



STATE OF DIGITAL EQUITY

Lessons from survey data and focus groups

The final report in a 3-part series on digital connectivity
during the pandemic

A research partnership between

everyone  **on** + John B. Horrigan, PhD

May 2022

Table of Contents

Introduction..... 3

Acknowledgements..... 4

Overview..... 5

I. Lessons Learned..... 7

II. Recommendations for digital equity planning 11

III. Conclusion..... 13



In late 2020, EveryoneOn undertook a national survey to understand the digital divide during the pandemic. Even at a time of such uncertainty, it was important to look at broadband adoption and digital equity in a deeper way, since investments in digital inclusion were and would continue to be necessary as COVID widened the digital gap, leaving students, seniors and families offline. In the absence of recent research, EveryoneOn, in partnership with the Ballmer Group and Microsoft surveyed income insecure households (<\$50,000 a year) as well as conducted focus groups with individuals and digital inclusion practitioners. Our collective goal was to understand the persistent barriers to adoption and use the findings to inform policies and initiatives that foster digital equity.

At the [Ballmer Group](#), addressing barriers to economic mobility for children and families is a priority. When children do not have access to the tools necessary to participate and succeed in school, that is a barrier to economic mobility and resiliency. This is why it is important to understand what is keeping K-12 households unconnected or under connected. We learned in the [first report](#) that families cannot afford anything over \$100 for a computer, reducing their education and economic opportunities.

For Microsoft, the pursuit of racial equity entails addressing digital inequities that disproportionately affect racial and ethnic minority communities. Lack of access to high-speed and affordable internet service, robust devices and digital skilling opportunities have compounding effects on households, communities and our society. The [Microsoft Airband Initiative](#) intends to support cross-sector efforts to address barriers to digital equity.

EveryoneOn helps unlock social and economic opportunity by connecting families in underserved communities to affordable internet service and computers, and providing digital skills trainings.

The findings in this third and final report reveal that equity must be at the center of digital inclusion efforts. We must invite diverse leaders, advocates and community anchor organizations to the table not only to provide a clear picture of digital inclusion, but to give them decision-making power about where and how funds should be invested. The recent passage of the Infrastructure and Investments Jobs Act and launch of the Affordable Connectivity Program provide a historic opportunity to create a more equitable and inclusive approach to digital equity. Rulemakings will influence what state and local funding efforts will look like, which has been instrumental for driving broadband adoption. On page 11 of this report, we make recommendations to help inform state and local leaders how to allocate federal funds they secure. The research makes it clear that policy change and investments must be made quickly if we are to prevent sustained educational, economic and social disparities caused by digital inequity. We are committed to ensuring digital equity for all. Will you join us?

In solidarity,



Norma Fernandez
CEO, EveryoneOn



Vickie Robinson
General Manager of
the Microsoft Airband
Initiative, Microsoft



Naria Santa Lucia
General Manager for
Digital Inclusion,
Microsoft



Kevin Bromer
Executive Director, Head of
Technology and Data Strategy,
Ballmer Group

ACKNOWLEDGEMENTS

We extend our deepest gratitude to the Ballmer Group and Microsoft for supporting this research at such a historic time for our nation, especially as \$65 billion from the Infrastructure Investment and Jobs Act begins to be dispersed. Now more than ever, resources and leadership are needed to drive meaningful conversations and intentional action toward digital equity. We especially appreciate the thought leadership Kevin Bromer and Korey Klien at the Ballmer Group, and Vickie Robinson, Fatema Kothari and Naria Santa Lucia at Microsoft provided.

We are honored to have worked alongside one of the nation's leading digital divide experts, Dr. John B. Horrigan who is a Senior Fellow at the Benton Institute for Broadband & Society. We appreciate his deep command of and commitment to understanding technology adoption and digital inclusion.

