Digital Equity Plan
Draft for Public Comment

Arizona Commerce Authority

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Table of Contents

1. Executive Summary

Arizona's economic and cultural identity has long been anchored by the "5 C's": Copper, Cattle, Cotton, Citrus, and Climate. Each of these sectors has played a pivotal role in shaping the state's history and development.

As we transcend into a new chapter of Arizona's story, we are stepping into a more connected and digital era; we will add a "6th C" – Connectivity. This new cornerstone represents the state's commitment to expand universal broadband internet access for all Arizonans. Digital connectivity plays a vital role in education, healthcare, business, civic engagement, and everyday life. We aim to bridge the digital divide and foster a more connected, inclusive, and prosperous Arizona. The addition of Connectivity to the iconic 5 C's marks a significant evolution, embracing modern technological advancements while continuing to honor the state's rich heritage.

Arizona's Digital Equity Plan represents the culmination of a year-long, statewide collaborative effort, marked by attentive listening to the voices and feedback of communities across our state. This plan, written in response to the 15 requirements as laid out by the National Telecommunications and Information Administration (NTIA), will address specific barriers faced by Arizonans that fall within the eight covered populations as defined by NTIA:

- Individuals who live in low-income households

- 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 individuals who are English learners and have low levels of literacy

- Racial and ethnic minorities

- Rural inhabitants

The plan is rooted in robust data collection and crafted to be responsive to the distinct needs of each region and covered population, ensuring that every individual and community is not only represented, but centered.

This Plan is designed to serve as a tailored roadmap for addressing the complex challenges unique to our state and our people. At the heart of the document is an acknowledgment of the intersectional experiences faced by Arizona's covered populations. The proposed strategies, programs, and interventions are designed to address visible and hidden barriers that limit meaningful online participation while fostering community responsive digital inclusion that resonates with the values and aspirations of each community.

To bridge the digital divide and promote digital equity across Arizona, the state is committed to ensuring universal broadband availability through infrastructure investments, supporting affordable broadband plans for all Arizona families, ensuring at least one internet enabled device per household, and providing inclusive digital skills training. Arizona will build digitally equitable ecosystems through strategic initiatives, collaborative partnerships, and community-responsive solutions.

Arizona is marked by social, cultural, and geographic diversity – with a population of more than 7 million residents spanning 15 counties, 91 municipalities, 57 urban areas, expansive rural regions, and 22 sovereign Tribal nations[1]. The cultural richness and diversity of the state are among its greatest assets. By honoring the distinct needs of each diverse region and population, the plan seeks to support local and culturally relevant solutions that align with the values and unique heritage of each region.

The population of Arizona is widely distributed across rural, remote, urban and Tribal regions (see Figures 1 & 2). Sprawling deserts and mountainous terrain create opportunities and pose obstacles to the pursuit of universal digital access and meaningful online participation. To address these geographical complexities, the Digital Equity Plan leverages innovative technologies, supports strategic collaborations, and highlights local solutions. This multi-faceted approach positions Arizona to overcome barriers, ensuring no community is left disconnected and everyone is positioned for growth and prosperity.

- Arizona ranks 41 in BroadbandNow's annual ranking of internet coverage, speed, and availability[2].

- Of Arizona's 7,278,717 people, 5,808,000 (79.8%) fall within the covered populations as determined by National Telecommunications Information Administration (NTIA[3]).

  - In covered households: 22%

  - Aged 60 or over: 24%

  - Incarcerated: 0.9%

  - Veteran: 6.6%

  - With a disability: 13.4%

  - With a language barrier: 21.7%

  - English learners: 8.1%

  - Low literacy: 23.4%

  - Racial or ethnic minority: 46.0%

  - Rural: 14.1%

- 5.2% of the Arizona population are in households lacking fixed broadband availability

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[1] US Census, List of 2020 Census Urban Areas. https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html
[2] From "Internet Service Providers in Arizona" by Broadband Now, 2022 https://broadbandnow.com/Arizona
[3] From "Digital Equity Act Population" by NTIA, 2019 https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42

- 11.1% of the Arizona population are in households lacking computer or broadband subscription[4]

- 21.1% of the Arizona population is not using the internet

- 38.2% of the Arizona population is not using a PC or tablet computer

More than 90% of the physical area within Arizona is classified as rural by the US Census (See Figure 1). Many rural areas also coincide with NTIA defined high-cost coverage areas with very few or no inhabitants. Adopting digital equity services and ancillary support, in addition to appropriate technology choices through infrastructure programs will be important to consider to right-size ongoing investments and target the appropriate communities.
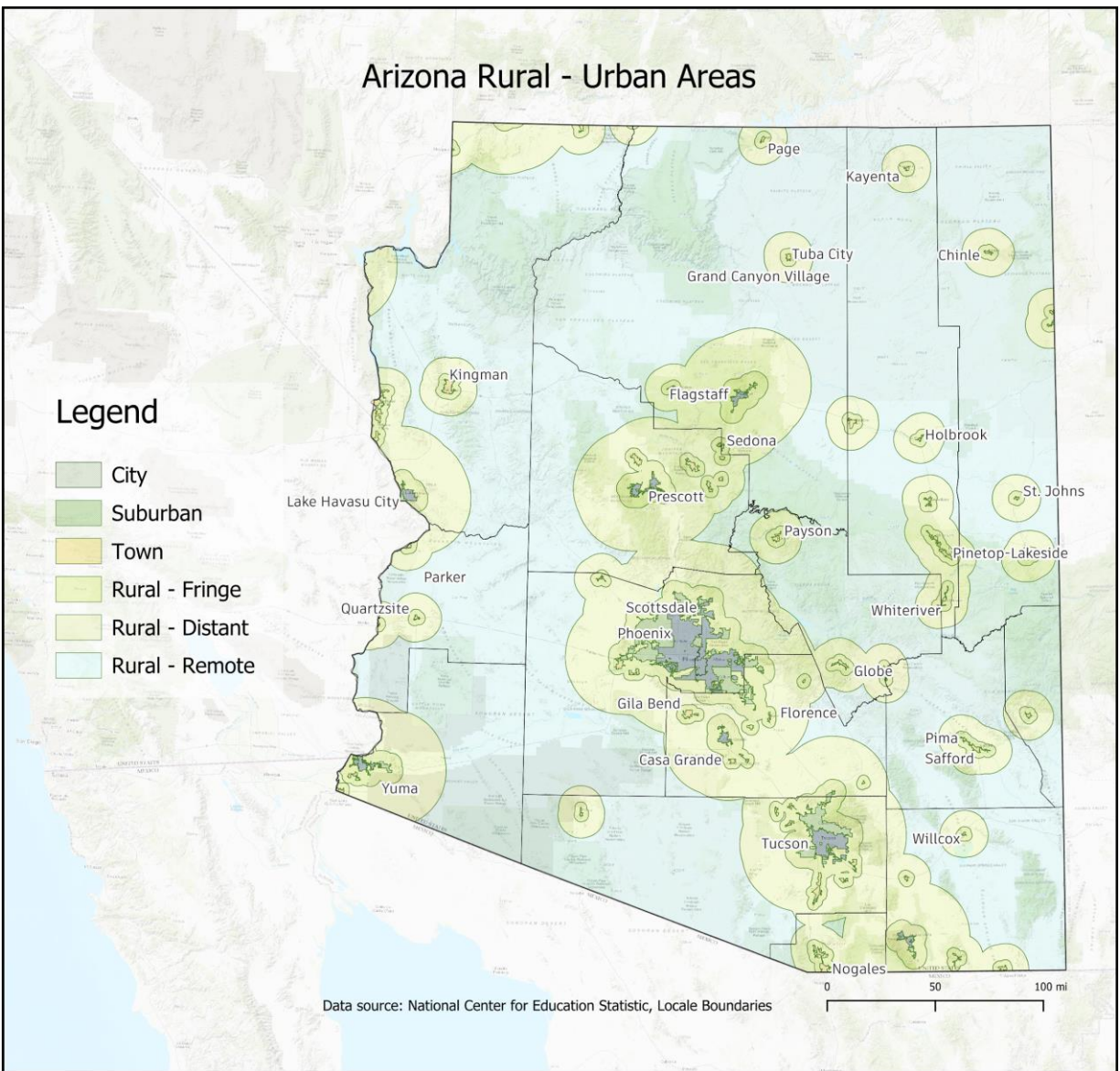
Figure 1: Arizona Local Boundaries are defined by the US Department of Education based on the US Census Urban/Rural classification schema. Categories for fringe, distant, and remote are based on the distance to urban locales. They do not take account of habitability or accessibility. Population data is based on the 2020 Census[5]

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[4] From U.S. Census Bureau, 2020 https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42
[5] Local Boundaries (2020) https://nces.ed.gov/programs/edge/Geographic/LocaleBoundaries

Figure 2: Arizona Population Density at the census tract level, 2017-2021.

Arizona is home to more Tribal lands than any other state. Tribal lands make up approximately 28% of the total land area of Arizona, including the largest reservation in the U.S., the Navajo Nation. Arizona recognizes the 22 Tribal governments within the state, the sovereignty of these Tr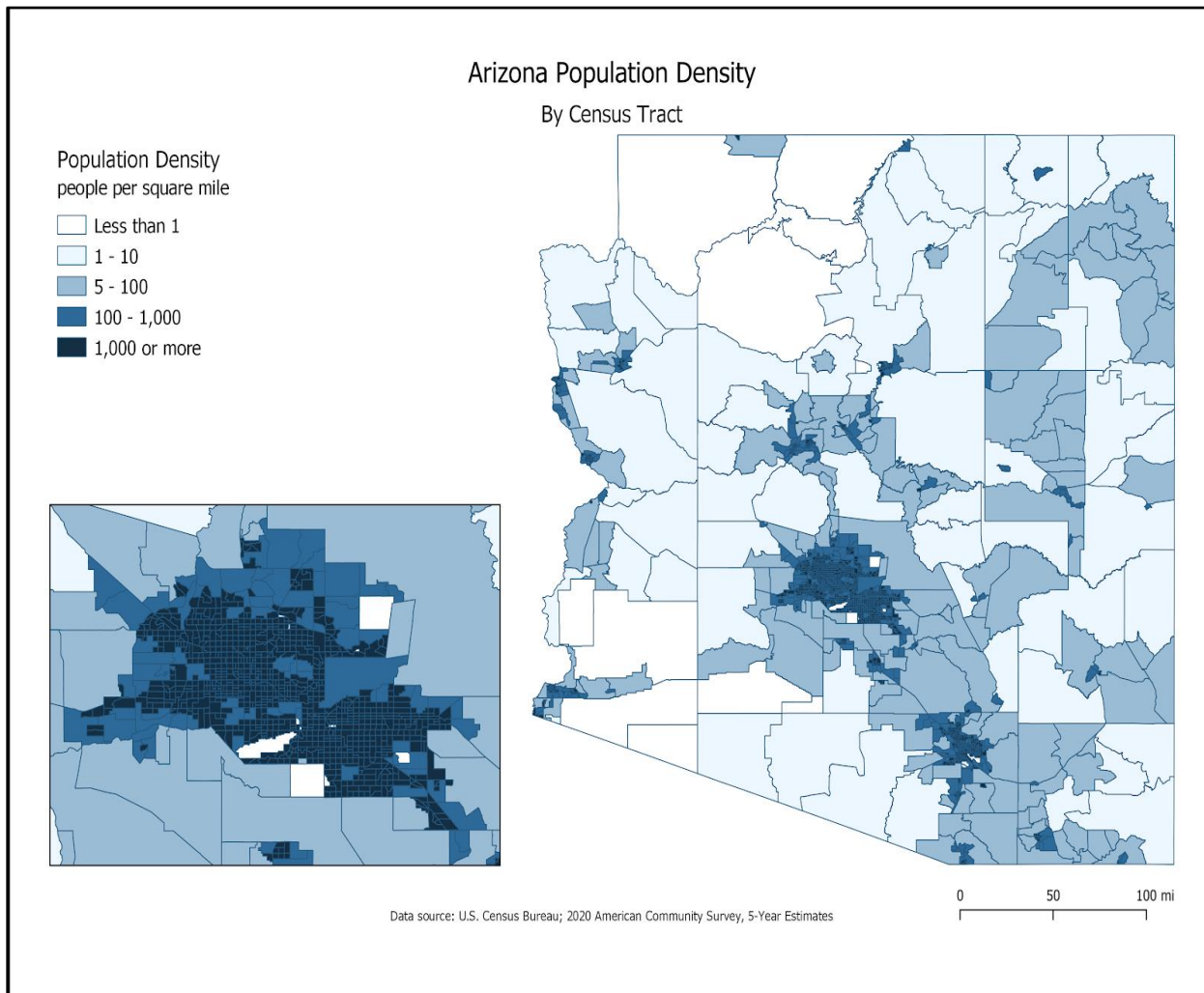ibal governments, and their jurisdiction over their lands. This Digital Equity Plan seeks to support the Tribes' efforts to build internal capacity, enhance digital equity, and support the well-being of all Tribal members who are also residents of Arizona. Tribal governments and the state of Arizona have shared practical interests to work together to assure Tribal-State coordination that enhances digital equity. Figure 3 highlights the Tribal lands within the state.
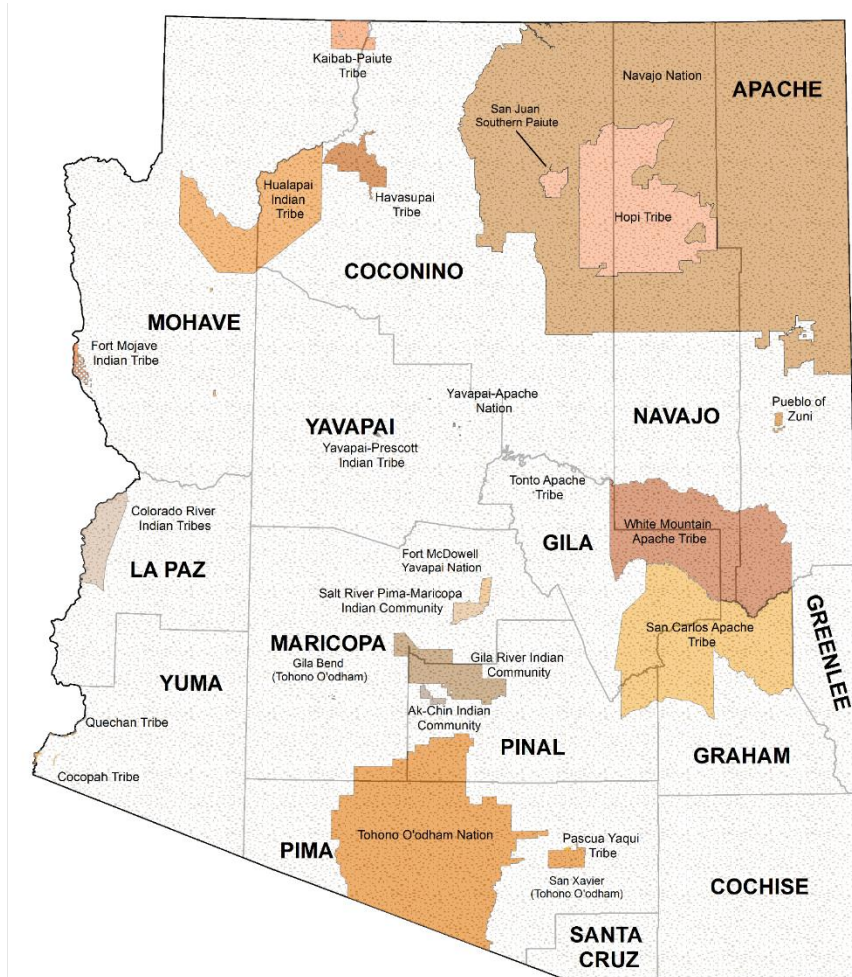
Figure 3: Intertribal Council of Arizona map of Tribal homelands in Arizona by County (2021)[6].

In Arizona's pursuit of digital equity, it recognizes the significance of **resilience, sustainability, trust-building**, and **meaningful collaboration** in shaping an effective plan that leads to a collectively prosperous future. These interconnected elements are integral to the long-term success of the Plan and its ability to meet the state's goals related to economic growth and workforce development, improving education, improving health, and delivering essential services.

Resilience is a key principle that underpins Arizona's approach. The state acknowledges the importance of building robust and adaptive digital infrastructure that can withstand and recover from potential disruptions, decrease vulnerabilities in covered populations, increase social cohesion, and enhance adaptive capacity. By integrating resilience measures into digital equity initiatives, Arizona seeks to ensure that communities have reliable access to technology even in times of crisis or natural disasters. This includes implementing redundancies, investing in backup solutions, and establishing emergency protocols.

Sustainability Arizona aims to create a digital ecosystem that not only addresses the immediate needs of its residents but also considers the long-term impact on the environment and the staying power of solutions. Through sustainable digital equity programs, the state strives to build solutions that have long-term impact while also contributing to a greener and more environmentally conscious future.

Trust-Building

Protecting the community and keeping Arizonans safe online is a key pillar of the state plan. Building trust and countering disinformation through community outreach programs, trust-building campaigns, and

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6 Tribal Homelands- Arizona (2021) https://itcaonline.com/

partnership with local community anchors and lived-experts will help to dispel myths and fears and combat misinformation while helping people prepare to safely participate in online environments.

Meaningful Collaboration

Acknowledging the diverse needs and aspirations of its communities, the plan emphasizes a bottom-up approach that actively engages local voices and lived experts in shaping digital policies and initiatives. The plan champions community dialogues and partnerships with grassroots organizations, while leveraging academic and research expertise from universities, colleges, and nonprofits. These collaborations play a critical role in bolstering digital literacy and skill growth and developing robust infrastructure, ultimately shaping a digital landscape in Arizona that is efficient and accessible.

2. Introduction and Arizona's Vision for Digital Equity

Arizona's BEAD Initial Proposal illustrated the state's plan to provide reliable high-speed internet to every household. Now, as we look to the future, the next piece to the puzzle is Digital Equity. With this plan, Arizona will lay the groundwork for this important next step and ensure a pathway to successful adoption of high-speed internet.

Defining Digital Equity: Digital equity is the condition in which all individuals have the information technology capacity to participate fully in every aspect of society, democracy, and the economy.

Defining Digital Inclusion: Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs).

This includes five elements:

1. Affordable, robust broadband internet service
2. Internet-enabled devices that meet the needs of the user
3. Access to digital literacy training
4. Quality technical support
5. Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration[7]

Digital Inclusion must evolve as technology advances. Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional, and structural barriers to access and use of technology.

Defining Digital Literacy:

The Arizona Digital Equity Plan uses the American Library Association's definition of Digital Literacy:

> Digital Literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.

A person with digital literacy skills:

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

engaged community[8].

Digital Equity for All: Advancing Arizona's Future and Transforming Lives

Across Arizona, the concept of equity—particularly digital equity—takes on different nuances, though some overarching themes emerge. While the baseline understanding across all communities is that equitable access to the internet is a fundamental need, the layers of what constitutes "equity" differ, ranging from affordability and competition among service providers, to knowledge and community-specific barriers like language and cultural sensitivities. The common thread, however, is that a one-size-fits-all approach is inadequate and community-responsive solutions are imperative to truly achieving equity.

In the past year, as we interacted with community members across the state, we identified several key facets of inequity that consistently emerged as recurrent themes. First, affordability is universally recognized as critical, particularly for financially constrained households, seniors, and vulnerable populations. Affordability is closely linked with the need for choice and competition among service providers, as seen in places like Gila County, where such competition is viewed as essential for improving service quality and pricing. Second, the importance of knowledge and digital literacy is consistently highlighted. Communities like those in Pima County put significant emphasis on not just the availability but also the quality of technology and digital literacy skills, indicating that the ability to navigate the digital world effectively is considered as important as having access to it. Third, localization of services and community engagement emerge as pivotal; local community centers and libraries are frequently identified as key community resources underscoring the preference for local solutions that are tailored to meet the needs of each community.

In sum, the discourse around equity in Arizona's varied communities reinforces the necessity of nuanced, multifaceted approaches to solving digital disparities. It calls for a deeper understanding of community-specific needs and conditions, advocating for solutions that are not just equitable but are deeply rooted in the unique challenges and opportunities each community and region experiences.

2.1   Vision

A digitally equitable and inclusive Arizona where every Arizonan, regardless of their location or circumstance, has affordable, high-speed reliable internet and the tools, digital skills, and resources needed to thrive in the digital age.

Mission: To bridge the digital divide and promote digital equity across Arizona, the state is committed to ensuring universal broadband availability through infrastructure investments, supporting affordable broadband plans for all Arizona families, ensuring at least one internet enabled device per household, and providing inclusive digital skills training. Arizona will build digitally equitable ecosystems through strategic initiatives, collaborative partnerships, and community-responsive solutions. This work will specifically look at strategies to support Arizonans with the highest rate of digital inequity, such as those who fall into one of the covered populations as defined by NTIA.

2.2   Alignment with Arizona's Existing Efforts to Improve Outcomes

Governor Hobbs' Goals for a thriving Arizona:

Arizona's Digital Equity Plan is a collaborative effort among a diverse group of stakeholders from around the state and across multiple sectors. The vision and mission of the Digital Equity Plan align with the priorities of Arizona's Governor[9] and reflect a seamless approach to positioning Arizona and all Arizonans to thrive**.**

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8 Digital Literacy Taskforce. (2011). What is digital literacy? American Library Association. Retrieved August 8, 2022 from https://alair.ala.org/handle/11213/16260
9 From "Office of the Governor Katie Hobbs-Priorities"2023 https://azgovernor.gov/governor/priorities

Goal	Description
Education for Everyone	Among other catastrophic impacts, the pandemic slowed the growth of Arizona students academically and led many students to skip higher education to enter the workforce, particularly in low-income communities and tribal lands. Governor Hobbs is committed to increasing postsecondary education attainment, math proficiency rates of 8th graders, and high school graduation rates. Providing equitable access to digital education tools, resources, devices, and training programs will enable individuals of all ages to develop essential digital skills and thrive in a technology-driven society.
Build Thriving and Supportive Communities Across Arizona	The most effective way to address financial insecurity is to equip households with the resources and support they need before a crisis ensues. Perhaps the ultimate consequence of financial insecurity is losing a home. Governor Hobbs is committed to improving economic well-being by facilitating access to digital platforms geared at encouraging participation in prevention initiatives and job supports— ultimately with the goal of keeping Arizonans from housing insecurity.
Health and Reproductive Freedom	Access to affordable, high-quality health care is a matter of life, death, and liberty for the people in our state. Arizona's digital equity work will complement Governor Hobbs' strategic priority of growing Arizona's health workforce, thereby ensuring access to affordable, high-quality care for years to come. This plan will further solidify Arizona's role as a leader in telemedicine, will expand health education opportunities, and will promote access to care via digital diagnostic tools. Utilizing technology will expand healthcare delivery, enhance patient outcomes, and support families in achieving optimal health and well-being.
Resilience, Water, and the Environment	Compounding threats to Arizona's water, natural resources, and climate are disrupting the economy, livelihoods, and quality of life. Governor Hobbs is committed to ensuring a resilient environment for future generations of Arizonans. Specifically, digital equity and skills training investments will promote energy efficient technologies and support workforce development programs to prepare Arizonans for jobs in the clean energy and energy efficiency sectors.
Public Safety, Border Security, and Corrections Reform	Keeping Arizona communities safe and secure is a top priority. As governments and citizens become increasingly connected online through significant broadband and digital equity efforts, threats have the potential to increase. Governor Hobbs is committed to improving cyber protections by working to ensure an adequately resourced and trained cyber workforce. As we provide technology, connectivity, and digital services, we must be aware of threat actors looking to take advantage of vulnerable technologies and people and do everything we can to prepare and protect both. Digital equity work will support the State in its work to collaborate with all levels of the educational escort, industry partners, and other organizations, to ensure

Goal	Description
	sustainable workforce pipelines and creative development of effective cyber professionals.
	Governor Hobbs is committed to increasing access to rehabilitative services, improved quality and access to reentry services, and skill building opportunities for individuals in prison and throughout the reentry process to increase employment opportunities after leaving prison and reduce recidivism.
Affordable and Thriving Economy	Governor Hobbs is working to grow an economy for all Arizonans by putting money back in Arizonans' pockets, improving the affordability of everyday expenses, growing our workforce and wages, and positioning Arizona to be at the epicenter of economic success.
	The Hobbs administration will prioritize bridging the digital skills gap and creating opportunities for all Arizonans through training, mentorship, and resources to support improved digital literacy and the skill-building needed to succeed in a rapidly evolving job market.
Building Connectivity and Infrastructure	Arizona is one of the fastest growing states in the country. Governor Hobbs is committed to ensuring Arizonans have accessible, cost-effective infrastructure. By 2030, Governor Hobbs aims to build out broadband infrastructure to all of Arizona and ensure hardworking families have access to affordable internet.
	Governor Hobbs is committed to ensuring every Arizonan has high-speed, reliable, and affordable Internet, particularly individuals in low-income and historically marginalized communities.

Table 1: Governor Hobbs' Goals

To ensure the success of the Governor's priorities and the goals of the Digital Equity Plan, we have identified these additional strategies to ensure the Digital Equity Plan overlaps with statewide goals related to Economic Growth, Improving Education, Improving Health Outcomes, Civic and Social Engagement, and Access to Essential Service:

Workforce Development and Economic Growth

The Arizona Digital Equity Plan stands in strategic congruence with the Governor's workforce development objectives, serving as a foundational pillar for the state's economic and social advancement. The Workforce Arizona Council, established under the auspices of the Workforce Innovation and Opportunity Act (WIOA) and A.R.S. § 41-5401, is the embodiment of this vision, tasked with crafting a dynamic and effective workforce ecosystem. The Council's composition—a tapestry of private sector leaders, community advocates, labor organization representatives, governmental figures, and legislative members—reflects a multifaceted approach to fortifying Arizona's labor market.

Central to the Council's mission is the cultivation of an inclusive workforce system, one that not only connects businesses with job seekers but also integrates educational pathways to foster a thriving state economy. This mission dovetails with the objectives of the Arizona Digital Equity Plan, which emphasizes the importance of digital literacy and inclusion as cornerstones for workforce development. The CEO of the Arizona Commerce Authority, the designated entity for the State Digital Equity Planning Grant, plays a pivotal role in this alignment, ensuring that initiatives spearheaded by the State Broadband Office are in lockstep with the Council's directives.

The Workforce Arizona Council's Strategic Plan for 2023-2027 delineates a clear trajectory towards achieving the state's workforce aspirations. Developed through a collaborative process that engaged a

cross-section of stakeholders, the plan addresses Arizona's most pressing workforce challenges with precision and foresight. Within this framework, digital equity and inclusion emerge as critical goals, recognizing that access to digital tools and skills is no longer a luxury but a necessity for economic participation and competitiveness.

To this end, the Council has outlined strategies that are directly responsive to the digital imperatives of our time. These include the deployment of digital literacy and education programs tailored to the workforce's needs, ensuring that these programs are accessible to all, particularly those with disabilities and other historically underserved groups. Furthermore, the Council advocates for the alignment of state policies to foster the development of digital competencies across training and employment sectors.

In concert with these efforts, the Council's commitment to work-based learning is unwavering. By collaborating with apprenticeship programs and ensuring that training providers meet industry standards, the Council aims to forge a workforce that is not only diverse and inclusive but also equipped with the skills demanded by today's industries. This commitment extends to Arizona's youth, where the goal is to prepare them for workforce success through high-quality training programs, thereby securing the state's future economic vitality.

The advanced manufacturing sector, identified as a critical growth area for Arizona, is another focal point. The Council's strategies are designed to cultivate a workforce adept in the skills required by this sector, thereby ensuring that Arizona remains at the forefront of industrial innovation. This is complemented by overarching efforts to enhance the workforce development system, creating a resilient and adaptable talent pipeline that aligns with employer needs and economic trends.

The Arizona Office of Economic Opportunity (OEO) complements the Council's initiatives by partnering with state agencies to offer targeted training opportunities to covered populations. These programs are crafted to address the unique needs of incarcerated individuals, those with disabilities, individuals facing language barriers, and veterans, ensuring that no segment of the population is marginalized in Arizona's digital and workforce evolution.

Arizona's Digital Equity Plan and the Workforce Arizona Council's Strategic Plan are interwoven, each reinforcing the other's objectives. Together, they form a robust strategy aimed at elevating the state's workforce to new heights of innovation, inclusivity, and economic prosperity.

Improving Educational Outcomes

Arizona understands that educational excellence is the cornerstone of a thriving society. The state plan is dedicated to providing equitable access to education, educational resources, and remote learning opportunities for learners of all ages. Furthermore, it recognizes the pivotal role technology plays in modern education. To this end, the plan highlights partners who provide learning, technology tools, resources, and training programs, empowering students, educators, and lifelong learners to excel in digital spaces. By doing so, it lays the foundation for a knowledge-driven economy that benefits all Arizonans.

Improving Health Outcomes

Broadband is a super social determinant of health and improving health outcomes is integral to personal and community well-being. The Arizona Digital Equity Plan aligns seamlessly with the state's aspirations to enhance health outcomes. It does so by expanding access to health education and telehealth services for physical and mental health, with a particular focus on covered populations and high-need areas. By leveraging digital technologies and local collaboration, the plan ensures that healthcare resources are readily available to all, thereby fostering healthier communities and a brighter future.

Increasing Civic and Social Engagement

For a vibrant democracy, civic and social engagement is vital. The plan underscores the importance of increasing civic participation and awareness. Through partnerships with nonprofits, outreach campaigns, and virtual community meetings, it fosters a culture of inclusivity and active citizenship. Additionally, the plan provides online resources for civic education, equipping citizens with the knowledge they need to make informed decisions when they cast their votes, thereby strengthening the very foundation of

democracy.

Delivering Essential Services

Access to essential services is a fundamental right, and the Arizona Digital Equity Plan is dedicated to ensuring that these services are accessible to all residents. The plan aligns with the state's objective to enhance the linkages, accessibility, and navigability of online platforms. We use an expansive lens to define "essential services" to capture those services vitally important to participation. Essential services include (water, gas, electricity), banking and financial operations, childcare provisions, parks and recreation management, food and agriculture systems, manufacturing processes, tourism activities, public works projects, public service communications, and law enforcement and safety protocols. Additionally, telehealth expansion, digital solutions for affordable housing, and online educational resources are just a few examples of how the plan addresses pressing societal challenges. These initiatives empower individuals to navigate their options effectively and access critical services.

2.3   Strategy and Measurable Objectives

Governor Hobbs is committed to ensuring that all Arizonans can participate fully and securely in the digital landscape. The Digital Equity Plan is designed to address the critical areas of:

1   Broadband Availability & Affordability

2   Online Accessibility & Inclusivity

3   Digital Literacy and Skill-Building

4   Online Privacy & Cybersecurity

5   Device Availability & Affordability

Recognizing that each of these pillars is interdependent and crucial for achieving digital equity, the Plan leverages state resources, public-private partnerships, and community engagement to create an inclusive digital ecosystem. From expanding broadband infrastructure in underserved areas and making devices more affordable, to enhancing online accessibility and providing robust online safety measures, our strategy aims to help Arizonans become empowered with the tools, skills, and confidence they need to thrive in a digital world.

The development of the program's goals and objectives involved a comprehensive methodology. A three-pronged approach was taken to conduct a comprehensive needs assessment, which included a listening tour, informal interviews, and targeted surveys. This triangulated approach ensured a comprehensive understanding of the community's needs. Each step aimed to uncover various aspects of digital inequity while capturing a diverse range of perspectives. The findings were used to create goals and objectives tailored to address the specific needs of each population group.

Goal 1: Increase availability and affordability of reliable, high-speed broadband Internet.

(Covered Populations- Low-income households + ALL)

Objective 1: Increase enrollment in the Affordable Connectivity Program

Over half a million Arizonans rely on the Affordable Connectivity Program (ACP) to get their families online. Internet connectivity is not only essential for engaging fully in an increasingly digital economy, it is a basic human need. Of over one million eligible Arizona families, just over 500,000 are enrolled in ACP. [10] Increasing the number of Arizonans who are utilizing this subsidy is one way to address the barrier of affordability of service.

KPI's and Targets

1. KPI: Number of low-income households enrolled in the Affordable Connectivity Program.

    Baseline Data: ~515,000 Arizona Households Enrolled in ACP and ~635,000 Eligible but not Enrolled[11] as of the writing of this report

    Near Term Target: By 2026, increase enrollment in ACP by 50,000 covered households.

    Long Term Target: By 2028, increase enrollment in ACP or another affordable program by 50%

Implementation Strategies

*   Increase support for digital navigators, and leverage them to support enrollment

*   Increase collaboration with ISPs providing ACP, and encourage those not currently offering ACP to participate in the program

*   Increase awareness of ACP through targeted campaigns and collaborations

Objective 2: Launch and increase enrollment in BEAD low-cost plan.

As a requirement of the BEAD Plan, Arizona will require subgrantees to offer a low-cost plan to ensure that Arizonans have affordable options available, in addition to ACP. To align the Digital Equity Plan with the groundwork established in the BEAD Plan, we will continue to ensure the availability of low-cost high speed internet options.

KPI's and Targets

1. KPI: Number of homes enrolled in low--cost programs through BEAD subgrantees

    Baseline: 0 households currently benefit from the BEAD low-cost plan

    Near-term: Establish low-cost price and work with BEAD team to create measurements and awareness of programs by 2026

    Long-term: increase eligible household enrollment by 20% by 2028

    Covered populations: all people across covered populations eligible for the BEAD low-cost plan

Implementation Strategies

*   Increase awareness of low-cost plan

*   Provide local and Tribal Digital Navigators training on low-cost plan

*   Prioritize outreach in areas with high volume of covered populations

Goal 2: Increase Inclusivity and Accessibility of Public Resources and Services

(Covered Populations: Individuals with a disability, aging individuals, people with a language barrier, and members of a racial or ethnic minority group)

Digital inclusivity aims to bring the benefits of technology to all Arizonans by ensuring community-based, culturally responsive solutions. We plan to create these solutions in concert with local government and

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[10] From "ACP Enrollment and Claims Tracker- Enrollment by State"" by Universal Service Administrative Co. ,2023
https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state
[11]From "ACP Enrollment and Claims Tracker "" by Universal Service Administrative Co. ,2023 https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state

Tribal designated points of contact across the state.

Objective 1: Make online spaces and content more accessible to a wider range of persons.

KPI's and Targets

1. KPI: Number of Partnerships Developed

   Baseline Data: To be determined. Initiate a comprehensive review to identify and document existing partnerships and current levels of digital accessibility.

