The Blueprint for Equitable Digital Participation

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Alisa Valentin
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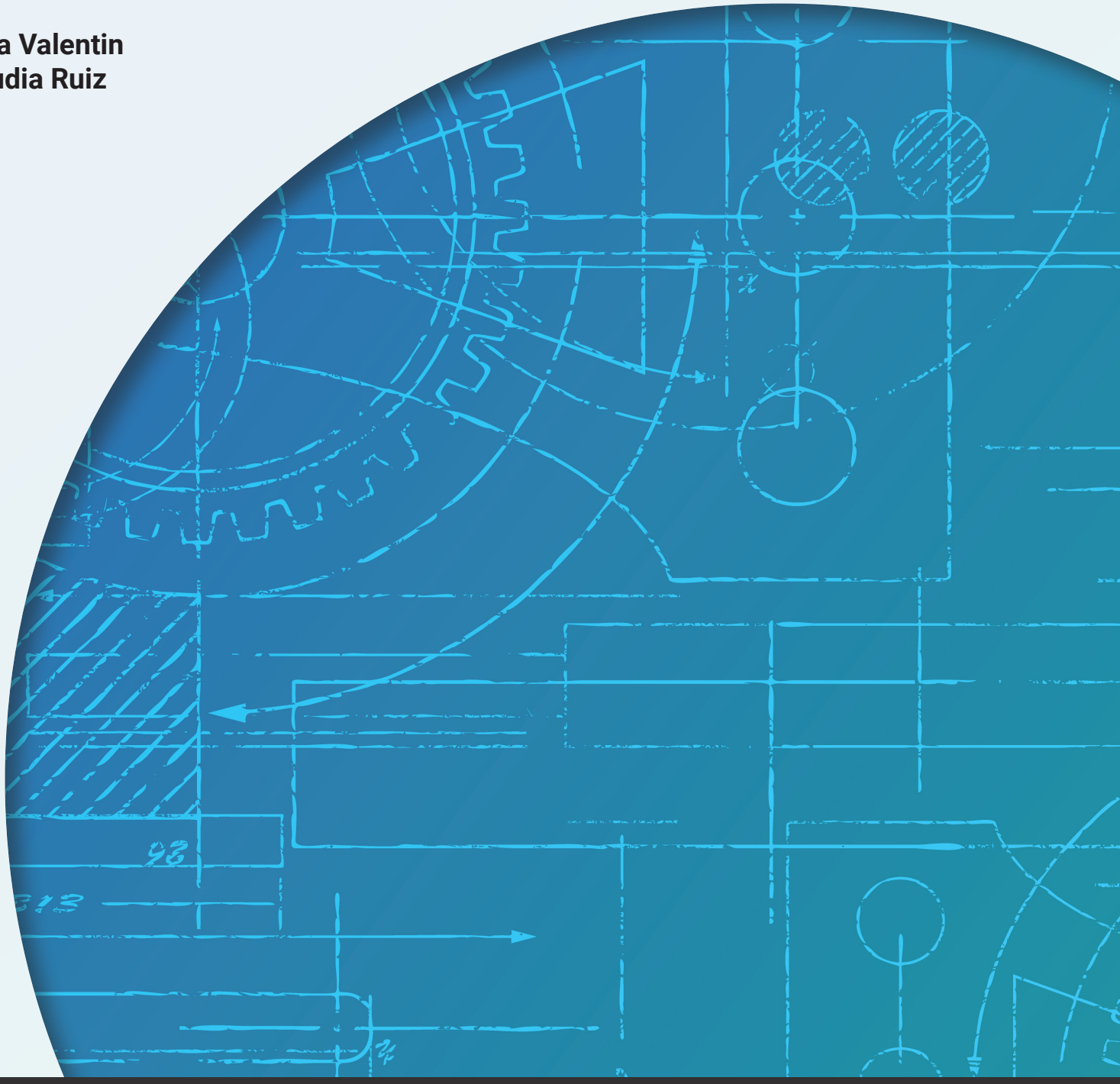

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Executive Summary

Access to affordable, reliable high-speed internet is a foundational prerequisite for participation in modern-day life. Yet, millions of households remain on the wrong side of the digital divide, which reinforces long-standing barriers to opportunity. *The Blueprint for Equitable Digital Participation* was designed to center the lived experiences of those directly impacted by digital inequities. Participants provided recommendations that ultimately pass the 'kitchen table' test—policies needed to help people live with dignity, opportunity, and the ability to thrive—for how to solve the digital divide in low-to-moderate-income households across America.

Methodology

Seven focus group sessions were conducted in Colorado, Georgia, New Mexico, and Ohio from September 2024 to March 2025 with participants living in households with an annual income of $70,000 or less. Following the conclusion of the focus group sessions, a nationwide survey was conducted in April 2025, which included 107 participants, to capture the challenges associated with broadband access, broadband affordability, and broadband adoption for low- to middle-income households.

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Key Findings

- Consumers possess a sophisticated understanding of solutions needed to bridge the digital divide, but they face systemic barriers due to policies that prioritize concentrated wealth over community needs. False narratives and associated policies rooted in scarcity have diverted resources away from those who need them most.

- The digital divide compounds every other challenge struggling households already face. Communities do not face barriers to broadband access and adoption in isolation. Instead, these obstacles intersect with challenges with housing stability, healthcare, employment, and education, which makes it imperative that these issues are addressed in concert with the closing of the digital divide.

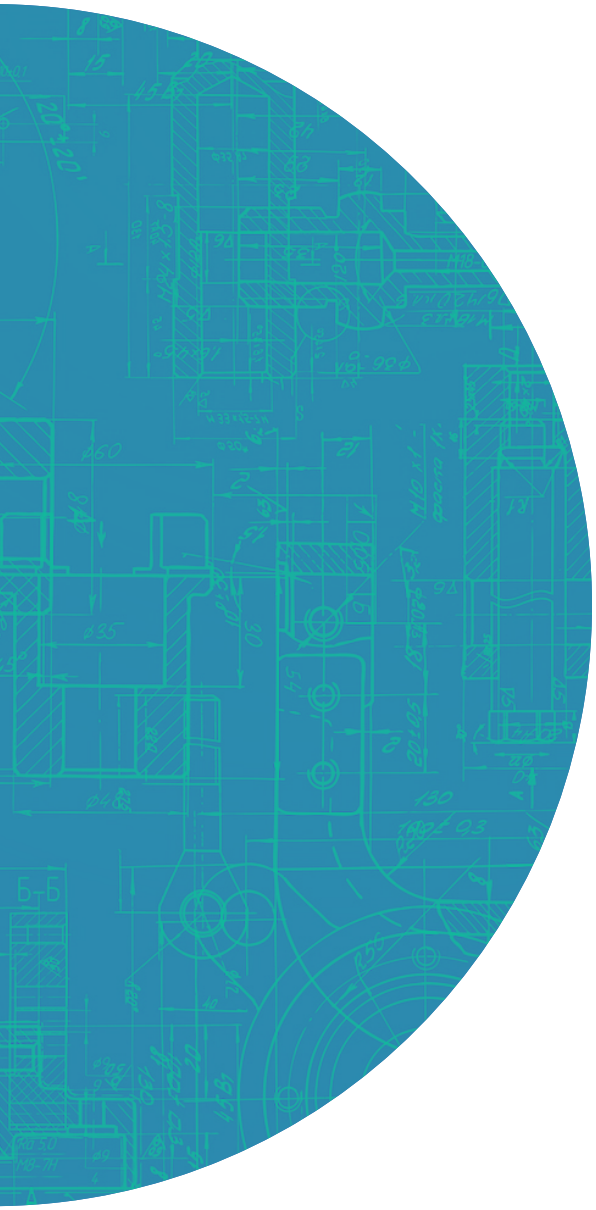
- Past policy approaches to closing the digital divide have failed to center community wisdom. Effective solutions meet people where they are so they are empowered to strengthen grassroots solutions, such as by embedding digital resources in frequently visited places or integrating digital navigation programs in existing areas of community support to meet their needs.

- The Universal Service Fund must be urgently reformed to provide a robust broadband affordability benefit of approximately $40 (or more if someone is in a high-cost area or living on Tribal lands) that reflects the market costs and the reality of competing costs of household expenses.

- Network resiliency must be strengthened by shifting high-cost program support toward operational expenses and network hardening.

- Broadband adoption must be prioritized through sustained federal investment in digital skills, device access, and culturally responsive training and digital navigation programs.

Introduction: A Broadband Policy Agenda of the People, by the People, and for the People



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Access to an affordable, reliable high-speed internet connection and the tools and skills needed to navigate it is the foundation for access to economic opportunity, healthcare, education, civic engagement, news and information, and government services. It has become increasingly undeniable that the internet is a prerequisite for nearly every dimension of daily life and similarly, it has become clear that its absence deepens long-standing inequities by further entrenching barriers to participation and engagement.[1]

Despite this reality, federal policymaking in Washington, DC continues to operate largely through networks of access, influence, and well-resourced interests that can uphold and reinforce entrenched institutional power structures and fossilize stale narratives that misdirect resources and structure programs to fail their intended beneficiaries. "Beltway" stakeholders move fluidly between Congress, federal agencies, think tanks, and advocacy organizations, each advancing their theories of progress and change. These actors collectively wield significant

1 UnidosUS. (January 24, 2025). Prosperity for All: A Latino Policy Resource for the 119th Congress, https://unidosus.org/publications/prosperity-for-all/.

influence over and often dominate policy debates. But within these circles, the authentic voices of low- and middle-income households are often erased, challenged, or misconstrued. The result is predictable: policies created in the ivory tower, drafted in congressional committee rooms, and debated in lobbying offices do not always pass the "kitchen table" test.

The Blueprint for Equitable Digital Participation seeks to confront this systemic exclusion by centering and elevating the lived experiences and knowledge of those most impacted by the digital divide. This includes voices from families navigating government assistance programs to those just one step away from a financial emergency upending their lives. This project also seeks to translate first-hand insights into policy solutions grounded in real-world expertise. In doing so, it aims to tackle sociopolitical and economic imbalances that have trapped historically marginalized communities in these cycles of exclusion—shifting power back to communities by authentically capturing and transmitting their insights to drive policy design and advance solutions grounded in their lived expertise.

Everyone deserves to live with dignity, opportunity, and the ability to provide for themselves and their families—and to thrive in their communities. At the same time, many participants also named the persistent struggles they face as a result of failed policy interventions that have created or reinforced barriers to consistent access to affordable, reliable broadband, and the digital skills needed to navigate the internet safely in a rapidly changing world.

What This Research Reveals

Focus group discussions conducted with participants living with disabilities, people of color, the underemployed, students, rural residents, immigrants, older adults, frontline essential workers, and individuals at the intersection of these identities, revealed a shared belief in the promise of America: everyone deserves to live with dignity, opportunity, and the ability to provide for themselves and their families—and to thrive in their communities. At the same time, many participants also named the persistent struggles they face as a result of failed policy interventions that have created or reinforced barriers to consistent access to affordable, reliable broadband, and the digital skills needed to navigate the internet safely in a rapidly changing world.[2] They also described the burden of confronting harmful narratives promoted by powerful, unaccountable special interests that use the notion of "scarcity" to distort political and societal realities. This project responds to those realities and offers a vision for the future that disrupts the status quo with community-sourced broadband policy proposals.

2 National Association of Counties. (July 12, 2021). Broadband Task Force: High Speed Internet is Essential for All Communities, https://www.naco.org/resources/broadband-task-force-high-speed-internet-essential-all-counties; Kelly Wert. (October 4, 2024). Every State Identifies Broadband Affordability as Primary Barrier to Closing Digital Divide, Pew Research Center, https://www.pew.org/en/research-and-analysis/articles/2024/10/04/every-state-identifies-broadband-affordability-as-primary-barrier-to-closing-digital-divide.

This paper is structured in four parts:

Part I: The Battle of Imaginations provides the background that led to the development and execution of this project. This section examines policy agendas that have undermined the goal of universal service, including political interference and systemic failures to recognize access to affordable, reliable broadband as a fundamental civil right. This section also outlines the purpose of this project and the need for transformative change driven by liberated imagination that is not constrained by what has been, to achieve digital equity.

Part 2: In Their Own Words amplifies the narratives of focus group participants from Colorado, Georgia, New Mexico, and Ohio through a section-by-section storytelling of how low-to-middle-income households experience barriers to broadband access, affordability, and adoption. This section also highlights community members' own proposed solutions and interventions voiced directly by those who are most impacted.

Part 3: By the Numbers–Measuring the Digital Divide presents an analysis of a nationwide survey conducted in April 2025, a period of time marked by economic and political change.[3] This snapshot provides unique insights into patterns related to broadband availability, adoption, and affordability. This analysis uses quantitative data to better understand relationships between demographics and geographies, and to highlight the needs and gaps in broadband policies.

Part 4: A Path Forward for Digital, Economic, and Societal Inclusion offers future-oriented recommendations for community members, policymakers, and civil society that are not constrained by past actions or the current political climate. Rather, these recommendations present ambitious solutions grounded in values of human dignity, justice, and equity. This section also argues that more than individual, one-off, temporary fixes are needed to drive transformative and lasting change. By centering community expertise over entrenched power structures, this research charts a path toward digital equity that honors both those most affected by the digital divide and the democratic principles that should guide policymaking in service of the public interest. This section argues that the task for policymakers is not necessarily to devise new theories of digital inclusion, but to listen, learn, and act upon the wisdom that already exists within the very communities that broadband policies should serve. This concludes with a blueprint for transformation by the people who understand best what universal service should mean.

3 Lauren Young. (Feb. 21, 2025). On The Money: Why more Americans are worried about the economy, Reuters, https://www.reuters.com/markets/us/money-why-more-americans-are-worried-about-economy-2025-02-21/.

Part I: Behind the Battle of Imaginations—Project Overview

The Stakes: Why Digital Equity Matters Now

Digital equity is defined as the condition in which all individuals and communities have the technological capacity they need to fully participate in our society, democracy, and economy.[4] Digital inclusion practitioners and researchers have continuously reminded the public that internet access alone is not enough. Broadband connections must be reliable and affordable and paired with access to up-to-date internet-enabled devices like laptops or desktops. Communities also need technical and culturally relevant support to promote full adoption and integration of digital and technical skills. In support of all of these goals, there must be policies, programs, and practices that are reflective of and responsive to the ways people live, navigate, and participate in digital spaces. Put simply, public investment, paired with safeguards and responsible governance frameworks, is essential to protect and advance policies that foster universal service. Yet, for millions of households in the U.S., the absence of one or more of these critical components leaves them disconnected.

4 National Digital Inclusion Alliance, The Words Behind Our Work: The Source for Definitions of Digital Inclusion Terms, https://www.digitalinclusion.org/definitions/.

To gain a ground-truthed understanding of the digital divide and the way it currently impacts individuals and families across the United States, seven community-level focus groups were conducted between September 2024 and March 2025 in various communities including Denver, Colorado; Atlanta, Georgia; Albuquerque, New Mexico; Santa Fe, New Mexico; and Marietta, Ohio. Additionally, 107 people participated in a nationwide survey distributed in April 2025, discussed in detail in Part 3.

Focus groups were intentionally selected to reflect varying community types across different regions of the United States. These areas have economies rooted in a variety of industries and are each situated in mixed geographic topographies with varying approaches to broadband policy at the state and local levels. Additionally, focus groups included communities from a range of demographic backgrounds as it relates to race, gender, age, disability status, lived experiences, and relationships with technology. Focus groups ranged in size from four to twelve participants, with each participant attesting to living in a household with an annual household income of $70,000 or less.

The Blueprint for Equitable Digital Participation was developed to better understand what low-to-middle income households need to be empowered.

The focus groups for this project were conducted between September 2024 and March 2025, a period marked by significant political and social change, heightened polarization, and shifts in approach to federal policy and associated funding. This timeframe also came several years after the height of the COVID-19 public health crisis, during an era of growing global recognition that affordable, reliable high-speed internet access is essential for nearly every aspect of daily life. These broader dynamics created an environment of uncertainty, with competing visions about the nation's direction with ongoing debates over economic conditions, the diversity of the population, the expanding influence of the technology sector, and powerful actors seeking to maximize their own influence and control.

Against this backdrop, *the Blueprint for Equitable Digital Participation* was developed to better understand what low-to-middle-income households need to be empowered in an era defined by rapid change, but also an era that will determine what happens when the challenges facing everyday people in the United States are not properly addressed. These include prioritization of corporate profits over the public interest, false or misleading narratives about barriers to broadband access and adoption, and the ongoing challenge of ensuring policymakers respond responsibly and effectively to the needs of households that have historically been and are presently being marginalized.

Critical Policy Disruptions During Research Period

During the period of the focus groups, survey distribution, and research analyses, several key initiatives that supported broadband access, adoption, and affordability were disrupted, altered or sustained, which posed significant risks, and in some cases, opportunities, to achieving universal service.

- **Affordable Connectivity Program Funding Lapse:** The Affordable Connectivity Program (ACP), a $14.2 billion initiative authorized by the Infrastructure Investment and Jobs Act (IIJA) of 2021, provided a $30 monthly subsidy ($75 for households on Tribal lands) for more than 23 million low-income households. Despite bipartisan interest in continuing the program, it expired when Congress failed to identify a long-term funding source.[5] The ACP played a key role in helping first-time broadband subscribers and "subscription vulnerable" households, those who have experienced intermittent disconnection due to inability to pay, maintain consistent access to affordable broadband. Research indicates that four in ten low-income households fall into this "subscription vulnerable" category, which underscores the importance of sustainable, long-term solutions that guarantee consistent broadband connectivity for a minimum of 23 million households.[6]

- **Cancellation of Digital Equity Act Funding:** The Digital Equity Act, also created under the IIJA, established three interrelated programs with a $2.75 billion funding allocation to support populations historically underserved by the digital ecosystem. The covered populations meant to be served by these programs included large percentages of all states in the nation including: "Individuals who live in Covered Households (defined as households with income from the most recently completed year of not more than 150% of the poverty level); aging individuals; incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility; veterans; individuals with disabilities; individuals with a language barrier, including English learners and those with low levels of literacy; individuals who are members of a racial or ethnic minority

5 Congressional Research Service. (May 8, 2024). "The End of the Affordable Connectivity Program: What Next for Consumers?" https://www.congress.gov/crs-product/IF12637.

