

# Growing Healthy Digital Equity Ecosystems During COVID-19 and Beyond

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# Executive Summary

This report presents findings from a survey of individuals representing a diverse group of organizations across the United States that are part of formal, informal, or emerging digital inclusion coalitions. The purpose of this study is to better understand the role these coalitions have played in supporting digital equity ecosystems in their communities during the magnified challenges of the COVID-19 pandemic. The findings should be of interest to local communities, philanthropic organizations, and policymakers in the United States addressing the digital equity challenges related to distance learning, telehealth, economic inequality, social isolation, and racial injustice.

In this report, we present a snapshot of what our survey respondents described as their most significant challenges and innovative responses to the pandemic. The summary of our main findings are as follows:

- 1. Digital inclusion coalitions established before the pandemic have responded to COVID-19 by focusing their efforts on information and resource sharing, networking, data collection, raising awareness about digital inequality, and developing new tactics to promote digital equity.** These coalitions have worked to coordinate investments and develop new funding opportunities to support their existing work such as providing access to computers, low-cost internet service, and Wi-Fi hotspots for more vulnerable members of their communities. In our survey, 29% of respondents indicated that they were part of digital equity coalitions that formed in response to the COVID-19 pandemic. These new and emerging coalitions have organized others in their communities, focusing on ways to provide access to the internet, digital devices, and digital literacy training for low-income individuals and families. Respondents described several factors that made it possible to respond in these ways, including: their existing relationships and collaborations; awareness of existing policy constraints; capacity and knowledge about how to best engage with key stakeholders (both inside and outside local government); as well as years of existing digital inclusion experience. Others cite new funding opportunities as key support for their response, with 52% of respondents indicating that their organization or community used CARES Act funding for digital inclusion activities.
- 2. The pandemic has introduced several new challenges for digital inclusion coalitions and has magnified a number of existing challenges.** These challenges include obstacles to getting sufficient buy-in from internet service providers to support their efforts, as well as barriers to working with local elected officials to make free and/or low-cost internet access a policy priority. Some coalitions cite the lack of infrastructure in rural areas, as well as insufficient resources, staff time, and funding to address the impacts of the COVID-19 pandemic. Additionally, respondents described social distancing rules as a challenge when many of their digital inclusion activities rely on in-person instruction and devices. Several respondents highlighted the challenge of balancing responses to the urgent, short-term needs that the pandemic presents—such as hotspot and device distribution for K-12 digital learning—with long-term, sustained investment in broadband access, adoption, and literacy.
- 3. Digital inclusion coalitions are finding ways to creatively solve problems to address their communities' digital needs.** These solutions include developing new and expanded partnerships, including partnering with community members; piloting new initiatives; collaboratively seeking new sources of funding; pivoting to online training in digital skills training and virtual tech help; sharing information and resources with their communities; and offering socially

distanced, masked, and outdoor events. In addition, *there are many new stakeholders interested in digital inclusion initiatives than ever before, especially K-12 schools, health care providers, and local nonprofits.* Two of our respondents indicated the importance of making connections between the COVID-19 pandemic, digital inequality, and racial injustice when developing digital equity solutions. Respondents indicated that several new tactics will continue even when the health crisis ends, including: virtual learning services; development of digital equity plans; expanding broadband infrastructure; raising awareness of digital equity work; prioritizing device accessibility and training in digital literacy; and promoting data-collection efforts.

- 4. Cities, counties, states, and national organizations have also played key roles in supporting local digital equity ecosystems.** Cities, counties, and states have played significant roles in addressing digital inequality during the pandemic, such as making funds available for internet and device access, including free community Wi-Fi access points and free or discounted in-home internet access. Cities and counties have also worked with their public libraries to expand Wi-Fi hotspot availability. Statewide and multi-state coalitions have focused their efforts on the following: providing maps of free internet locations; compiling lists of low-cost internet deals; providing recommendations for COVID-19 task forces; creating online-resource webpages; informing people about digital equity; offering information on funding opportunities and state actions; and collaborating to share knowledge and resources. National nonprofits have worked to address digital inequality in communities across the United States through their work with local digital inclusion coalitions to promote literacy training in digital literacy, as well as device refurbishing and reuse.

# Introduction

The impacts of the COVID-19 pandemic have been devastating worldwide. As of September 2020, more than 28 million global cases have been confirmed and more than 921,000 deaths worldwide have been recorded since January 2020, according to the [Johns Hopkins Coronavirus Resource Center](#). In the United States alone, more than 200,000 Americans have died from the pandemic and, as we know from mainstream media reports, the coronavirus has disproportionately impacted poor communities and communities of color. According to [The COVID Racial Data Tracker](#), Black people in the United States are dying at 2.4 times the rate of White people. More than 37,000 Black lives have been lost to COVID-19, and “Black people account for 21% of COVID-19 deaths where race is known.” The Racial Data Tracker shows that Hispanic or Latino and American Indian or Alaska Native people have also been disproportionately impacted by the coronavirus.

In addition, the COVID-19 pandemic has negatively impacted non-White poor communities at much higher rates. For example, in an [article](#) written by researchers at the New York University Grossman School of Medicine and published in the *Journal of the American Medical Association*, the authors found that in those U.S. counties with higher rates of poverty, “substantially non-White populations had an infection rate nearly 8 times that of counties with substantially White populations.”

At the same time, research on digital inequalities in the United States has shown consistently over the years that poor communities and communities of color often struggle the most with the high cost of internet access. The [Pew Research Center](#) reported in 2019 that “Black and Hispanic adults remain less likely than whites to say they own a traditional computer or have high-speed internet at home.” Last year, Howard and Morris found in their report on the [State of Internet Service on Tribal Lands](#) that government data reveal tribal lands to be the least connected in the country. Based on their research findings, [Rhinesmith, Reisdorf, and Bishop](#) argued that if we are to develop effective and meaningful solutions to digital inequality, it’s critically important for policymakers, practitioners, and researchers to understand the local, cultural drivers and social barriers to broadband adoption in low-income communities.

Because of social distancing rules and other safety measures enacted during the pandemic, access to broadband has become more important than ever. A [survey](#) conducted in April by the Pew Research Center found that 53% of U.S. adults considered the internet to be essential to them during the pandemic. In a more recent [study](#) by Pew, researchers found that 59% of low-income parents were concerned about their children’s ability to complete online schoolwork at home. Others have [argued](#) that for tribal communities impacted by COVID-19, broadband access may be a matter of life and death.

## Digital Equity Ecosystems

In this report, we introduce the concept of *Digital Equity Ecosystems* as a way to more deeply understand and build upon these local, cultural drivers and social barriers to broadband adoption as a starting point for promoting digital equity, as well as to understand how digital inclusion coalitions have responded to the triple challenges of the COVID-19 pandemic, racial injustice, and digital inequality. The [National Digital Inclusion Alliance \(NDIA\)](#) defines “digital equity” as “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.”

We define *Digital Equity Ecosystems* as interactions between individuals, populations, communities, and their larger sociotechnical environments that all play a role in shaping the digital inclusion work in local communities to promote more equitable access to technology and social and racial justice. This way of thinking about digital inequalities can also assist researchers, practitioners, and policymakers in seeing the creative and innovative community-based solutions that have emerged in response to the COVID-19 pandemic, particularly in poor communities and communities of color that are disproportionately impacted by the coronavirus.