This third and final report was inspired and made possible by the participation of the people affected by policies, or lack thereof, that keep the internet out of reach for them and millions of others. Thank you to the 22 individuals who shared their time and insights to inform this report. EveryoneOn is committed to addressing the challenges they raised. We are also grateful to the 10 organizations that participated in the focus groups. They are digital inclusion practitioners and leaders who have had significant impact throughout the country. Their leadership, conviction and deep expertise are inspirational and needed to drive change.

Lastly, thank you to EveryoneOn's dedicated board of directors and team members who helped inform the process with their deep knowledge and insights. The digital inclusion sector has come a long way because of collective efforts like these and advocacy led by amazing people and organizations dedicated to digital equity.



OVERVIEW

The United States is about to embark on unprecedented broadband policy initiatives. The Infrastructure Investment and Jobs Act (IIJA) contains \$65 billion for broadband infrastructure and adoption programs. It also funds broadband planning in each of the 50 states as well as digital equity planning pursuant to the Digital Equity Act. A key policy goal, particularly for those interested in making it easier for people to subscribe to broadband, is fostering “[meaningful broadband adoption](#),” defined as having internet access:

- **at speeds, quality and capacity necessary to accomplish common tasks;**
- **with the digital skills necessary to participate online and;**
- **on a personal device and secure convenient network.**

This third and final report in a series examining the digital divide during the pandemic ties together lessons learned from prior reports on [affordability](#), and [digital skills and trust](#). It draws on data from those reports while adding new qualitative findings from focus groups made up of low-income individuals and digital inclusion practitioners. This report also explores what the lessons mean for digital equity planning.

Focus Group Participants

It was a priority for this report to capture perspectives from individuals affected by digital inequities and the organizations working to foster digital equity. In order for digital inclusion initiatives to be successful, equitable and inclusive, it is essential to hear from the communities impacted and the organizations serving them. Digital inclusion practitioners are critically important to informing the design and implementation of effective initiatives.

Individuals

A total of 22 individuals participated in the virtual focus groups. Participants joined from Los Angeles (CA), Mount Vernon (AL), Pittsburgh (PA), and San Leandro (CA). Two focus groups were conducted in English and one group was conducted in Spanish. The participants represented the populations disproportionately affected by the digital divide and included (self-identified) Black or African American, Hispanic or Latino, and Native American, income insecure (average household salary was less than \$30,000, women, and those whose primary language is one other than English). In addition, participants expressed having varying in-home internet service options ranging from hotspots to smartphones and market rate broadband. All participants confirmed having access to at least one device — smartphone or computer — in the household, which allowed them to participate in the virtual focus groups. Participants were recruited from diverse organizations that EveryoneOn partners with, including nonprofits and public housing agencies.



Digital Inclusion Practitioners

Ten organizations participated in two focus groups. The organizations included several nonprofits, a library, two city departments, a public housing agency and a social enterprise with extensive experience fostering digital equity in underserved communities. These practitioners are signing people up for the Affordable Connectivity Program or other low-cost internet service programs, refurbishing and distributing computers, delivering digital skills training, advocating for policies and funding that support digital inclusion efforts, and know what it takes to reach the underserved and hard-to-reach populations. Many if not all of the organizations and participating representatives have been working in the digital inclusion space since before the pandemic, shedding light on the long-lasting severity of the digital divide. Participating organizations included:



INNOVATION AND
TECHNOLOGY DEPARTMENT



CITY OF LONG BEACH
TECHNOLOGY & INNOVATION
DEPARTMENT



Quality Affordable Housing and a Pathway to Self-Sufficiency



National Digital Equity Center
Disruptive Strategies to Close the Digital Divide



NATIONAL DIGITAL INCLUSION ALLIANCE



I. LESSONS LEARNED

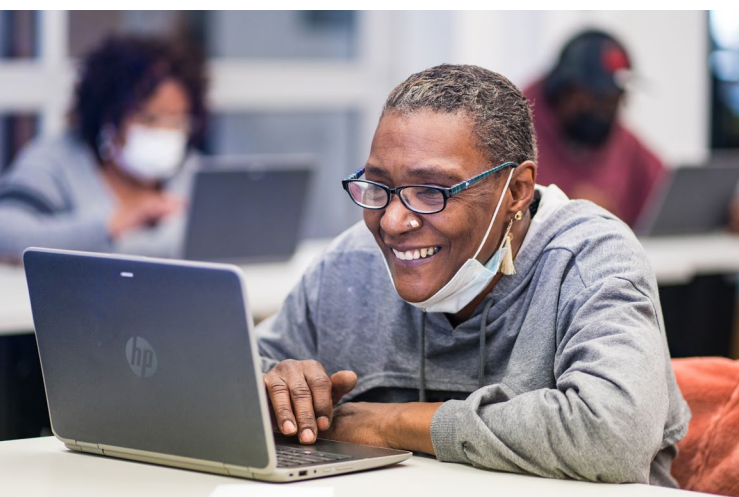
The lessons from the first two reports and the focus groups fall into four categories:

1. Affordable and reliable service

For many low-income households, having broadband service is a balancing act. They know having service is important; like everyone else, they saw how home internet service went from being a “good to have” to a “have to have.” Yet, affordability is a struggle for many. Even if they fit broadband service into their monthly budgets, paying for it can cause financial strain. For this reason, low-income households are often very attuned to service quality. Why pay for something that is not reliable? Does it make sense to stretch the budget in order to have better service?

Focus group participants highlighted a trade-off between cost and reliability. For one participant, \$120 per month was the price one had to pay for reliable service in her area.

This participant decided it was worth it for her — even at that level of expense. One participant said that, in reference to a service upgrade, she “actually went up on my plan during that time [the pandemic],” and “once we went to more megabytes” she “did not have any trouble” with service.



Others worried that low-cost subscription plans might not suit their household needs. One participant recalled unsatisfying past internet experiences when multiple devices in the household were needed to use the internet connection. Many felt that “You get what you pay for,” i.e., low-cost service plans might result in inferior service quality. **Several focus group participants agreed with one of their colleagues who was “skeptical because of scams” when he saw advertisements for low-cost service. One noted that their internet service provider “gave a price and then they went up quite a bit.” Yet switching service was difficult to do because they could not afford to have a service interruption that change entails.**

Data show that many low-income households report difficulties fitting service into their household budgets. Large numbers (40%) said that any monthly broadband bill was a challenge to fit into their budget, and 46% said they find it difficult to afford their monthly internet bill. The fact remains, though, that most of those who say that their internet bill is a burden nonetheless subscribe to service. They find a way to have service even though the bill is a source of financial difficulties.

...most of those who say that their internet bill is a burden nonetheless subscribe to service. They find a way to have service even though the bill is a source of financial difficulties.

A deeper look into the spending patterns of low-income households helps explain this apparent anomaly. Recent work from the Center on Budget and Policy Priorities found that 21% of the expanded child tax credit was used for basic household needs, such as food, rent or mortgage, or utilities (including internet service). Over time, the financial burden of basic needs has grown for low-income households. Analysis of Consumer Expenditure Survey data shows that between 1984 and 2014, household spending for low-income households fell 4.5% in real terms compared with a 2% increase for middle-income households. During this same time period, low-income

households increased spending on housing and health care and decreased spending on food, clothing and transportation. For instance, low-income households spent 35% of their budgets on housing in 1984 and 41% in 2014.

These households in the United States had to contend with higher housing and health care expenditures from 1984 to 2014 as a share of their household budgets — and then contemplate the additional monthly expenditure for internet service (averaging \$62 per month). Given that schools, employers and health care providers expect people to have connectivity, paying for broadband may be both unavoidable and unaffordable.

One focus group participant said that the internet “counted ... as an essential bill.” But keeping access involves trade-offs for some low-income households. One focus group participant said she told her kids, “We cannot buy shoes because we have to pay for the internet.”