6 John Horrigan. (April 2, 2025). The ACP Boosted Rural Adoption and Helped Keep the Subscription Vulnerable Online. https://www.benton.org/blog/acp-boosted-rural-adoption-and-helped-keep-subscription-vulnerable-online.

group; and individuals who primarily reside in a rural area."[7] However, in May 2025, President Donald Trump unilaterally cancelled this funding initiative under false claims that it was "racist" and "unconstitutional."[8] At the time of publication of this project, policymakers and civil society are advocating for the reinstatement of these funds so organizations and states can meaningfully connect communities on the wrong side of the digital divide through access to affordable devices, digital skills, and workforce development opportunities. NDIA is also in active litigation against the Trump administration arguing that the unilateral cancellation of the Digital Equity Act constitutes a constitutional violation of the separation of powers and is seeking restoration of the program passed into law by Congress.[9]

- **Overhaul of the Broadband Equity Access and Deployment (BEAD) Program:** This program was established by the bipartisan IIJA to expand high-speed internet access to unserved and underserved communities by funding physical infrastructure build-out and modernization across the United States and its territories. In June 2025, the Trump administration's National Telecommunications and Information Administration (NTIA) issued a Restructuring Policy Notice that reversed several of the Biden administration's guidelines, including removal of fiber technology preferences, removal of labor requirements, rescinding of planning for diversity, equity, and inclusion efforts, and a 90-day delay to revise plans and meet these requirements.[10] As of April 22, 2026, 54 out of 56 states and territories have had their Final Proposals approved by NTIA. The long-term impact of these changes and the future direction of the BEAD program remain uncertain.

7 National Telecommunications and Information Administration. Digital Equity Act Programs. https://broadbandusa.ntia.gov/sites/default/files/2022-06/DE-FAQs.pdf.

8 Public Knowledge. (May 9, 2025). "Public Knowledge Denounces Unconstitutional Attack on Right to Connect and Communicate." https://publicknowledge.org/public-knowledge-denounces-unconstitutional-attack-on-americas-right-to-connect-and-communicate/.

9 National Digital Inclusion Alliance. (October 8, 2025). National Digital Inclusion Alliance Files Lawsuit Seeking Reinstatement of Bipartisan Digital Equity Act's Competitive Grant Program, https://www.digitalinclusion.org/blog/national-digital-inclusion-alliance-files-lawsuit-seeking-reinstatement-of-bipartisan-digital-equity-acts-competitive-grant-program/.

10 National Telecommunications and Information Administration. (June 6, 2025). *BEAD Restructuring Policy Notice*. U.S. Department of Commerce, https://www.ntia.gov/other-publication/2025/bead-restructuring-policy-notice.

All people in the United States should have access to rapid, efficient, nationwide communication services at reasonable charges.

- **Constitutionality Challenge to the Universal Service Fund (USF):** The Communications Act of 1934 established that all people in the United States should have access to rapid, efficient, nationwide communication services at reasonable charges. The Telecommunications Act of 1996 later codified the concept of universal service, which led the Federal Communications Commission (FCC) to formalize and expand programs designed to ensure that communications services are available to everyone across the U.S. at comparable and affordable rates.[11] Today, the FCC administers universal service through four key programs including (1) the High Cost program, which provides assistance to certain qualifying telephone companies that serve high-cost areas, (2) the Lifeline program, which assists low-income customers by subsidizing monthly telephone charges as well as connection fees required to initiate service, (3) the Rural Health Care program, which allows rural health care providers to pay rates for telecommunications services that are comparable to those available in urban areas, and (4) the E-Rate program, which offers eligible schools and libraries access to telecommunications services needed to meet the needs of students, educators, and patrons. The USF faced a legal challenge when the Fifth Circuit Court of Appeals ruled that its funding mechanisms were unconstitutional.[12] This decision threatened to disrupt programs that provide essential telecommunications services to rural areas, low-income households, schools, libraries, and healthcare facilities. However, the U.S. Supreme Court later overturned the Fifth Circuit's ruling and correctly affirmed the constitutionality of the USF.[13] This ruling ensured that the USF could continue supporting connectivity initiatives and now provides an opportunity for future reforms by Congress.

11 New America. (August 2025). Bridging the Gap: Funding Universal Service in the Broadband Era. Open Technology Institute. https://www.newamerica.org/oti/reports/bridging-the-gap/.

12 John Bergmayer. (July 24, 2024). "Fifth Circuit Decision on Universal Service Undermines Congress, Worsens Digital Divide," https://publicknowledge.org/fifth-circuit-decision-on-universal-service-undermines-congress-worsens-digital-divide/. *See also*, Amicus Brief of Public Knowledge, Affordable Broadband Campaign, Chamber of Progress, Common Sense Media, & Communications Workers of America. (August 20, 2025). *Public interest SCOTUS brief in Consumers' Research v. FCC*, https://publicknowledge.org/policy/public-interest-scotus-brief-in-consumers-research-v-fcc/.

13 Federal Communications Commission, et. al. v. Consumers' Research, et. al., No. 24-345, https://www.supremecourt.gov/opinions/24pdf/24-354_0861.pdf.

Organizational Foundations and Commitment to Digital Equity

Public Knowledge, UnidosUS, and the National Digital Inclusion Alliance are steadfast advocates for universal service, a bedrock principle of telecommunications policy designed to ensure that all people, regardless of ZIP code, income, and background, have access to telecommunications networks and technology without discrimination. Our organizations share a deeply held belief that universal service policies should not be static and should instead evolve to keep pace with society's increasing dependence on the digital ecosystem. Our organizations also maintain the belief that universal service and digital equity are foundational elements of strong democratic governance and the advancement of civil rights, and further believe that the failure to close the digital divide will only deepen cycles of marginalization and exclusion for communities across the nation.

As scholar Ruha Benjamin observes, "radical imagination can inspire us to push beyond the constraints of what we think, and are told, is politically possible."

Insights from the focus groups and survey further underscore this imperative and highlight that while the United States grapples with a battle of imaginations between liberation and oppression, the authentic voices and solutions presented by those most affected by digital inequities offer a path toward policies that truly serve the public interest. As scholar Ruha Benjamin observes, "radical imagination can inspire us to push beyond the constraints of what we think, and are told, is politically possible."[14] Drawing upon this foundation of radical imagination and community-centered solutions as an approach to this blueprint, the following sections present what emerged from these insights.

14 Ruha Benjamin. (2024). *Imagination: A Manifesto*.

Part 2: In Their Own Words: Policy Insights from the Ground Up

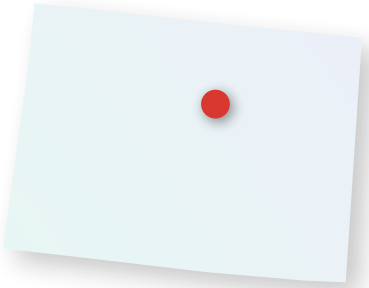
"We've got to struggle democratically if we're struggling for democratic ends. You've got to lead democratically if you want democratic ends."

Eddie S. Glaude Jr., Ph.D., James S. McDonnell Distinguished University Professor in the Department of African American Studies at Princeton University[15]

Part 2 represents a critical untapped resource in American policymaking: the strategic insights and solutions of those who understand digital exclusion not as an abstract concept, but as a daily navigation of systems inaccessible to them. Across all four states—Colorado, Georgia, New Mexico, and Ohio—focus group participants demonstrate sophisticated, nuanced understanding of broadband markets, federal programs, and infrastructure gaps with the precision that comes from the experiences of necessity and exclusion. Each regional section captures three essential dimensions of this expertise: first-hand knowledge of access barriers that quantitative data and narratives often miss, lived experiences of how federal program disruptions or their total absence impact communities, and community-generated policy solutions that emerge from genuine understanding of what works and what does not.

15 Eddie S. Glaude Jr., Ph.D. & Marcus Campbell, Ed.D. (April 30, 2024), "We Are the Leaders We Have Been Looking For," https://www.youtube.com/watch?v=X3Ygv1V3Ysw.

These voices do not simply illustrate the people who experience the digital divide. In fact, they sketch out its acute pain points and prescribe remedies with the authority that comes only from those whose economic security, educational success, civic participation, and even health and well-being hang in the balance. In offering their insights, these participants embody the democratic leadership our digital future requires, grounded in solutions shaped by those most affected, for the benefit of all. The sections below highlight a form of policy expertise that has been systematically dismissed by prevailing institutional hierarchies—hierarchies that contradict the basic democratic principle that people most impacted by policy decisions should have a central voice in making them.



Denver Residents Demand Predictable, Reliable Broadband

Roughly one-third of the population spends more than 30% of their income on housing, forcing families to choose between essential services.

Denver, Colorado, is a city that has experienced significant growth and transformation over the years. With a population of more than 700,000 residents, Denver is racially and culturally diverse, with nearly half of the city identifying as people of color.[16] The city has also become a hub for the tech industry, with many tech startups in the metropolitan area contributing to its thriving economy. In 2023, the median household income in Denver was $91,000, which surpasses the national median.[17] Despite these opportunities, many residents still face financial challenges. Denver reflects broader trends in Colorado, where roughly one-third of the population is cost-burdened, spending more than 30% of their income on housing.[18] As a result, residents in that low-to-middle-income bracket often have to make sacrifices in other areas, including access to affordable, reliable broadband and other essential services.

In August 2024, residents from Denver, Colorado, which included a range of retirees, people living with disabilities, non-traditional college students, and teachers, joined a focus group discussion about the opportunities and challenges they have experienced when accessing high-speed internet. Facilitators of the focus group were mindful of the potential power dynamics at

16 U.S. Census Bureau. (August 20, 2025). *Denver County, Colorado: Data Profile*, https://data.census.gov/profile/Denver_County,_.

17 U.S. Census Bureau. (August 20, 2025). *Denver County, Colorado: Data Profile*, https://data.census.gov/profile/Denver_County,_.

18 United Way Denver. (June 26, 2025). Colorado's Housing Affordability Crisis 2025, https://unitedwaydenver.org/wp-content/uploads/2025/06/Housing-Affordability-Crisis-Report-2025.pdf.

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Participants' Animal Metaphors for Internet Subscription Experiences

Shark Predatory | **Elephant** Slow | **Hyena** Misleading | **Monkey** Unpredictable | **Roadrunner** Fast

play, particularly given their deep knowledge of broadband policy and greater familiarity with prevailing terminology. To build rapport and create a more accessible environment, the sessions began with a simple, engaging question, with participants asked to characterize their experiences with internet subscriptions as an animal. Their responses were both creative and revealing:

- A **shark** represents a participant's lack of trust in predatory internet service providers (ISPs) that are "circling" to take advantage of consumers.
- An **elephant** describes a consumer's experience with a slow internet connection that impacts their ability to accomplish their tasks.
- A **hyena** captures a resident's feelings about how their connection "eats up everything" and how their provider misled them on what their connection would be able to deliver.
- A **monkey** illustrates how the internet behaves in an unpredictable way, in which it operates on its own terms.
- A **roadrunner** positively describes a resident's experiences with their subscription to the fastest speeds available, which allows them to thrive in the digital world. Similarly, another consumer highlighted their positive experiences with the internet without using an animal to describe their experiences.

Participants' animal metaphors revealed powerful insights into their internet experiences. This exercise highlighted how those experiences vary widely even within the same region. The comments also revealed what consumers are looking for with their internet experience: trust, speed, reliability, and an experience that supports full digital engagement. Although the examples above focus on Denver, the same methods and similar insights were observed across all focus groups, even though they are not shown in every city described in forthcoming sections.

Access

Broadband access challenges are often framed as an issue that primarily impacts rural America, yet infrastructure gaps and unreliable networks impact both rural and urban communities. According to the FCC, which assesses broadband availability through its Form 477 data, 7.2 million locations lacked broadband access as of 2024.[19] This was a sharp decline from what the FCC reported in 2021, when the agency stated 42 million households did not have access to broadband.[20] However, as researcher Dr. Christopher Ali has stated, "there are no doubt many more who are unserved and undercounted."[21] Beyond coverage, network reliability and network resiliency are also critical components of meaningful internet access, and this impacts communities across both rural and urban America, which Public Knowledge, the National Digital Inclusion Alliance, and other civil society organizations stated to the FCC in response to its Section 706 Notice of Inquiry.[22] To experience the full benefits of the internet, people must have a connection they can depend on regardless of the time of day, where they live, and local weather conditions. Because low-income communities often live in areas with chronic underinvestment in infrastructure, they also deal with the brunt of network outages.

One participant shared, "Frequently, it'll just cut out. And it'll cut out for the entire neighborhood without any notice... often at night is when it usually will cut out fairly consistently."

19 Jessica Rosenworcel. (November 17, 2023). "National Broadband Map 3.0: Thankful for Continued Improvements," *Federal Communications Commission*, https://www.fcc.gov/news-events/notes/2023/11/17/national-broadband-map-30-thankful-continued-improvements.

20 Federal Communications Commission. (January 19, 2021). *"Fourteenth Broadband Deployment Report,"* https://docs.fcc.gov/public/attachments/FCC-21-18A1.pdf.

21 Christopher Ali. (April 24, 2024). "For Millions of Americans, High Speed Internet is Unavailable or Unaffordable-A Telecommunications Expert Explains How to Bring Broadband to Places That Need It the Most," *The Conversation*, https://theconversation.com/for-millions-of-americans-high-speed-internet-is-unavailable-or-unaffordable-a-telecommunications-expert-explains-how-to-bring-broadband-to-the-places-that-need-it-the-most-227666.

22 Comments of Public Knowledge, UnidosUS, National Digital Inclusion Alliance, Asian Americans Advancing Justice-AAJC, New America's Open Technology Institute, and X-Lab, FCC Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket No. 25-223 (September 8, 2025); Reply Comments of Public Knowledge, X-Lab, Hispanic Technology and Telecommunications Partnership (HTTP), UnidosUS, National Digital Inclusion Alliance, and New America's Open Technology Institute, FCC Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, GN Docket No. 25-223 (September 23, 2025).

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This issue was clearly reflected in focus groups with residents in Denver who raised frustrations about the internet outages in their communities, and this is particularly concerning because the majority of the participants were individuals who live in housing supported by public assistance. One participant shared, "Frequently, it'll just cut out. And it'll cut out for the entire neighborhood without any notice...often at night is when it usually will cut out fairly consistently." Another participant described similar issues and how that impacts their academic experience: "I can echo that that happens to me [when the] summer semester just ended, and I had one paper to turn in, and I was like, please come on before 11:59, when this paper is due, because [I] can't submit a 17-page paper via my phone."

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Ultimately, the lack of sustained investment in low-income communities and historically marginalized communities is not new. As the Urban Institute has described, from the New Deal to Great Society, not everyone has benefited equally from federal policies. Their research notes that, "Neighborhoods and cities where people of color and/or people living below the federal poverty line were concentrated were broadly excluded from funding and projects that produced positive externalities—and instead experienced (and continue to experience) harm from infrastructure projects' planning and implementation."[23]

Such stories highlight why network reliability must be treated as a core component of digital equity. In November 2023, at the direction of Congress as provided by the Bipartisan Infrastructure Law of 2021, the FCC created digital discrimination rules that have since been challenged in court. During the development phase, Public Knowledge encouraged the agency to include network-reliability measures, such as the number and length of outages, because it is a path to ensure that networks function as reliably in the area under review as the comparison area.[24] The responses from interviewees made it clear that equity-centered infrastructure deployment, maintenance, and upgrade is key to ensure that low-income communities consistently experience quality broadband service.

23 Carlos Martín, Dulce Gonzalez, and Ajjit Narayanan. (October 2023). "Is Federal Infrastructure Investment Advancing Equity Goals?" Urban Institute, https://www.urban.org/sites/default/files/2023-10/Is%20Federal%20Infrastructure%20Investment%20Advancing%20Equity%20Goals.pdf.

24 Comments of Public Knowledge, In the Matter of Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination Notice of Inquiry, (May 16, 2022), https://publicknowledge.org/wp-content/uploads/2022/05/Public-Knowledge-FCC-Digital-Discrimination-NOI-Comments_May-2022.pdf.

The Impacts of the End of the Affordable Connectivity Program

The nation's efforts to make broadband subsidies sustainable were interrupted when the Affordable Connectivity Program expired in June 2024. For millions, including in Denver, ACP made all the difference in ensuring households could be consistently connected to broadband without making sacrifices in other areas of their lives. In Denver, Colorado, where the U.S. Census Bureau reports that the median household income from 2019–2023 is $91,000, 10.5% of residents still live in poverty. For many formerly ACP-enrolled households, broadband affordability remains a significant barrier to full participation in digital life. This is not solely the case for first-time subscribers to broadband but also for "subscription vulnerable" households. As broadband researcher John Horrigan of the Benton Institute has noted, approximately 4 in 10 low-income households fall into the subscription vulnerable category.[25]

Broadband affordability remains a significant barrier to full participation in digital life.

Participants in the Denver focus group indicated, on average, that $30–$40 is the average amount they are able to pay for broadband service. They further expressed that initiatives like the now-expired Affordable Connectivity Program were critical to closing the affordability gap, particularly because the simple enrollment process made participation accessible and streamlined. After the program ended, focus group participants expressed feelings of disappointment and abandonment, as well as a sense of being taken advantage of and having no escape from their reality. As one participant shared, "I participated in the Affordable Connectivity Program when it was available...I am the president of a community of...a lot of family homes as well, so I know a lot of the people there were very disappointed or it affected their internet access when it ended, and they're there looking for other ways to find affordable internet now."

Another participant echoed this sentiment: "I got a notification from ACP because I lived in public housing, and I filled out the form online and applied for it. They sent the information to my provider. They gave me the discount... when I heard it was going to stop, I made sure everybody else in the building knew that if Congress decided not to renew it, it would go away. Now, some of the companies had come up with an alternative on their own, but you had

25 John B. Horrigan. (April 2, 2025). *The ACP Boosted Rural Adoption and Helped Keep the Subscription Vulnerable Online*. Benton Institute for Broadband & Society, https://www.benton.org/blog/acp-boosted-rural-adoption-and-helped-keep-subscription-vulnerable-online.

to contact them to get it, and it wasn't nearly $30. For a lot of the people in my community, they didn't pay anything for their internet while that was going on; they had just the basic plan. When it quit, they ended up either renewing their contract for whatever plan it was going to cost them."

- "I was glad to see [it] because...it was meant to help people [who] couldn't afford or had limited incomes to get better access to the internet, because everything is on the internet, and now all the communication, basically, is through the internet. And I was glad to see it going. I was really disappointed when the Congress didn't renew it."

- "I'm still paying [for] expensive internet that I can't hardly afford, but I have to have it. But [if] I don't, can't use my phone, or my TV, or anything if I don't have it...For me, it feels like you're taking advantage of people that are in low-income, or you lied about what you [are] doing."

These testimonies all drive home the critical point that broadband is a necessity. For low-income households, programs like ACP, similar to programs for public housing, are essential for survival in the physical and digital world. Without robust connectivity programs, systemic inequities experienced by low-income households are only magnified.

Community Insights about Building Digital Skills

Digital skills are a critical part of one's ability to fully experience digital equity. An affordable connection, while critical, is not sufficient for those who do not have the devices or skills to safely navigate the online world. During the Denver focus group, participants spoke candidly about both their successes and the ongoing challenges they face in building digital skills, as well as what they see in their broader community. Across participant responses, several common themes emerged. First, there is a strong desire for more opportunities to develop digital skills at both a basic and intermediate level. Participants emphasized the importance of learning in spaces that are safe, accessible, culturally responsive, and where they feel supported.