Digital Equity Ecosystems are the interactions between individuals, populations, communities, and their larger sociotechnical environments that all play a role in shaping the digital inclusion work in local communities to promote more equitable access to technology and social and racial justice.

## Digital Inclusion Coalitions

To support the growth and development of digital equity ecosystems, communities across the United States have been organizing digital inclusion coalitions since long before the COVID-19 pandemic appeared. As NDIA has explained, digital inclusion coalitions often include “libraries, community-based organizations, local governments, housing authorities and others in cities across the country [that] have organized to cooperatively address equitable access and use of communication technologies.” These coalitions play a key role in promoting and supporting healthy digital equity ecosystems across the United States. We also believe they will be integral to understanding how to best support those working to advance equitable technology access and social and racial justice in our communities long after the pandemic ends.

Knowing the work of formal, informal, and emerging digital inclusion coalitions and how they responded to the COVID-19 pandemic will assist policymakers on local, state, and national levels to develop strategies to address the enormous challenges facing many communities in gaining access to high-speed, reliable internet access, digital devices, and training in digital literacy. We examine the innovative ways in which coalitions have responded to the digital equity needs of the community, including how they pivoted to address heightened and changing needs during the pandemic. Additionally, we examine how some of these shifts in tactics and programming may remain even beyond the current health crisis.

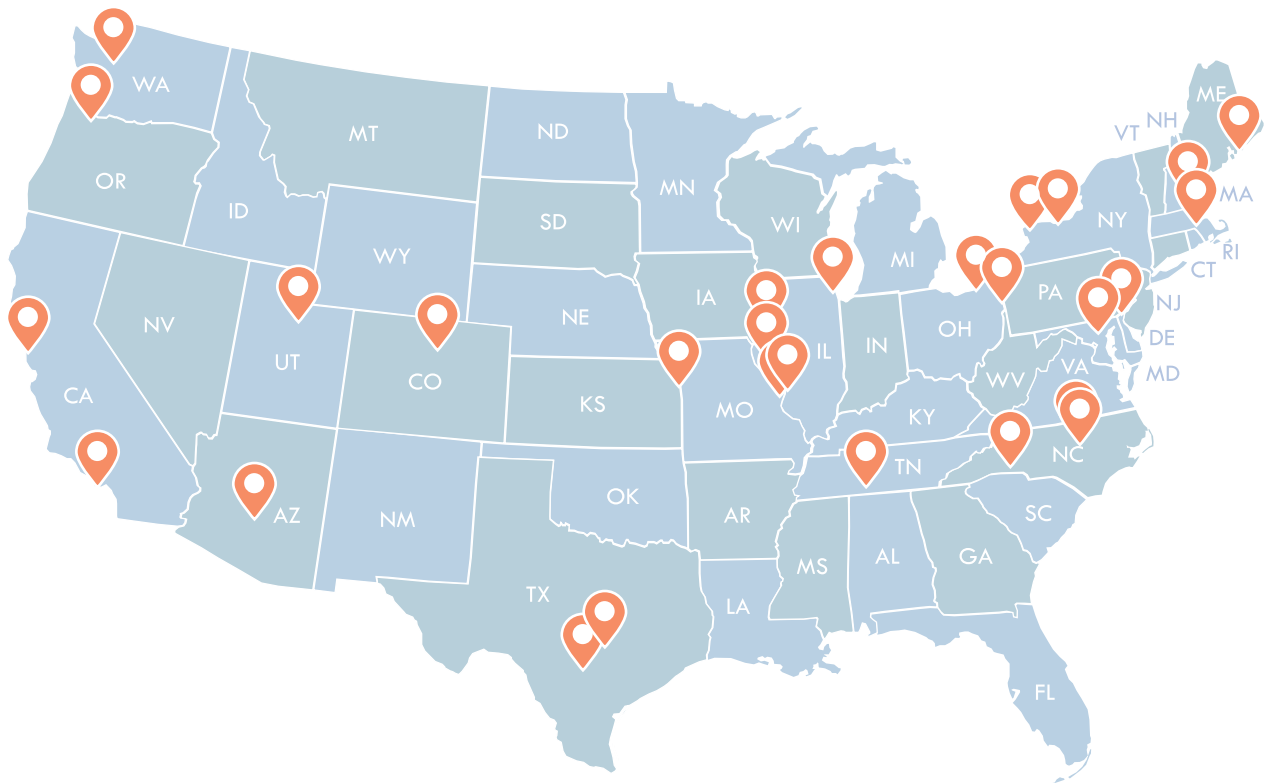
Our findings should also be helpful for private foundations and other funders interested in learning about the digital equity needs of local communities, as well as for practitioners responding to the digital equity challenges related to the COVID-19 pandemic, and for those interested in the work of other communities.

# Research Overview

This report seeks to update findings from the 2016 report [Digital Inclusion and Meaningful Broadband Adoption Initiatives](#), written by Colin Rhinesmith and published by the Benton Foundation (now known as the Benton Institute for Broadband & Society). That research focuses on the work of digital inclusion organizations and their community partners and on the low-income residents they serve as the lens for understanding and measuring meaningful broadband adoption. It highlights how digital inclusion organizations view their role within a broader ecology of social and technical support to help individuals and families adopt broadband regardless of location. Since that report was written, several new formal and informal digital inclusion coalitions have emerged.

We now seek to provide a snapshot of digital equity work in communities in response to the COVID-19 pandemic. Participants were recruited through NDIA, using a Simmons University Institutional Review Board–approved recruitment script. NDIA provided access to a large umbrella of digital equity stakeholders, including practitioners, many of whom are involved in digital equity coalitions. As a national network of local community organizations, it constituted an ideal space to recruit individuals with specific expertise in digital equity who could respond about their experiences during the pandemic.

The survey was open for approximately one week during the end of August and early September 2020. We were particularly interested in responses from individuals representing organizations involved with digital inclusion coalitions in their communities. A total of 55 responses were gathered from individuals representing a wide range of organizations located in the United States. In our final analysis, we looked closely at the responses from 36 individuals who represented formal, informal, or emerging digital inclusion organizations. The types of organizations and the populations served (diagram 1) also include representatives from statewide and national organizations. The map shown here presents an overview of where the survey respondents' organizations were located.



## Individual Organizational Profiles

The individual organizations represented by the survey respondents in this study together serve a diverse array of constituents, as diagram 1 shown here reveals.