The upshot of this discussion is that low-income households deal with their connectivity bills as they have since the 1980s — a balancing act that means economizing on food, clothing and transportation in order to afford necessities. Unfortunately, they are not always successful in maintaining that balance. Some 18% of connected households lost service during the pandemic due to economic difficulties; that figure was 31% for the lowest income households. This “subscription vulnerability” underscores a household’s internet connectivity can be a casualty of job loss or changes in household income.

2. Digital skills

Digital skills constitute an important pillar of digital inclusion. For practitioners, it flows seamlessly from the services they provide. Those who need an affordable internet plan and a working computing device often need assistance in getting started online — from the basics of using a browser to learning how to ensure they protect personal data.

Participants in focus groups thought about digital skills in several different ways. Younger people were confident in their online capabilities and thus generally did not feel any need for training courses. The one exception for younger participants was an important one: digital skills for the workforce. Many felt that there were things they did not know about digital workplace applications, but thought jobs would provide necessary training.

Two types of users had greater digital skills training needs. Spanish speakers, perhaps because they struggled with some English-language websites, had an interest in improving digital skills in the context of growing reliance on the internet. One focus group participant said, “There are some apps where everything is in English,” and expressed concerns about clicking “accept” for lengthy terms and conditions on websites that they did not fully understand. Older adults were the other group. Younger focus group participants, particularly parents with school-age children, reported they had to upskill grandparents who had been pressed into childcare duty during the pandemic and needed to be part of digital communication flows with schools and parents.



Many felt that there were things they did not know about digital workplace applications, but thought jobs would provide necessary training.

There are two other key points about digital skills training: the need for it is not likely to diminish and it pays off. Our national survey indicated that 36% of lower-income adults have low digital skills. Other research shows that sizable numbers of adults have low levels of “[digital readiness](#)” when it comes to using online educational applications. With new applications such as artificial intelligence on the horizon, the need for digital skills resources will increase. As to payoffs, [research](#) shows that recent at-home internet adopters who have had digital skills training are more likely to use the internet for educational and health applications than those who have not had such training.

3. Trust

Trust is one of those internet issues that usually punches below its weight — until it does not. On one hand, a fair number of non-broadband users cite it as a reason they do not subscribe to service. Some 42% say this. However, when pressed in a follow-up question on the most important reason they do not have service, just 8% of non-subscribers cite “worry about privacy and security of personal data.” Focus group participants reinforced this point. For those who had the internet at home, the possibility of their data being tracked was a cost of being online. They assumed that the government or industry had access to their data. Although they understood online targeted advertising, it “spooked” some of them nonetheless. Yet none of this seemed to have any impact on focus group participants’ online behavior.

Practitioners expressed a somewhat different view on trust and online use. For them, new internet users (particularly older individuals) needed education on data security in order to fully engage with online applications. Their clients had significant concerns about whether their personal data or identities might be stolen. Part of the digital skills training that these clients needed had to include the privacy and security of personal data, otherwise clients might be reluctant to use online applications such as telehealth.

Trust plays a more consequential role in a comparative sense when people are asked about institutions and discount internet offers. One issue that has arisen is whether eligible households are aware of new internet subsidy programs, such as the Emergency Broadband Benefit (EBB) (in operation until the end of 2021) and its successor program, the Affordable Connectivity Program. Just 25% of eligible households said (in the summer of 2021) that they had heard of the EBB or discount internet programs. The lack of awareness about these programs makes communicating to these populations about their existence a priority. However, trust in internet service providers (ISPs) to convey reliable information is low. Just 10% of survey respondents said ISPs were highly trustworthy sources of information about discount programs and subsidies — far below the 28% figure for local public libraries. Focus group participants also said they often learned about programs for connectivity from their children’s schools, but nonetheless had difficulty signing up for the programs.

Just 25% of eligible households said that they had heard of the EBB or discount internet programs. The lack of awareness about these programs makes communicating to these populations about their existence a priority. However, trust in internet service providers to convey reliable information is low.