   Near Term Target: By 2026 Establish partnerships with the Department of Economic Security (DES) as well as at least three (3) key nonprofits and Non-Government Organizations (NGOs) working with persons with disabilities and persons with a language barrier to promote the adoption of inclusive digital practices.

   Long Term Target: By 2028 Ensure organizations have tools and resources needed to adhere to these accessibility standards.

2. Implementation Strategy

- Collaborate with Experts and Advocacy Groups: Form a task force with accessibility experts and disability advocates to identify and integrate best practices for digital accessibility.

- Partner with ADOA-ASET: Develop guidelines and training programs in partnership with the Arizona Department of Administration/Arizona Strategic Enterprise Technology) ADOA-ASET to improve accessibility understanding and implementation in public state offices and organizations receiving state funding.

Objective 2: Establish Local and Tribal designated Digital Equity Specialists

ACA will work with local and Tribal governments to identify potential Digital Equity Specialists and create a network of people across the state that share a baseline understanding of Digital Equity and Inclusion, as well as other local and federal government programs that may benefit the communities in which they're working. For example, Tribal Digital Equity Specialists could be trained to help schools, libraries and other approved locations secure E-Rate funding to support telecommunications services, and Internet access, as well as internal connections, managed internal broadband services and basic maintenance of internal connections.

These Digital Equity Specialists, as designated by their county or Tribe, will complete a formal training or certification program and have a deep understanding of the activities required for Digital Equity Plan implementation. They will act as points of contact for on-going engagement and collaboration, work with Digital Navigators in their communities, help identify additional resources and programs that support Digital Equity and help ACA create a continuous feedback loop as we move through the implementation of the plan.

KPI's and Targets

1. KPI: Number of Digital Equity Specialists with certifications or formal training

   Baseline: 0 Local or Tribal Digital Equity Specialists

   Near-term: work with local and Tribal governments to determine Digital Equity Specialists in every county and at least five (5) Digital Equity Specialists for tribes by 2026

   Long-term: ensure every Local and Tribal Digital Equity specialist has formal training or a certification by 2027

Implementation Strategies

- Identify and train Digital Equity Specialists

- Create cohorts of Digital Equity Specialists and create regular cadence of meetings to coordinate with State Broadband Office

- Support Digital Equity Specialists completing certification or formal training

Objective 3: Support Local and Tribal capacity for Digital Equity Planning and Activities

Support local and Tribal capacity for tailored Digital Equity planning and activities, ensuring each county and sovereign Tribal Nation has the training opportunities and resources needed to fully leverage the work at a local level. While a number of Digital Equity Plans and feasibility studies exist across the state, supporting the planning activities will ensure local concerns continue to be met throughout the statewide plan implementation. Currently there are two counties that have a formalized Digital Equity Plan (Pima and Maricopa Counties, our two urban counties).

This objective is also aimed at the cultural responsiveness of current and future local plans, and acknowledges the importance of language and cultural preservation, when addressing digital equity on Tribal lands.

<u>KPI's and Targets</u>

1. KPI: Number of local and Tribal Digital Equity Plans

   Baseline: 2 local plans (Maricopa County, Pima County)

   Near Term Targets: Increase number of local and Tribal Digital Equity Plans by 10%, by 2026

   Long Term Targets: Host Digital Equity training opportunities in each county and Tribal Governments by 2027

<u>Implementation Strategies</u>

- Determine core needs of how Tribes can view language and cultural preservation with digital equity lens

- Create dashboard that depicts local and Tribal digital equity resources

Objective 4: Increase Telehealth Access Points and Support Health Navigator Services

A Telehealth Access Point (TAP) is a dedicated public space for individuals to access a telehealth appointment. These spaces consist of an adequate internet connection, a device with working camera, speaker and microphone, as well as privacy considerations in the form of a dedicated room or kiosk where the telehealth visit can be conducted. TAPs may also have support staff, a Health Navigator, to assist an individual through a telehealth appointment if needed.[12]

Health Navigation differs from the more general Digital Navigation services in that Health Navigators are individuals who address the whole digital inclusion process — connectivity, devices, and digital skills — to support community members and provide access to healthcare. The digital health navigator model draws from volunteers, librarians, social services or healthcare staff who offer remote and in-person guidance[13].

<u>KPI's and Targets</u>

1. KPI: number of TAPS recorded and number of health navigators serving Arizona.

   Baseline: Three (3) current Digital Health Navigators who are a part the Digital Equity Institute navigator team housed in ASU's Experience Center; 0 mapped TAPs

   Near Term Targets: identify locations that would be considered Telehealth Access Points as defined by the State of Arizona; work with local and Tribal governments to assess the local need for health navigators, and increase the number of health navigators overall by 10%, by 2027

   Long Term Targets: ensure every county and Tribe has access to TAP and health navigator by 2030

<u>Implementation Strategies</u>

- Provide outreach and education campaigns in tribal and local communities to increase awareness of TAPs and digital health navigators

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[12] From "Digital Navigation Toolkit" by Telehealth Resource Centers, 2023 https://southwestttrc.org/resources/dhn
[13] From Is the Digital Divide the Newest Social Determinant of Health?" by Telehealth Resource Centers, 2023 https://southwestttrc.org/resources/dhn

- Provide support to local partners to establish TAPs and health digital navigators and ensure health navigators and TAP staff are reflective of local and tribal community demographics

Goal 3: Provide Relevant Digital Literacy and Skills Training Tailored to the Needs of Covered Populations

(Covered Populations: ALL)

Objective 1: Increase Digital Literacy and Skills

Increasing digital literacy skills in alignment with learners' personal objectives is critical for encouraging adoption and meaningful use of the internet. Individuals are more inclined to maintain and expand their skills when they perceive a relevance to their daily lives and interests.

KPI's and Targets

1. KPI: Number of individuals across covered populations that completed informal or formal digital skills training or digital skills learning platforms

   Baseline: To be determined

   Near Term Target: increase number of individuals across covered populations that completed informal or formal digital skills training or digital skills learning platforms by 2026

   Long Term Target: Increase confidence in digital skills by 20% by 2030. Confidence is measured through assessment by a Digital Navigator and through subsequent Community Survey data.

Objective 2: Strengthen Community Support Through Digital Navigation Service Utilization.

Key partners who provide targeted digital literacy skill building to covered populations have been identified in the Digital Inclusion Assets by Covered Population (section 3.1.1). This inventory can serve as a resource list for Digital Navigators to use when connecting Arizonans with resources and leveraging the work of community partners and state agencies.

KPI's and Targets

1. KPI: Number of People Assisted by Digital Navigator Services

   Baseline: To be determined

   Near Term Target: By 2025 expand digital navigator services to reach an additional 20,000 people served annually, focusing on reaching low-income households, aging individuals, racial and ethnic minorities, people with a language barrier, people with disabilities, veterans, formerly incarcerated individuals, and people who reside in rural areas.

   Long Term Target: By 2030, establish a comprehensive, sustainable network of digital navigator services, achieving widespread adoption and high satisfaction rates across all targeted demographics. Sustained goal of 20,000 people served statewide by the network of digital navigators.

Implementation Steps

- Increase awareness of digital navigator programs around the state.
- Increase capacity of Digital Navigator and skill building programs
  - Coordinate with Digital Navigator network to incorporate targeted resources available to people across covered populations
  - Incorporate monitoring into navigator intake forms
- Increase support to organizations serving individuals across covered populations that provide informal and formal digital skills training
- Increase awareness of digital skills learning platforms and resources

- Ensure digital skills learning platforms and resources are available in multiple languages and formats as reflected by individuals across covered populations

Objective 3: Ensure Workforce Development opportunities to prepare for jobs created by the BEAD program

Throughout 2023, Arizona worked to prepare the state for jobs created by the Infrastructure Investment and Jobs Act (IIJA). For example, in March 2023, the Arizona Office of Economic Opportunity launched a pilot program with Arizona Western Community College to offer a first-of-its-kind, Broadband Fiber Optic Training program to prepare graduates for entry-level positions as Broadband Fiber Optics Technicians. Each of the 96 individuals that completed the program earned a Broadband Fiber Optics Technician certificate that prepared them for a career as an entry-level telecommunications technician specializing in fiber optics.

In November, the BuilditAZ Apprenticeship Initiative launched. This initiative represents Arizona's latest workforce advancement, connecting workers with the skills and know-how needed for jobs in the state's construction and trades industry with the goal of doubling the number of construction and trades registered apprentices.

KPI's and Targets

1. KPI: Number of people who have a certification or confirmed skills as related to jobs created by the BEAD program

   Baseline: To be determined using the number of people who have a certification or confirmed skills as related to jobs created by the BEAD program

   Near Term Target: By 2026, aim to have 25% of higher education institutions and organizations in Arizona, which have formed partnerships for training, actively participating in the BEAD workforce program.

   Long Term Target: Train an additional 3,000 jobseekers by 2027

Implementation Strategies

- Provide support to institutions of higher education or organizations with partnerships to implement training

- Provide workforce development opportunities to individuals who will play a vital role in the implementation of the BEAD program.

- Coordinate with Arizona@Work and BuilditAZ Apprenticeship initiative

- Coordinate with local workforce boards and the Workforce Arizona Council, established under the Workforce Innovation and Opportunity Act (WIOA)

Objective 4: Integrate Digital Literacy Upskilling into K-12 Educational Standards

Ensuring that students are given opportunities to acquire digital literacy skills will be paramount to their success as they complete school and enter the workforce. We intend to create a state-wide Seal of Digital Literacy similar to Arizona Department of Education's Seal of Personal Finance to recognize high school students who a achieve a high level of proficiency in Digital Literacy. The seal will be placed on student's diploma and a note will be added to students' transcripts.

KPI's and Targets

1. KPI: Number of students who complete steps necessary to receive the Seal of Digital Literacy

   Baseline: 0 Students have completed this program

   Near Term Target: Work with the Department of Education to create a series of requirements for the new Seal of Digital Literacy by the start of the 2026 school year.

Long Term Target: By 2030, at least 400 students per year (sustained) will complete the requirements to earn the Seal of Digital Literacy.

Implementation Strategies

- Work with Department of Education to create standards for this new program

- Increase awareness of this program across the state, especially in school districts that serve families that fall into one of the covered populations

Goal 4: Enhance the Privacy and Security of Arizona's Digital Spaces

(Covered Populations: ALL)

Objective 1: Develop a statewide online safety campaign for individuals of all ages.

Online safety and cybersecurity emerged as a critical need for Arizonans. A statewide online safety campaign plays a crucial role in educating and protecting individuals and communities from the increasing risks associated with internet usage. By partnering with Community Anchor Institutions (CAIs) and conducting regular training and workshops, the campaign aims to raise awareness of online safety and cybersecurity best practices.

KPI's and Targets

1. KPI: Number of online safety training or cybersecurity workshops

2. KPI: Number of people trained by covered population

   Baseline: To be determined for CAI's and community members.

   Baseline: ~500 cybersecurity safety training workshops held for county officials by Arizona Department of Homeland Security (AZDOHS)

   Near Term Target: Conduct a minimum of 12 online safety trainings annually each year between 2025 and 2030.

   Long Term Target: By 2030, establish a comprehensive statewide online safety campaign, fully integrated into community networks and CAIs, that demonstrably improves online safety practices and cybersecurity awareness across all covered populations/target demographics

3. KPI: Number of CAIs committed to partnering to disseminate online safety information.

   Baseline: 0

   Target: Gain commitment from 10 organizations by the end of 2025

   Long Term Target: By 2030 have a robust network of CAIs around the state providing high-quality online safety training.

Implementation Strategies

- Increase awareness and use of online safety training and cybersecurity resources

- Partner with AZDOHS to conduct online safety and cybersecurity training for Community Anchor Institutions and community members.

- Partner with the Arizona Department of Homeland Security to increase cyber preparedness.

- Enhance information sharing among stakeholders to reduce risk

Goal 5: Ensure Arizonans Have an Affordable Device That Meets Their Unique Needs

(Covered Populations: ALL)

Objective 1: Increase the affordability of digital devices

Among all covered populations, the cost of digital devices emerged as a barrier to adoption and use of the

internet. Individuals with a physical or intellectual disability face disproportionate cost barriers due to added costs associated with adaptive technology.

<u>KPI's and Targets</u>

1. KPI: Number of People with Access to an Affordable Device that Meets their Needs

   Baseline: Establish the benchmark for affordability and then establish the number of people who have access to an affordable device that meets their needs.

   Near Term Target: increase number of people across covered populations with access to affordable devices by 15% by 2027

   Long Term Target: increase number of people across covered populations with access to affordable devices by 30% by 2029

<u>Implementation Strategies</u>

- Launch public awareness campaigns to inform covered populations about the availability of affordable devices and the benefits of digital inclusion.
- Use various communication channels, including social media, community events, and local media. Set up community distribution centers in underserved areas where individuals can access affordable devices.
- Identify the device distribution and affordability programs that have shown the most success in the near term and expand them to cover a broader population.
- Form partnerships with corporate entities that can donate or subsidize devices for the covered populations.

Objective 2: Match Devices to the Need of the Individual

(Covered Population: Aging Individuals, Veterans, Individuals with Disabilities + ALL)

<u>KPI's and Targets</u>:

1. KPI: Number of people indicating their digital device meets their needs

   Baseline: To be established

   Near-term: determine criteria (as determined by coordination with Digital Equity Specialists and Digital Navigators) for how to ensure device is correct for individual needs – by 2025

   Long-term: increasing adequate devices to meet the needs of user by 2028

<u>Implementation Strategies</u>

- Determine criteria around appropriateness of users' devices, and encourage Digital Navigators to gather data regarding appropriateness of devices
- Coordinate with organizations that provide devices to user
- Determine minimum requirements for devices
- Coordinate with Digital Equity Specialists and Digital Navigators to create periodic check-ins with individuals who have received devices

Objective 3: Create a sustainable device distribution model

<u>KPI's and Targets</u>:

1. KPI: The number of eligible Arizonans who apply for and receive the ACP's device discount benefit

   Baseline: To be determined

   Target: Increase the number of recipients by 10% beyond the baseline by 2025

2. KPI: Number of Accessible devices distributed that have adjustable settings, user-friendly interfaces, and are compatible with assistive technologies.

Target: Support nonprofits and CAIs in the distribution of 20,000 accessible devices in low-income communities and rural regions by the end of 2027.

Implementation Strategies

- Increase support for organizations that provide refurbished devices and outreach to people across covered populations

- Determine best practices surrounding affordability and accessibility features of devices

- Conduct gap analysis of impact on environmental sustainability and distribution

- Collaborate with tech companies to integrate a refresh plan into distribution to ensure that devices are updated as technology evolves.

- Highlight the benefits of refurbishing devices, emphasizing their affordability, reduced environmental impact, and alignment with various user needs.

Baseline Data: Baseline ACP data to be determined

*53% of Arizona Survey respondents indicated they had access to a personal computer.

Goal 6: Monitor and Evaluate Impact and Progress towards Achieving Digital Equity

(Covered Populations: ALL)

Digital equity initiatives, while noble in their intent, can only succeed if we continually assess impact and tailor strategies to meet the evolving needs of our communities. By including impact and efficacy evaluation in the Goals, we ensure we remain proactive in improving and effectively communicating status and progress of initiatives. Moreover, by regularly evaluating our efforts and listening to the voices of our communities, we can adapt and refine our strategies, making them more inclusive, resilient, and ultimately more successful.

Objective 1: Assess Impact and Communicate Findings

KPIs and Targets

1. KPI: Number of Stakeholder and Community Engagement Activities Conducted

   Baseline: Initial findings from the digital equity planning process.

   Near Term Targets: By 2026, conduct at least one community listening session in each of the fifteen counties. Implement a combination of qualitative and quantitative assessment methods, such as surveys, focus groups, and interviews.

   Ongoing: Report on impact through various communication channels, i.e. quarterly newsletter, annual reports (per engagement plan)

   Long Term Targets: By 2030, publish comprehensive programmatic impact report detailing progress made towards statewide digital equity and inclusion.

2.4   The Planning Process

Listening to the Community: An Ecosystem Building Approach

Through a holistic and inclusive approach that combines robust research, stakeholder engagement, and data-driven insights, this Digital Equity Plan is Arizona's commitment to building an inclusive digital future.

Recognizing the importance of firsthand, lived experiences and insights, we embarked on a comprehensive listening session tour, organizing both in-person and virtual sessions. Through these interactive sessions, breakout groups engaged in dialogues about their communities, their neighbors and their experiences.

Each of the forty-eight sessions was recorded and transcribed. This approach allowed us to identify recurring themes, challenges, and potential solutions, all of which have been integrated into our statewide plan. By casting a wide net and inviting a diverse group of participants – from those who live the challenges

of digital inequity daily, to educators, practitioners, and local leaders – we ensured a holistic understanding of the barriers that hinder full and meaningful digital participation.

Seeking Permission and Identifying Leaders

Our approach was to connect with individuals recognized as anchors within their communities. To identify these leaders, we reached out to various local entities, including social service providers, libraries, elected officials, civic services organizations, housing authorities, educational institutions, and popular community gathering spots.

Understanding Community Communication

Once connected with community leaders, we inquired about the primary modes of communication within their communities. These leaders directed us to community touchpoints that resonated most with their communities. We learned that many communities have unique ways of disseminating information.

Active Listening and Understanding Infrastructure

In each community, we aimed to understand how communities receive, share, and connect with digital information. Our inquiries revolved around practical scenarios, such as how communities react when power outages occur due to windy conditions or how they communicate when floods render bridges inaccessible.

Weaving the Tapestry of Community Insights

After engaging with each community, we analyzed the transcripts from our listening sessions to identify common themes and experiences that bridged communities. This analysis was designed to demonstrate a network of shared experiences across Arizona. This interconnected web enables communities, whether neighboring or miles apart, to share experiences, digital information, fostering a sense of unity and mutual understanding.

By following this methodical approach, we ensured that every community's voice was heard, respected, and integrated into our statewide plan for achieving digital equity across Arizona.

Listening Sessions

Our ecosystem-building methodology offers a blueprint for fostering robust, interconnected human ecosystems within Arizona communities. This approach is not just about data collection; it's about understanding the intricate tapestry of factors that shape our communities, from economic and socio-political dynamics to technological advancements and cultural heritage as shared through lived experience. At its core, this methodology emphasizes that thriving communities are built on collaboration, the availability of resources, strategic partnerships, safety, scalability, and the ability to weave together diverse elements into a cohesive whole.

To ensure the successful implementation of this Ecosystem Framework, we:

- Set Clear Objectives: We began by defining the desired outcomes.

- Engaged Stakeholders: We secured buy-in from relevant stakeholders and community anchors ensuring that every voice is heard and valued.

- Fostered Collaboration: We coordinated efforts across all 15 counties - promoting deep listening and shared purpose.

- Established a Blueprint: We worked toward capturing stories that provide a roadmap for community digital development.

- Scaled Thoughtfully: We worked toward developing strategies that allow for the expansion of successful initiatives and can be integrated locally.

- Documented Progress: We created this report, capturing insights, achievements, and future recommendations for Arizona.

Arizona's Digital Equity Plan is guided by the needs of the community, as expressed by its local members. The ecosystem construction approach accompanied other data collection processes. By constructing an

ecosystem that looks 5-years into the future and imagines the desired outcome, a plan in which no one is missed, communities are connected, and learning is shared, is crafted.

Community Roundtable Conversations

Since May 2023, the Arizona Commerce Authority State Broadband Office has hosted seven virtual Community Roundtable Conversations. The ACA brought together stakeholders from around Arizona to facilitate online conversations about the state of digital equity in Arizona. At each session, attendees were updated on planning progress and given an opportunity to provide feedback, ask questions, and make recommendations on digital equity planning activities.

Synchronizing Activity

To ensure maximum impact and efficiency, our Ecosystem structure was synchronized with both the survey and interview capture. At every juncture of our tour, the Listening Session Team championed the significance of our surveys and highlighted opportunities for in-depth interviews. By providing tailored surveys for both Community Members and Community Anchors, and complementing them with in-depth interview opportunities, we foster participation tailored to individual preferences. This approach ensures a diversity of perspectives are incorporated into the plan, promoting alignment across all planning activities.

Surveying the Community

The team developed a comprehensive survey examining digital access across the state of Arizona. To create survey items, the team examined data collection documents from online sources that included state reports, digital equity documents, and other open-source materials regarding digital use, access, and education. The team fine-tuned the community member and community anchor survey instruments through collaboration with the team and through reviews by subject matter experts.

Both the community member survey and the community anchor institution survey query the respondents' location (town and county), age group, and if the respondent or the respondents' organization serves any of the following populations:

- Individuals who live in covered households (low income)
- Aging Individuals (Over age 60)
- Individuals who are veterans
- Individuals with a disability
- Individuals with a language barrier
- Individuals who are members of a racial or ethnic minority group
- Individuals who primarily reside in a rural area
- Member of a Tribal Nation
- Incarcerated individuals, other than those who are in a Federal correctional facility

All respondents were also asked questions that fall within the three categories of digital equity, (1) internet access; (2) availability and use of devices; and (3) digital literacy. The fifteen-minute survey was disseminated at listening sessions throughout the state of Arizona. Participants could scan a QR code, follow a link, or complete a paper/pencil version of the survey in English or Spanish. The survey was also translated into: Arabic, Farsi, French, German, Hindi, Tagali, Vietnamese, Navajo, Apache, and Chinese (common) to increase response rates, recruitment efforts also include emails, in person distribution at community gatherings, and social media posts.

Public Comment Phase

A crucial step in Arizona's digital equity planning process is the public comment phase. During this phase members of the public will have the opportunity to review the Plan and provide feedback before it is finalized.

By opening the plan to public comment, we aim to achieve the following objectives:

- Inclusivity: The more feedback, the more the Plan reflects the needs, concerns, and aspirations of the diverse community it is intended to serve. The Arizona Commerce Authority recognizes the need to make the Digital Equity Plan available in multiple languages, and formats; for the initial public comment period, this was not possible. We will ensure that the Plan is made available in multiple languages and formats and will be shared widely on the upcoming engagement tour. We recognize the Digital Equity Plan will be a dynamic document that responds to any additional feedback or comments we receive throughout the implementation process.

- Improved Plan Quality: Public input is valuable and can help identify any unintentionally overlooked issues and any opportunities for improvement.

- Collaboration: Engaging the community in the feedback process fosters collaboration. It allows us to tap into the collective wisdom of the community.

- Community Ownership: When the community has a say in the plan, they are more likely to feel a sense of ownership and responsibility for its success.

3. Current State of Digital Equity: Barriers and Assets

3.1 Asset Inventory

To create an effective digital equity plan for Arizona, a targeted analysis of existing resources, challenges, and opportunities was conducted. Through this approach we uncover opportunities and discover where additional support is needed, particularly for existing programs that serve vulnerable communities. *The Stakeholder Asset and Resource Map* results from a multi-pronged capture approach that included:

1. Questions on the community anchor institution surveys

2. Personal interviews with community members and community anchor institutions to identify local organizations serving their community in the digital space

3. Online research at both the county and city levels to ensure the compilation of a comprehensive list

4. Virtual listening sessions specifically focused on disabled individuals, aging individuals, incarcerated populations, and veterans.

Arizona's *Stakeholder Asset and Resource Map* is an invaluable tool for fostering collaboration and driving meaningful change. As a resource, the map fosters capacity building, knowledge-sharing, coordination, and collective action. Moreover, it shows the breadth and depth of expertise and services available throughout Arizona. The table format is used to organize and make information about programs and services easily accessible. Each stakeholder is listed in rows, and different columns represent specific characteristics or services provided by the stakeholders, such as offering free internet, providing digital literacy training, or offering free technical support. By structuring the information in a table format, it becomes easier to compare and analyze the various stakeholders and their specific capabilities. Moreover, this method of organization allows for a clear and concise representation of the stakeholders' assets and resources related to digital inclusion. When combined with CAI mapping, the asset map becomes a very useful tool.

The map is intended to be a starting point. Additional organizations will be added as identified. The entire *Stakeholder Asset and Resource Map* can be found in the Appendix.

3.1.1 Digital Inclusion Assets by Covered Population

Life is multifaceted, and so is human identity. People do not experience life through a singular lens or a single aspect of their identity. Instead, our identities are composed of multiple, intersecting facets that influence our experiences, perspectives, and interactions with the world. This concept is known as intersectionality.

For instance, consider a veteran living in rural Arizona, who has a disability. Her experiences are shaped not just by her gender, disability, or race, but by the combination of these identities. She may face challenges and biases that are distinct from those experienced by a white woman or a man of color. Her identity is at the crossroads of multiple societal constructs, each with its own set of challenges and privileges.

Given the complexity of human identity, it's rare for organizations to cater exclusively to one specific group. Most organizations, especially those aiming for inclusivity and broad impact, recognize the intersectionality of identity and strive to serve a diverse range of individuals. As such, the organizations we identified are best understood as serving multiple covered populations, acknowledging the rich tapestry of identities that make up our communities.

Covered Population- Organizational Stakeholders and Assets

Key for asset inventory

Symbol	Covered Population	
L	Covered Households	Individuals who live in households with incomes below 150% of the poverty threshold
D	Individual with a Disability	Individuals with a physical or mental impairment that substantially limits one or more major life activity
I	Incarcerated Individuals	Inmates confined or recently released from a prison or jail, other than those in a federal corrections facility
R	Rural Residents	Any town with less than 50,000 residents and not an urbanized areas next to a town with 50,000 or more residents
A	Aging Individuals	Individuals aged 60 years and older
M	Members of a Racial or Ethnic Minority Group	Individuals who are Black, Hispanic or Latino, Asian, Native American or Alaska Native, Native Hawaiian or other Pacific Islander.
V	Veterans	Individuals who served in the active military, navy, or air service and were honorably discharged or released
E	Individual with a language barrier (non-English speakers)	Individuals with a language barrier including individuals who are English learners with a low level of literacy

*Tribal communities are not included in the NTIA's definition of covered populations. Nevertheless, acknowledging the significance of this population is of utmost importance to the state of Arizona and its 22 tribes.

Asset Inventory

Below are those organizations working in a statewide capacity. A full list of Arizona stakeholders and assets can be found in the Appendix. Additional organizations will be added as identified.

AARP A M V

AARP is a nonprofit organization dedicated to improving the quality of life for older adults. AARP has undertaken several initiatives to promote digital equity among older adults including research and awareness, education and training, and policy advocacy. AARP's Older Adults Technology Services (OATS) program from Senior Planet is best-practice for helping older adults learn to use and leverage technology.

Ability360:

Ability360 is a nonprofit dedicated to empowering individuals with disabilities to lead independent lives. They offer a range of services, from advocacy and independent living programs to fitness and employment support. They focus on promoting autonomy, inclusion, and equal opportunity and provide people with disabilities with the tools, resources, and support needed to thrive in all aspects of life.

American Friends Service Committee – Arizona (AFSC-AZ):

AFSC-AZ is a nonprofit organization dedicated to promoting social justice in Arizona. AFSC-AZ serves marginalized communities, including immigrants, refugees, those affected by the criminal justice system, and people facing poverty and discrimination. The organization's work in digital equity includes advocating for policies and initiatives to bridge the digital divide, expanding affordable internet access, providing digital literacy training, and upholding the rights of underserved communities in the digital sphere.

Arizona@Work:

Arizona@Work is a network of organizations providing comprehensive workforce development services, job placement, and career guidance. They collaborate with employers and job seekers to facilitate employment opportunities and support individuals in their career advancement.

Arizona Chamber of Commerce:

The Arizona Chamber of Commerce and Industry advocates for policies and programs that promote economic growth and workforce development in the state. They collaborate with businesses, government agencies, and community organizations to create a favorable business environment and drive economic prosperity.

Arizona Commerce Authority:

The Arizona Commerce Authority facilitates workforce development initiatives, fosters economic growth, and supports entrepreneurship and innovation in the state. They work to attract businesses, promote job creation, and drive economic development across various sectors.

Arizona Community Action Association:

The Arizona Community Action Association supports various community programs, including those focused on workforce development, financial education, and digital inclusion. They work to empower individuals and families, promoting self-sufficiency and community well-being.

Arizona Community Foundation:

The Arizona Community Foundation supports various community initiatives, including funding programs related to digital inclusion, workforce development, and telehealth. They provide resources and grants to organizations working towards community development and empowerment.

Arizona Department of Corrections

The Arizona Department of Corrections, Rehabilitation & Reentry is responsible for the incarceration and rehabilitation of convicted felons in the state of Arizona. It operates various correctional facilities, oversees

parole and community supervision, and implements programs aimed at preparing inmates for successful reintegration into society.

Arizona Department of Economic Security:

The Arizona Department of Economic Security provides a range of services, from workforce development and job placement to specialized programs catering to diverse needs. These include Aging and Adult Services, Benefits and Medical Eligibility assessments, Employment and Rehabilitation Services, support for individuals with Developmental Disabilities, and Child Support Services. Through these multifaceted offerings, the department strives to empower individuals and families, fostering self-sufficiency and community well-being.

Arizona Department of Education:

The Arizona Department of Education promotes digital literacy and offers resources to educators and students to enhance technology integration in schools. Their initiatives aim to equip students with the necessary digital skills for academic success and future workforce readiness.

Arizona Department of Health Services:

The Arizona Department of Health Services supports telehealth initiatives and provides resources to healthcare providers and patients for remote healthcare services. Their programs aim to improve healthcare access and quality through the integration of technology.

Arizona Department of Homeland Security:

The Arizona Department of Homeland Security provides cybersecurity services at no-cost to State, Local, Tribal, and Territorial Governments (SLTTs) and K-12 school districts through the Statewide Cyber Readiness Program. Services and products include Advanced Endpoint Protection, Security Awareness Training and Anti-Phishing, Converged Endpoint Management, Multi-Factor Authentication, and Web Application Firewall.

Arizona Department of Housing:

The Arizona Department of Housing offers financial literacy training and resources to help individuals and families achieve housing stability and financial well-being. Their programs aim to empower individuals with the necessary knowledge and skills to make informed housing and financial decisions.

Arizona Health Care Cost Containment System (AHCCCS):

The Arizona Health Care Cost Containment System supports telehealth initiatives by providing resources and reimbursement for healthcare providers offering remote healthcare services to patients. Their programs aim to increase access to quality healthcare through innovative technology solutions.

Arizona Hispanic Chamber of Commerce:

The Arizona Hispanic Chamber of Commerce supports workforce development and business growth among Hispanic-owned businesses, including technology-related initiatives. They provide resources, networking opportunities, and advocacy for the Hispanic business community.

Arizona IT/Cyber Career Network:

The Arizona IT/Cyber Career Network a resource for technology and cybersecurity exploration in Arizona. The initiative provides job seekers and students with universal access to technology and cybersecurity career development resources, including access to hiring employers, community resources, and education and training programs. The Arizona IT/Cyber Career Network is made possible by the partnership between

the Arizona Technology Council, Maricopa IDA, and the Partnership of Economic Innovation (PEI).

Arizona Public Libraries: R L D M V A E

Arizona's 230+ Public Libraries are statewide institutions that provide various resources and services to the public. They offer free computer access, digital device and navigation training, and some provide digital workforce training classes. Public libraries play a vital role in promoting digital literacy and providing access to technology for all residents.

Arizona Rural Schools Association (ARSA): R M

The ARSA supports and advocates for the unique needs of rural schools in Arizona. ARSA promotes digital equity, job training for educators, and community engagement in rural education. They bridge the digital divide by advocating for reliable internet access and equal opportunities to technology. ARSA provides job training programs and resources to empower educators with technology integration skills. Through community collaborations, ARSA strengthens the connection between schools and the local population, enhancing education quality and creating thriving learning environments for rural students.

Arizona State University: L D I R M V A E T

Arizona State University works to advance digital equity in Arizona. The university offers a range of programs including workforce development, financial and digital literacy, disability services, career services, and research initiatives related to technology and innovation. ASU's robust community outreach programs, research collaborations, and innovative partnerships, seek to address the barriers faced by underserved communities including challenges related to accessing and utilizing technologies. Through a partnership between Enterprise Technology and Watts College, ASU is providing internet connectivity and literacy training to the community. ASU's W.P. Carey school leads a financial literacy program for students and their families. ASU also provides hotspot giveaways, digital skill building and cybersecurity and a range of free upskilling programs. The Osher Lifelong Learning Institute provides learning experiences and a community where adults ages 50 or better engage in non-credit, university-quality programs, member-driven experiences, campus-based learning opportunities, and community partnerships. ASU is also home to the Digital Inclusion Leadership Certification, built in partnership with Marconi Society.

Arizona Technology Access Program (AzTAP): D L I R M V A E

The Arizona Technology Access Program, in partnership with Achieve Human Services and RefurbIT, offers free or low-cost technology devices and items needed for disabled Arizonans to participate in the digital world. Their services include free or low-cost technology and medical devices, low-interest technology loans, user training and demonstrations, loaner programs, and digital workforce training. AzTAP serves the entire state of Arizona from its Phoenix-based program.

Arizona Technology Council (ATC): L D I R M V A E T

The Arizona Technology Council focuses on promoting technology innovation and workforce development, supporting businesses and startups in the technology sector. ATC provides resources, networking opportunities, and advocacy for technology-related initiatives.

Arizona Technology in Education Association (AZTEA): L D I R M V A E T

AZTEA is focused on promoting the effective use of technology in education throughout the state of Arizona. AZTEA works toward fostering digital equity, providing job training, and engaging in community efforts. AZTEA strives to prepare students for success in a digital world through collaborations with schools, districts, and community organizations to promote the use of technology in education.

Arizona Telemedicine Program: L D R M V A E T

The Arizona Telemedicine Program promotes telehealth services by facilitating access to healthcare providers, telemedicine networks, and training programs. They play a crucial role in advancing healthcare delivery through the use of technology and remote healthcare services.

Arizona Western College: (L)(R)(M)(V)

Arizona Western College has initiatives in place to promote digital equity and workforce training. They offer computer access to students and provide resources for digital skill development. Additionally, the college collaborates with local businesses and organizations to create workforce training programs aligned with industry needs.

ASU Local: (R)(L)(M)(V)(E)

ASU Local is a regional initiative of Arizona State University (ASU) aimed at promoting digital literacy, workforce development, and community engagement. Through various programs and partnerships, ASU Local offers digital skills training, career counseling, and employment placement services to individuals across the state. ASU Local leverages the university's resources and expertise to empower individuals, foster economic growth, and drive innovation in local communities.

AT&T: (L)(D)(R)(M)(E)

AT&T has been involved in numerous initiatives related to digital equity. Through its "AT&T Connect All" program, the company aims to bridge the digital divide by providing affordable internet access and devices to underserved communities. AT&T also offers workforce training programs and supports STEM education initiatives.

