictate the relationship between state and local digital equity plans. Understanding and accounting for these relationships will be critical to successfully coordinating your plan and any existing local or Tribal plans in your state.



Spotlight: Massachusetts Municipal Digital Equity Planning Grant Program

The Massachusetts Broadband Institute (MBI) launched the [Massachusetts Municipal Digital Equity Planning Grant Program](#) in 2022 and has funded the creation of digital equity plans in nearly 80 communities across the Commonwealth. In addition to providing funding directly to municipalities, MBI also funds regional planning agencies and consultants to provide ongoing technical assistance to the communities throughout the planning process, with each community assigned a technical assistance partner to work with. Upon completion of their plans, every grantee community can apply for an implementation grant of up to \$100,000 to kickstart plan implementation.

Regardless of statutory parameters, supporting the creation and implementation of strong local and Tribal digital equity plans will ultimately enhance local digital equity ecosystems and benefit the State's implementation efforts. In many other planning fields, including transportation, economic development, natural resource management, and public health, it is common and sometimes even required for some portion of state funding or federal funds administered by the State to be allocated for creating and maintaining local plans. Local planning also has the positive byproduct of increasing awareness of digital inequities and existing programs and spurring collaboration and coordination between digital inclusion-focused or adjacent organizations. It has even led to the forming of committees and coalitions in some areas.

Local digital equity planning efforts have proliferated in recent years, with dozens of plans on the books and many more underway. Our [Local Government Digital Inclusion Trailblazers](#) resource repository includes 24 completed local digital equity plans from communities nationwide. Both spotlights in this section (Massachusetts and the Appalachia Digital Accelerator Program) have significantly advanced local digital equity planning. They may serve as models for your strategy to support local planning.



Spotlight: [Connect Humanity Appalachia Digital Accelerator Program](#)

Established by Connect Humanity in 2023 and supported by a grant from the Appalachian Regional Commission, the Appalachia Digital Accelerator funds community connectivity plans in 50 of Appalachia's least-connected communities across 11 states. The plans holistically address connectivity, combining a digital equity plan, a broadband infrastructure plan, and a financial feasibility analysis into one undertaking. The community grantees are each assigned to a Lead Community Agency. This regional agency provides direct support throughout the planning process, while national partners (including NDIA) provide specific training and guidance.

Direct Services Strategies



This section provides general information, best practices, and things to know about direct (i.e., organization to consumer) digital inclusion service strategies. We've provided multiple examples of existing programs or organizations operating programs for each strategy. In addition, we've provided things you—the Administering Entity—should look for when selecting grantees to deliver these services to the covered populations.

Digital Skills Training



Digital skills are an ever-expanding area of knowledge for everyone as changes and advancements in technology continue to create new opportunities for teaching and learning. Effective digital skills training provides opportunities for learners to acquire digital skills that empower them to use their devices and connectivity effectively.



UNESCO defines digital skills as: a range of abilities to use digital devices, communication applications, and networks to access and manage information. They enable people to create and share digital content, communicate and collaborate, and solve problems for effective and creative self-fulfillment in life, learning, work, and social activities at large.



Why the Change in Language?

While the term “literacy” is academically correct, it can damage community members, who can feel reduced to being classified as either literate or illiterate. The label “illiterate” blames the individual instead of the existing complex and systemic barriers. It also suggests that individuals will no longer need support when they have achieved “literacy,” which does not reflect the reality that digital technologies will continuously evolve; thus, everyone will require support for digital skills at some point in their lives. ‘Skills’ is also an asset-based term instead of deficit-based, focusing on strengths and potential.

Types of Digital Skills Training

The Administering Entity is unlikely to deliver digital skills instruction at the state level. Instead, the Administering Entity must understand the value and importance of various digital skills training techniques to guide ecosystem development and ensure appropriate options, complementary methods, and responsive, community-based learning.

Paying particular attention to formats and methods that account for different learning styles for digital skills instruction and ensuring they meet the needs of the covered population is essential. mit to regularly attending.

Classroom Settings – In-person and Virtual

Holding digital skills classes can allow you to reach many students at once, leverage a single instructor for multiple topics, and develop cohorts of students who can rely on one another and practice together. Classes are often a good approach for communities at the same level who can move together as a group, such as students, some seniors, and groups of employees.



When considering teaching digital skills in-person in a classroom setting, determine how to schedule classes and topics that best serve community members, choose times and days that reflect the activities and cultures of the community of learners, and allow the pace and number of courses you offer to be led and influenced by the learners' needs. Provide flexibility for learners who cannot come.



Spotlight: The National Digital Equity Center

[The National Digital Equity Center](#) (NDEC) in Maine provides digital skills classes for groups between five and 10 people on over 40 topics in three curricula areas: 1) Work and business, 2) Home and education, 3) Aging well with technology. NDEC offers in-person and online courses in a synchronous, interactive format via Zoom. From Email Basics to Identifying Fraud and Scams, the classes can typically be completed in one to three hours. This bi-modal approach helps them connect with learners all across their state.



Virtual classes may also provide an opportunity to connect with a wide range of students and provide support and instruction to many community members unable to engage in person. These classes can be an excellent support to more isolated covered populations, such as the disabled community, older adults, and rural communities if they have broadband and an appropriate learning device.

Assuming successful outreach and advertisement for classes, they can sometimes be the most economical as they can serve multiple people simultaneously. However, outreach and advertisement are critical, as if the seats are empty, there is no economy of scale.



Spotlight: The TechConnect Program at the New York Public Library

[The TechConnect Program at the New York Public Library](#) in Manhattan, NY, offers more than 100 online and in-person technology classes at libraries throughout the Bronx, Manhattan, and Staten Island for free. Topics range from beginner to advanced level, including series-based programs for those who want more in-depth knowledge. Classes are offered in multiple languages, and library staff assist learners in registering for their classes.



One-on-One Training

Digital skills can also be taught one-on-one in virtual or in-person formats, allowing for a wide range of flexibility for both the digital skills provider and the consumer.

For example, in a one-on-one format, a digital skills instructor may assist a community member in learning basic online payment processes via their first online purchase or guide an experienced learner in setting up two-factor authentication on their existing social media accounts.

In a one-on-one format, the instructor should design the lessons around the learners' goals and objectives instead of standardized curricula or lessons. One-on-one instructors may need to engage creatively with resources and digital skills frameworks when leading learners down their unique pathway. Additionally, these programs are effective for many covered populations, including community members with disabilities and non-English speaking individuals.

Solo and Self-Paced Learning

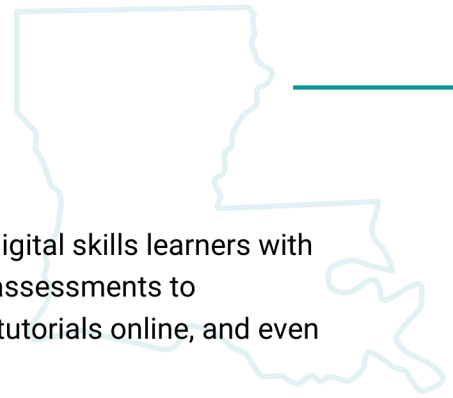
Most internet users have engaged in solo and self-paced learning at some point. If you learned to type with Mavis Beacon Teaches Typing, taught yourself a new skill through a quick YouTube video, or read a wiki-how tutorial, you've engaged in self-directed, solo digital skills learning.

Digital skills learners with high self-sufficiency feel confident exploring their technology and learning by trial and error. Still, for those who would like a more guided experience, several resources such as [Human-I-T's Digital Literacy Program](#), LinkedIn Learning, or [Google's Applied Digital Skills](#) include progressive lessons to help learners develop their skills and build their digital confidence toward self-sufficiency. When working with the covered populations and those who want to improve their digital skills, subgrantees or the State should provide learners with information about available and appropriate solo or self-paced learning opportunities.



Spotlight: Rapides Parish Library

The [Rapides Parish Library](#) in Rapides Parish, Louisiana, supports digital skills learners with the [Northstar Digital Literacy](#) platform. Community members take assessments to determine the skills they may need to develop, learn via self-paced tutorials online, and even take proctored exams to certify their knowledge.



Learners' Motivations

Each learner has different motivations for learning new or perfecting existing digital skills. Meanwhile, States typically focus digital skill training on formal education, career training or retraining, and acquiring certifications. These are critical aspects of digital skills education. However, because they only serve a small and specific community of digital skills learners, they are only a portion of the instruction States should support. Instead, States should coordinate services statewide, ensuring all learners, especially covered populations, have digital skills training opportunities that meet their individual learning goals.



Example Motivations for Acquiring Digital Skills:

- To share photos and stories with family members in other states or countries
- To feel like they're keeping up with the modern world
- To gain the skills they need for a promotion or career change
- To be able to help their children with schoolwork and their digital skills needs
- To learn how to use the evolving digital tools of everyday life!

Validating and uplifting the many ways in which community members become digital skills learners can result in the development of lifelong learners and champions of digital skills.

Learn to Earn

In addition to certifications, job advancement, and curiosity, the programmatic incentive of “learn-to-earn” can motivate learners. This practice establishes goals for learners. If a learner completes the goal, such as a specific number of classes attended or assessments, they receive a device—such as a laptop or Chromebook—to keep. Programs using the learn-to-earn model often demonstrate stronger student retention and engagement. One key element of a learn-to-earn program to remember is that the earned devices should align with the digital skills instruction, such as the same operating system, hardware, and type of device.



Spotlight: Tech Goes Home

Tech Goes Home, a digital inclusion organization in [Boston](#) and [Chattanooga](#), leverages the learn-to-earn model to help keep their learners consistent. After completing 15 hours of digital skills instruction, students can receive a Chromebook for no cost or a small copay fee. They focus on supporting English language learners, college preparation, and enhancing small business skills.



Digital Skills Frameworks and Curriculum



Digital Skills Frameworks are a method of organizing and categorizing different skills that can be learned and mastered by a community member.

As part of your digital skills implementation strategy, States should consider developing and/or revising a comprehensive digital skills framework to share with subgrantees and other digital skills practitioners.

A state-led framework enables community-based organizations and other existing program partners to align their work within the framework, offering overlapping and linear options for learners across the state. Schools, libraries, and community-based organizations can then tailor the State's digital skills framework to their members' needs.

(23) “Most Americans Continue to Have Privacy and Security Concerns, NTIA Survey Finds”, National Telecommunications and Information Administration, accessed February 26, 2024, <https://www.ntia.gov/blog/most-americans-continue-have-privacy-and-security-concerns-ntia-survey-finds>

- Frameworks guide instructional pathways, class structures, and decisions surrounding purchasing and developing curriculum.
- Include social, entertainment, and communication skills in addition to workforce skills.
- Design or tailor the framework to the communities' needs, desires, and unique aspects.
- Regularly refresh digital skills frameworks, as societal and technological changes can result in out-of-date information.



Spotlight: Seattle Digital Equity Initiative

Seattle Digital Equity Initiative's [Digital Skills Framework](#) from [Digital Skill Sets for Diverse Users](#) outlines a wide range of holistic digital skills a learner may need to thrive. The framework outlines ten common themes and 74 distinct digital skills. The themes are:

1. Communication: Exchanging information with others on digital platforms using various strategies to collaborate, share, and communicate.
2. Creation: Engaging in digital spaces to design, create, and revise content online.
3. Device ownership: Practices that support device longevity, including physical care, protective software, and the use of technical support.
4. Gateway skills: Foundational skills required to use a device and participate online.
5. Information skills: Skills to apply, evaluate, and manage information across digital and physical environments.
6. Lifelong learning: Engagement in self-assessment of digital skills, using self-reflection to tailor accessible digital environments and continue digital skills learning.
7. Mobile: Understanding basic functions of a mobile device to communicate and access goods and services.
8. Online life: Access to online resources that support the digitalization of daily tasks and socialization within a broader digital community.
9. Privacy and security: Maintenance of practices to secure digital identity, recognize threats, and understand the broader safety implications of working in a digital environment.
10. Workplace: Advancing workplace success and professionalism through engagement with an organization's online tools and other supportive digital systems.

States can also select, recommend, or purchase and share digital skills instructional tools for subgrantees and digital skills practitioners. Many free or low-cost digital skills curricula on various topics exist, including those listed in Figure 1 below.

Figure 1

Program	Creator	Languages	Special Features	Facilitator Support
DigitalLearn	Public Library Association	English	Provides templates for instructors to build their own courses	Yes
GCFGlobal	Goodwill Foundation	English Spanish Portuguese	Tutorial-style lessons, on a wide range of technology topics	Yes
Digital Literacy Pathway	WebJunction	English	Provides guidance for instructors on how to evaluate and engage with digital literacy skills resources and programming	Yes
TechBoomers	TechBoomers	English	Offers a WIDE variety of topics in listicle lessons and video tutorials, much like an early BuzzFeed format. Great for community members looking to answer their own questions.	No
Applied Digital Skills	Google	English Spanish French	Offers both a robust curriculum, but also extensive materials for learning to teach digital skills	Yes
Grow with Google	Google	English Spanish French	Brings Google resources to organizations and provides career-focused certifications	No
Senior Planet	Older Adults Technology Services (OATS) by AARP	English Spanish	Live, synchronous classes for community members 60+	No
Web Literacy	Mozilla Foundation	English	Offers lesson plans called “playlists,” including offline activities and online instruction	Yes
Microsoft Learn	Microsoft	English	Presents training on Microsoft products with clear prerequisites. Instructor materials focus on building skills as a trainer.	Yes

While a wide variety of options for digital skills resources exist, only some core areas of a digital skills framework may match an option in the existing curriculum. States could develop new courses, lessons, and instructional materials to fill gaps in educational material. To do so, follow these steps:

1. Determine the covered populations' broad digital skills needs, and goals (your state digital equity plan should contain these).
2. Work with community-based organizations to learn about the specific populations learning digital skills.
3. Identify specific curriculum needs, such as target skill areas or methods of instruction that reflect the communities represented within your state. Ensure all covered populations are considered in this stage.
4. Research and identify current digital skills, instructional materials, programs, and courses that will fulfill goals.
 - a. Determine if your State will purchase materials for community digital skills programs or provide guidance and suggestions.
5. Identify gaps in existing digital skill instruction curricula. Create a plan to develop necessary supplemental materials to support your state's full digital skills education.
 - a. Use prior research and knowledge to determine if existing community organizations in your state may have the capacity and expertise to provide the curriculum and materials.
6. Create a plan for sharing curriculum and resources throughout the state.
7. Create a plan to evaluate and expand curriculum offerings based on feedback from digital skills training programs and new technology developments.



Spotlight: The Maryland Department of Labor

The [Maryland Department of Labor's Digital Literacy Framework for Adult Learners](#) and [Instructor Implementation Guide](#) offers guidance to community and state organizations providing workforce development instruction. The Instructor implementation guide acts as a curriculum for teaching classes or small groups on the material.



Privacy and Security

Privacy and security concerns can hinder individuals from fully participating in online spaces. Three out of four online households had concerns about online privacy and security, and one-third attributed these concerns to holding them back from online activities.²³ Including privacy and security concerns in your State's digital skills framework is essential to overcoming this barrier.

Evaluating Digital Skills Instruction

Evaluating digital skills programs is more complex than collecting data on attendance, course completion, and learner outcomes. Timelines and engagement build community trust and strengthen partnerships. We go into more detail on program evaluation in Chapter VI. However, consider the following areas to evaluate digital skills instructional programs (from concept to delivery):

- **Learner satisfaction** - Are community members satisfied with the content they received instruction? Do learners expect to use the skills they learned?
- **Course relevance** - Does the program update materials for new applications and versions of software and hardware? Are they prepared to provide instruction on various topics in their area of focus? Do the topics covered help learners reach their goals?
- **Ease of participation** - Can community members engage with the program easily? Does the time, place, and methodology decrease the community's entry barriers? Are there adaptations for appropriate covered populations?
- **Sustainability and growth** - How will this program remain consistent and sustainable? Are there plans for growth and development to match the community learning pace?

Finally, as you further develop and refine your digital skills strategies, leverage the many existing resources and subject-matter experts available, including:

- **Digital Skills Research and Best Practices** - [The National Skills Coalition](#) publishes the most up-to-date research on digital skills gaps and solutions.
- **Digital Skills Frameworks** - A series of briefs from [The Digital Resilience in the American Workforce - Putting Digital Literacy and Digital Resilience into Frame](#)
- **Learner Assessments** - [Northstar Digital Literacy](#) (developed by Literacy Minnesota) offers digital literacy skills assessments complete with certificates of achievement
- **Digital Skills Activities** - [Digital Skills Library](#), managed by the [Ed Tech Maker Space at World Education](#).
- **Digital Skills Data Collection** - [Using Data To Advance Digital Skills: A State Playbook](#) from the National Governors Association (NGA)

(23) "Most Americans Continue to Have Privacy and Security Concerns, NTIA Survey Finds", National Telecommunications and Information Administration, accessed February 26, 2024, <https://www.ntia.gov/blog/most-americans-continue-have-privacy-and-security-concerns-ntia-survey-finds>

Digital Navigator Services



Digital navigators are trusted guides who address the digital inclusion process—including connectivity, devices, and digital skills—with individual community members through repeated interactions.

With empathy, they assess needs, recommend resources, and provide support throughout the process to empower individuals to meet their goals. Digital navigator programs typically provide a mix of direct services and referrals to resources elsewhere, depending on their capacity and what other digital inclusion programs exist to meet their clients' needs. As more digital inclusion resources become available, the need for support navigating those resources also increases.



I struggle with learning, and the repeated tutoring has helped me keep my head on straight and keep all this crazy tech knowledge. Could not have gotten my businesses up and running without you.” - Chris, a Connect Arizona digital navigator client.



The digital navigator model is replicable and flexible, so it works well in various settings. Some programs use a title other than “digital navigators” publically, such as digital ambassador, digital connector, tech navigator, or *especialista en acceso tecnológico*. However, the term digital navigator is useful to collectively refer to individualized, ongoing, holistic digital inclusion assistance so that similar programs can connect and collaborate, and we caution against using other terms to define the work. Instead, we recommend States use the term ‘digital navigators’ if the role aligns with the standard definition.



Spotlight: The Center for Digital Equity

The [Center for Digital Equity \(CDE\)](#) in Charlotte, NC, established a community-wide digital navigator service to connect residents to resources throughout the community's well-coordinated digital inclusion ecosystem. They centralize access to dedicated digital navigators through the [local 311 phone service](#).²⁴

The CDE works directly with residents, neighborhoods, and private and public sector partners, to listen to the needs of Mecklenburg County community members and then provides one-on-one guidance that helps them reach their goals. The digital navigator service connects community members with the resources they need to access the internet and use online services in their everyday lives.²⁵



Photo Credit: Center for Digital Equity

NDIA defined and developed the digital navigator model in collaboration with the digital inclusion community and continues to act as a hub for free tools, shared resources, and community support. We actively document the model as it evolves and matures through work with the digital inclusion community and projects like the National Digital Navigator Corps (NDNC). With support from Google.org in 2022, NDIA launched the NDNC to establish a cohort of digital navigators across rural and Tribal lands and gather best practices for successful digital navigator programs in these communities. We used these projects as a basis for the examples and recommendations below. More information about best practices, available materials, and the national community of practice is available and continually updated on NDIA's [Digital Navigator webpage](#).

(24) "Digital Navigators," The Center for Digital Equity, The Center for Digital Equity, accessed January 18, 2024, <https://thecenterfordigitalequity.org/digitalnavigators/>

(25) NDIA Community Digital Navigator Programs Form submission by CDE

Why Digital Navigators?



In a robust digital inclusion ecosystem, the digital navigator role adds a vital human element and a centralized access point for all the resources a community offers. A digital navigator customizes support to match every person's unique needs, assets, and goals. This holistic flexibility and individualized support remove barriers that may prevent community members from accessing other digital inclusion programs.

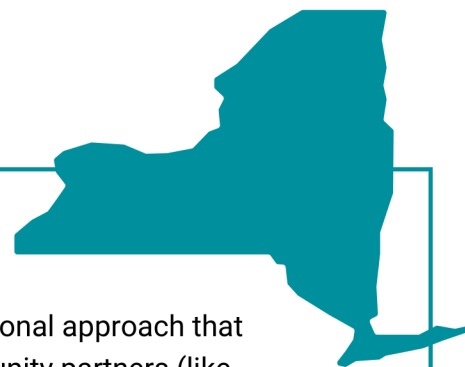
Digital navigator programs offer repeated interactions, as needed, to ensure an individual has all their needs met and a point of contact when a new need arises. Holistic, ongoing, consistent support equips individuals to continue engaging effectively and confidently online in the long term.

Digital navigators also assist individuals in determining what they don't need—helping them discern the appropriate resources at the appropriate time. Even in a community where plentiful resources exist for connectivity, devices, and digital skills, resource navigation support is critical to ensure community members can effectively connect to the right resources.



Spotlight: Digital Navigators of Hudson Valley

[Digital Navigators of Hudson Valley \(DNHV\)](#) (NY) is a coordinated regional approach that leverages a cohort model to cross-train public library staff and community partners (like senior living communities and community-based organizations) to provide digital navigator services to their patrons and clients. Southeastern New York Library Resources Council and regional library systems manage the cohorts which operate on a three-month rotation as well as the funding, program support, program data, training, peer support, and mentorship among the cohort. This model adds capacity for digital navigator services in small, rural organizations and provides peers for the digital navigators to learn with and from during their training.



Digital navigators can also identify gaps and needs across the community and, in some cases, develop services to fill those gaps, providing feedback on the effectiveness of solutions offered and insight into a community's evolving needs. Additionally, digital navigators improve community engagement with digital inclusion efforts. They act as a bridge between other digital inclusion stakeholders and the community for two-way communication. For example, digital inclusion coalitions work to coordinate efforts, and digital navigator programs can serve as the front desk of that coordinated work—interacting with community members, providing a human connection, and collecting feedback for improved programming and services.



“As a homeless person, my life has been a series of trials and tribulations, abandonment, abuse, and addiction, but I refuse to let my past define my future. The Digital Navigator Project holds immense significance for me as I embark on the journey of rebuilding my life. Through this project, I was provided with computer and digital skills training, including computer classes. These resources will be the key to reigniting my passion for spreading the message of hope and redemption. The project empowers me to reclaim what I have lost, rebuild the foundations of my professional life, and breathe new life into my entrepreneurial endeavors. Most importantly, the Digital Navigator Project will allow me to reconnect with my children, who have been deeply affected by my past struggles.”