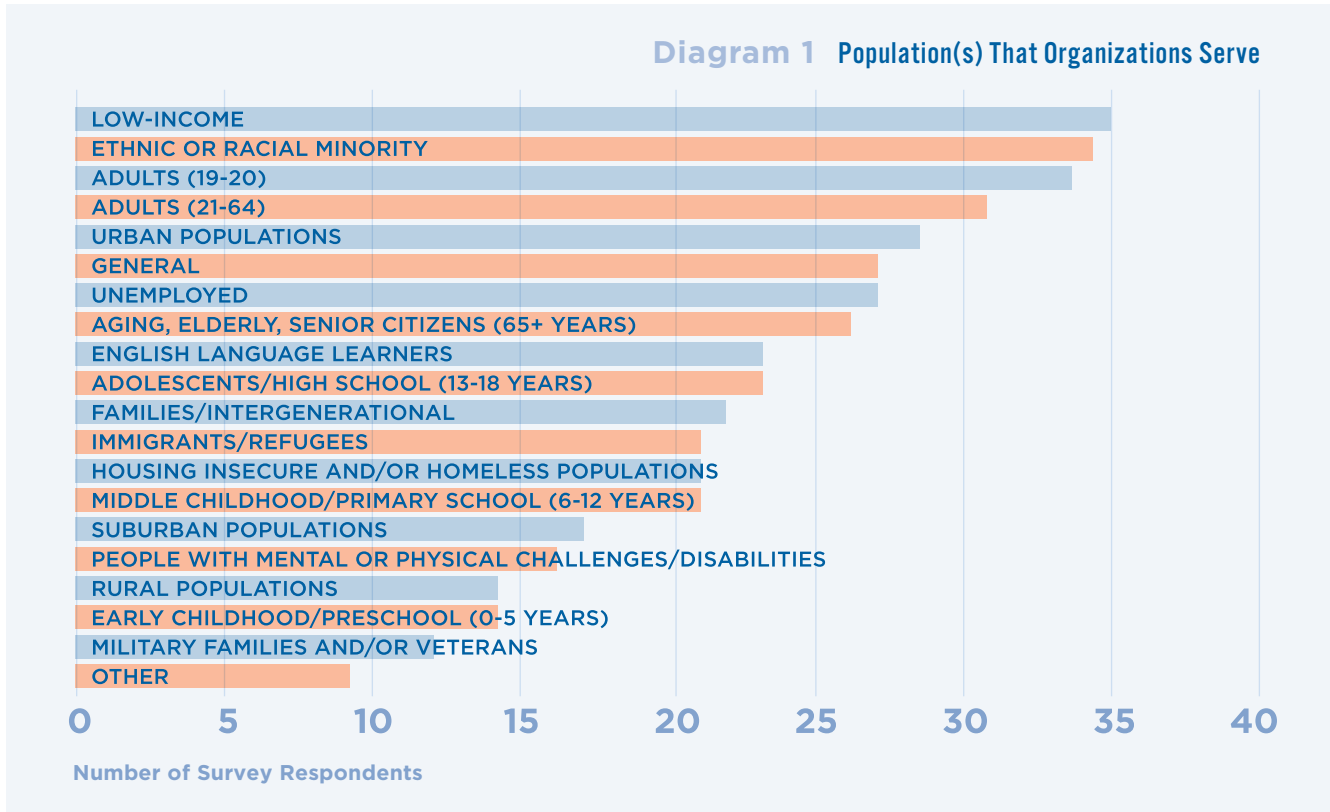
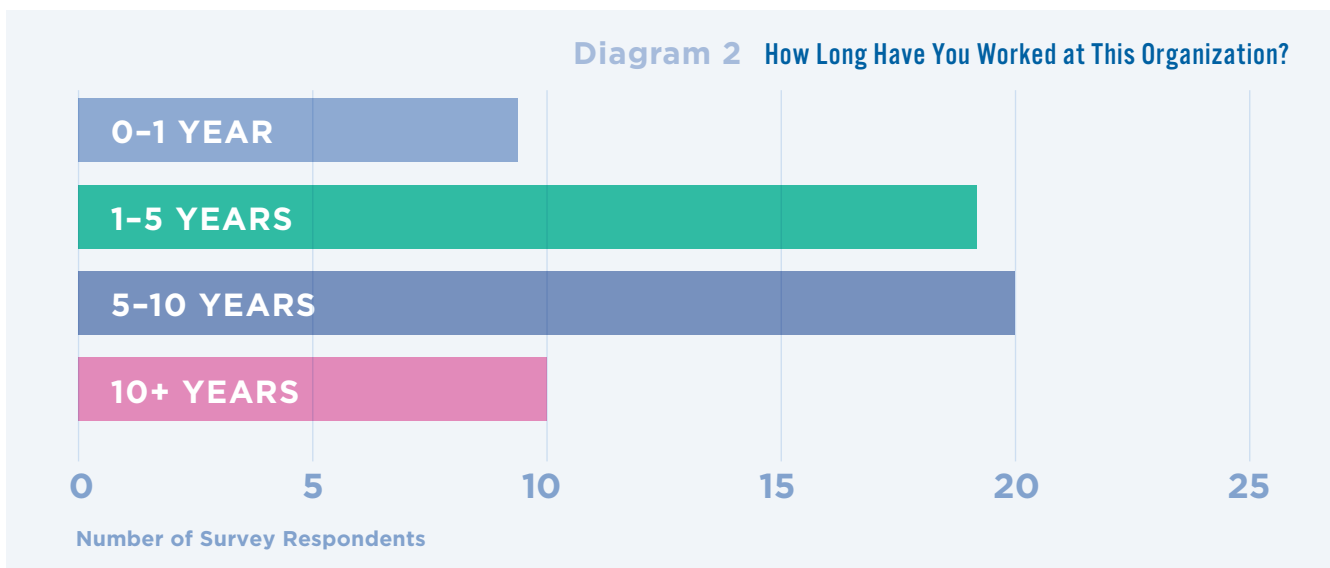
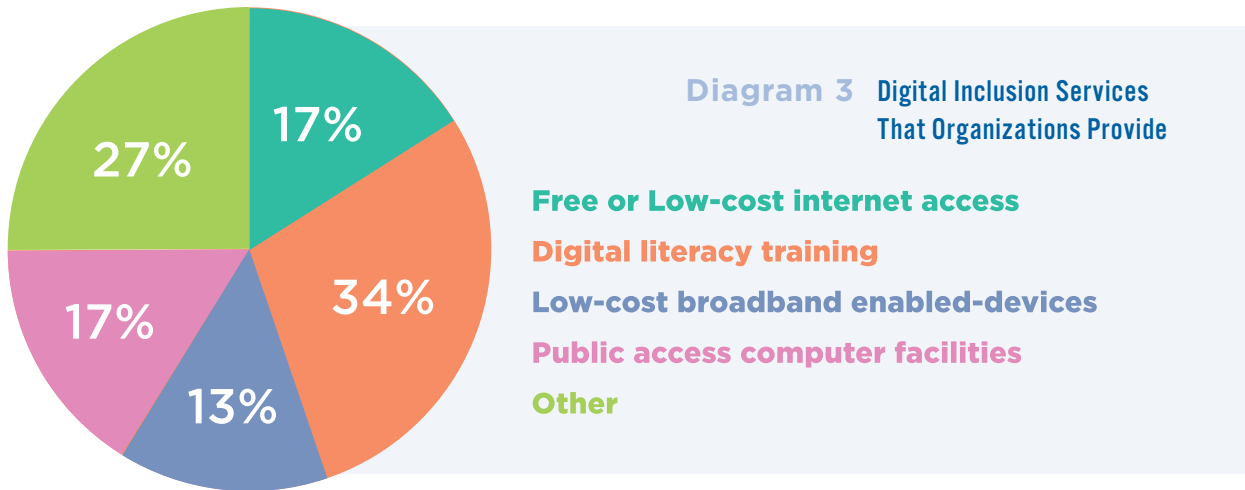


Diagram 2 shows how long respondents have worked at their organization, and diagram 3 on the following page shows the types of digital inclusion activities their organizations provide. The complete list of organizations represented in this study can be found in Appendix III.