AZ StRUT: (L)(D)(R)(M)(V)(A)(E)(T)

Arizona Students Recycling Used Technology, otherwise known as AZ StRUT, provides A+ certification training to students across the state. They aim to improve the competitiveness of Arizona's technical workforce by supporting applied learning in our educational systems through scholarships and donated electronics & technology, providing refurbished equipment to education and community non-profit organizations, promoting diversity through technical education and work experience, and disposing of electronic waste responsibly.

Boys and Girls Clubs: (L)(D)(R)(M)(E)(T)

The Boys and Girls Club has a strong presence in communities across Arizona. They provide comprehensive support to young people, including digital literacy training and workforce development programs. Through their clubs and after-school programs, the Boys and Girls Club offers access to technology resources, mentors, and educational opportunities that equip youth with the skills and confidence needed to succeed in the digital age.

Chicanos Por la Causa: (M)(L)(D)(R)(M)(V)(A)(E)

Chicanos Por la Causa is a statewide organization that provides digital literacy, workforce development, and community empowerment programs. CPLC provides digital and financial literacy training and access to technology resources. Through their workforce programs, CPLC provides job training, career counseling, and employment placement services to empower individuals and promote community development.

Connect Arizona: (L)(D)(R)(M)(V)(A)(E)(T)

Connect Arizona is supported by the Arizona State Library, Archives & Public Records, a division of the Secretary of State, with federal funds from the Institute of Museum and Library Services. Connect Arizona provides bi-lingual one-on-one phone tech support and digital literacy training through repeat interactions

with Digital Navigators. Connect Arizona also offers support finding and accessing digital literacy classes, refurbished computers, and local resources. The program aims to foster digital inclusion across Arizona.

Common Sense Media: L D R M V A E T

Common Sense Media is a nonprofit organization dedicated to assisting parents, educators, and young people in navigating the digital landscape. While they offer unbiased reviews and advice on media content, a significant part of their mission centers on promoting digital literacy and citizenship. They provide educational resources and programs to foster responsible online behavior, ensuring that children and families are equipped with the tools and knowledge for a safe and enriching digital experience.

Cox Communications: L D R M V A E T

Cox is committed to promoting digital equity through various programs and initiatives. One of their notable programs is Connect2Compete, which aims to bridge the digital divide by offering affordable internet access and devices to low-income families with school-aged children. Connect2Compete provides discounted internet service plans, digital literacy training, and access to affordable devices, ensuring that students have the tools and connectivity they need to succeed academically. Cox is a provider of the Affordable Connectivity Program and also works in collaboration with community organizations on STEM programs and engages in robust community outreach.

Department of Veterans Services: V R L M A D

The Department of Veterans Services recognizes the digital needs of veterans and aims to provide services and resources that promote digital equity, digital literacy, and accessibility. While their primary mission is to support veterans in various ways, they also play a role in helping veterans navigate the digital landscape and access the resources they need to enhance their quality of life.

Digital Equity Institute: L D R M V A E T

The Digital Equity Institute (DEI) provides a range of digital equity ecosystem supports including age and stage-appropriate digital skill building, digital and financial literacy training, and 21st-century workforce development. Navigators offer a robust in-person, hybrid, and virtual digital navigator program, and provide digital navigator and digital health navigator training. Additionally, DEI offers telehealth system design and support services and provides device distribution and online safety training. DEI Tech Hives are spaces where community meets technology. Hives culturally responsive community spaces designed to increase a sense of belonging in the digital world while improving use, adoption, and affinity for technology. DEI also provides comprehensive impact evaluation.

Disabled American Veterans (DAV): V D A R M L

Disabled American Veterans is actively engaged in promoting digital equity and literacy among disabled veterans. They work to ensure that digital resources are accessible to all, and they offer technical support to help veterans overcome digital challenges. These services empower disabled veterans to connect with the digital world, access essential information and services, and improve their quality of life.

EveryoneOn Arizona: L D I R M V A E T

EveryoneOn Arizona is a statewide organization that supports the sign-up process for the Affordable Connectivity Program. They assist individuals and families in applying for affordable internet plans, ensuring that everyone has access to essential online resources and opportunities.

Geeks 2 You: L D I R M V A

Geeks 2 You is a statewide organization that provides free tech support services. They offer computer repairs, virus removal, and software troubleshooting to ensure that individuals have access to reliable and

functioning technology.

Girl Scouts: L D R M E

The Girl Scouts organization plays a vital role in empowering girls and young women across Arizona. In addition to their leadership and character-building programs, the Girl Scouts offer digital literacy training and skill-building activities, as well as opportunities for girls who have incarcerated parents, or other barriers, to fully participate in Girl Scouting. Through engaging workshops, badge programs, and partnerships with technology organizations, they equip girls with essential digital skills, promote creativity and innovation, and inspire future leaders in the digital realm. There are two Councils serving Arizona: the Arizona Cactus-Pine Council and the Girl Scouts of Southern Arizona.

Goodwill of Central and Northern Arizona: L D I R M V A E

Goodwill of Central and Northern Arizona is a statewide organization that offers workforce development programs, job training, and employment placement services. Their focus is on assisting individuals with barriers to employment, providing them with the necessary skills and resources to secure meaningful and sustainable employment opportunities.

Greater Phoenix Economic Council: L D I R M V A E T

The Greater Phoenix Economic Council promotes economic growth and attracts businesses to the region by providing resources, networking opportunities, and workforce development initiatives. They strive to create a vibrant business ecosystem and drive economic prosperity in the Greater Phoenix area.

Literacy Connects: L D R M V A E T

Literacy Connects is a statewide organization that provides digital literacy training to underserved populations. Their programs cover essential computer skills, internet usage, and online safety. By empowering individuals with digital literacy, Literacy Connects aims to promote equity and inclusion in the digital world.

Local First: R L D M V A E T

Local First initiatives promote economic and community development with a focus on workforce development. In rural areas of Arizona they offer various programs and resources to empower rural communities, foster entrepreneurship, and enhance quality of life. AZNavigator, a Local First Arizona Coalition, is a team of 10 organizations working together across Arizona to improve quality and access to small business support services. From startups to established businesses, the team of experts can help stabilize, reinvent, or scale your company.

Maricopa Community Colleges: L R M V T I

Maricopa Community Colleges provide digital literacy training and workforce development programs, including certifications and vocational training. They offer educational opportunities to enhance career prospects and meet the evolving needs of the job market.

Native American Connections: T R E D A I

Native American Connections provides workforce development programs and resources to empower Native American individuals and communities. They offer culturally sensitive services and support systems to enhance educational and employment opportunities for Native Americans.

Northern Arizona University: L D I R M V A E T

Northern Arizona University is an important partner in achieving digital equity. NAU provides workforce

development programs, cybersecurity, a range of skills training and future of work focused career services. Their in-person and online education opportunities meet the needs of diverse learners and support career advancement. NAU is a trusted anchor institution whose work extends beyond the borders of Coconino County and throughout northern Arizona.

Phoenix Public Housing L D I R M V A E

The City of Phoenix Public Housing Digital Inclusion Program offers subsidized internet plans in collaboration with local providers, ensuring that low-income residents can access high-speed internet at a fraction of the cost. Additionally, the program equips participants with free or low-cost computer hardware, such as laptops or tablets, and provides hands-on training in digital literacy, including online safety, software proficiency, and job search skills, enabling them to harness the full potential of the digital world and pursue economic opportunities.

Pima Community College: L D I R M V A E T

PCC offers a wide range of academic programs, from certificate courses to associate degrees. With a commitment to educational excellence and community engagement, Pima Community College provides accessible, affordable, and high-quality education opportunities. The institution plays a pivotal role in workforce development, lifelong learning, and in helping students achieve their academic and career aspirations.

RefurbIT: L D R M V A E T

RefurbIT is an initiative of the ACHIEVE Enterprise Services, a full-service electronic recycling center that is an industry leader in converting obsolete computer electronics into reusable and refurbished products and provides refurbished IT equipment at discounted prices. RefurbIT serves Yuma, San Luis, Somerton, Wellton, Gadsden, Parker, Quartzsite, Kingman, Lake Havasu City, Bullhead City, Casa Grande, and Maricopa.

Rural Arizona Development Council: R

The Rural Arizona Development Council supports rural development initiatives and addresses the unique challenges faced by rural communities in Arizona. They promote economic growth, community development, and the well-being of rural residents.

Sahuarita Food Bank L D I R M V A E T

Sahuarita Food Bank is a community staple in southern Arizona. The Food Bank and family resource center provide local families with food services, financial and digital literacy training, coding and robotics classes, online safety training, digital navigator support, job search support and more. With a volunteer corps of more than 250 people, the Food Bank is one of the most trusted community anchors in the region. The organization recently launched project AZUL, a mobile digital literacy and skills training unit that brings service and support directly to rural communities.

SciTech Institute: L D R M E

The SciTech Institute is an organization that focuses on promoting science and technology education and engagement across the state of Arizona. It offers various programs, events, and resources to inspire and educate students, educators, and the community about STEM (science, technology, engineering, and mathematics) fields.

Southwest Human Development: L D R M E T

Southwest Human Development provides early childhood education programs that incorporate digital literacy training for parents and caregivers. They offer resources and support to ensure that young children

and their families are equipped with digital skills for lifelong learning.

Sun Corridor Network: (L)(D)(I)(R)(M)(V)(A)(E)(T)

Sun Corridor Network is a nonprofit organization focused on providing high-speed internet access and infrastructure to support economic development in Arizona. They work with community anchor institutions, including schools and libraries, to enhance broadband connectivity and bridge the digital divide in rural, remote, urban underserved areas.

Televerde: (I)

Televerde Foundation's mission is to provide currently and formerly incarcerated women with the personal and professional development programs necessary to successfully join and advance in the global workforce. Their approach inspires creativity, imagination, self-confidence, and social skills while addressing issues that cause recidivism. They enable women to break the generational cycle of poverty and incarceration by becoming positive role models to change the lives of future generations and build stronger communities.

T-Mobile: (L)(D)(I)(R)(M)(V)(A)(E)(T)

T-Mobile has taken steps to address digital equity through its "Project 10 Million," which offers free internet access and mobile devices to eligible students and their families. The program aims to bridge the homework gap and provide equitable access to educational resources.

Tucson Connected (L)(T)(E)

A collective public/private campaign aimed at eliminating the gap between Tucsonans who have access to telecommunications – and the educational, economic, and social advantages connectivity brings – and those who do not. A project fund of the Community Foundation for Southern Arizona, the coalition for Tucson Connected works together to deliver strategies that reduce and eliminate historical barriers to technology access and use.

University of Arizona: (L)(D)(I)(R)(M)(V)(A)(E)(T)

The University of Arizona is an integral partner in Arizona's mission to become digitally equitable. UA offers a full range of education and workforce programs. They are deeply embedded in their community through in person and online education opportunities. They provide tech support, telehealth service, and resources to support career growth and lifelong learning.

Verizon: (L)(D)(I)(R)(M)(V)(A)(E)(T)

Verizon actively contributes to digital equity efforts through initiatives like the Verizon Innovative Learning program. This program provides free technology, internet access, and immersive STEM education to underserved communities and under-resourced schools across Arizona. Through the program Verizon equips students, teachers, and communities with devices, they help foster digital skills, improve educational outcomes, and promote equitable access to technology. Through the Small Business Digital Ready plan Verizon provides a free, personalized online experience that provides quick online courses, expert coaching, peer networking, and grant opportunities for small businesses. Through a partnership with the National 4-H Council they provide digital skills training to adults in rural communities.

We Care Tucson: (L)(D)(R)(M)(V)(A)(E)(T)

We Care Tucson provides individuals with access to information technology, medical equipment, and supplies. Through the restoration of donated computers and reusable medical devices, including the responsible recycling of non-functional components, we strive to cultivate an equitable and sustainable community in Southern Arizona**.**

YMCA: L D I R M V A E T

The YMCA operates with the mission to empower individuals, strengthen communities, and promote social responsibility. In addition to its wide range of programs and services, the YMCA actively engages in efforts related to digital equity, job training, and community development to create a more equitable society. They provide access to technology and digital resources to underserved communities and offer various programs and resources to equip individuals with the skills needed to thrive in the workforce.

YWCA: L D I R M V A E T

The YWCA is committed to empowering women, eliminating racism, and promoting social justice. The YWCA provides digital literacy and workforce development programs to individuals of all backgrounds. They provide training and resources to enhance digital skills, promote career advancement, and foster economic self-sufficiency. The YWCA's holistic approach ensures that women and their families have the tools and support needed to thrive in an increasingly digital society.

3.1.2 Existing Digital Equity Plans

Cataloging existing digital equity plans is a critical step towards achieving full and meaningful digital participation. By understanding work that is planned and already underway throughout the state we identify opportunities to maximize funding, increase efficiency, and accelerate progress towards goals. Arizona Commerce Authority, with support from the Digital Equity Institute, collaborated with local municipalities, counties, and Tribal governments to identify and analyze existing digital equity plans. Each plan was assessed to identify gaps, opportunities, and best practices. These local and Tribal plans will serve as foundational elements for a state-wide strategy, ensuring that our approach is both inclusive and contextually relevant. The list below is based on feedback provided to the Arizona Commerce Authority by regional entities. Additional resources will be added as they are identified.

Arizona Broadband Strategic Plan

The 2018 Arizona Statewide Broadband Strategic Plan is a comprehensive report that analyzes the state of broadband in Arizona and outlines a strategic plan for improving access and connectivity throughout the state. The report emphasizes the importance of digital equity and the need to provide equal, affordable, and reliable broadband access to all citizens, including those in underserved and remote locations. The plan identifies several initiatives to stimulate economic growth, create jobs, and boost America's capabilities in education, health care, and homeland security. While identifying unique challenges to digital equity on tribal lands in Arizona, the report does not provide specific steps for improving broadband access on tribal lands in Arizona.

Benefits of Expanding Broadband Infrastructure in Apache County

This report highlights the economic benefits of expanding broadband infrastructure in Apache County, with case studies and key observations showing how broadband can help improve economic conditions in the region. The report emphasizes the importance of broadband as an economic foundation item and essential to day-to-day communication and recommends a comprehensive economic development strategy that includes programs and policies to expand access to broadband services, advance workforce development initiatives, and enhance transportation infrastructure. However, the report does not address the issue of digital equity and the potential impact of broadband expansion on underserved communities in Apache County.

Central Arizona Governments Comprehensive Economic Development Strategy

This report by Central Arizona Governments and its partners outlines the regional values, philosophy, and goals of the Central Arizona Governments Economic Development District. The report emphasizes the importance of economic resilience and identifies several key factors that contribute to it, including workforce development, infrastructure, broadband, housing, transportation, and water management. The report highlights the need for digital equity and broadband density as a crucial factor in economic performance, but it also acknowledges that the CAG region lags significantly behind the U.S. in this area.

While the report outlines several initiatives to address this gap, it does not provide a detailed plan for how to achieve digital equity in the region.

Connect Pima

Connect Pima is a strategic plan aimed at expanding and improving digital access in Pima County, with a focus on digital equity. The Plan includes goals for creating infrastructure, implementing digital literacy initiatives, and increasing devices and tools for connectivity. The Plan involves collaboration with local partners and organizations to distribute affordable or free technology devices to individuals and families with limited resources. The Plan does not include specific initiatives to address the needs of underserved communities or a timeline for implementing the plan's goals.

Digital Payson

The Digital Payson collaborative is a collective effort to improve digital infrastructure and services in Payson and the surrounding region. The group's mission is to ensure that all residents have access to affordable, reliable, and high-speed internet, as well as the skills and resources needed to use digital tools effectively. The DPWG has identified several key areas of focus, including strategic planning, community outreach and education, outage tracking and issue reporting, and collaboration platforms.

The Maricopa County Digital Equity Plan

Maricopa County's Digital Equity Plan is a pilot program with dual purposes — to deploy a scalable model for addressing digital inequity in high need areas, and to establish the foundation upon which subsequent government funding could help the county reach every member of a covered population in the county. The plan includes digital literacy training, prioritizing foundational skills, workforce skills, and telehealth access. The plan includes the distribution of network-enabled devices, emphasizing accessibility and a person-fit model. It includes a robust digital navigator program designed to support tech support, telehealth, and ACP enrollment. The plan addresses connectivity gaps in underserved areas, targeting symmetrical 100 Mbps internet speeds, upgrading infrastructure, and promoting public sector collaboration. It recognizes the importance of middle-mile infrastructure, aiming to provide open-access fiber connectivity to residents below the poverty line, attracting private sector involvement and supporting modern technologies. Funded through ARPA dollars, the pilot program is a partnership between the County, Digital Equity Institute, Sun Corridor Network, and Arizona State University. The plan does not cover all Maricopa residents. It creates a model that with additional funding, can do so efficiently and strategically.

NACOG Broadband Strategic Plan

The 2021 Northern Arizona Council of Governments' Broadband Strategic Plan is a comprehensive plan that aims to improve broadband access in Northern Arizona. The plan recognizes the importance of broadband internet capacity for economic recovery and resilience, public safety, and quality of life. The plan proposes the deployment of new broadband infrastructure throughout Northern Arizona to serve the communities, especially in rural areas. The plan also highlights the need for clear communication and coordination about planned broadband projects in the EDD. The plan does not address the issue of affordability, which is a significant barrier to digital equity.

NACOG Comprehensive Economic Development Strategy

The 2020-2025 Northern Arizona Council of Governments Economic Development District Comprehensive Economic Development Strategy is a collaborative report that aims to promote economic development in Northern Arizona while maintaining the unique character of the region's cities and towns. The report identifies five focus areas, including workforce and education, economic and community health, infrastructure, maximizing available assets and supporting existing businesses, and natural resource assets as an economic driver. One of the target opportunities identified in the report is broadband, as only 34% of rural areas in Arizona have access to services that meet the FCC's benchmark standard for broadband speed. However, there is a gap in the plan regarding how to ensure that all residents in the region have access to reliable and affordable broadband services.

NACOG Economic Development District 2021 Recovery & Resilience Plan

The 2021 Northern Arizona Council of Governments' Economic Development District 2021 Recovery &

Resilience Plan outlines a vision and mission to create a sustainable regional economy while preserving heritage and natural resources. The report identifies digital equity as a key challenge, with disparities in broadband access magnified by the COVID-19 pandemic. The report proposes the development of a Regional Broadband Strategic Plan to support the expansion of robust broadband options in the region. However, the report does not provide specific details on how this plan will be implemented or how it will address the needs of vulnerable populations, such as low-skilled, low-wage individuals, ex-offender populations, and the long-term unemployed, who are at risk of being left behind in a post-COVID economy.

PAG Smart Communities Regional Issues Statements, Goals and Potential Strategies report

The PAG 2018 report is a comprehensive plan for improving economic vitality and modernizing infrastructure in communities. The plan emphasizes the importance of advancing digital infrastructure to progress in every area of regional prosperity, including education, healthcare, research, business, government, public safety, agriculture, energy, and the environment. The document highlights the need for ultra-high-speed networks, intelligent transportation systems, modernized emergency services communications, and the Internet of Things network.

PAG Advanced Communications Infrastructure Assessment

This assessment discusses the benefits of technology in Pima County, with a particular focus on digital equity. The report highlights the importance of high-speed internet in enhancing opportunities for education, workforce development, and training. However, the report also acknowledges that the Digital Divide is most pronounced in areas that are rural or economically disadvantaged, putting already vulnerable communities at further risk of falling behind. The report recommends digital inclusion efforts to address these issues, with a focus on rural areas of Arizona affected by the divide. While the report provides a comprehensive evaluation of the regional benefits of technology, it does not provide a detailed plan for implementing digital inclusion efforts or addressing the gaps in the current system.

PAG Smart Region

The Boosting Regional Economic Competitiveness overview outlines a shared regional vision for Southern Arizona that focuses on enhancing the region's economic competitiveness in six key areas: water reliability, advanced communications infrastructure, modernized transportation system, strategic talent alignment, resilience of infrastructure, and public-private partnerships. The plan aims to improve the region's mobility, sustainability, and livability through the use of technology, data analytics, and knowledge sharing. While this plan does not directly address digital equity, it does include important elements of digital equity including workforce development and infrastructure.

SEAGO Broadband Feasibility Draft Report: Graham, Greenlee, and Santa Cruz Counties

The 2023 Broadband GAP & Feasibility Report for Graham, Greenlee, and Santa Cruz Counties in Arizona provides a comprehensive analysis of the broadband market, engineering design, and cost in the region. The report highlights the importance of digital equity and the need to address the digital divide in low-income neighborhoods. It recommends identifying the staffing needed to pursue a broadband solution, finding and partnering with ISPs to pursue grants, reviewing local policies that might be a barrier to constructing a broadband network, and tackling other broadband issues like digital literacy. However, the report does not provide a detailed plan for addressing the digital divide, and it does not address the issue of affordability, which is a significant barrier to digital equity.

SEAGO Broadband Feasibility Report: Cochise County

The 2023 The Southeastern Arizona Governments Organization (SEAGO) Broadband Feasibility Report for Cochise County, Arizona is a comprehensive analysis of the broadband market in the area, including providers, products, and pricing. The report highlights the importance of digital equity and the need to address the digital divide in the county. The report suggests that affordability is likely to be a big issue in the county, with lower median household income, per capita incomes, and higher levels of poverty indicating a higher likelihood of residents who struggle to afford broadband. The report recommends solutions for closing the digital divide, including finding solutions for closing the computer gap. However, the report does not provide a detailed plan for addressing the affordability issue, which is a significant challenge on the path to digital equity.

SEAGO Broadband Feasibility Report: Graham, Greenlee, and Santa Cruz Counties

The 2023 Broadband GAP & Feasibility Report for Graham, Greenlee, and Santa Cruz Counties in Arizona provides a comprehensive analysis of the broadband market, engineering design, and cost in the region. The report highlights the importance of digital equity and the need to address the digital divide in low-income neighborhoods. It recommends identifying the staffing needed to pursue a broadband solution, finding and partnering with ISPs to pursue grants, reviewing local policies that might be a barrier to constructing a broadband network, and tackling other broadband issues like digital literacy. However, the report does not provide a detailed plan for addressing the digital divide, and it does not address the issue of affordability, which is a significant barrier to digital equity.

SEAGO Comprehensive Economic Development Strategy

The 2021 Southeastern Arizona Government Organization's Comprehensive Economic Development Strategy (CEDS) for 2021-2025 is a strategic plan aimed at promoting economic growth in the region. The plan identifies infrastructure, including broadband, as a focus area and outlines strategies to support the development and expansion of broadband infrastructure within each of the counties. The plan also seeks to identify and develop quality infrastructure and facilities to stimulate future economic development capacity and opportunity. However, while the plan acknowledges the importance of digital equity, it does not provide specific strategies or actions to address the digital divide and ensure that all residents have access to affordable and reliable broadband services.

State of Arizona Cybersecurity Plan

The Cybersecurity Plan represents the State of Arizona's continuous commitment to improving cybersecurity and supporting the State, as well as the cybersecurity practitioners across local jurisdictions. Key components include organizational roles and responsibilities, implementation plans, funding strategies, and various cybersecurity plan elements. These elements address managing, monitoring, and tracking cybersecurity best practices, enhancing preparedness, conducting assessments and mitigation, and implementing multi-factor authentication and enhanced logging. The plan also focuses on eliminating the use of unsupported software and hardware, encrypting data at rest and in transit, and migrating to the .gov internet domain. It includes a wide range of best practices and methodologies, including alignment with NIST principles and supply chain risk management, while promoting safe online services and continuity of operations.

3.1.3 Existing Digital Equity Programs

Arizona's Digital Equity Plan is built upon a foundation of existing programs and initiatives that are vital to achieving digital equity. The following stakeholders have already made significant contributions to digital equity and will continue to be vital partners in the state's ongoing efforts. The below assessment is a work in progress. A full list of programs can be found in the *Arizona Stakeholder and Asset Map* in the Appendix. This list is intended to be updated as more programs and stakeholders are identified.

AARP

Through their nationwide OATS (Older Adults Technology Services) program, AARP provides specialized digital skills training tailored for seniors. Senior Planet programs are built around five impact areas: financial security, social engagement, creative expression, health and wellness, and civic participation. All five areas represent opportunities in the lives of older adults where a significant impact can be achieved through the use of technology.

Arizona State University (ASU)

ASU is a leader in advancing digital equity across Arizona. ASU is home to the Maricopa Broadband and Digital Equity Initiative, the largest university-led digital equity initiative in the country. As part of the Maricopa program, ASU leads a statewide broadband mapping activity to help identify areas that are un and underserved. Through a partnership between Enterprise Technology and Watts College, ASU is providing internet connectivity and literacy training to the community. ASU's W.P. Carey school leads a financial literacy program for students and their families. ASU also provides hotspot giveaways, digital skill building and cybersecurity and a range of free upskilling programs. ASU is also home to the Digital

Inclusion Leader training program they built in partnership with Marconi Society.

Arizona Telemedicine Program

The Arizona Telemedicine Program is a large, multidisciplinary, university-based program that provides telemedicine services, distance learning, informatics training, and telemedicine technology assessment capabilities to communities throughout Arizona.

Chicanos Por La Causa

CPLC offers workforce development workshops and financial literacy training for the community. Core components include budgeting techniques, saving strategies geared towards life milestones such as home ownership and retirement, and short-term financial planning to prevent running out of funds before the next paycheck. The program aims to provide participants with the practical skills and knowledge needed to make informed financial decisions.

Connect Arizona

Connect Arizona is supported by the Arizona State Library, Archives & Public Records, a division of the Secretary of State, with federal funds from the Institute of Museum and Library Services. Connect-AZ is focused on providing Arizonans with access to Digital Navigators service, one-on-one phone tech support, and support finding and accessing digital literacy classes, refurbished computers, and local resources. The program aims to foster digital inclusion across Arizona.

Connect Pima

A Pima County initiative aimed at improving broadband access and digital inclusion in Pima county. The initiative is designed to close the digital divide in Pima County by improving the broadband infrastructure across the county, implementing digital literacy initiatives, and increasing access to the devices and tools needed to access the internet.

Maricopa County Digital Equity Program

The Maricopa County Digital Equity Program is a substantial initiative to bridge the digital divide in Maricopa County, Arizona. The program focuses on the needs of the 588,000 county residents living below the poverty line. The program's central objectives include improving digital skills, providing digital navigator support, distributing network-enabled devices, and helping people learn to use them safely and meaningfully. The program is designed to create an efficacious model that can be leveraged to inform future efforts.

Digital Equity Institute (DEI)

Digital Equity Institute has a full-service digital navigator corps with teams focused on tech support, skill building, and digital health. Teams are trained to support people of all ages and abilities. Support is available in multiple languages over the phone, chat, via a bot, in-person, and at tech hubs called Hives. Hives are located in high-need communities around the Valley and are designed to disrupt historic marginalization by bringing holistic digital inclusion services into places where it is most needed. DEI provides access to age-and-stage relevant digital literacy and skill building from foundational skills to credentials needed to compete in the 21st century workforce. The Institute also provides digital devices that meet the needs of the user, telehealth, ecosystem building, and impact evaluation.

Phoenix Public Housing

The City of Phoenix Public Housing Digital Inclusion Program offers subsidized internet plans in collaboration with local providers, ensuring that low-income residents can access high-speed internet at a fraction of the cost. Additionally, the program equips participants with free or low-cost computer hardware, such as laptops or tablets, and provides hands-on training in digital literacy, including online safety, software proficiency, and job search skills, enabling them to harness the full potential of the digital world and pursue economic opportunities.

Sun Corridor Network (SCN)

Sun Corridor Network is Arizona's research and education network lead. Founded by Arizona's three

universities, SCN provides access to unserved and underserved communities. SCN is the lead ISP for the Maricopa Broadband and Digital Equity Initiative. Their work serves as the backbone for connecting community anchor institutions in high need areas across Maricopa County.

Tucson Connected

A collective public/private campaign aimed at eliminating the gap between Tucsonans who have access to telecommunications – and the educational, economic, and social advantages connectivity brings – and those who do not. A project fund of the Community Foundation for Southern Arizona, the coalition for Tucson Connected works together to deliver strategies that reduce and eliminate historical barriers to technology access and use.

3.1.4 Broadband Adoption

"Access to high-speed (gigabit) internet in my rural community would enhance peoples' ability to work remotely, which is a significant factor for them. It would also aid in enticing businesses and employers to move here and open facilities, which would further aid the local workforce and economy. Overall, high-speed internet would be a tremendous boon to local commerce and industry." - Community Member in Yavapai County

According to the latest US Census ACS 5-Year estimates[14] (2017-2021), 88.2% of Arizonans have a broadband subscription, including cellular and satellite broadband services. Broadband adoption varies widely across the state, ranging from a high of 90.2% of households in Maricopa County to a low of 42.9% of households in Apache County. In comparison, the FCC estimates[15] the percentage of population living where broadband fixed services are available with minimum speeds of 25/3 are 99.3% in Maricopa County and 23.0% in Apache County respectively as of December 31, 2019.

The discrepancies between broadband availability and adoption highlight important barriers to achieving universal coverage, defined as 100/20 broadband service for everyone. In Maricopa County, only 0.7% of the population is not in a 25/3 service area, yet 9.8% of households did not report having a subscription. Possible reasons include subscriptions are not affordable, FCC estimates may not be precise, people may choose to not have broadband, people may have access to the internet without a subscription (e.g. students in dorms, elderly in community living), bias in census data due to mis/under-reporting, and time lags in the data.

Conversely, in Apache County, the data implies the number of households who report having a broadband subscription is 19.9% higher than the FCC estimate of population within a fixed broadband service area. Approximately 8.5% of these respondents have a cellular plan as their only access to broadband. Reasons for this discrepancy include over-reporting of broadband subscriptions, reporting of broadband services that are less than 25/3, non-representative sampling of households particularly among tribal populations, poor ACS response rates for households who do not have the communications to participate in ACS survey (e.g. no internet, no phones).

These data demonstrate that there are different barriers to broadband adoption in urban and rural areas which may be confounded by income, poverty, education, employment, and community functioning.

Building on the existing landscape assessment, which serves as baseline data on internet access and utilization, future work will focus on creating a dynamic framework to measure the meaningful use of the internet in key life sectors such as education, employment, civic engagement, and healthcare. Given that significant portions of the state's population currently lack internet access, this framework will be designed to monitor changes over time against the established baseline, thus allowing for the evaluation of both accessibility and impact. Critically, the definition of "meaningful use" will be derived from community consultations, ensuring that it is contextually relevant and aligned with local needs and priorities.

There are multiple resources available across the state designed to promote, enhance, and support broadband adoption. ACA will continue to build on the asset inventory list to identify all resources available

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[14] Access Broadband Dashboard. US Census Bureau and NTIA. accessed at https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=233ad09d77e14150be143b9447ed5074
[15] From "Fourteenth Broadband Deployment Report" by Federal Communications Commission (FCC). Released January 19, 2021.

for broadband deployment and digital equity.

Digital Navigator Services, ACP Enrollment and Outreach Campaigns

Early in the COVID-19 pandemic, the Arizona State Library, Archives and Public Records launched the first Digital Navigator service in the state. Connect Arizona was modeled on the National Digital Inclusion Alliance (NDIA) Digital Navigator model. This program enables librarians from various locations throughout the state to assist community members in locating internet service, building digital literacy skills, and accessing technical support needed to become more efficient and effective internet users. Connect Arizona also sought to collate Digital Equity and Inclusion resources into a central location via their website, making it simpler for Arizonans to locate and gain access to the information and resources necessary to flourish in the digital economy. The Connect Arizona site offers resources for obtaining internet service, such as information about the Affordable Connectivity Program (ACP) and participating ISPs, a location map of Wi-Fi hotspots, a list of low-cost internet service plans and providers statewide, and guidance on where to find and buy low-cost, refurbished devices.

Digital Equity Institute's Digital Navigator model includes ACP enrollment support in partnership ASU's Experience Center, and a robust repository of resources for community members. Both Connect Arizona and the Digital Equity Institute's Digital Navigators serve the entire state.

The Navajo County Library District was a recipient of the FCC's ACP Outreach Grant and combines ACP Enrollment and Outreach with the Digital Navigator model, creating a sustainable system of support for residents of Navajo County.

Common Sense Media in partnership with both the City of Phoenix and the Digital Equity Institute have ongoing ACP enrollment campaigns. Community anchor organizations including but not limited to Phoenix Public Housing, Arizona State University, Future Stars, Literacy Connects, Connect Pima, Tempe Health and Human Services, as well as ISP's run targeted ACP enrollment campaigns.

Additional broadband adoption assets can be found in the Appendix. Assets will be added on a rolling basis as they are identified.

3.1.5   Broadband Affordability

"I've heard community members say, you know, yeah, I know about the affordable care plan for reduced cost Internet. I gave up trying to sign up for that thing months ago, you know, because it is so extensive and you have to upload documents. And who knows how to do that? Right? So I wanna make sure that we are identifying people that can help within that community." - Community Member in Arizona

Affordability plays a pivotal role in achieving digital equity in Arizona. Ensuring that internet access and digital services are affordable for all residents is essential to bridging the digital divide. Many underserved communities, including low-income households and rural areas, face barriers in accessing the digital resources they need for education, employment, healthcare, and civic engagement. In Arizona, internet service can range from $20 a month for the slowest connections up to $199 a month for faster connections[16]. Satellite internet service is available to some consumers in Arizona but tends to be one of the most expensive options and can exceed $150 a month[17].

There are several local and federal programs available to qualifying Arizona residents that offer internet service at a reduced cost. The Affordable Connectivity Program (ACP) is a Federal Communications Commission (FCC) program that helps to offset the cost of the internet for low-income households. ACP provides a discount on internet services for individuals living at or below 200% of the Federal Poverty Guidelines or those participating in various assistance programs[18]. These populations are represented in Figure 4 below. To date, there are 463,791[19] Arizonans enrolled in ACP. A total of 1,145,670 Arizona

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[16] All Connect (2023), Internet Providers in Arizona. Accessed at https://www.allconnect.com/local/az

[17] U.S. News & World Report (August 2023). Accessed at https://www.usnews.com/360-reviews/services/internet-providers/satellite-internet#:~:text=Satellite%20internet%20is%20one%20of%20the%20more%20expensive%20forms%20of,options%2C%20like%20cable%20or%20fiber.