- Rick, a client of a [Computer Reach](#) digital navigator



Digital navigators should direct their support to segments of the population that other digital inclusion services fail to reach. Community-based best practices dictate that digital navigators should be members of their communities, embedded within trusted community organizations.

Recommendations for State-Level Role



States may assume various roles in establishing and supporting digital navigator programs at different levels of involvement and influence. State-level entities, including State Library Agencies, helped establish some of the earliest digital navigator pilot programs through grants and continue to do so in many cases. Beyond direct funding, state agencies have many opportunities to support digital navigator programs ranging from hands-on program design to responsive technical assistance. The best strategy for state-level work with digital navigators will likely include combining these activities.

When determining the appropriate role for a state-level entity, the first step is understanding any existing or forthcoming digital navigator programs in your state. The asset inventory you developed for your state digital equity plan should include many, if not all, of your state's local digital navigator programs. While a comprehensive national directory of digital navigator programs does not exist, there are good places to look for existing digital navigator programs, including [NDIA's Affiliate directory](#) and [NDIA's Digital Navigator web page](#). To identify new programs, continue working with your sister agencies, local digital inclusion coalitions, libraries, community action agencies, community health organizations, housing organizations, community colleges, workforce development centers, extension offices, etc. State-level programs should always complement and support existing local, regional, and state-wide digital navigator programs.

Provide Assistance and Support for Independent Digital Navigator Programs

Existing digital navigator programs are uniquely tailored to their communities. State agencies may establish a statewide community of practice for digital navigator programs to promote peer support, collaboration, and resource sharing. Digital navigators often work independently and benefit from professional opportunities to connect. Existing programs may provide assets to help develop digital navigator programs by sharing materials they've created or training new digital navigators. Existing programs will also provide feedback to the state agency on how they can best support digital navigators in the state. State agencies should elevate best practices from this community and respond to their requests for support.



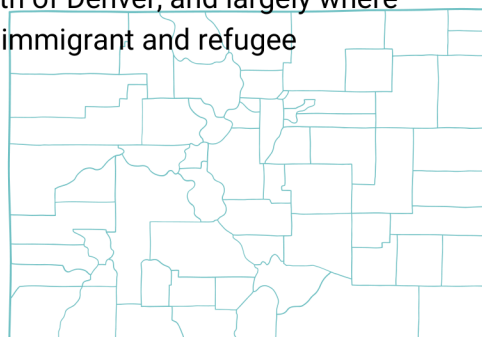
Spotlight: Denver Public Library

[Denver Public Library's](#) (CO) digital navigator program targets efforts in areas with low rates of home connectivity. They have four full-time navigators: one who works with the Mobile

Services department and accompanies the bookmobiles, and three who work in the Digital Inclusion Department in neighborhood branch libraries. DPL offers appointment services at nine of the 28 branches, in neighborhoods with high numbers of digitally disconnected households—these are predominantly in the west and north of Denver, and largely where concentrations of lower-income, BIPOC, older adults, and immigrant and refugee communities are present.²⁶



Photo Credit: Denver Public Library



(26) NDIA Community Digital Navigator Programs form submission by DPL

Fund Digital Navigator Programs

States should continue to support digital navigator programs financially and dedicate funding to develop more digital navigator programs. Digital navigator programs have reported that community trust and referral networks can take four to six months to establish and grow even a year later, so supporting the longevity of existing programs is more effective than establishing new, short-term pilot programs.

Establish Standardization for Digital Navigator Programs

While each digital navigator program must maintain the unique attributes that allow them to serve their community best, there can be benefits to some level of statewide standardization and coordination. Standardizing and providing digital navigator training would ensure that communities around the state receive the same level of support from their digital navigators. Standardizing data collection would allow digital navigator programs to track trends and program impact collectively and in comparison. The State may also pay for access to digital navigator training, subscription-based digital skills tools, data collection platforms, etc., to build the capacity of local digital navigator programs and incentivize them to adopt statewide standards. However, digital navigator programs will not succeed if they are bound to inflexible program design. Feedback from digital navigators and the communities they serve should inform statewide efforts.

Create and Supervise Digital Navigator Programs

Some state agencies may establish new digital navigator programs and take a supervisory role. This may make sense when local organizations cannot fully support the digital navigator. In these cases, it is still critical that newly hired digital navigators are based in and hired from the communities they serve, both geographically and culturally. Embed Digital navigators within trusted local organizations for support with local outreach.

Best Practices for Local Digital Navigator Programs



Whether the State takes a role in establishing new digital navigator programs, providing grants for digital navigator programs, or supporting a statewide network of digital navigators, these best practices for local digital navigator programs are key to success:

Address all Digital Inclusion Aspects

Digital navigator programs must address all aspects of digital inclusion, either directly or by referral. Digital navigators sometimes provide direct access to these resources by distributing devices, assisting with home internet access, and teaching digital skills individually or in classes. Alternatively, digital navigators will refer clients to these resources elsewhere.

Design digital navigator programs to utilize community resources and fill any existing gaps. For example, a digital navigator would refer clients to a nonprofit device refurbisher that distributes free devices. In a community with no reliable device source, design a digital navigator program to include purchasing and distributing devices for those who need them.

The Digital Navigators are GREAT-and so-o-o competent and so-o-o patient. I was new to cell phones and smart TV and I had no one who could help me....Regarding my home phone and computer, my Digital Navigator got me on to an ACP (federal) program that saves me \$30.00 per month on home phone and computer service. And I qualify for a new computer Free!" - a client of a [Hamden Public Library digital navigator](#)

Embed in Existing Programs and Services

Digital navigator services are effective when embedded in existing programs and services. Community members are likely to connect to a digital navigator at a location where they already receive services or experience a need for support. For example, if a community action agency supports individuals completing online housing applications, a digital navigator within that organization can address any need for digital skills support.

Embed in Trusted Institutions

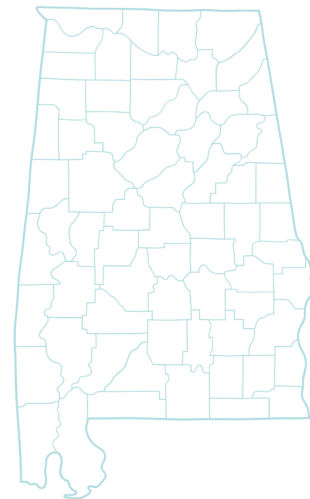
Digital navigators should be placed in organizations the population being served trusts. Keep in mind that not all members of a community trust a single organization or institution. For example, libraries are trusted organizations for many people, but some communities may not trust libraries due to their connection to governments. Similarly, not all community members trust healthcare organizations, schools, community action agencies, cultural centers, and housing organizations. It may make sense to place digital navigators at multiple organizations in a community or leverage partnerships to ensure everyone can access a digital navigator they can trust.



Spotlight: Community Service Programs of West Alabama

[Community Service Programs \(CPS\) of West Alabama](#) is a community services agency serving residents in a 10 county region in West Alabama with housing, education, and supportive services such as energy and elderly assistance. As a [National Digital Navigator Corps](#) grantee, they hired one full-time digital navigator to integrate digital navigation support into their existing services, including housing support, utility assistance, disaster recovery, and Head Start.

Embedding a digital navigator in an organization that already serves low-income households supports their mission to “provide resources and services which resolve immediate needs and lead to long-term self-sufficiency for low-income and vulnerable populations,” and ensures the residents can receive digital navigator services from an organization they already know and trust.



Prioritize Cultural Competence

Digital navigators must be culturally competent and speak a language comfortable for their clients. This is achieved by hiring members of the community. A team of diverse digital navigators can target various populations within a community. Local expertise is necessary to adapt the digital navigator program to local needs.

Invest in Digital Navigators as Community Leaders

As digital navigators do their work, they will become experts in the on-the-ground success of digital inclusion programs and resources and the community needs, so respect and utilize that expertise. Ask digital navigators to continue asset mapping and providing analysis to improve programs and identify gaps.

Keep Retention in Mind

Retention of digital navigators is important to provide consistent, trusted, experienced service. Some digital navigator programs have experienced high turnover due to part-time positions and low pay.

Devices



This section is authored by our partners at [Digitunity](#)—a national non-profit who work to make computer ownership possible for everyone. It offers advice for creating a community-based device ecosystem—a sub-ecosystem of the state digital inclusion ecosystem. Creating a sustainable, inclusive device ecosystem is feasible by harnessing cross-sector collaborations, taking stock of existing assets, challenges, and solutions, and listening to and working closely with your residents.



Photo Credit: Center for Digital Equity

Principles of an Effective Device Ecosystem

The following are key principles to follow:

1. A robust, reliable supply of high-quality, free, and low-cost internet-capable devices that meet residents' needs and intended uses.
2. Community-level systems that reach covered populations are integrated with essential services, including digital skills training, internet connectivity, and technical support.
3. Cross-sector collaboration and engagement among business, government, philanthropy, and community stakeholders.
4. A sustainable approach, both systemically and environmentally, and not solely reliant on inconsistent outside funding sources.

An Ecosystem Approach

Employing an **ecosystem** approach to meet your state's ongoing device needs allows diverse individuals and organizations to work collectively within an interconnected system. Considerations that may strengthen an ecosystem include:

- Integrate within existing systems, especially those that offer resources, assets, and/or strengths for the overall ecosystem, increasing efficiency and effectiveness.
- Recognize that sufficient resources exist to achieve universal device ownership, but those resources require redistribution, and current IT asset management practices may need to be adjusted.
- Purchasing devices or making grants is only one part of a broader strategy.
- Single-vendor device-sourcing solutions are inherently risky; the system's resilience is stronger when various options are engaged.
- Developing an ecosystem is not sequential; concurrent efforts toward developing multiple aspects are necessary.

A sustainable device ecosystem requires recognizing how residents currently access technology and the gaps within the system. You identified the covered populations' device needs in your plan, but you may need to further refine that understanding. In addition, you should map the existing local device pathways to understand how residents access devices.

- **Mapping pathways** - Some residents in your state currently receive free or affordable devices. Learning what is working and not working in this process highlights areas you should leverage and scale. Mapping also allows for understanding the stakeholders involved in your state and which are prepared or suited for capacity growth.
- **Identifying need** - Various data sources are available regarding the device needs of covered populations in your community. Be sure to segment the data to understand what specific populations have device needs and the depth of their needs. Based on data analysis and considering other factors, such as priorities set by government leaders or initiatives supporting specific groups currently underway, identify and prioritize geographic areas and/or groups needing devices.

Key Components of a Device Ecosystem

This section describes the main components of a device ecosystem: supply, preparation, distribution, deployment, and regeneration.

Supply: Sourcing Devices

A steady supply of large-screen devices is essential. To achieve this goal, you must understand residents' specific device needs

and intended uses and establish sources for a steady flow of new or previously used devices.

- **Identify device options** - Consider the range of intended uses of devices and identify the types and sources of devices that best fit each use case. Consider the merits of new and refurbished devices and what will be necessary to ensure successful adoption.
- **Consider large-screen devices** - Internet-enabled and large-screen devices, like laptops, desktops, Chromebooks, and tablets, are ideal for content creation instead of smartphones. Smartphones are useful but are better suited for content consumption and do not enable equitable online participation

Terms to Know

- **Loan vs. own** - Increasing individual device ownership is preferable over temporary use like public computer labs or loaner laptops as ownership promotes equity. However, at times, loan programs can be the best solution.
- **Non-deviced and under-deviced homes** - Households that either lack a large-screen device or don't have access to the number of devices necessary for concurrent use by multiple household members.

- **Engaging device donors** - Collectively, businesses, governmental entities, healthcare systems, educational and post-secondary institutions, and other large organizations are the biggest users of computing devices. Thus, they are excellent sources of donated technology. Develop a comprehensive outreach and engagement strategy for these partners to cultivate and sustain a steady, robust pipeline of devices. Understanding IT asset management practices, refresh cycles, existing vendor relationships, and corporate social responsibility efforts is essential in engaging large technology sources.
- **Funding for devices** - Consider including device funding as an eligible expense for a statewide digital equity fund. Encourage philanthropic partners to fund device acquisition and distribution. Employee engagement programs are another vehicle through which the corporate sector can participate.
- **Government surplus** - Leverage federal, state, county, and local surplus as a pipeline of computers that could support a device ecosystem. For example, the Computers for Veterans and Students Act, passed at the end of 2022, will direct repairable, out-of-service computers from the federal government to nonprofit technology refurbishers nationwide. When the program is fully live, devices will be repaired, prepared for deployment, paired with digital skills training, and contributed to community members.
- **Incentivizing support** - Several options exist to incentivize technology donations and reward organizations for contributing to this work. These include tax benefits, governmental incentive programs, and marketing and publicity tools established to reward participating entities.

Use Cases

- **Young children** - A tablet or a laptop with a simple and intuitive interface is the best choice and is highly portable. Be sure to choose a durable design that can withstand rough handling.
- **K-12 students** - A laptop is often the best choice. Attention to battery life and a lightweight design are important.
- **College students** - A powerful and versatile laptop is a good choice, especially based on their field of study. A large display and a high-resolution screen are also important for students who need to read textbooks and do research.
- **Adults** - Here, the choice of device depends on whether it is used for work or personal tasks. A desktop or a laptop are the best choices.
- **Older adults** - This group often uses computers to stay connected with family and friends. A tablet or a simple laptop is the best choice as they allow for video chatting, browsing the web, and reading emails.
- **People with disabilities** - Various computer hardware options cater to their needs. For example, individuals with visual impairments may require a computer with a larger screen, high-contrast display, or screen-reading software. Those with hearing impairments may require a computer with visual notifications and alerts. Individuals with physical disabilities may benefit from a computer with ergonomic features like a specialized keyboard or mouse.



- **Making it easy** - Streamlining corporate technology donations within standard end-of-use technology retirement procedures offers an alternative to traditional disposal methods. Understanding existing corporate IT operational procedures can support informed, data-backed decisions on technology donations. Advocating for creating procurement policies for new technology purchases that include alternative end-of-use outcomes can foster an anticipatory, donation-centric mindset. Analytical tools, complemented by documentation that illustrates the value of tech donations, can equip executive leadership to advocate for an efficient, community-focused technology disposition approach.
- **Procurement** - State governments often have existing technology procurement contracts. You can leverage these contracts to purchase in bulk. Providing a streamlined and low price point will maximize investment in devices.



Tips: Engaging Technology Donors

Getting into the right door at a business to discuss technology donations can be challenging. Specific departments in charge of technology donations include the leadership team, the IT department, the corporate social responsibility (CSR) team, philanthropic giving, and marketing. Share data regarding the number of your state’s residents without devices and educate prospective donors about the opportunity owning a device can offer when discussing their potential donation.

Preparing Devices

Generally, devices must be cleaned, tested, repaired (if necessary), configured with operating systems and appropriate software, and paired with necessary accessories before deployment. Sometimes, a donor will take care of some of these steps. Technology refurbishment vendors can provide these services and should be engaged to complete this critical aspect of a sustainable device ecosystem.

- **Configuration** - Identify the hardware specifications, necessary pre-installed software, and additional resources that meet the residents’ needs.
- **Sanitization** - Assure device donors that the organization will wipe their device data according to specific standards. Common standards include R2 and e-Stewards.



Nonprofit Technology Refurbishing Organizations

For help finding a technology refurbisher in your area, consult Digitunity’s [Alliance for Technology Refurbishing and Reuse Map](#), which highlights over 100 nonprofit technology refurbisher locations across the United States.

- **Testing** - All previously used devices should go through rigorous diagnostic testing, and if a hardware issue is detected, either repaired or sent to a certified recycler who can safely recover valuable materials and dispose of any hazardous components.
- **Imaging** - It is possible to “image” or load both new and used computers with specific software and resources. Standardize device imaging across the ecosystem where appropriate or practical.



Suggested Minimum Hardware Specifications

- At least 250 gigabytes of hard drive or solid-state drive storage (solid-state drives preferred)
- At least eight gigabytes of RAM
- An 8th Generation (or newer) Intel Core Processor or 2nd Generation (or newer) AMD Ryzen Processor
- Internet capabilities via ethernet or wireless connections (wireless is most applicable to the widest range of intended uses)
- A manufacturing date within the last five years

Distributing Devices: Moving Product to Deployment Partners

- **Logistical planning** - It’s essential to understand the flow of computers prepared for deployment. Devices must move from a centralized location or distribution centers to deployment partners and ultimately to intended recipients.
- **Crunching the numbers** - Determine the appropriate number of devices for each deployment partner.
- **Thinking through accessories and peripherals** - While the device itself is critical, so are the key essentials that enable the productive use of a computer and the conditions and supports that lead to meaningful device adoption and use.



Understanding a Resident’s Experience Through Journey Mapping

Intentionally investigate and map every step of the device deployment process, from the initial request for a device to the point of deployment and the post-deployment technical and digital skills support. Every part of the journey should be captured and critiqued. Is your application form for a resident to request a device too complex? Is it tailored to the language needs of your community? Are eligibility requirements too stringent or difficult to understand? This deep and intentional analysis should evolve as your process grows and changes.

Deploying Devices to Residents

Deploying devices requires careful consideration and planning.



- **Prioritize populations** - A system for determining which populations and geographic areas will be prioritized to receive a device is critical. Your state digital equity plan should provide initial guidance for the system, and your master project plan should include this system.
- **Select and vet deployment partners** - Identify organizations or programs trusted by residents and covered populations to serve as deployment partners. Establish a vetting process for prospective partners to ensure institutional capacity, good standing, and reliability.
- **Train partners** - Deployment partners should be trained in best practices for determining recipient eligibility, developing application processes, and logistical considerations, such as managing an inventory of devices. You should apply standards to ensure consistency.
- **Match devices to purpose** - Deployment partners play a key role in understanding the intended device uses of their constituents, and the specific device needs to match those uses, leading to greater adoption.
- **Account for information security** - A comprehensive approach to safeguarding all digital, physical, or intellectual information is critical. Information security encompasses more than malware and virus protection software. It involves both digital and tangible assets. While cybersecurity focuses on internet-based threats like online malware and hacking, information security covers topics like securing your digital accounts with strong passwords and two-factor authentication.
- **Coordinate** - Coordinate device deployment with your other implementation strategies. Devices do not exist in a vacuum and should be distributed with your other implementation strategies.



Suggested Minimum Hardware Specifications

- **Flash drive/external hard drive** - allows for files to be shared across devices or backup and archive important files
- **Headphones/earbuds** - allows for device use that necessitates audio in loud environments
- **Keyboard** - enables text input
- **Microphone** - enables audio conferencing, telehealth, professional and social use
- **Mouse/trackpad** - enables user selection
- **Speakers** - enable audio support for computers without built-in capabilities
- **Webcam** - enables video conferencing for telehealth, professional and social use
- **Wi-fi adaptor (for desktops)** - enables desktop computers without wireless internet capabilities to connect to wi-fi networks

Regeneration: Support for Technology's End of Life

A computer of any kind eventually reaches the end of its useful life, and repair becomes inappropriate or too costly. Below are options for consideration:

- **End of use** - At the end of a device's use, residents should have options for upgrading or replacing the device, donating it for further refurbishment and reuse, or recycling.
- **Recycling options** - Identify options within the ecosystem to send non-functional devices to certified recyclers to recover valuable materials safely and dispose of hazardous components.



TIP: For help finding an R2 or e-Stewards certified recycler in your area, consult SERI's [R2 Certified Facility Map](#), or [e-Steward's Find a Recycler Tool](#).

- **Measuring impact** - Consider how measuring device ownership's impact and recycling and reuse's environmental impact can bolster the ecosystem's sustainability.
- **E-waste** - Entities within the ecosystem that process e-waste, discarded electronic or electrical devices, and equipment that has reached the end of its useful life may be able to participate in a revenue share that could contribute funding towards devices or digital inclusion efforts.
- **Incentives** - Identify existing recycling or technology donation incentives and consider advocating for or establishing new incentives to generate greater technology donations in an ecosystem or influence handling e-waste.
- **Awareness** - While businesses across the country can and do contribute technology to support the communities in which they operate, the practice is not widely understood across the corporate sector. Additionally, businesses may have deeply entrenched vendor relationships or policies that may currently restrict technology donations. Awareness-building efforts at the local, regional, or state level can help drive a deeper understanding of the issue, overcome objections, and influence how IT assets are managed.

Other Considerations

Community Outreach

When promoting the availability of free or affordable computers, along with related supports, many community members are either outside the scope of traditional marketing or possess varying levels of advertising mistrust. Culturally sensitive communication plans must be thoughtfully developed.

- **Effective tools** - Identify key communication vehicles and tools for reaching recipients where they are and through trusted methods. These approaches may include presenting information in multiple languages, working through and with trusted community-based organizations, using easily understood terminology, and conducting statewide and targeted hyper-local campaigns.
- **Consumer safety** - States are uniquely positioned to provide information on residents' rights as consumers, internet safety, and other important topics related to the successful adoption and ongoing use of technology.
- **Coalition engagement** - leverage coalitions to reach potential device recipients. Subgroups within coalitions or other groups of diverse and interested stakeholders can provide input on device strategy or to assist with outreach. See the Community Capacity Building Strategies section for more information on digital inclusion coalitions.

Continuous Feedback and Improvement

A robust device ecosystem requires ongoing evaluation, monitoring, and adjusting. Community feedback is essential in identifying pain points and incrementally improving the system. Embedding program evaluation, data collection, and feedback loops across the ecosystem is essential to gauging effectiveness. See Chapter VI for more information on performance and program evaluation best practices. Chapter VI for more information on performance and program evaluation.

Affordable Access to Broadband



Cost is one of the top reasons households do not subscribe to broadband.²⁷ And for households that do subscribe, cost forces many to make hard choices of what to cut from their household budget to sustain their internet connection.²⁸

Market forces alone have been insufficient in bringing the cost of broadband service within reach for households facing economic hardship. Thus, long-term investments in broadband affordability solutions are essential to ensure all households can subscribe to broadband.

States can implement the following affordability strategies to achieve your affordability goals:

- Supporting the implementation of federal broadband affordability programs (ACP or a successor program)
- Leveraging federal funding streams or allocating State funds to create a monthly broadband benefit for low-income households
- Mapping low-cost options
- Integrating affordability requirements into broadband deployment grant programs
- Encouraging ISPs to adopt low-cost plans

Supporting Federal Broadband Affordability Programs



[The Affordable Connectivity Program \(ACP\)](#) is a \$14.2 billion federal program established in the IIJA and administered by the Federal Communications (FCC) and the Universal Service Administrative Company (USAC). Established in the IIJA alongside the DEA and BEAD, the program provides a monthly discount of up to \$30 for internet service (\$75 monthly benefit for households on Tribal lands) and a one-time benefit of up to \$100 off an eligible device.²⁹ To date, over 23 million households, including nearly 300,000 Tribal households, have enrolled in ACP.