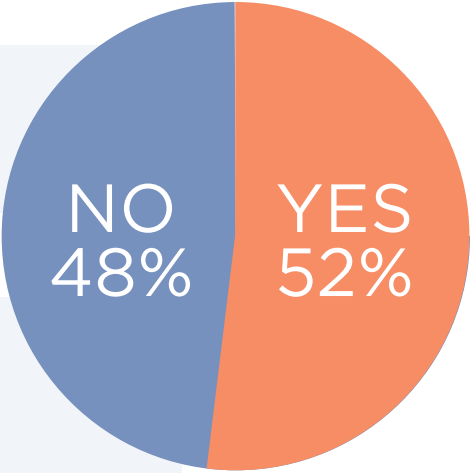






Diagrams 4 and 5 represent the major sources of funding that survey respondents have received to do their digital equity work during COVID-19, including CARES Act funding. In late March, President Trump signed into law the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), which provided assistance for a number of broadband-related initiatives, including telehealth, distance education, delivery of broadband and essential services to rural areas, and digital inclusion work.

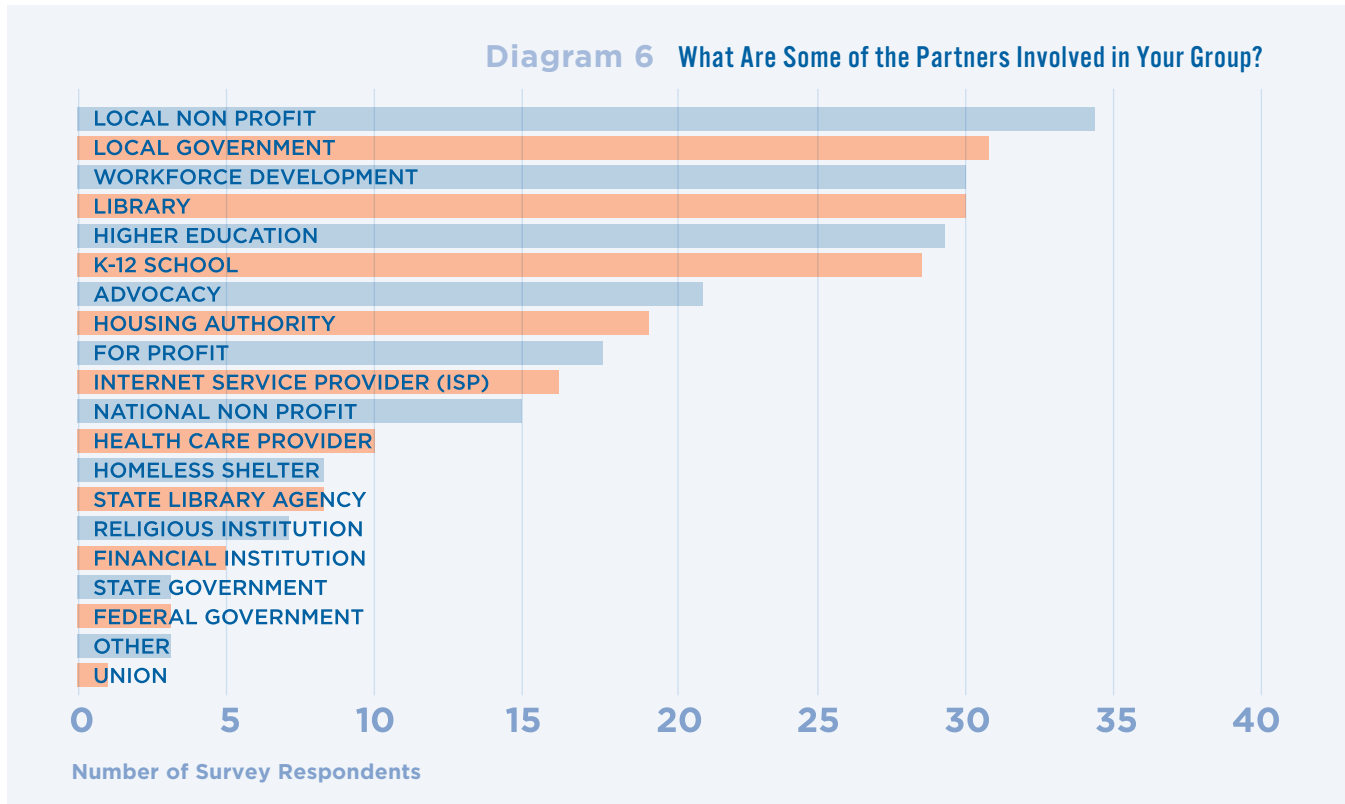
**Diagram 4 Have You or Your Community Used CARES Act Funding to Do Digital Equity Work?**



**Diagram 5 What Other Types of Funding Have Your Organization or Community Received for Digital Inclusion Work Since COVID-19?**

- 23%** REPURPOSED EXISTING RESOURCES
- 22%** PRIVATE DONATIONS
- 19%** COMMUNITY FOUNDATION GRANTS
- 17%** COVID-19 RAPID RESPONSE / RELIEF FUNDS
- 15%** PRIVATE GRANTS
- 12%** OTHER / NOT APPLICABLE
- 8%** FEDERAL GRANTS
- 8%** NONE

Diagram 6 includes a list of the types of partners involved in each digital inclusion coalition, as described by our survey respondents.

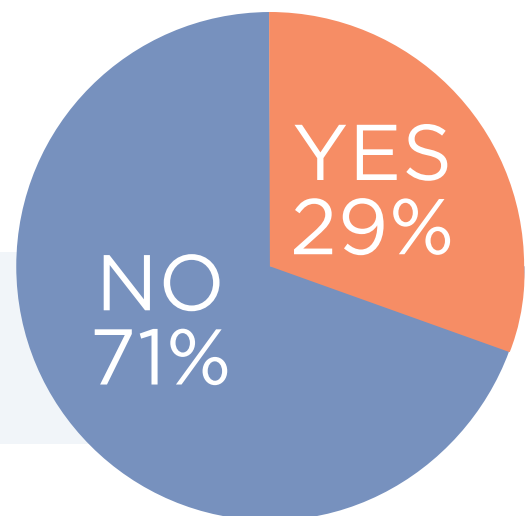


**Diagram 7 How Long Has Your Group Been Around?**

**29%** 0-1 Year  
**45%** 1-5 Years  
**21%** 5-10 Years  
**5%** Longer

Diagrams 7 and 8 show how long each coalition has been around and the percentage of coalitions formed before and in response to COVID-19.