[18] Federal Communications Commission (August 2023), Affordable Connectivity Program. Accessed at https://www.fcc.gov/acp

[19] Universal Service Administrative Co. (August 2023), ACP Enrollment and Claims Tracker. Accessed at https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/

residents are eligible for the program[20]. The future of ACP is uncertain and identifying alternative approaches to address affordability is prudent. In the meantime, it is imperative to identify and scale programs that increase awareness of ACP and assist individuals with enrollment.
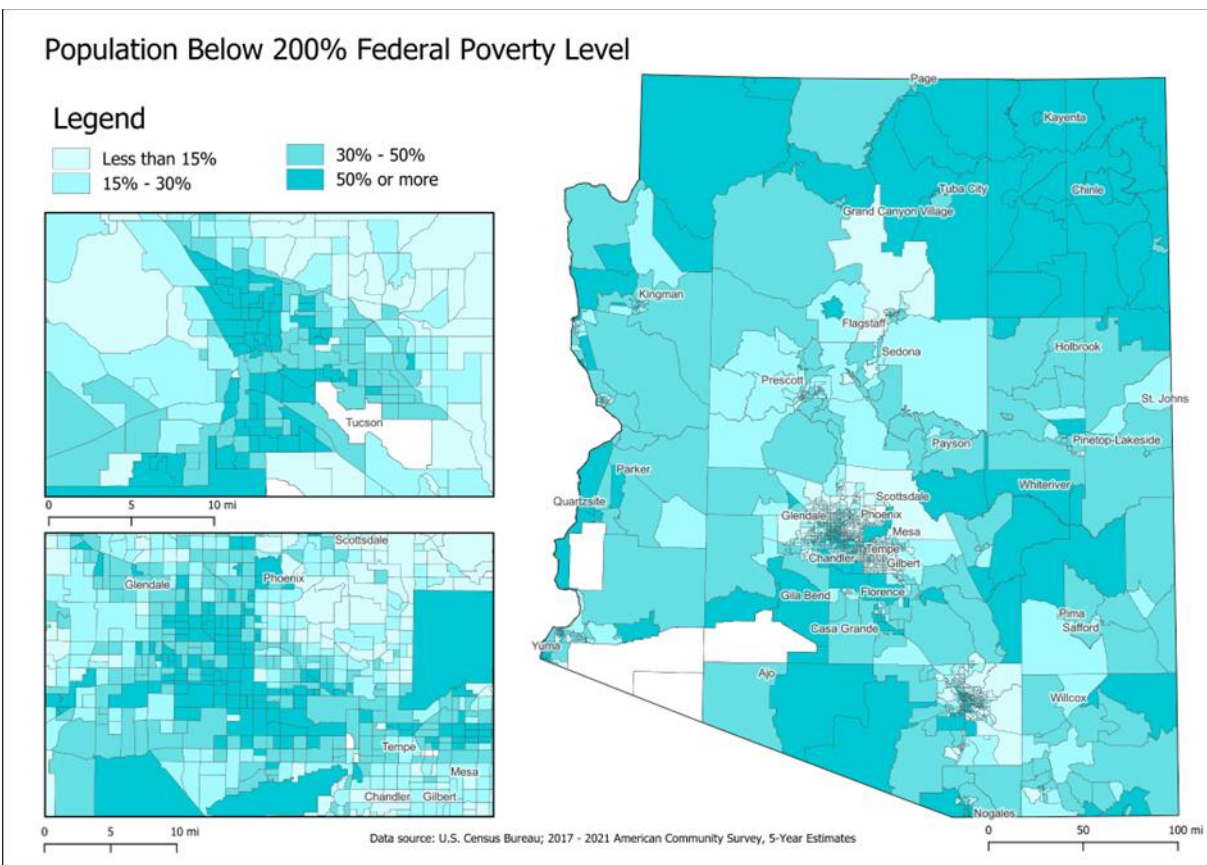
Figure 4: Census estimates of the percentage of households that are below 200% of the poverty level based on household size. The ACP threshold is 200% of the poverty level, so each identified household is eligible for the program

Broadband Affordability Resources in Arizona

"If it weren't for the ACP FCC program, our family would struggle greatly to afford the internet. The cheapest plan that is offered is not very reliable or fast with the amount of people in my household (5). 5G is limited and slow in our area otherwise. The eligibility guidelines for the ACP FCC program should be expanded if possible to allow others access to fast, reliable and affordable internet." - Community Member in Pima County

Achieving digital equity is not possible without programs in place to help with the cost of internet connectivity and the devices needed to engage online. The following resources are currently available programs that assist with the cost of the Internet for residents of Arizona that meet income and other requirements. Connect Arizona, a service of the Arizona State Library, Archives & Public Records, maintains a list of Low-Cost Internet Plans and Offers available in Arizona[21], which Digital Navigators can leverage to help people find options in their area. Additional programs will be added to this resource list as they are identified.

*Affordable Connectivity Program (ACP)***:**

The Affordable Connectivity Program is a federal program aimed at ensuring affordable and accessible internet connectivity for all Americans. The ACP offers subsidies to low-income households, schools, and

[20] Information Superhighway (June 2023), Affordable Connectivity Program Enrollment Dashboard. Accessed at https://www.educationsuperhighway.org/no-home-left-offline/acp-data/#dashboard
[21] From Low Cost Internet Plans and Offers in Arizona 2022, https://connect-arizona.com/get-online/internet-offers

underserved communities, enabling them to access reliable internet services at affordable rates. ACP benefits can be combined with Lifeline benefits for eligible households.

Benefits: $30 per month discount off internet services for eligible households. In addition, a one-time $100 discount (per household) is available to purchase a device such as a laptop, desktop computer, or tablet offered by participating internet service providers. A $75 per month discount is available to Arizona residents who live on federally recognized Tribal lands.

Connect2Compete:

Cox Communications' Connect2Compete program provides affordable internet access and low-cost computers to low-income families with school-aged children, bridging the digital divide and enabling students to access online education, while also empowering them with essential digital literacy skills. This initiative underscores Cox's commitment to making technology and educational opportunities accessible to all, regardless of income.

Cox ConnectAssist:

Cox offers its ConnectAssist program to low-income households that meet income eligibility requirements. The program includes free installation and equipment rental was designed to work in concert with ACP to cover the full cost of internet service. The program is available to all residents of Arizona in areas serviced by Cox Communications, including on Tribal land.

Lifeline:

A program sponsored through the Federal Communications Commission (FCC) and available to U.S. residents that meet income requirements. This federal program provides a monthly discount on telephone service or broadband. Lifeline benefits can be combined with ACP benefits for eligible households. Lifeline internet service providers participating in Link Up can assist with initial charges (up to $100) for telephone service or broadband service installation.

3.2   Needs Assessment

Arizona faces urgent digital equity challenges across all 15 counties and covered populations. Key areas include enhancing digital literacy and skills education, supporting youth and older Arizonans uniquely, and expanding library resources and social service digital engagement opportunities. Older Arizonans need protection from digital pitfalls and tailored educational programs, while veterans require specialized support, especially in Telehealth. Youth need phone-to-computer skills training as well as education and workforce support. Language barriers, particularly among Spanish-speaking and refugee communities, hinder digital access and require a thought plan partnership. The infrastructure improvements throughout Arizona are crucial, especially in older communities. The incarcerated and recently released individuals' needs are currently underrepresented, pointing to a future focus area. Overall, a human-centric, localized approach is vital for equitable digital access in Arizona.

The areas that will benefit most from broadband infrastructure improvement include:

- Economic and workforce development
- Education
- Telehealth
- Access to devices
- Digitally literate communities
- Civic and social engagement opportunities
- Delivery and access to essential services

Creating a comprehensive needs assessment required a multi-pronged approach to assess the needs of covered populations. To collect these data, we created maps to identify areas where covered populations

are located, asked questions through surveys, listening tours, and personal interviews, and analyzed census data along with state and federal data sources. Collectively, this provided specific information about the barriers for each covered population and offered insight into strategies for future digital equity work.

Covered Population Mapping:

The research team identified and collected estimates of the covered populations in Arizona using US Census American Community Survey (ACS) data sets[22] and the US Census Decennial Census Demographic and Household estimates[23]. The Decennial Census data for covered populations is available only at the county and state levels. The ACS data, alternately, is available at the census tract level providing a higher level of resolution, but it is collected from a five-year rolling estimate - most recently 2017-2021.

Covered population	Statewide percent of population estimate[24]
Covered Households Individuals who live in covered households (not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census)	24%
Aging individuals (60 and above)	22%
Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility	0.63%
Veterans	6.6%
Individuals with disabilities	13.4%
Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy	8.1% 23.4%
Individuals who are members of a racial or ethnic minority group	46%
Individuals who primarily reside in a rural area	14%

Table 2 : Covered populations in Arizona by percent of the population

Covered populations are defined by NTIA as those likely to experience elevated challenges in achieving digital equity and accessing services through digital technologies.

The geography of Arizona is diverse, with 15 counties ranging from the largest, Maricopa County with over 4.5 million residents, to the smallest, Greenlee County with just over 9,000 residents. As a result, county-level data alone is not adequate to assess the locations of need for covered populations. Census tract-level information is superior for location-based needs assessments. Census tracts in urban and suburban areas are commonly around one square mile with 1,000 - 3,000 population. Rural tracts are larger in size and include many locales that are not inhabited at all. Figure 4 (above) shows the Arizona population density at the tract level.

Survey design

The survey process serves as a pivotal mechanism for gathering granular, area-specific data, which is vital

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[22] U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates https://data.census.gov
[23] U.S. Census Bureau, 2020 Census Demographic and Housing Characteristics https://data.census.gov
[24] Digital Equity Act Population Viewer. 2023, https://www.google.com/url?q=https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id%3Dc5e6cf675865464a90ff1573c5072b42&sa=D&source=docs&ust=1702412325667435&usg=AOvVaw3e0KHNKFuSXXScIiIkAQ_o

for the mapping activity focused on covered populations. This comprehensive data collection process ensures that the subsequent maps are both accurate and insightful, offering a nuanced understanding of the digital landscape across various geographic and demographic segments in Arizona.

The data collected through the surveys are directly integrated into the mapping activity, providing layered insights into the state of digital equity in different regions. These highly detailed maps provide stakeholders with a visual representation that complements the survey's findings. By weaving these two components together—survey data and geographic mapping—we create a synergistic tool for dissecting and addressing digital equity issues.

Survey data analysis

Analysis highlighted resources, challenges, and barriers to digital equity across the state. Analysis and interpretation of findings were examined through various stakeholder groups and delineated by the state's urban, rural, remote, and Tribal areas with a focus on "covered" and vulnerable populations, including low-income households, racial and ethnic minorities, members of Tribal Nations, the elderly, veterans, non-English speakers, people with disabilities, and other historically marginalized communities. Examination of current resources and barriers trends ensure representative sampling using sound statistical methods.

Analysis further examined the availability, quality, and utilization of digital resources. Electronic and paper surveys were distributed statewide to gather participant perceptions. Semi-structured interviews with a representative sample of groups enabled the collection of evidence informing the availability of resources and gaps in utilization. The landscape assessment provided foundational and baseline data.

The team measured areas experiencing poor outcomes and identified the statistical correlates that could be embedded in programs to improve them. The scale of this problem was such that it could only be successfully addressed if resources were strategically coordinated and evaluated within a framework that had a deep understanding of the factors driving digital access and their relationship to underlying social determinants. In addition to highly curated data, one also needed decision tools based on predictive models and clear visualizations.

Taken together, the data collection process fed two key models: one spatial (GIS), and one network-based. The GIS included data layers at multiple geographic scales (census tract, county). For example, all of the figures for population estimates and covered populations represent the U.S. Census data that provides foundational information about Arizona residents. These data were analyzed along with collected data to create a reliable and accurate landscape assessment of connectivity and barriers across the state.

Survey Participants

Overall Number By Covered Population		Percentage of Respondents Self-Reporting their Status in a Covered Population (these numbers are not mutually exclusive as people could select multiple categories)							
		Older than 60	Veteran	Disability	Language Barrier	Member of a racial/ ethnic minority	Resides in a Rural Area	Member of a tribal nation	Incarcerated individual
County Name	**Total**	**716**	**179**	**210**	**89**	**242**	**903**	**184**	**8**
Apache	173	24	11	11	1	28	92	82	0
Cochise	47	17	8	7	1	2	20	0	0
Coconino	223	64	14	14	0	15	80	4	0
Gila	26	6	1	1	0	0	13	1	0

Graham	98	27	8	8	0	5	54	1	0
Greenlee	14	5	1	6	0	2	8	0	0
La Paz	81	41	8	16	1	7	51	2	2
Maricopa	424	73	12	46	36	62	24	10	3
Mohave	104	19	8	5	0	8	40	0	0
Navajo	222	24	7	12	1	35	100	79	1
Pima	256	35	10	12	19	35	25	1	1
Pinal	82	29	5	3	1	9	26	0	0
Santa Cruz	10	2	0	1	2	0	4	0	0
Yavapai	731	325	84	57	1	28	354	2	0
Yuma	125	25	2	11	26	6	12	2	1

Community Member Survey: There were 2,616 responses to the community member survey. Of those, there was representation across each county in Arizona as shown in Table 2. Respondents from each covered population (except covered households) were represented in the survey as shown in Table 3 below. Figure 5 shows the community member breakdown by age groups. The lowest number of respondents was from Arizonans aged 18-24. Participants under the age of 18 were not eligible to take the survey and were not included.

*Household income was not asked or recorded on the survey and is not reflected in Table 3.

County	Community Member Participant Total	County	Community Member Participant Total
Apache	173	Mohave	104
Cochise	47	Navajo	222
Coconino	223	Pima	256
Gila	26	Pinal	82
Graham	98	Santa Cruz	10
Greenlee	14	Yavapai	731
La Paz	81	Yuma	125
Maricopa	424		

Table 3 : Community Member Survey Participation by County

Aging Individuals	Veteran	Disability	Language barrier	Member of a racial or ethnic minority group	Reside in a rural area	Member of a Tribal Nation*	Incarcerated individual
721	179	213	96	247	907	185	8

Table 4 : Percentage of Respondents Self-Reporting their Status in a Covered Population* (Participants could choose multiple answers.)

*Tribal communities are not included in the NTIA's definition of covered populations. However, opinions from members of this community are vital to achieving digital equity in Arizona**.**

County Responses by Age
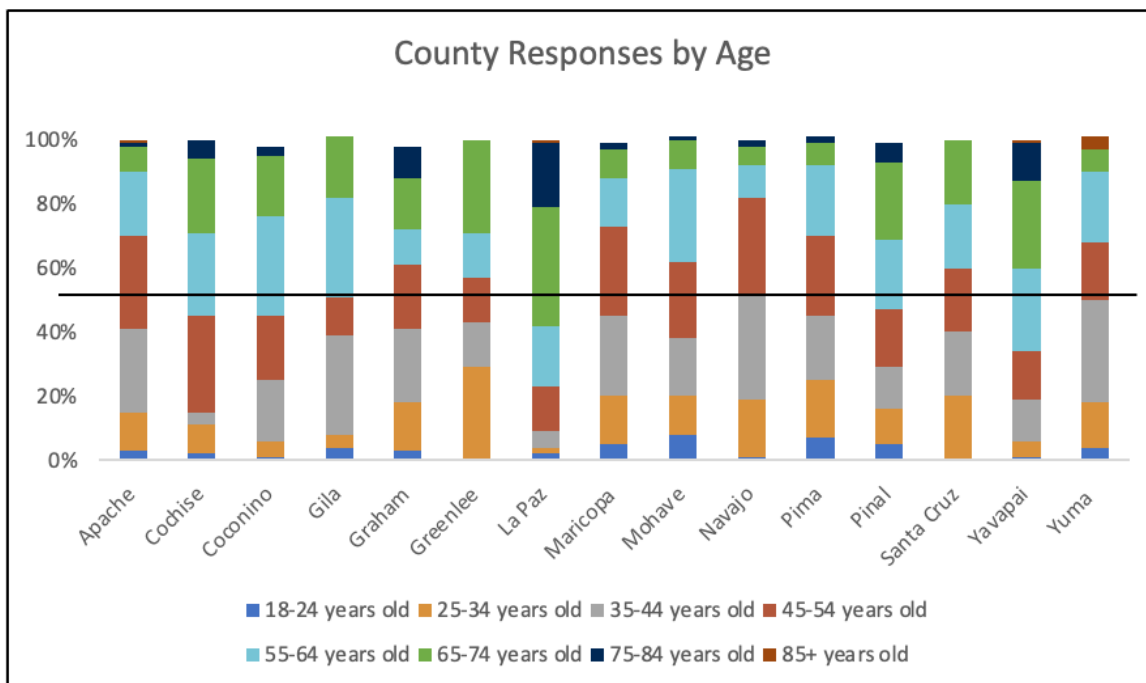
Figure 5: Community member participant age by county. Age Groups: Respondents varied by age with good representation from most age groups

Community Anchor Survey: There were 371 responses to the community anchor survey. Respondents represented all counties in Arizona. When broken down by county, anchor institutions reported serving all covered populations with the exception of Greenlee County not servicing members of a Tribal Nation and several counties not serving incarcerated individuals.

Covered Population Service: The percentage of surveyed anchor institutions that serve covered populations are listed below in Table 4. Organizations serving members of a racial or ethnic minority group were highest at 44% and those serving incarcerated individuals were the lowest at 15%. Identification of these agencies is vital to collaborations and partnerships moving forward with agencies that are currently doing the work in their communities.

*Income levels were not asked or recorded on the survey; therefore, Covered Households are not represented in Table 4.

| Number and Percentage of Those Community Anchor Institutions Reported Working within Their Community within Covered Populations* | | | | | | | |
Aging Individuals	Veteran	Disability	Language barrier	Member of a racial or ethnic minority group	Reside in a rural area	Member of a Tribal Nation**	Incarcerated individual
150	143	156	149	163	154	128	54
40%	39%	42%	40%	44%	42%	35%	15%

Table 45: Community Anchor Institution Respondents by Covered Population

** Tribal populations are not identified as a covered population, but the identification of anchor institutions that work directly with the tribal nation is imperative to digital equity work in Arizona.

Ecosystem-Building

The ecosystem-building methodology was a comprehensive approach to constructing and nurturing interconnected human ecosystems within communities. It dovetailed with mapping and quantitative capture. It entailed the joining together of various complex systems encompassing economic, socio-political, technological, cultural, historical, psychological, and physical factors. The methodology revolved around central organizing principles, including individuals, the environment, and the interactions between them.

Collaboration, resource availability, partnerships, safety, scalability, simplified complexity, and weave-ability were considered the necessary conditions for success. Measurement tools such as models, engagement methods, and impact assessment tools were employed to evaluate progress and results. This methodology aimed to create inclusive and impactful learning ecosystems by adhering to open standards and promoting widespread participation. For the State of Arizona, the Digital Equity Ecosystem building component took the form of statewide Listening Sessions designed to gather data to be analyzed for inclusion in this Plan.

Barriers to Digital Equity Across Arizona

"Internet access is slow and current needs of the community exceed capacity."- Community Member in Coconino County

"Internet speed and bandwidth is very poor in my neighborhood and the cellular LTE is not strong enough to be very functional. We only have one choice for internet provider that's not satellite in our neighborhood and it comes over the old phone line."- Community Member in Yavapai County

"I wish there was a free class for those who have no digital experience."- Community Anchor in Cochise County

Analysis of the quantitative and qualitative results identified numerous themes impacting digital equity in Arizona, which are outlined below. Figure 6 is a summary of barriers that were identified throughout the research and planning process, and collectively demonstrates the most urgent barriers and needs of the residents in Arizona.
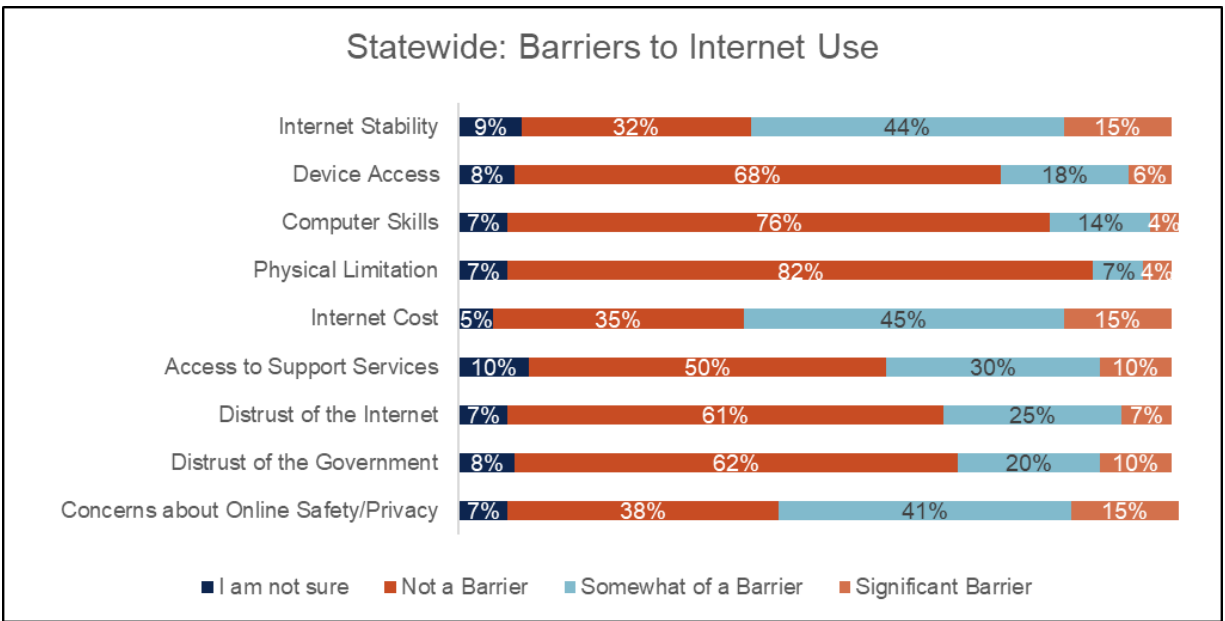
Figure 6: Statewide Barriers to Internet Use**.**

As indicated in the figure above, the most significant barriers statewide are internet cost, internet stability, and concerns about online safety. The list of noted barriers from the Arizona surveys provides valuable insights into the challenges that residents face in adopting internet services. It also provides important insight for public and private companies, community organizations, and government agencies to consider as they make plans.

1. **Internet Cost (60%)**: Cost was the top concern, with the majority of respondents indicating that the cost of internet service is a significant barrier. This underscores the importance of addressing affordability issues to promote broadband adoption

2. **Internet Stability (59%)**: Almost as prevalent as cost, concerns about internet stability highlight the need for reliable connections, especially in areas where the infrastructure may be less developed.

3. **Concerns about Online Safety/Privacy (56%)**: Worries about online safety and privacy rank high, emphasizing the importance of robust cybersecurity measures and public awareness campaigns.

4. **Distrust of the Government (40%)**: A substantial portion of respondents expressed distrust in government initiatives. Building trust and transparency in government-led broadband programs is crucial to the implementation of equity plans moving forward.

5. **Access to Support Services (40%)**: Access to support services, likely related to digital literacy and assistance in navigating the online world, is a significant concern that must be addressed to bridge the digital divide.

6. **Distrust of the Internet (32%)**: A notable proportion of respondents distrust the internet itself, possibly due to concerns about misinformation or scams. Efforts to combat online mistrust are essential.

7. **Device Access (24%)**: While not as high as other barriers, the lack of access to devices is still a noteworthy concern, particularly for low-income households. It is important to consider that not all devices are equally equipped for all online needs.

8. **Computer Skills (18%)**: The need for digital skills training is evident, as a significant minority of respondents indicated a lack of computer skills.

9. **Physical Limitation (12%)**: A smaller percentage noted physical limitations as a barrier, which could include mobility issues that affect their ability to use digital devices effectively.

Community Anchor Identified Boundaries

At the end of the survey, community anchor respondents were asked if there was anything they would like to add regarding the unique needs of members in their community. Respondents from all counties except Greenlee provided comments. Summaries are provided for rural and urban community anchor institutions.

Summary of Community Anchor Institutions- Rural

The overall summary of Community Anchor Institution feedback in rural counties (taking out Maricopa and Pima County) highlights various issues and challenges related to internet access and connectivity in different communities. There is a call for financial assistance, training, and more resources for impoverished individuals to access computers and the internet. These comments emphasize the urgency of addressing internet access disparities, affordability issues, and infrastructure gaps across various communities.

The need for vendor expansion to communities with existing fiber optic connections, especially in rural areas and reservations like the Navajo Nation, is critical due to the limited internet access, with only 25% of the Navajo Nation having internet access. Rural communities, including those with students on free and reduced lunch programs, face challenges in accessing the internet, affecting online learning. To address this digital divide, there's a demand for digital literacy programs, providing free classes for those with no digital experience. Nonprofits struggle with internet costs, impacting their ability to serve the community effectively. Affordable high-speed internet is lacking in many households, particularly in rural regions, with concerns about insufficient emphasis on upload speeds, crucial for applications like telemedicine.

Limited internet services also affect access to essential services like medical and employment assistance, notably in urban areas such as Flagstaff. Inadequate internet speeds in schools, especially those with multiple campuses, hinder effective education. Access to better internet options is needed in rural areas and reservations, prompting suggestions to treat internet services as a community utility with standard rates to increase affordability. Infrastructure gaps, particularly in middle and last-mile infrastructure in rural counties like Coconino, need to be addressed to support communities and visitors. Additionally, Verizon's phone internet service is criticized for inadequacy, though many rely on it as a hotspot for work. Lastly, affordable housing is intertwined with addressing the digital divide, emphasizing the complexity of the issue.

Summary of Community Anchor Institutions Feedback- Urban

When examining comments included by community anchor institutions from Maricopa and Pima Counties, themes highlight the need for affordable and accessible internet, digital literacy programs, expanded public Wi-Fi, and partnerships to bridge the digital divide, especially in low-income and rural communities.

Affordability concerns are widespread as families experiencing poverty struggle with rising internet costs. Some areas face technical challenges with 5G due to building materials. There is a need for low-cost home Wi-Fi for clients and students, along with access to devices and digital education, particularly for vulnerable populations. Digital literacy is essential, and libraries and organizations lend Wi-Fi hotspots. Internet access is crucial for business, and efforts are underway to expand public Wi-Fi networks. Concerns persist regarding internet affordability for families and its impact on education. Increased funding and equitable resource distribution are sought, while barriers to internet access persist, including cost and location challenges. Fiber connectivity is a priority in underserved areas, but some broadband providers face criticism. Support is needed for vulnerable groups like veterans and older adults, and partnerships between sectors are emphasized. Rural areas, including Tribal communities, contend with unreliable internet access, highlighting the urgency of addressing their digital divide.

The Census maps demonstrate the quantity, classification, and location of covered populations within the margins of error. The baseline can be used to identify the potential pool of residents who could potentially benefit from Digital Equity programs and services.

Digital Vulnerability Index:

Based on the US Census estimates for covered populations, we leveraged an index to aggregate risk factors for the covered populations and identify the tracts that have the highest rankings.

The areas of most need for services that can address the needs of covered populations are distributed

uniformly throughout the state, but they do not aggregate in the higher-density urban areas of Greater Phoenix Area or Tucson. They also do not group in any region of the state. One important observation to make is that data does not exist for military facilities that are not occupied by civilians. These areas show up as blank because there are no populations there, although there could be other reasons to deliver digital equity infrastructure and services.

The index is created by rank ordering each covered population as a percent of the total population (with the exception of incarcerated persons, because they are institutionalized populations). Once each covered population is ranked, the rank order percentage is summed into an aggregate rank percentage. The aggregate percentage is then, again ranked into a percentile metric between 0 and 1. In this way, the index produces a relative rank ordering of cumulative covered population percentages within each census tract. This methodology follows other existing index approaches, most notably, the CDC Social Vulnerability Index[25]. While there are many ways to construct indices, this established methodology is appropriate for census-tract level ACS index data.

The areas of most need from the Digital Vulnerability Index are shown in figures 7 and 8 below. The highest concentration of census tracts are in Maricopa County in the Phoenix Metro Area and Pima County around Tucson, which is predominantly ranked in the bottom half of vulnerable tracts. This indicates that the covered individuals most in need of support and services to achieve digital equity are in rural areas.
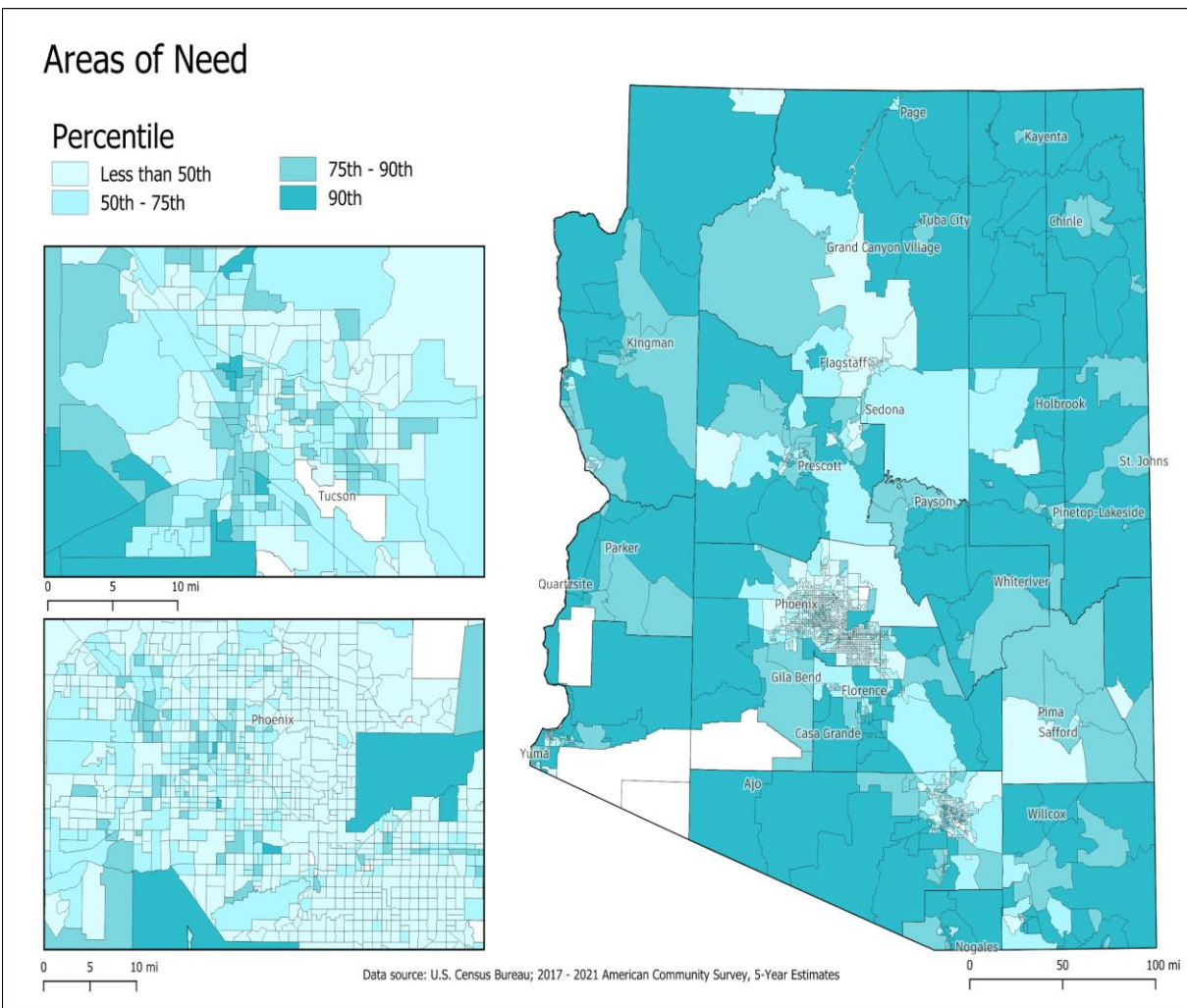
Figure 7: Areas of most need from the Digital Vulnerability Index**.**

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[25] From "CDC/ATSDR Social Vulnerability Index" by CDC/ATSDR, 2023 (https://www.atsdr.cdc.gov/placeandhealth/svi/index.html)
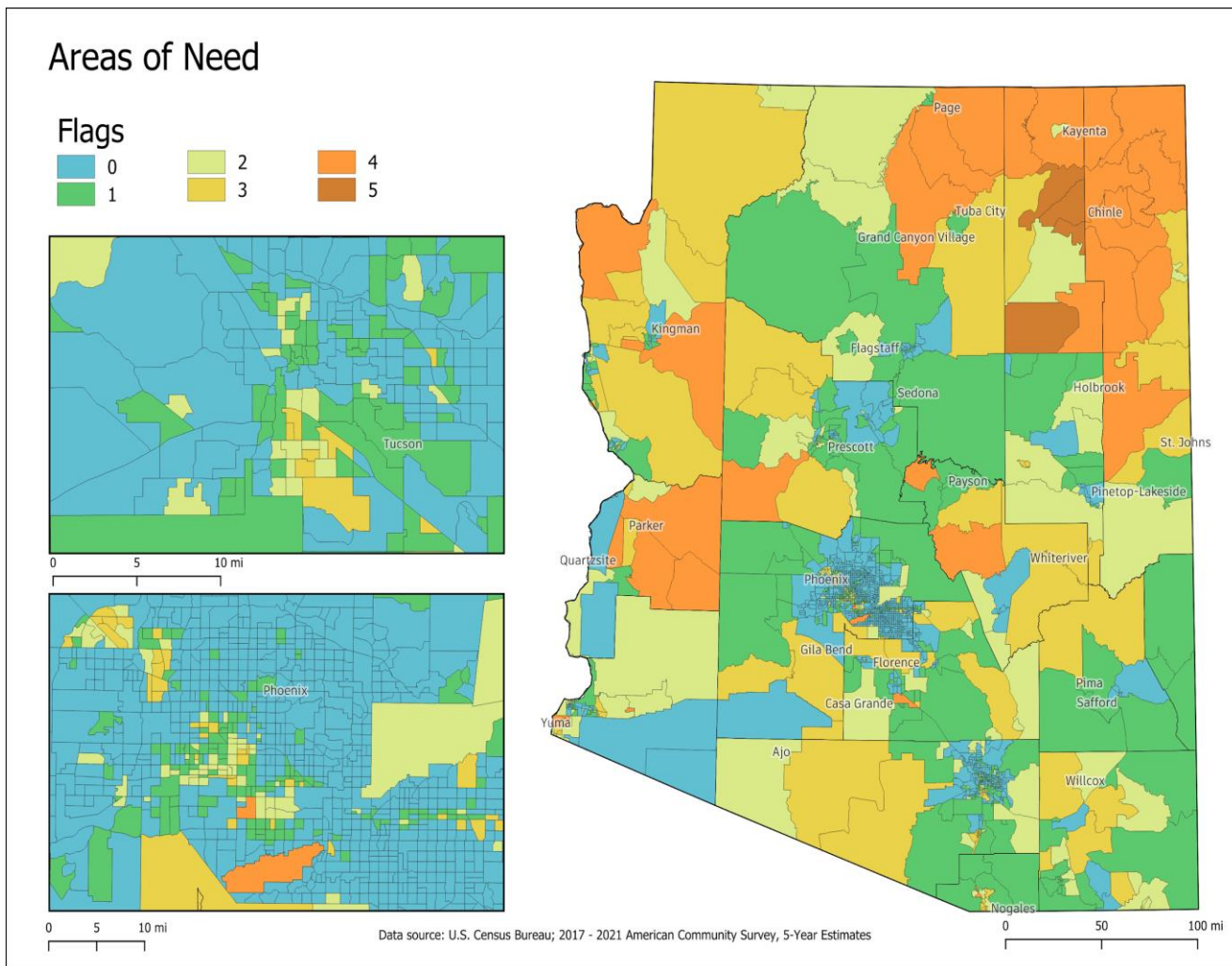
Figure 8: Digital Social Vulnerability Index scores for Arizona based on Digital Equity Institute methodology. The first map shows the vulnerability score as the sum of the rank orders of each covered population. The second map shows the number of high-vulnerability metrics for each census tract, where high is any ranking above 90%. For example, if there are 4 flags in a census tract, it means that four of the percent rankings for covered populations are each above 90%, indicating a very high degree of digital vulnerability that will need programs and services to allow residents to reach digital equity status

3.2.1 Barriers and Needs by Covered Population

"I am visually impaired and some websites and applications are hard to navigate. The internet does provide me a connection to the community." - Community Member in Maricopa County

"Veterans enrolled in VA healthcare & benefits require reliable, secure internet in order to access the increasing amount of digital interactions with VA. This need is particularly acute in rural areas of Arizona, to include Native American communities. Digital literacy is also a challenge among the older veteran population." - Community Member in Maricopa County

Individuals within covered populations can be profoundly more impacted by elements of digital inequity than their less vulnerable counterparts. The Arizona Digital Equity Plan focuses on the eight categories of covered populations designated by NTIA because they are likely to experience elevated challenges in achieving digital equity and accessing services through digital technologies.