For one of the older participants, the desire for training was not about mastering advanced programs but was about gaining basic skills such as navigating email and increasing their fluency with texting. While some may deem these as simple tasks, they represent real barriers for the millions of consumers who have limited exposure to technology. This insight also illustrates how digital inequities manifest in people's everyday lives, even in the most fundamental ways, such as attempting to communicate with a business, access and navigate government services, or stay connected to family and friends. There was also an underlying theme of how learning digital skills can help strengthen one's self-confidence, leading to greater self-empowerment and ultimately greater independence and self-reliance. The focus group participants' insights also highlighted the themes of simplicity, accessibility, and security.

Additionally, while it was an outlier for this focus group discussion, it is also important to note that one individual underscored the layers of digital exclusion. This participant shared that they have limited reading ability, which prevents them from writing or understanding emails that contain critical information. This reveals a deeper and often overlooked part of digital exclusion because challenges of basic literacy compound with the inability to fully participate in an increasingly online world. These insights highlight an urgent need for multidimensional digital skills programs that address the diverse needs of individuals—integrating foundational literacy, contextualized learning, and supportive resources—to create viable pathways for digital participation.

Keys to Digital Skilling

- **Simplicity**
- **Accessibility**
- **Security**

The Denver focus group offered deeply personal and practical insights into barriers residents face, but also solutions that are easily attainable. Below are some of the most powerful reflections and recommendations voiced during this session.

Highlights from Denver Residents about Digital Skills Needs

- "In my neighborhood, and a lot of it through Denver Housing Authority that I'm involved with, there's a big need for more training on devices, on how to even start them, and use them, and wake them up, and also cautionary things like how to avoid phishing scams. Basically, education and access to devices."
- "I would like to have some classes on how to do emails, how to get your emails, how to do your text, how to do all these things that way. It's easier for you to use something if you know how to use it."

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- "We have some person from DHA [Denver Housing Authority] coming in, and he teaches us how to use your laptop or phone for the Wi-Fi or stuff like that. And... he'll tell you, well, don't, get all these scams and all this. And he said, block them or don't even pay attention to them. So I think that's one good thing that they have that."

- "So I would say for the elderly, disabled individuals, they could definitely use classes and just basic information on how to use the devices, not [be] a little bit intimidated by them. And for the younger families and population, I would say they need to definitely make sure they have access to the internet and that the kids [have] some classes...geared towards safety. They come with a lot of problems about their children using the internet and them not knowing properly how to monitor it or ensure that it's a safe place for them."

Policy Recommendations from Denver Residents "In Their Own Words"

- **Increased Competition and Accountability:** "There are solutions outside of our current ISPs from town-made internet, ideally, if not city, and to extend beyond that, having better antitrust laws against ISPs and looking very, very closely at what they're doing and who they are and are not willing to serve."

- **Message for Congress:** "I would tell them that with the rising inflation and struggle for most families and even individuals to get by if they didn't plan properly for retirement, or they were forced into a retirement or just can't find work, or can't work for whatever reason they're on a fixed income, that we really need to, if it's a digital age, and if you don't have access or you can't afford it, you are really losing out on a lot of opportunities and connections with people, friends, family, everything's on the internet now."

- **Revitalization of the Affordable Connectivity Program:** Given the frequency with which the Affordable Connectivity Program (ACP) was mentioned throughout the discussion, researchers specifically asked participants whether they believe Congress should renew funding for the program. The response was overwhelmingly affirmative, with a resounding "yes" that echoed throughout the room.

Denver residents who participated in this focus group made clear that digital equity is a necessity that extends beyond traditional concerns of affordability and digital upskilling. While their stories affirmed these ongoing challenges, they also revealed critical gaps in how digital equity is typically addressed. Participants highlighted how network reliability, compromised by chronic underinvestment in low-income communities, creates additional barriers as significant as cost itself. Their experiences also uncovered deeper structural inequities, including basic literacy challenges that compound digital barriers and are often overlooked in policy discussions. These insights reflect both the persistent inequities created by systemic underinvestment and the opportunities that exist when communities are provided with comprehensive tools and resources, including reliable infrastructure, affordable access, relevant training, and foundational support to empower themselves in an increasingly digital world.

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Claudia Ruiz

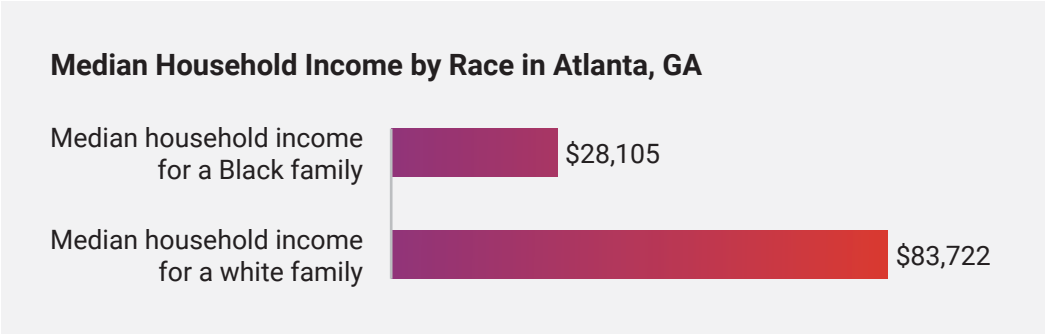
Atlanta Confronts Structural Barriers to Digital Belonging

"Nothing about the future of this country can be resolved unless it is first resolved here: not the climate crisis, or the border, or life expectancy, or anything else of national importance, unless you solve it in the South and with the people of the South."

Tressie McMillan Cottom, Professor, Center for Information, Technology and Public Life at UNC-Chapel Hill, columnist at *The New York Times*, and 2020 MacArthur Fellow

In September 2024, focus groups were held in Atlanta, Georgia, a city widely recognized as a vibrant hub for culture, innovation, and economic activity in the South. As the state capital, Atlanta serves as the political center where critical decisions are made about how to close the digital divide across its geographically and racially diverse population. As writer and sociologist Tressie McMillan Cottom has stated, the South must remain central to any conversation about national progress: "[n]othing about the future of this country can be resolved unless it is first resolved [in the South]: not the climate crisis, or the border, or life expectancy, or anything else of national importance, unless you solve it in the South and with the people of the South."[26] This observation underscores that the South is a focal point where solutions to national challenges can be developed in partnership with the communities most impacted. Atlanta offered an interesting way to examine how policy, infrastructure (even beyond broadband), and historical inequities intersect to shape the lives of people online and offline.

26 Tressie McMillan Cottom. (April 11, 2023). "Why I Keep My Eyes—and My Mind—on the South," *The New York Times*, https://www.nytimes.com/2023/04/11/opinion/columnists/tennessee-house-nashville-shooting.html.



How Structural Barriers Shape Digital Participation

The urgency of the need to close digital gaps in Atlanta is evident in Atlanta's economic realities. According to the U.S. Census Bureau, 17.9% of residents live in poverty.[27] Additionally, the racial and economic divides persist with the median household income for a Black family hovering at $28,105, compared to $83,722 for a white family, according to the Atlanta Wealth Building Initiative.[28] At the same time, Atlanta is still known as a "Black Mecca" where approximately 11,000 Black millionaires reside.[29] The counties that make up the Atlanta metropolitan area, including Gwinnett, Cobb, Fulton, DeKalb, Hall, and Clayton counties, are home to more than half (51.4%) of the state's Latino population. Gwinnett alone is home to more than 200,000 Latino residents.[30] These figures reflect the city's complexity that mirrors many metropolitan areas across the country: concentrated wealth, rapid demographic shifts, and persistent inequities which all shape digital access and opportunity in profound ways.

Atlanta focus group participants highlighted how digital equity efforts cannot be considered in isolation from other forms of structural inequities. Transportation emerged as a significant barrier, particularly for those who live in more affordable neighborhoods that may be outside of Atlanta city limits. One participant explained that for many living in those areas, it is

27 U.S. Census Bureau. "QuickFacts: Atlanta city, Georgia." *QuickFacts*. https://www.census.gov/quickfacts/fact/table/atlantacitygeorgia/PST045223.

28 Atlanta Wealth Building Initiative. *Building A Beloved Economy: A Baseline and Framework for Building Black Wealth in Atlanta*. https://buildblackwealth.info/.

29 Rolling Out. (April 8, 2023). Which Cities in the US Will Allow You to Live Near the Most Millionaires?, https://rollingout.com/2023/04/08/black-millionaire-cities/.

30 State of the Latino Community in Georgia. "Latino Population by County." https://stateoflatinosga.org/diversity-of-our-community/#latino-population-by-county.

more difficult for them to reach community organizations that offer digital skills programs as most of them are concentrated a significant distance from their home. They stated, "More associations or community things out there will be very helpful for people that don't drive... We have buses, but they don't run all over the place... So the difficulties expand the farther you get away from downtown."

The challenges faced by residents are rooted in a long history of underinvestment in public transit and urban infrastructure, which impacts Atlanta as well as other communities in the South. These issues are simultaneously about inaccessibility as much as they are about accessibility. A report from the Partnership for Southern Equity notes that the transportation challenges of the city "have been undeniably shaped by a history of structural racism and divisive policy decision." [31] This report further comments on the lack of a robust rail transit system and how the "promises were not realized due to several failures: Dense development around stations did not occur, MARTA was rejected by voters outside of Fulton and DeKalb counties, and suburban whites were not interested in riding trains and buses with urban Blacks." A history of exclusion and underinvestment in physical infrastructure finds its contemporary parallel in the digital realm, where broadband deployment follows similar patterns of inequity, often leaving the same communities disconnected. These infrastructure barriers are compounded by economic inequities and a broader politics of deservingness that shapes who receives resources and who does not.[32]

Another participant described the critical role internet connectivity plays in homeschooling their children:

> *"The connection is very important, because when they lose it, they'll get an absence, so now we have to communicate with the school, 'hey, this happened.' [And they respond] Well, guys, get a better internet. Well, it's not always the internet, because I mean, we have that fiber cable in our neighborhood, which has gotten a lot better, and not all the devices seem to work all at the same time sometimes."*

31 Ryan Holeywell. (February 9, 2017). "New Study Examines How Historic Racism Shaped Atlanta's Transportation Network," The Kinder Institute for Urban Research, https://kinder.rice.edu/urbanedge/new-study-examines-how-historic-racism-shaped-atlantas-transportation-network.

32 Alisa Valentin. (June 30, 2025). "Countering the Politics of Deservingness in Digital Equity," *Tech Policy Press*, https://www.techpolicy.press/countering-the-politics-of-deservingness-in-the-fight-for-digital-equity/.

Consistent and equitable access to reliable internet is crucial to the educational success of the country's youngest learners. This is particularly important given the reading proficiency levels for third-graders in Atlanta, where in 2023, "35% of third graders in Atlanta were proficient in reading."[33] Similar to the connectivity challenges reported by members of the Denver community, the Atlanta focus group participants highlighted how neighborhood-level disparities can prevent residents from accessing quality, reliable internet service. These patterns reveal that digital inequities are not isolated incidents but part of broader systemic barriers impacting many communities across the country.

Affordability emerged as a central challenge throughout focus group discussions, with participants consistently noting that cost poses a significant and ongoing challenge to broadband adoption. Many discussed the financial pressures faced by their households when there are competing needs such as food, utilities, and other basic household expenses. One participant explained, "I have five kids [and] my wife and I'm the only one that works. So $40 is pushing... It's limiting on what's in the refrigerator, a utility bill, water, electricity... So it's either put food on the table for six people or have internet." Others expressed frustration with the persistent annual increases of internet prices and noted, "I pay $120... I have looked at other offers, and I think $80 is the best I'm gonna find. I don't understand why every year they keep raising our prices on internet."

"I have five kids [and] my wife and I'm the only one that works. So $40 is pushing... It's limiting on what's in the refrigerator, a utility bill, water, electricity... So it's either put food on the table for six people or have internet."

Beyond individual household constraints, participants highlighted how structural barriers reinforce the digital divide at the neighborhood level. Limited market competition was cited as a key factor driving up prices, particularly in areas where only one or two providers operate. As one participant stated, there needs to be more "competition so the prices will be lower. In some regions, only one or two companies go in... So there's no competition, so they can do whatever they want. But if there's three or four providers in the same area, then they're like, 'Okay, if we don't offer it, he's gonna offer it.'" These patterns demonstrate how both financial and structural factors intersect to exclude or strain low-income households from accessing the digital ecosystem.

33 Annie E. Casey Foundation. (2024). *Changing the Odds 2024: Comprehensive Solutions for Atlanta's Future*, https://assets.aecf.org/m/resourcedoc/aecf-changingtheodds-2024.pdf.

The Need for Increased Outreach and Broader Accountability

Broadband infrastructure investment is not just about installing infrastructure. It demands investment in the skilled workers who build networks, the organizations that shape equitable policies, the navigators who bridge the digital divide, and ultimately the communities who depend on connectivity. A series of reports published by the Benton Institute for Broadband & Society on the human infrastructure of broadband demonstrates how human-centered investments yield returns in the form of meaningful internet use, especially for marginalized communities.[34] Without these investments, consumers face limited opportunities, lack of transparency, and challenges in acquiring digital skills that prevent people from fully participating in the digital world.

Who's keeping track that [ISPs are] offering [assistance] to the people, to the community?

These challenges were raised with several participants in Atlanta who described barriers created by insufficient outreach and accountability on behalf of ISPs. Several participants shared that they only became aware of opportunities to lower their bills, such as through the Affordable Connectivity Program, late in their existence or even after they had expired. One participant suggested that internet service providers should better advertise available assistance and stated, "This is something they keep hidden, unless you bring it up," which highlights the transparency issues that can occur when someone is not aware of more affordability options. Concerns about accountability also surfaced with another participant who asked the focus group, "Who checks on them if they're offering to the people, because at the end of the day, they're not offering it to people, they're keeping the money. But who's keeping track that they're offering it to the people, to the community?" Participants further explained that the perceived lack of transparency from ISPs creates unnecessary barriers, especially for residents with limited time and resources.

34 Amelia Bryne & Revati Prasad. (January 2025). The Human Infrastructure of Broadband: Looking Back, Looking Around, and Looking Ahead, Benton Institute for Broadband & Society, https://www.benton.org/publications/human-infrastructure; Colin Rhinesmith & Revati Prasad. (February 2025), From the Ground Up: Investing in the Human Infrastructure of Broadband, Benton Institute for Broadband & Society, https://www.benton.org/sites/default/files/Ground-Up-Infrastructure-Investing.pdf.

One participant highlighted that it is difficult to determine which companies offered the ACP in their particular area and, similar to their community members, was often reliant on informal networks for information about offerings. This dependence on personal connections to navigate government systems highlights a broader failure of formal, reliable, consistent outreach. Notably, the now unlawfully cancelled Digital Equity Act grants were designed to address these gaps by investing in "human infrastructure" including through funding for digital navigators, or trained community members who provide personalized support to help residents understand their broadband options, enroll in assistance programs, troubleshoot connectivity or platform access issues, and provide digital upskilling and training. Without more formal support systems, access to digital resources becomes a matter of chance rather than equity.

Participants also emphasized the importance of clear communication from the government via official agency websites. They highlighted that it is unreasonable for people to be knowledgeable about where to find information about or be aware of a program in general without significant outreach. One participant stated, "Because it's government funded... I think they should display it on one of the web pages... People aren't digging into every icon and reading everything." This is a call for accessibility, intuitive designs, and interagency collaboration with community anchors that make resources simple to find, understand, and enroll.

Without more formal support systems, access to digital resources becomes a matter of chance rather than equity.

This dynamic highlights a disconnect between national conversations about outreach and realities that happen in certain pockets of the public. In the Denver focus group, for example, nearly all participants were aware of the Affordable Connectivity Program due to targeted efforts by the Denver Housing Authority. This experience stands in contrast to what members interviewed in Atlanta stated were their lived experiences. While the Federal Communications Commission, other government agencies from the state to local level, and community organizations were rightfully praised for their outreach efforts, there is broader work that needs to be done to institutionalize a more deliberate, visible effort for programs that get, or help communities stay, connected. Additionally, while some participants did not distinguish between actions that can or have been taken by the local, state, and federal government, it is clear that there are significant opportunities across all levels to drive meaningful change.

Barriers Beyond Access: Language, Literacy, and Belonging

In today's interconnected world, access to the internet underpins nearly every facet of daily life. Yet, as focus group participants in Atlanta highlighted, this experience remains out of reach for many communities, especially marginalized immigrant populations. Members of the Atlanta focus group emphasized how language barriers and limited basic digital skills present significant obstacles for immigrant communities who want to effectively use devices and safely navigate the internet. These barriers are compounded by the fact that immigrant communities are frequently targeted by scams designed to exploit such vulnerabilities. [35] As one participant noted, there are some people who have never used a computer due to lack of skills and accessible devices: "Sometimes people that are living here for 10 years, 12 years, 15 years, and they never used a computer." Another participant noted the compounding issue of language accessibility and digital accessibility, stating: "The majority of people, they have less opportunities, they have more barriers, not only the language barrier, also the digital barrier."

"My mother, she's in my country. Now, all the time we're using WhatsApp. We're making FaceTime [calls]. So you feel weird when you don't have the internet. You feel alone...The internet is my life. The internet is for everything."

These barriers do more than limit access to information as they also undermine people's sense of connection and belonging. For Atlanta participants, the internet was described as an essential lifeline for sustaining social, educational, and familial connections. Reliable connectivity affects how residents communicate, access critical information, and participate in their communities. One participant described the critical role of connectivity in staying close to family abroad:

> *"My mother, she's in my country. Now, all the time we're using WhatsApp. We're making FaceTime [calls]. So you feel weird when you don't have the internet. You feel alone...The internet is my life. The internet is for everything."*

This account illustrates how staying connected can help combat isolation and reinforce a sense of belonging in an increasingly globalized world.

35 Connecticut Department of Consumer Protection, "Common Scams Targeting Immigrants," https://portal.ct.gov/SmartConsumer/SmartConsumer/Immigrants-and-Refugees/Common-Scams-Targeting-Immigrants---Know.

Policy and Programmatic Interventions from Atlanta Residents "In Their Own Words"

As participants in Georgia made clear, bridging the digital divide requires policies and programs that better reflect the lived experiences of the people most impacted. Participants suggested concrete interventions that would make a difference in their daily lives, which ranged from device subsidies to multilingual digital skills training.

- **Device Subsidy Programs:** "Every four or five years, we can get a discount of $200-$300 to get a new device... but maybe in order to get the discount or the coupon, you need to complete a course."