(27) John B. Horrigan, Measuring the gap: What's the Right Approach to Exploring Why Some Americans Do not Subscribe to Broadband? (National Digital Inclusion Alliance, 2020) <https://www.digitalinclusion.org/measuring-the-gap/>

(28) Bobbi Dempsey, "U.S. News & World Report Internet Cost, Speed, and Value Consumer Survey 2023," U.S. News, September 19, 2023, <https://www.usnews.com/360-reviews/services/internet-providers/internet-cost-speed-value-survey#:~:text=More percent20than percent20half percent20of percent20our service percent20from percent20that percent20same percent20ISP>

(29) Infrastructure Investment and Jobs Act, 47 USC § 1702 (2021).

As of the date of this publication, unless Congress acts, April 2024 is the last month the full benefit will be available to ACP-enrolled households. A partial benefit will be available for some households in May. After that, the \$14.2 billion IJA allocation that established the ACP program will be fully depleted.³⁰

The FCC is officially winding down the program, and enrollments ceased on February 7th, 2024. Participating ISPs have sent the required first and second notices to consumers informing them the program is ending.³¹ The ACP Outreach Grant Program is also paused. While there is still time for the program to be renewed, it's highly possible it won't be. As such, you may be reading this manual after the program ends.

The following lessons learned for increasing or supporting ACP enrollment are relevant and applicable to any state or local benefit program you establish (if you establish one), no matter the funding source. In addition, another federal benefit program could take ACP's place in the future if ACP officially ends, and these best practices would apply.

Get the Word Out

Because federal and state broadband benefit programs are relatively new compared to other public assistance programs, many households may not know about the support available to pay their broadband bills.

ACP Program Eligibility Requirements

Individuals are eligible for ACP if they meet one of the following criteria:

- Household income is at or below 200 percent of the federal poverty level
- Received a Federal Pell Grant during the current award year;
- Meets the eligibility criteria for a participating provider's existing low-income internet program
- Participates in one of these assistance programs:
 - Free and Reduced-Price School Lunch Program or School Breakfast Program, including at U.S. Department of Agriculture (USDA) Community Eligibility Provision schools.
 - SNAP
 - Medicaid
 - Federal Housing Assistance, including:
 - Housing Choice Voucher Program (Section 8 Vouchers)
 - Project-Based Rental Assistance
 - Public Housing
 - Affordable Housing Programs for American Indians, Alaska Natives or Native Hawaiians
- Supplemental Security Income
- WIC
- Veterans Pension or Survivor Benefits
- [Lifeline](#)

Participates in one of these assistance programs and lives on [Qualifying Tribal lands](#):

- Bureau of Indian Affairs General Assistance
- Tribal TANF
- Food Distribution Program on Indian Reservations
- Tribal Head Start (income based)

A successor program to ACP may have different eligibility requirements.

(30) Federal Communications Commission, "Wireline Competition Bureau Announces the Final Month of the Affordable Connectivity Program," DA 21-195, March 4, 2024, <https://docs.fcc.gov/public/attachments/DA-21-195A1.pdf>

(31) Affordable Connectivity Program Wind-Down Order, WC Docket No.21-450,(January 11,2024,) <https://docs.fcc.gov/public/attachments/DA-24-23A1.pdf>

This lack of familiarity could trigger mistrust among populations traditionally targeted for scams. States can play an important role in socializing and vouching for the credibility of broadband benefits while supporting community-based outreach.

The FCC launched the [ACP Outreach Grant Program](#) to increase awareness and enrollment in ACP. Over 200 organizations in rural, urban, and Tribal communities in nearly every state participated in the program. Grant recipients focused their outreach efforts on reaching historically underserved communities—which include many covered populations under the Digital Equity Act—and aim to reach eligible applicants where they are (e.g., schools with a high proportion of students enrolled in free and reduced lunch programs or residents in public housing dwellings). As critical assets in the state’s ACP enrollment, outreach grant recipients are well-positioned to advise States on reaching populations needing affordable broadband solutions.

The following list includes lessons learned from these ACP outreach grantees. Each can be adapted for any successor federal program or a state-supported broadband benefit program.

- **Leverage reach of state agencies** - State agencies that administer public assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP), WIC, Medicaid, and federal housing assistance programs, frequently interact with low-income households. They make natural partners coordinating efforts to share information about broadband benefit programs.



- Make a list of state agencies that administer public assistance programs for low-income households (e.g., Department of Children and Family Services for SNAP, Department of Health for Medicaid, etc.).



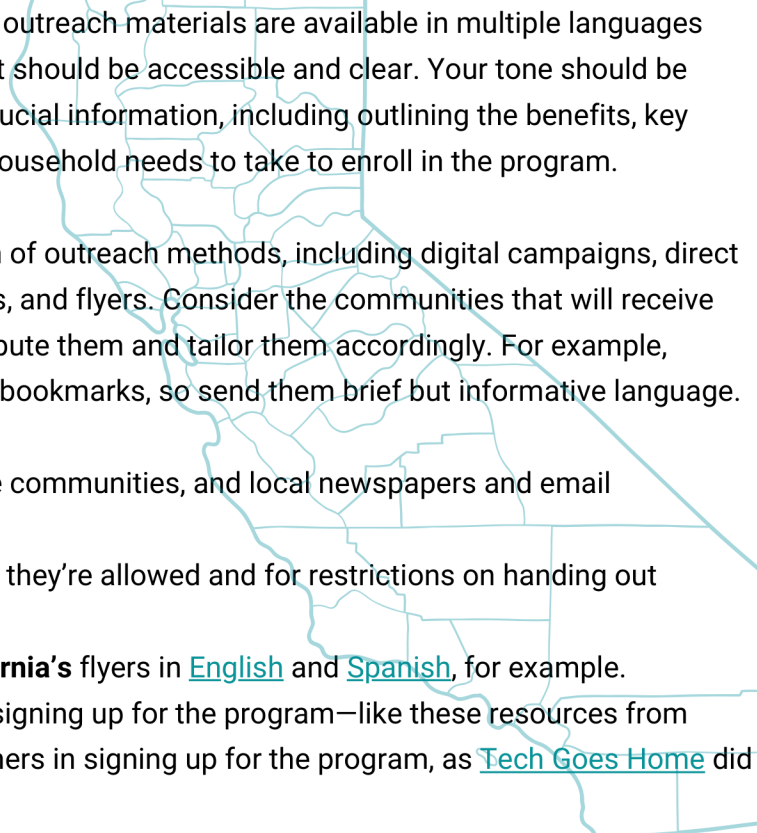
- Reach out to the individuals who influence program or policy decisions. They may have titles such as “program administrator” or “policy director.” (Tip: You may find the information in the agency’s organizational chart)



- Make your ‘ask’ clear. In most cases, you’ll simply need support in raising awareness—not for help with more labor-intensive activities like helping people sign up for the program. For example, you might ask the agency to include a banner on their website about the program or add a link that redirects individuals to the State’s broadband office for more information.




- Consider a formal agreement with financial support if you need significant time commitment, material resources, or enrollment support.

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- **Develop Accessible Outreach Materials** - Ensure outreach materials are available in multiple languages and written at an 8th-grade reading level. Content should be accessible and clear. Your tone should be approachable and easy to understand. Include crucial information, including outlining the benefits, key dates, phone numbers, websites, and steps the household needs to take to enroll in the program.
 - **Use Multiple Media Formats** - Use a combination of outreach methods, including digital campaigns, direct mail, public service announcements, infographics, and flyers. Consider the communities that will receive the materials and the organization that will distribute them and tailor them accordingly. For example, schools and libraries could hand out informative bookmarks, so send them brief but informative language.
 - Share flyers in digital and print form.
 - Radio and Facebook groups may reach some communities, and local newspapers and email campaigns may reach others.
 - Door hangers and yard signs - check to see if they're allowed and for restrictions on handing out information at residences.
 - Make flyers in multiple languages. See **California's** flyers in [English](#) and [Spanish](#), for example.
 - Digital materials can include information on signing up for the program—like these resources from [AARP](#)—or training for individuals to assist others in signing up for the program, as [Tech Goes Home](#) did in these resources.
 - **Convene Outreach Grantees** - Bring together organizations, local governments, or other entities who participated in the FCC's ACP Outreach Grant Program or provided outreach and enrollment support for ACP to learn from their efforts.



Spotlight: The State of New York



New York launched a broadband outreach initiative to increase awareness of ACP through the New York Department of Motor Vehicles, Office of Aging, Office of Temporary and Disability Assistance, and the Office of Children and Family Services.³² These offices used multiple communication media, including flyers, social media, newsletters, and public service videos. By Fall 2023, nearly half of all eligible households in New York were enrolled in ACP.

(32) "Governor Hochul Announces More than 1 Million Households Enrolled in Federal Affordable Connectivity Program," New York State, October 5, 2022 <https://www.governor.ny.gov/news/governor-hochul-announces-more-1-million-households-enrolled-federal-affordable-connectivity>

Support Household Enrollment Assistance

After learning about a broadband benefit, many individuals need assistance navigating the application process. States can boost awareness and enrollment in broadband benefit programs by investing in organizations that offer one-on-one support to individuals who need affordable broadband, simplifying the enrollment process by sharing data with the federal government, and leveraging state agencies that provide direct services to residents to support enrollment.

- **Invest in Programs Offering Digital Navigator Services** - Digital navigators play an important role in all phases of the enrollment process, beginning with outreach and extending to application troubleshooting, consumer rights education, and follow-up appointments to ensure their monthly benefit is applied to their bill.
- **Enter into Data Matching Agreements with USAC** - The tool USAC uses to verify qualification for Lifeline and ACP recipients, the National Verifier, relies on Computer Matching Agreements with States to check an applicant's participation in a qualifying government program.³³ Applicants who could not obtain an eligibility determination by auto-qualifying through the National Verifier had to submit other supporting documentation to verify their eligibility. It was difficult for individuals without internet, a device, or digital skills, and increased the number of applicants abandoning the application process. This and other enrollment and renewal hiccups can be avoided through auto-checks supported by Computer Matching Agreements; thus, a State's decision to enter into these agreements can vastly improve the application experience for applicants.
 - You can find your state's data matching agreement status on [USAC's database connection webpage](#), which includes contact information for initiating a state database connection with USAC.

(33) "Database Connections." Universal Service Administrative Company, 26 Oct. 2023, <https://www.usac.org/about/affordable-connectivity-program/acp-processes/check-consumer-eligibility/database-connections/>.

Gather and Share ACP Data Resources

Understanding how many and which eligible households in your state participate in ACP (or a successor program) is essential for executing your affordable broadband implementation strategies and increasing enrollment in the program (or its successor). Multiple data tracking and visualization tools exist and can help you, your partners, and subgrantees understand trends and opportunities for increasing the number of eligible households enrolled.



NOTE: A successor program may have different data points collected and connect to different data portals.

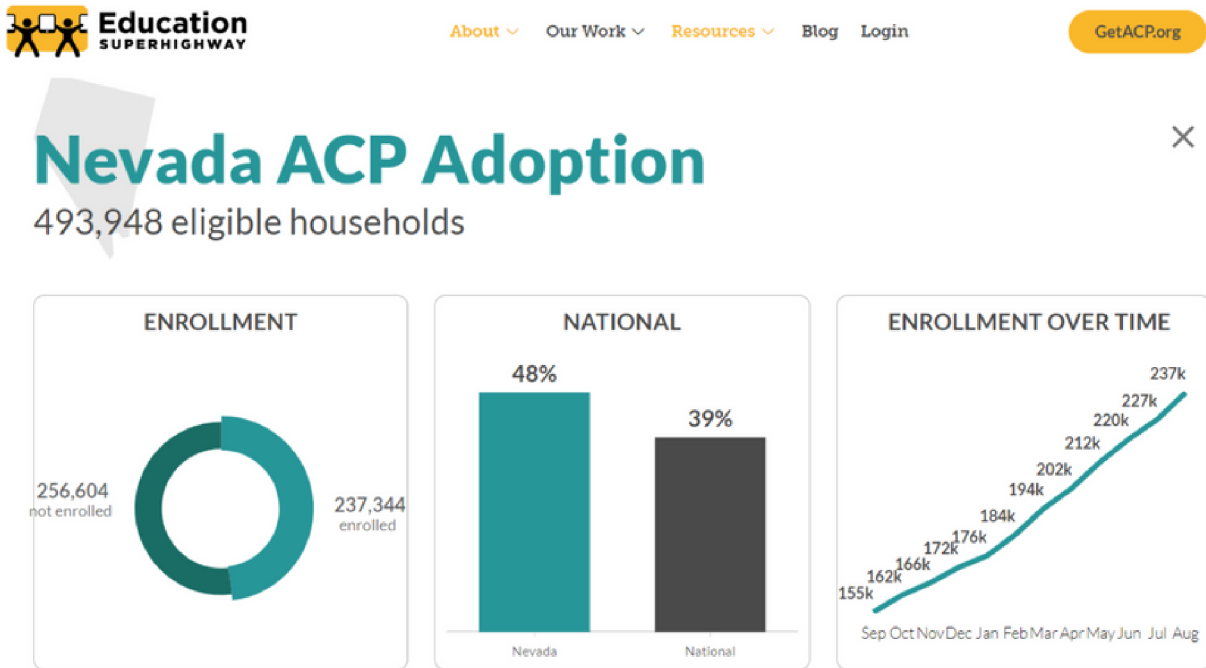
Determine what data is most relevant and useful for your and your partners then leverage the following resources to create a state database or interactive dashboards on your site.

Universal Service Administrative Company

USAC is the primary source for ACP data. They publish data available to the public via the [ACP enrollment claims tracker](#), providing updates on total household enrollment in each state every week, at the county level each quarter, and the zip code level monthly.

Education SuperHighway ACP Enrollment Dashboard

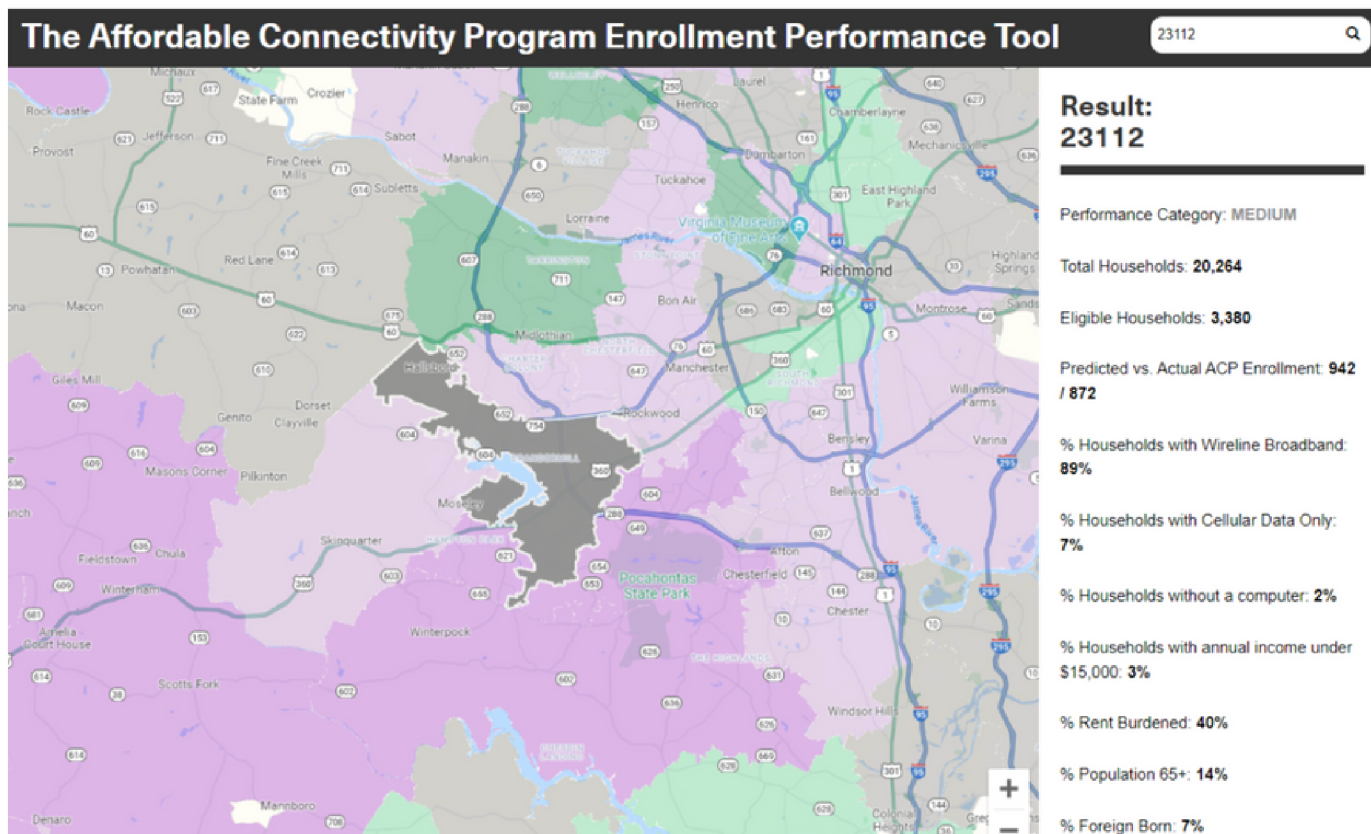
This [interactive enrollment dashboard](#) displays the ratio of the proportion of ACP enrolled households compared to the total number of eligible households at the state and city level, and compared to the national average. The dashboard also displays the enrollment growth rate, which can support analyses of ACP outreach³⁴ initiatives' effectiveness.



(34) Although the definitive number of eligible households for any given area is unknown, some tools rely on sophisticated estimates for analysis purposes.

Benton Institute's ACP Enrollment Performance Tool

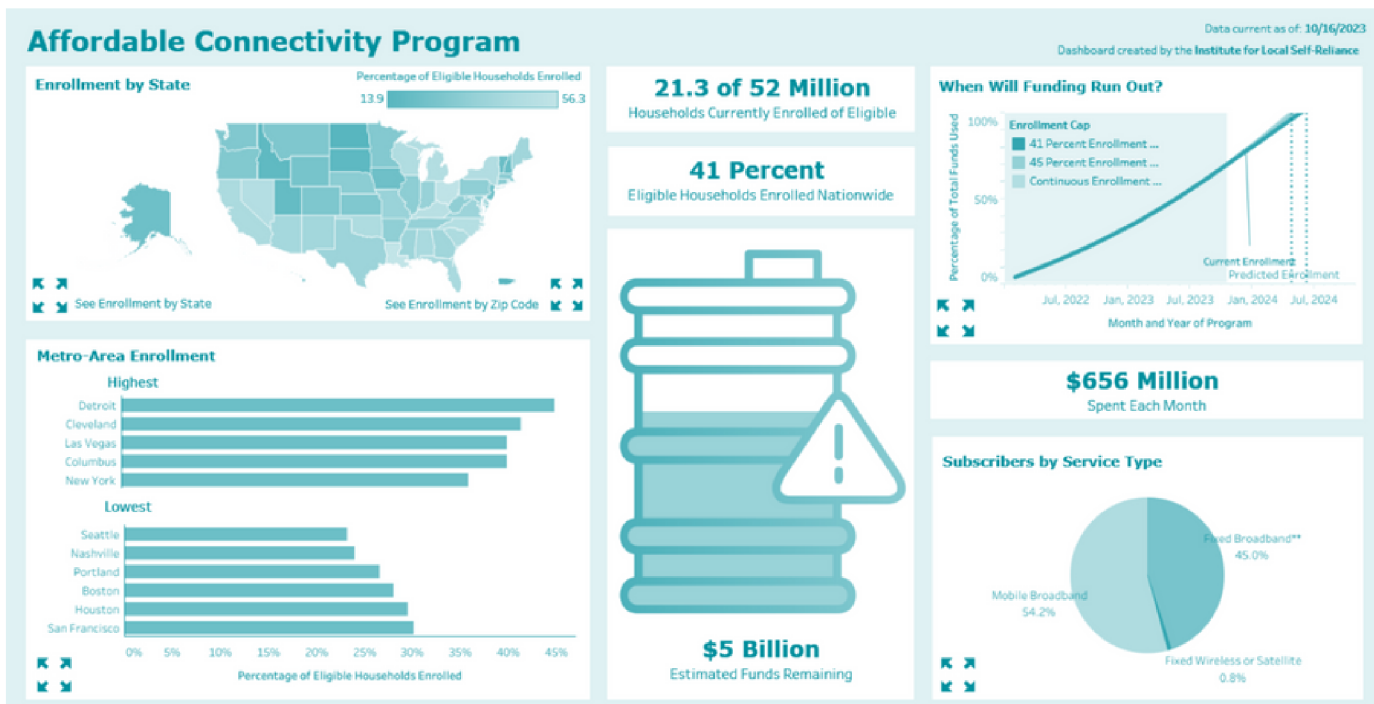
[This tool](#) tracks ACP enrollment at the zip code level, displaying information about the total number of enrolled households and an estimate of eligible households. It also predicts an enrollment number and incorporates factors that may influence ACP enrollments beyond the eligibility criteria, such as the presence of anchor institutions and population density in the zip code. Each zip code corresponds to a performance category based on how actual enrollment compares to the predictive model. A zip code is considered a 'high performer' if actual enrollments exceed projected enrollments and a lower performer if there are fewer enrollments than predicted. This tool can help States understand where more investment is needed to support ACP or a successor program's outreach.



Institute for Local Self Reliance (ILSR) ACP Dashboard

The ILSR dashboard has a predictive model for tracking how much ACP funding remains. The tool aggregates the following information at the state, zip code, and Congressional district level:

- ACP enrollment
- Estimates the number of eligible households
- Estimates of ACP monthly spending



USASpending.gov

USASpending.gov is an excellent resource for tracking where the ACP-obligated funds go and which ISPs benefit most from the program. Use the search bar to filter for "Affordable Connectivity Program." You can also filter by fiscal year and by state. After searching, you can see the recipients of ACP awards under the "Direct Payments" tab on the right. You can see the total amount awarded to a recipient by clicking its name.

The 'Time' and 'Map' features are also useful. The 'Time' feature shows the ACP spending by year, quarter, or month, and the 'Map' shows state, county, and congressional district spending. However, data for counties and congressional districts are very sparse. Under "Categories," you can select "Spending by Recipient" to get the total amount obligated to different ISPs.