4. Device access

Access to computing devices often receives less emphasis in the digital divide discussion than service subscription. Part of this may be because computer access is less intermittent than an internet subscription. Hard times may mean a household has to cancel internet service, but the computer remains. Historically, many non-broadband adopters have computers at home. A [2010 survey](#) for the National Broadband Plan found that among those without high-speed service at home (about one-third of the adult population at the time), 46% had a working desktop or laptop computer at home.

Today, computer ownership gaps are bifurcated among non-broadband households with some internet connectivity (typically relying on a smartphone for access) and those with no internet subscription plan. Some 76% of connected non-subscribers (i.e., those with cell phone access) have a desktop or laptop computer in the household. Very few disconnected Americans — roughly half of all those without broadband that do not use the internet even with a smartphone — have desktop or laptop computers (11%).

Computer affordability is another issue. Some 47% of non-adopters cited the cost of a computer as a reason they do not have service. Among disconnected households, 50% say they would have difficulty affording any computer that costs more than \$200.

For practitioners, ensuring their clients have access to computers and tech support is a crucial component to solving the digital divide. Although many of the people they serve have a smartphone, digital inclusion service providers view smartphones as insufficient for clients to foster meaningful broadband adoption.

Among focus group participants, younger ones in particular were very reliant on their smartphones. Their portability and on-the-go data access suit their lifestyle. For that reason, many turned away from desktop or laptop computers; it was not worth the expense and (occasional) trouble-shooting hassle to have one.

47% of non-adopters cited the cost of a computer as a reason they do not have service.