- **Multilingual Digital Training:** "They need to feel more confident with the computers, and the way to do that for Latino community is getting some training in Spanish first, and then they can improve their language."

- **Community Navigator Programs:** "Invest in the different navigators... they need to replicate that, because the Small Business Administration, they are using that, and they have good numbers."

- **Information Sharing Between Government and Community Organizations:** "They need to start sharing information with the different counties that we have, because other organizations, the majority of them... have partnerships with the different counties."

- **Flexible Access Points to Accommodate Working Families:** "A lot of people get up at 6 and they don't come back home until about 8 or 9 PM. They wish they had the benefit of being [at a community center], but unfortunately, the reality is that they don't."

These recommendations underscore that successful digital equity efforts require collaboration between multiple stakeholders including federal, state, and local governments; trusted community-based organizations; policymakers; and—critically—the residents whose lives are shaped by the digital divide and legacies of exclusion.

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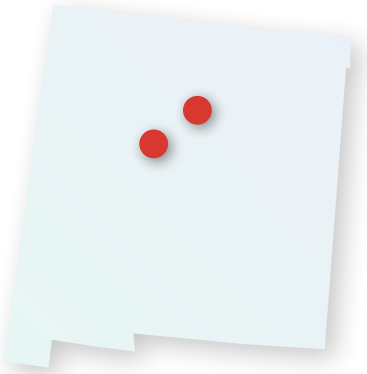


New Mexico Experiences at the Edge of Connectivity

In October 2024, researchers hosted community focus groups in Santa Fe and Albuquerque, New Mexico. These discussions took place at trusted anchor institutions that provide residents with access to community services, support, and information, and are spaces that promote cross-community organizing and collaboration. Focus groups in both cities included working parents, single parents, immigrants, rural residents, and individuals at the intersection of these backgrounds.

According to U.S. Census data, New Mexico's median household income is $62,125, approximately 22% lower than the national average.[36] An estimated 18.1% of New Mexicans live in poverty compared to 11.6% nationally, with one in four children in the state living in poverty. Additionally, 43.0% of New Mexico children are part of families receiving public assistance, ranking the state 50th in the U.S. on this measure.

$62,125
Median household income in New Mexico

22%
Lower than national average

18.1%
New Mexicans living in poverty

43%
New Mexican children part of families receiving public assistance, ranking 50th in the U.S.

Access to reliable broadband remains a persistent challenge throughout New Mexico, exposing the limitations of viewing digital infrastructure gaps as primarily a rural problem. As previously noted in this report, the FCC's 2024 data indicates that 7.2 million locations nationwide lack broadband access, which is a substantial decrease from the 42 million households reported in 2021. However, focus group discussions revealed a more nuanced reality across New Mexico communities. Historically, broadband availability data overstates actual connectivity options especially in states with challenging topography and dispersed populations like New Mexico.

Focus groups across both cities highlighted how true access encompasses not just technical availability but also reliability, affordability, and consistent performance. Participants from both urban centers and rural areas described fundamental infrastructure challenges that prevent full digital participation. Even in urban Santa Fe, participants reported significant reliability issues, with one describing their connection as "a monkey, very inconsistent with its behaviors, it will work one day [but] other days I have to move rooms and it won't work in one and then the other."

36 U.S. Census Bureau, New Mexico Quick Facts, https://www.census.gov/quickfacts/fact/table/NM/PST045224; Raymond Sena. (2023). Poverty in New Mexico: 2023, Department of Workforce Solutions, https://www.dws.state.nm.us/Portals/0/DM/LMI/Poverty_in_NM_2023.pdf.

These testimonies underscore that meaningful broadband access requires infrastructure that delivers consistent performance regardless of location, time of day, or weather conditions. For New Mexico residents, particularly in Spanish-speaking communities and rural areas, the digital divide manifests not just in the absence of service as a result of infrastructure limitations, but in connections too unreliable, too expensive, or too limited in capacity to support essential activities like education, healthcare, and economic opportunity.

Section A: "We Just Cannot Get Internet:" Challenges of Accessibility, Reliability, and Affordability in Santa Fe and Surrounding Communities

"We just cannot get internet in our area, being able to stay connected to the rest of the world for our kids and ourselves. No neighbors can get it, the whole 40 mile radius we have no service other than satellite which is extremely expensive and even that I have heard is very touch and go."

During the focus groups, residents in Santa Fe and surrounding areas raised significant concerns about the complete lack of internet infrastructure in their communities. As one resident stated, ISPs "don't feel like it is cost effective to them [and] they do not realize how many people are desperate to get connected." Another resident described a 40-mile radius around their home where no reliable internet service exists except for prohibitively expensive satellite options:

> *"We just cannot get internet in our area, being able to stay connected to the rest of the world for our kids and ourselves. No neighbors can get it, the whole 40 mile radius we have no service other than satellite which is extremely expensive and even that I have heard is very touch and go."*

The rural-urban divide was highlighted by a participant who noted:

> *"I spend time with my girlfriend and she lives on the east side of the mountains and she has satellite and it's like a snail, so slow... at my girlfriend's place I can only use audio for Teams calls."*

Connectivity gaps ranging from lack of infrastructure to affordability force many participants to rely on mobile hotspots for internet access. However, mobile hotspots are no substitute for reliable connectivity to the home because they carry data limitations and offer slower speeds, which makes them unreliable and largely inadequate to support typical online activities like remote work, online education, or accessing telehealth appointments. One participant stated:

> *"I work off of a hotspot because we have no internet, there are no lines running, only satellite so I have to use hotspot. I will connect my laptop for work in the morning, [but] it will suddenly drop. I have to restart and reconnect and I will lose it and have to go somewhere where I can find the connection."*

Even in more urban areas like Albuquerque, participants reported significant reliability issues even with at-home broadband: "I live in Albuquerque and I still have problems getting connected, it's in and out and I will be in meetings and it will drop. I will call my service provider and all they say is hopefully it will be back up in a few hours."

Broadband affordability also remains a significant barrier. During the first few focus groups in Santa Fe, many families highlighted that they have to maintain tight budgets to pay for any broadband connection, even services with reliability issues or services too slow to fully meet their needs. Participants across the focus groups indicated varying budget thresholds for internet service. According to participants, the following prices work best to meet their connectivity needs:

> *"At the end of the day do I really have the $50? I have bills and groceries, but if it really does work, I need to stick at the budget."*

- **Focus Group 1:** $50-60 maximum
- **Focus Group 2:** $30-50 range
- **Focus Group 3:** $10-40 range for Spanish-speaking participants, with one English-speaking participant indicating $75-100

The wide range reflects the economic diversity within the community, but for most participants, even $50 represents a significant financial strain. As one participant stated, "At the end of the day do I really have the $50? I have bills and groceries, but if it really does work, I need to stick at the budget." Similar to the Atlanta focus group, a resident pointed out the lack of competition as a barrier that impacts their experience online. They stated, "In Santa Fe there is no competition among private services. We need more access." (*Translated from Spanish*)

The now-expired Affordable Connectivity Program (ACP) had mixed results among our focus group. For some, the program was transformative. One participant stated, "I did participate [in the Affordable Connectivity Program] and I didn't pay anything and in my opinion it is a very good service. I paid $9.99 and when they used the program I didn't pay anything and it worked very well." (*Translated from Spanish*) However, some people had issues enrolling in ACP. One participant stated, "I enrolled prior to my current employment... It made reliable internet very reasonable, it brought a $60

plan to $30 a month. Negative was the process for applying, the national verifier online I had issues with that... the discount got cut off even though I was eligible so I went on a months-long battle with the verifier and the service provider, and it was never resolved." These testimonies drive home two critical points: broadband is a basic necessity, and digital navigators play a vital role in helping households navigate support programs like ACP. For low-income households, programs like the now-expired ACP are essential, as are the navigator programs supporting access and enrollment.

The Fight for Digital Skills, Security, and Devices

Digital skills emerged as another significant barrier for some participants during the Santa Fe focus group sessions. Several responses highlighted challenges with basic computing tasks. One participant stated that using Microsoft products is their most important need, particularly Excel. They stated the following: "I use YouTube step by step to learn Excel. I need something more user friendly. I am still learning PowerPoint. There needs to be more user-friendly applications." Another participant stated they needed assistance "turning my files into a PDF. We are supposed to turn our files into PDFs and I cannot figure it out."

An important conversation about online security emerged, highlighting how fears around sharing personal information constrain people's online activities. These were a few of those highlights:

- "I hate shopping online because of hackers stealing information. Yes, this has happened to me before. There are only two or three places I trust putting my credit card in."
- "I don't like putting my social security on forms because I don't trust the security."
- "Online shopping, I have had my credit card information stolen so I don't do it any longer."

These comments reveal the need for accessible progressive digital skills training, and ongoing support from digital navigators. This is particularly the case for tasks related to productivity software and online security. They also highlight how limited technology skills and security concerns can compound other barriers to digital inclusion, which underscores how individuals begin with vastly different levels of access and readiness. These gaps in skills and confidence directly impact how households interact with technology, including the devices they own and how effectively they can use them.

Most participants across the Santa Fe focus groups reported having multiple digital devices in their households, including smartphones, laptops, gaming consoles, and tablets. However, participants consistently identified cost as the primary barrier to acquiring these technologies and they then described strategic approaches to acquiring devices:

- "I am a bargain hunter, my TV is a smart TV but very old, my security system came with the apartment, my laptop I got with a student loan. It's a lot of planning and I need to determine what is necessary and practical."
- "It took 5-6 of my family members to come together to pay for (a PlayStation)."
- "I plan and stagger so I can't buy everything. I set aside money every month to plan, if the TV broke that's different."
- "For me, we usually wait until Christmas and plan around Christmas. We sometimes take advantage of holiday deals. I begin buying in September and wait until December."
- "I am fortunate because the televisions I won, the computers are gifts and from my daughters' school. The Alexa I bought on Black Friday, the cameras I bought at a discount, it's not that difficult but they are decisions." (*Translated from Spanish*)

While many households have managed to acquire digital devices, they have often done so through significant financial sacrifices, strategic shopping, or by relying on gifts, educational programs, and credit options.

This indicates that while many households have managed to acquire digital devices, they have often done so through significant financial sacrifices, strategic shopping, or by relying on gifts, educational programs, and credit options.

Policy and Programmatic Recommendations from Santa Fe Residents "In Their Own Words"

These focus groups revealed how digital inclusion challenges persist across multiple facets: infrastructure gaps in rural areas, affordability barriers for low-income households, reliability issues even in more urban settings, skill gaps that limit full participation in the digital world, and significant concerns about security and privacy. Unlike the Colorado and Georgia sessions, where participants often had access to the internet but struggled with reliability and affordability, many Santa Fe focus group participants reported a complete lack of infrastructure options beyond expensive satellite service. This fundamental gap in access represents a more severe form of digital exclusion that requires significant infrastructure investment.

Additionally, Santa Fe participants consistently identified affordability as a major barrier, with most indicating that $50-60 represents the maximum they can budget for internet service. This offers more evidence that programs like the now-expired Affordable Connectivity Program were viewed as essential by those who successfully enrolled. Across all sessions, participants emphasized that internet access is a necessity for education, employment, healthcare, and maintaining social connections in their community. As one participant powerfully framed it, internet access has become a "social determinant of health," directly affecting opportunities and outcomes across multiple dimensions of well-being. When asked about policy interventions and solutions, participants emphasized several key priorities:

"Keeping the affordable ACP, keep it continued forever."

"Invest more in infrastructure and invest more in subsidies for those living paycheck to paycheck."

"More competition for services."

Infrastructure Investment:

- "Infrastructure, put some lines out there, some fiber optic."
- "I am sure there are a lot of folks in my girlfriend's area where they do not have internet at all because it's not available unless you have satellite, which is expensive and I see the school bus picking up kids and internet is essential for kids with home learning."

Affordability Subsidies:

- "Keeping the affordable ACP, keep it continued forever."
- "I agree, to have affordable internet and the cellphone bill to give everyone that opportunity."
- "Invest more in infrastructure and invest more in subsidies for those living paycheck to paycheck."

Increased Competition:

- "More competition for services." (*Translated from Spanish*)
- "Expand internet access, more competition because when there are more companies there are better prices." (*Translated from Spanish*)

These recommendations highlight the clear priorities of Santa Fe and surrounding areas including robust infrastructure, affordable access, and greater competition among service providers.

Section B: The Price of Staying Connected in Albuquerque

In October 2024, residents from Albuquerque, New Mexico participated in a series of community listening sessions with the facilitators of this project. The diverse groups included primarily Spanish-speaking participants with varying levels of digital access and digital skills. As was the case for the other focus groups, participants were asked what animal metaphor they would use to describe their experience with the internet and there were some enlightening responses:

- A **parasite** was described for service that "works very well" but extracts payment.
- A **lion** was chosen because "it takes a large part of my paycheck and the costs are hidden."
- A **hyena** was selected to represent "the poor quality that doesn't offer the plans my family needs."
- A **turtle/lizard** that "takes all the money (like blood)."
- A **butterfly** for a service that costs $10 and "works very well."
- A **dog** "because it's very active, but when it puts its paws up, it stops. Everything. Because it wants its head scratched. So, in internet, in my house, that's how it is. Suddenly it was good, and suddenly it was bad."
- A **turtle** was mentioned again: "Sometimes it's fast, and sometimes slow."
- A **cat** was chosen by one participant because "sometimes [it's] there, suddenly disappears. And I can't find it."
- A **duck** "because they are very slow, working very hard sometimes."

Yet again, this highlighted issues related to unpredictability, reliability, and lack of control over their internet experiences. The Albuquerque focus groups revealed a wide range of internet usage patterns, which indicates how essential connectivity has become for these households. These responses also show the inconsistent nature of internet access experienced by many Albuquerque residents, even as they increasingly rely on connectivity for essential services.

Participants' Animal Metaphors for Internet Subscription Experiences

The Impacts of the End of the Affordable Connectivity Program

With 18.4% of New Mexico residents living in poverty, nearly twice the national rate, broadband affordability is a substantial barrier to digital equity. Across the state's focus groups, participants consistently cited cost as their primary concern when selecting an internet service. Albuquerque participants cited thresholds of $10–30 as what they are able to afford. The now-expired Affordable Connectivity Program (ACP) provided critical support for many participants, which created a pathway to connectivity that would otherwise be financially out of reach. When asked about their monthly budget for internet service, participants indicated significantly lower thresholds than those in other focus groups:

- **Focus Group 1:** Most participants said $10 is an ideal amount they could pay for broadband but if they made sacrifices in other critical parts of their lives, it would be a maximum of $30.
- **Focus Group 2:** The range was $10–50, with most indicating $25 was the maximum.

When asked whether price or speed was more important, the majority in both focus groups prioritized price. Many of the participants stated they now rely on low-cost offer programs created by internet service providers, but challenges around contract terms and billing practices emerged as significant obstacles:

- "I tried another company but companies have a minimum one-year contract so I use the same company because I can't change." (*Translated from Spanish*)
- "My mom is 70 years old, and her account changes a lot each month, doesn't notify when there are changes in the service, not the same usage, so I get very angry because the service for my parents is so expensive but they use less." (*Translated from Spanish*)

"My mom is 70 years old, and her account changes a lot each month, doesn't notify when there are changes in the service, not the same usage, so I get very angry because the service for my parents is so expensive but they use less."

These testimonies illustrate how affordability barriers are compounded by confusing billing practices, hidden fees, and contract requirements that disproportionately impact vulnerable populations.

Navigating Digital Discomfort

Participants in both Albuquerque focus groups expressed a wide range of comfort levels with online activities, which revealed significant variation in how they engaged with digital platforms. Many participants specifically highlighted discomfort or frustration with certain online tasks. One participant stated, "I don't like anything [online], I prefer to do everything in person, not online. I want physical contact." (*Translated from Spanish*) Another shared, "The most difficulty for me is creating profiles because when there's an error and I can't continue." (*Translated from Spanish*) This illustrates how technical challenges can prevent users from completing basic online processes. Others expressed struggles with routine digital tasks as well, such as password management: "I like everything but I still have problems with passwords." (*Translated from Spanish*) Concerns extended to sensitive areas like healthcare, as one participant noted, "I'm not comfortable for medical services for my daughter, I'm not comfortable using email or having these conversations online." (*Translated from Spanish*)

The feedback collected during the Albuquerque focus groups highlights a consistent theme including a strong preference for in-person interactions because of challenges with managing passwords, creating online profiles, and navigating crucial digital platforms for sensitive services. These insights demonstrate the importance of in-person, brick-and-mortar services alongside user-friendly digital alternatives and tailored support for people experiencing barriers to digital participation.

Policy Recommendations from Albuquerque Residents "In Their Own Words":

When asked what recommendations they would provide policymakers, participants emphasized several key priorities related to affordability, including the continuation of the Affordable Connectivity Program and low-cost internet offers by internet service providers. Some of the most detailed recommendations were on the topics of education, digital skills, and targeted outreach.

Education and Digital Skills

- "[We] need more programs to teach the community how to use the internet and distribute computers." (*Translated from Spanish*)
- "It's important that they go and look for the person who needs it. The programs don't leave the building to look for the people who need it in their homes." (*Translated from Spanish*)
- "Accessible classes in the language, programs that assist with barriers. In my experience I've seen programs that give away computers but if people don't know how to use them..." (*Translated from Spanish*)
- "For example, in senior centers there is an organization that worked with seniors to use the phone or computers, schools also need these programs." (*Translated from Spanish*)
- "Artificial intelligence—we need more information and continued education." (*Translated from Spanish*)

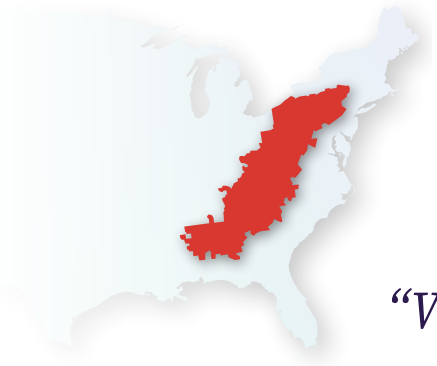
"[We] need more programs to teach the community how to use the internet and distribute computers."
(Translated from Spanish)

Targeted Outreach

- "They need to create programs that share information about the programs, better communication for communities." (*Translated from Spanish*)
- "Show how to use and send prepared people to teach the community." (*Translated from Spanish*)
- "Better communication, have free programs for education, prepare me and use a tax credit incentive program." (*Translated from Spanish*)

- "They need to go to the communities that need it." (*Translated from Spanish*)
- "I think these programs exist but they are not in the Latino community, if I could learn when I was little that would be better." (*Translated from Spanish*)

These recommendations highlight the need for comprehensive approaches that address not only affordability but also the cultural and linguistic barriers that may prevent limited English proficient communities from fully benefiting from existing programs.