Barriers By Covered Population:

Identifying barriers for each covered population was completed through analyzing feedback from listening sessions, community surveys, individual interviews, and subject matter experts to ensure a comprehensive

exploration of all barriers. The barriers identified by members of each covered population are listed below.

Covered Households (Low-income)

Population	Barrier	Digital Equity Strategy/Goal Objective
Covered Households (Low-Income)	Access to Devices: Low-income households lack access to essential digital devices such as computers, smartphones, or tablets, making it difficult to connect and engage in online activities. Access to Internet: Lack of access to reliable internet hinders low-income students' ability to participate in online learning, exacerbating educational disparities. Affordability: Limited resources lead to lower-quality devices or outdated software, making it difficult to access and engage with modern digital content and services. Affordability: Cost of internet services can be a significant barrier, with low-income households struggling to afford broadband or mobile data plans, limiting their online access. Safety and Privacy: Concerns about privacy and security, particularly related to data collection and surveillance emerged.	Establish a low-cost BEAD plan. Increase awareness of and participation in the Affordable Connectivity Program. Establish a device stipend program for covered households. Encourage technology providers to offer device discount programs. Partner with CAIs to offer focused in-community literacy and skill building. Stand up tech hubs in marginalized communities to provide digital skill building, device access, and technical support.

Primary barriers for covered households block individuals from acquiring digital devices, paying for subscription services, and affording broadband, cellular, and satellite communications. Confounding factors present themselves in areas with higher prevalence of poverty, including regions that are rural and/or have high concentrations of veterans, aging individuals, non-English speakers, and racial and ethnic minorities.
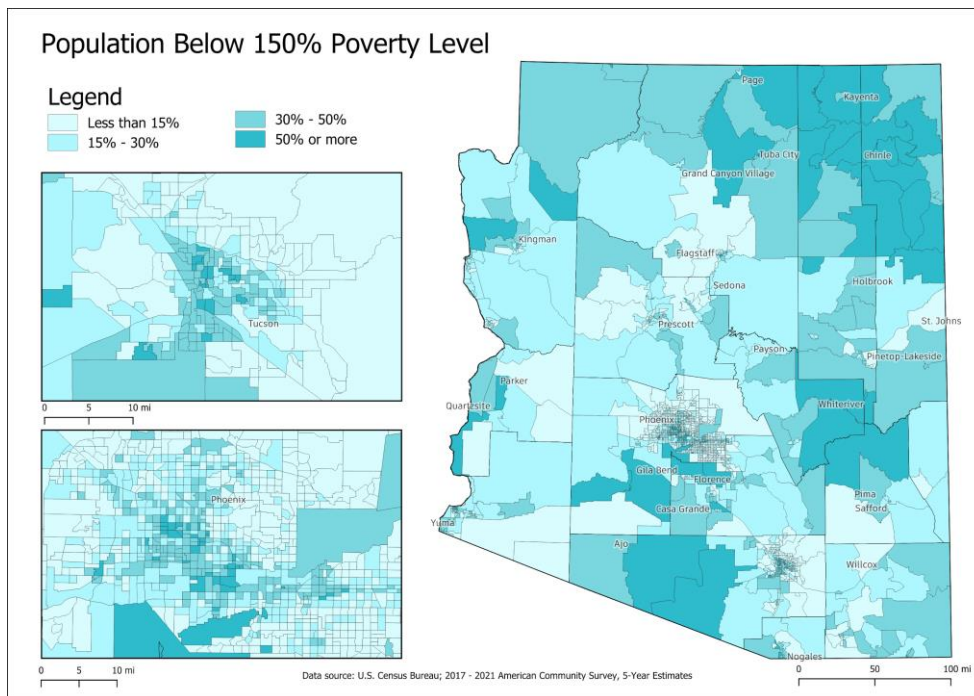
Figure 9: ACS estimates of the percentage of households that are below 150% of the poverty level based on the number of individuals within the household.

Aging individuals

Covered Population	Barrier	Recommended Digital Equity Strategy
Aging Individuals	Access and Support: Transportation challenges when seeking tech help or resources. Digital Skill/Literacy: Intimidation and fear of new technology and online scams. Digital Skill/Literacy: Communication challenges; especially for those aged 65+. Digital Literacy/Skill: Assumed technological sophistication, such as QR codes, can be challenging. Safety and Privacy: Concerns about privacy and security in a rapidly changing digital environment. Support: Lack of support and patience from younger adults. Support: Dependence on family members for tech support.	Support Digital Navigator programs, nonprofits and Community Anchor Institutions providing digital literacy and skills programs tailored to aging individuals. Deliver online safety training and provide resources tailored for aging individuals and delivered at a pace at which they are comfortable to learn Fund programs that provide accessible devices that are responsive to the physical challenges faced by aging individuals. Support peer navigator programs that train aging individuals to support others in their communities.

	Support: Embarrassment when struggling with technology.	

Aging individuals have primary barriers to achieving digital equity due to the changing technologies environment that may not be familiar to them. Older adults are often confused about how to access broadband and other digital services and may have challenges using the devices and applications to navigate digital tasks efficiently. They will need services and assistive technologies to learn how to execute tasks that have shifted to a primarily online service delivery, such as telehealth, online bill payments, streaming services, and online shopping. Many aging individuals - especially those in good physical and mental health - are interested in adult education and other socialization activities and events that require typing, reading, emailing, and completing online tasks.
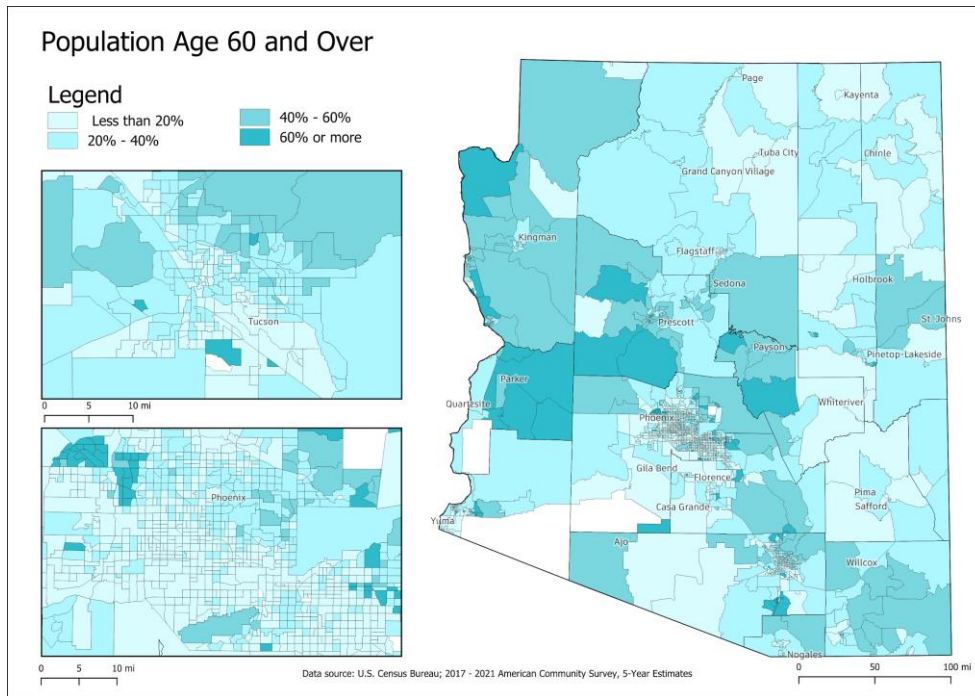
Figure 10: ACS estimates of the percent of Arizona residents aged 60 and over by census tract.

Meeting the Needs of Aging Individuals

Adults aged 65 and older, constituting 16.8% of the U.S. population (55.8 million people), experienced a growth rate of 38.6% from 2010 to 2020, surpassing the overall population growth rate of 7.4%[26]. However, this demographic is still significantly left behind in the digital era, with approximately 42% lacking broadband access at home, according to a study by Humana and Older Adults Technology Services (OATS)[27]. While accessibility to reliable internet is a fundamental concern, other factors such as accessible devices, digital literacy, ageism, and ongoing support play crucial roles in their digital engagement.

Efforts to increase internet access and usage among older adults have been diverse but have struggled to cater consistently to the varied needs of this group, which spans a wide range of ages, demographics, and backgrounds. Disparities in access are notable, with disparities linked to factors like high school completion, income level, race, health status, disability, rural location, and marital status. Ensuring adequate representation of this diverse group in decision-making and program creation is essential.

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[26] From Caplan, Z., "U.S. Older Population Grew from 2010 to 2020 at Fastest Rate Since 1880 to 1890," U.S. Census Bureau, accessed September 12, 2023, https://www.census.gov/library/stories/2023/05/2020-census-united-states-older-population-grew.html.

[27] From "Report: 22 Million U.S. Seniors Lack Broadband Internet Access; First Time Study Quantifies Digital Isolation of Older Americans as Pandemic Continues to Ravage Nation", 2021 https://press.humana.com/news/news-details/2021/Report-22-Million-U.S.-Seniors-Lack-Broadband-Internet-Access-First-Time-Study-Quantifies-Digital-Isolation-of-Older-Americans-as-Pandemic-Continues-to-Ravage-Nation/default.aspx#gsc.tab=0

Effective digital training should be conducted in a safe, inclusive space that encourages community building and knowledge sharing. Training should encompass digital skills, digital safety, and fraud prevention. Furthermore, it should empower older learners and address ageism. Ongoing support is equally important, allowing participants to seek assistance, address updates, and reinforce their skills[28]. Devices and digital tools must meet specific criteria to support sustainable digital use, including full screens, up-to-date operating systems, and accessibility features. These features should be covered in training and ongoing support. Digital inclusion among older adults is crucial for aging in place, reducing health disparities, combating social isolation, enabling lifelong learning, increasing access to healthcare, financial management, and transportation alternatives. It fosters intergenerational connections and reduces societal costs[29]. With the right connectivity, devices, training, and support, older adults can access the internet meaningfully, improving their well-being, safety, and overall quality of life.

Rural Communities

"It's challenging in the rural areas. It's really, really challenging. And there's not a lot of options for people if they don't have their own connection." - Community Member in Arizona

Covered Population	Barrier	Recommended Digital Equity Strategy
Individuals that live in rural areas	Access: challenges including spotty signals and lack of broadband services.	Expand initiatives to increase access and adoption of broadband infrastructure through BEAD.
	Access: Unreliable internet connections.	Offer free or low-cost digital literacy workshops.
	Access: insufficient bandwidth cited as a barrier to professional-level work.	Address equipment and service cost barriers with financial assistance programs.
	Affordability: Prohibitive cost of internet service.	Leverage local organizations to deliver foundational digital literacy and skills training (in the language of the learner).
	Affordability: devices and internet service are too expensive.	
	Cost: High cost of engineering infrastructure affecting end user's monthly bill.	Provide online safety and privacy training for individuals in rural areas.
	Digital Literacy/Skills: Need for basic training, from using a mouse to basic computer skills.	Provide cybersecurity training for rural businesses.
	Distance: Distance to public internet access points and cost of public transportation.	Ensure essential services can be accessed online to address transportation challenges.
	Distance: Residents driving miles to find a signal for emergency services.	Leverage trusted organizations and CAIs to increase trust with community members.
	Language barriers: Impacts effective internet use.	Extend digital equity to the agricultural sector.

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[28] From "Patient Characteristics Associated with Objective Measures of Digital Health Tool Use in the US: A Literature Review" by S. Nouri et al., 2020 https://escholarship.org/uc/item/0m86p4qw

[29] From "Equity in AgeTech for Ageing Well in Technology-Driven Places: The Role of Social Determinants in Designing AI-based Assistive Technologies" by G. Rubeis, Fang, M.L., & Sixsmith, A. 2022. Science and Engineering Ethics, 28(49) https://link.springer.com/article/10.1007/s11948-022-00397-y

Covered Population	Barrier	Recommended Digital Equity Strategy
	Limited resources: Relying on public services like libraries for internet access is not always feasible or preferable.	
	Online safety: Predatory marketing schemes for internet services.	
	Safety and Privacy: Need help distinguishing truth from fiction online.	
	Support: Dependence on community members for internet access for tasks like job applications.	
	Quality: Concerns about the quality of technology provided.	

Rural regions, constituting approximately 75% of the nation's land area[30], play a pivotal role in the socio-economic fabric of the country. Statistically, every fifth American resides in these regions, underscoring the significance of rural communities in the national demographic. These areas, characterized by their resilience and diversity, are instrumental in the provision of natural resources, anchoring food supply chains, and facilitating tourism and outdoor recreational activities.

Rural communities in Arizona, like many across the nation, often grapple with limited broadband infrastructure, which can hinder access to essential services like healthcare, education, and government resources. The importance of addressing these challenges is underscored by the fact that approximately 766,272 individuals, or 10.7% of Arizona's population, reside in rural areas, as per the latest US Census ACS 5-Year estimates (2017-2021)[31]. In Arizona the deficit in broadband services has profound implications for the state's rural populace. The importance of broadband is intrinsically linked to overall quality of life, and potential economic advancement.

The role of broadband emerges as a critical component for farmers and ranchers where it has become an essential tool. It facilitates their engagement with global markets, streamlines communication channels with customers, and ensures adherence to regulatory frameworks. Modern agricultural practices, underscored by a commitment to sustainability, increasingly rely on technology. Precision agriculture, underpinned by broadband connectivity, informs a myriad of decisions ranging from resource allocation to pest management, epitomizing efficient and environmentally conscious farming methodologies.

Beyond agriculture, the healthcare landscape in rural Arizona presents its own set of challenges. Access to healthcare services in these regions is often fraught with difficulties. Data from the 2019 Arizona State Health Assessment highlights this disparity: urban locales have a ratio of 2,407 residents per Primary Care Provider, whereas rural areas grapple with a ratio of 3,896:1[32]. The Arizona Health Improvement Plan has identified and acknowledged this discrepancy, emphasizing the imperative for a healthcare workforce that is both diverse and reflective of the communities it serves. This is not merely a quantitative issue but one that pertains to fostering trust, cultural understanding, and community-centric healthcare provision.

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[30] From "Rural Broadband," by the Farm Bureau Federation,2022 https://www.fb.org/issue/infrastructure/rural-broadband

[31] American Community Survey 5-Year Data (2009-2021) by US Census https://www.census.gov/data/developers/data-sets/acs-5year.html

[32] From "Rural Broadband," by the Farm Bureau Federation,2022 https://www.fb.org/issue/infrastructure/rural-broadband

Incarcerated individuals

Covered Population	Barrier	Recommended Digital Equity Strategy
Incarcerated individuals	Access: lack of access to certain websites and services due to firewalls.	Support incarceration and reentry focused digital navigator initiatives.
	Access: restricted websites due to firewalls.	Expand the network of digital navigators and tech support services into correctional facilities
	Access: Heavily controlled device usage.	Educate released individuals on how to schedule and access resources and essential services.
	Access to Internet: challenges during re-entry preparations due to limited internet access.	Support measures to address cost of device use while incarcerated.
	Affordability: cost of internet access upon reentry.	Collaborate with agencies to provide digital literacy and skills training to incarcerated individuals.
	Digital literacy: lack of familiarity with technology.	Hold online safety training for incarcerated individuals and people preparing for reentry.
	Digital Literacy: need for training and orientation sessions on available resources.	Expand tech centers to provide digital skilling, support, and devices in correctional facilities
	Digital Navigators: lack of community awareness about available resources for recently released individuals.	
	Safety and Privacy: Need for safe and conducive spaces for internet access without distractions.	
	Support: Need for specialized support and a digital "guide to getting out".	
	Support: lack of specialized support and resources.	

Incarcerated individuals encounter significant barriers to accessing digital equity, stemming from both personal and institutional factors. Within correctional facilities, technology programs often suffer from inadequate funding and are subject to stringent security and access protocols that restrict inmates' use of digital technology, including web access and social media. These constraints limit essential online activities such as communication with family, legal research, and court preparation. These institutional constraints are further compounded by the non-geographic nature of correctional environments, making the implementation of programs aimed at enhancing digital access a complex challenge.

Incarcerated populations also face significant challenges due to their limited access to technology and educational resources within correctional facilities. A paramount concern is the exorbitant cost associated with communication services, imposing a substantial financial burden on inmates and their financially disadvantaged families. Inadequate access to modern technology devices further impedes their digital literacy development, as many facilities lack up-to-date hardware, constraining engagement with digital

learning materials[33]. Additionally, the outdated and insufficient digital infrastructure within these facilities compromises network security and quality, hindering digital education initiatives. The absence of comprehensive digital skills training programs leaves incarcerated individuals ill-prepared for the demands of a digitized society upon release, posing a substantial obstacle to successful reintegration into the community and overall rehabilitation.

Recognizing these multifaceted challenges is imperative for promoting digital equity within correctional facilities and enhancing the prospects of incarcerated individuals upon their eventual release.

Veterans

Covered Population	Barrier	Recommended Digital Equity Strategy
Veterans	Access: Lack of reliable internet access, especially for those in rural and tribal areas. Affordability: Financial constraints, particularly for older veterans living on fixed incomes. Digital Literacy/Skills: Challenges faced by older veterans in understanding and using modern technology. Internet Reliability: Need for consistent and reliable connectivity, especially for online education or remote work. Support: Absence of a centralized resource page for veterans in Arizona. Support: Difficulty transitioning from military service to civilian sector employment.	Improve broadband access for veterans Utilize community and veteran advisory councils to coordinate resources. Partner with workforce development agencies to support veterans in job searches and successful transition to the civilian workforce Provide digital navigator support to assist enrollment in online federal veteran benefit programs.

In Arizona, veterans are found in higher concentrations in the western and south-eastern rural areas of the state as shown in Figure 11. Arizona veterans have unique barriers to achieving digital equity due to the nature of veteran specific services and programs. Many veterans are highly technologically savvy and will function in digital environments as well as non-veteran civilian counterparts. Special services may be needed for mental health and trauma from combat and military experiences. Disabled veterans could have additional physical limitations that require additional equipment or human assistance to use. 16.1% of Veterans also have a disability. 41.9% of Veterans are from service years prior to 1990[34], including the Vietnam War era, the Korean War era, and the WWII era. Disabled, elderly veterans will benefit from interventions that address all three covered statuses concurrently.

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[33] Benton Institute for Broadband & Society. (2023, December 11). An open letter to state broadband leaders on digital equity for incarcerated people. Benton Institute for Broadband & Society. URL: https://www.benton.org/blog/open-letter-state-broadband-leaders-digital-equity-incarcerated-people?utm_campaign=Newsletters&utm_medium=email&utm_source=sendgrid

[34] From QuickFacts. State of Arizona by U.S. Census Bureau. 2021, https://www.census.gov/quickfacts/fact/table/AZ/PST045222
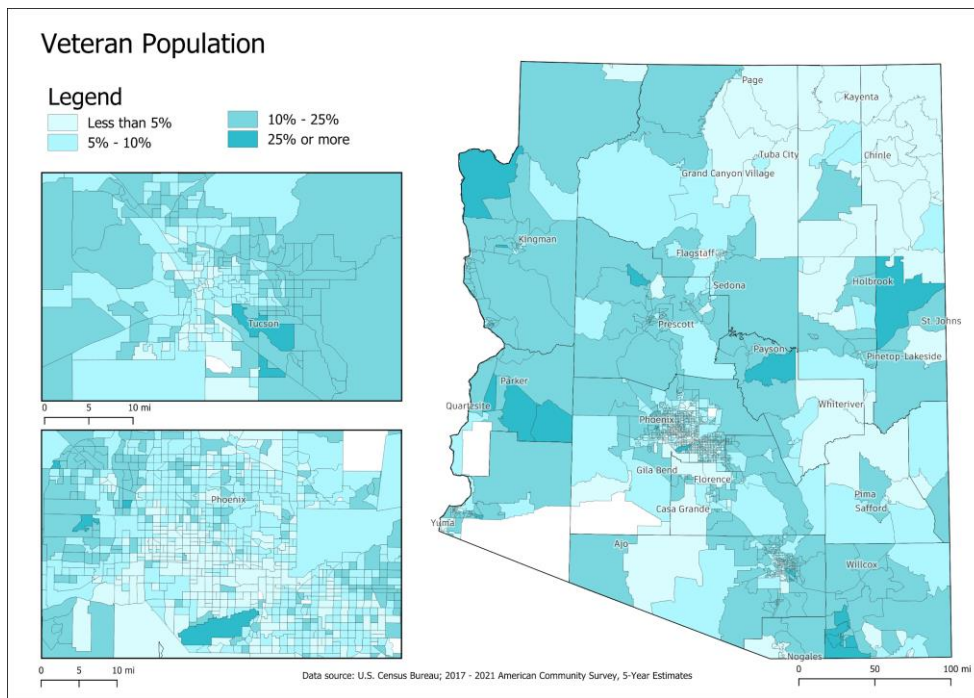
Figure 11: ACS estimates of Arizona veterans of the US military by census tract

Individuals with a Disability

Covered Population	Barrier	Recommended Digital Equity Strategy
Individuals with a Disability	Access: Difficulty in obtaining Wi-Fi, which is essential for receiving medical exercises and blood work paperwork. Access: Physical health barriers, lack of transportation to essential services. Access: The loss of community resources like computers and Wi-Fi at local senior centers, which were previously relied upon. Accessibility: Many websites lack proper descriptions for images or graphics. Devices: The need for devices that can speak for the visually impaired and considerations for those who are hearing impaired. Digital Literacy/Skill: Difficulties applying for jobs online due to inaccessible application forms. Safety and Privacy: Concerns about privacy, security, and	Implement web accessibility standards (WCAG) and provide training for web developers on creating screen reader-friendly content. Mandate alt-text for all images and graphics as part of website design protocols. Offer workshops for digital content creators on accessibility. Partner with job platforms to ensure their forms meet accessibility standards and provide job application assistance programs. Develop and fund specialized support services, including digital navigators who are trained to assist individuals with disabilities. Subsidize adaptive technology such as screen readers, Braille displays, and video relay services for the hearing impaired.

		surveillance that affect trust in digital platforms.	Implement community Wi-Fi programs, especially in areas with significant populations of individuals with disabilities.
		Safety and Security: The need for better online security measures to protect individuals with disabilities from scams and other digital threats.	Establish mobile tech units that can visit individuals where they are, ensuring continuous access to necessary technology.
		Support: Lack of services and support tailored to the needs of individuals with disabilities.	Invest in library resources to make them more accessible, including adaptive technology and trained support staff.
		Support: Challenges navigating websites not designed for screen readers.	Collaborate to offer regular digital security workshops and create easy-to-use resources to educate individuals on avoiding digital scams and general online safety.
		Support: Libraries not being a suitable alternative for the needs of individuals with disabilities.	

Disabled persons face a range of potential barriers due to the nature of their disability, and the online/digital technologies they need to use. Disability refers to a wide range of physical, intellectual, and developmental conditions that may hinder a person's ability to meaningfully engage in digital spaces. Disability types include mobility, cognitive, hearing, visual, self-care, and independent living[35]. Physical disabilities could lead to challenges handling and manipulating devices without assistive technologies. Cognitive and mental disabilities could create challenges in using devices to achieve their intended purposes, such as seeking healthcare, education, or employment. 27% of adults in Arizona have a disability. 31.9% of disabled persons are also above 65 years old.
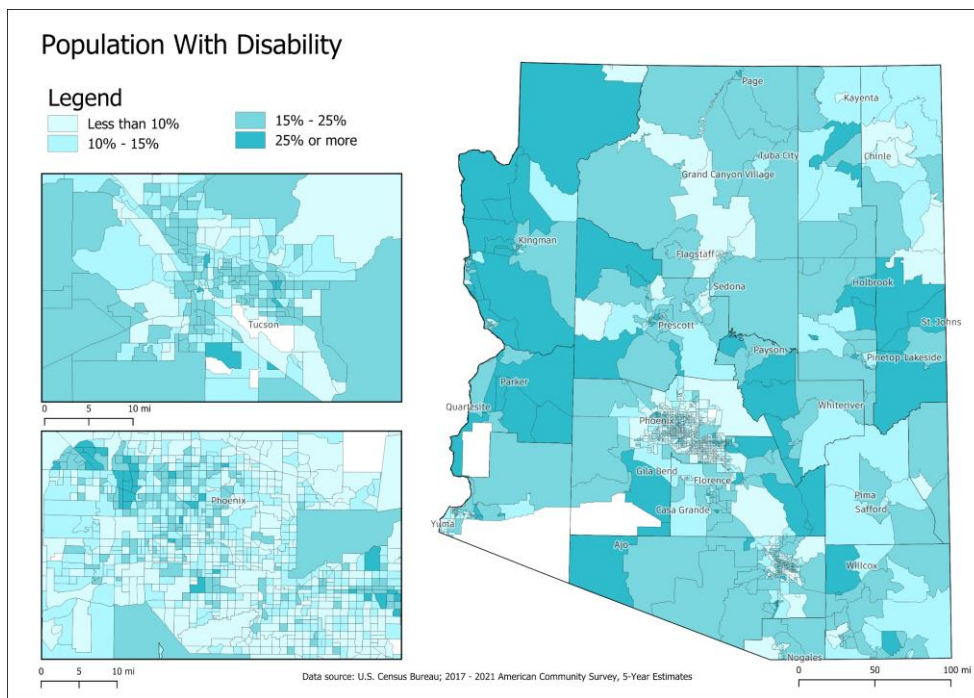
Figure 12: ACS estimates of the percentage of individuals with disabilities by census tract.

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[35] From "Disability & Health U.S. State Profile Data for Arizona" by the Centers for Disease Control and Prevention, 2023
https://www.cdc.gov/ncbddd/disabilityandhealth/impacts/arizona.html

Individuals with a Language Barrier

Population	Barrier	Recommended Digital Equity Strategy
Individuals with a Language Barrier	Access and Support: Relying on family members to bridge language and cultural barriers. Accessibility: Limited language proficiency makes it challenging for individuals to navigate websites and digital platforms that are primarily in English, hindering their ability to complete tasks, access information, and services. Navigation: Difficulties in navigating internet services and understanding costs/packages due to language barriers. Accessibility: Online education and e-learning platforms can pose significant barriers for individuals with a language barrier, as course materials and instructions are often presented in the dominant language. Accessibility: Job search and application processes are often conducted online, and individuals with language barriers may face difficulties in applying for job opportunities, creating resumes, or participating in online interviews. Support: Many digital platforms and services may not provide customer support or help in languages other than the dominant one, making it difficult for individuals to seek assistance when needed.	Support existing digital navigator programs to deliver support in multiple languages. Working with state agencies to ensure websites and content is accessible in multiple languages. Support higher education institutions to expand delivery of e-learning instruction in multiple languages. Partner with workforce agencies to increase accessibility of application and job support service for people with a language barrier.

Individuals with a language barrier and individuals with low English literacy face barriers of comprehension, understanding, and efficiency when attempting to access online information that is English-only. Therefore, this population needs programs in their native language to assist them in online navigation, learning, and access to services, utilities, and social programs. Additional essential services like online legal, healthcare, or education services may be inaccessible without assistance or language services. The majority of limited English households are Spanish-speaking, accounting for 71.0% of the total. These households are likely under-represented in Census ACS data because they are harder to interview, and less likely to consent to being interviewed. Households that have undocumented persons are even more likely to be uncounted in the Census and to have other covered population status that goes uncounted. The Census does not count individuals with a language barrier or illiterate persons, making it an additional barrier to identify and provide

services to these populations without additional incentives to provide employment and educational services.
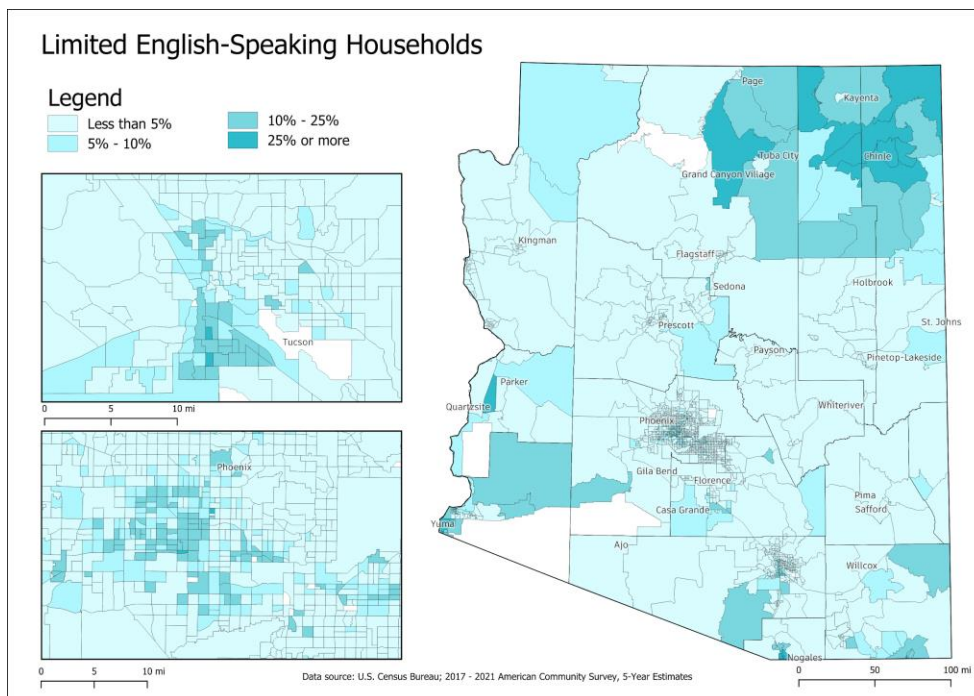
Figure 13: ACS estimates of the percentage of households who have limited English-speaking members.

Racial and ethnic minority groups

Population	Barrier	Recommended Digital Equity Strategy
Racial/Ethnic Minority groups	Accessibility: Differences in language and cultural practices can be exclusive. Affordability: Economic disparities create challenges in obtaining devices and internet subscriptions. Infrastructure: Infrastructure deficits in older neighborhoods. Relevance: existing classes lack cultural sensitivity. Trust: Reluctance to use digital applications.	Ensure training and services are available in the language of the learner. Expand infrastructure in areas with high populations of racial and ethnic minorities. Partner with trusted local organizations to deliver culturally responsive digital literacy and digital skill building. Partner with education providers to create content that reflects the diversity of the community. Ensure policies related to digital equity and free from bias.

Concerns about privacy and security, particularly related to data collection and surveillance, may disproportionately affect ethnic and minority groups due to historical mistrust or targeted surveillance. Individuals who do not identify as white, non-Hispanic are considered racial and ethnic minority groups according to US Census definitions. These covered individuals face racial and cultural barriers to interacting with digital services or unfair discrimination while seeking to access digital resources.

Specific racial communities may experience local barriers combined with other covered population statuses.
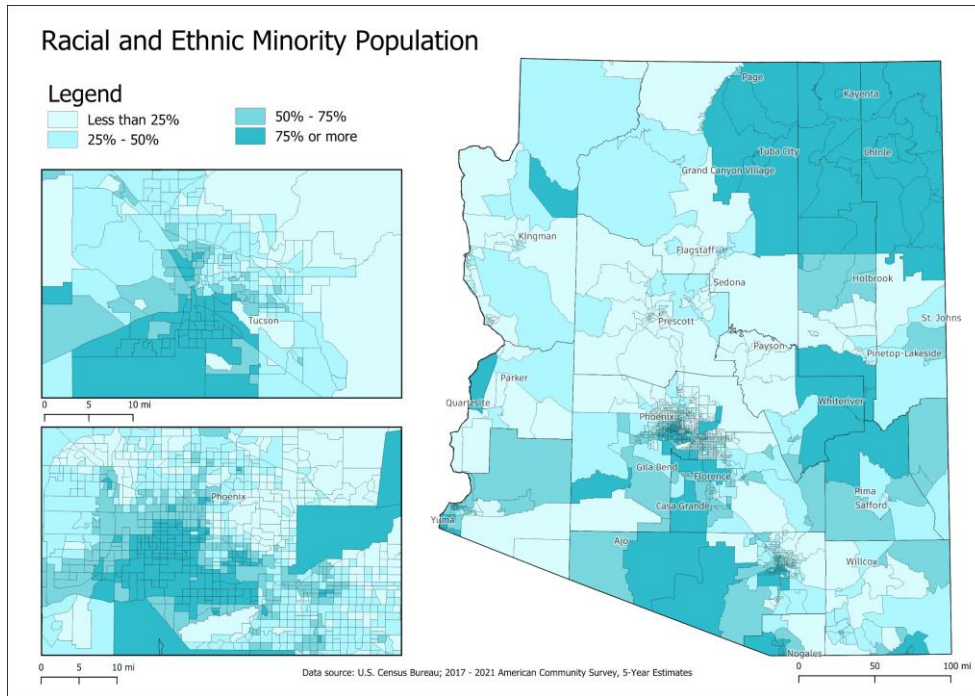
Figure 14: ACS estimates, aggregated for each racial and ethnic group, as a percentage of total population by census tract

Tribal Nations

"[The] elders [in the community] are raising [the] kids, but don't know how to use technology when the kids do. It can be scary for the elders. This is why digital skills training is so important." - Arizona Tribal Broadband Working Group Member

"How do we teach our community members to leverage broadband for economic advancement? First, getting buy-in is a challenge." - Arizona Tribal Broadband Working Group Member

"Multi-generational housing makes service provision a challenge. Telemedicine would be super helpful, but it's not always accessible. Management of schools' funding for remote learning. Lack of understanding from elderly decision makers." - Arizona Tribal Broadband Working Group Member

Population	Barrier	Digital Equity Strategy/Goals and Objectives
*Tribal Nations	Access: challenges including spotty signals and lack of broadband services. Access: Unreliable internet connections. Access: Insufficient bandwidth cited as a barrier to professional-level work. Affordability: Prohibitive cost of internet service.	Align Digital Equity initiatives to increase access and adoption of broadband infrastructure through BEAD. Offer free or low-cost digital literacy workshops designed for multi-generational households. Address equipment and service cost barriers with financial assistance programs.