This breakdown can help you identify potential ISP partners who could strengthen advocacy or outreach efforts based on those ISPs that have benefited most from the program and those with significant market share in your area.

Leverage Federal Funding Streams

States should proactively identify current and future federal funding streams to support access to affordable broadband. Some funding opportunities, such as the DEA programs and BEAD, explicitly aim to support specific digital inclusion activities. However, both are short-term programs, and affordable broadband is an ongoing issue.



Spotlight: Maryland State Broadband Office

The Maryland Broadband Office leveraged funds to create the [Maryland Emergency Broadband Benefit](#) (MEBB) program, which offers eligible households a discount of up to \$15 monthly for internet service. A household must already be eligible for ACP to qualify for the monthly benefit. With State support, eligible households have the potential to receive a total discount of \$45 per month for 12 months.³⁵At the time of this publication, the benefit has expired as the funds are depleted; however, the lessons Maryland has learned in administering this benefit are valuable for it and other States that seek to pursue a State-funded benefit program.



Tip: Look for ways to align state-level eligibility criteria with federal program participation. You can streamline enrollment by enabling households already qualified for ACP (or a successor program) to participate in the State benefit program.

State Funds to Support Affordable Broadband



A state-funded affordable broadband benefit program would support low-income households in subscribing to broadband regardless of the status of ACP. However, if ACP is not continued nor a successor program introduced, a state benefit program becomes even more vital.

(35) "Maryland Emergency Broadband Benefit," State of Maryland, accessed on January 18, 2024, <https://dhcd.maryland.gov/Broadband/Pages/MEBB.aspx>

Justifying a state-funded program will require both quantitative and qualitative data. State policymakers will need to fully understand the economic, health, social, and educational benefits of the investment. Presenting research like John Horrigan's analysis that demonstrates that every dollar invested in ACP results in \$2 in benefits for the household.³⁶

The most compelling data will come from state-led research and analysis. Your state planning process likely unearthed both quantitative and qualitative data highlighting specific affordability challenges the covered populations face. Present these data and personal stories to state policymakers for inclusion in the State budget. If you did not collect broadband adoption data, conduct surveys to learn whether and to what extent cost has kept residents from subscribing or sustaining their home broadband connection.

A state-funded benefit program could operate like ACP or have its own operational procedures. Things to consider as you establish your procedures are:

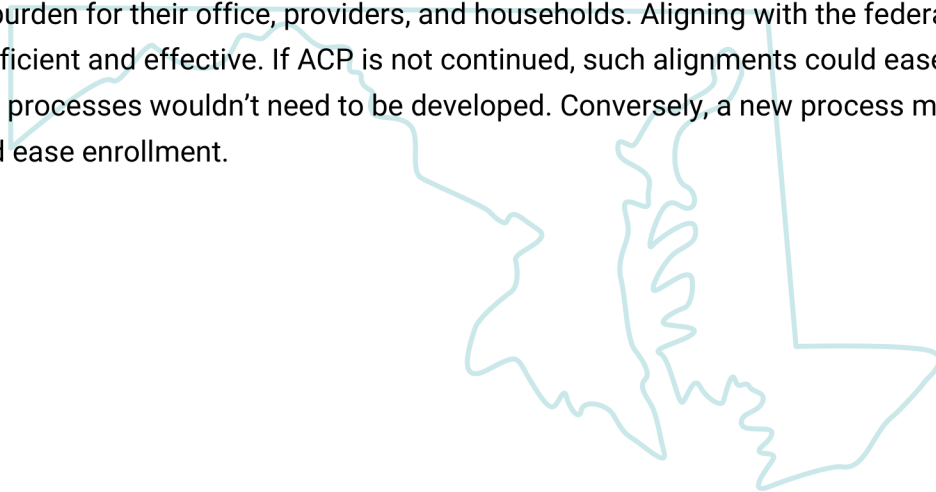
- **Benefit Amount** - Will you mirror the ACP and provide \$30/month or a different amount? What amount do the covered populations need to be able to afford a subscription? You may want to calculate options with and without a federal benefit of \$30. Of course, your state budget will necessarily impact the final amount, but start your calculations with what is needed instead of possible, then work backwards from there.
- **Eligibility** - Who is eligible for the program? Will you align with ACP's eligibility criteria (or its successor program) or develop your eligibility criteria?
- **Verification** - How will you verify eligibility?
- **Reimbursement** - How will enrolled households receive the benefit? Would you reimburse the providers and they pass on the benefit to the household? Would you provide vouchers for the household? Or would you use some other mechanism?

(36) Horrigan, John B. 2024. "The Affordable Connectivity Program Creates Benefits that Far Outweigh the Program's Costs." Benton Institute for Broadband and Society. <https://www.benton.org/publications/affordable-connectivity-program-benefits-outweigh-costs>.



TIP: Verifying a household’s eligibility will be the most challenging part of managing a benefit program, particularly if a federal verification tool like the National Verifier isn’t available for states or providers to leverage. Check with sister state agencies to learn how they verify eligibility for programs they manage, like WIC, SNAP, or other benefit programs. You may be able to leverage their databases or software.

For example, Maryland mirrored the ACP's method and eligibility criteria in its program to ease the administrative burden for their office, providers, and households. Aligning with the federal criteria and program was efficient and effective. If ACP is not continued, such alignments could ease administrative burdens as new processes wouldn't need to be developed. Conversely, a new process may be more streamlined and ease enrollment.



Low-Cost Broadband Plans



States can also increase affordability for their residents by encouraging ISPs operating in their state to adopt a low-cost plan or discount. Before the pandemic, some, but not all, ISPs offered “low-cost plans” for eligible households. However, the plans varied widely in their offerings, administration, and eligibility requirements. ACP has demonstrated the essential role of low-cost internet plans.

States can also encourage ISPs to adopt low-cost plans voluntarily. As the State Administering Entity, you have the ability, through policy (like the BEAD low-cost plan requirements) and persuasion, to influence and encourage ISPs operating in your state to offer a low-cost plan that meets the needs of low-income families.

NDIA created two models for ISPs to consider: a “Low-Cost Plan Model” and a “Fixed Discount Offer Model.” The models are not mutually exclusive—a provider could offer both a low-cost plan and a discount that would cover the cost of that plan for an eligible household.

Low-Cost Plan Model Criteria

COST



- Costs \$30 per month or less, inclusive of all taxes, fees, and charges if the subscriber does not reside on Tribal Lands, or
- \$75 per month or less, inclusive of all taxes, fees, and charges if the subscriber resides on Tribal Lands or designated high-cost areas,
- No additional non-recurring costs or fees to the consumer

SPEED



- Minimum typical speed threshold of 100 Mbps/20 Mbps, or the fastest speeds the infrastructure is capable of if it is less than 100 Mbps/20 Mbps
- Provides typical latency measurements of no more than 100 milliseconds

Eligibility Requirements



Should be no more restrictive than the following:

- Household Eligibility Criteria (aligns with ACP eligibility requirements)
 - Has an income that is at or below 200% of the Federal Poverty Guideline, or
 - Participates in any of these federal programs: SNAP, Medicaid, WIC, SSI, Federal Public Housing Assistance, Veterans Pension and Survivors Benefit, Free and reduced lunch program or school breakfast program, or
 - Have received a Federal Pell Grant in the current award year, or
 - Receiving a Lifeline Benefit
- Tribal Eligibility Criteria (aligns with ACP eligibility requirements)
 - Live on qualifying Tribal Lands,
 - Income at or Below 200% of the Federal Poverty Guideline, or
 - Participate in any of the above programs and Bureau of Indian Affairs General Assistance, Head Start, Tribal TANF, or Food Distribution Program on Indian Reservations

Eliminate barriers



Including (but not limited to) instituting practices such as:

- No termination fees
- No data caps, surcharges, or usage-based throttling, and is subject only to the same acceptable use policies to which subscribers to all other broadband internet access service plans offered to home subscribers
- No introductory rates or bundling requirements
- Enrollees can upgrade to the new low-cost offerings with higher speeds at no additional cost when they become available
- Waiving unpaid bill/past due sign-up restrictions, allowing customers to go on a repayment plan
- Allow current customers to access low-cost plans without a waiting period
- Waive installation and hardware/equipment charges
- Eliminate credit checks

Fixed Discount Offer Criteria:

A \$30 benefit that can be applied to all plan the ISP offers

Eligibility Requirements



Should be no more restrictive than the following:

- Household Eligibility Criteria (aligns with ACP eligibility requirements)
 - Has an income that is at or below 200% of the Federal Poverty Guideline, or
 - Participates in any of these federal programs: SNAP, Medicaid, WIC, SSI, Federal Public Housing Assistance, Veterans Pension and Survivors Benefit, Free and reduced lunch program or school breakfast program, or
 - Have received a Federal Pell Grant in the current award year, or
 - Receiving a Lifeline Benefit
- Tribal Eligibility Criteria (aligns with ACP eligibility requirements)
 - Live on qualifying Tribal Lands,
 - Income at or Below 200% of the Federal Poverty Guideline, or
 - Participate in any of the above programs as well as Bureau of Indian Affairs General Assistance, Head Start, Tribal TANF, or Food Distribution Program on Indian Reservations

Eliminate barriers



Including (but not limited to) instituting practices such as:

- No termination fees
- Waiving unpaid bill/past due sign-up restrictions, allowing customers to go on a repayment plan
- Allow current customers to access low-cost plans without a waiting period
- Waive installation and hardware/equipment charges
- Eliminate credit checks

Helping Households Find Low-Cost Plans

States can also support the expansion and use of affordable or low-cost plans by publishing them on your website. Create a public, user-friendly, accessible tool for households in your state to find and identify which providers offer low-cost plans AND services their location. Doing so helps consumers and digital navigators locate available and sufficient plans. NDIA tracks existing free and low-cost plans, you're welcome to use our list to build yours. See our [website](#) for more information.



Spotlight: Wisconsin State Broadband Office

The Wisconsin Broadband Office developed a [user-friendly tool](#) (see screenshot below) to help residents identify low-cost broadband plans based on location and participation in public assistance programs.



Get Affordable Home Internet

Internet service providers offer a variety of discounted internet service options, based on your eligibility. The Wisconsin Internet Discounter Finder can search these resources and provide a list of options available to you.

Find free and discounted internet providers at your address

1. What is your location?

(Type your address and select the suggestion)

2. Are you enrolled in ACP (Affordable Connectivity Program) or Lifeline?

[What are ACP & Lifeline?](#)

Participation in these programs decreases your total internet cost.

- I am enrolled in the ACP.
- I am a Lifeline subscriber.
- Neither.

3. Check all that apply to you:

Participation in other programs increases the number of discounts available.









[What are these programs?](#)

- Free/Reduced Lunch or CEP at school (applies to K-12 students)
- Head Start
- Live on tribal land
- Low Income Home Energy Assistance Program (LIHEAP)
- Live in public housing
- Low-income household (Review info in What are these programs?)
- Medicaid
- SNAP (Supplemental Nutrition Assistance Program)
- The Special Supplemental Nutrition Program for Women, Infants and Children (WIC)
- Supplemental Security Income (SSI)

Best Practices for Serving Covered Populations



While our goal is digital equity for all people in the US, how we get there may vary from person to person, place to place or barrier to barrier. This is particularly true for under-resourced, underrepresented, vulnerable, and oppressed populations, whom the digital divide disproportionately impacts. Congress named eight such “covered populations” and asked you—States—to learn what prevents each population from being online. Covered populations include:

-  1 Individuals who live in covered households (i.e., households with income less than or equal to 150 percent of federal poverty level)
-  2 Aging individuals
-  3 Incarcerated individuals, other than individuals who are incarcerated in a federal correctional facility
-  4 Veterans
-  5 Individuals with disabilities
-  6 Individuals with a language barrier, including individuals who are English learners or have low levels of literacy
-  7 Individuals who are members of a racial or ethnic minority group
-  8 Individuals who primarily reside in a rural area

What you discovered in your planning process about each of these covered populations and the barriers they face should guide your implementation strategies and how you spend your Capacity Award funds.

This section provides best practices that span the covered populations and their unique considerations, the potential barriers they may encounter, and specific information and aspects about each covered population. States should consider these best practices as they develop subgrant programs and define implementation strategies. And organizations directly serving covered populations should consider these practices when delivering digital inclusion services.

Overarching Best Practices

These practices can and should be tailored to the specific covered population as you design your implementation program.

Remember, People are Complex

No amount of data can tell the complete story of the digital divide in your state. People are complex and may not fit neatly in the boxes Congress has asked you to fit them into, or they may fit into two or more boxes.

This is [intersectionality](#), defined as: “how systems of inequality based on gender, race, ethnicity, sexual orientation, gender identity, disability, class and other forms of discrimination ‘intersect’ to create unique dynamics and effects.”³⁷

Remember these complexities as you choose which programs to fund or establish. Do your programs meet your residents where they are? Are the programs you’re funding designed to meet the specific needs you uncovered through your planning process?

Individualized, Tailored Support

Where possible, look for organizations, programs, or people who already have the trust of the covered populations and whose programming is tailored to the covered populations’ needs. Some examples include community-based organizations, Minority-Serving Institutions (MSIs), places of worship, CAIs, etc.³⁸

Another option would be to provide individualized programming that can be embedded in other support programs at trusted organizations. Programs like [Tech Changemakers 4-H](#), [Easter Seals of Greater Houston](#), [Northstar/Literacy Minnesota](#), [OATS](#), [Oasis Rochester](#), and Cyber-Seniors offer tailored support to specific populations, such as rural residents, Veterans, low-literacy individuals, and aging adults, respectively.

Hire From the Community

Hiring from a specific covered population can effectively ensure that the digital inclusion programs are tailored to the community’s needs and can help build trust with that population. For example, Gila River Telecommunications hired members



(37) “What Is Intersectionality,” Center for Intersectional Justice, 2022, <https://www.intersectionaljustice.org/what-is-intersectionality>

(38) For example, the HBCU Wellness Project is an “intervention designed to utilize the human and social capital at Tennessee HBCUs to promote health and modify risks for chronic diseases among individuals

from the Gila River Indian Community to operate their Digital Connect Initiative, a multi-faceted digital inclusion initiative for Gila River residents.³⁹ Finding members of the covered populations or in minority communities who can assume digital inclusion responsibilities in addition to or instead of their regular duties can be difficult, so States should consider capacity-building investments in addition to direct service investments.

Focus on Social and Family-Based Approaches

Consider ways to make your program more accessible and friendly to the whole family unit, like providing meals, tutoring, or programs for children while adults learn or offering transportation options. Think about work schedules and availability as you design and schedule programs.

Tap into Available Resources and Current Ecosystem

You're not doing this work alone. Community-involved organizations and companies can be natural partners for digital inclusion programs. Consider partnering with other organizations, such as health centers, schools, internet providers, and government agencies, for a more comprehensive approach to community members' needs.

Awareness Campaigns

Implement awareness campaigns to increase technology adoption by covered populations. Campaigns should include information about affordable devices and connectivity, as well as digital skill training and support. Demonstrate the value of technology and how technology can meet their specific needs.⁴⁰ Messaging should be clear, familiar, and informative. Avoid fear-based tactics.

Success is Relative and Will Vary

Define success and progress toward achieving your measurable objectives based on the baseline data for each covered population. For example, success within sparsely populated areas may look different than in other communities. Conventional benchmarks, such as client numbers, will naturally be reduced, so they shouldn't be your primary success metrics. Instead, consider evaluating robust partnerships, community trust, engagement quality, and results from interactions with digital navigators.

(39) "Digital Connect Initiative," Digital Connect Initiative, accessed May 1, 2023, <https://digitalconnect.org/>

(40) Aging Connected: Exposing the Hidden Connectivity Crisis for Older Adults (Aging Connected, 2021), https://agingconnected.org/wp-content/uploads/2021/05/Aging-Connected_Exposing-the-Hidden-Connectivity-Crisis-for-Older-Adults.pdf

Common Digital Equity Barriers Across Covered Populations

Affordability:



The cost of broadband access often makes it financially burdensome for low-income households, compelling them to resort to public Wi-Fi or go without internet access at home.

Reliable Internet:



A reliable, high-speed internet connection is not available to all households.

Limited Access to Suitable Devices:



Covered populations frequently lack essential devices such as computers, smartphones, or tablets, limiting their full participation in the digital world.

Digital Skills:



Many of the covered populations lack the digital skills necessary to navigate the internet effectively, which includes tasks like online research, filling out online forms, using email, and navigating through their devices and internet access confidently.

Privacy and Security Concerns:



Covered populations might be more vulnerable to privacy and security issues due to a lack of digital skills, awareness of available resources, or predatory practices from bad actors aimed at vulnerable populations.



Geographical and Economic:



Covered populations are often concentrated in specific cities and regions where poverty has persisted over extended periods.⁴¹ Individuals with lower incomes consistently grapple with unmet social needs, exposure to detrimental environmental factors, and hurdles in accessing resources, such as libraries, after-school programs, and critical social resources.

Increased Institutional and Socioeconomic Risk Factors:



Covered populations, including specific racial and ethnic groups, rural residents, and individuals with disabilities, face an elevated risk of poverty due to factors beyond individual control.² Institutional racism and discrimination foster unequal social and economic opportunities.⁴³

Specific Best Practices and Considerations for Covered Populations

This section provides unique aspects about each covered population, digital equity barriers specific to them, and best practices for serving the covered population.

Low-Income Households



According to the Pew Research Center, about four in ten adults with lower incomes do not have broadband service or a computer to access the internet.⁴⁴ To have broadband service at home, 62 percent of low and lower-middle-income households would require considerable cost relief (relative to market price).⁴⁵ In addition, 36 percent of lower-income adults have low digital skills, and 55 percent of these households needed more confidence in finding or accessing government services.⁴⁶

(41) Poverty (U.S. Department of Health and Human Services, 2023) <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/poverty>

(42) Poverty (U.S. Department of Health and Human Services, 2023) <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/poverty>

(43) Id.

(44) Emily Vogels, "Digital divide persists even as Americans with lower incomes make gains in tech adoption," Pew Research Center, June 22, 2021, <https://www.pewresearch.org/short-reads/2021/06/22/digital-divide-persists-even-as-americans-with-lower-incomes-make-gains-in-tech-adoption/#:~:text=About%20four%2Din%2Dten%20adults,%24100%2C000%20or%20more%20a%20year.>

(45) (46) John Horrigan, The State of Digital Equity, (EveryoneOn, 2022) <https://www.everyoneon.org/2022-national-research>



Spotlight: EveryoneOn

Everyoneon works to connect people in under-resourced communities to affordable internet services, computers, and digital skills training through an offer locator tool and a network of more than 650 cross-sector partner organizations. Their Digital Learning Center provides access to free online digital learning resources. EveryoneOn offers a free tablet workshop for aging individuals in public housing. Their Digital Communities project offers a curriculum and toolkit to support a train-the-trainer digital equity model in California-based organizations.



For low-income households, no additional best practices are outlined, as the overarching best practices are designed with them in mind.

Aging Individuals



In 2022, 10.9 percent of aging individuals across the nation experienced poverty, with some states as low as 7.5 percent and as high as 15.9 percent.⁴⁷ The Census Bureau has classified income for older households into five categories: social security, supplemental security income,⁴⁸ pensions and retirement, earnings, and other income. While earnings and other income can vary, most of these categories are fixed. Economic insecurity and a fixed income can make it challenging to purchase high-functioning devices and a home broadband subscription if it's available.



(47) Craig Benson, "Child Poverty Rate Still Higher Than For Older Populations But Declining," United States Census Bureau, December 4, 2023, <https://www.census.gov/library/stories/2023/12/poverty-rate-varies-by-age-groups.html#:~:text=The%20ACS%20shows%20that%20in,18%20to%2064%20was%2011.7%25>.

(48) Daniel Thompson and Michael D. King, *Income Sources of Older Households:2017* (United States Census Bureau, 2022), <https://www.census.gov/content/dam/Census/library/publications/2022/demo/p70br-177.pdf>



Spotlight: OATS Senior Planet

[Senior Planet Community](#) from AARP is an online community designed for and by older adults. The online platform offers tech tip videos, resources, online classes, in-person classes, interest groups, and more. The online platform helps aging adults feel connected, at home, and access relevant topics while interacting with the digital world. Photos Photo Credit: Senior Planet



Photo Credit: Senior Planet

Potential Digital Equity Barriers

Covered populations are often concentrated in specific cities and regions where poverty has persisted over extended periods. Individuals with lower incomes consistently grapple with unmet social needs, exposure to detrimental environmental factors, and hurdles in accessing resources, such as libraries, after-school programs, and critical social resources.

- **Accessible Devices:** Lack of access to devices with large screens, screen magnification, screen readers, and adaptive accessories can hinder technology adoption in older adults.
- **Digital Isolation:** Younger adults are more likely to have a broadband connection than aging adults.⁴⁹ At the same time, older adults are more likely to experience feelings of isolation and loneliness.
- **Awareness:** Aging adults are less likely to use devices or subscribe to home broadband due to a lack of awareness. Many older adults are unaware of low-cost device and broadband programs.⁵⁰ A lack of awareness about technology and its relevance can be due to isolation, a need for support in developing digital skills, and inconsistent and irrelevant digital inclusion programs.⁵¹

(49) (50) Aging Connected: Exposing the Hidden Connectivity Crisis for Older Adults (Aging Connected, 2021), https://agingconnected.org/wp-content/uploads/2021/05/Aging-Connected_Exposing-the-Hidden-Connectivity-Crisis-for-Older-Adults.pdf

(51) id.



Spotlight: Little Brothers Friends of the Elderly-Boston

LBFE Boston offers two intergenerational technology programs in public/affordable senior housing and senior centers throughout the city. Their Tech Cafes are informal, with weekly drop-in hours. Older adults bring their devices (from flip phones to the most current iPhones!), and their questions, and college students work with them to solve their queries.

The program's Digital Dividends provides weekly training and support to older adults in an intergenerational setting. Program participants are given a device (usually a Chromebook), which they keep. Participants also receive internet connectivity via a hotspot for the duration of the program. LBFE Boston is a Senior Planet licensing partner and uses their curriculum at many Digital Dividends sites.

Through intergenerational engagement, they offer programs in several languages, including English, Spanish, Cantonese, Mandarin, and Taishanese.