Appalachia's Urgent Call for Reliable, Affordable Broadband

"Without a deeper and more complete understanding of Appalachia, it will be hard for its people to build a brighter future that crosses lines of division and works toward parity between race and class."

Ivy Brashear, former Appalachian Transition and Communications Associate at the Mountain Association for Community Economic Development

The Appalachian region of the United States spans 206,000 square miles across 13 states from Southern New York to Northern Mississippi and is home to approximately 26.4 million people.[37] This region was chosen as a location of exploration because of its geography and increasing political significance, often cited by politicians in the national discourse. As Ivy Brashear, native of the region and former Appalachian Transition and Communications Associate at the Mountain Association for Community Economic Development, states, "without a deeper and more complete understanding of Appalachia, it will be hard for its people to build a brighter future that crosses lines of division and works toward parity between race and class."[38] Brashear further states that [Appalachians] have had "little say in what images the rest of the country saw, and how those images would shape policy, grantmaking and the local economy for generations."[39]

37 Appalachian Regional Commission, "About the Appalachian Region," https://www.arc.gov/about-the-appalachian-region/.

38 Ivy Brashear. (November 12, 2019). "The Lies We're Told About Appalachia," *YES! Magazine*, https://www.yesmagazine.org/issue/building-bridges/2019/11/12/the-lies-were-told-about-appalachia.

39 Ivy Brashear. (November 12, 2019). "The Lies We're Told About Appalachia," *YES! Magazine*, https://www.yesmagazine.org/issue/building-bridges/2019/11/12/the-lies-were-told-about-appalachia.

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In Appalachia, the median household income is $64,588, and the region's poverty rate stands at 14.3%. Among households with children under the age of 18, 21% participate in the Supplemental Nutrition Assistance Program (SNAP).[40] Additionally, one in six Appalachian residents reported having a disability between 2018 and 2022, which is more than three percentage points higher than the national average. Broadband access and broadband adoption are critical factors shaping economic, education, and healthcare resources. According to the Appalachian Regional Commission, in 73 counties in this region (more than 40% of which are rural), less than 75% of households had a broadband subscription.[41]

In contrast, most of the 29 counties with broadband subscription rates at or above the national average were located in metropolitan areas of Appalachia, which demonstrates that there is even a digital divide that is not only regional, but also more severe in this region's most rural communities. In Washington County, Ohio, where the focus group research was conducted in March 2025, the broadband subscription rate was 83.0%, compared to the national average of 88.3% and the regional Appalachian average of 84.5%.[42] Similar to the rural areas of New Mexico, the participants in Marietta, Ohio highlighted issues of broadband access in their communities. These participants also highlighted issues related to affordability, customer service and transparency, and broader economic challenges in the community.

Brashear further states that [Appalachians] have had "little say in what images the rest of the country saw, and how those images would shape policy, grantmaking and the local economy for generations."

Service Quality Challenges

In communities across America, access to reliable, high-speed internet service, both at-home and mobile, remains a significant barrier, particularly in areas located far from town centers or urban hubs. The quality of connectivity in these regions often falls short of the demands of modern life, which makes even basic online tasks difficult or impossible to achieve. The comments made by focus group participants highlighted their frustrations with data caps, weather-dependent connections, and speeds that are so slow that it makes tasks like speaking on the phone or streaming video nearly impossible.

40 Appalachian Regional Commission. (June 2025), "The Appalachian Region: A Data Overview from the 2019-2023 American Community Survey," https://www.arc.gov/wp-content/uploads/2025/05/PRB_ARC_Chartbook_ACS_2019_2023_FINAL_2025-06.pdf#page=157.

41 Appalachian Regional Commission, Computer and Broadband Access in Appalachia, *The Chartbook*, https://www.arc.gov/about-the-appalachian-region/the-chartbook/computer-and-broadband-access-in-appalachia/.

42 Appalachian Regional Commission, "Computer and Broadband Access in Appalachia," *The Chartbook*, https://www.arc.gov/about-the-appalachian-region/the-chartbook/computer-and-broadband-access-in-appalachia/.

- "We're so rural. You have to live in town to be able to pick up an internet service. I live a mile and a half away from the main road, and there's no cable network. You have to have satellite, and then there's no internet. We're lucky to have city water."
- "We can't really stream. We try to use our Vizio Free to just watch Fox News, and it'll just spin."
- "In my area, I can barely get a bar to use a cell phone. To make a 911 call, I believe that will work, but we have to do Wi-Fi calling. Oh, and then it's like crack, crack, breaking up. You can hardly [carry on] a conversation."

"Whenever there is a storm or something along those lines, I have to use my annual leave to take the day off because I don't have the ability to work from home. We had a snow storm and our office, we were open, but our office base was closed. So twice this year I've had to use annual leave because I just do not have the ability to work at home."

These first-hand accounts reveal the daily frustrations and limitations experienced by people in underconnected areas. Insufficient or unreliable broadband is not a minor inconvenience. It disrupts people's ability to fully participate in everyday life and has far-reaching consequences. In Marietta, Ohio, for example, consumers clearly understood how inadequate broadband infrastructure shapes their families' experiences and opportunities. These connectivity gaps also affect regional economic development, because reliable broadband plays a key role in business investment decisions, compounding disadvantages for underserved communities.

- "I have two children that like to game and if they're on at the same time, I hear, 'It's lagging.' 'Our internet is terrible, Mom!' 'We need new internet!'"
- "I have worked at home occasionally, but I'm limited as to what I can do. [We have a] large operating system that we use through [my job], and I can't even open that to get to our providers or make any comment logs. It won't even open."
- "Whenever there is a storm or something along those lines, I have to use my annual leave to take the day off because I don't have the ability to work from home. We had a snow storm and our office, we were open, but our office base was closed. So twice this year I've had to use annual leave because I just do not have the ability to work at home."

From kids struggling with remote learning or online gaming, to adults unable to work effectively from home during storms, it is clear that the impacts of unreliable broadband are tangible and widespread in Appalachia.

Balancing Cost and Value

For many residents in the region, satellite broadband is often the only available service option but the high cost and inconsistent reliability make it a frustrating solution. While some satellite providers have long-served

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the community, newer alternatives, particularly Starlink, have sparked interest as a potential alternative. However, the steep initial investment (as much as nearly $400 upfront) and ongoing monthly expenses (between $80–$120 monthly) associated with this alternative put it out of reach for households, which discourages subscribership. Additionally, Starlink is charging "congestion fees" of up to $1,000 in various regions to help control high-demand areas.[43] One resident said: "The upfront cost to get Starlink is... unattainable. I mean, my friends that moved here from California are the only people I know that have Starlink and that's because they could afford the upfront costs." Another participant detailed the expenses: "They told us it would be $120 a month. But where we live, it was between $500 and $600 just to have the setup done." For those who do secure a satellite connection, performance falls short of the needs. One person described the limitations of their data plan: "If you use all your gigabytes, you get a little 50GB bonus cushion but you can only use that between 2 AM and 8 AM." They added, "I don't think my supervisor would like me only being available between 2 AM and 8 AM so I can log on to our program." These comments revealed not only the technical limitations of current broadband offerings, but also the social and economic barriers they reinforce.

"I'd pay $120 if that's my TV and my internet and I'm using my phone. But when it's $100 for this, $115 for this, and $90 for that, I mean, just to be connected to nothing... like all three packaged together, that would be great. But when you're putting out $300 a month and it's like, I can't even download a movie, and you try to look at Facebook, and you can't even open a picture, [it] just sits there."

On the issue of pricing more broadly, and the ability to pay, one participant said: "I'd pay $120 if that's my TV and my internet and I'm using my phone. But when it's $100 for this, $115 for this, and $90 for that, I mean, just to be connected to nothing... like all three packaged together, that would be great. But when you're putting out $300 a month and it's like, I can't even download a movie, and you try to look at Facebook, and you can't even open a picture, [it] just sits there."

Another participant said she would pay up to $200 because they "view it as just as an important utility, as my electric bill, my water bill, etc., and so, if my internet bill suddenly jumped $200 like, I would be okay paying that amount because it's as important to me as being able to turn on my lights. I don't want to pay that much. I would figure out a way to make it work in my budget, but I think anything in excess of that would be too much to take on." Another participant stated, "I'd look at price; my kids would look at speed."

These experiences underscore a fundamental challenge: current options can fail to meet affordability, reliability, or both standards.

43 Michael Kan. (May 1, 2025). "The Starlink Waitlist is Gone But You Should Check if Your Area Has a Demand Surcharge," *PC Mag*, https://www.pcmag.com/news/spacex-removes-Starlink-waitlist-in-the-us-but-demand-surcharge; Michael Kan. (November 6, 2025). "New Starlink Map Highlights Which Areas in the U.S. Face Network Congestion, *PC Mag*, https://www.pcmag.com/news/new-starlink-map-highlights-which-areas-in-the-us-face-network-congestion.

Policy Recommendations "In Their Own Words"

Conversations with consumers in Marietta, Ohio surfaced important insights for stakeholders. Participants consistently noted that systems are often not designed with end users in mind, and that many programs, while promising in concept, fail to provide the comprehensive support people actually need. In addition to these design failures, there is pervasive distrust of broadband providers, leading participants to call for greater transparency, consumer-friendly policies, and reliable service.

Support for the Affordable Connectivity Program and Ease of Enrollment:

- "The best thing about ACP is that it had departments talking to each other. There's no reason that an individual should prove their income level when the IRS already has that information, because they file their taxes. The best system is one that talks to other places within the federal government that has their information. So that's like one key thing that like, let's keep that. I also think that it should be in some frame, like auto enrollment, like the internet users that are already on programs, they usually have to disclose some amount of financial information to get that service. It should be on the ISPs to enroll those people."

- "[The] easiest process for seniors is they want to see it. They want to hold it in their hand. They want to look at it. They don't want to go online and fill out a form. They want to be able to pick it up and hold it in their hand and read what it's going to say, physically fill it out, and mail it back into you."

"We deal with people who live in very rural areas, and without having the access to the internet, there's a lot of things that they just cannot participate in.

Wraparound Support:

- "We have a lot of people that we run into that still do not read or write, and so having to fill out a consent form or do something, they have no ability to do that. But it's just, that is still a problem in this area. So giving someone a device and saying, 'this is a program that you're getting this device,' they're not going to know how to use it, because they're not going to be able to read the directions to understand how to use it."

- "We deal with people who live in very rural areas, and without having the access to the internet, there's a lot of things that they just cannot participate in. We have a program here called the senior farmers market, and they're trying to get that to go digital, and that will mean they'll have to have smartphones, download an app to their smartphone, have a debit card, and we have places where we have farmers markets that have no access to internet, so how are they going to use their cards? Right? It's just, it's a big problem."

Reframing the Customer Experience:

- "I guess unlimited usage that's affordable, not like you're roaming 2 AM to 7 AM, 8 AM usage... And I just learned that today, that I had that. I called because my internet is so slow, it's been so bad recently. I'm like, did something change in the contract? I'm like am I dropped to a lower amount of service per month, or what? What's the problem? And then my phone call got dropped. So I never, didn't even get anywhere. It was 15 minutes into my hour lunch, trying to work on this to see what the problem was [and] if I could get bumped into a higher service program, but they wanted to put me into another two-year contract. I'm like, 'I don't want to be in a two-year contract.'"
- "No gimmicks. Because the gimmick of, we'll give it to you for $34 a month for the first six months, but then it's gonna jump up to $130 a month after that. That's just a gimmick to get you to come aboard."
- "Loyalty: If you're with them, you should earn some sort of discount if you're with [them] so many months, you get a free month just for loyalty, for staying with them."

Participants highlighted the importance of simplicity, transparency, and support, from automatic enrollment in programs like the Affordable Connectivity Program to hands-on assistance with seniors and those who are unable to read or write well. A dual approach of investing in systems that are user-friendly and accessible while ensuring internet service providers adopt transparent, trustworthy policies is essential to reaching digital equity in Appalachia.

Part 3: By the Numbers– Measuring the Digital Divide

To complement the community voices captured in focus groups, a nationwide survey was conducted in April 2025, which was nearly a year after the expiration of the Affordable Connectivity Program and when the future of federal broadband investments, including BEAD and the Digital Equity Act, remained uncertain. While this survey of 107 respondents does not represent all people in the United States, it provides a valuable snapshot of how the challenges articulated by focus group participants may extend beyond the communities where listening sessions occurred.

The survey was distributed through partner organization networks and social media, reaching respondents across demographic and geographic lines: 39% Hispanic/Latino, 30% White or European, 13% Asian, and 11% Black (**Figure 1**), with representation from rural (15%), micropolitan (49%), and metropolitan (36%) communities. Notably, 31% of respondents were categorized as living in poverty based on federal guidelines (**Figure 2**).

Figure 1. Percent of respondents by race/ethnicity

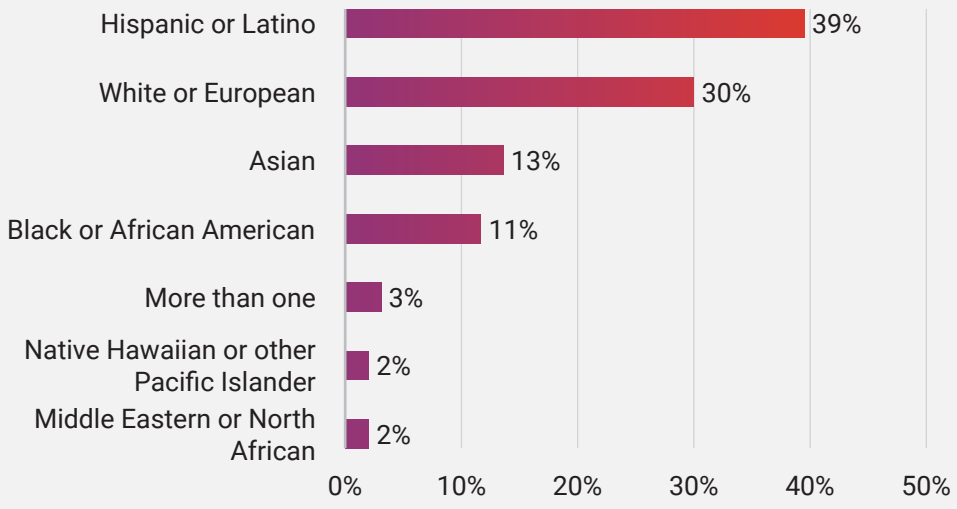

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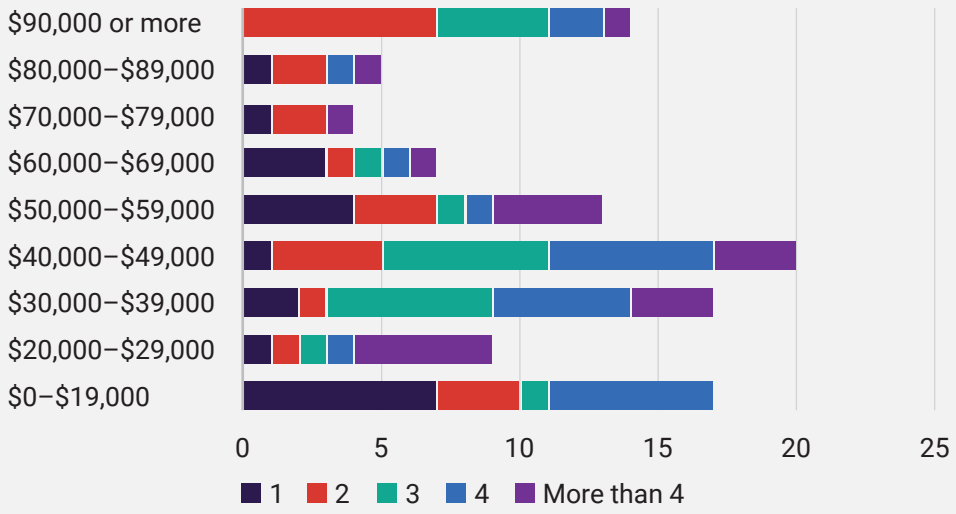
Figure 2. Percent of respondents by income and number of people in household



Access and Reliability: Persistent Infrastructure Gaps

Survey respondents confirmed that many households still lack even basic access to the internet. When those without home internet explained their experience, 59% cited cost of service as the primary barrier (**Figure 3**)—validating focus group insights about affordability as the fundamental access challenge.

Figure 3. Barriers to home internet

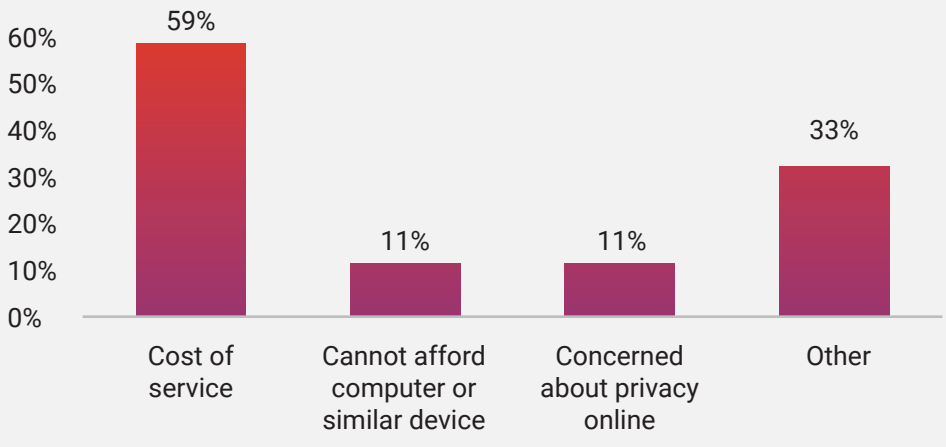
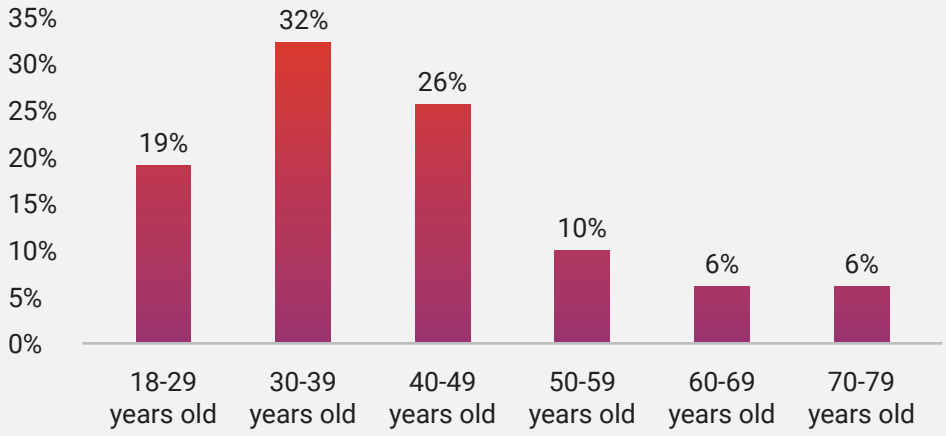


Figure 4. Cost as an issue by age



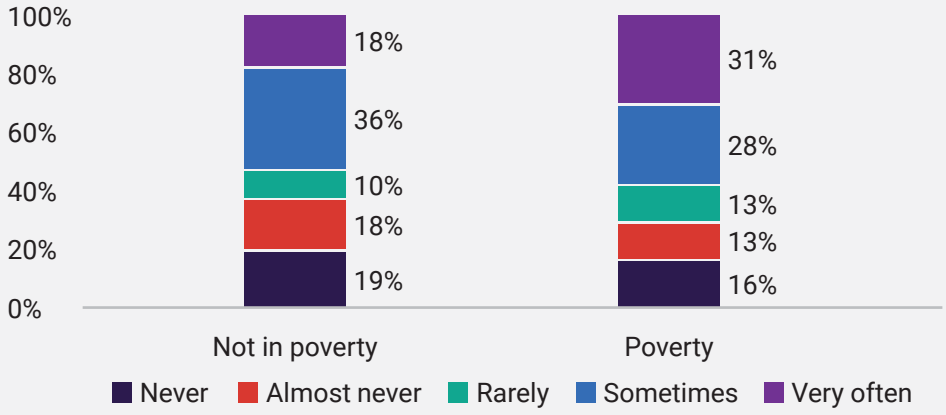
Among the respondents who identified cost as their primary barrier to accessing the internet, younger adults aged 30-39 were most affected (**Figure 4**), challenging assumptions that affordability primarily impacts older adults on fixed incomes.