	Affordability: devices and internet service are too expensive.	Leverage local organizations to deliver foundational digital literacy and skills training (in the language of the learner)
	Cost: High cost of engineering infrastructure affecting end user's monthly bill.	Provide online safety and privacy training for individuals in tribal communities.
	Digital Literacy/Skills: Need for basic training, from using a mouse to basic computer skills.	Provide cybersecurity training for tribal businesses.
	Distance: Distance to public internet access points and transportation costs.	Ensure essential services can be accessed online to address transportation challenges.
	Distance: Residents driving miles to find a signal for emergency services.	Leverage trusted tribal organizations and CAIs to increase trust with community members.
	Language barriers: Impacts effective internet use.	Help tribes acquire the resources – personnel, knowledge base, and physical assets so they can future-proof their communities for generations to come.
	Limited resources: Relying on public services like libraries for internet access is not always feasible or preferable.	
	Online safety: Predatory marketing schemes for internet services.	
	Safety and Privacy: Need help distinguishing truth from fiction online.	
	Support: Dependence on community members for internet access for tasks like job applications.	
	Quality: Concerns about the quality of technology provided.	

Arizona is home to more Tribal lands than any other state in the United States. Tribal lands make up approximately 28% of the total land area of Arizona, including the largest Tribal Nation in the U.S., the Navajo Nation. Arizona recognizes the 22 Tribal governments within the state, the sovereignty of these Tribal governments, and their jurisdiction over their lands. This Digital Equity Plan seeks to support the Tribes' efforts to build internal capacity, promote digital equity, increase the quality of life, and support the well-being of all Tribal Nations.

Like Individuals with a Language Barrier, Tribal Nations and its household members are also likely to be under-represented in Census ACS data because they are harder to interview, and far less likely to consent to being interviewed due to historical marginalization, language barriers, and lack of trust in the federal government as a whole.

While not expressly listed as a "covered population," tribal communities and its members require programs in their native language, when possible, to assist them in online navigation, learning, and access to services, utilities, and social programs. Additional essential services like online legal, increased healthcare, or educational services may be inaccessible without assistance or language services.
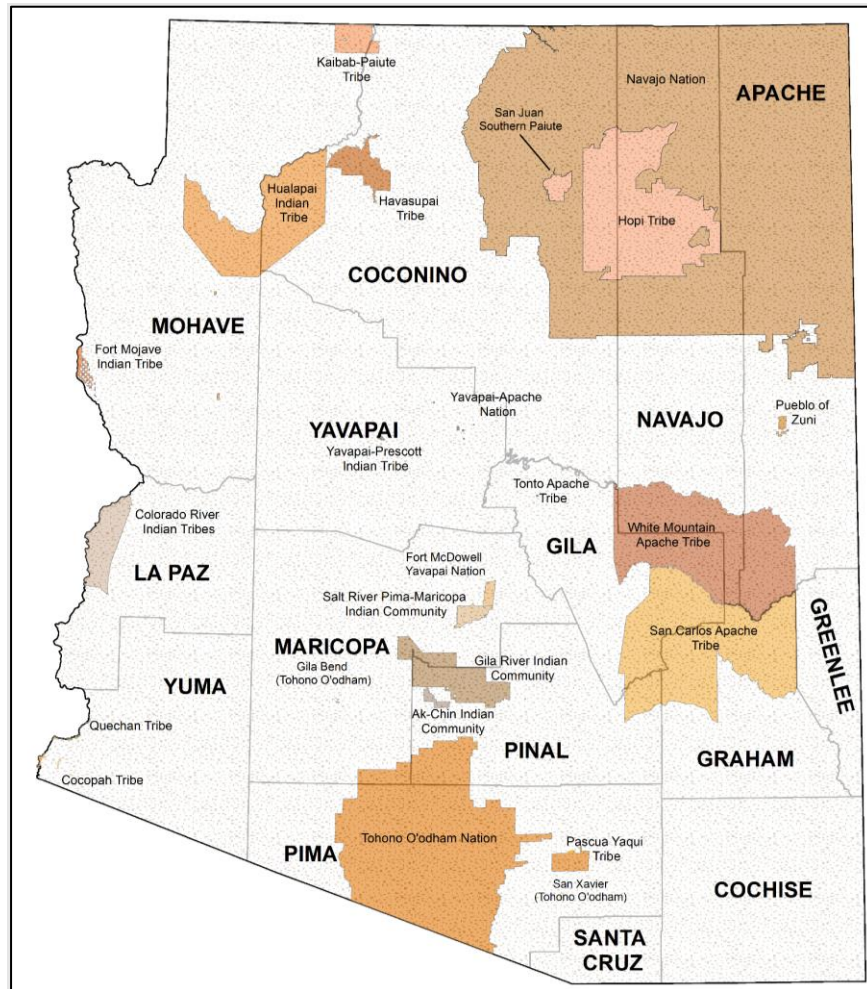
Figure 15: Intertribal Council of Arizona map of Tribal homelands in Arizona by County (2021)[36].

3.2.1.1 Telehealth

The health sector offers perhaps the greatest opportunity to impact the health and well-being of Arizona residents- especially the covered populations[37]. Given this, it is vital to identify opportunities to address digital inclusion through the health sector and innovative health applications.

Digital health tools such as telehealth, patient portals to the electronic health record (EHR), wearables, and apps have grown dramatically in the past two decades with the proliferation of mobile devices, federal financial incentives for EHR adoption and use, and advances in software and cloud computing[38]. Telehealth and patient portals became essential for obtaining healthcare during the pandemic[39]. Disparities in telehealth use for seniors, low income and rural populations, people of color and those with disabilities or not speaking English became evident early in the pandemic and precisely echoed disparities evident in portal use for over a decade. Lack of internet access, digital skills and devices were recognized early on as an important cause of the disparities[40].

Community responses collected for this plan overwhelmingly support the need to expand access to

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[36] Tribal Homelands- Arizona (2021) https://itcaonline.com/

[37] From "What the Health? Why and how to include health at the digital equity table. Panel Discussion: Northstar Digital Literacy: A Key Resource in your Digital Equity Plan Implementation" by A. Sheon, 2023 https://netinclusion2023.sched.com/event/912b96c7769099c56ffcb1b8779257ad

[38] From "Differences in the Use of Telephone and Video Telemedicine Visits During the COVID-19 Pandemic. The American Journal of Managed Care" by J. Rodriguez et al., 2021 https://www.ajmc.com/view/differences-in-the-use-of-telephone-and-video-telemedicine-visits-during-the-covid-19-pandemic

[39] From "Characteristics of Telehealth Users in NYC for COVID-related Care during the Coronavirus Pandemic" by E. Weber et al., 2020, J Am Med Inform Assoc https://academic.oup.com/jamia/advance-article/doi/10.1093/jamia/ocaa216/5899728

[40] From "Patient Characteristics Associated with Objective Measures of Digital Health Tool Use in the US: A Literature Review" by S. Nouri et al., 2020 https://escholarship.org/uc/item/0m86p4qw

telehealth services across Arizona. Respondents identified a lack of access to the internet as a significant barrier to obtaining telehealth services, particularly in areas not located within a reasonable distance of a doctor or specialist. Many Arizonans live in remote areas that make travel cumbersome, which can limit healthcare visits for routine and specialized care. This is also true for mental health services. According to a 2023 report on mental health care access, Arizona ranks last on the list for access to mental health services[41]. Online access to health providers and digital technologies for physical and behavioral health, could alleviate many of these challenges, and improve the health and wellbeing of our most vulnerable populations.

Benefits of expanding telehealth services
• Telehealth benefits patients by saving the time and expense of going to the office. Patients can potentially access providers from around the world, possibly choosing ones that speak their language or come from their community. • Patients can also access technology features that help people with hearing, visual or movement difficulties. • Older unhoused seniors have very high mortality rates due to chronic conditions, disabilities, wounds, and mental health issues that require both ongoing and acute care. Telehealth can connect unhoused older adults with social services and resources for addressing other needs such as housing and food. • Telehealth can reduce the costs for transportation to care, emergency room visits, and from missed appointments, reduce exposure of patients and providers to contagious diseases, and connect patients with a usual source of care to address chronic illness and complete treatment for acute conditions. • Telehealth stands to deliver the most benefits to population groups that have numerous barriers to health. • Telehealth can provide a safe and affirming experience for LGBTQ youth who may face stigma, discrimination or poor care quality. With providers pre-selected for their experience with this population, care can address sensitive issues such as gender-affirming care and mental health counseling.

Barriers to telehealth to consider
• Telehealth may require equipment, connectivity, and digital skills that the patient does not have access to. • Patients, even those with digital skills, may need encouragement, training, and technical support if something goes wrong. • Some patients prefer in-person appointments or don't understand what telehealth is and when it should be used. • Providers need equipment, secure software and connectivity, linkages to electronic health records, and training and technical support for their staff and patients.

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[41] From "Best States for Mental Health Care" by Quote Wizard, 2023 https://quotewizard.com/news/best-states-for-mental-healthcare

3.2.1.2 Additional Considerations

The Importance of Language

The internet and social media platforms can be accelerants of social change, facilitating connection, social cohesion, information exchange, economic development, and collective action. Yet these same tools have been linked to increased polarization, frayed social fabric, democratic disillusionment, and widespread mis- and disinformation.

In expanding broadband access and adoption, a central question is how to capture the myriad possibilities and benefits of the internet–social media and messaging apps included–while anticipating, preparing for, and mitigating their risks, among them division, discrimination, and violence. Addressing this tension requires grappling with the features of the internet that make dangerous online content a particularly pernicious problem.

Online content does not exist in a vacuum[42] but instead interacts with and even supercharges offline dynamics within a given context[43], intergroup tensions and power imbalances, salient narratives, and historical grievances. It also gains influence from trusted messengers and valued information sources, often credible community leaders, who spread the content both online and offline. Together, this means that anticipating and managing the risks of dangerous online content requires grappling with its offline root causes.

Communications & Conflict

Communication is central to how we organize and understand ourselves as both individuals and within groups–how we find connection, develop relationships, form communities, and create social norms. Communication also allows us to develop, embrace, and spread narratives that help make sense of the world and our place within it. Through communication, we develop and share stories about what it means to be "us" and how we interact with "them."

The Role of Technology

In facilitating our ability to connect, access information, and communicate, new information and communication technologies inevitably interact with the surrounding context, impacting information flows, intergroup relations, divisions, and even risks of division. This is not a new phenomenon.

New Technologies Amplify These Risks

More recent technologies – among them expanded internet access, social media platforms, and messaging apps – have supercharged these dynamics. How does this happen? Social media platform algorithms privilege divisive and inflammatory content, including hate speech–the very posts users are more likely to share[44]. An absence of gatekeepers allows fringe views to travel into the mainstream and, thanks to likes and shares, appear normal or widespread. This enables a few loud voices–including those spreading misinformation and dangerous content–to have an outsized impact on online discourse and group norms.

Factors to Consider

Efforts to anticipate and manage risks that might stem from expanded internet access must address this web of dynamics–online and offline–that contribute to potential harms. Below we highlight three especially important factors to consider: (1) narratives, (2) intergroup relations and power dynamics, and (3) credible messengers.

Narratives**:** Efforts to anticipate and curb the spread of dangerous online content should consider the offline narratives already contributing to polarization and how they might be amplified online, reaching new audiences and/or strengthening existing views.

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[42] From "Understanding the Context Around Content: Looking behind Misinformation Narratives" by Laura Livingston, 2021 (https://www.ned.org/wp-content/uploads/2021/12/Global-Insights-Innovation-in-Counter-Disinformation-Toward-Globally-Networked-Civil-Society.pdf)
[43] "A New Approach to Assessing the Role of Technology in Spurring and mitigating Conflict: Evidence from Research and Practice" by R. Brown and L. Livingston, 2018, Journal of International Affairs, 71(1.5), 77–86. https://www.jstor.org/stable/26508121
[44] "The Science of Fake News" by D. Lazer , M. Baum, Y. Benkler, A. Berenski, K. Greenhill, F. Menczer, B. Nyhan, G. Pennycook, D. Rothschild, M. Schudson, S. Sloman, C. Sunstein, E. Thornson, D. Watts & J. Zittrain, *Science,* 359,1094-1096(2018).DOI:10.1126/science.aao2998

Intergroup relations and power dynamics: Online communications will tap into any intergroup tensions or power imbalances that exist within a given context – including any divisions or any new or long-standing grievances. Because social media is programmed to give us more of what we like, users are fed additional information that reinforces these views and related biases and thereby deepens divisions.

Credible messengers: Communications derive their influence in part from the messengers who are sharing them. Dangerous or divisive communications are more likely to spread and impact various target audiences when they come from individuals that the audience trusts – those they look to for new information, behavioral cues, or otherwise identify with. Social media and other online mediums can give credible offline voices a significantly larger platform to influence larger audiences.

Applying these insights to Arizona: Applying these considerations to Arizona requires investing in deeply understanding the state's contextual dynamics that connectivity might tap into. It's particularly important to consider current lines of division, intergroup relations and power dynamics, and current and historical group-targeted harm, including against Native and Indigenous communities, migrants, and LGBTQ+ communities.

Conducting a context analysis that prompts diverse stakeholders—for instance, civil society organizations, interdisciplinary researchers, and community leaders from diverse groups – to pool their perspectives on dynamics that connectivity might tap into and amplify (and related risks) will contribute to preparedness for the connectivity plan rollout.

This contextual awareness can also surface language or phrases that can help ensure broad buy-in to the rollout plan, as well as any phrases that should be avoided. In divided contexts, language itself can become loaded. Words that may have previously been considered innocuous, apolitical, or part of the common good can assume new meaning, denoting support for one group or another. Conducting a context analysis can help identify the language that might interfere with broad-based support for the plan and how to instead frame the plan using shared values and goals.

Cybersecurity

In the context of digital equity, cybersecurity emerges as a crucial foundation. As technology is more tightly interwoven with our daily lives, and governments, business, and citizens are becoming increasingly connected online, ensuring a safe and secure digital environment becomes paramount for all individuals, regardless of their geographic location or socioeconomic background. Cybersecurity is not only about protecting one's personal data; it's about safeguarding the availability of critical services and the participation of marginalized communities in the digital world. Today's modern threats are looking to take advantage of this, especially against communities which are new to technology and the Internet.

A robust cybersecurity framework guarantees that vulnerable populations are shielded not only from online threats but also from predatory behaviors that can exploit their digital presence. This encompasses preventing data breaches, safeguarding against digital harassment, scams, and discrimination, and harmful content, as well as inappropriate use of legitimately acquired data. These safeguards are particularly critical for marginalized individuals who may already face disproportionate vulnerabilities and risks in their offline lives.

Relatedly, information sharing will continue to play a key role in providing a collective defense against many of the threats that are seeking to exploit our vulnerabilities. Efforts to collect, analyze, and rapidly share actionable information to respond to these threats across all entities within Arizona will be crucial. This includes the fully transparent coordination with the private sector, non-governmental information sharing organizations, law enforcement, and relevant Federal and State government entities where appropriate.

Moreover, a secure digital landscape with transparency and privacy built-in bolsters trust, encouraging wider adoption of digital tools among those who might otherwise be hesitant due to concerns about privacy and safety. By actively mitigating potential risks, we enable individuals to navigate the digital world with confidence, free from the fear of exploitation or exclusion. Through a digital equity lens, cybersecurity becomes a mechanism for democratizing access to online spaces, ensuring that everyone can reap the benefits of the digital world without compromise. By fostering a secure and inclusive digital environment, we pave the way for equitable participation, empowerment, and the realization of digital equity's

transformative potential.

A final critical component tying all of this together is a properly resourced and trained cyber workforce and citizenry. To this end, collaboration among the education sector, industry partners, nonprofits and charities, and all levels of government must work together to establish sustainable workforce pipelines and creative development of effective cyber professionals and digital citizens.

The importance of addressing these challenges means that this must truly be a collaborative effort. Government, Non-profits, private industry, and various other key stakeholders must come together to advise and strategize around the security and privacy ramifications of rapid expansion of online services for an increasing digital population. As we provide technology, connectivity, and digital services, we need to be aware that threats are looking to take advantage of both vulnerable technology as well as vulnerable people and do everything we can to prepare and protect both.

3.2.2   Broadband Adoption

"When I travel through the state, there's still a ton of people sitting in the McDonald's parking lot using the wi-fi." - Community Anchor Institution in Arizona

"There are some digital deserts within rather well-connected neighborhoods. I just don't think people appreciate how much of a digital desert exists in this state." - Community Anchor Institution in Arizona

A thorough assessment of community member feedback in Arizona reveals five major barriers to broadband adoption including cost (61%), internet availability (28%), internet reliability (27%), access to devices (13%), and digital literacy skills (17% combining safety and lack of knowledge) in figure 16. This evaluation is essential for gaining insight into the current status in Arizona and discerning actionable pathways for enhancement in these critical domains. Cost, the overwhelming reason given, will be discussed in section 3.2.3.

Reasons for Not Having Internet Service

It's too expensive	61%
Internet is not available in my area	28%
Internet is available but it doesn't work well enough for my...	27%
I do not have a device to use internet	13%
I have concerns about my safety or privacy	12%
My smartphone lets me do everything I need to do online	12%
I do not need internet at home	8%
I do not want internet at home	7%
I do not know how to use the internet	5%

Figure 16: Statewide results when asked the reason(s) for not having internet service at home.

Internet Availability

Access to the internet is a fundamental first step in achieving digital equity in Arizona. Community member interviews and listening sessions identified many residents who do not have internet access, with many relying on access at public libraries and local businesses. Additional analysis reveals that internet access varies greatly between counties, and among covered populations. When asked about internet access, residents in Apache County, Maricopa County, Yavapai County, and Yuma County report the highest

percentages of people without internet access. Around 28% of the residents of Apache County and 18% of residents in Maricopa County report no internet access. Figure 17 provides an all-county breakdown. Across covered populations, respondents from tribal nations (15%) were the most prominent group without internet access, followed by residents with a disability (10%) and those with a language barrier (10%). See Figure 18 for all covered population results.
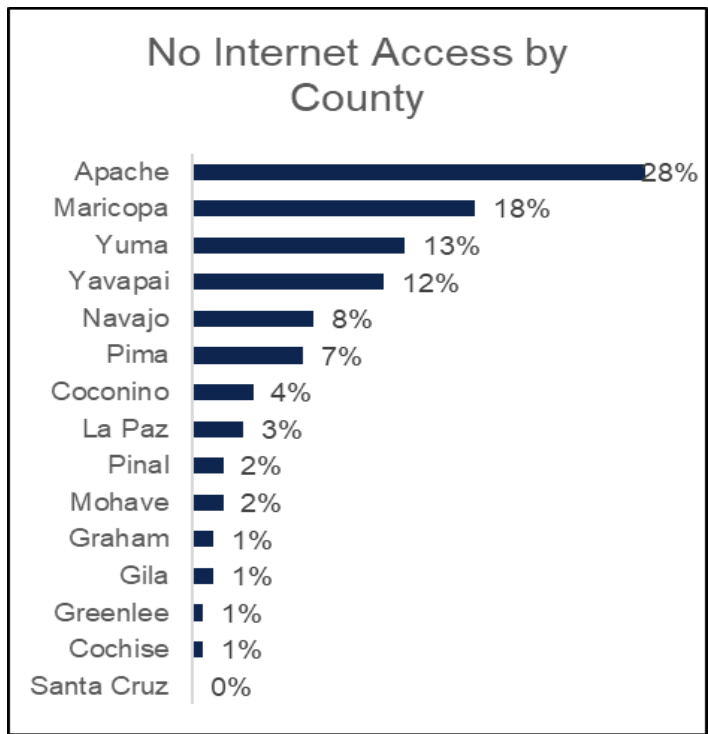
Figure 17: Percent of Arizona residents without internet access
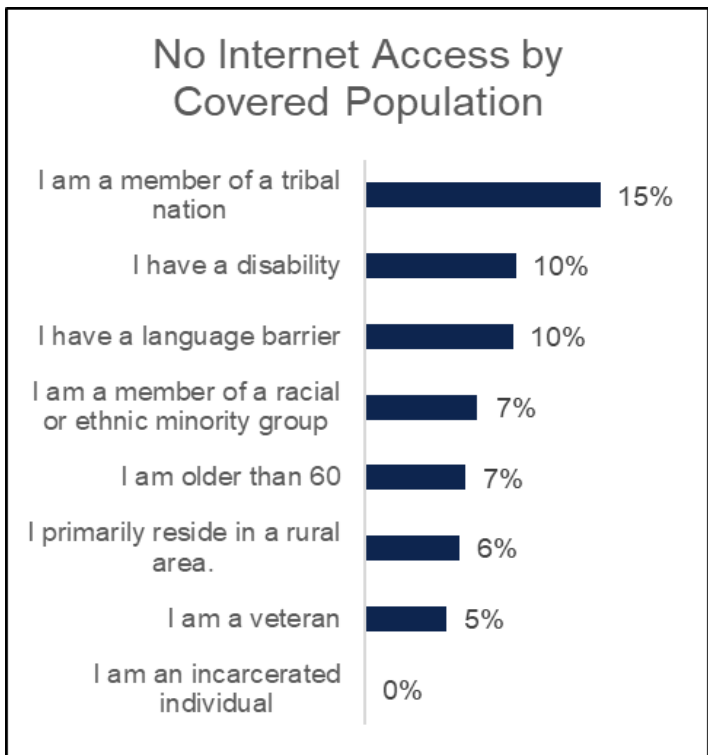
Figure 18: Percent of members of covered populations in Arizona that reported no internet access.

Internet Reliability

A reliable internet connection is vital for participation in the digital world. Internet reliability is closely related to digital equity and directly influences individuals' and communities' ability to access and utilize education, work, healthcare, and citizen services. Poor reliability is described by community members as bad connections, frequent outages, lack of service options, and slow service.

As shown in Figure 19 below, survey results indicate that 45% of Arizonans are either extremely dissatisfied or somewhat dissatisfied with their internet reliability. Results varied considerably among counties. Coconino, Gila, and La Paz Counties report the highest rates of dissatisfaction, while Greenlee, Pima, and Yuma have the highest rates of satisfaction. See Figure 20 for full results by county. These findings are important to consider as service is expanded into rural and underserved areas of Arizona. Access to internet service is vital, but the connection must also be reliable.

Internet reliability, or the lack thereof, poses a significant barrier for covered populations, particularly among individuals living in low-income households and those who primarily reside in rural areas. Geographic and geologic factors can impact Internet connection in these regions, disrupting essential online activities such as remote work, distance learning, and telehealth services. Results indicate that low-income households in rural areas are disproportionately disadvantaged.
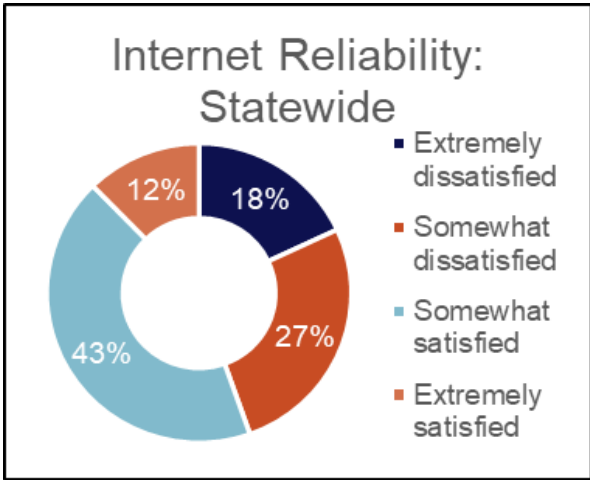
Figure 19: Internet Reliability Across Arizona
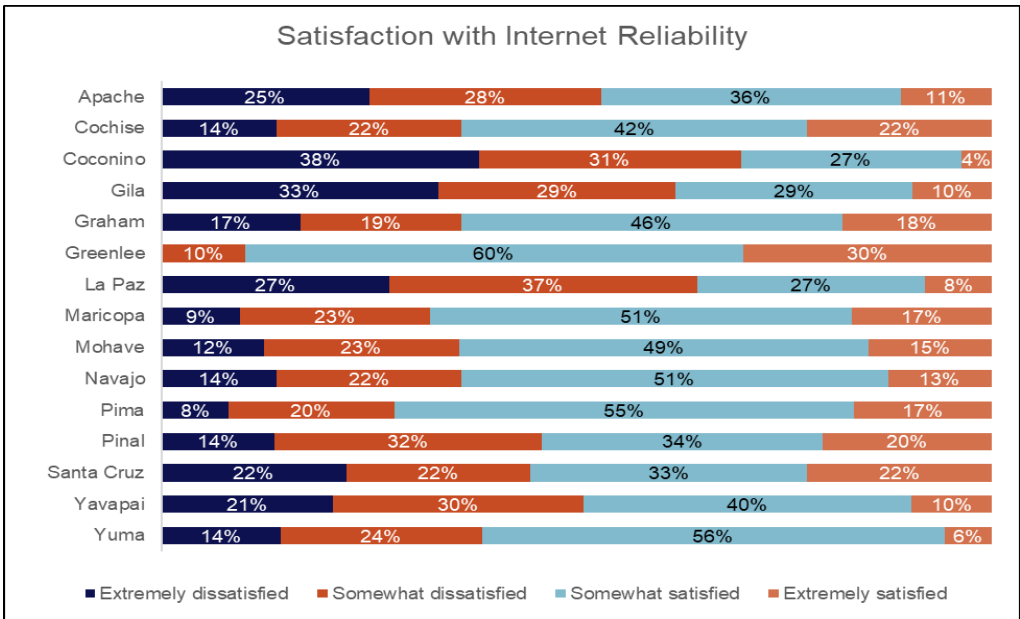
Figure 20: Satisfaction with internet reliability by county in Arizona

Use of Digital Devices

Having a digital device that can connect a user to the internet is a basic need. Internet service is important, but Arizonans also need access to the right device for their unique needs. Community member survey analysis indicates that overall, Arizonans have access to a device. When respondents were asked if their household has enough digital devices (computers, smart phones, tablets) to meet their needs, the majority (80%) responded "yes" as shown in Figure 21. Only 18% of the respondents indicated that they did not, and 2% reported having no device.
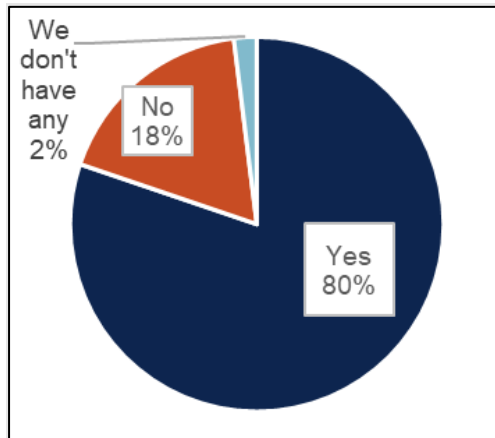
Figure 21: Percent of community members answering "yes" when asked if their household has enough working digital devices (computers, smart phones, tablets) to meet the needs of everyone living in the home.

When examined by county, this trend continued with most respondents reporting that they did have enough devices. However, In Navajo County, the percentage of households that have enough devices dropped to 66%, and the percentage of respondents in Apache County fell to 59%. The full county results can be found in Figure 22.
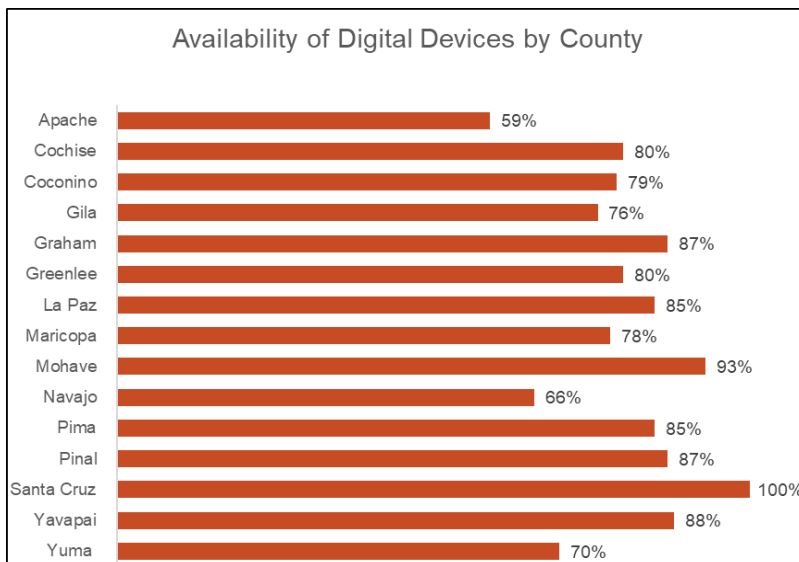
Figure 22: Community member percent answering "yes" when asked if their household has enough working digital devices (computers, smart phones, tablets) to meet the needs of everyone living in the home by county

Digging Deeper

While the majority of Arizonans reported having access to a digital device, a deeper dive is warranted. Not all devices are created equally, and some devices don't enable meaningful participation. For example, a

smart phone is not the best device for learning remotely. Repeatedly we heard stories of students using their phones for writing papers and submitting homework. Similarly, members of the community shared that their phone was the device they used to complete paperwork or apply for a job. Across the state, 68% of respondents reported access to a cellular phone while only 53% had access to a personal computer. Around 38% use a tablet, and 22% use a computer from work or school (Figure 23). The discrepancies in these numbers indicate that while Arizonans may have access to devices, the device might not be the best fit for their needs.
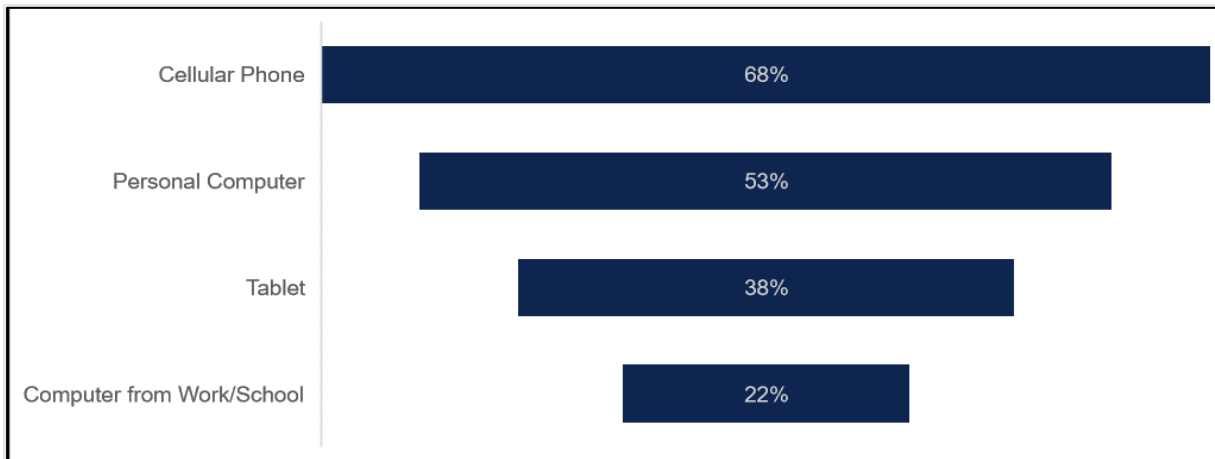
Figure 23: Statewide community member access to a digital device by device type

Access to Devices By Covered Population

When examined by covered populations, results reveal that most of the covered population groups fall below the state average of 80%. Only veterans and older adults exceeded the state average. Only 55% of households in Tribal Nations have access to the devices they need, and only 63% of incarcerated individuals have enough devices. Analysis revealed that 69% of households with a language barrier report having enough devices, which could greatly exacerbate the challenges they face as they navigate a world in which they are not a native speaker. Full results can be reviewed in Figure 24.