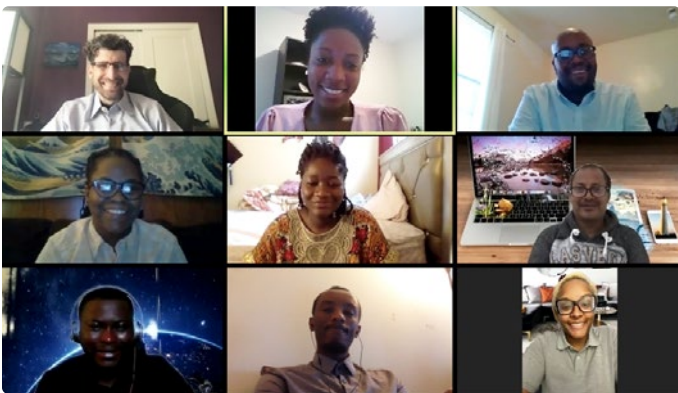
**Diagram 8 Did Your Group Form in Response to COVID-19?**



## How Digital Inclusion Coalitions Have Responded to COVID-19

Digital inclusion coalitions that were established before the pandemic have responded to COVID-19 by focusing their efforts on information and resource sharing, networking, data collection, raising awareness about digital inequality, and developing new strategies to promote digital equity in their communities and beyond. For example, the Digital Inclusion Network (DIN) in Portland, Oregon, created the [DIN Action Tracker](#) to share response efforts and identify priority needs areas. Some coalitions across the country have focused their efforts on working with local leaders to call for action, while other groups have worked closely with their local elected officials to develop digital equity plans for their cities and counties.

Several established digital inclusion coalitions have worked to coordinate investments and develop new funding opportunities to support their existing work providing access to computers, low-cost internet service, and Wi-Fi hotspots for more vulnerable members of their communities, including low-income adults and youth, refugees, older adults, and people with disabilities. One digital inclusion coalition conducted its own survey of its members to understand how they were adapting to the pandemic, including questions asking how they used digital channels to meet the needs of their clients, as many physical locations remained closed.



A number of participants in our study noted that their organizations and coalitions have shifted their focus to providing virtual training and support in response to the pandemic. These activities followed after assurance that these same individuals and families had gained access to affordable internet service and digital devices. Other coalition members have responded to the impacts of the coronavirus by launching virtual tech-support services, as well as in-person tech support through “tech tents” and other pop-up sessions in their communities.

Digital inclusion coalitions that formed in response to the COVID-19 pandemic have focused their efforts on organizing. These activities include beginning to organize others in their communities, focusing on ways to provide access to the internet, distributing digital devices, and offering digital literacy training for low-income individuals and families in their communities. For example, one of the groups that formed in response to COVID-19 was awarded a grant from the state of Illinois to facilitate future plans for bringing faster broadband to their county. The [City of Long Beach COVID-19 Digital Inclusion Initiative](#) has focused its efforts on creating a plan for how to best spend the CARES Act grant money it received to increase digital access in the community. [Mission:Ignite](#), a part of the New York State Regional Digital Inclusion Committee, which formed in response to COVID-19, reconditioned and distributed more than 1,200 computers to students lacking equipment, created a learning platform, and provided STEM training for 25 community-based organizations and students they support.

In Baltimore and Cleveland, large digital inclusion coalitions were able to form quickly and develop rapid-response teams to address the dual crises of the digital divide and COVID-19. For example, [Greater Cleveland’s Digital Equity Coalition](#) built upon its existing community relationships and came together “to identify digital inclusion and advocacy and connectivity gaps with a goal of finding short- and long-term solutions.” The [Baltimore Digital Equity Coalition](#) was able to organize more than 50 local organizations in a short period to focus on “internet access, device distribution, tech support, and tech training.”

## What Made It Possible to Respond?

Most of the survey respondents, particularly those with established digital equity ecosystems, described several factors that made it possible for them to respond quickly and effectively, including: established relationships and collaborations, awareness of existing policy constraints, capacity and knowledge about how to best engage with key stakeholders (both inside and outside local government), and years of digital inclusion experience.

The City of Seattle, for example, which has had a well-established digital equity ecosystem in place for many years, played a key role in organizing local digital inclusion efforts and activities with several local government agencies and elected officials, aided by the support of many local organizations. Other cities also played important roles in convening local coalitions in response to the pandemic. These established structures and processes made it possible for coalitions to quickly organize, share resources, and address challenges due to the pandemic.

“Having a pre-established network of organizations aware of the digital divide and working collaboratively to address the barriers faced by under-served community members was foundational for a quick pivot response.”

—City of Portland, Office for Community Technology, Digital Inclusion Network of Portland

Because these established digital inclusion coalitions were already involved in the on-the-ground work in communities, several spent the time to develop new outreach and engagement strategies to raise awareness about the importance of digital equity in their communities. However, for many coalitions, COVID-19 precautions required organizations that provided digital inclusion services to move their programming and events online. In doing so, some coalitions relied more on social media channels for outreach to raise visibility and interest in their work, particularly for those with access to the internet. Other established coalitions received grant funding and other kinds of support, such as from businesses, to respond to the pandemic, which allowed them to spend time connecting with schools and government leaders to promote digital equity in their areas. Survey respondents indicated that CARES Act funding played an important role in making it possible for several coalitions both new and established to respond.

Digital inclusion coalitions that formed in response to COVID-19 reported that existing relationships also played a key role in their pandemic responses. For example, respondents from Baltimore explained that a “wide support of people and organizations working on this was in place. We’ve also added to what was existing and have about 60-70 organizations and more individuals collaborating on community solutions.” Another survey respondent from Baltimore noted that “a high degree of collaboration, goodwill, and willingness to solve problems creatively from a wide range of partners” played an important role in making a rapid response to digital inequality and COVID-19 possible. Similarly, in Cleveland, one respondent observed, “Leaders from our community who were working in the digital inclusion space for years, as well as the Cleveland Foundation which initiated the COVID-19 Rapid Response Fund, made it possible for our group to respond immediately to try and understand the needs of our community.”

## Challenges During the Pandemic

Several participants in our study explained that the pandemic made their existing work in digital inclusion much more difficult. Among the challenges were obstacles to getting sufficient buy-in from internet service providers to support their efforts, as well as barriers to working with local elected officials to make free and/or low-cost internet access a policy priority. While some coalitions had direct access to and support from their local elected officials and government agencies, some survey respondents noted the challenges with getting their local officials involved and integrated into the work of their coalitions. Other respondents noted that they had difficulties addressing all of the “newfound interest” in digital equity, while others mentioned their challenges in leveraging resources to engage in digital inclusion activities in a strategic way.

“There is a much greater understanding of the digital divide and a new expectation for it to be quickly ‘solved’ with few new resources and inadequate funding to non-profits and on-the-ground organizations who have been doing this work with vulnerable communities for a long time.”

—Free Geek, Digital Inclusion Network of Portland

Several survey respondents noted that although they had been part of an established digital inclusion coalition in their community, a lack of dedicated staff time, funding, and other resources within their organizations created persistent challenges to addressing the impacts of the COVID-19 pandemic. Others were concerned about duplicating digital inclusion efforts as well as stepping into other organizations’ programmatic missions. The lack of infrastructure in rural areas made it challenging for some digital inclusion coalitions to assist people in gaining access to the internet during the pandemic.