Photo Credit: LBFE-Boston

Best Practices for Serving Aging Adults

- **Supportive Partnerships:** Many organizations work to support aging adults. As part of an initial needs assessment, determine trusted organizations actively serving aging adults in your community and consider forming a partnership to address service gaps. Consider partnering with meal delivery providers such as [Meals on Wheels](#), senior centers, food banks, places of worship, and assisted living facilities.
- **Promote Community:** Older adults learn well in community-based, collaborative environments that incorporate opportunities for peer group and intergenerational learning.⁵² Individuals are more likely to participate in the digital world when they feel a sense of belonging and connection with peers. Access to broadband, a device, and digital skills training can increase a sense of connectedness to family and friends and can help older adults build social networks.⁵³

(52) Sunyoung Kim, Willow Yao, and Xiaotong Du, Exploring Older Adults' Adoption and Use of a Tablet Computer During COVID-19: Longitudinal Qualitative Study (National Library of Medicine, 2022), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8906838/>

(53) Fly Like an Eagle: Measuring Transformational Social Outcomes Among Seniors Using Technology (Older Americans Technology Services, 2022), https://oats.org/wp-content/uploads/2022/09/OATS-from-AARP_Fly-Like-an-Eagle_Digital.pdf?utm_source=report&utm_medium=pdf&utm_campaign=fly-like-an-eagle-pdf&utm_id=FLAE_media

- **Age-Friendly Digital Skills Programs:** Aging adults can be intimidated by the perceived complexities of using devices and getting online.⁵⁴ Workshops and classes should use relatable language, address relevant digital skills, proceed appropriately for learners, and include short, project-based workshops that allow time for Q&A and individual support. Accessibility, privacy, security, password management, entertainment, video chatting platforms, social media, and file management are topics to cover. Ongoing programming should include printed materials and one-on-one support by digital navigators that allow participants to bring their own devices for basic skill-building and troubleshooting.
- **Provide Accessibility Education and Resources:** Education on accessible tools, adaptive tools, and software can help aging individuals have a better experience and make informed technology choices. See the *Individuals with Disabilities* section below for more information on accessible devices.



Spotlight: Ashbury Senior Computer Community Center (ASC³)

ASC addresses the technology needs of greater Cleveland residents (young adults 18-40, mature adults 45-64, and senior citizens 65 and older) with limited income via education, resources, and training.

ASC programs include an intergenerational learning component to decrease disparities in the use and understanding of technology. Participants gain a basic understanding of computer concepts, learn to

operate the computer, and learn how to use the internet efficiently. The ultimate goal is to enhance the quality of their lives by applying technical knowledge, access, and hands-on experience.



Photo Credit: Gina Birch, Ashbury Senior Computer Community Center



(54) Aging Connected: Exposing the Hidden Connectivity Crisis for Older Adults (Aging Connected, 2021), https://agingconnected.org/wp-content/uploads/2021/05/Aging-Connected_Exposing-the-Hidden-Connectivity-Crisis-for-Older-Adults.pdf

Incarcerated Individuals



Depending on the year an incarcerated individual begins their sentence and what (if any) digital technologies and opportunities the facility has, an individual reentering their community may have never seen a computer or smartphone. Even those incarcerated in recent years may struggle to maintain or advance digital skills during incarceration, given the rapid rate at which technology evolves and the limited digital resources available to them in their facility.



Justice-involved individuals - individuals who have had contact or interaction with the criminal justice system, primarily through police, courts, or the corrections system.

Potential Digital Equity Barriers

- **Limited Access:** If there is any access to the internet or devices at all, it's rationed, has an associated fee, and is restricted.
- **Affordability:** Although some communication providers are available in incarceration facilities, facility limitations and the cost to access these opportunities can present obstacles. These communication costs can include per-minute email charges, per-minute internet access, and supplementary charges for email attachments. Even if the charges are small, they can accumulate quickly. Meanwhile, incarcerated individuals earn minimal wages, if any at all, so they often rely on funds from family and friends for all costs incurred during their incarceration, including accessing the internet.
- **Available Platforms:** access to widely used email, communication, and social media platforms like Gmail are frequently restricted. Instead, the facilities provide limited alternatives that do not reflect outside incarceration platforms. As such, any digital skills built on these platforms may be irrelevant to the individual once released.



Spotlight: Ameelio

Ameelio is a tech nonprofit focusing on reentry and social integration in the American incarceration system. Ameelio works to reduce recidivism by increasing the accessibility of reliable prison communications technology, so incarcerated individuals can communicate with their families and friends more easily. Ameelio's products reduce the financial burden typically borne by the incarcerated individual and their family through a no-cost prison video calling platform, e-messaging, secure and inexpensive voice calls, and a mail service app. Ameelio also offers products for privileged communications (for communications with attorneys), education, reentry, and tablets. Ameelio is partnering with three States (Colorado, Iowa, and Maine).

- **Available Platforms:** Device access varies from place to place and state to state during incarceration. However, in many correctional facilities, the devices do not look or work like average devices, or allow personalized support. Devices are sparse and not universally available. Their use is often timed, and the demand typically outpaces their availability. Cameras, media card readers, and Bluetooth capabilities are often disabled, too.⁵⁵
- **Post-Release Barriers Continue:** Upon release, many formerly incarcerated individuals grapple with a lack of access to digital devices and the necessary skills to navigate them. The overlap of learning essential digital skills and engaging in online job-seeking activities can become an overwhelming barrier to successful reentry into society.

Best Practices for Serving Incarcerated Populations

- **Establish Specialized Virtual Communication Accounts:** Specialized communication platforms, such as email communication, are essential to expose incarcerated individuals to digital skills and provide opportunities to remain connected with friends and family.

(55) "FAQ: CDCR secure laptops project," California Department of Corrections and Rehabilitation, August 18, 2022, <https://www.cdcr.ca.gov/insidecdcr/2022/08/18/faq-cdcr-secure-laptops-project/>



Spotlight: [The New York Public Library \(NYPL\) Jail & Prison Services:](#)

The New York Public Library’s Jail & Prison Services program connects librarians with incarcerated individuals across New York and the nation via phone. Incarcerated individuals can request NYPL Jail & Prison Services access through their facility, and then a librarian engages with them, providing updates on current events and offering literary resources. Beyond this, the initiative also equips incarcerated individuals with essential digital skills crucial for reintegrating into society post-release.

These services include “[Connections: A Free Guide for Formerly Incarcerated People in New York City](#),” a reentry resource guide to smoothly support formerly incarcerated individuals’ transition. The guide doubles as a comprehensive job application preparation manual. It offers step-by-step directions, essential service information, contact details for personalized assistance, relevant hiring departments, and skill-enhancing classes.

- **Address Inequities in Access to Digital Resources and Opportunities per Facility:** For incarcerated individuals, you’ll need to address the inequities of access to the correctional facilities and within them. This requires multiple layers of partnerships—with the state correctional department, individual facilities, ISPs, CBOs, or other organizations who can provide device and digital skills support.
- **Measure Skill Levels and Specific Digital Needs:** Incarcerated individuals have different digital skill levels and needs. Some may simply want to keep in touch with their family members, others want to gain educational skills for job opportunities, and others may require digital skills to communicate and coordinate with a legal team.
- **Remove Costs:** Institute solutions that remove costs to access the internet, devices, and skills opportunities for Incarcerated individuals and their families.



Spotlight: [Digital Pathways for Empowerment - A STEM Alliance Project](#)

The STEM Alliance, in collaboration with Resultant and Children's Village, launched the Digital Pathways for Empowerment (DP4E) pilot program for detained and incarcerated juveniles in the Woodfield Juvenile Center in Valhalla, NY. The program empowers detainees and incarcerated juveniles with essential, relevant tech skills and tools, contributing to their overall educational development and reducing recidivism rates.

Inspired by Resultant's first Department of Corrections project in the Michigan DOCS (summarized in this video), The STEM Alliance secured philanthropic funding to implement DP4E to deliver comprehensive tech education to juvenile detainees. The program integrates project-based learning with Google education services. The cornerstone of the approach is security. The program partners use Chromebooks and Google Workspace Administrative Controls to access Google services such as Docs, Sheets, and Slides while strictly limiting internet accessibility. This enables detainees and incarcerated juveniles to develop transferable skills on a relevant digital platform without compromising security.

In addition, the program participants engage in the STEM Alliance's Personal Branding Lab, a proprietary, project-based learning course taught by a credible messenger—a justice-impacted individual. The course teaches practical website development skills for learners to create an entrepreneurial or advocacy product. Throughout the 15-hour class, the students further their entrepreneurial and/or advocacy goals using workforce tools like Docs and Sheets to create resumes and budgets.

This pilot program will run through August 2024, reaching up to 75 participants, and is funded by Schmidt Futures' NY Digital Inclusion Fund Grant. When the young people reenter their communities, they receive a Chromebook, a hotspot, and additional one-to-one training.⁵⁷

Veterans



The digital divide in Veteran populations can be partially attributed to how they are demographically distinct⁵⁸ from the overall US population. With an average age of 61 and a disability rate that is more than two times the rest of the population, Veterans have an increased need for consistent access to healthcare. Veterans are also more likely to live in rural areas than the average American. According to Dr. Kevin Galpin, VA Telehealth Executive Director, more than a third of Veterans who receive care through the VA do so through telehealth.

(56) "NTIA Data Offers Window into Understanding Veterans' Computer and Internet Use," National Telecommunications and Information Administration, accessed November 28, 2023, <https://www.ntia.gov/blog/ntia-data-offers-window-understanding-veterans-computer-and-internet-use>.

(57) Id. (58) Id.

According to the FCC, Veterans were also more likely to indicate that a lack of an adequate device was the primary barrier to subscribing to an internet service.⁵⁹ These factors, combined with the population's higher-than-average age and the digital skills training challenges presented by aging individuals, may indicate that Veteran populations will require a tailored approach to outreach and education to get them online compared to other populations.⁶⁰

Potential Digital Equity Barriers

- **Lack of Military Instructional Representation:** Some Veterans find it challenging to connect with those who do not understand military life, and this chasm can make it difficult for Veterans to learn and engage in a classroom environment.⁶¹
- **Low Levels of Digital Skills:** On average, Veterans are older and may have had a service career that did not require digital skills. They may need to adapt to new technologies not used in their daily tasks. Their inability to complete and submit information could be a significant barrier if they need to manage their benefits and other personal information online.
- **Economic Factors:** Research has shown that Veterans are “overrepresented in homeless populations” compared to the general population.⁶² Financial hardship associated with homelessness may make accessing devices and mobile internet cost-prohibitive.



(59) Wireline Competition Bureau, Report on Promoting Broadband Internet Access Service for Veterans, Pursuant to the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018 (Washington D.C., Federal Communications Commission, 2018), <https://docs.fcc.gov/public/attachments/DOC-357270A1.pdf>

(60) “NTIA Data Offers Window into Understanding Veterans’ Computer and Internet Use,” National Telecommunications and Information Administration, accessed November 28, 2023, <https://www.ntia.gov/blog/ntia-data-offers-window-understanding-veterans-computer-and-internet-use>.

(61) “Veterans Employment Toolkit”, U.S. Department of Veteran Affairs, August 6, 2021, https://www.va.gov/vetsinworkplace/docs/em_challengesreadjust.asp

(62) John A. Schinka & Thomas H. Byrne, “Aging and Life Expectancy in Homeless Veterans: Nine Questions” (VA National Center on Homelessness Among Veterans, 2018), https://www.va.gov/HOMELESS/nchav/docs/Schinka_Byrne_AgingLifeExpectancyHomelessVeterans_Sept2018_508.pdf

Best Practices for Serving Veterans

- **VA Awareness and Collaboration:** The VA offers [Digital Divide Consults](#) to assist Veterans in finding programs and services among other supports and services. Keep up to date with the VA's benefits and pursue partnerships with the VA to reach Veterans.



Spotlight: Washington Department of Veteran Affairs



The [Washington Department of Veteran Affairs Digital Navigator Program](#) focuses on Veterans in “underserved rural areas, elderly Veterans, Veterans of color, Homeless Veteran Reintegration Program Participants, and Veterans participating in higher education or apprenticeship.”⁶³ The program supports Veterans' device and digital navigation needs, equipping them with laptops to access and manage earned Veteran benefits and specialized support to help them access Veteran benefits online.

The program includes:

- Assessment and guidance toward resources suitable for their skill level, needs, and lifestyle.
- Assistance with filling out program intake forms.
- Digital literacy, technical, and application skills training.
- A toll-free hotline to schedule appointments with a Digital Navigator or to request technical assistance.
- Assistance with enrollment in the Affordable Connectivity Program (ACP).
- Digital literacy and technical application skills training.
- Support through Vet Corps members who will assist with using equipment to access Veteran benefits and other supportive services.

(63) “Digital Navigator Program”, Washington State Department of Veteran Affairs, accessed January 18, 2024, <https://www.dva.wa.gov/veterans-service-members-and-their-families/digital-navigator-program>

Individuals with Disabilities



NTIA defines disability for an individual as “(1) a physical or mental impairment that substantially limits one or more major life activities of such an individual; (2) a record of such an impairment; or (3) being regarded as having such an impairment.”⁶⁴ One in four adults in the United States has some type of disability.⁶⁵

Potential Digital Equity Barriers

- **Device Ownership and Internet Use:** US residents with disabilities are less likely than those without to go online, regularly use the internet, or own a computer or a smartphone ⁶⁶
- **Accessible Devices:** Accessible or assistive technologies can benefit people with hearing, visual, motor, and other disabilities and allow them to participate in the digital world independently. Accessible devices include hardware, software, and adaptive peripheral devices such as keyboards, buttons, mice, and controllers.⁶⁷ New technologies like 3D printers can further customize adaptive devices.⁶⁸ Barriers to accessible devices include high price points, awareness of available technologies, and the skills to use them.

Best Practices for Serving Individuals with Disabilities

- **Accessible Spaces:** Partner with an expert to determine if your space is accessible for someone with disabilities. Consider buildings and facilities, height-adjustable desks and other assistive devices, and reasonable accommodations staff can make. Give extra consideration to your learning space to ensure individuals with disabilities can access the tools necessary to learn. Train staff on technical support for using and teaching assistive technology and devices. Consider having additional staff during classes and workshops to provide one-on-one instruction on assistive technologies as needed. You can find more best practices in the [Doing Digital Inclusion: Disability Handbook](#), published by The Good Things Foundation.

(64) Serving Individuals with Disabilities, (National Telecommunications and Information Administration) accessed January 18, 2024, https://broadbandusa.ntia.doc.gov/sites/default/files/2023-10/Serving_Individuals_with_Disabilities.pdf

(65) Id

(66) Andrew Perrin and Sara Atske, “Americans with disabilities less likely than those without to own some digital devices”, (Pew Research Center, 2021), <https://www.pewresearch.org/short-reads/2021/09/10/americans-with-disabilities-less-likely-than-those-without-to-own-some-digital-devices/>

(67) “Types of Assistive Technology”, Minnesota Guide to Assistive Technology, accessed January 21, 2024, <https://mn.gov/admin/at/getting-started/understanding-at/types/#>

(68) “Customize your Microsoft adaptive accessories with 3D printed designs”, Microsoft, accessed January 21, 2024, <https://support.microsoft.com/en-us/topic/customize-your-microsoft-adaptive-accessories-with-3d-printed-designs-29ee6d7e-45f4-4730-bfe6-657c294d02ca>



Spotlight: The Assistive Technology Act Programs

The Assistive Technology Act (AT Act) funds 56 grantees, including all 50 states and four US Territories, to increase access, knowledge, and ownership of assistive technology devices. [The Association of Assistive Technology Act Programs \(ATAP\)](#) is a nonprofit organization that supports AT Act programs nationally and educates individuals with disabilities and service providers about assistive technologies and how to acquire accessible devices and services. Contact your [state program](#) to learn more about access to assistive technology in your state.

You can also find resources from [the National Assistive Technology Act Technical Assistance and Training \(AT3\) Center](#). It provides free, self-directed assistive technology courses, information about accessible technology resources, information on Assistive Technology Act Programs in States and Territories, and information on the 21st Century Assistive Technology Act.

- **Independent Living:** Independent Living supports people with disabilities in their efforts to make their own choices, control their own lives, and have equal access to and inclusion in society.⁷⁰ Consider contacting a [Center for Independent Living Association](#) in your community for more information about their resources for individuals with disabilities and best practices for digital skill-building programs.
- **Advocate for Accessible Web Design:** Not all websites are designed for accessibility. Encourage organizations to help make the web accessible to those with disabilities by learning about the [Web Accessibility Initiative](#)⁷¹ and adopting [W3C Accessibility Standards](#).⁷²
- **Lower Barriers to Accessible Devices:** Since many accessible devices are available but out of reach for many individuals with disabilities, consider ways to make them more accessible. Either purchase them directly, include them as an eligible expense for subgrantees, or provide lists of available assistive devices to organizations that support individuals with disabilities and the individuals themselves.

(69) "About Us", Association of Assistive Technology Act Programs, accessed January 21, 2024, <https://ataporg.org/about-us/>

(70) "Centers for Independent Living," Administration for Community Living, accessed January 31, 2024, <https://acl.gov/programs/aging-and-disability-networks/centers-independent-living>

(71) "Accessibility", World Wide Web Consortium, accessed January 21, 2024, <https://www.w3.org/mission/accessibility/#shape-an-accessible-web-as-a-w3c-member>

(72) "W3C Accessibility Standards Overview", Web Accessibility Initiative, accessed January 21, 2024, <https://www.w3.org/WAI/standards-guidelines/>

Individuals with Language Barriers



Individuals with language barriers can face various issues, including: communication difficulties, limited job opportunities, social isolation, difficulty accessing information and resources, challenges navigating healthcare and legal systems, and struggles in education and training. These experiences can discourage them from taking advantage of digital inclusion resources and programs even if they are available.

Potential Digital Equity Barriers

- **Underrepresentation in Digital Equity Data:** Surveys designed for English speakers or only the most common non-English languages exclude many ethnic minorities and can lead to a lack of existing data on their needs.
- **Underrepresentation in Digital Equity Data:** Surveys designed for English speakers or only the most common non-English languages exclude many ethnic minorities and can lead to a lack of existing data on their needs.
- **Navigation of Predominantly English-Speaking Spaces:** Non-English speakers may be hesitant to venture to public spaces, such as libraries, that likely require interacting with at least one person who only speaks English. Public computing spaces without devices configured for non-English speakers can be discouraging.
- **Identification of Resources:** Adults with low literacy levels may struggle to use the internet to identify resources to help them learn.
- **Communication with Instructors:** An inability to communicate with an instructor can hinder someone's ability to learn and comprehend instruction.
- **Pace of Instruction:** Many adult education programs accommodate those who can more quickly obtain a high school diploma or work-related credential and fail to devote attention to those who began at a lower reading level baseline.⁷³

(73) Annie Waldman and Aliyya Swaby et al. "A Fifth of American Adults Struggle to Read. Why Are We Failing to Teach Them?", (ProPublica, 2022), <https://www.propublica.org/article/literacy-adult-education-united-states>

Best Practices for Serving Individuals with Language Barriers

- **Consider New Survey Development Strategies:** To discover possible underrepresented languages in your state data, reach out to organizations that serve individuals who are refugees, immigrants, or English language learners. When conducting survey research, create versions in underrepresented languages.



Spotlight: Asian American and Pacific Islander (AAPI) Digital Access Survey by OCA-Asian Pacific American Advocates

Available in 12 languages at its initial launch, the AAPI Digital Access Survey sought to discover the internet access needs and challenges of Asian Americans and Pacific Islanders. The surveys asked respondents about the type of household internet subscription, digital device ownership, and use of digital devices. Because the survey is available in multiple non-English languages, organizations serving these communities can reach those experiencing significant barriers to digital access because of language barriers.

We encourage you to identify organizations in your state serving non-English-speaking populations to learn which communities are underrepresented in typical digital access surveys.

- **Match Instructors and Instruction with Language Needs:** Digital inclusion programs should hire staff fluent in the languages of the communities they seek to serve. You can also provide language translators if a few instructors speak the participants' native language. The program curricula and materials should also be translated into the learners' language.
- **Match Instructors with Literacy Needs:** Digital inclusion programming for adults with literacy needs should utilize staff trained to work with individuals with lower literacy levels. Individuals who struggle to read may become adept at using digital tools without fully comprehending written instructions. These adaptations may also make their struggles less visible to untrained instructors. While their coping skills may allow them to complete some course exercises, reading comprehension challenges will limit their success and reduce self-sufficiency. Many communities have 'Literacy Centers.' Connect with them to learn and identify instructors.
- **Match Devices with Language Preferences:** Learners with the lowest literacy levels in a non-English language may prefer physical keyboards printed with their native language's characters. Equip computing centers with keyboards imprinted with characters to match language preferences.

- **Include Options for Individuals with Very Low Literacy:** Digital inclusion programs for adult learners should include instruction options for learners with the lowest literacy levels, including those below a third-grade reading level.



Spotlight: Community Tech Network

Community Tech Network (CTN) offers digital inclusion programming in eight languages and adopts the following practices to promote inclusivity and create accessible learning environments for non-English speaking individuals:

- Native speakers review all printed material to ensure translation accuracy
- Digital inclusion instructors are fluent in the languages they teach
- Program instructors configure devices for learners in the appropriate language

CTN identifies resources for individuals who cannot read or write any language.

Racial and Ethnic Minorities



Racial and ethnic minority communities, sometimes referred to as Black, Indigenous, and People of Color (BIPOC), represent multiple cultural identities, ancestral histories, and life experiences and they may identify as one or more of many races and ethnicities. These communities may experience several unique barriers to digital equity because of systemic racism and inequities, including income and wealth gaps, access to high-quality education, and employment disparities.

Workers of color are more widely affected by a gap in digital skills as compared to their white counterparts, with half of Black workers and more than half of Hispanic workers reporting they lack digital skills in the workplace.⁷⁴ Research also shows that Black and Hispanic adults in the US, across all income levels, are less likely to say they own a computer or have access to high-speed internet at home as compared to their white counterparts.⁷⁵

(74) "Applying a racial equity lens to digital literacy: How Workers of color are affected by digital skills gap," National Skills Coalition, accessed December 15, 2023, <https://nationalskillscoalition.org/wp-content/uploads/2020/12/Digital-Skills-Racial-Equity-Final.pdf>

(75) Id.