Service quality issues also emerged as a common barrier, with 17% citing "repeated service outages" as a major problem, which echoes the reliability frustrations voiced by focus group participants across all regions who described connections that "cut out for the entire neighborhood" and networks that fail during critical moments like submitting school assignments. This pattern reveals how affordability and reliability may intersect: households paying high prices for unreliable service experience a double burden that compounds digital exclusion.

The Affordable Connectivity Program's Lasting Impact

The survey's timing captured households navigating life after ACP's expiration. Hispanic/Latino respondents comprised 50% of those citing cost barriers to home internet access—a finding that validates the acute affordability challenges described by participants in Albuquerque and Santa Fe focus groups. When asked about difficulty affording high-speed internet over the past six months, 55% of respondents indicated challenges "sometimes" or "very often," with those living in poverty experiencing significantly greater hardship (**Figure 5**).

Figure 5. Percent of respondents by poverty who answered question



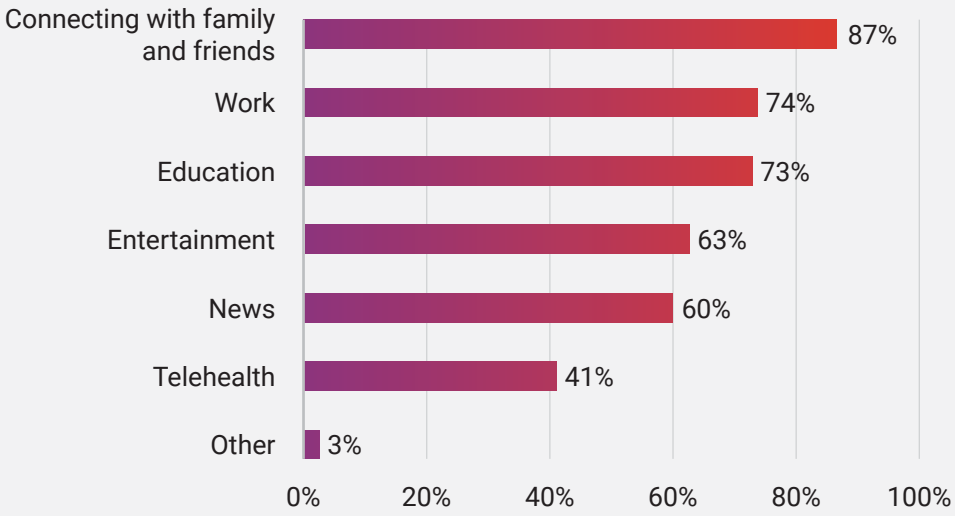
Values may not add up to 100% due to rounding.

This data confirms what focus group participants across all four communities consistently emphasized: programs like ACP represent essential infrastructure for economic security, not luxury subsidies. As one Denver participant stated, "I'm still paying [for] expensive internet that I can't hardly afford, but I have to have it." The survey data reveals the human impact of policy disruptions: communities that finally experienced digital inclusion due to ACP now navigate renewed exclusion, which shows how policy instability can reestablish rather than solve inequities.

Digital Skills: Universal and Evolving Needs

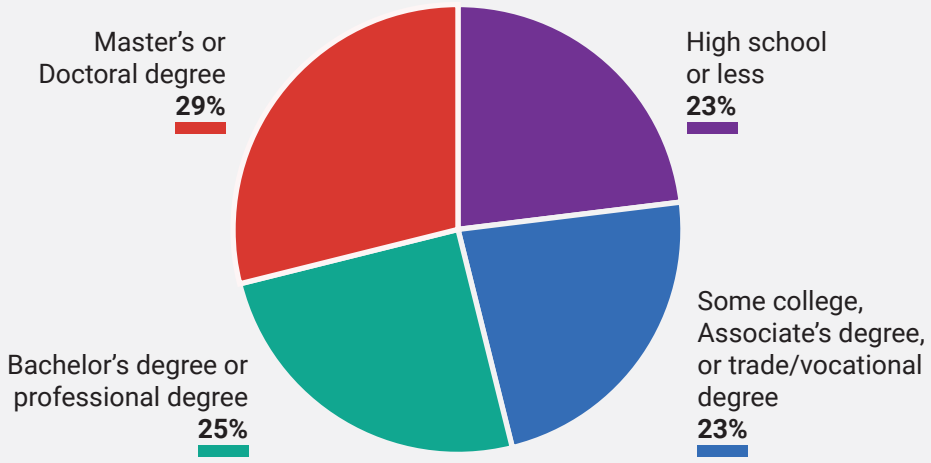
Survey responses confirm what is generally understood to be true about the central role of the internet in modern life: it serves as essential infrastructure for social, economic, and educational participation. Respondents use the internet for diverse activities, with connecting to family and friends leading at 87%, followed by work (74%) and education (73%) (**Figure 6**). These patterns mirror focus group insights about connectivity's role in maintaining relationships, accessing employment, and supporting learning across all communities we engaged.

Figure 6. What are all the things you use the internet for?



Beyond basic usage, survey responses challenge narrow assumptions about who needs digital skills support. Internet safety emerged as the top priority for 44% of respondents, with consistent demand across all education levels (**Figure 7**), which validates focus group discussions where participants from Denver to Santa Fe described security concerns that limit their online activities.

Figure 7. Percentage of respondents by education who want to improve skills in internet safety



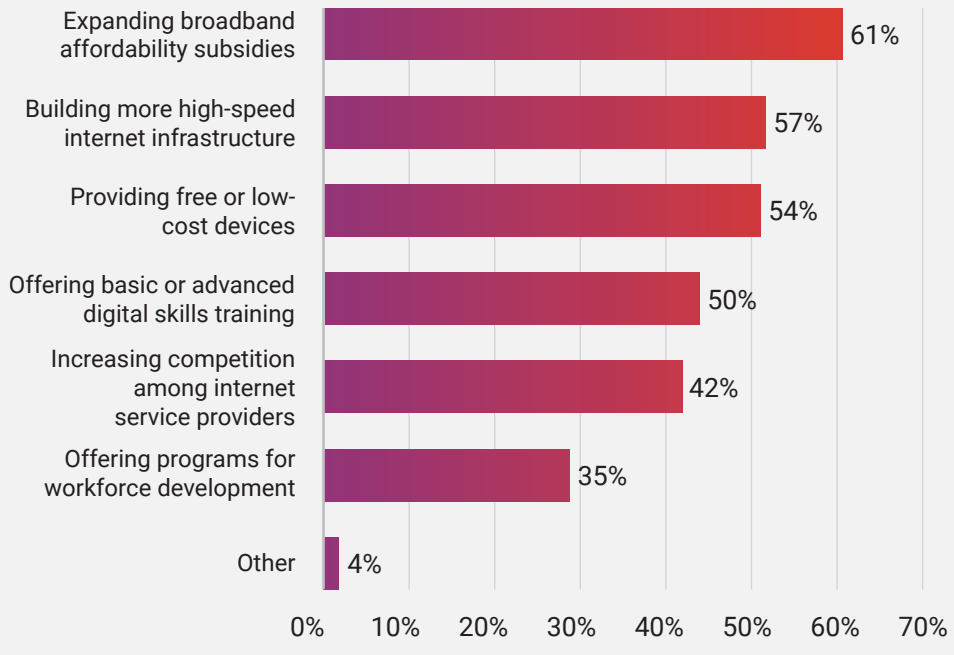
The broad demand for security training reveals a market and regulatory failure: as digital threats proliferate, the burden increasingly falls on individual users to protect themselves rather than on platforms and policymakers to create inherently safer, more accessible digital environments. This pattern shifts responsibility from systems to individuals, particularly burdening those with fewer resources to navigate evolving landscapes and threats.

These findings demonstrate how digital exclusion operates on multiple levels simultaneously: even when people gain access to the internet, security concerns and evolving platform requirements create ongoing barriers that require sustained, community-responsive support rather than one-time interventions.

Policy Solutions: Community Expertise Reflected Nationally

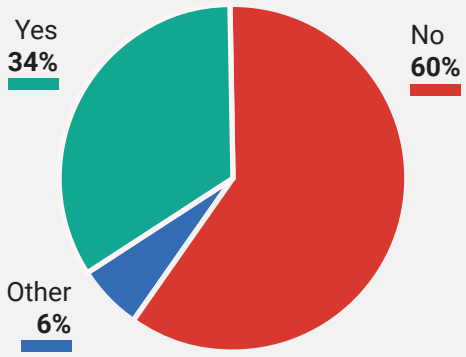
Survey respondents identified the same policy priorities consistently raised in focus groups: expanding broadband affordability subsidies (61%), building more high-speed infrastructure (57%), and providing free or low-cost devices (54%) (**Figure 8**).

Figure 8. What policies or actions do you think would most improve your high-speed internet access in your community?



Predictably, rural respondents were more likely to prioritize both infrastructure development and affordability subsidies compared to urban counterparts, aligning with the infrastructure gaps described by participants in Santa Fe and rural Ohio. This geographic variation underscores a critical insight from community voices: universal solutions must be flexible enough to address diverse local contexts while maintaining the scale and consistency needed to drive systemic change.

Figure 9. Consumer satisfaction with federal government's responsiveness to internet needs



When asked about the federal government's responsiveness to internet needs, 60% of respondents expressed dissatisfaction (**Figure 9**)—a finding that validates focus group participants' calls for more community-centered policymaking approaches and reflects the broader struggle facing policymakers and the lawmaking process that consistently fail to center affected communities in solution design.

Finally, open-ended responses echoed focus group recommendations, with multiple participants calling for solutions including:

- increased high-speed internet infrastructure,
- digital skills programs (especially for aging populations), and,
- affordability programs such as:
  - low-cost devices
  - subsidized internet plans
  - banning extra fees for low-income users
  - low-cost internet plans
  - affordable hotspots for rural citizens.

Several responses also referred to the ACP and urged the return of the program or something similar that would fiscally support internet access to low-income users.

Survey Limitations and Context

This survey's 107 respondents and English-only format limit its scope, and online distribution may have excluded those with the most severe digital access challenges. The April 2025 time frame, during significant policy disruption, provides valuable insights into how policy changes affect communities but may not reflect patterns during stable periods. More importantly, these limitations reinforce rather than undermine the importance of the community listening sessions that anchor this research. Quantitative data can illuminate patterns, but cannot substitute for the nuanced understanding that emerges from authentic relationship-building and sustained engagement with affected communities.

Affordability barriers, infrastructure gaps, evolving skills needs, and frustration with government responsiveness appear consistently throughout, suggesting these challenges reflect structural inequities.

Data Validates Community Wisdom

The survey findings validate key insights from focus group participants while extending their geographic reach. Affordability barriers, infrastructure gaps, evolving skills needs, and frustration with government responsiveness appear consistently across both the focus groups and the survey responses, which suggests these challenges reflect structural inequities rather than isolated local problems.

These aligned findings reveal digital exclusion as a systems-level challenge requiring systems-level solutions. Individual barriers including cost, reliability, skills, and government responsiveness interconnect to create compounding disadvantages that cannot be addressed through siloed interventions. This systemic nature explains why incremental policy adjustments consistently fail to achieve meaningful progress.

This convergence strengthens the case for the community-generated policy recommendations presented in Part 4. The alignment between survey responses and focus group insights suggests that the solutions proposed by Denver, Atlanta, New Mexico, and Ohio participants reflect broader national needs because the data not only validates their experiences, but because their experiences illuminate systemic patterns that quantitative data can only partially capture.

The specificity and sophistication of survey respondents' policy recommendations challenges deficit narratives that frame affected communities as passive recipients of expert-designed solutions. Instead, both data sources demonstrate that those experiencing digital exclusion possess detailed understanding of both problems and remedies. What's missing is not knowledge. Instead, it's the political will to implement community-generated solutions.

The path forward requires centering community expertise while using empirical data to demonstrate the scale and urgency of the structural changes needed to achieve universal digital participation. Both community voices and survey data point toward the same conclusion: incremental adjustments cannot address digital exclusion's scale and structural nature, and comprehensive transformation is required. The survey findings set the stage for Part 4's transformative recommendations: they document not just the scale of current challenges, but the sophisticated community expertise already available to drive solutions. The question is not whether effective approaches exist. The question is whether policymakers will embrace the fundamental power shifts necessary to implement community-generated solutions at the scale these challenges demand.

Data sources demonstrate that those experiencing digital exclusion possess detailed understanding of both problems and remedies—what's missing is not knowledge, but political will to implement community-generated solutions.

Part 4: A Path Forward for Digital, Economic, and Societal Inclusion

"I could be as individually ambitious and talented as I wanted to be and if the structure had not imagined the possibility of me, it wouldn't have mattered....I don't want the lack of my imagination to make someone else impossible."

Tressie McMillan Cottom, Professor, Center for Information, Technology and Public Life at UNC-Chapel Hill, columnist at *The New York Times*, and 2020 MacArthur Fellow

The following recommendations for digital, economic, and social inclusion are presented with profound responsibility to the communities we engaged, and deep commitment to honoring their wisdom and insights. The focus groups and survey responses reveal critical perspectives on the current state of broadband policy, economic realities, and aspirations for transformation for both individuals and entire communities. One insight resonated particularly strongly: ***Americans believe meaningful change is possible. However, that change must fundamentally shift power away from top-down approaches toward grassroots leadership.***

Transformative change requires reimagining and reconstructing the frameworks and institutions that anchor our democratic, political, and economic ecosystems. Equipped with first-hand experiences and generational histories confronting marginalization, the communities that participated in our research possess nuanced, sophisticated understanding of solutions that can drive this fundamental restructuring in the digital age. Universal service itself represents a framework that directly challenges the scarcity mindset that tends to characterize national policy discussions related to addressing the digital divide. Similar community-oriented and rights-advancing frameworks can serve as a powerful tool for refashioning entrenched power dynamics by asserting that essential connectivity is a public good, not just a market commodity.

Existing systems continue to be reinforced by actors, including some in government, who prioritize protecting concentrated wealth and power and have consolidated decision-making, influence, and resources in the hands of the few while leaving everyday Americans with barely enough to survive, much less thrive.[44] Laws and regulations that favor the wealthy and corporations are not accidents; they are deliberate choices. The failure to enact policies that boldly address poverty is a choice, as is the rhetoric that masks inaction. Those most harmed by these policy decisions are the very communities that deserve pathways to economic security and human dignity, in no small part because of the ways in which they also serve as the backbone for the American economy and democracy.[45]

Americans believe meaningful change is possible. However, that change must fundamentally shift power away from top-down approaches toward grassroots leadership.

The divisive narrative that categorizes communities as "deserving" versus "undeserving" has systematically diverted resources from those who need them most. A manufactured myth of scarcity continues to distort public perception, perpetuating the false belief that individual sacrifice and endurance, rather than structural change, will lead to better outcomes.[46]

44 Rebecca Riddell. (November 3, 2025). "Unequal: The Rise of a New American Oligarchy and the Agenda We Need," Oxfam, https://www.oxfamamerica.org/explore/research-publications/unequal-the-rise-of-a-new-american-oligarchy-and-the-agenda-we-need/.

45 José García. (October 1, 2025). "The Backbone of America: Understanding America's Working Class," Ford Foundation, https://www.fordfoundation.org/news-and-stories/stories/the-backbone-of-america-understanding-the-working-class/.

46 Alisa Valentin. (June 30, 2025). "Countering the Politics of Deservingness in the Fight for Digital Equity," *Tech Policy Press*, https://www.techpolicy.press/countering-the-politics-of-deservingness-in-the-fight-for-digital-equity/.

Communities long-caught on the wrong side of the digital divide, like those engaged during focus group discussions, must be brought into our democratic and policymaking processes. Their voices must be elevated and empowered to demand that policymakers in Washington embrace universal service as a vehicle for systemic transformation. This requires acting with courage, imagination, and commitment to grappling with the structural complexities of these systems. The following section outlines a vision for the future shaped by participant insights that positions universal service and related interventions as mechanisms for catalyzing lasting systemic and structural change.

Current systems are shaped by a government that has prioritized protecting concentrated wealth and power and has consolidated decision-making, influence, and resources in the hands of the few while leaving everyday Americans with barely enough to survive, much less thrive.

Empower Communities Through Action and Self-Determination

Moving beyond the scarcity framework that has constrained digital equity efforts requires embracing a framework that better recognizes the wealth of knowledge, relationships, and soft resources that already exist within marginalized communities. The strategies outlined below, drawn from focus group discussions and survey responses, demonstrate how communities can leverage these existing assets to drive digital inclusion while building power for broader progress. Communities can exercise their collective agency to advance meaningful transformation through strategic action and self-determination.

The unlawful cancellation of Digital Equity Act funding and the lapse of Affordable Connectivity Program funding both underscore the reality that the path towards universal service remains at risk when Washington lawmakers fail to prioritize closing the digital divide. While focus group discussions make clear that transformative action is already taking shape at the grassroots level, federal policy remains essential to scale systemic change nationwide. Participants' experiences reveal strategies that not only address immediate digital access needs, but also build the community power and resilience necessary to demand broader structural change. This empowerment manifests in several critical ways.