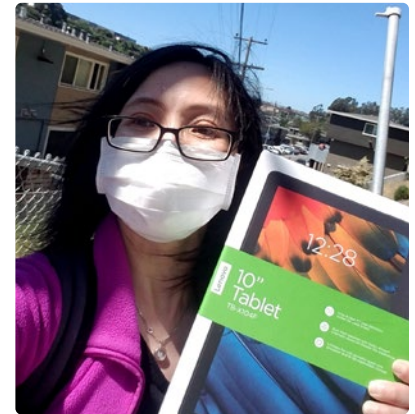
A common thread among respondents was the distinct challenge of balancing short-term, immediate needs—especially magnified during the pandemic—with long-term investment in areas around broadband access, adoption, and literacy. Multiple respondents worried that some of the work they are doing with their coalitions to respond to heightened need during the pandemic are “band aid solutions” that temporarily alleviate problems but do not systematically address the larger issues. The North Carolina Broadband Office, which is part of the [North Carolina Digital Equity and Inclusion Collaborative](#), described an initiative in April 2020 in which 205 Wi-Fi-enabled buses traveled to parts of communities without widespread broadband access or adoption. The office mentioned that although this important initiative helped to address the gap in the short term, it wasn’t “sustainable in the long run.” Relatedly, several respondents identified the need for increased advocacy to ensure that policymakers at multiple levels understand the importance of digital inclusion activities during the COVID-19 pandemic and beyond so that digital equity becomes a policy priority.

“Again, policy and advocacy work is our greatest weakness/area of need ... We are trying to implement band aid solutions, which is very important and necessary, but we lack the resources currently to create systems-level change...”

—Creative Action, Digital Empowerment Community of Austin

The physical challenges posed by social distancing rules and guidelines created enormous challenges for some organizations, such as public libraries, which had previously offered public, in-person access to computers and the internet. Many coalitions talked about how these restrictions greatly impacted their ability to continue to reach vulnerable populations who had relied on their in-person services before the pandemic. Several respondents indicated that they were not able to get devices into people’s hands (or help instruct them on how to use them), leaving many vulnerable populations at an even greater disadvantage during the pandemic. In response, several organizations, working as part of larger digital inclusion coalitions, developed new online services and training programs.

Some of the coalitions that formed in response to the COVID-19 pandemic observed that the topography of their county, where a cellular signal is not always available or workable, has presented serious challenges for residents in their communities. Other survey respondents noted that they had to be “very nimble” and devote a lot of time to digital inclusion work “in a short window.” Others spoke of the challenges in working to develop a good balance of organizations in their digital equity efforts, and others noted that they were considered to be providing “tech essential services” that needed “to keep operating during COVID,” despite some of these groups lacking the equipment and resources needed to address the digital demands of their communities.



## New Tactics

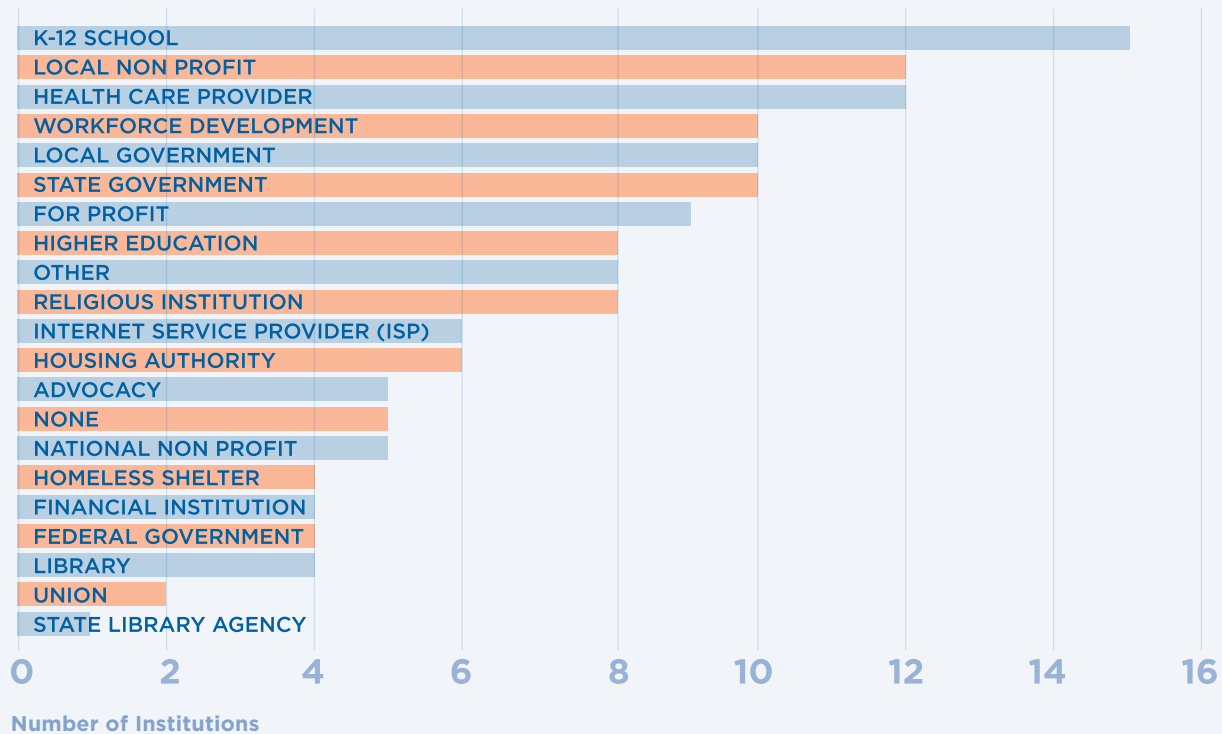
In response to these enormous challenges and constraints, largely due to the pandemic, several organizations have created new tactics to address their communities’ digital needs. Some digital inclusion coalitions have developed new collaborations with organizations serving similar constituents to join forces and share resources. Others have partnered more directly with community members to meet the local digital equity needs in their communities. For example, the [Ashbury Senior Computer Community Center \(ASC3\)](#), which is part of the [Greater Cleveland Digital Equity Coalition](#), described how it has been “piloting outdoor help sessions co-hosted by the city and the school system for public school families with their new laptops provided by the school system.” Expanding community partnerships seemed to be a major theme in several of the survey responses.

Other digital inclusion coalitions included the following list of new strategies, which they have adopted in response to COVID-19:

- Applying for grants in partnership with other organizations to provide hotspots;
- Providing online classes to train adult learners in digital skills;
- Offering virtual tech help;
- Sharing lists of local free/low-cost tech resources;
- Organizing socially distanced/masked events; and
- Moving coalition meetings online.

Some coalitions described how they had found strength in numbers by learning to work more closely with organizations that served similar constituents. Along these same lines, other survey respondents talked about how they collaborated with other individuals and organizations in their communities to apply for new funding opportunities. One survey respondent indicated that virtual programming has become the norm in their coalition and believe it will continue into the foreseeable future. As diagram 9 demonstrates, there is a variety of new institutions that have become interested in digital equity work in response to the pandemic, with special interest from K-12 schools, health care providers, and local nonprofits.

**Diagram 9** What Are Some of the Institutions in Your Community That Are Interested in Digital Inclusion That Weren't Before COVID-19?