Potential Digital Equity Barriers

- **Discriminatory and Predatory Practices:** Although scams target many groups, those experiencing multiple hardships may have more difficulty recovering. Racial and ethnic minorities are often targets of *legal* but unethical business practices, such as deceptive advertising promising a free device while obscuring the unfavorable terms of a contract. These practices can reduce trust in public benefit programs.
- **Historical Inequities in Government Investment:** Historically, federal investment in broadband disproportionately benefited rural, white Americans.⁷⁶ Redlining, in which federal agencies discouraged mortgage lending in minority neighborhoods by deeming them ‘high-risk,’⁷⁷ continues to leave many minority neighborhoods with fewer options for affordable and reliable broadband today.⁷⁸
- **Lack of Affordable Options for Broadband and Devices:** Non-white households are overrepresented in the share of households experiencing poverty.⁷⁹ Low-income individuals are less likely to have home broadband and have “lower levels of technology adoption” in multiple categories (i.e., own a tablet, desktop, and laptop computer).⁸⁰

Best Practices for Serving Racial and Ethnic Minorities

- **Ensure Equity in Implementation:** The design of grant programs can influence outcomes for racial and ethnic minorities. For example, grants that exclude housing authorities as eligible entities may privilege communities in single-family housing and leave out many low-income and minority communities.
- **Leverage the Reach of State Agencies:** Government departments or agencies serving a high volume of minority populations should educate individuals on the availability of digital inclusion resources and

(76) Angela Siefer and Bill Callahan, “Limiting Broadband Investment to “Rural Only” Discriminates Against Black Americans and other Communities of Color” (June, 2020) <https://www.digitalinclusion.org/digital-divide-and-systemic-racism/>

(77) “Broadband Challenges and Opportunities in Affordable Rental Housing”, (Pew Pew Research Center, 2023), <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2023/04/broadband-challenges-and-opportunities-in-affordable-rental-housing>

(78) Id.

(79) See discussion on the persistence of racial inequality. Em Shrider, “Poverty Rate for the Black Population Fell Below Pre-Pandemic”, (U.S. Census, 2023), <https://www.census.gov/library/stories/2023/09/black-poverty-rate.html#:~:text=For%20example%2C%20Black%20individuals%20made,pover%20of%201.5>.

(80) Emily A. Vogels, “Digital divide persists even as Americans with lower incomes make gains in tech adoption”, (Pew Research Center, 2021), <https://www.pewresearch.org/short-reads/2021/06/22/digital-divide-persists-even-as-americans-with-lower-incomes-make-gains-in-tech-adoption/>

programs. For example, if Medicaid or SNAP programs serve many people of color in your state, the government staff supporting those programs could also share application information for state or federal broadband benefit programs.

- **Provide Consumer Rights and Anti-Fraud Education:** Include consumer rights education in digital skills programs to equip learners with the information they need to advocate for themselves and protect themselves from fraudulent online schemes.
- **Adopt Intentional Outreach Strategies:** Raise awareness about digital inclusion resources by partnering with organizations primarily serving racial and ethnic minorities, such as Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs), and Tribal Colleges and Universities (TCUs) and organizations providing direct services to low-income families, immigrants, or refugees. Lessons learned from ACP outreach may be useful for guiding outreach efforts for other digital equity resources. For example, one study shows variation in engagement preferences among different race categories, with people of color showing stronger preferences for local radio/TV ads over email.⁸¹



Spotlight: Tech Goes Home of Massachusetts



TechGoesHome (TGH) explicitly acknowledges the role of systemic racism in creating the digital equity barriers experienced by some communities and “deliberately partners with communities most affected by structural injustices at the root of digital exclusion.” TGH provides adult digital skills programming tailored to individual needs and interests, such as obtaining financial literacy, starting a business, or communicating with friends and family. As a trusted community messenger, TGH raises awareness of the ACP and offers enrollment support to all community members, regardless of their program participation.

The program has an extensive reach into racial and ethnic minority communities, with 85 percent of participants identifying as Black, Indigenous, and People of Color (BIPOC). Trained staff teach courses in community centers, libraries, public housing communities, and other nonprofit organizations. TGH also addresses other barriers to digital equity, such as lack of access to devices and affordable internet. Participants receive a Chromebook, and the program provides 12 months of internet access support for those without affordable options.

(81) Alejandro Alvarado Rojas, Hernan Galperin, John Horrigan, and Brian Whitacre, “Half of ACP-Eligible Households Still Unaware of the Program”, Benton Institute for Broadband and Society(blog), March 17,2023, <https://www.benton.org/blog/half-acp-eligible-households-still-unaware-program>

Individuals Who Primarily Reside in a Rural Area



Around 25 million Americans lack broadband access—19 million of whom reside in rural areas.⁸² Due to the cost of building in low-density areas, rural communities are most likely to lack internet (i.e., no options for service at all), only have one or two options, or have sluggish internet speeds.



Spotlight: The Pottsboro Library

The Pottsboro Library in Pottsboro, Texas, showcases community-focused innovation, catering to all age groups—children, teens, and adults—fostering connections, resources, and information. Under Director Dianne Connery's leadership, the library has become a vital digital inclusion and tech resource hub for its 2,300-strong rural community. It offers rural residents broadband Wi-Fi access, computers, and diverse technologies. The library has also spearheaded an esports program for local teens in collaboration with the North America Scholastic Esports Federation and an ongoing telehealth program that emerged during the peak of the COVID-19 pandemic, driven by grant support. Pottsboro Library is among the 18 National Digital Navigator Corps grantees.



Potential Digital Equity Barriers

- **Distance:** Rural communities are often isolated from many resources, exacerbating all factors contributing to the digital divide. The distance to essential services should be considered when designing digital inclusion solutions. For example, we, and others, recommend offering a meal at no cost to digital inclusion program participants, particularly if the program is scheduled during mealtime. In some rural areas, the nearest restaurant, fast food chain, or catering option can be 20-30 miles away.
- **Limited resources and service organizations:** The limited number of organizations in rural areas can severely inhibit service delivery (including digital inclusion services), the formation of robust digital inclusion ecosystems, and coalitions.

(82) An Update on Connecting Rural America, (Microsoft Airband Initiative, 2018), https://blogs.microsoft.com/uploads/prod/sites/5/2018/12/MSFT-Airband_InteractivePDF_Final_12.3.18.pdf

Best Practices for Serving Individuals Who Primarily Reside in A Rural Area

- **Consider Agriculture Demands and Seasonality:** As agricultural and sustenance industries are often the primary employers in rural communities when you plan digital inclusion programs, identify busy seasons to ensure programming doesn't conflict. In Alaska, for example, the summer months are the primary months in which goods can be shipped and delivered, building can occur, and sustenance industries operate. Meanwhile, the citrus picking season in Florida can stretch from September to June.
- **Go Beyond Standard Services:** Because the population is more dispersed, consider offering transportation options for participants or transporting facilitators closer to the community.
- **Use Traditional Communication Platforms:** AM, FM, and CB radio systems offer remarkable reliability in rural communities. Additionally, bulletin boards in grocery stores, churches, and farm cooperatives have been successful and can help get the word out about programs and opportunities.



Spotlight: [Buckeye Hills Regional Council](#)

For over a decade, the Buckeye Hills Regional Council of Southeast Ohio has collaborated with local, state, and federal entities to address broadband issues. While initially concentrated on mapping and infrastructure, their current focus is on digital equity. Collaborations extend to both local and national partners, including NDIA. They partner with rural organizations serving ACP-eligible populations, providing education, skills, and tools to enable these organizations to facilitate community enrollment.

A notable partnership with [Hocking Athens Perry Community Action](#) (HAPCAP) began when Buckeye Hills identified the organization as a strong match for hosting a digital navigator. They provided training to this navigator, who conducts digital skills training and enrolls eligible participants in ACP in their rural community.

Buckeye Hills Regional Council also supports digital inclusion efforts with rural farmers and their families through partnerships with the local farm bureau and [Future Farmers of America](#) (FFA).



Performance Measurement, Program Evaluation, and Sustainability

Performance Measurement and Program Evaluation

States should conduct performance measurement and program evaluation processes to evaluate your effectiveness in achieving the strategies outlined in your state digital equity plan.⁸³ According to the DEA, States can spend up to five percent of your capacity award on program evaluation activities and up to 20 percent on activities related to updating the plan. In addition to the DEA funds, we encourage States to consider long-term State investment in the practices discussed here.

A thoughtfully designed measurement and evaluation strategy will allow States to:

- Track progress toward the State's measurable objectives and, more importantly, toward advancing digital equity
- Demonstrate effective, accountable, and transparent administration of DEA funding
- Inform decisions about continued investment in and expansion of successful programs
- Build field-wide knowledge for digital inclusion practitioners through the sharing of best practices and lessons learned
- Facilitate research through the creation of statewide and national datasets
- Communicate the value of investments in digital equity, thus increasing the likelihood of future investments

To start, States should create a data collection and management plan that includes, at minimum, the following capacities, resources, and activities:

- A designated subject matter expert or experts
- A digital equity data hub
- A process for collecting local digital equity data

These three capacities will be covered more comprehensively later in this chapter.



(83) Lawrence L. Evans, Jr et. al. "Program Evaluation Key Terms and Concepts", (March, 2021), <https://www.gao.gov/assets/gao-21-404sp.pdf>



Performance Measurement: the ongoing monitoring and reporting of a program’s accomplishments and progress, particularly towards its pre-established goals. Performance measurement entails assessing the performance of activities and outputs in a logic model (see Figure 3).

Program Evaluation: An assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and efficiency. Program evaluation goes beyond measuring the performance of a program to study the outcomes and impacts of a program (see Figure 3).

As outlined in Figure 2, performance measurement and program evaluation are complementary processes that assess program activities and outputs (performance measurement) and program outcomes and impacts (program evaluation).

Figure 2	What questions it answers	What data it uses	What frequency	What it can tell	When to use it
Performance Measurement	Were the activities we intended to perform conducted? Were the outputs we intended to produce delivered?	Typically use quantitative data (e.g., counting the number of people served by a program)	Ongoing data collection. Data reporting should occur at a regular frequency (e.g., monthly, quarterly)	How well the program is performing in comparison to its goals	At a regular frequency. Identifying deviations from intended performance (positive or negative) allows for course correction where appropriate.
Program Evaluation	Are we creating the changes (outcomes and impacts) we intend to create in the world? Do the people affected by our program experience the benefits we think they should?	Quantitative and qualitative (e.g., identifying changes in program participants’ incomes, and health outcomes)	Begin planning evaluation at the point of program design, ideally. Data reporting may be less frequent and occur later in a program’s implementation; however, ongoing data collection enables an evaluation’s success.	Whether a program is working as intended and why	When enough time has elapsed in program implementation for intended outcomes and impacts to occur. Program evaluation typically occurs at the conclusion of a program, though data collection throughout program implementation is vital to accurate evaluation.

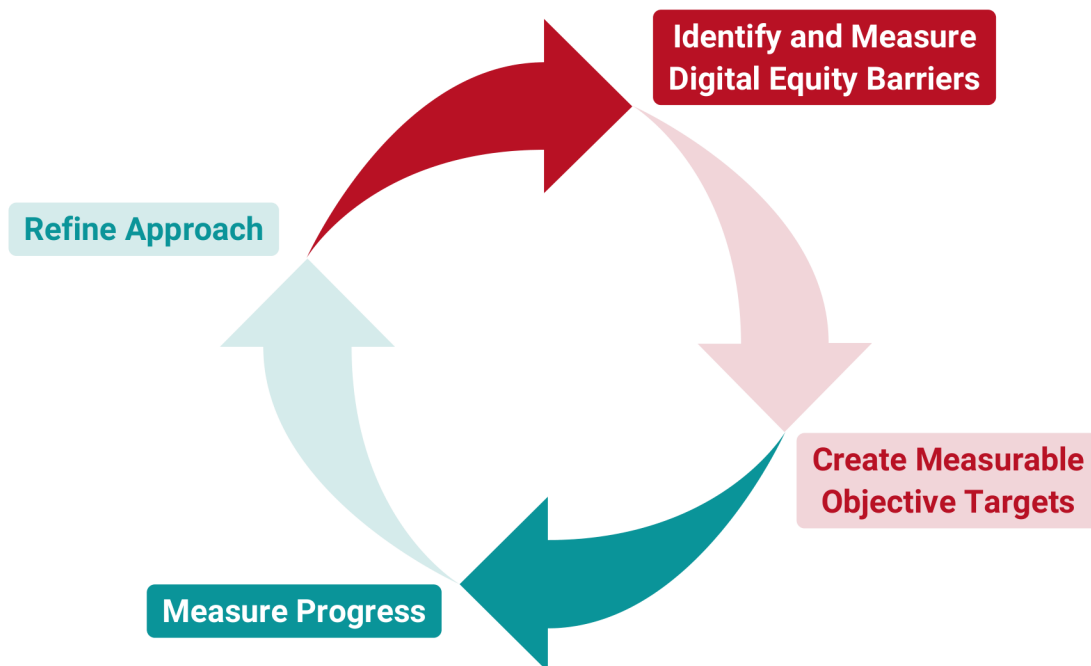
Performance Measurement in Practice



The principal goal of performance measurement is to understand how well a program is performing against stated objectives. You will measure the performance of your strategies throughout the entire implementation process. This will help populate the data needed to ascertain if you've reached the KPIs or benchmarks you outlined in your plan. You can also use the performance measurement for your program evaluation.

Consider the following example:

A State's measurable objective is to close its home broadband adoption gap for each covered population relative to the general population. To understand its progress toward achieving this goal, the State measures adoption rates three years after implementation activities begin. It finds that the adoption gap between covered and general populations has closed by 30 percent—on track with the State's mid-term KPI. The State determines that the home broadband adoption gap is closing at a rate consistent with its plan to close this gap by 80 percent in five years. The data collected throughout the program is aligned with the data needed by the external program evaluation partner for the final evaluation.



Program Evaluation



Program evaluations help decision-makers understand where to allocate resources, discover whether and to what degree a program's implementation activities align with its intended purpose, promote accountability, and identify areas for improving efficient use of resources.⁸⁴ In other words, evaluation enables you to test or refine your theories about how your DEA programs should positively impact the individuals and organizations as planned. It also allows you to examine if the short-term outcomes, mid- to long-term outcomes, and impacts of programs are occurring.

Collect Comparable Data in Comparable Ways



To accurately track progress toward measurable objectives, states should collect data comparable to the baseline data used in the state digital equity plan. Ongoing evaluation should allow for an apples-to-apples data comparison between two points in time.

For example, during the planning process, a state may collect primary data through listening sessions, focus groups, one-on-one interviews, and community surveys. In that case, they should continue using these consistent methodologies for each research type. This promotes data comparability and community engagement to inform the plan's implementation. Data collection methods that are most appropriate for identifying barriers and measuring the current state of digital equity will be equally important going forward.

You should also consider comparability when using existing data sources. For example, if you relied on the NTIA Computer and Internet Use Survey estimates to establish a baseline measure, an evaluation based on that data could only be conducted once new estimates are published, generally every two years. You will also need to account for potential changes NTIA may make to its survey, as questions and format can sometimes be revised from one survey version to the next.

Using Logic Models



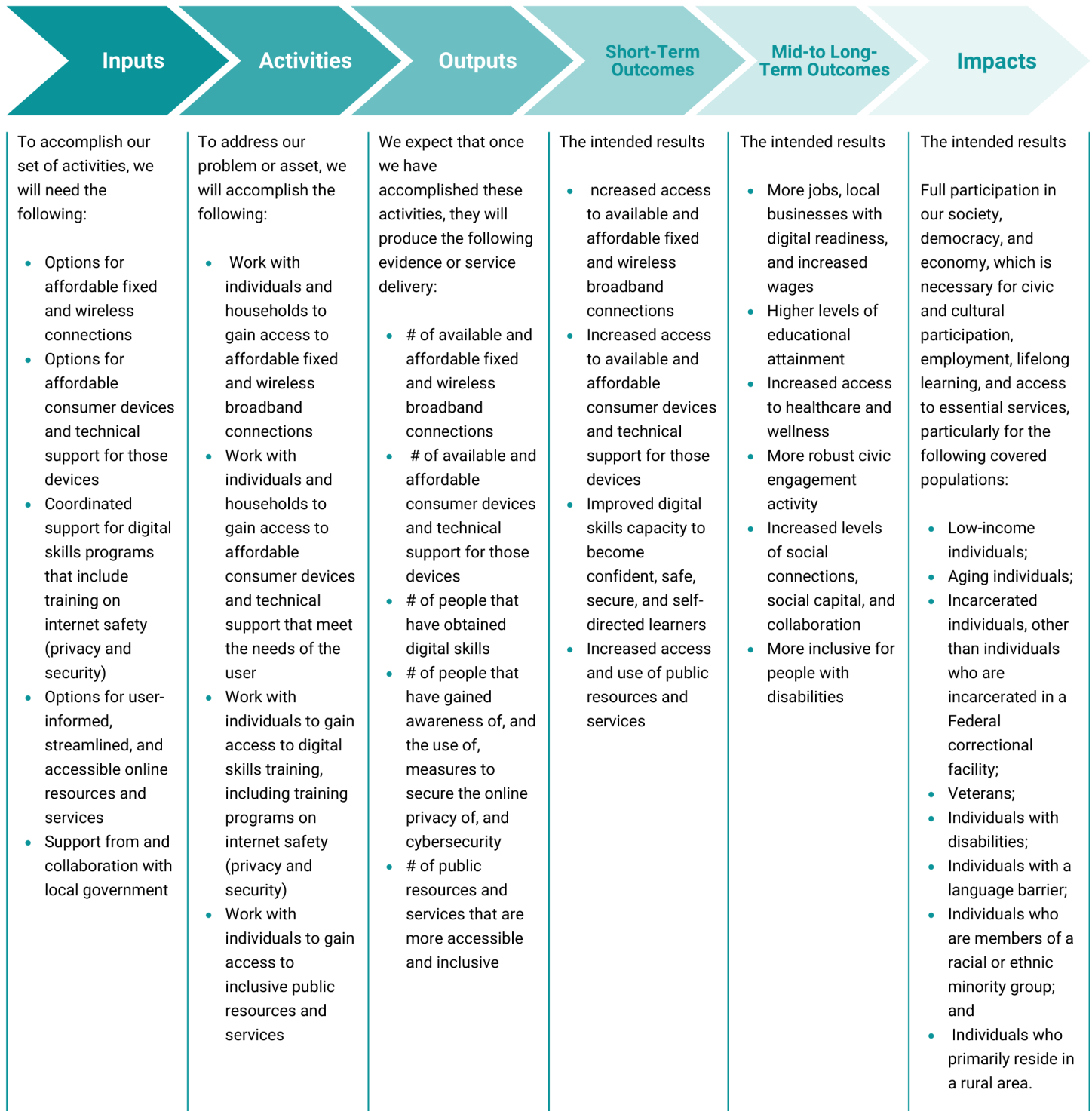
A logic model "links outcomes (both short and long-term) and impacts with program activities, processes and the theoretical assumptions of the program."⁸⁵ It encourages program designers to articulate what they believe is the relationship between the resources and activities and the outputs and outcomes that result from that program.

(84) GAO-21-404SP, Program Evaluation: Key Terms and Concepts." n.d. Government Accountability Office. Accessed March 22, 2024. <https://www.gao.gov/assets/gao-21-404sp.pdf>.

(85) Colin Rhinesmith and Angela Siefer, Digital Inclusion: Outcomes-Based Evaluation(Evanston,IL, Benton Foundation, May 2017), [https://www.benton.org/sites/default/files/Digital percent20Inclusion percent20Outcomes percent20Based percent20Evaluation percent20report.pdf](https://www.benton.org/sites/default/files/Digital%20Inclusion%20Outcomes%20Based%20Evaluation%20report.pdf)

The Digital Opportunities Compass Situated Logic Model (Figure 3) integrates the measurable objectives required by IJJA into a logic model, showing a clear throughline from inputs (resources) to outcomes and impacts. The activities depend on the available resources and influence the expected outputs, outcomes, and impacts.

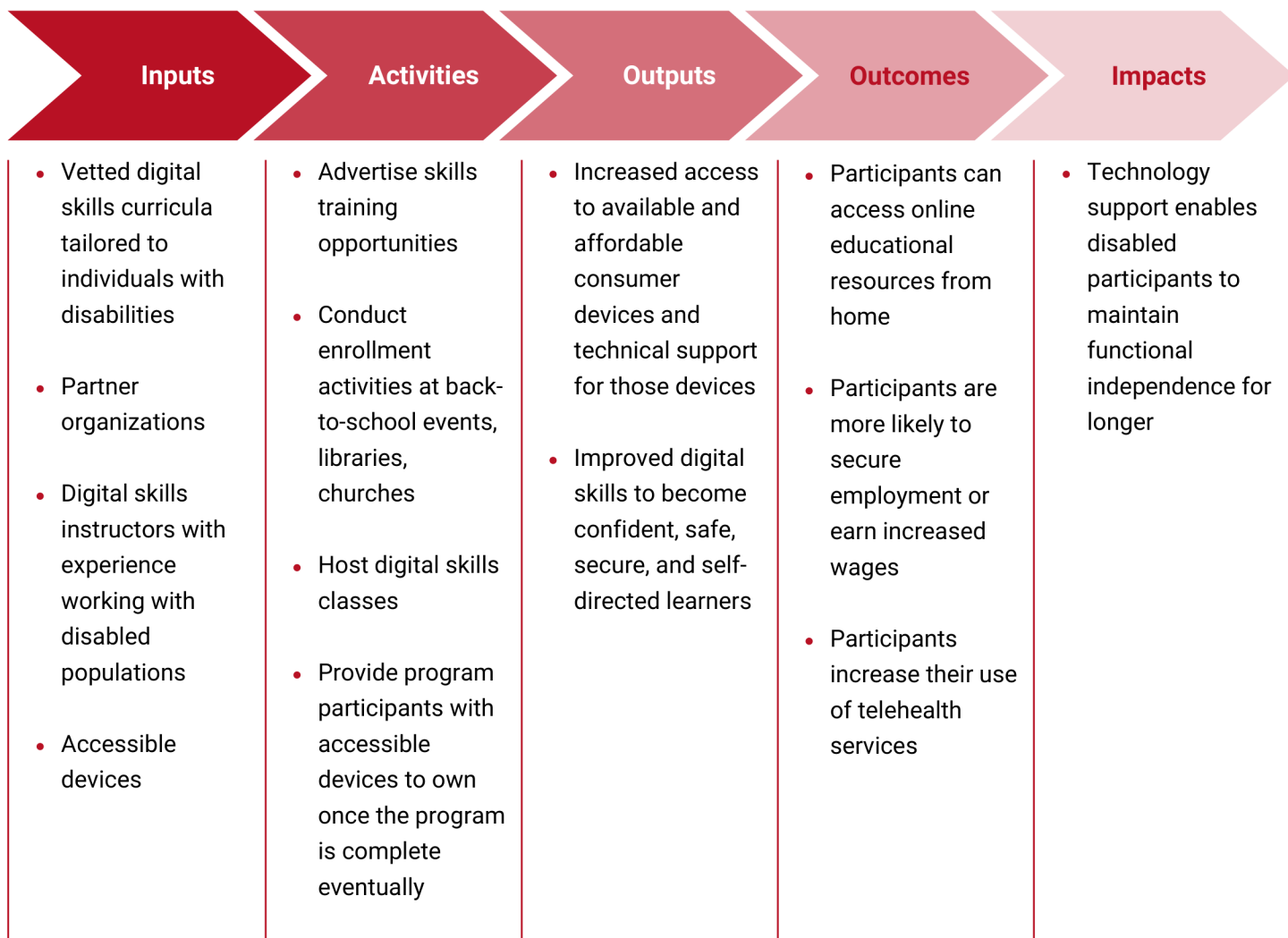
Figure 3



Colin Rhinesmith et al., 2023

A state may subgrant to a local organization to support one aspect of an implementation strategy. You can use a simpler logic model when a project has a smaller scope. For example, a subgrantee may obtain an award to implement a digital skills program for adults with disabilities. An adapted logic model for that program might look like **Figure 5**:

Figure 5



Supporting Subgrantee Data Collection and Evaluation



Subgrantees will also benefit from the knowledge, best practices, and information your performance measurement and program evaluation provide. They and other local partners can also enhance and partner with you in your measurement and evaluation efforts. Those doing digital inclusion work know it best and can best report on how well strategies work. States should approach grantees as data collection and evaluation partners, not strictly as a grantor-grantee reporting relationship.