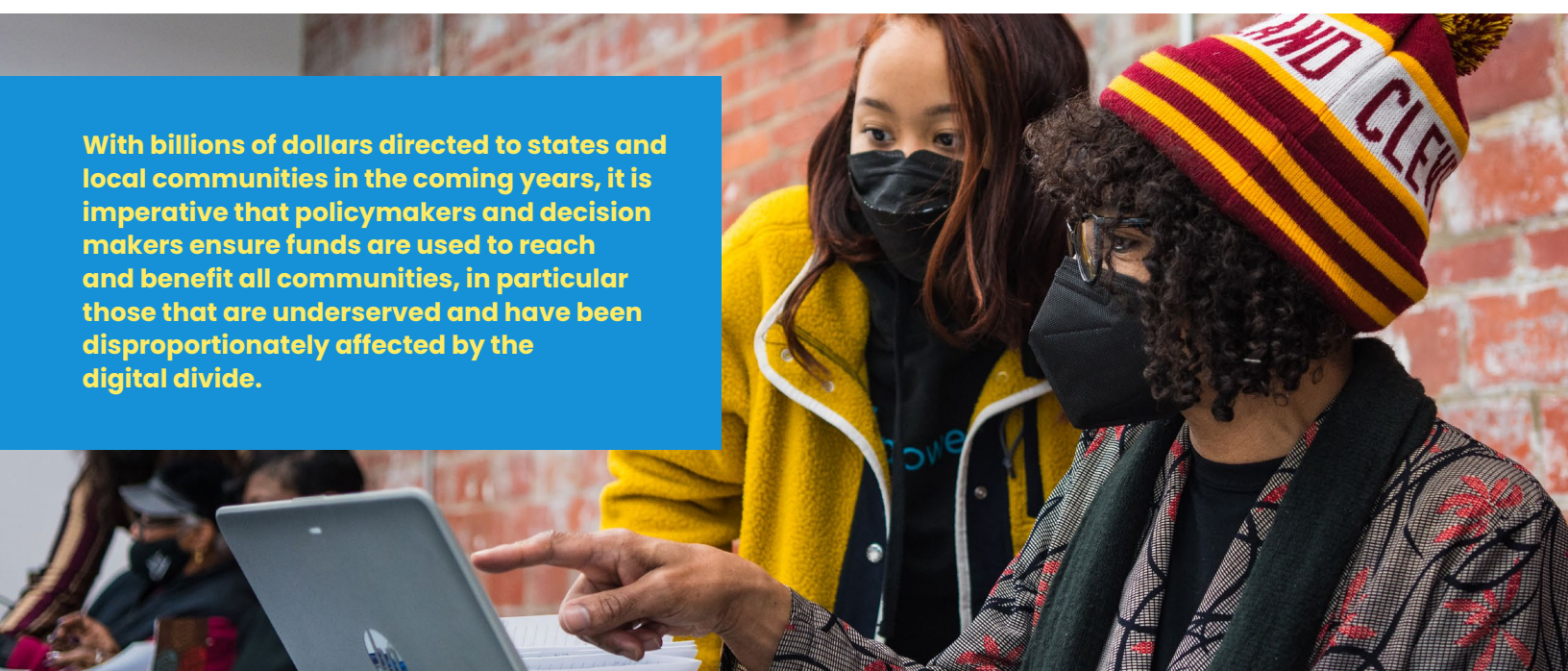
II. RECOMMENDATIONS FOR DIGITAL EQUITY PLANNING

A key takeaway from the national survey and focus groups is how barriers to meaningful broadband adoption are interrelated. Solving subscription affordability problems might be the right place to start, but it is also the wrong place to end. Many non-subscribers need computers and an understanding of how to operate them. While having resources available for digital skills is important, the issue has multiple dimensions. Older adults may be upskilling in the face of online demands that the pandemic imposed. Younger people — while generally confident navigating the internet — understand they may need training for the workplace.

The data and focus group discussion suggest the following recommendations for states and communities to keep in mind as they embark on digital equity planning.

1. Lead with an equity framework: As a digital inclusion practitioner highlighted, “Equity needs to be in the center.” With billions of dollars directed to states and local communities in the coming years, it is imperative that policymakers and decision makers ensure funds are used to reach and benefit all communities, in particular those who are underserved and have been disproportionately affected by the digital divide. It is equally important to be explicit about equity and inclusion goals while also including digital inclusion practitioners and community voices in coalitions, planning activities and advocacy efforts.

2. Facilitate community-driven messaging: Focus group participants and especially practitioners underscored the importance of the local dimension of digital inclusion. Not only do circumstances differ across communities, but reaching target populations who need help getting and staying online happens best when community members connect with one another, which is where trust is strong. This makes the notion of digital navigators highly relevant. These are ambassadors from the community who are trained to help others find the resources, e.g., discount plans and free computers, to start and sustain their internet journeys. In recent months, many communities have piloted digital navigator models, including the organizations that participated in the focus groups. The practitioners highlighted the important role digital navigators have played in recent months to promote the Affordable Connectivity Program, the new federal internet subsidy program.



With billions of dollars directed to states and local communities in the coming years, it is imperative that policymakers and decision makers ensure funds are used to reach and benefit all communities, in particular those that are underserved and have been disproportionately affected by the digital divide.

3. Localize and centralize digital resources: Not only are community-driven initiatives key, but having a trusted and accessible place in the community for digital resources is crucial. People need a one-stop shop that gives them access in one place to the digital assistance they may need. The data shows that local nonprofits, public libraries and other community anchor institutions are far more trusted than internet service providers and the government. For enrolling in discount or free internet plans, it is also important that people be able to complete that transaction in one visit. Complicated processes for determining eligibility for such programs [inhibits participation](#). If people have to leave a place that they have gone to sign up to retrieve a document to demonstrate eligibility, they often do not return. Easy-to-use enrollment processes at trusted community places are foundational to promoting digital equity. In addition, as devices become more prevalent in households and new adopters come into play, people require hands-on technical support. A one-stop shop or community space that offers technical support, coupled with internet enrollment assistance and digital skills training opportunities, addresses the multiple barriers that new adopters, in particular, face. As documented in the focus groups, people are eager to return to in-person activities, including digital skills training, as the pandemic eases.