Are digital inclusion coalitions making connections between the COVID-19 pandemic, digital inequality, and racial injustice? Two of the survey respondents described how they were able to make these connections in their work in response to the pandemic. For example, one of the four survey respondents involved in the [San Antonio Digital Inclusion Alliance](#) mentioned that its city council approved a resolution that declares that racism is a public-health crisis and that “we understand the strong connections with access to reliable broadband.” A Portland, Oregon, respondent involved in the [Digital Inclusion Network](#) (DIN) explained that members “have been engaged in conversations about what it means to lead with race as we continue to implement our Digital Equity Action Plan strategies.”

## Activities Embraced and Left Behind

Many of the new digital inclusion activities developed in response to the COVID-19 pandemic will be continued into the future, including an ongoing focus on helping people gain access to digital devices, virtual resources, online learning, and training in digital skills. Coalitions mentioned that they definitely plan to continue their work to develop local digital equity plans, as well as to focus on policy advocacy and legislative efforts. Expanding broadband infrastructure and collaborating to raise awareness and funding for digital equity work were among the top priorities identified by our survey respondents.

Some respondents talked about their interest in continuing to prioritize device accessibility, data-collection efforts, more support for staff focused on digital inclusion, and increased focus on expanding digital skills. Still others talked about their desire to move more events from in-person to virtual and to make expanded services available to their communities in ongoing ways. Some noted an interest in continuing hybrid learning, while others wanted to emphasize cell phone- and computer-skills training, with additional support provided to help people overcome social and technical barriers. Respondents reported that they will also “continue efforts to train parents around digital literacy in order to better prepare them to help their student/child.” One survey respondent simply stated, “We’ve learned a lot” during this time.

“COVID has lit a fire under this group.”

—BiblioTech, San Antonio Digital Inclusion Alliance



## City and County Responses

In several cities and counties, significant funds have been allocated to provide access to the internet and devices, especially for K-12 students, in response to the pandemic. For example, one respondent mentioned that digital inclusion is one of San Antonio’s four pillars of recovery. The city is implementing the [Connected Beyond the Classroom](#) initiative to support connectivity for K-12 students in the San Antonio area. In those cities and counties that had developed concrete digital equity plans, established digital inclusion coalitions were able to act upon and implement the plans as part of the COVID-19 pandemic response.



In Chattanooga, Tennessee, the Digital Access and Equity Committee worked with its “local government leaders, the school system and fiber provider to set up both free community Wi-Fi access points as well as in-home access (100Mbps, symmetrical) to families who have a student that qualifies for free or reduced lunch.” Several respondents explained that their cities had received CARES Act funding to support their digital equity initiatives. For example, as one respondent in Portland, Oregon, explained, “The city applied for and received \$3.5 million in CARES Act funding for digital inclusion objectives.”

“The City of Portland, Multnomah County, and Multnomah County Library co-lead implementation of a community-driven Digital Equity Action Plan and convene the Digital Inclusion Network. In March, the City of Portland received a small donation of 200 Chromebooks to help with [the] COVID shut down. 100 Chromebooks were immediately given to Reynolds School District for students impacted by COVID school closures. The other 100 Chromebooks were evenly distributed among 10 community-based organizations serving low-income residents. The City, using current year bureau budgeted funds, entered into a sponsored service agreement with Comcast to provide 12 months of Internet Essentials service for 100 residents. The City invested \$3.5 million in CARES Act funds to scale these services—free device, free Internet service, and some free training and technical support—in hopes of connecting at least 3,500 residents.”

—Office for Community Technology, City of Portland, Digital inclusion Network of Portland

One respondent from Salt Lake City explained that the city has been able to “expand public Wi-Fi in parks and community spaces, expand youth services to support online school, and adopt a digital equity policy.” Other cities and counties have worked with their public libraries to make wireless hotspots available, as well as parking-lot internet access. The City of Seattle passed an “Internet for All” resolution on July 28, which outlines the city council’s “vision of making broadband internet service accessible, reliable, and affordable to all residents and nonprofits.”

## Statewide, Multi-State, and National Responses

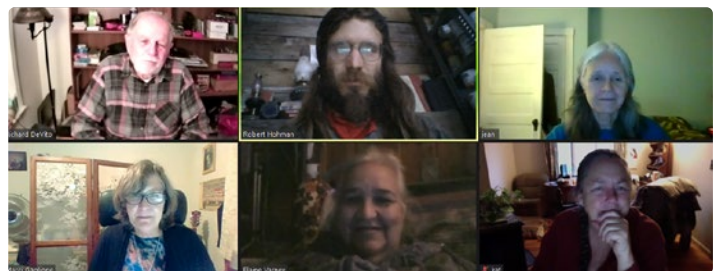
Six of our survey respondents represented organizations focused on developing statewide initiatives, including one organization, [Connected DMV](#), that has focused its work across three areas: Maryland, Virginia, and Washington, D.C. Five of the six survey respondents—from [Maine](#), [New Jersey](#), [North Carolina](#), [Utah](#), and the DMV—already had established statewide digital inclusion initiatives. Only one of the respondents, [Connect Arizona](#), formed in response to COVID-19.

Interestingly, the established statewide coalitions have been involved in activities similar to those of the more local, regional initiatives also with pre-COVID coalitions. These activities included the following:

- **Providing maps of free internet locations;**
- **Listing low-cost internet deals;**
- **Providing recommendations to COVID-19 task forces;**
- **Creating online-resource webpages;**
- **Helping people understand the nuances of digital inequity and what digital inclusion truly means;**
- **Offering up-to-date information on federal funding opportunities, state actions, and opportunities, along with other information to help the coalition members respond to the COVID-19 pandemic; and**
- **Collaborating to leverage knowledge and resources to further digital inclusion work.**

The [Maine Digital Inclusion Initiative](#), led by the National Digital Equity Center, has worked to provide cell-enabled tablets for older adults (ages 70 and up) to help combat social isolation, which mirrors similar initiatives from established coalitions in regional locations that have been focusing on helping older adults access the internet, digital devices, and virtual training during the pandemic.

Two of the respondents represented national initiatives that have been working to respond to the pandemic. [DigitalUS.org](#) is “a national collective impact initiative with World Education, Inc. providing the backbone support and coordination of partners.” Its initiative is helping to scale and replicate the model of [Digital Navigators](#), a concept introduced by NDIA to describe “individuals who address the whole digital inclusion process—home connectivity, devices, and digital skills—with community members through repeated interactions.” Digital US’s greatest challenge in response to the pandemic has been meeting the scale of need from a national perspective, especially around device access. Some of its new tactics have included expanding the Digital Navigators program by embedding services into existing adult education and workforce programming. Digital US also indicated a concern that “a lot of the current efforts (e.g., device distribution without infusing such work into the formal workforce ecosystem) are band aids that will be left aside post-pandemic.”



The Alliance for Technology Refurbishing and Reuse (AFTRR) network “builds a community among nonprofit technology refurbishers through collaboration, advocacy, and promotion of best practices.” It responded to the COVID-19 pandemic through “used-tech drives, new partnerships to get devices to people who need them, and requesting technology to get to people in need.” AFTRR explained that having an existing group with a shared mission made it possible to respond in this way. AFTRR’s greatest challenge during the pandemic was “getting enough used technology to refurbish.” AFTRR engaged in a strategic planning process, described as an effort “to address all of these issues in a more impactful, timely and integrated manner. We expect ... to be doubling down on the power of networks to address these issues as well as working closer with for-profits...”