Figure 25 shows the type of devices being used by members of covered populations in Arizona. Similar to the previous results, respondents from covered populations overwhelmingly report that the device they are using is a cell phone. Only 37% of respondents with a language barrier have access to a personal computer, and 52% of people from Tribal Nations have access to a personal computer. Results indicate that nearly 30% of disabled individuals do not have access to a personal computer, which could greatly impact the ability to meaningfully engage in digital spaces.
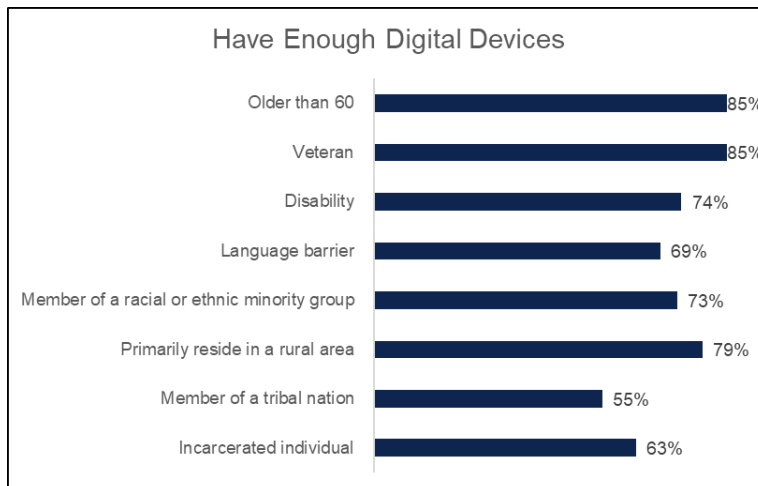
Figure 24: Covered population member percent answering "yes" when asked if their household has

enough working digital devices (computers, smart phones, tablets) to meet the needs of everyone living in the home by county.
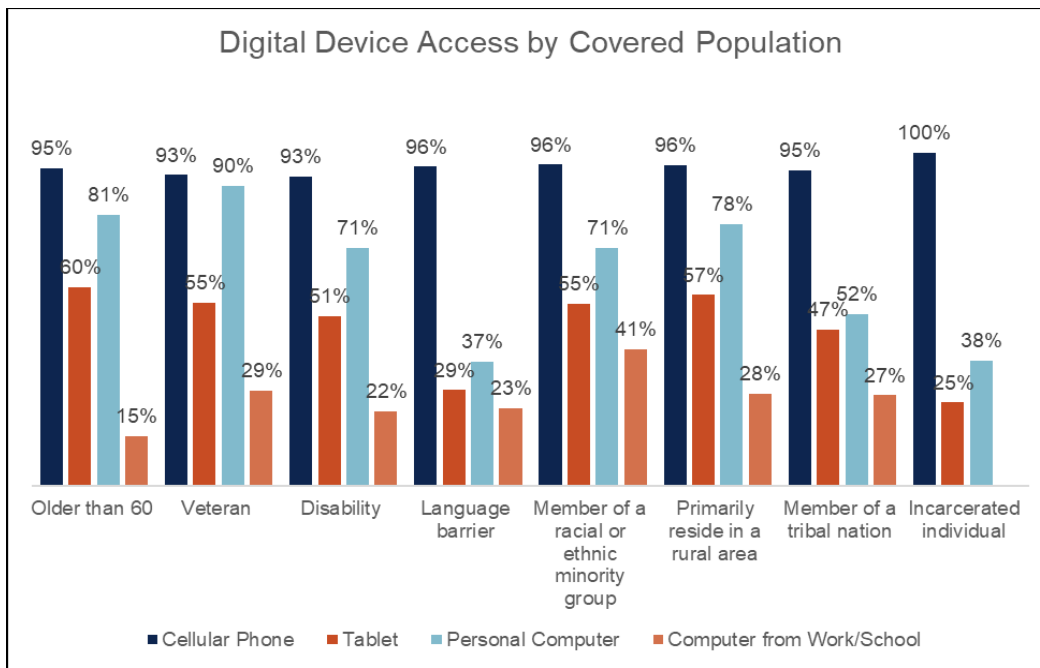
Figure 25: Digital device access among covered populations

Digital Literacy and Online Safety

Digital literacy is an overarching term that represents a learning path through which users gain the skills, knowledge, and confidence needed for meaningful use of online services. Community interviews and survey feedback overwhelmingly identified public libraries, nonprofits, and community organizations as the places where people go to learn basic computer skills with libraries being the most frequently identified. Interestingly, awareness of digital literacy programs was low among many Arizonans, which presents an opportunity for community awareness campaigns to improve skills and safe participation.

Participants responded that they were able to complete many tasks online. However, when asked what skills they want to learn, protecting one's privacy, identifying false and misleading information, and finding credible sources accounted for 60% of the feedback as shown in Figure 26. These results support a theme that emerged during interviews and listening sessions where participants expressed concerns about cybersecurity and falling victim to scams or disinformation. In general, Arizonans want to participate in online environments, but they want to do so safely. While less frequently reported, respondents report a desire to access telehealth and essential services, create online content, access entertainment, and engage on social platforms.

Statewide: Percent who Report Wanting to Learn...

Topic	Percent
Protect my privacy online	23%
Identify false or misleading information	21%
Block spam or unwanted content	21%
Troubleshoot issues with technology	19%
Find credible sources online	16%
Create my own online content using the internet	11%
Connect with my doctor or healthcare services online	9%
Access government services	8%
Pay bills online	7%
Purchase groceries and food online	7%
Stream a TV show or a movie	7%
Send and receive email	6%
Access my bank account online	6%
Share pictures/files	6%
Create and manage a social media profile	5%

Figure 26: Percent of Arizona residents that want to learn more about various topics

Digital Literacy and Online Safety by Covered Population

When the data are examined by covered population, results are similar. Safe use of the internet emerged as the top concern. Members indicated that they would like to learn more about identifying false or misleading information, finding credible sources, blocking spam or unwanted content, and protecting their privacy online. Members of tribal nations, individuals with disabilities, and residents older than 60 expressed the most interest in these topics. 50% of respondents over the age of 60 want to learn more about protecting their privacy, and 45% need guidance identifying false or misleading information. Around half of surveyed community members that have a disability or are part of a racial or ethnic group indicated an interest in learning ways to protect their privacy online. Members of covered populations also indicated that they would like to learn more about troubleshooting issues with technology. Half of the surveyed members of tribal nations indicate an interest in learning more about troubleshooting, and 47% of individuals with disabilities expressed interest. Full results for all covered populations are represented in Table 6. Safety and cybersecurity are vital parts of digital literacy and are incorporated into the implementation of the state plan.

	Aging Individuals	Veteran	Disability	Language barrier	Member of a racial or ethnic minority group	Primarily reside in a rural area	Member of a tribal nation
Identify false or misleading information	45%	36%	50%	57%	43%	37%	53%
Find credible sources online	31%	28%	42%	47%	39%	30%	43%
Block spam or unwanted content	46%	43%	49%	42%	42%	40%	53%

Protect my privacy online	50%	38%	50%	42%	49%	43%	56%
Trouble-shoot issues with technology	41%	35%	47%	34%	39%	39%	50%

Table 6 : Percent of residents in covered populations that would like to learn more about indicated topics

3.2.3   Broadband Affordability

"If you're already strapped for cash on your electric bill, which a lot of people are, especially during our summertime. Why would you justify paying for Internet?" - Community Member in Arizona

The Pew Research Center study showed that 43% of households earning less than $30,000 per year do not have home internet subscriptions, compared to merely 8% of households earning over $75,000. Many cited costs as the primary explanation for not subscribing to internet service[45]. One way of expressing the difference between these households is that, given the present pricing models, households earning under $30,000 per year typically have to pay over 2 percent of their annual income for broadband service.

Based on this 2% standard, the median household in Arizona would be considered cost- burdened with broadband service that costs more than $100 per month. Per the BEAD program requirements, the ACA Broadband Office will develop an affordable pricing structure for eligible households which subrecipients of BEAD funding must offer to bridge the gap in affordability.

Although the Federal Communications Commission discloses comprehensive information on broadband availability at the location level, the data on pricing is absent from the FCC National Broadband Map. Although the data is expected to become more accurate as the challenge process and other learning initiatives continue, the ACA Broadband Office is currently unable to determine the number of households in Arizona that experience cost burdens from the expense of internet service.

Identifying the population who are eligible for the ACP program is a challenging task since the ACS provides data only on household incomes and estimates of the percentage of households below various poverty levels, but not on the number of households enrolled in other assistance programs. According to estimates made by Education Superhighway and based on the 2021 ACS data, 42.7% of households in Arizona are eligible for the ACP. Of those who are eligible, 39% of households have enrolled in the ACP, according to the USAC's ACP Enrollment and Claims Tracker data as of Sept 20, 2023. Arizona is 19th in the country in terms of ACP participation.

Cost was the primary reason cited by Arizonans who do not subscribe to internet service with a significant majority (60%) indicating this as their main deterrent. (Figure 16). The cost of internet services acts as a substantial deterrent to broadband adoption, particularly for low-income households. The financial burden of internet connectivity can be prohibitive, restricting their full participation in the digital age. The cost of internet service varies greatly across Arizona, and survey respondents often mention a lack of options as a driver for higher prices in their area. Statewide results indicated that approximately 26% of the state population is extremely dissatisfied with the cost of their internet services and 34% are somewhat dissatisfied as indicated in Figure 27. Only 8% of Arizonans indicated that they are extremely satisfied with the cost of their service, leaving a lot of room for improvement.

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[45] From How to Make Broadband a Priority in Affordable Rental Housing by A. Read & K. Wert. Pew Research, 2022
https://www.pewtrusts.org/en/research-and-analysis/articles/2022/11/03/how-to-make-broadband-a-priority-in-affordable-rental-housing-development
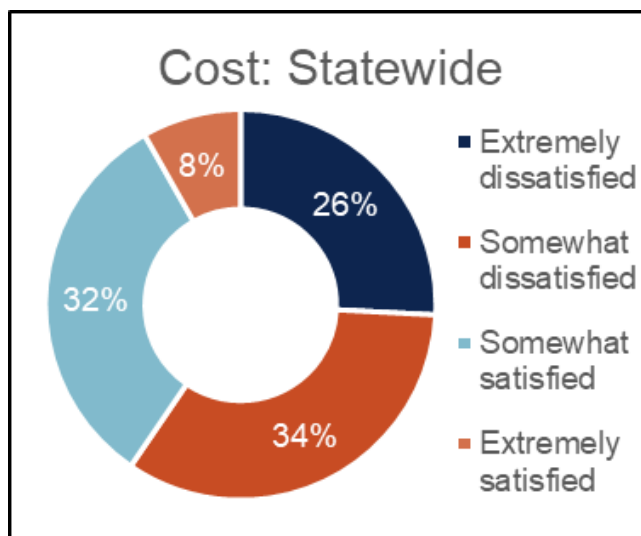
Figure 27: Statewide cost opinions from the community member survey.

Cost by County

Across Arizona, there are marked differences in satisfaction with internet price plans. Given this, it is important to dig deeper and examine the impact of internet service cost based on geography. Figure 28 breaks down the state by county, and indicates that La Paz County (68%), Yavapai County (67%), Cochise County (67%), and Coconino County (63%) reported the largest percentages of dissatisfaction with the cost of internet service. Residents in Greenlee County had the highest satisfaction rate in the state at 80%.

Satisfaction with Internet Cost

County	Extremely dissatisfied	Somewhat dissatisfied	Somewhat satisfied	Extremely satisfied
Apache	35.1%	25.8%	27.8%	11.3%
Cochise	24.3%	43.2%	27.0%	5.4%
Coconino	19.3%	44.1%	34.2%	2.5%
Gila	22.7%	31.8%	40.9%	4.5%
Graham	25.4%	31.0%	32.4%	11.3%
Greenlee	10.0%	10.0%	60.0%	20.0%
La Paz	35.6%	33.9%	20.3%	10.2%
Maricopa	22.0%	30.6%	35.9%	11.5%
Mohave	25.0%	31.3%	33.8%	10.0%
Navajo	24.5%	32.2%	32.9%	10.5%
Pima	19.3%	33.3%	38.0%	9.4%
Pinal	20.0%	25.5%	40.0%	14.5%
Santa Cruz	12.5%	37.5%	25.0%	25.0%
Yavapai	31.0%	36.4%	27.8%	4.9%
Yuma	22.7%	25.8%	40.9%	10.6%

Figure 28: Satisfaction with internet cost by county in Arizona

Affordability by Covered Population

As shown in Figure 29, members of covered populations are overwhelmingly only "somewhat satisfied" with the price of internet services in their area. 28% of Arizonans with a disability find their internet service unaffordable, and 25% of populations that live in rural areas consider their service expensive. Only 11% of Arizonans over the age of 60 rate their internet service as "very affordable." Free access to internet service appears to be very limited in Arizona, with members of Tribal Nations (18%) and incarcerated individuals (13%) reporting the highest numbers among the covered populations.

Affordability of Internet by Covered Population

Covered Population	Internet is Free	Not Affordable	Somewhat Affordable	Very Affordable
Older than 60 (N=667)		20%	66%	11%
Veteran (N=169)		24%	67%	8%
Disability (N=185)	3%	28%	57%	12%
Language barrier (N=81)		14%	59%	23%
Member of a racial or ethnic minority group (N=225)	5%	23%	59%	13%
Primarily reside in a rural area (N=841)	3%	25%	62%	10%
Member of a tribal nation (N=147)	18%	20%	54%	9%
Incarcerated individual (N=8)	13%	13%	63%	13%

Legend: ■ Internet is Free ■ Not Affordable ■ Somewhat Affordable ■ Very Affordable

Figure 29: Member responses by covered population indicate that most members of covered populations consider the internet not affordable or somewhat affordable**.**

Affordability of Internet by County

County	Internet is Free	Not Affordable	Somewhat Affordable	Very Affordable
Apache	18%	24%	55%	3%
Cochise	2%	28%	63%	7%
Coconino		19%	72%	9%
Gila		23%	68%	9%
Graham		19%	64%	17%
Greenlee		9%	73%	18%
La Paz		28%	59%	12%
Maricopa	4%	22%	58%	16%
Mohave		22%	67%	11%
Navajo	9%	18%	63%	10%
Pima	4%	21%	64%	11%
Pinal	4%	19%	57%	19%
Santa Cruz			80%	20%
Yavapai		26%	66%	7%
Yuma	7%	11%	59%	23%

Legend: ■ Internet is Free ■ Not Affordable ■ Somewhat Affordable ■ Very Affordable
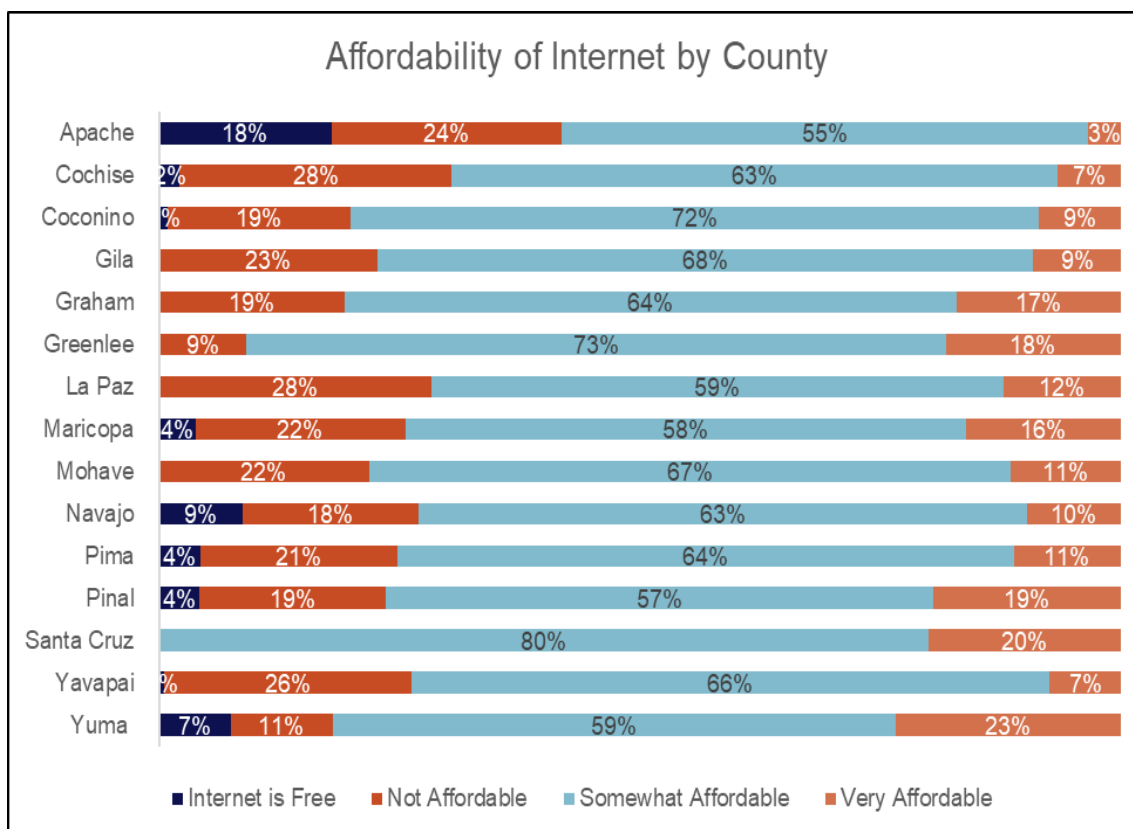
Figure 30: Member responses by county indicates that most members of covered populations consider the internet not affordable or somewhat affordable

Access to Free Internet

Having access to internet services at no cost is an excellent solution to the affordability barriers to connectivity. However, free access is very rare in homes across Arizona, and most "free" internet access is obtained at a community location (24%) or a local place of business (22%). When asked where they could access free internet in their community, 10% of respondents said there was no place in their community with free internet. Others reported the following community locations as shown in the figure below. For those that marked "other" responses ranged from a friend or family member's home to churches to libraries to parks to their apartment complex. (Figure 31)
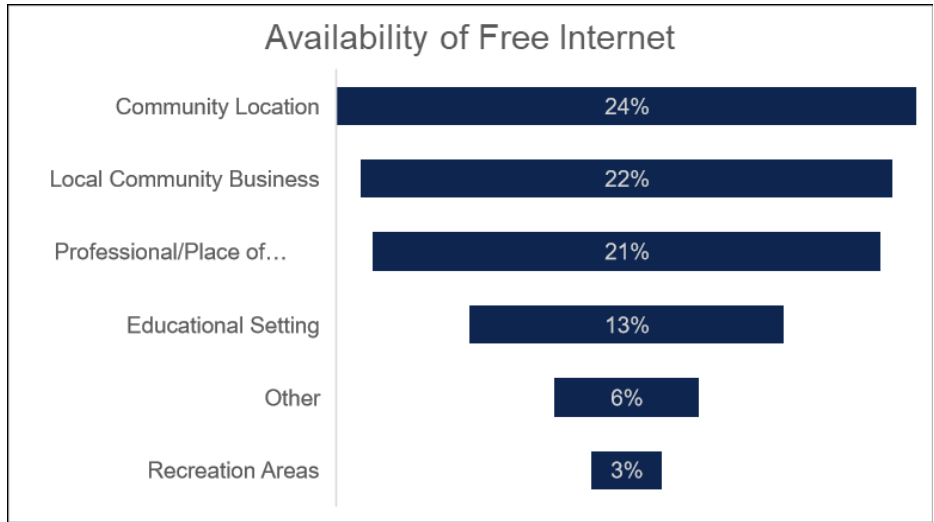
Figure 31: Identified areas where access to the internet is provided at no personal cost

3.2.4   County Reports
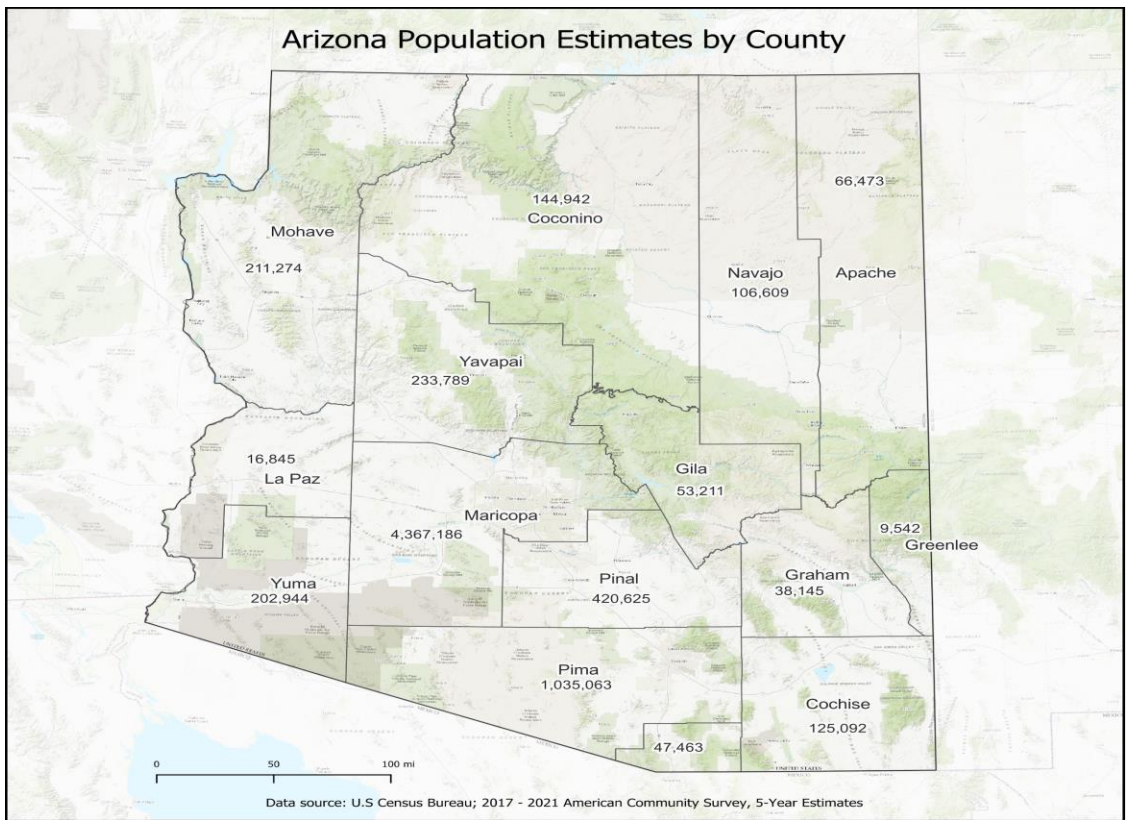
Figure 32: ACS estimates of total population for each county in Arizona

Apache County

Apache County

Summary of Comments from the Community Member Survey

Apache County urgently needs improved, affordable internet and cellular services, particularly in the rural, remote, and underserved areas. These services are vital for education, work, healthcare, and the delivery of essential services. The community reports that current cellular infrastructure is unreliable and costly, particularly for hotspot usage.

There is a significant demand for better broadband internet, with criticisms directed at major providers for depending on outdated technologies and neglecting these communities' needs. Concerns about internet safety, such as cyber scam risks and password security, are also increasing.

Rural areas face specific issues like limited cell tower coverage and high costs of current services. Satellite-based solutions like Starlink, though known, are considered expensive and operationally challenging. Waitlists are long and inaccessible for most people. The community's feedback highlights a pressing need for affordable and reliable internet solutions, and a sense of urgency of collaborative solutions.

Overview of Digital Equity Challenges in Apache County

Located in the northeastern region of Arizona, Apache County is characterized by natural landscapes and diverse indigenous heritage. Notable demographic segments include individuals under 18 years (26.0%) and those aged 65 years and over (16.7%). Most residents identify as American Indian (73.4%). Linguistic diversity is prominent, as 54.9% of the population speaks a language other than English at home. This linguistic diversity, combined with a relatively lower percentage of households with a computer (62.1%) and broadband Internet subscription (42.9%), underscores the importance of digital equity initiatives to bridge these gaps. [56]

[56] From QuickFacts. Apache County, Arizona by U.S. Census Bureau. 2022, https://www.census.gov/quickfacts/fact/table/apachecountyarizona,yavapaicountyarizona,US/PST045222

Quotes from the County

Access Barriers
"They cannot work from here. They do not have sufficient bandwidth for them to do their job, you know, and that's been the case forever."

Comfort and Safety Concerns
"The parents can't know how to know when their child is potentially in an unsafe or incorrect area and have the tools to move them in the right direction to protect our senior citizens in the same way."

Apache County has a median household income of $34,788 and a per capita income of $16,888, with 28.4% of the population living in poverty. The county's economic resilience is reflected in its total employment establishments (445) and businesses (324), contributing to its local economy. [57]

Barriers in Apache County

Access Barriers
Much of the county lacks digital infrastructure which impacts access to education, jobs, healthcare, and essential services. Where service is available, bandwidth constraints hinder professional-level work and limit the types of jobs and businesses that can effectively operate within the region. The unreliability of service providers has eroded the community's trust in internet service offerings.

Cost Barriers
Both businesses and residential users grapple with high equipment and service costs. For businesses, initial setup costs can soar up to $2,500, while residential users may face initial expenses of up to $700, with recurring monthly fees ranging from $120 to $500, rendering internet services financially unattainable for many.

Skill Barriers
While libraries in Apache County offer some free internet and training, their resources are limited. They often need help with understaffing and restricted hours, making them an insufficient solution for fully meeting the diverse educational needs of the community. Residents in Apache County face a notable digital skills deficit. For people to meaningfully and safely participate online, training is needed in everything from computer foundations to identifying mis-and-disinformation. Skills barriers prevent individuals from fully harnessing the potential of the internet for personal and professional benefit.

Trust Barriers/Safety and Security Concerns
The community expressed a pronounced lack of trust in the safety and security of online platforms. Concerns are wide-ranging including parents worrying about their children's online safety, concerns about the susceptibility of older adults to online scams and fraud, and concerns about the intrusiveness of the government. There is deep resistance to change, skepticism towards government-led internet initiatives, resistance to the expansion of towns, and resistance to new technologies. Here, rural communities value their isolation and exhibit apprehension towards external interventions that might impact their way of life. This resistance is rooted in a longstanding preference for traditional methods and a general mistrust of new initiatives.

Barriers by Covered Populations in Apache County

Barriers for Individuals with Disabilities: Individuals with disabilities encounter a range of

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[57] From QuickFacts. Apache County, Arizona by U.S. Census Bureau. 2022, https://www.census.gov/quickfacts/fact/table/apachecountyarizona,yavapaicountyarizona,US/PST045222

challenges related to the availability and accessibility of technology, internet resources, hardware, and software that meets their specific needs. Additionally, transportation barriers hinder access to healthcare, particularly for those with physical and intellectual disabilities who sometimes have to drive for hours to reach the nearest doctor.

Barriers for Rural Areas: The significantly higher cost of engineering infrastructure in this rural area affects the end user's monthly bill. The divide between well-off people and those living in poverty in these areas also affects bandwidth usage, access issues and limits to internet availability.

Barriers in Education & Literacy: Students in Apache County frequently leave to acquire basic computer skills due to inadequate local resources. Libraries, despite offering some educational opportunities, face constraints that impact their hours of operation and staffing. To address this inequity, educating the community on safe and effective internet usage is critical. The "train the trainer" approach is suggested to create local support navigators, thereby enhancing digital literacy and education

Barriers for Aging Individuals: The community emphasizes the importance of protecting seniors from digital scams. Senior centers and libraries are identified as key venues for educational workshops that focus on basic computer skills and safe internet navigation.

Barriers for Racial or Ethnic Minorities: It is crucial to acknowledge the economic disparities that disproportionately impact communities of color in the region. Efforts to address digital inequity should strive to reduce disparities based on race or ethnicity, ensuring equitable access to digital resources and opportunities.

Barriers for Individuals with Language Barriers: For individuals facing language barriers, especially prevalent in tribal areas, the dominance of English-only materials creates significant access challenges. To foster digital inclusivity, providing training materials in native languages and offering on-site translation services is vital. Additionally, respecting cultural nuances and customs, especially in Native American communities where elders often speak exclusively in their native languages, is essential for effective engagement and support.

Resources

Nonprofits and Local Businesses

Libraries are recognized as critical community hubs, providing indispensable support for residents in areas such as employment assistance, internet navigation, and basic services like phone charging. Despite facing staffing challenges that may occasionally impact their service capabilities, libraries remain pivotal in offering free internet access and a range of training resources. Beyond libraries, the community benefits from nonprofit organizations dedicated to fostering entrepreneurship, local business development, skill development, and economic empowerment.

Residents heavily rely on library services for job searches, device charging, and internet

access. The libraries have implemented special programs to address specific community needs. It is important to note the financial burden even a nominal fee, such as $10 for internet access, can have on some residents. This highlights the ongoing issue of affordability and its impact on resource accessibility in the community.

Local community centers and schools play a vital role in providing access to technology and education in a safe environment. The Round Valley youth center provides access to the internet and tech support for the kids who use the space. The high school in St. Johns, for instance, integrates technology into their courses, offers a pathway to higher education, and integrates an ACP program for their low-income students and students who are members of a tribal nation. However, the lack of internet access remains a significant hurdle. Addressing this gap is essential for ensuring equitable access to educational and developmental opportunities.

Recommendations from Lived Experts

Address Affordability
The community identified the high cost of internet plans as a significant concern, especially for single-parent households. There was a strong focus on seeking solutions to make these services more affordable for low-income families and individuals facing economic hardships

Address Language Barriers
Addressing language barriers is crucial, especially for aging individuals and non-English-speakers.

Advocate for Diverse Leadership
In tribal areas, experts with direct experience underscored the importance of culturally sensitive training programs. They advocate for these initiatives to be led by members from within the respective communities, ensuring relevance and respect for cultural nuances.

Create Policy Initiatives
Local and state governments are urged to consider policies that encourage internet service providers to offer affordable plans and invest in underserved areas.

Develop a Monitoring and Evaluation System
A robust monitoring and evaluation system is needed to assess the impact of these initiatives, allowing for data-driven modifications to enhance effectiveness.

Increase Library Capacity
Libraries are identified as vital centers for digital literacy and internet access. To effectively serve in this capacity, they require additional resources and staffing.

Secure Funding for Implementation of Broadband Projects
Securing funding through grants, public-private partnerships, and community fundraising is essential for implementing training and infrastructure projects. Micro-grants were specifically mentioned as a means to support training initiatives and provide free IT support in the community. The idea of creating a small IT service business, supported by micro-grants, was also proposed to stimulate local economic growth and meet IT needs.

Address Concerns About Online Safety and Security
Addressing safety concerns, especially for parents and seniors, is vital. Help people learn to keep themselves and their families safe online.

Thoughtfully Engage the Community
Town halls and community meetings are vital platforms for residents to voice concerns and offer suggestions. Engaging the community thoughtfully ensures that the solutions that are developed are precisely aligned with the community's unique needs.

Use Train The Trainer Models
To bolster community capacity for digital literacy, the 'train the trainer' model is proposed. This approach aims to empower local individuals to educate others, spreading digital literacy throughout the community.

Cochise County

Cochise County

Summary of Comments from the Community Member Survey

In Cochise County, residents are vocal about their dissatisfaction with limited and costly internet options, especially in rural locales. The community strongly advocates for more affordable, accessible high-speed internet, greater government intervention, and improved internet literacy resources. A common theme is the systemic barriers faced, such as inadequate internet access, evidenced by reliance on library computers and hotspots. The financial strain of existing internet services is a significant concern, given the integral role of digital connectivity in modern life. Notably, high-speed fiber options are scarce, with other providers being either too expensive or unreliable.

These internet speed deficiencies have tangible effects on education, compelling families to depend on Wi-Fi in schools due to inadequate DSL services at home. There's a widespread disillusionment with government initiatives to improve rural internet infrastructure, perceived as largely ineffective. Proposals include reclassifying internet services as a basic utility to enhance affordability and access, particularly in rural areas. Additionally, there's a noticeable lack of digital literacy resources, further impeding the use of internet connectivity for educational and professional growth.

Internet service providers are criticized for their selective service offerings and perceived negligence. Specific concerns include providers not offering in-home internet due to local governmental complexities. There is also heightened awareness of the disparities in internet service costs, which seem to disproportionately affect seniors on fixed incomes.

Overview of Digital Equity Challenges in Cochise County

Cochise County is situated in the southeastern region of Arizona and boasts a unique blend of natural landscapes and diverse

cultural heritage. Home to a population exceeding 126,000 residents, the county is situated along the borders of Mexico and New Mexico. The County encompassess seven municipalities and has a diverse demographic landscape. In addition to being a predominantly rural region, 35.9% of residents identify as Hispanic or Latino (35.9%) and other 24.6% identify as Two or more races. This diversity extends to linguistic preferences, as 28.5% of residents communicate in languages other than English at home. Notably, 10.1% of the population speaks English less than 'very well,' underscoring the need for multilingual approaches to bridge language barriers. The median age is 43.2 years, with the age group between 25 to 44 years constituting 23.2% of the population—a pivotal segment for economic productivity and digital inclusion efforts.[48]

Barriers in Cochise County

Access
Rural areas of Cochise County face significant challenges accessing reliable, high-speed internet. The poor digital infrastructure leads to slow and inconsistent services, affecting essential online access to education, work, and healthcare. Residents report relying on satellite internet, which is neither reliable nor affordable. Alternatively, people go to the library to get online.

Affordability
In Cochise County, rural residents struggle with economic barriers that make it difficult to afford digital devices, internet service plans, and data usage. As a result, internet access often takes a back seat to more pressing financial needs.

Cultural and Linguistic Barriers
Cultural resistance to technological change and apprehensions about the internet's impact on community values can impede the adoption of internet services. Community attitudes and perceptions play a crucial role in influencing internet adoption rates.

Skills Barriers
A notable gap in digital literacy exists among many Cochise County residents. There is a pressing need for educational programs and training to address this gap. Aging individuals, in particular, feel intimidated by technology, which can discourage them from seeking help and using internet services.

Trust Barriers/Safety and Security Concerns
Concerns about cybersecurity and privacy are significant deterrents to online engagement in Cochise County. A general mistrust of online platforms, coupled with fears of scams, misinformation, and fake news on social media, contributes to digital skepticism. These concerns are especially prevalent among youth, middle-aged adults, and aging individuals.

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48 U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates. Retrieved from https://data.census.gov

Barriers by Covered Populations in Cochise County

Barriers for Rural Areas: In Cochise County's predominantly rural landscape, residents face significant isolation. Long bus rides are often necessary to access basic services or shopping facilities. The separation of communities by highways further exacerbates the difficulty in accessing digital resources, leaving many in these rural areas digitally disconnected.

Barriers in Education & Literacy: There's a pressing need for education and training to tackle digital inequities in the community, especially for adults in their forties and fifties with limited computer experience. They, and others, require foundational digital skills training, including tasks like setting up email accounts, creating secure passwords, and navigating online spaces safely to avoid scams and misinformation. These individuals often have numerous questions and need extensive time and support for their digital learning journey.

Barriers for Aging Individuals: Aging residents in Cochise County grapple with adapting to the digital age, often experiencing embarrassment and vulnerability due to their limited technological knowledge. This challenge is particularly pronounced among retired individuals, especially those on fixed incomes. For instance, one 85 year old resident who relocated from Pennsylvania to Arizona shared their journey of learning to stream online content and teaching their partner, who is in their seventies, to do the same. These anecdotes underscore the multifaceted hurdles and roles that aging individuals will play in this journey.

Recommendations from Lived Experts

Address the Affordability of Internet Plans
In Cochise County, it's vital that affordable internet plans consider residents' financial constraints. Exploring partnerships with internet service providers to provide discounted plans for low-income individuals can significantly improve digital accessibility.

Building Community Trust and Addressing Safety Concerns
Conducting educational campaigns on online safety and cybersecurity is essential for Cochise County communities. These campaigns should aim to debunk myths and misinformation, building trust in the digital environment and promoting responsible internet usage

Develop and Support Public-Private Partnerships
Engaging in collaborations with both the public and private sectors can bring together resources and expertise to address the digital gaps in Cochise County.

Encouraging Open Discussions and Involve Community Leaders
Encouraging open discussions in Cochise County about the advantages and challenges of internet use is vital. Involving community leaders can help in advocating for digital equity as a communal objective.