States can support subgrantees and other local partners in the following ways:

- **Allocate direct funding for data collection and other subgrantee measurement and evaluation activities.** The time and effort needed to conduct these activities can cause a significant burden on grantees, particularly on smaller, under-resourced nonprofit organizations.
- **Provide clear but flexible reporting requirements.** And balance standardization with flexibility in reporting requirements, templates, and support.
- **Provide technical assistance to subgrantees** to help them develop evaluation plans and establish performance measurement goals and objectives that align with your plans' measurable objectives.
- **Share public data platforms with subgrantees.** If you created or are creating a public data dashboard, consider how to make it accessible to subgrantees for accessing and uploading data for performance measurement and program evaluation efforts.
- **Require grantees to compensate community members for their expertise.** Grantees should be required to demonstrate community engagement in shaping the standards of success for funded programs. Community members are local experts and should be compensated for their contributions. (Note: refer to the NOFO for guidance on implementing this as an allowable expense).

Program Measurement and Evaluation Support Capacity Building and Sustainability



Measurement and evaluation efforts can be translated into capacity building and longer-term sustainability to support the overall health of your state's digital inclusion ecosystem.

First Steps



- **Create a Digital Equity Data Hub:** States should establish and maintain a digital equity data gathering and analysis database that includes data collected during the planning process that informed the State's baseline measures, like (anonymized) qualitative and quantitative data, enables State staff or subgrantees to upload new program data easily, and allows for easy retrieval of reports or dashboards demonstrating the State's progress in each measurable objective category.

- **Establish a Process for Collecting Local Digital Equity Data from Local Partners:** If digital inclusion coalitions exist in your state, approach them to learn about current data collection efforts in process and better understand their capacity for working with digital equity data. If coalitions do not exist in your state, consider partnering with other organizations with experience collecting digital equity data at the local or state level or those with the resources and capacity for statewide data collection, such as universities and research institutes. Your process for collecting local digital equity data from local partners should specify who is responsible for collecting data, where and how it should be submitted, in what format, and when these activities will occur.
- **Establish a Process for Collecting Local Digital Equity Data from Local Partners:** If digital inclusion coalitions exist in your state, approach them to learn about current data collection efforts in process and better understand their capacity for working with digital equity data. If coalitions do not exist in your state, consider partnering with other organizations with experience collecting digital equity data at the local or state level or those with the resources and capacity for statewide data collection, such as universities and research institutes. Your process for collecting local digital equity data from local partners should specify who is responsible for collecting data, where and how it should be submitted, in what format, and when these activities will occur.

Desired Results/Impacts



- **Elevating and supporting the most impactful strategies.** Learning which digital inclusion strategies are the most effective at producing desired impacts is the most obvious and important benefit of a robust measurement and evaluation process; it allows States to refine plans in the coming years and decide where to direct future resources.
- **Field-wide knowledge sharing and capacity building.** Information collected and reported by States on the efficacy of your implementation strategies will also support the development of digital equity ecosystems at all levels. Local practitioners can learn how to improve their existing programs or which programs to replicate in their communities. States can share knowledge, and federal agencies and other national organizations can identify promising programs with the potential to scale.
- **Facilitating future research.** The digital inclusion field is still developing, and our understanding of digital equity needs, barriers, and practical solutions frequently needs more data. Gaining proficiency with performance measurement and program evaluation activities will build valuable datasets that allow for and help to inform areas for future research. Solid data from performance measurement and program evaluation efforts can also help organizations pinpoint areas for additional data collection. For example, evaluating outcomes for learners who participated in a digital skills and device distribution program may raise further questions about the ancillary benefits for the members of their household.

Sustainability

Build capacity and robust digital inclusion ecosystems

As shown throughout this manual, capacity building and digital inclusion ecosystem development should be significant goals and outcomes of your capacity grants. Investing in building capacity across different communities and organization types can ensure sustainability by protecting against shifts in funding and policy priorities.

When those who recognize the necessity of digital equity form relationships, partnerships, and coalitions, their message becomes stronger, and their advocacy ability becomes more powerful.

As with all things, this work must start locally. Local digital equity coalitions have attracted funding, impacted state-level decision-making, and collectively created robust digital inclusion ecosystems that benefit their community members. However, we also need state digital equity coalitions, which, when combined, create an even more impactful national digital equity movement. As previously mentioned, establishing robust digital inclusion ecosystems should be the primary goal of the capacity (implementation) grant program. Digital inclusion ecosystems provide support networks, opportunities for sharing best practices, coalition and community of practice building, and coordination opportunities needed to sustain the work beyond the DEA.

See the *Community Capacity Building Strategies* section for more information on digital inclusion coalitions.

Establish a Statewide Digital Equity Fund

A permanent, state digital equity fund housed at the State or with a partner organization like a community foundation would support long-term sustainability and ecosystem building. Depending on your structure, your office may not be the best home to raise and administer a fund of this nature; thus, partnering with an organization may be a good solution.





Spotlight: BAND-NC

In 2020, the Institute for Emerging Issues (IEI) at North Carolina State University hosted a statewide forum on digital inclusion. It announced a new fund called ‘Building a New Digital Economy in North Carolina’ or [BAND-NC](#). Donors included local telecommunications cooperatives, electric member cooperatives, foundations, and ISPs. IEI established a micro-grant program to distribute the funds, and applicants could apply for rapid response grants or funds to create digital inclusion plans. To date, BAND-NC has raised \$2.9 million and distributed 73 “rapid response” and “digital inclusion planning and implementation” grants covering 64 of North Carolina’s 100 counties.

Collect and Use Data to Attract Investment Partners

To successfully meet and expand the DEA’s digital inclusion efforts, we must continue to engage more investment partners. Gather and compellingly present program evaluation data so potential funders—industry partners, philanthropic organizations, and governments—fully understand the benefits of investing in digital inclusion programs, particularly for specific populations in specific circumstances.

See the *Performance Measurement and Program Evaluation* section above for more information.

Leverage Storytelling to Demonstrate Impact

Storytelling is essential for raising awareness, building momentum among constituents and stakeholders, fundraising, and sharing program successes with donors and policymakers. Share impact stories at a program launch and throughout the program to continue the momentum and generate interest and support. Storytelling may also create a sense of pride and ownership among communities participating in digital equity programs, which can help lead to longer-term success.

Identifying your audience is the first step in telling a story. While the story may be delivered to the general public, having a specific audience in mind can help refine your messaging and develop your most powerful points. Potential audiences may be community leaders and members, industry players, policymakers, and stakeholders.

Remember that a good story grabs people’s attention and keeps them engaged. Why does the story matter? What does it mean? Why should your audience care about the story? Specifically, look for unique aspects to tell, keep the language clear and concise, and include supporting details.

You can place advertisements or earn media attention in many types of media outlets for public storytelling, including:

- National, state, and local papers
- TV and radio stations
- Op-eds
- Direct mail
- Community events
- Podcasts
- Newsletters
- Social media



Use these outlets in various ways, and you can use one or more tactics/outlets simultaneously. For example, a storytelling campaign could include a press release to the media, a series of social media posts, a blog on the website of a community partner, and a piece in a newsletter of a supportive ally.

Ethical and equitable storytelling uses stories to empower people and bring communities together. When sharing other people’s stories, you are responsible to the person whose story you are telling. Before sharing their story, you should gain informed consent from the individual to tell their story, use their name, and get feedback on how you format/frame the story. When possible, individuals should be compensated for the time and experiences they shared with you during the storytelling.

Layer Strategies Across Programs

Rather than operating in silos, weave digital equity throughout existing funded programs, regardless of who is funding them, including but not limited to State or locally-operated workforce development, health, education, economic development, and entrepreneurship programs. Doing so will help enhance the sustainability of digital inclusion programs, leverage existing investments, and increase their potential impact. It will also help create more robust and healthier digital inclusion ecosystems statewide.

For example, you could partner with other state agencies or organizations identified in your asset mapping process to begin supporting the digital equity plan’s implementation, building capacity in their organizations to continue digital inclusion work beyond the plan’s implementation. If sister state agencies have existing grant programs, work with them to identify whether those programs could support digital inclusion programs or projects.

Utilize Other Federal Funding Sources

Other federal funding sources, such as the Coronavirus State and Local Fiscal Recovery Funds (SLFRF), support digital inclusion activities, among other eligible uses. Some programs may have multiple funding cycles with different eligible funding categories each time.

These funding streams may use broad language to characterize digital inclusion (e.g., ‘broadband adoption and use’) but may support various digital inclusion activities. Effective use of various federal funds allows States to maximize the reach of more narrowly tailored digital equity programs.

DEA Competitive Grants

The Digital Equity Competitive Grant Program is the other half of the Digital Equity Act programs. It provides \$1.25 billion in grants “to support efforts to achieve digital equity, promote digital inclusion activities, and spur greater adoption of broadband among covered populations.”⁸⁶ While there is no specific date for the start of the Competitive Grant Program, the DEA states explicitly, “Not later than 30 days after the date on which the Assistant Secretary begins awarding state formula funds and not before that date, the Assistant Secretary shall establish in the Department of Commerce the Digital Equity Competitive Grant Program.”⁸⁷ Thus, we expect the NOFO to open in Fall 2024 and NTIA to begin awarding grants by the end of 2024.

The Competitive Grant NOFO will provide more information and instruction for prospective grantees. Until then, the statute’s language can help individuals and organizations prepare for the program.

Figure 6⁸⁸

Digital Equity Competitive Grant Program	
Funding	Grant information
<ul style="list-style-type: none"> • \$1.25B in total funding • 5 percent set aside for NTIA • 5 percent set aside for Tribal entities • 1 percent set aside for Territories 	<ul style="list-style-type: none"> • Grants may require 10 percent match. • 4-year grant period • A maximum of 10 percent of funds may go towards administrative costs. • A maximum of 10 percent of funds may go towards program evaluation.

(86) Infrastructure Investment and Jobs Act, 47 USC § 1724 (2021)

(87) Infrastructure Investment and Jobs Act, 47 USC § 1724 (2021)

(88) Infrastructure Investment and Jobs Act, 47 USC § 1724 (2021)

Eligible Entities	Eligible Users
<p>Political subdivisions, agencies or instrumentalities of the State (state agencies) etc. including public housing</p> <p>Indian Tribes, Alaska Native entities, or Native Hawaiian entities</p> <p>Workforce development programs</p> <p>Foundations/corporations/institutions/associations that are:</p> <ul style="list-style-type: none"> • Nonprofits • Not a school <p>Community Anchor Institutions</p> <p>Local Educational Agencies</p> <p>Partnerships between any of the above</p> <p>A partnership between any of the above and an entity the Assistant Secretary says is in the public interest and isn't a school*</p> <p>*If any of the above entities were the Administering Entity for the State Capacity Grant Program, they are ineligible for the Competitive Program.</p>	<p>Digital inclusion activities that benefit covered populations</p> <p>Broadband adoption for covered populations for:</p> <ul style="list-style-type: none"> • Education • Employment opportunities <p>Training programs for basic, advanced, and applied skills</p> <p>Other digital inclusion workforce development programs</p> <p>Create new or operate existing public access computing centers for covered populations through Community Anchor Institutions</p> <p>Equipment, instrumentation, networking capability, hardware and software, or digital network technology for broadband services to Covered Populations at low or no cost</p> <p>Any other project or activity the Assistant Secretary approves</p>

As of this publication, the NOFOs for the Capacity Grant Program and the Competitive Grant Program are forthcoming.

BEAD

The Broadband, Equity, Access, and Deployment Program, otherwise known as the BEAD Program, is a block-grant program, providing grants in lump sums to States, the DC, and Territories based on a formula that hinges on the number of unserved and underserved households in a given state. The FCC defined those numbers and announced them at the White House on June 27th, 2023. States will subgrant most of their BEAD awards to ISPs to build broadband infrastructure for households without inadequate broadband service. BEAD funds can support digital inclusion activities if funds remain after states serve all of their unserved locations, underserved locations, and Community Anchor Institutions, and funds remain.

NTIA describes the DEA and BEAD programs as “complementary efforts aimed at a singular, unified objective of closing the digital divide.”⁸⁹

To establish a strong synergy and joint accountability between the two implementation strategies, we suggest the following overarching strategies:

1. **Continue Frequent Communication and Collaboration Between Teams:** a formalized, direct communication pathway will benefit those implementing BEAD and DEA strategies. We recommend that you consider continuing to meet frequently to ensure your implementation strategies align and work in tandem.
2. **Coordinate Data Collection for Program Evaluation and Reporting to NTIA:** coordinate the data collection and analysis so actions are consistent to ensure you save time and resources and measure the same things differently.

Pay particular attention to areas where your digital equity plan’s measurable objectives overlap with the BEAD goals and objectives to streamline data collection and avoid duplication for your performance measurement and program evaluation.

(89) NTIA, Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program, (NTIA-BEAD-2022,11.035) pg.641-646

Areas of Alignment

Affordability

According to the NOFO, any broadband project funded through the BEAD program is required to address affordability through two plans: 1) a middle-class affordability plan, and 2) a low-cost broadband service option.

Low-Cost Broadband Service Options

At a minimum, BEAD subgrantees must offer a low-cost broadband service option to ACP-eligible subscribers. However, States had broad flexibility in further defining the eligibility and plan criteria and determining how to embed them into their grant program. Some chose to apply standard criteria across the board to all grantees. Others incentivized the ISPs to develop high-quality plans through their application point system. The table below provides an overview of how the four States defined their low-cost broadband service option.

Some examples of low-cost options are:

State	Louisiana	Kansas	Vermont
How	All subgrantees required to offer low-cost option	BEAD applicants can receive up to 15 percent of total points available. Points allocated based on how well applicant meets affordability standards	All subgrantees
Price	\$30/month	\$90 per month or less for 1Gbps or \$60 or less for 100/20; Includes all taxes and fees	\$45/month
Speed Requirements	100 Mbps down/20Mbps upload. Up to 100ms latency	1Gbps or 100/20 service that consistently, verifiably, and reliably provides the designated speed. Up to 100ms latency	100/20 Mbps minimum, up to 100 ms latency

	<u>Louisiana</u>	Kansas	Vermont
Eligibility	ACP or successor program eligible households	None stated so ACP or successor program standards will apply.	ACP or successor program eligible households
Additional Plan Requirements	No data caps, installation, or other non-recurring charges, surcharges, or usage-based performance reductions	No data caps, surcharges, or usage-based throttling	No data caps,
Price Adjustment Mechanism	1x/year, based on Consumer Price Index (CPI), 3% max annually	None. Enforceable commitment to not raise the price for 5 years from the infrastructure deployment date	Must remain available for the useful life of the network. Prices can adjust with inflation.
Other	If provider proves \$30 is financially unviable, they may charge up to \$65/month	Must provide service installation within 10 calendar days of service request or services installation fee is waived	Must comply with state consumer protection and net neutrality standards

*As of the date of this publication, Louisiana is the only State whose plan is approved by NTIA. For up-to-date information, see [NTIA's BEAD progress tracker](#).

Middle-Class Affordability Plans

In addition to the low-cost plans, BEAD requires States to design middle-class affordability plans to ensure “high-quality broadband services are available to all middle-class families in the BEAD-funded network’s service area at a reasonable price.” The NOFO listed the following examples:

- Requiring BEAD subgrantees to offer low-cost, high-speed plans to all middle-class households in BEAD-funded areas.
- Providing consumer subsidies to lower costs for those who may not qualify for ACP or other programs.

- Promoting competition through a State regulatory authority.
- Allocating extra points to subgrantee applications with robust, affordable plans and/or open access networks.⁹⁰



Spotlight: Michigan's Middle-Class Plan Proposal

In its' BEAD Initial Proposal Volume II plan, [Michigan](#) proposed* a regional pricing standard to support middle-class families on the cusp of the federal poverty level, or Asset Limited, Income Constrained, Employed (ALICE) households, of which there are over a million in the State as of 2021. The State developed regional affordability benchmarks using the [ALICE income threshold standards](#) and identified price points ALICE households in those regions could afford. In some regions, the standard is \$75; in others, it is \$83 for minimum speeds of 100/20 Mbps and a maximum price increase of three percent per year. Michigan will award points to applicants based on their proposed prices as measured against these benchmark prices. If the proposal is less than the benchmark, they'll receive up to 30 points; if more than the benchmark, they can only receive up to five points. Plans \$10 or more than the regional benchmark will receive zero points.

*Michigan's proposal has not been approved as of the date of this publication.

Affordable Connectivity Program Participation Requirement

Under the program rules, Eligible Entities must require subgrantees (ISPs) to participate in ACP, any successor program, or any other household broadband subsidy programs and allow subscribers to apply the benefit to any plans provided by those subgrantees through BEAD-funded networks. As of the date of this publication, how States will fulfill this requirement if ACP is not continued or a⁹¹ successor program is established is unknown.

Extended Access in Multi-Tenant Buildings

Eligible Entities may use BEAD funding to deploy Wi-Fi infrastructure to multi-tenant buildings, including those in low-income, urban areas that either entirely or partially lack high-speed broadband access (100/20). However, the BEAD funding priority framework must still be followed. Before building Wi-Fi infrastructure,

(90) NTIA, Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program, (NTIA-BEAD-2022,11.035)

(91) NTIA, Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program, (NTIA-BEAD-2022,11.035) pg.66

Eligible Entities must determine that in-unit fiber projects are not feasible for a given location and Wi-Fi infrastructure is the best option. Eligible Entities must follow a priority framework to designate which buildings they will deploy Wi-Fi infrastructure.

Eligible Entities must prioritize residential buildings that:

1. Have a substantial share of unserved households OR
2. Are in locations in which the percentage of individuals with a household income at or below 150 percent of the poverty line applicable to a family of the size involved is higher than the national percentage of such individuals.⁹²

While the FCC prohibits landlords from entering into certain types of agreements with a given provider, landlords are legally permitted to limit their buildings to a single service provider.⁹³ This may determine what type of project is feasible for any given building.

BEAD Non-Deployment Funds

States can use BEAD funds for eligible non-deployment projects once they have finalized plans to deploy broadband services to the following:

- Unserved areas, which the IIJA defines as locations without any internet or less than 25 Mbps download/3 Mbps upload⁹⁴
- Underserved areas – defined as access to broadband at 25 Mbps download/3 Mbps upload but less than 100 Mbps/20 Mbps⁹⁵
- Connecting Community Anchor Institutions (CAIs) that do not yet have gigabit service

(92) NTIA, Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program, (NTIA-BEAD-2022,11.035) pg.41

(93) 47 C.F.R § 64.76 (2022)-Improving Competitive Broadband Access to Multiple Tenant Environments

(94) NTIA, Notice of Funding Opportunity Broadband Equity, Access, and Deployment Program, (NTIA-BEAD-2022,11.035); Infrastructure Investment and Jobs Act, 47 USC § 1702 (2021).

(95) Chris Velazco, "FCC calls 25 Mbps 'broadband' speed. The push is on to up it to 100." The Washington Post, July 19, 2022
<https://www.washingtonpost.com/technology/2022/07/19/fcc-broadband-new-definition-100mbps/>

The eligible non-deployment uses include but are not limited to, the list provided in Figure 7.⁹⁶

Figure 7

Eligible Non-Deployment Uses	Example
User training in cybersecurity, privacy, and other digital safety matters.	Cybersecurity classes offered by local libraries, job training programs with digital components, publicly offered university training courses or local economic development organizations.
Remote learning or telehealth services/facilities.	Libraries and community-based organizations can provide a dedicated, private space with the necessary technology to participate in remote learning or telehealth services. The space may or may not include dedicated staff to help participants set up their devices and get online.
Digital literacy/upskilling, from beginner to advanced levels.	See the Digital Skills Training section of this manual for examples.
Computer science, coding, and cybersecurity education programs.	K-12 STEM programs, libraries, and other community organizations are ideal partners for these programs.
Implementation of Eligible Entity's Digital Equity Plan.	See Chapter IV of this manual for additional examples.
Broadband sign-up assistance and programs that provide technology support.	Examples include Tech Trainers in local libraries and organizations like Ohio Connectivity Champions . See the Affordable Access to Broadband section of this manual for more examples.
Multi-lingual outreach to support adoption and digital literacy.	See Chapter V of this manual for examples.
Incarcerated individuals' education to promote pre-release digital literacy, job skills, online job acquisition skills, etc.	Examples include Brave Behind Bars , university courses designed specifically for the incarcerated population, and nonprofit programs like Operation New Hope's Ready 4 Work . See Chapter V of this manual for more examples.