## Conclusion: Summary of Findings

This research was conducted to present a better understanding of how formal, informal, and emerging digital inclusion coalitions in communities across the U.S have been working to address the increased demand for internet access, digital devices, and training in digital literacy caused by the COVID-19 pandemic. The concept of *digital equity ecosystems* was introduced as a way to more deeply understand the local, cultural drivers and social barriers to broadband adoption as a starting point for promoting digital equity, as well as to understand how digital inclusion coalitions have responded to the triple challenges of the COVID-19 pandemic, racial injustice, and digital inequality in their communities.

The findings show that coalitions with established relationships developed before the pandemic were able to quickly respond to the increased demand for computers, low-cost internet service, Wi-Fi hotspots, and virtual training. Digital inclusion coalitions that formed before the pandemic have focused their efforts on the following activities: providing information and resource sharing; networking with others in their communities; collecting data to address gaps in digital access; raising awareness about digital inequality; and developing new tactics to promote digital equity. Coalitions that formed in response to the pandemic have been more focused on organizing individuals and groups in their communities to provide access to low-cost internet service, digital devices, and training in digital literacy.

The pandemic has created new challenges and magnified several existing challenges, including working to get buy-in from internet service providers and local policymakers to help low-income individuals and families gain access to low-cost internet and digital devices. In addition, social distancing and other safety measures in response to the pandemic have created challenges in developing online training in digital literacy. Several survey respondents noted the difficulties in balancing short-term needs with longer-term solutions to the digital inequality issues in their communities.

In response to these challenges, digital inclusion coalitions have developed several new tactics, including: creating new and expanded partnerships; piloting new initiatives; collaboratively seeking new sources of funding; pivoting to online training in digital skills and virtual tech help; sharing information and resources with their communities; and offering socially distanced, masked, and outdoor events.

There is a variety of new institutions that have become interested in digital equity work in response to the pandemic, with special interest from K-12 schools, health care providers, and local nonprofits. In addition, two of our respondents noted the importance of making connections between the COVID-19 pandemic, digital inequality, and racial injustice when developing digital equity solutions.

Several new digital inclusion activities that emerged in response to the pandemic will continue even when the health crisis ends, including: virtual learning services; development of digital equity plans; expanding broadband infrastructure; raising awareness of digital equity work; prioritizing device accessibility and expanded digital literacy; and promoting data-collection efforts.

Cities, counties, and states have played important roles in addressing digital inequality during the pandemic. These efforts have included making funds available for internet and device access, free community Wi-Fi access points, and free or discounted in-home internet access. Cities and counties have also worked with their public libraries to expand Wi-Fi hotspot availability.

Statewide and multi-state coalitions have focused their efforts on providing maps of free internet locations, compiling lists of low-cost internet deals, providing recommendations for COVID-19 task forces, creating online-resource webpages, informing people about digital equity, offering information on funding opportunities and state actions, and collaborating to share knowledge and resources. National nonprofits have worked to address digital inequality in communities across the United States through their work with local digital inclusion coalitions to promote training in digital literacy as well as device refurbishing and reuse.

## Appendix I Coalitions That Formed In Response to COVID-19 Based on Survey Data

Baltimore Digital Equity Coalition, MD  
 Brown County (BC) Broadband for All, IL  
 City of Long Beach COVID-19 Digital Inclusion Group, CA  
 Connect Arizona  
 Digital Inclusion Taskforce  
 Greater Cleveland Digital Equity Coalition, OH  
 NY State Regional Committee Digital Inclusion Committee  
 St. Louis Regional Coalition for Digital Equity and Inclusion, MO

## Appendix II Coalitions That Formed Pre-COVID-19 Based on Survey Data

Name	Age
Alliance for Technology Refurbishing and Reuse and Cristina Network	10+ years
Charlotte Digital Inclusion Task Force, NC	5-10 years
City of Portland Digital Inclusion Network, OR	1-5 years
Connected DMV Connectivity 4 All Solution Group, WA	1-5 years
Denver Digital Equity Coalition, CO	0-1 year
Digital Access & Equity Committee	1-5 years
Digital Durham, NC	1-5 years
Digital Empowerment Community of Austin, TX	1-5 years
Digital Inclusion Alliance of San Antonio, TX	1-5 years
Digital Inclusion Network	5-10 years
Digital Inclusion Practitioners of New Jersey (DIPNJ)	1-5 years
Finger Lakes Digital Inclusion Coalition, NY	1-5 years
KC Coalition for Digital Inclusion	5-10 years
Leadership Council Southwestern Illinois	5-10 years
Maine Digital Inclusion Initiative	1-5 years
National Collective Impact Coalition	1-5 years
North Carolina Digital Equity and Inclusion Collaborative	1-5 years
Oak Hill Collaborative, OH	5-10 years
Palatine School District Illinois Connected Communities	0-1 year
San Francisco Tech Council, CA	1-5 years
Seattle King County Digital Learning Network, WA	5-10 years
Utah Communities Connect	1-5 years

## Appendix III Full List of All Organizations

Arizona State Library, Archives and Public Records  
Ashbury Senior Computer Community Center (ASC3), OH  
Backside Learning Center, KY  
BiblioTech, TX  
Brown County School District, IL  
Byte Back  
Camden Dream Center, NJ  
City of Portland, Office for Community Technology, OR  
City of San Antonio, TX  
Community Tech Network, CA  
Comp-U-Dopt Inc., TX  
Consortium for School Networking (CoSN), Washington, DC  
Creative Action  
Delta Interfaith, LA  
Denver Public Library, CO  
Digital Durham, NC  
Digital Harbor Foundation, MD  
Digital Inclusion Alliance of San Antonio, TX  
Digital Inclusion Practitioners of New Jersey  
Finger Lakes Digital Inclusion Coalition, NY  
Free Geek, OR  
Fully Equipped 4 Life Training Solutions, NC  
Generations on Line, PA  
IBSA, Inc., KS  
Intercultural Development Research Association, TX  
KC Digital Drive  
Literacy Source, WA  
Long Beach Gray Panthers, CA  
Loyola U. Maryland Center for Community, Service and Justice  
Mercer Foundation for Health, IL  
Mission: Ignite powered by Computers For Children, Inc., NY  
National Aquarium  
National Cristina Foundation, NH  
National Digital Equity Center, ME  
NC Broadband Infrastructure Office  
NTEN, OR

## Appendix III Full List of All Organizations (continued)

Oak Hill Collaborative / VISTA Member, OH  
Our Community LA (Formerly known as Our Children LA), CA  
Outside the Frame, OR  
Raritan Valley Community College Library, NJ  
Salt Lake City, UT  
San Francisco Tech Council, CA  
Smart City Media  
STEM Alliance  
Strong City Baltimore Adult Learning Center, MD  
SweetSpot WiFi, CA  
The Enterprise Center, TN  
The United Palatine Coalition, IL  
Transitioning to Harris-Stowe State University, MO  
Virgin Islands Next Generation Network  
Webster University, IL  
Work as consultant to Blandin Foundation, MN  
World Education



Broadband Delivers Opportunities  
and Strengthens Communities