Build Locally Owned Broadband Networks: This vision of community control resonates strongly with focus group participants who identified local ownership as a pathway to both better service and community empowerment. As one Colorado participant explained, "There are solutions outside of our current ISPs from town-made internet, ideally, if not city,

and to extend beyond that, having better antitrust laws against ISPs." Their emphasis on "town-made internet" reflects sophisticated understanding that municipal and cooperative broadband models can provide alternatives to corporate-controlled infrastructure while building community wealth and decision-making power.

This participant insight aligns with successful models already emerging across the country. Indigenous communities remind us of the power of "address[ing] the digital divide on their own lands and on their own terms."[47] This mirrors efforts in Detroit, Michigan, where the Equitable Internet Initiative "supports and develops historically marginalized residents to build and maintain neighborhood-governed internet accessibility, consent, safety, and resilience."[48] Similarly, in many rural communities, there is an opportunity to power connectivity through cooperatives, which are already deploying broadband to communities across the nation.[49] Communities at the margins can work to reclaim control and build power as a means of reshaping how they are able to participate in the digital ecosystem.

Leverage Power of Community Knowledge: Effective digital skilling initiatives deliver technical knowledge within existing social networks alongside cultural practices rather than treating skills development and training as separate from community life.[50] "Train the trainer" models can be especially effective by building on existing community relationships. When former students become teachers, they bring both technical knowledge and first-hand knowledge of unique local barriers, motivations, and needs. Peer-driven models can also generate sustainable knowledge ecosystems that persist because they're woven into the social fabric of communities, thereby strengthening community unity and resilience.

Focus group participants in all four regions consistently emphasized the value of peer-to-peer learning rooted in community relationships. As one Denver participant noted, "We have some person from DHA [Denver Housing Authority] coming in, and he teaches us how to use your laptop or phone for

Strategies for building community power and resilience

- Build locally owned broadband networks
- Strengthen funds of community knowledge
- Expand access where communities already gather
- Integrate digital navigation with existing community support systems
- Mobilize through community coalitions

47 Institute for Local Self-Reliance. (n.d.). Indigenous broadband networks. Community Networks. https://communitynetworks.org/content/indigenous-broadband-networks#1.

48 Detroit Community Technology Project. (n.d.). EII Resiliency Network. https://detroitcommunitytech.org/eii/resiliency.

49 Christopher Ali, Ph.D. (February 22, 2021). Cooperatives: The Unsung Heroes of Broadband, Benton Institute for Broadband & Society, https://www.benton.org/blog/cooperatives-unsung-heroes-broadband.

50 National Digital Inclusion Alliance. (2024). *Digital inclusion program manual*. https://www.digitalinclusion.org/resource/digital-inclusion-program-manual/.

the Wi-Fi or stuff like that. And... he'll tell you, well, don't, get all these scams and all this." Another Denver resident highlighted the community-wide need: "In my neighborhood, and a lot of it through Denver Housing Authority that I'm involved with, there's a big need for more training on devices, on how to even start them, and use them, and wake them up, and also cautionary things like how to avoid phishing scams. Basically, education and access to devices."

The importance of culturally responsive training emerged particularly strongly in Spanish-speaking communities. As Atlanta participants recommended, "They need to feel more confident with the computers, and the way to do that for [the] Latino community is getting some training in Spanish first, and then they can improve their language." Similarly, Albuquerque residents called for "accessible classes in the language, [and] programs that assist with barriers" and emphasized that programs should "go and look for the person who needs [digital skills training]. The programs don't leave the building to look for the people who need it in their homes." These examples illustrate how effective digital skills training emerges organically within existing community support systems, where trusted messengers can address both technical skills and safety concerns in culturally relevant ways that formal training programs often miss.

To truly maximize digital inclusion, public access models should align with the rhythm of daily community life.

Expand Access Where Communities Already Gather: Participants identified multiple barriers to accessing traditional digital navigator support sites that underscore the need for more distributed, community-reflected access points. As one Georgia participant explained, "More associations or community things out there will be very helpful for people that don't drive... We have buses, but they don't run all over the place... So the difficulties expand the farther you get away from downtown." Another Georgia resident highlighted how work schedules create additional barriers: "A lot of people get up at 6 and they don't come back home until about 8 or 9 PM. They wish they had the benefit of being [at a community center], but unfortunately, the reality is that they don't." These insights reveal why digital access must be woven into spaces and times that align with community members' existing routines rather than requiring them to navigate additional logistical challenges to participate in the digital world.

Libraries have long served as essential community anchors providing public access to computers, internet connectivity, and digital resources and support. However, institutional limitations often create or compound accessibility barriers, like transportation constraints, time constraints, and others, that many marginalized communities face. To truly maximize digital inclusion, public access models should align with the rhythm of daily community life and map onto trusted, regularly visited places.

These include places of worship, community centers, small and locally owned businesses (such as laundromats and barbershops), which are spaces already central to community life. This approach alleviates the burden of special trips to access technology and normalizes digital participation as part of everyday activities. When technology access is molded to existing routines, it removes additional transportation, time, cost, and energy demands from already stretched households.

Integrate Digital Navigation with Existing Community Support Systems: In the absence of dedicated digital access resources, rather than creating parallel or competing support systems, communities have found success by integrating digital navigation services with existing community navigation models already trusted and utilized by residents.[51] Focus group participants emphasized the importance of recognizing that digital access challenges rarely exist in isolation, but intersect with other access gaps like healthcare, housing, employment assistance, and more. Community health workers, social service navigators, and other frontline assistance providers can be equipped with digital navigation training, enabling them to address technology needs alongside other services. This integrated approach does not simply acknowledge the interconnected nature of community needs. It strategically leverages these interconnections to create more holistic, sustainable solutions that can maximize individual well-being overall.

The siloed approach that treats digital access as separate from other community needs has failed to produce lasting results.

When digital access is addressed within the context of housing, healthcare, employment, or education services, broadband adoption rates can significantly increase and digital skills development becomes more meaningful as it connects directly to immediate life priorities. The siloed approach that treats digital access as separate from other community needs has failed to produce lasting results. Community-based organizations across the country have demonstrated that when digital inclusion efforts are embedded within existing trusted systems, they avoid the fragmenting effect of stand-alone programs that inadvertently create additional barriers through new intake processes, unfamiliar locations and providers, or disconnected services. This integration honors the realities that digital adoption is a throughline across issue areas and that people experience their needs holistically, not in artificially separated categories created by funding streams or government programs.

Participants consistently described how digital barriers intersect with other life challenges, reinforcing the need for integrated support approaches. As one Georgia participant noted while describing experiences of Latino communities, “The majority of people, they have less opportunities, they have more barriers, not only the language barrier, also the digital barrier.” Similarly, Ohio participants highlighted how digital access connects to broader economic participation: “We

51 National Digital Inclusion Alliance. (2024). Digital Inclusion Program Manual. https://www.digitalinclusion.org/resource/digital-inclusion-program-manual/.

have a program here called the 'Senior Farmers Market,' and they're trying to get that to go digital, and that will mean they'll have to have smartphones, download an app to their smartphone, have a debit card, and we have places where we have farmers markets that have no access to internet, so how are they going to use their cards?"

The compounding nature of these challenges became particularly evident when participants described how basic literacy intersects with digital exclusion. As one Ohio resident explained, "We have a lot of people that we run into that still do not read or write, and so having to fill out a consent form or do something, they have no ability to do that. But it's just, that is still a problem in this area. So giving someone a device and saying, 'this is a program that you're getting this device', they're not going to know how to use it, because they're not going to be able to read in directions to understand how to use it." Denver participants echoed this complexity including one individual who discussed how their literacy challenges currently makes it impossible for them to write or understand emails.

"I'm not comfortable [with] medical services for my daughter, I'm not comfortable using email or having these conversations online."

Healthcare access further illustrates these intersections. As Albuquerque participants shared, "I'm not comfortable [with] medical services for my daughter, I'm not comfortable using email or having these conversations online." The digital divide becomes a healthcare access issue, an educational barrier, and an economic participation challenge simultaneously. These examples illustrate how digital navigation must be woven into existing social services, economic programs, and community support rather than treated as a separate, standalone need.

Mobilize Through Community Coalitions: Digital inclusion coalitions bring attention to community needs at the local level and can serve as a powerful engine in accelerating, and maximizing the efficacy and deployment of digital inclusion initiatives. Coalitions may bring together individuals, community-based organizations, libraries, faith-based organizations, educational institutions, businesses, and local governments. By working collaboratively, coalitions can align strategies, provide a platform for feedback loops between communities and local policymakers, and develop or support the implementation of digital equity initiatives.

The power of community coalition building emerged consistently across focus group discussions, with participants referencing how collective action amplifies individual voices. As one Denver participant described their leadership role, "I am the president of a community of... a lot of family homes as well, so I know a lot of the people there were very disappointed or

it affected their internet access when [ACP] ended, and they're there looking for other ways to find affordable internet now." This example illustrates how community leaders naturally emerge to coordinate responses to policy changes and connect neighbors with resources.

Georgia participants emphasized the importance of cross-organizational collaboration in reaching diverse communities: "Invest in the different navigators... they need to replicate that, because the Small Business Administration, they are using that, and they have good numbers" and "They need to start sharing information with the different counties that we have, because other organizations, the majority of them have partnerships with the different counties." These insights reveal how effective coalitions leverage existing partnerships and proven models rather than starting from scratch, creating networks that can respond rapidly to community needs and policy opportunities.

Demanding Broadband Policy Interventions Across All Levels of Government

While community engagement and inclusion must anchor policy frameworks for full digital participation, the scale and systemic nature of digital exclusion demands coordinated government action across all levels. Policy shifts between 2024 and the time of publication in 2026 have created both crisis and opportunity. The crisis is immediate: millions of households have been harmed by the cancellation of the Digital Equity Act and uncertainty around the future of the non-deployment funds available through the BEAD program.[52] However, this moment also presents an opportunity to rebuild programs with stronger foundations and more sustainable support. The following proposed federal and state interventions emerged from both participant insights and policy analysis of what comprehensive digital equity requires at this moment.

52 Shelly Brisbin. (November 12, 2025). How Ending the Digital Equity Act Has Disrupted Programs to Help People Get Online, NPR, https://www.npr.org/2025/11/12/nx-s1-5594805/how-ending-the-digital-equity-act-has-disrupted-programs-to-help-people-get-online.

Federal Reform Imperatives: The Universal Service Fund Must Be Reformed to Meet the Needs of all Consumers

In June 2025, the Supreme Court upheld the FCC's congressionally delegated authority to administer the Universal Service Fund (USF) and to work with the nonprofit Universal Service Administrative Company.[53] Debates about the future of USF have since been revived and are largely led by the Universal Service Fund Working Group, an effort championed by Senator Deb Fischer (R-Neb.) and Senator Ben Ray Luján (D-N.M.). What will be central to this debate is how the program should be reformed and particularly who pays into the fund (contribution) and how those funds should be used to meet universal service goals (distribution). As discussions move toward potentially expanding the contribution base for USF to include a broader range of communications services, careful consideration must be given to ensure consumers, particularly the country's low-income consumers, are not disproportionately burdened. This reform must also be grounded in a deep sense of our shared obligation to ensure the economic security of all who live in the United States, which is now so deeply intertwined with our ability to get and stay connected to high-speed internet. To that end, these are potential recommendations for reform:

Recommended Universal Service Fund reforms

- Enhance connectivity support for low-income consumers
- Improve program outreach and find ways to support broader broadband adoption efforts
- Centralize broadband adoption as a core pillar of USF reform
- Make resiliency a core ongoing outcome of the high-cost program

1. Enhance Connectivity Support for Low-Income Consumers:

There is an urgent need for Congress and the FCC to establish a sustainable broadband subsidy for low-income households that goes well beyond the $9.25 Lifeline benefit. Focus group participants consistently identified cost as a primary barrier to connectivity, with the ability to pay for broadband bills ranging from $10-30 in Albuquerque to $30-60 in Santa Fe and Denver. As one Denver participant powerfully stated, "I'm still paying [for] expensive internet that I can't hardly afford, but I have to have it." These affordability limits should directly inform the calibration of USF affordability subsidies. Families are not simply weighing the cost of broadband in isolation. Instead, they are forced to make choices between the internet, housing, transportation, electricity, health insurance, and other necessities—and all during an affordability crisis. The complexity of modern connectivity needs is evident in participants' experiences. As one Georgia participant explained, "I have five kids [and] my wife and I'm the only one that works. So $40 is pushing... It's limiting on

53 *Federal Communications Commission v. Consumers' Research*. (2025). https://www.scotusblog.com/cases/case-files/federal-communications-commission-v-consumers-research/.

what's in the refrigerator, a utility bill, water, electricity... So it's either put food on the table for six people or have internet." This testimony emphasizes how connectivity costs compete directly with basic necessities, underscoring why benefit structures must acknowledge these competing demands and provide adequate support to prevent families from choosing between internet access and other essential needs.

Today, consumers require access to mobile, fixed, and voice services— or 'bundled offerings'—to fully participate in the digital world. A broadband subsidy that limits support to a single type of connection fails to reflect the real and varied needs of low-income households. Any robust benefit must therefore be structured to be eligible across these different service types.

That benefit should also be tiered. A baseline of no less than $40 is essential, but in high-cost rural and Tribal households, where monthly service can run $120 or more, particularly in markets exclusively served by low-earth orbit providers, that floor is insufficient. Congress should take cues from states like Utah and Montana, whose BEAD low-cost proposals model an expanded benefit, and provide these consumers an increased $50 to $70 in support.

Families are not simply weighing the cost of broadband in isolation. Instead, they are forced to make choices between the internet, housing, transportation, electricity, health insurance, and other necessities—and all during an affordability crisis.

Finally, a static benefit will erode over time, actively undermining its own effectiveness as purchasing power shrinks. Policymakers must build in mechanisms for regular recalibration, whether through an annual review that assesses subsidy effectiveness or a sliding scale tied to shifting economic conditions, to ensure the benefit remains meaningful for the long term.

2. Improve Program Outreach and Find Ways to Support Broader Broadband Adoption Efforts

A reformed USF that incorporates an enhanced broadband subsidy, whether through the Lifeline program or other mechanisms, should also prioritize enhanced outreach efforts, including cultural and linguistic competencies, that maximize the program's effectiveness and ensure eligible households are notified. Participants consistently identified significant gaps in program awareness and accessibility. As one Atlanta participant noted, "This is something they keep hidden, unless you bring it up," while another emphasized that government programs should be easy to find: "Because it's government funded... I think they should display it on one of the web pages... People aren't digging into every icon and reading everything." These insights are not merely complaints about individual confusion; they are indictments of systems that place the burden of access on the people least equipped to navigate them. Outreach must move beyond government landing pages and into trusted community channels, and must meet eligible households where they are, in the languages they speak, and through the institutions they trust.

Alisa Valentin
Claudia Ruiz

3. Center Broadband Adoption As a Core Pillar of Universal Service

Building networks alone is not enough to close the digital divide. Congress and the FCC must also invest in ensuring that households can meaningfully access, deploy, and benefit from the networks that serve them. The Digital Equity Act embodies this principle as it was designed to address multilayered broadband adoption barriers. At the time of this publication, the future of this $2.75 billion in funding remains uncertain following the unilateral and unlawful cancellation of this program by President Trump.[54] These funds were congressionally mandated through the Infrastructure Investment and Jobs Act (IIJA) of 2021, which received bipartisan support in Congress. This cross-party support demonstrated a fundamental recognition that meaningful digital participation requires resourcing communities and investing in "human" infrastructure alongside the build-out of physical infrastructure. Focus group participants across all four states consistently highlighted the critical importance of programs addressing the multifaceted and interconnected structural barriers to digital participation. Digital Equity Act funds were specifically designed to address the gaps and barriers identified throughout this report, including:

"Ensuring all Americans can fully participate in the digital economy requires both wires and wisdom."

- Support for digital literacy and skills development programs that meet people where they are.
- Capacity building within trusted community organizations to provide digital navigation services.
- Support for accessible and culturally responsive training materials for diverse communities and vulnerable populations.
- Creation of pathways for workforce development and economic opportunity through digital skilling and advancement.

These human-centered investments complement the historic funding being made available through the BEAD program and are essential to achieving the goal of universal digital participation. The bipartisan origins of this funding reflect an understanding that ensuring all Americans can fully participate in the digital economy requires both wires and wisdom. In other words, it requires physical deployment of affordable, reliable networks coupled with the knowledge and skills to use them effectively. As evidenced by the focus group discussions, communities already understand what they need to bridge the digital divide. Digital Equity Act funding represents

54 Jessica Dine. (May 16, 2025). Trump's Cancellation of Digital Equity Act Programs Will Perpetuate the Digital Divide, *Tech Policy Press*, https://www.techpolicy.press/trumps-cancellation-of-digital-equity-act-programs-will-perpetuate-the-digital-divide/.

a rare opportunity to support community-driven solutions with appropriate federal support rather than imposing top-down approaches that often miss the nuanced needs of populations that have long been left behind by technological and economic advancement and resources.

Participants provided concrete guidance for how these investments should operate. As Albuquerque residents emphasized, "[We] need more programs to teach the community how to use the internet and distribute computers" with "accessible classes in the language, [and] programs that assist with barriers." They specifically called for programs that "go and look for the person who needs it. The programs don't leave the building to look for the people who need it in their homes." This community-driven approach of meeting people where they are rather than expecting them to navigate complex institutional systems should guide future broadband adoption program implementation and funding priorities within a reformed Universal Service Fund.

Digital Equity Act funding represents a rare opportunity to support community-driven solutions with appropriate federal support rather than imposing top-down approaches that often miss the nuanced needs of populations that have long been left behind by technological and economic advancement and resources.

A broadband adoption program within a reformed USF is essential. Congress should build on what it has already recognized through the bipartisan Digital Equity Act, which affirmed that meaningful participation in our economy and democracy requires devices, digital skills, and trusted digital navigators. Failing to invest in broadband adoption in the long-term will undermine U.S. economic leadership, weaken innovation, slow productivity, and lessen growth.

4. Make Resiliency a Core, Ongoing Outcome of the High-Cost Program

The need for reliable, resilient broadband infrastructure extends beyond initial deployment because networks must remain operational and durable over time. There must be a shift in High-Cost support toward operational expenses (OPEX) and network hardening, not just capital expenditures (CAPEX). With historic one-time build funds flowing from IIJA, ReConnect, and Capital Projects Fund (CPF), the High-Cost program should increasingly underwrite the ongoing operations that make networks durable, such as hardened outside plant, diverse routing, and robust field maintenance capacity. The consequences of failing to invest in network resilience are evident in communities across the country. Participants in Denver described the impact of current network fragility. One focus group member shared, "Frequently, it'll just cut out. And it'll cut out for the entire neighborhood without any notice...often at night is when it usually will cut out fairly consistently." Another participant described similar issues and how that impacts their academic experience: "I can echo that that happens to me [when the] summer semester just ended, and I had one paper to turn in, and I was like, please come on before 11:59, when this paper is due, because [I] can't submit a 17-page paper via my phone."