4. Prioritize people over networks: Practitioners emphasized that closing the digital divide requires people as much (if not more than) networks. The digital divide is not primarily a technological problem, but instead a [social problem](#). Yet practitioners worried about a tendency among some stakeholders to equate fixing the digital divide with building more networks. The social nature of the digital divide means people-driven solutions have to be the main part of the equation, and this entails having people in the community, i.e., boots on the ground to address the problem. This puts the notion of scaling solutions in another light. Scaling a solution, in the business sense, connotes finding the easily replicable digital solution that can go viral quickly and reach the masses. That is not as relevant for a social problem. Rather, “seed” is more appropriate. Fostering digital equity requires seeding initiatives in places where community members are cultivating solutions. This requires patience and clear thinking about “seed versus scale” to address digital equity. It may be possible to scale digital equity solutions, but only after models have been cultivated in and for specific communities.

5. Engage and fund organizations doing the work: In the last two years, many organizations across the country have become digital inclusion experts in order to ensure their communities are connected and have the devices needed to participate in various online activities. At the same time, organizations that have been focused on digital equity since before the pandemic, including those that participated in the focus groups, have expanded their services exponentially to meet the demand. These are the organizations that states and local jurisdictions should engage to both inform the design and implementation of initiatives and fund to drive the work locally. Nonprofits, workforce development agencies, libraries and others are trusted voices across diverse communities and also know how to reach the hardest-to-reach populations. And to ensure digital inclusion efforts are successful, community partners need to be funded appropriately. Whether building out new infrastructure or a community wireless network, launching an awareness campaign to drive adoption of the Affordable Connectivity Program, or creating a computer refurbishment program, sufficient funding should be allocated to cover all costs associated with a successful implementation, including all personnel costs. As we heard from the organizations that participated in the focus groups, without appropriate funding, digital inclusion initiatives fall short of meeting goals.

III. CONCLUSION: PLANNING FOR DIGITAL EQUITY

After two years of a pandemic that exposed and exacerbated the digital divide, the nation is on the brink of making historic investments to address the issue. Practitioners interviewed noted that the pandemic created an opportunity to build capacity at the local level to help populations in need get online, maintain connectivity and build digital skills that create opportunities for them. But practitioners shared several potential pitfalls, specifically that:

- Local organizations that have for years been working to close the digital divide will be bulldozed by outside organizations new to the issue, but motivated to take it on due to funding opportunities.
- Federal and state funding applications and requirements will inhibit organizations that have not received public funding in the past, making it challenging to be eligible and receive funding.
- Planners and/or local officials will equate fixing the digital divide with more networks. In other words, installing fiber optic infrastructure will be seen as the sole necessary intervention. As practitioners repeatedly pointed out, this would not be sufficient.
- Policymakers will neglect the fact that much of the digital divide is a product of institutional racism. This is a strongly held view among practitioners and there is a concern that a failure to recognize this could result in new initiatives “doing more harm than good.”

Notwithstanding potential pitfalls, new funding from the Infrastructure Investment and Jobs Act (IIJA) is part of a very new communications policy environment. The IIJA includes legislative language from the [Digital Equity Act](#), which states that “Achieving digital equity is a matter of social and economic justice and is worth pursuing.” The legislation also finds that access to “...affordable, reliable, high-speed broadband is essential to full participation in modern life in the United States.” This calls on policymakers to take a more expansive notion of the digital divide with an understanding that the problem unfolds along a continuum from network investment to encouraging meaningful broadband adoption via discounts and digital skills training.

The lessons from this report — the importance of local solutions, appreciating the social dimension of the digital divide, and the need to collaborate with residents of impacted communities in devising solutions — can help ensure that IIJA investments have intended impacts.



www.everyoneon.org

@EveryoneOn

Facebook, Instagram, LinkedIn and Twitter