(96) NTIA, Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program, (NTIA-BEAD-2022,11.035) pg.641-646

Digital navigators.	See Chapter IV of this manual for examples.
Direct subsidies for use toward broadband subscription, where the Eligible Entity shows the subsidies will improve affordability for the end user population (and to supplement, but not to duplicate or supplant, the subsidies provided by the Affordable Connectivity Program).	See Chapter IV of this manual for examples.
Costs associated with stakeholder engagement, including travel, capacity-building, or contract support.	Examples include covering travel costs for Eligible Entity staff to visit digital equity grantees. Providing hands-on technical assistance, training, or resources for digital inclusion practitioners and nonprofits to build capacity to obtain State or federal government grants. i.e., grant writing support, reporting support, etc. Contracts with subject matter experts to support capacity building and partner engagement activities.
Other allowable costs necessary to carry out programmatic activities of an award, not to include ineligible costs described in Section V.H.2 of the NOFO	Examples include convenings for your digital equity grantees/partners to foster/support the development of a digital inclusion community of practice (see Chapter III of this manual for more information) and Train-the-Trainer workshops/training for your digital equity grantees/partners (i.e., digital navigator best practices, digital inclusion coalition building, digital inclusion planning best practices, digital skills training best practices, etc.).

In its NOFO, NTIA recognized that broadband deployment projects often take longer to complete than other BEAD-eligible projects (i.e., non-deployment projects).⁹⁷ Because of this, as long as a plan is in place to serve all unserved and underserved locations within an Eligible Entity’s jurisdiction, that Eligible Entity may pursue non-deployment projects before or during the implementation of deployment projects.⁹⁸

Importantly, non-deployment projects are not subject to the same match requirements that deployment projects are, meaning if a State has non-deployment funds available, it could begin funding digital inclusion programs or projects without requiring sub-grantees to provide a match.⁹⁹

(96) NTIA, Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program, (NTIA-BEAD-2022,11.035) pg.641-646

(97) (98) NTIA, Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program, (NTIA-BEAD-2022,11.035)

(99) “Broadband Equity Access Deployment Program Frequently Asked Questions Version 5.0,” NTIA, November 2023, Section 9.6, https://broadbandusa.ntia.doc.gov/sites/default/files/2023-11/Broadband_Equity_Access_Deployment_Program_Frequently_Asked_Questions_Version_5.0.pdf

Other Programs

To supplement your capacity award, determine the eligible uses of other federal funds and align them with your implementation strategies and the resource gaps you identified in the project planning process. Other federal funding opportunities to leverage and align with your digital equity efforts include:

- The [Coronavirus State and Local Fiscal Recovery Funds \(SLFRF\)](#), established by the American Rescue Plan Act and managed by the US Department of Treasury, is a \$350B program that awards block grants to State and local governments for COVID-19 relief purposes, which include a variety of broadband and digital inclusion activities.
- [The Capital Projects Fund \(CPF\)](#) is a \$10B program managed by the US Department of Treasury that awards funds to States, Tribal entities, and Territories. It focuses on funding critical infrastructure projects, particularly those improving high-speed internet access.
- [The USDA's Rural Utilities Service \(RUS\)](#) helps bring essential infrastructure to rural areas. They provide loans and grants for broadband expansion and some digital inclusion purposes through programs like [Community Connect Grants](#) and [Distance Learning and Telemedicine Grants](#).

Also, consider other programs and funds that aren't dedicated solely to digital inclusion and broadband efforts whose missions and efforts align with digital equity goals, such as the [Appalachian Regional Commission \(ARC\)](#), the [Delta Regional Authority](#), the [Denali Commission](#), or the [Institute of Museum and Library Services \(IMLS\)](#).

Updating the Plan and Implementation Strategies

At some point during implementation—whether halfway through or in the last year, you will want to take what you've learned and accomplished to update your digital equity plan. Incorporate progress made since the publication of your initial State Digital Equity Plan, updated reporting on the current state of digital equity (i.e., community engagement, needs assessment, and asset mapping), and forward-looking comments to your plan's measurable objectives, targets, and implementation strategies. After all, the work you are undertaking now to implement your plan and Capacity Grant Program will actively change the state of digital equity in your state, leading to new, or at least revised, objectives, targets, and strategies that you will pursue.

Updating your State Digital Equity Plan will require time (at least a year), sufficient planning, staff capacity, and budget. However, unlike the initial version of the plan, you're not starting from scratch, and several of the

recommended best practices for implementing and evaluating your plan, discussed throughout this manual, can make your plan update easier.

- **Maintain ongoing community engagement and data collection** to ensure relevant data is available and that communities are aware of and engaged in the State’s digital equity efforts. Doing so will avoid having to start over and ramp up efforts for the plan update process.
- **Build the capacity of local digital equity ecosystems, particularly coalitions and local planning efforts.** Coalitions can assist in community engagement and data collection efforts as your plan update gets underway, and they can provide meaningful insights into which strategies are most effective. Information from local digital equity plans can directly inform most aspects of the State Digital Equity Plan update. See the Community Capacity Building Strategies section for more information on digital inclusion coalitions.
- **Align individual implementation strategy and subgrant to measurable objectives and targets** to simplify updating objectives and targets and determining which strategies to continue, expand, or abandon in the updated plan.

Public Comment

According to the statute, if you update the plan you propose or significantly amend the State Digital Equity Plan, the specific change or amendment must be made available for public comment. As with the original public comment period, the required 30-day public comment period is an additional opportunity for Administering Entities to continue meaningful engagement, build trust, and gather further input and expertise for your updated plan and implementation strategy. The public comment period should not be the only time Administering Entities interact with communities—instead, it should be a gut check. If you co-created the original plan with the covered populations, stakeholders, and partners, then the updated plan should already reflect barriers they identified to digital equity and solutions. We recommend you follow and refine the best practices you developed in the original public comment period.

Here are some best practices for public comment periods:

- **Learn from your first go-round.** You already had one public comment period during the initial development of the plan. What did you learn? What solicited the most helpful feedback? How did the community engage best?
- **Distribute the updated plan** via multiple modes of communication to garner as much feedback as possible - print, online, social media, etc.

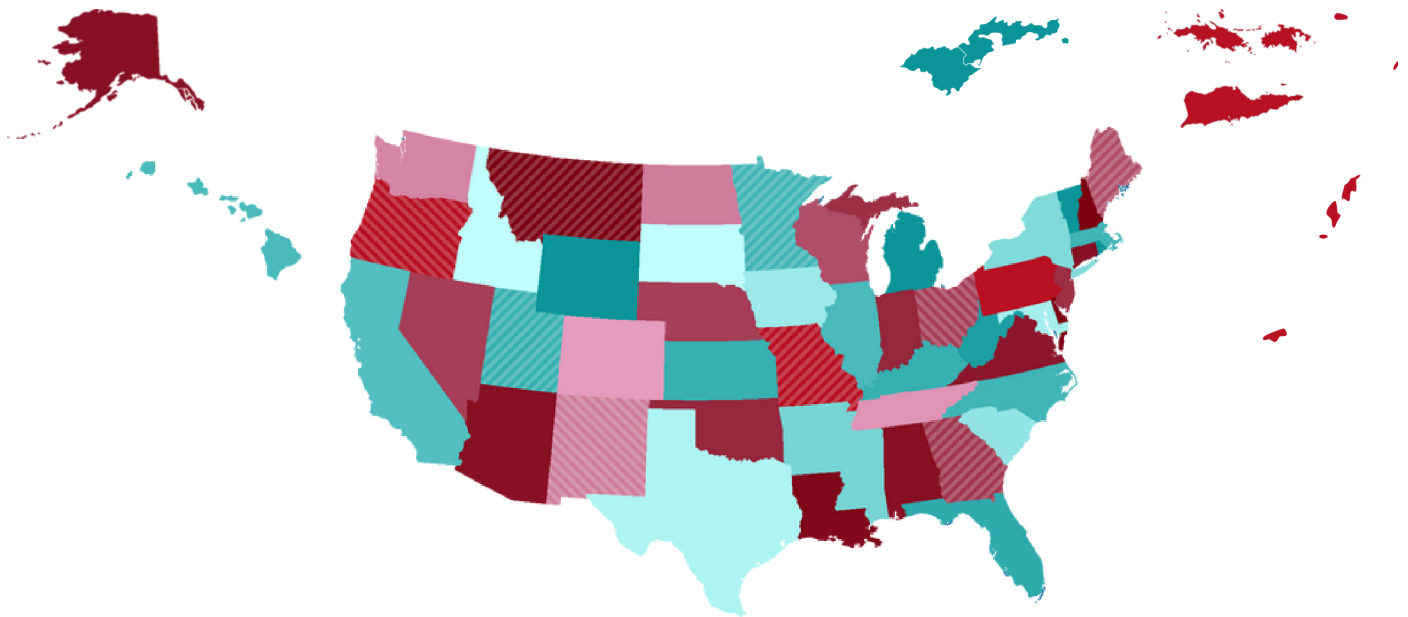
- **Seek community feedback and input** via outlets or means they are accustomed to and prefer using. For example, many Alaskan Natives regularly use and interact with each other through Facebook. Identify platforms and opportunities like this to solicit ongoing feedback from distinct audiences.
- **Provide multiple ways people can submit feedback.** Attend meetings and allow participants to submit feedback verbally and via a written or digital form.
- **Engage Tribal Entities differently,** deferring to their Sovereignty. You should ensure Tribes receive the updated plan with plenty of time to provide comments, feedback, and clear instructions on how to do so. In addition, Administering Entities should provide an opportunity for Tribal Entities to approve the plan via a formal letter (on Tribal letterhead) or a signatory process.

Conclusion

From your neighbor to the President of the United States, each of us has a role in closing the digital divide and ensuring every US resident—from Alaska to American Samoa—can thrive in today's digital world. As Congress rightly identified, States, Territories, and the District of Columbia are essential leaders and partners in advancing digital inclusion work and meeting their residents' needs. The Digital Equity Act programs provide us with the first real chance to collectively and holistically address the underlying challenges and barriers created by the digital divide. But they're just the start. We'll need you, your leadership, dedication, support, innovation, convening power, and partnership for years to come. We hope this manual supports you as you work toward our collective goal of digital equity. Because, as Congress said—

“achieving digital equity is a matter of social and economic justice and is worth pursuing.”

So, let's pursue it together.



Appendices

From your neighbor to the President of the United States, each of us has a role in closing the digital divide and ensuring every US resident—from Alaska to American Samoa—can thrive in today's digital world. As Congress rightly identified, States, Territories, and the District of Columbia are essential leaders and partners in advancing digital inclusion work and meeting their residents' needs. The Digital Equity Act programs provide us with the first real chance to collectively and holistically address the underlying challenges and barriers created by the digital divide. But they're just the start. We'll need you, your leadership, dedication, support, innovation, convening power, and partnership for years to come. We hope this manual supports you as you work toward our collective goal of digital equity. Because, as Congress said—

Appendix A—DEA Capacity Grant Language



NOTE: The use of funds for the Capacity Grant Program must comply with the requirements outlined in the Digital Equity Act and the requirements outlined in the Notice of Funding Opportunity (NOFO). Appendix A includes excerpts discussing the Capacity Grant Program requirements from the Digital Equity Act (a section of the Infrastructure Investment and Jobs Act). Refer to the NOFO for additional requirements.

(d) STATE CAPACITY GRANTS.—

(1) **IN GENERAL.**—Beginning not later than two years after the date on which the Assistant Secretary begins awarding planning grants under subsection (c)(3), the Assistant Secretary shall each year award grants to eligible States to support—

- (A) the implementation of the State Digital Equity Plans of those States; and
- (B) digital inclusion activities in those States.

(2) **APPLICATION.**—A State that wishes to be awarded a grant under this subsection shall, not later than 60 days after the date on which the notice of funding availability with respect to the grant is released, submit to the Assistant Secretary an application, in a format to be determined by the Assistant Secretary, that contains the following materials:

- (A) A description of the entity selected to serve as the Administering Entity for the State, as described in subsection (b).
- (B) The State Digital Equity Plan of that State, as described in subsection (c).

- (C) A certification that the State, acting through the Administering Entity for the State, shall—
 - (i) implement the State Digital Equity Plan of the State; and
 - (ii) make grants in a manner that is consistent with the aims of the Plan described in clause (i).
- (D) The assurances required under subsection (e).
- (E) In the case of a State to which the Assistant Secretary has previously awarded a grant under this subsection, any amendments to the State Digital Equity Plan of that State, as compared with the State Digital Equity Plan of the State previously submitted.

(3) AWARDS.—

(A) AMOUNT OF GRANT.—

- (i) **FORMULA.—**Subject to clauses (ii), (iii), and (iv), the Assistant Secretary shall calculate the amount of a grant awarded to an eligible State under this subsection in accordance with the following criteria, using the best available data for all States for the fiscal year in which the grant is awarded:
 - (I) 50 percent of the total grant amount shall be based on the population of the eligible State in proportion to the total population of all eligible States.
 - (II) 25 percent of the total grant amount shall be based on the number of individuals in the eligible State who are members of covered populations in proportion to the total number of individuals in all eligible States who are members of covered populations.
 - (III) 25 percent of the total grant amount shall be based on the comparative lack of availability and adoption of broadband in the eligible State in proportion to the lack of availability and adoption of broadband of all eligible States, which shall be determined according to data collected from—
 - (aa) the annual inquiry of the Federal Communications Commission conducted under section 706(b) of the Telecommunications Act of 1996 (47 U.S.C. 1302(b));
 - (bb) the American Community Survey or, if necessary, other data collected by the Bureau of the Census;
 - (cc) the NTIA Internet Use Survey, which is administered as the Computer and Internet Use Supplement to the Current Population Survey of the Bureau of the Census; and
 - (dd) any other source that the Assistant Secretary, after appropriate notice and opportunity for public comment, determines to be appropriate.
- (ii) **MINIMUM AWARD.—**The amount of a grant awarded to an eligible State under this subsection in a fiscal year shall be not less than 0.5 percent of the total amount made available to award grants to eligible States for that fiscal year.

- (iii) **ADDITIONAL AMOUNTS.**—If, after awarding planning grants to States under subsection (c)(3) and capacity grants to eligible States under this subsection in a fiscal year, there are amounts remaining to carry out this section, the Assistant Secretary shall distribute those amounts—
 - (I) to eligible States to which the Assistant Secretary has awarded grants under this subsection for that fiscal year; and
 - (II) in accordance with the formula described in clause (i).
 - (iv) **DATA UNAVAILABLE.**—If, in a fiscal year, the Commonwealth of Puerto Rico (referred to in this clause as “Puerto Rico”) is an eligible State and specific data for Puerto Rico is unavailable for a factor described in subclause (I), (II), or (III) of clause (i), the Assistant Secretary shall use the median data point with respect to that factor among all eligible States and assign it to Puerto Rico for the purposes of making any calculation under that clause for that fiscal year.
- (B) **DURATION.**—With respect to a grant awarded to an eligible State under this subsection, the eligible State shall expend the grant funds during the 5-year period beginning on the date on which the eligible State is awarded the grant funds.
- (C) **CHALLENGE MECHANISM.**—The Assistant Secretary shall ensure that any eligible State to which a grant is awarded under this subsection may appeal or otherwise challenge in a timely fashion the amount of the grant awarded to the State, as determined under subparagraph (A).
- (D) **USE OF FUNDS.**—The Administering Entity for an eligible State to which a grant is awarded under this subsection shall use the grant amounts for the following purposes:
- (i) (I) Subject to subclause (II), to update or maintain the State Digital Equity Plan of the State.
 - (II) An Administering Entity for an eligible State to which a grant is awarded under this subsection may use not more than 20 percent of the amount of the grant for the purpose described in subclause (I).
 - (ii) To implement the State Digital Equity Plan of the State.
 - (iii) (I) Subject to subclause (II), to award a grant to any entity that is described in section 60305(b) and is located in the eligible State in order to— (aa) assist in the implementation of the State Digital Equity Plan of the State; (bb) pursue digital inclusion activities in the State consistent with the State Digital Equity Plan of the State; and (cc) report to the State regarding the digital inclusion activities of the entity. (II) Before an Administering Entity for an eligible State may award a grant under subclause (I), the Administering Entity shall require the entity to which the grant is awarded to certify that— (aa) the entity shall carry out the activities required under items (aa), (bb), and (cc) of that subclause; (bb) the receipt of the grant shall not result in unjust enrichment of the entity; and (cc) the entity shall cooperate with any evaluation— (AA) of any program that relates to a grant awarded to the entity; and (BB) that is carried out by or for the Administering Entity, the Assistant Secretary, or another Federal official.
 - (iv) (I) Subject to subclause (II)

to evaluate the efficacy of the efforts funded by grants made under clause (iii). (II) An Administering Entity for an eligible State to which a grant is awarded under this subsection may use not more than 5 percent of the amount of the grant for a purpose described in subclause (I). (v)(I) Subject to subclause (II), for the administrative costs incurred in carrying out the activities described in clauses (i) through (iv).

Appendix B—Definitions Key Terms and Definition

Covered Populations, as Defined in the Digital Equity Act¹⁰⁰

“The term ‘covered populations’ means—

- (A) individuals who live in covered households;
- (B) aging individuals;
- (C) incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility
- (D) veterans;
- (E) individuals with disabilities;
- (F) individuals with a language barrier, including individuals who—
 - (i) are English learners; and
 - (ii) have low levels of literacy;
- (G) individuals who are members of a racial or ethnic minority group; and
- (H) individuals who primarily reside in a rural area.”

Covered Household, as Defined in the Digital Equity Act

“The term ‘covered household’ means a household, the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census.”

Digital Equity, as Defined by NDIA and the Digital Equity Act

Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.

(100) Infrastructure Investment and Jobs Act § 60302(7), 47 USC § 1702 (2021).

Digital Inclusion, as Defined by the Digital Equity Act

Digital inclusion refers to the activities necessary to ensure that all individuals in the United States have access to and use of, affordable Information and Communication Technologies (ICTs). This includes five elements: (1) affordable, robust broadband internet service; (2) internet-enabled devices that meet the needs of the user; (3) access to digital literacy training; (4) quality technical support; and (5) applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration. Digital inclusion must evolve as technology advances. Digital inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology.

Digital Literacy

NDIA recommends the American Library Association’s definition of “digital literacy” via their Digital Literacy Task Force:

Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills. A digitally literate person:

- Possesses the variety of skills – technical and cognitive – required to find, understand, evaluate, create, and communicate digital information in a wide variety of formats;
- Is able to use diverse technologies appropriately and effectively to retrieve information, interpret results, and judge the quality of that information;
- Understands the relationship between technology, lifelong learning, personal privacy, and stewardship of information;
- Uses these skills and the appropriate technology to communicate and collaborate with peers, colleagues, family, and on occasion, the general public; and
- Uses these skills to actively participate in civic society and contribute to a vibrant, informed, and engaged community.

Digital Divide

The digital divide is the disparity in access to, knowledge of, and ability to use digital tools and technology.

Digital Inclusion Ecosystem

A digital inclusion ecosystem is a combination of programs and policies that meet a geographic community’s unique and diverse needs. Coordinating entities work together in an ecosystem to address all aspects of the digital divide, including affordable broadband, devices, and skills.

Appendix C–NDIA Resources

- [State Digital Equity Plan Toolkit](#) with the following:
 - General recommendations to consider for the entire planning process, such as the overlapping of the Digital Equity (DEA) plan and the Broadband Equity, Access, and Deployment program (BEAD)
 - Suggested outline for your plan
 - Tactical recommendations for building a digital equity plan, section by section
- [“Defining a State Digital Equity Office”](#) NDIA white paper with the following:
 - Support in defining a State Digital Equity Office, expectations, and responsibilities
 - Advice on states' unique position to lead cross-sector, cross-departmental, multi-faceted digital inclusion activities that impact the entire state
- [NDIA broad Listserv](#), which provides
 - Communication with all of NDIA’s Affiliates—over 1,300 in 50 states, the District of Columbia, Puerto Rico, and the US Virgin Islands.
- [NDIA Community Calls](#)
 - Community Calls occur on the third Friday of every month at 1 pm (ET)
 - We share national resources and on-the-ground strategies for providing digital inclusion services. Registration is required. [Register here.](#)
- [Digital Inclusion 101 webinars where NDIA:](#)
 - [Shares digital inclusion updates and resources. It provides shared definitions and information about the field.](#)
 - [Supports and resources for digital inclusion practitioners](#)
- [The Digital Navigator Model](#)
 - [The digital navigator model is a replicable framework for organizations already providing digital inclusion services or those entering the digital inclusion space to ensure that their constituents can connect with them online.](#)
 - [NDIA is available to consult about adapting the model to your community’s needs and existing social services and provide digital navigator training.](#)
- [Coalition Guidebook](#)
 - [The Digital Inclusion Coalition Guidebook provides an in-depth look at successful models and recurring themes across coalitions, accompanied by best practices, lessons learned, and specific recommendations from the field. Some of the key themes covered in the guidebook include how coalitions form and are structured, the keys to successful coalition operations, and ways coalitions adapt over time to maintain effectiveness and sustainability.](#)

- [Advisory services via direct contract. Contact Amy Huffman \(amy@digitalinclusion.org\) for further information.](#)

Appendix D—NDIA Resources

NDIA Resources for State Digital Equity Administering Entities

- NDIA State Digital Equity Cohort

Contact: shauna@digitalinclusion.org, ryan@digitalinclusion.org or amy@digitalinclusion.org

The NDIA State Digital Equity Cohort is a closed group for peer-to-peer learning for the staff of the Digital Equity Act (DEA) Administering Entities (i.e., State, Territories, and the District of Columbia) leading the digital equity planning process. Members have access to our bi-monthly meetings on the first and third Thursdays of the month, access to State DE Cohort shared resources, NDIA affiliate resources, and more. We facilitate, provide an agenda, share information and best practices, and create welcoming spaces for cohort members to address their planning status and questions.

State, Territories, and District of Columbia Administering Entities that wish to join this group can complete this [State Digital Equity Cohort Application form](#). The gathered information in the form allows us to aid and connect members and automatically grant members access to specific State DE Cohort and NDIA resources.

Perks of Joining NDIA's State Digital Equity Cohort

- Bi-monthly meetings
 - Closed to State/Territory Administering Entities where members get to pose agenda items and together discuss hiccups, improvements, and solutions in their DEA plans
 - Automatically invited when added to the cohort
- Access to the [NDIA State DE Cohort shared folder](#) with the following:
 - [Previous agenda and notes](#)
 - [Recordings of meetings showcasing presentations](#)
 - [Member updatable shared documents](#) of progress, awarded funding, and State/Territory Administering Entity information sharing
- Specific [NDIA State Digital Equity Cohort Listserv](#) access
 - Members use this private listserv to communicate safely outside the bi-monthly online meetings
 - The listserv was established as an independent system to allow cohort members to support each other, ask questions, and address any issues that arise during our planning progress
 - Members can utilize this system to seek assistance and find solutions within our cohort.



STATE DIGITAL EQUITY IMPLEMENTATION MANUAL

2024