As Public Knowledge has long stated, America's aging, underfunded, and fragmented broadband infrastructure leaves hundreds of millions vulnerable to service disruptions when a single provider experiences an outage. When a provider loses service, whether due to power loss or other factors, communications cease, cutting off life-saving connections. The IIJA provides some opportunity to build resilience, but the High-Cost program could serve as a long-term funding source to ensure networks are consistently hardened against disasters and that consumers have reliable backup power during outages. The FCC has previously disbursed USF funds on an ad hoc basis to assist communities devastated by natural disasters, such as Hurricane Maria. Moving forward, the FCC should consider initiating a proceeding to examine how USF High-Cost reforms could systematically support upgrades that make our communications networks more resilient.

State-Based Opportunities: Driving Broadband Deployment, Affordability, and Adoption Initiatives

America's aging, underfunded, and fragmented broadband infrastructure leaves hundreds of millions vulnerable to service disruptions.

The $42.45 billion BEAD program is a critical federal investment in closing the physical infrastructure gap that continues to leave too many communities disconnected. Its original design, informed by years of evidence, prioritized fiber broadband to ensure that unserved and underserved communities receive reliable, future-proof connectivity. However, recent changes under the Trump administration take what they deem is a "technology-neutral" approach that emphasizes lowest-cost solutions. Advocates have stated that this flexibility may actually undermine the goals BEAD was created to achieve as a lowest-cost approach could leave communities with inadequate or short-lived service.[55] The consequences of underinvestment are clear in the lived experiences of focus group participants. As one Santa Fe resident shared, "We just cannot get internet in our area, being able to stay connected to the rest of the world for our kids and ourselves. No neighbors can get it, the whole 40 mile radius we have no service other than satellite which is extremely expensive."

55 Drew Garner. (May 26, 2025). "Is Leo the 'Benefit of the Bargain' for BEAD? The Impact of Turning to Satellite Internet," Benton Institute for Broadband & Society, https://www.benton.org/blog/benefit-bargain-bead.

Focus group participants consistently expressed deep frustration with broken promises and inadequate infrastructure. This skepticism is well-founded given historical patterns of infrastructure investment that have systematically bypassed low-income communities, communities of color, and rural areas. The urgency of comprehensive infrastructure investment is evident in participants' experiences with complete service gaps. Ohio participants described rural infrastructure challenges: "We're so rural. You have to live in town to be able to pick up an internet service. I live a mile and a half away from the main road, and there's no cable network." These testimonies underscore why a focus on reliable, high-performance infrastructure matters.

What States Must Do

States have both the authority and the responsibility to leverage BEAD's flexibility to prioritize robust, high-performance infrastructure. They should proceed without intimidation and follow NTIA's own FAQ: "States should consider if an ISP can easily scale speeds over time to meet the evolving connectivity needs of households and businesses and support the deployment of 5G, successor wireless technologies, and other advanced services."

The digital future of America's communities depends on states getting their deployment strategy right.

Relatedly, the Vernonburg Group, a consulting organization focused on broadband policy and research, recommended that states should only use satellites in their deployment efforts for ultra-rural areas and redirect savings to broadband adoption programs to support digital skills programs, device subsidies, and affordability initiatives beyond federal programs.[56] The digital future of America's communities depends on states getting their deployment strategy right.

Some states have taken proactive steps to address broadband inequities through large-scale public investment and community-centered strategies. California, for example, committed more than $5 billion to fiber infrastructure deployment and established partnerships with Tribal governments to provide critical middle-mile and backhaul connectivity to ensure rural and Tribal communities are not excluded from statewide broadband expansion efforts.

56 Vernonburg Group. (2025). "What percentage of BEAD eligible locations can LEO satellite providers serve at scale?" https://www.vernonburggroup.com/blog/what-percentage-of-bead-eligible-locations-can-leo-satellite-providers-serve-at-scale.

In addition to direct investment, states should repeal laws that prohibit or otherwise restrict municipalities, cooperatives, and public entities from offering broadband services. Such barriers limit competition and perpetuate gaps in access, particularly in areas where larger providers claim they have little to no economic incentive to invest. Community cooperatives tend to be more responsive to local needs, reinvest revenues locally, and are better positioned to deliver affordable, reliable services.

Additionally, a commonly proposed infrastructure reform is the streamlining of permitting processes and the expansion of access to utility poles.[57] While states should consider these measures, they must balance them against other important equities, including environmental protection and local community impacts. Beyond these regulatory changes, municipalities can pursue infrastructure strategies that lower deployment costs while promoting competition and long-term benefit. One such approach is the development of open-access conduit systems where a municipality or state agency installs conduit as part of a public works project, which allows for multiple providers to pull fiber through the conduit on nondiscriminatory terms.[58]

States should repeal laws that prohibit or otherwise restrict municipalities, cooperatives, and public entities from offering broadband services.

As it relates to affordability, with the expiration of the federal ACP in 2024, states are implementing their own broadband affordability mandates. New York's Affordable Broadband Act, in effect since January 2025, requires larger ISPs to offer qualifying low-income households broadband service for $15–20 monthly.[59] There are also efforts from New Mexico, Maryland, and California that all address the critical affordability barrier. These actions also address opportunity: comprehensive digital equity programs that pair subsidies with device access and digital skills training could maximize impact. However, state programs should not be seen as replacements or stop-gaps for federal support, but rather as complements that enhance the reach and impact of a baseline nationwide benefit. Making broadband truly accessible and affordable for low-income communities requires state-specific strategies that reflect local economic conditions, geographic challenges and community needs, and this must work in tandem with federal funding initiatives.

57 Jake Varn. (March 2025), Broadband Expansion May Hinge on States' Processes for Attaching Lines to Utility Poles, The Pew Charitable Trusts, https://www.pew.org/en/research-and-analysis/issue-briefs/2025/03/broadband-expansion-may-hinge-on-states-processes-for-attaching-lines-to-utility-poles.

58 Karl Bode. (Feb. 21, 2023). "Open Access Conduit in West Des Moines, Iowa Brings Google Fiber, Choice to City Residents," Institute for Local Self Reliance, https://ilsr.org/article/community-broadband-networks/Open-access-conduit-des-moines-fiber/.

59 Valerie Ceballos Juaregui. (June 5, 2025). Broadband Affordability Laws are Coming to Stay, National Digital Inclusion Alliance, https://www.digitalinclusion.org/blog/broadband-affordability-laws-are-coming-to-stay/.

State innovation in affordability programs directly responds to the urgent needs focus group participants identified. As Georgia participants emphasized, there needs to be "competition so the prices will be lower. In some regions, only one or two companies go in... So there's no competition, so they can do whatever they want. But if there's three or four providers in the same area, then they're like, 'Okay, if we don't offer it, he's gonna offer it.'" New Mexico residents similarly called for "more competition for services" because "when there are more companies, there are better prices." The $15-20 range established in state affordability mandates closely aligns with budget thresholds that Albuquerque participants identified as affordable, suggesting these policy interventions reflect genuine community needs rather than arbitrary regulatory targets.

The Role of Corporate Stewardship in Achieving Universal Service and Adoption

Achieving universal service and meaningful participation requires an all-hands-on-deck approach with commitments from every stakeholder in the ecosystem. While community mobilization, policy initiatives, and public investment lay a foundation, it is critical that broadband providers and other broadband-enabled industries embrace their role as stewards of infrastructure—both physical *and* human—in today's digital economy. Focus group discussions surfaced frustrations with certain industry practices that make it more difficult or time-consuming for households to fully access and maintain connectivity. The following recommendations represent concrete actions industry stakeholders can implement to advance meaningful corporate citizenship, remove barriers to connectivity, and ultimately benefit both consumers and their own business interests. There should be a symbiotic feedback loop where inclusive practices lead to more connected households, reduced churn, and stronger communities where everyone can participate in our increasingly digitally dependent society, economy, and democracy.

Internet Service Providers (ISPs) Should Design and Implement Robust Low-Cost Programs: ISPs should implement low-cost offerings designed with a holistic understanding of the economic realities facing low-income and working-class households. Focus group participants consistently indicated that broadband costs compete with essential utilities, housing, healthcare, and food expenses in their monthly budgets. Low-income offerings should be calibrated to recognize these competing financial

pressures and avoid forcing families to choose between connectivity and other basic needs. These programs should also provide adequate speeds for essential activities like remote work and education, with straightforward eligibility requirements and streamlined application processes. By designing offerings that acknowledge the complete financial picture of households, providers can expand their customer base while building long-term loyalty that ultimately represents a strong return on investment. Programs should also be proactively marketed through partnerships with community organizations and government agencies offering low-income assistance programs to ensure eligible households are aware of these opportunities.

The financial reality participants described underscores why low-cost programs must reflect genuine affordability and pricing stability rather than burden household budgets. The testimonies from focus group participants reveal that effective low-cost programs must provide predictable pricing and comprehensive value rather than fragmented services that collectively become unaffordable.

Offer Consistent, Straightforward Pricing Models: Predictable pricing structures, coupled with loyalty incentives, allow households to better plan their technology expenses alongside other household costs while fostering improved customer relationships through greater billing transparency. By offering transparent, fair, and stable rates from the outset and recognizing customer commitment, providers can reduce churn, lower customer acquisition costs, and build a more sustainable business model focused on retention rather than cyclically replacing customers who leave after promotional periods end.

With the passage of the Infrastructure Investment and Jobs Act, Congress directed the Federal Communications Commission to implement broadband consumer labels modeled after the Food and Drug Administration's nutrition labels. These labels were designed to improve transparency by providing consumers with clear, standardized information about broadband pricing, speeds, and service terms. However, in October 2025, the Federal Communications Commission voted 2-1 on a proposal to roll back the effectiveness of these labels.[60] While at the time of the publication of this report the Commission was still accepting and reviewing public comments on these changes, the very proposal reflects broader concerns about the erosion of consumer protections at the FCC, particularly those related to transparency and accountability.

Next Steps for Corporate Stakeholders

- ISPs should design and implement robust low-cost programs
- Offer consistent, straightforward pricing models
- Move away from long-term contracts
- Simplify the customer service experience

60 Federal Communications Commission, Empowering Broadband Consumers Through Transparency, Second Further Notice of Proposed Rulemaking in CG Docket No. 22-2, Notice of Proposed Rulemaking in GN Docket No. 25-133, https://docs.fcc.gov/public/attachments/FCC-25-72A1.pdf.

ISPs should consider alternatives to promotional rate structures that increase significantly after initial periods. Many consumers face challenges with budgeting when their monthly bills increase substantially after promotional periods end without proper warnings. More consistent pricing approaches, including explicitly stated and easy-to-understand data caps, speed limitations, and any additional fees or charges, can help customers maintain long-term service without interruption, possibly reducing customer turnover. Rather than offering the best deals only to new customers, providers could implement loyalty programs that reward continued service with benefits such as price guarantees, service upgrades, or other wraparound customer support.

More consistent pricing approaches, including explicitly stated and easy-to-understand data caps, speed limitations, and any additional fees or charges, can help customers maintain long-term service without interruption, possibly reducing customer turnover.

Some participants expressed frustration with promotional pricing schemes that create budget instability and penalize customer loyalty. As one Ohio resident said, a programmatic intervention should include, "No gimmicks. Because the gimmick of, we'll give it to you for $34 a month for the first six months, but then it's gonna jump up to $130 a month after that. That's just a gimmick to get you to come aboard." The same participant advocated for loyalty recognition: "I guess I think, like, loyalty, if you're with them, you should earn, some sort of discount if you're with [them] so many months, you get a free month just for loyalty, for staying with them." These insights reveal that customers value pricing transparency and reward systems that recognize their commitment rather than pricing structures that treat loyal customers as captive markets for higher rates.

Unpredictable billing practices can frustrate customers and damage long-term retention by eroding trust and creating ongoing customer service burdens for providers. As one Albuquerque participant described, "My mom is 70 years old, and her account changes a lot each month, doesn't notify when there are changes in the service, not the same usage, so I get very angry because the service for my parents is so expensive but they use less." (*Translated from Spanish*) Inconsistent and lack of transparency in billing and pricing creates ongoing customer service costs and complaints that could be eliminated through straightforward pricing, allowing providers to invest resources in service improvement rather than damage control.

Move Away from Long-Term Contracts: ISPs should minimize lengthy contract requirements that lock customers into services, particularly in areas with limited provider options due to lack of competition or unreliable delivery options. Short-term service options give customers flexibility to adjust their service as needs change or terminate without punitive fees. When contracts are offered, they should provide meaningful customer benefits rather than simply serving as churn-prevention mechanisms.

Long-term contracts often trap customers in unsatisfactory service arrangements that fail to meet connectivity needs, rather than building genuine customer loyalty. As one Albuquerque participant explained, "I tried another company but companies have a minimum one-year contract so I use the same company because I can't change." (*Translated from Spanish*) Rather than build loyalty, these contractual requirements create captive customers who remain with providers not by choice but by constraint, undermining the genuine loyalty that flexible service options could build. Similarly, Ohio participants described contract frustrations: "I don't want to be in a two-year contract [when trying to upgrade service]." These experiences demonstrate that flexible options could build stronger customer relationships based on service quality rather than contractual obligation, ultimately creating more sustainable retention through customer satisfaction rather than legally binding households into subscriptions that fail to meet their needs.

Long-term contracts often trap customers in unsatisfactory service arrangements that fail to meet connectivity needs, rather than building genuine customer loyalty.

Simplify the Customer Service Experience: ISPs can build trust and loyalty with consumers by overhauling their customer service systems to reduce wait times, streamline access to support from relevant departments, and empower representatives to resolve issues efficiently. Multilingual support should be maximized and technical assistance should be provided in accessible, non-technical language. This consumer-centric approach shores up the provider-consumer relationship and reduces frustration during service issues or account changes.

Participants consistently described how inadequate customer service creates additional barriers for households already struggling with connectivity challenges. As one Ohio resident described trying to resolve service issues, "I called because my internet is so slow, it's been so bad recently... And then my phone call got dropped. So I never, didn't even get anywhere. It was 15 minutes into my hour lunch, trying to work on this to see what the problem was." Working families cannot afford to sacrifice their break time during lengthy customer service calls, particularly if they're already in areas with inadequate or unreliable service. Similarly, Albuquerque participants emphasized how poor communication disproportionately affects vulnerable populations: "My mom is 70 years old, and her account changes a lot each month, doesn't notify when there are changes in the service, not the same usage, so I get very angry because the service for my parents is so expensive but they use less." (*Translated from Spanish*).

These experiences reveal that accessible, responsive customer service is not a luxury but a necessity for households who depend on reliable connectivity for work, education, healthcare, and maintaining family connections across distances. This need becomes especially critical for low-income households who are dedicating significant portions of their limited budgets to connectivity and deserve, just like their peers, to receive service that functions properly.

"I called because my internet is so slow, it's been so bad recently... And then my phone call got dropped.

Alisa Valentin
Claudia Ruiz

Research Limitations of the Blueprint for Equitable Digital Participation

While this project provides valuable insights into the lived experiences of digital exclusion across four regions, several limitations should be considered when interpreting these findings.

Geographic and Sample Scope

This study focuses on four specific regions including Denver, Colorado; Atlanta, Georgia; Santa Fe and Albuquerque, New Mexico; and Marietta, Ohio, which all represent diverse geographic and demographic groups, but cannot be considered representative of all communities facing barriers to full digital participation across the United States. These locations were deliberately chosen to reflect varying economic conditions and rural-urban differences. However, findings may not be generalizable to regions with different infrastructure, local or state laws and policies, or demographic characteristics. Additionally, because focus group participation was limited to individuals living in households with annual incomes of $70,000 or less, the data captures the experiences of low-to-moderate-income households most affected by the digital divide. Thus, the focus groups excluded perspectives from moderately higher-income households that may also face digital access challenges, particularly in rural areas or among older adults, and as related to the high-costs of devices and monthly broadband subscriptions.

Focus groups ranged in size from four to twelve participants, with seven total community-level sessions conducted. While these smaller group sizes facilitated deeper, more intimate conversations that reveal nuanced experiences, they can limit the statistical generalizability of findings. The qualitative nature of this research prioritizes depth of understanding over breadth of representation. The national survey component included 107 respondents, a sample size that, while sufficient for descriptive analysis and some statistical testing, limits the ability to draw definitive conclusions about national trends or to conduct more sophisticated statistical analyses across multiple demographic subgroups simultaneously. Additionally, the national survey was distributed only in English as a result of time and resource constraints. Also, survey distribution relied primarily on partner organization networks, online platforms (email listservs, social media), and required internet access to complete. This methodology may have systematically excluded individuals with the most severe digital access challenges who lack reliable internet connectivity or are not connected to community or advocacy organization networks.

Changing Policy Environment and Current Events

Focus groups were conducted during a period of significant policy disruption, including the expiration of the Affordable Connectivity Program in early 2024 and other federal program changes. While this timing provided valuable insights into how policy disruptions affect communities in real-time, participants' experiences and recommendations were inevitably shaped by this specific political and policy context. Their perspectives may differ during periods of policy stability or expansion.

The research period (September 2024—April 2025) also occurred during ongoing economic recovery and adjustment following the COVID-19 pandemic, which may have influenced participants' financial situations, digital adoption patterns, and relationship with technology in ways that will evolve over time.

Recommendations for Future Research

This research focused primarily on broadband access, affordability, and adoption as experienced by participants. While these represent core components of digital equity, the study did not comprehensively examine other important factors such as technical support availability, digital content relevance, artificial intelligence, or accessibility for individuals with disabilities beyond those specifically represented in focus groups.

The analysis emphasizes individual and household experiences with digital inequity while touching on, but not deeply examining, broader structural factors such as regional economic conditions, local policy environments, or telecommunications market competition that shape digital access opportunities. Despite these limitations, this research provides critical insights that are often missing from digital equity policy discussions. The emphasis on centering community voices, conducting research during a period of policy disruption, and capturing experiences across diverse geographic and demographic contexts offers valuable perspectives that complement larger-scale quantitative studies. Future research could address these limitations through larger-scale surveys, broader geographic representation, increased multilingual accessibility, and longitudinal studies that capture how experiences with digital inequity evolve over time and across different policy environments.

Conclusion

Universal service represents a framework for challenging entrenched power dynamics by asserting that essential connectivity is a public good. This requires embracing community assets and knowledge while demanding coordinated government action across all levels. The research demonstrates that transformative change is already emerging at the grassroots level, but federal and state policy must scale these community-driven solutions nationwide.

The digital divide is fundamentally about power and resource distribution. Closing it requires not just building infrastructure but ensuring people can actually benefit from networks through comprehensive adoption support, community ownership models, and policy frameworks that prioritize human dignity over corporate profits. The communities most affected by digital exclusion possess the wisdom to drive solutions—they just need the resources and power to implement them.

Alisa Valentin
Claudia Ruiz

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