Expand ISP Coverage

Motivating Internet Service Providers (ISPs) to broaden their coverage and offer affordable plans in underserved areas is a critical step towards enhancing digital access in Cochise County.

Invest in Infrastructure

Advocating for increased investment in digital infrastructure is key to ensuring reliable and high-speed internet in Cochise County. Innovative solutions, such as satellite internet, should be explored to reach the most remote areas.

Partner to Provide Training to the Community

Developing comprehensive digital literacy programs that cater to various skill levels and age groups is essential. Collaborating with libraries, community centers, and local organizations to offer regular training sessions can significantly improve digital literacy.

Tailor Outreach and Customize Programs to Meet the Needs of the Community

Efforts should be made to customize outreach programs to meet the unique needs and concerns of different demographic groups within Cochise County. Creating culturally sensitive training materials is necessary to overcome cultural barriers.

Coconino County
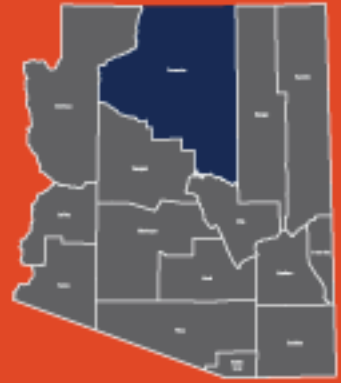
Coconino County

Summary of Comments from the Community Member Survey

In Coconino County, particularly among rural and suburban residents, there is widespread dissatisfaction with the current state of internet service. The primary issues include lack of reliable internet access, affordability, and service quality. Residents report that outdated, slow internet service impedes work, content streaming, and digital communication. Limited provider options in certain areas result in market monopolization, leading to high prices and poor service quality.

Complaints are frequent about the outdated DSL infrastructure, which negatively impacts speed and reliability. Certain providers are consistently identified as unresponsive and problematic. Although satellite-based services offer an alternative, they are often financially out of reach for many. Cellular services also face criticism for dropped calls and slow data speeds.

There is a demand for fiber-optic internet to address reliability and speed issues, but economic barriers, notably the high cost of quality internet services, are a significant obstacle. The community urges increased involvement from local and governmental bodies to enhance internet access, emphasizing connectivity as a critical modern utility, particularly for remote work. Additionally, there's a recognized need for educational initiatives to improve technological literacy within the community.

The collective voice from Coconino County clearly articulates the need for comprehensive solutions addressing the various aspects of internet inadequacy, ranging from infrastructure improvements to enhanced affordability and digital literacy, calling for concerted efforts from service providers and government entities.

Overview of Digital Equity Challenges in Coconino County

Coconino County is the second-largest county in Arizona by

land area, covering approximately 18,661 square miles. Flagstaff is the largest city in the county. It is situated in the northern part of the state and encompasses a wide range of geographic features. The population of Coconino County was estimated to be around 145,000 in 2022, with a mix of urban and rural residents. The County is home to Northern Arizona University, which has an enrollment of around 30,000 students that mostly reside in Coconino County. Around 27% of the county's population identify as American Indian, and 15% identify as Hispanic or Latino. Nearly 20% of the population is aged 18 or under, and around 15% of the population is aged 65 or older. [49]

Income levels in Coconino County vary significantly based on factors such as location and industry. In 2021, the median household income in the county was approximately $61,888, which is slightly below the national average. It's important to note that the county includes both rural and urban areas, with Flagstaff, the county seat, having a somewhat higher cost of living and income levels compared to more remote areas. [50]

While the city of Flagstaff enjoys relatively robust internet connectivity, remote communities in the county often grapple with limited broadband access. The county is exploring wireless, microwave, and satellite technologies to provide service in hard-to-reach areas. However, these technologies vary in type and cost. While fiber optics offer the best internet connectivity, their deployment is costly and thus far has been limited to densely populated areas.

Barriers in Coconino County

Access Barriers
Limited access to reliable and high-speed internet restricts full participation in online life, particularly for those living in rural areas and on tribal lands. This lack of access impedes the use of essential online services like education, social services, and healthcare.

Cost Barriers
Affordability poses a significant challenge for many residents. The cost of internet plans and necessary devices is often beyond the reach of individuals, impeding their online engagement. The high cost associated with the internet hinders participation in remote education, telework, telemedicine, and access to vital services. Furthermore, barriers such as limited digital skills and language differences prevent many from taking advantage of reduced-cost internet plans.

Digital Literacy and Education
There is a notable deficiency in digital literacy and skills, particularly among aging residents, those with disabilities, and non-English speakers. This gap hinders their ability to effectively use digital devices and navigate the internet safely. Training in fundamental digital skills is crucial as is opportunity to build on those skills once the basics are learned

[49] From QuickFacts. Coconino County, Arizona by U.S. Census Bureau. 2022,
https://www.census.gov/quickfacts/fact/table/coconinocountyarizona,apachecountyarizona,yavapaicountyarizona,US/PST045222

[50] From QuickFacts. Coconino County, Arizona by U.S. Census Bureau. 2022,
https://www.census.gov/quickfacts/fact/table/coconinocountyarizona,apachecountyarizona,yavapaicountyarizona,US/PST045222

Infrastructure
Government funding and initiatives to address these digital challenges are often complex and subject to delays, affecting the progress in bridging the digital divide in Coconino County.

Support
Residents lack adequate support and guidance in effectively using digital technology. The idea of digital navigators, offering assistance and education, is gaining traction but has not been widely implemented yet.

Trust Barriers/Safety and Security Concerns
A general mistrust in online platforms, fueled by fears of scams, misinformation, and fake news, is prevalent. This distrust underscores the need for ensuring digital safety and providing resources to combat online threats. The vulnerability of many individuals to online scams and misinformation, due to limited technological experience, highlights the importance of partnering with trusted entities.

Barriers for Covered Populations in Coconino County

Barriers for Individuals with Disabilities: Individuals with disabilities encounter a variety of obstacles in accessing, adopting, and effectively using the internet. Technology, resources, services, and supports often fail to adequately address their specific needs. There is a pressing need for accessible devices and technologies, such as those equipped with voice output for the visually impaired and specialized features for the hearing impaired, to ensure these individuals can fully engage with digital resources.
Barriers for Rural Areas: Community members highlight digital literacy challenges. There is concern about how to protect rural citizens from online scams and other digital threats due to their lack of experience with technology.

Barriers in Education & Literacy: Digital equity is not just about providing devices and internet access but also ensuring that individuals have the literacy and skills to use them. In Coconino County there is an emphasis on the need for human support as the community learns foundational and more advanced skills, begins accessing the internet, using apps, and learns to be safe online. Local colleges like Coconino Community College and Northern Arizona Universities will play a pivotal role in reaching and supporting the community.

Barriers for Aging Individuals: The challenges faced by aging individuals include operating cell phones, but it's unclear if they are smartphones with internet capabilities. The role of churches in disseminating information to older individuals should be highlighted, with many relying on printed materials and announcements.

Barriers for Individuals with a Language Barriers: Non-English speakers in Coconino County face challenges accessing information and services online, as most resources are available only in English. This language barrier creates a significant disconnect that pre-

vents members of the community from fully utilizing essential digital services. An example was shared of a grandmother who only speaks Spanish who relies on bilingual grandchildren to translate. This increasingly common occurrence will be important to address as programs to increase digital skills are developed.

Resources

Community Engagement and Collaboration
Coconino County is bolstered by a strong sense of community and collaboration. Key community organizations such as the Murdoch Center, Tynkertopia, Southside Community Association, and Lived Black Experience CommUnity, all play a significant role. These groups have the trust of the community, and along with others, are exploring community-based solutions like setting up digital inclusion centers and local support networks.

Public Private Partnership
Effective digital equity solutions in Coconino County will require significant investment and collaboration between private and public sectors. Local community organizations and educational institutions will be instrumental in providing the digital literacy, skill training, and workforce development the community needs. Programs such as "Digital Navigators," which are supported by community organizations, along with efforts to provide digital literacy training, demonstrate a strong commitment to closing the digital divide.

Local Knowledge and Expertise
The community's rich local knowledge and expertise are invaluable assets in tailoring digital solutions to the unique challenges of Coconino County. This local expertise is crucial, especially in addressing the needs of Tribal nations, rural communities, and marginalized groups.

Potential Government Initiatives and Higher Education Support
Discussions in Coconino County highlight the role of government funding and initiatives in promoting digital equity. Furthermore, institutions like Northern Arizona University contribute to these efforts through higher education resources and expertise. This collaborative approach between community organizations, government initiatives, and higher education institutions like Northern Arizona University is pivotal in developing comprehensive solutions for digital inclusivity in the county.

Recommendations from Lived Experts

Address Connectivity and Infrastructure Challenges
Addressing the lack of infrastructure and the high cost of connectivity is a priority. Ensuring that every community member has access to reliable and fast internet includes expanding broadband coverage and prioritizing remote and underserved areas.

Address Language Barriers

Providing multilingual online resources and services is essential to overcoming language barriers and ensuring equitable access and participation. Bilingual support and translation services can bridge the language gap.

Build Partnerships with Tribal Governments that Respect their Sovereignty

Building partnerships with tribal governments to create solutions for the unique digital challenges faced by tribal communities is crucial. Understanding their specific needs and including tribal members in planning processes is essential for comprehensive digital equity.

Create Awareness and Advocacy Programs

Launching public awareness campaigns to highlight the significance of digital inclusion is vital. Advocacy efforts can amplify this message, drawing attention to the many local organizations ready to assist in these efforts. Launching campaigns to educate residents about the internet's benefits and safe online practices can foster digital adoption. These campaigns should be in multiple languages and should emphasize digital inclusion and collaborate with local organizations and businesses for wider reach.

Establish Community Digital Inclusion Centers

Establishing digital inclusion centers in both urban and rural areas of Coconino County can provide crucial access to the internet, digital training, and assistance. These centers should be welcoming spaces for learning, technology access, and support.

Help People Learn to be Safe Online

Ensuring the digital safety of residents, particularly in rural communities, is imperative. Education and resources to combat online threats and scams can protect the most vulnerable.

Implement Digital Navigator Programs

Implementing digital navigator programs within the local communities that are personalized to the unique needs of the covered population with community members become more comfortable and confident being online, using digital devices, accessing online services, and safely navigating the internet safely.

Provide the Community Accessible Digital Literacy and Skill Building

Developing targeted digital literacy programs that cater to the specific needs of groups like aging individuals, people with disabilities, and non-English speakers is important for digital inclusivity

Provide Accessible Devices

Ensuring the availability of affordable and accessible devices is crucial. These devices should be user-friendly, compatible with assistive technologies, and tailored to meet the

diverse needs of community members, including but not limited to aging individuals, veterans, and those with disabilities.

Provide Affordable Internet Options

Introducing subsidized or more affordable internet plans is key to expanding access in Coconino County, particularly among low-income households and underserved communities for whom cost is prohibitive. Collaborating with ISPs to develop plans that address financial limitations is essential as rising internet costs continue to exclude many from the digital economy.

Provide Support and Resources

Provide more resources and staffing for libraries to transform into community hubs for digital literacy training and internet access. Senior centers and libraries could also serve as venues for educational workshops to protect older citizens from digital scams by teaching them basic computer skills and internet navigation. Additionally, support the creation of small businesses that offer IT support to benefit the community, potentially funded by micro-grants

Secure Micro-grants and Government Funding

Securing additional funding in Coconino County from government entities is crucial. These funds should focus on infrastructure development, educational programs, and equitable resource distribution, especially to underserved areas.

Gila County
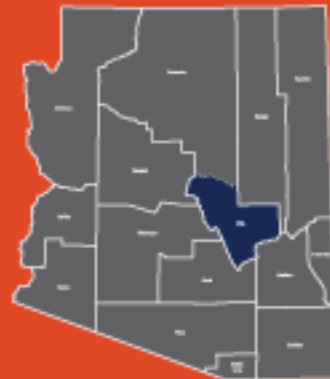
Gila County

Summary of Comments from the Community Member Survey

In Gila County, survey responses, though limited in number, indicate a significant issue with internet service satisfaction. They highlight a county-wide need for reliable and affordable internet options that surpass the limitations of existing data plans. The findings suggest that currently available internet services are often inconsistent and unreliable. A major concern is the limited competition among internet service providers that contributes to decreased service quality and increased costs for residents. Of particular note is the scarcity of high-speed internet options, specifically those offering speeds of 1 Gbps or faster. Although the number of survey responses is modest, the issues identified — such as service reliability, affordability, limited competition, and the need for higher-speed options — likely reflect broader sentiments within the Gila County community.

Overview of Digital Equity Challenges in Gila County

Gila County, nestled in the heart of Arizona, is at a crossroads with digital equity. According to census data from 2022, Gila County has a population of 53,922 residents. The average annual household income is $51,406, which falls below the national average, and nearly 17% of the population lives in poverty. Nearly 18% of county residents identify as American Indian, and over 19% identify as Hispanic or Latino. Residents over the age of 65 represent 30% of the county's population.[51] Overall, the county is lacking basic internet infrastructure, and the need for digital equity support has never been more pressing. Gila County's digital landscape is a tapestry of contrasts. While some areas enjoy the benefits of modern connectivity, others are left in the shadows of the digital age. The ability to call 911, a service many take for granted, is a challenge in certain parts of the county. Stories of residents driving miles to find a signal to call for emergency services are not uncommon. Such gaps in essential services underscore the urgency of the situation.

[51] From QuickFacts. Gila County, Arizona by U.S. Census Bureau. 2022, U.S. Census Bureau QuickFacts: Gila County, Arizona

Quotes from the County

"What I'm hearing more often than not is that people are booking their appointments six months down the line just because they don't want to see someone over telehealth. They don't believe they can get that help, they think that if it's done through a screen, it's not going to be as good as someone right there actually is doing their examination."

"If folks haven't been in that space at all, how do we bring folks into a space that's moving, whether we all like it or not with some level of comfort and guidance and ongoing skill offering and training offering. It's mandatory."

"So they don't have transportation down into the valley to their appointments. If some of those doctors could do telehealth right at the senior center, that might be a real offering."

Barriers in Gila County

Accessibility Barriers
Challenges related to physical accessibility in community centers and libraries are significant, particularly for people with disabilities. For example, the location of a library on a hill presents a notable barrier to individuals with mobility challenges. This situation highlights the need for more thoughtfully designed, accessible public spaces and digital spaces that are responsive to the needs of everyone.

Affordability Barriers
In Gila County, the high cost of internet access presents a substantial obstacle, particularly for residents from low-income households. For many, affording the necessary technology, such as computers, coupled with the expense of maintaining a stable internet connection, poses a significant financial challenge.

Digital Skills Barriers
A substantial number of community members, particularly aging adults, lack fundamental digital skills. This shortfall highlights the urgent need for educational initiatives and resources focused on improving digital literacy and competencies within the older population.

Infrastructure Barriers
Internet service in rural Gila County is either unreliable or unavailable. This situation underscores the clear need for improving the infrastructure vital for essential digital services and opportunities in education, healthcare, and the workforce.

Training and Support
Gila County faces a shortage of accessible digital literacy and safety programs. This gap is compounded by staffing challenges and a lack of qualified instructors or digital navigators. This gap makes it difficult for organizations to provide digital literacy training, leaving many without the skills needed to navigate the digital world effectively.

Trust and Comfort Barriers
People in the county, particularly aging individuals, are skeptical of new digital services such as telehealth. This skepticism underscores the importance of creating trust and comfort with digital technologies targeted education and outreach efforts. There is disagreement about what broadband and digital equity efforts should be prioritized and a concern that funding entities don't truly understand the needs of the community.

Barriers for Covered Populations in Gila County

Barriers for Rural Areas: In rural areas of Gila County, including Payson, Houston, and Whispering Pines, there are well-documented challenges in accessing emergency and

essential services digitally. Residents find the concept of telehealth potentially beneficial but remain skeptical due to persistent connectivity issues. Additionally, the logistics of providing services, particularly transportation and access to medical services, are major concerns in these rural communities.

Barriers in Education & Literacy: The transition to online learning during COVID-19 highlighted significant challenges, such as the necessity of reliable internet for remote learning, especially on days with inclement weather. In Gila County, libraries serve as primary resources for internet and device access. However, their effectiveness is limited by staffing shortages and restricted operating hours, hindering accessibility. Users often require substantial support, which current staffing levels may not adequately provide. Community and Senior Centers face similar challenges, with potential for educational and internet access services being limited by funding and staffing constraints.

Barriers for Aging Individuals: Older residents in Gila County often struggle with accessing online information and adopting new technologies. While some are nearly tech-savvy, they require additional guidance for full adaptation. Transportation for medical services is a significant hurdle for this demographic. Although telehealth is proposed as a solution, there remains skepticism about its practicality and effectiveness among older residents.

Barriers for Individuals from a Racial or Ethnic Minority Group/Individuals with a Language Barrier: Gila County's diverse linguistic landscape includes speakers of English, Spanish, Navajo, and Apache. However, information about resources and services is predominantly provided in English, creating a barrier to access and participation for non-English speakers and members of racial or ethnic minority groups. This limitation underscores the need for multilingual resources and services to ensure equitable access for all community members.

Resources

Libraries and Colleges
Libraries offer free public Wi-Fi and lend out hotspots for three weeks at a time to those with a valid library card. They also provide computers for public use and a variety of support services. Local colleges provide internet access, computers, and skills training.
The availability of multiple cellular providers in Gila County, including T-Mobile, Cricket, and Verizon, offers residents a variety of options for mobile connectivity. This diversity in providers is beneficial for the community, allowing for a range of choices that can cater to different needs and budgets.

Public Private Partnerships and Community Collaboration
Digital Payson is an example of a strategic initiative in Gila County that focuses on expanding digital infrastructure and literacy. The initiative encompasses efforts to enhance internet connectivity and provide digital education, serving as a vital resource for the

county's technological advancement

Recommendations from Lived Experts

Address Generational Differences
Acknowledging the generational digital divide in Gila County is crucial. Younger residents are more digitally adept, whereas older individuals may feel embarrassed to seek help. Establishing trust and communication channels that cater to different demographics is important.

Insist on Transparency and Communication
Leveraging transparent and effective communication channels, such as community web-sites and social media, is necessary to keep residents informed. These channels must be accessible to individuals with language barriers and those with disabilities.

Support Digital Navigators in the Community
Implementing local "Digital Navigators" could provide residents with tailored training and serve as reliable sources of information on new technologies. These navigators can also help identify gaps in knowledge and develop needs-based classes and workshops. Special-ized navigators can support the needs of Veterans, formerly incarcerated individuals, and people needing help with telehealth.

Support and Expand Community Centers, Churches, and Libraries
Senior and community centers have the potential to be vital contributors to community education and internet access. However, securing funding for programs and staffing is essential for realizing this potential. Churches, integral to the Gila County community, could act as pivotal centers for ongoing educational classes and training, capitalizing on their established congregational communities. Community Anchors like libraries should be leveraged as trusted venues for unbiased accessibility of digital information and education.

Use Community Events to Provide Information and Resources
Utilizing community events is an effective strategy to spread information and resources about internet access and digital literacy. Integrating existing community resources and trusted leaders can foster trust and enhance inclusivity.

Use Community-Specific Language
All disseminated information should be presented in the language and vernacular familiar to the region's residents, ensuring accessibility and understanding.

Graham County
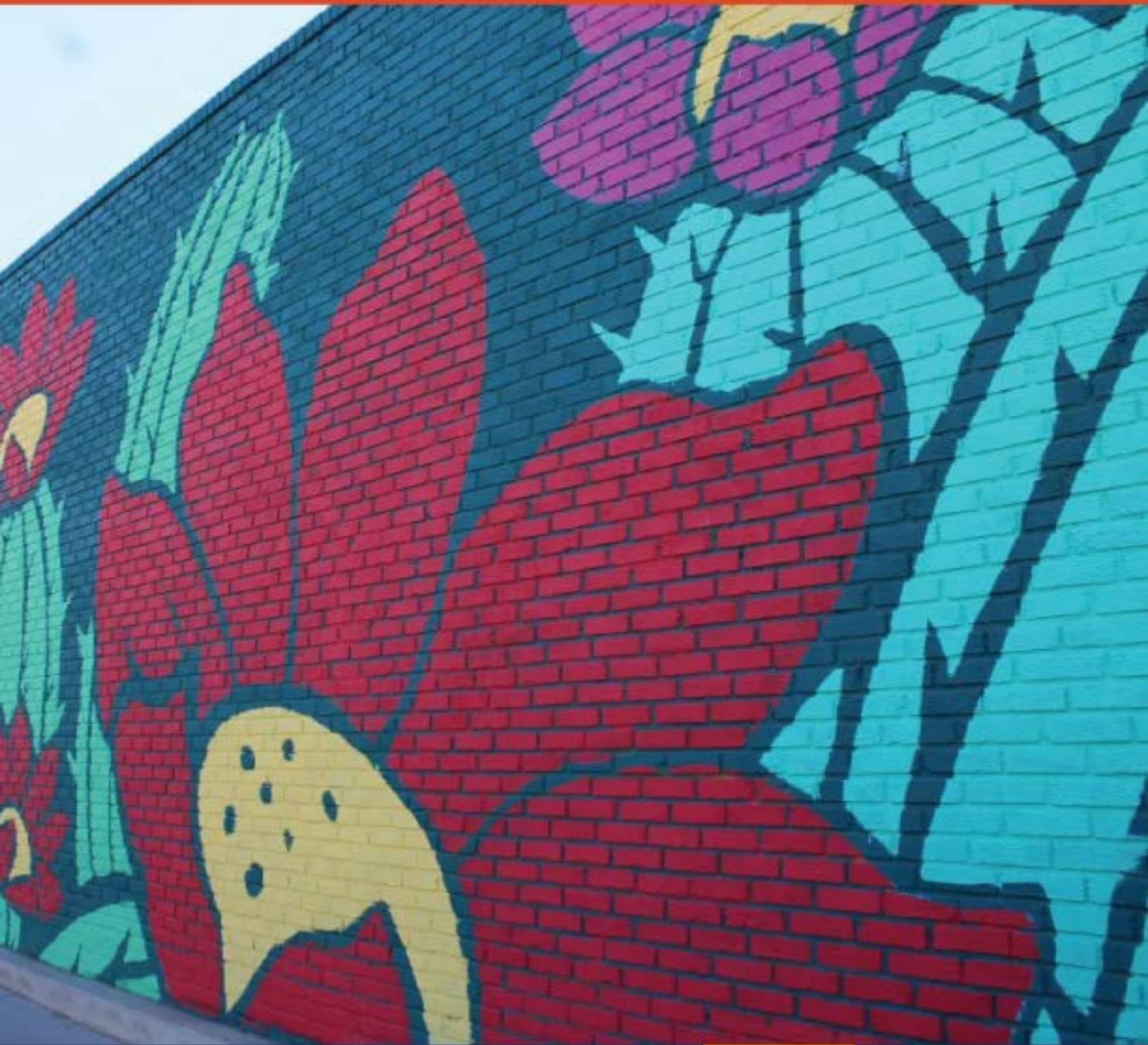
Graham County

Summary of Comments from the Community Member Survey

Residents of Graham County express a variety of concerns and frustrations, primarily centered around internet access and service quality. These issues underscore not only the challenges faced by the community but also highlight significant disparities in rural areas. At the core of these concerns is the need for more equitable, affordable, and reliable internet. The inability to access digital services is a fundamental problem, with some residents reporting a lack of digital phone cable infrastructure or reliance on outdated phone services. Bandwidth limitations are a frequent grievance. Bandwidth challenges also hinder access to essential online activities such as work and streaming.

The sense of urgency intensifies in rural regions, where internet services are often seen as disproportionately expensive and more likely affected by environmental factors like storms. The scarcity of provider options in these areas exacerbates reliability challenges. Economic concerns are prominent, with a clear need for affordable internet options for low-income individuals, highlighting the critical role of internet access in contemporary life.

Inequities in the distribution of technological infrastructure, particularly the availability of fiber-optic services, are notable. Such services are often concentrated in more affluent areas, raising questions about equitable service provision. Reliability is a major issue, with providers such as Sparklight identified for their unreliable services. The demand for more high-quality landline internet service providers further reflects the community's desire for dependable options.The rural-urban divide is a recurring theme, with rural residents feeling that their needs are often overshadowed by urban development priorities in terms of internet infrastructure. Lastly, there is a call for more transparent and consumer-friendly practices, including affordable unlimited usage plans and regulatory oversight to ensure that ISPs offer realistic connection speeds.

Quotes from the County

"It's an everyday thing where my internet is not working at all. I don't know how the schools and stuff do it where they don't have a constant use of internet."

"How do we benefit rural communities (in Graham County) with digital services without trying to turn them into big cities?"

Overview of Digital Equity Challenges in Graham County, Arizona

Graham County, located in southeastern Arizona, is a 4,621 square mile region known for its diverse geography. The county is characterized by a diverse landscape including portions of the Gila River Valley, the Gila Mountains, and the Coronado National Forest. This geographic diversity presents unique challenges to ubiquitous internet coverage.

According to census data, the population of Graham county in 2022 was nearly 39,000. It is notable that 14.5% of the county residents are over the age of 65, and persons under the age of 18 make up 26.8% of the county's population. Around 13% of the population identify as American Indian, and 33.5 % of the county residents identify as Hispanic or Latino. Income levels vary across the county. Some areas have relatively lower median household incomes, while others, particularly in and around the county seat, Safford, have slightly higher income levels. About 20% of county residents live in poverty. In 2022, the median household income was approximately $57,000, which is below the national average. Economic activities include agriculture, mining, tourism, and government employment, with Eastern Arizona College also contributing to the local economy. [52]

Barriers in Graham County

Access and Awareness
In Graham, the unavailability of the internet impacts the community's ability to access essential services and information. Unreliable internet is a persistent challenge. Areas with limited or no network access struggle to stay connected which limits the accessibility of essential online services and resources. The problem is compounded for those living in rural areas who are often unaware of available programs. Effective communication about programs and resources will be important to addressing gaps.

Cultural Barriers
Cultural perceptions and attitudes towards technology significantly influence internet engagement in Graham County. Socio-cultural factors contribute to a divide in how different groups interact with online resources. Particularly, aging individuals may be reluctant to use digital resources due to concerns about societal perceptions.

Digital Literacy Barriers
There is a noticeable digital literacy gap across generations in Graham County. Younger individuals lack the skills needed to critically evaluate online information, while older adults face a steeper learning curve and a reluctance to use new technologies.

Lack of Trust
A lack of local trust in new initiatives poses a challenge in Graham County. A lack of community support for new programs hinders participation, effectiveness, and acceptance. There is significant resistance to change and skepticism towards new technologies. This

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[52] *From QuickFacts. Graham County, Arizona by U.S. Census Bureau. 2022, h*
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resistance, rooted in long-standing habits and preferences, poses a barrier to the adoption and implementation of technological advancements.

Barriers for Covered Populations in Graham County

Barriers for Individuals with Disabilities: Individuals with disabilities in Graham County encounter significant challenges in accessing essential services and participating in online programs. These challenges encompass physical accessibility to local facilities offering digital resources and a lack of specialized tools or interfaces designed for various disabilities. This situation restricts their engagement with online services and programs, underscoring the urgent need for more inclusive digital solutions.

Barriers for Rural Areas: In Graham County's rural areas, the inconsistency and unreliability of internet connectivity present major challenges. This limited access restricts residents' ability to reach essential information and online resources, critically impacting their online engagement with necessary services like medical, veterinary care, and educational opportunities.

Barriers in Education & Literacy: Digital literacy gaps are prevalent across different age groups in the community. Older members often face challenges with basic digital tasks, while younger residents typically struggle with critically assessing online information.

Barriers for Aging Individuals: In Graham County, differing generational attitudes towards technology are evident. Older residents frequently hesitate to sign up for online resources, even when in need, due to fear of negative perceptions or access difficulties. Sociocultural factors contribute to this reluctance, with concerns about knowledge gaps and safety prevalent among older individuals. Tailoring the presentation and communication of digital resources to this demographic is vital to encourage their engagement and utilization.

Resources

Government Initiatives
Graham County's existing Community Resilience Plan and Public Safety Agency will be assets as the county advances digital access, online safety, as well as skill building and literacy initiatives.

Local Organizations
Local organizations, libraries, and educational institutions are essential resources for providing access to education and digital skills training. Some provide computers, trained staff, and opportunities to build digital skills.

Recommendations from Lived Experts

Develop Sustainable Plans
Developing a sustainable, transparent local plan is important to ensure ongoing support and resources for regional digital equity and inclusion.

Ensure Resources are Available and Accessible
Ensuring that essential resources and services are available and accessible online is important, particularly for those with limited physical challenges. Addressing the needs of individuals with disabilities and individuals with a language barrier is key.

Encourage Community Engagement
Building local trust and engagement is critical. Strategies and initiatives must involve local individuals and be community-specific. Collaboration with local organizations, libraries, educational institutions, and service providers will create a supportive network for digital access.

Incorporate Inclusivity and Representation
Ensuring that the voices and perspectives of local community members are included in digital equity efforts is vital. This includes feedback from aging individuals, people with disabilities, veterans, racial minorities, and people facing language barriers. Materials should be accessible to those with disabilities and available in multiple languages. Approaches must address cultural attitudes towards technology and resonate with everyone.

Increase Communication with the Public
Effective communication strategies are essential to keeping residents informed about available resources and programs. It is important that information be communicated in ways that encourage participation and help to overcome stigmas associated with seeking assistance.

Invest in Infrastructure
Investing in infrastructure improvements, such as fiber-optic cables, is critical in Graham County. Investment should address access and reliability issues, particularly in rural areas, to ensure the internet is high-speed and reliable.

Provide Comprehensive Education and Training
Communities need comprehensive digital literacy education and training. Programs should meet the unique needs of the community and should equip individuals with the necessary skills to use the internet effectively, safely, and confidently.

Greenlee County
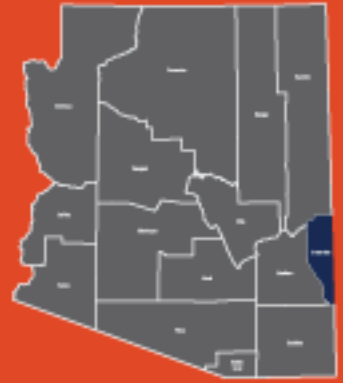
Greenlee County

Summary of Comments from the Community Member Survey

In Greenlee County, although the responses from residents are limited in number, they reveal significant concerns regarding internet access in rural areas. The feedback underscores the importance of reliable, high-speed internet for work, education, and healthcare. A notable aspect of this input is the highlighted need for fiber-optic internet services. Fiber is perceived as a more effective and cost-efficient alternative to traditional copper lines, particularly for facilitating remote work and efficient video conferencing, which are currently constrained in the region. There is an appeal to reinstating the "Tech Consultant" role at the local library. This role is seen by community members and library staff as crucial for providing residents with personalized educational training and support, thereby improving digital literacy.

Overview of Digital Equity Challenges in Greenlee County

Greenlee County sits in the eastern part of Arizona and is the smallest county by population in Arizona. The county encompasses the eastern portion of the Coronado National Forest, the Gila Box Riparian National Conservation Area, and the Blue Range Wilderness. Greenlee County's economy and livelihood is deeply connected to copper mining, agriculture, and ranching. In 2022, Greenlee County had a population of 9,302 according to Census data. Approximately 49% of the county's population identifies as Hispanic or Latino, and around 27% of residents are under the age of 18. Income levels in Greenlee County vary widely across different areas. In 2022, the median household income in the county was approximately $67,000, which is around the national average. However, income disparities exist between urban and rural communities within the county. [53]

[53] From QuickFacts. Greenlee County, Arizona by U.S. Census Bureau. 2022, https://www.census.gov/quickfacts/fact/table/US,greenleecountyarizona/IPE120222

Quotes from the County

"Some of our older generation, we don't get them as often as maybe Clifton because a lot of you can't retire and stay here. Once you're done with your job, you're out. This is all private. We live in company housing. So if I lose my job or I retire, I have to go somewhere else and start all over (with digital support services)."

"We've offered in the past, real basic stuff... I've been surprised. Really surprised at how much, what I consider basic things people don't know how to do."

"We had to put up a thing because people wanted help with legal or banking and we can't do that. It's a privacy issue. So we had to say, I'm sorry, you can bring somebody with you to help you. But we can't do that. We're not supposed to know your passwords."

Barriers in Greenlee County

Access to Stable Housing and Internet Services
Extended housing waitlists reflect a concerning scarcity of stable housing, that in turn impacts the availability of consistent internet services. This issue particularly affects contractors and transient workers who often depend on temporary accommodations like "man camps," where internet access is not a given.

Access to Devices and Services
Residents frequently turn to public facilities like libraries for internet access and printing services, indicating a gap in personal device ownership and home internet service. This gap is more pronounced among lower-income residents, for whom the cost of devices and services is a significant barrier.

Community Engagement
Greenlee County's approach to digital equity involves actively engaging with the community to understand and address specific needs, particularly regarding privacy concerns. Educational campaigns and workshops tailored to these concerns could promote a more widespread use of online services.

Digital Literacy Training
There is an evident need for digital literacy training. Regular, structured training programs could significantly reduce the digital skills gap and benefit various demographics, including seniors and younger residents who lack the critical skills necessary to evaluate online content.

Infrastructure Barriers
Certain areas in Greenlee County, notably North and South Clifton, lack access to advanced digital infrastructure like fiber-optic internet, despite previous commitments. Addressing these infrastructure gaps is critical to addressing concerns related to internet connectivity and reliability.

Limited Public Services
There are capacity challenges related to the delivery of public services, such as those provided by libraries. Challenges include devices and extending Wi-Fi coverage will significantly improve digital access and meaningful participation.

Reliance on Public Equipment and Services
The reliance on public services for internet access, as observed with library Wi-Fi usage, highlights the need for better in-home digital resources for residents throughout the county.

Privacy Concerns

Privacy concerns, particularly among Greenlee's aging community, act as a barrier to embracing online services. Addressing these concerns through dedicated initiatives could foster trust and encourage greater digital participation.

Barriers for Covered Populations in Greenlee County

Barriers Individuals with a Disability: Services and support for individuals with physical and intellectual disabilities are limited in Greenlee. In addition to devices and accessories that address physical and cognitive limitations, people will need trained navigators or support services to make participation online safer and easier.

Barriers for Rural Areas: Geographical and logistical barriers make it challenging for people in the more rural areas to access essential services. Residents of Clifton face unique challenges related to internet access, challenges that are compounded by a declining economy, housing shortages, and high levels of household poverty.

Education & Literacy Barriers: There is limited access to digital literacy and skills training. Staffing and funding challenges at the libraries make it difficult for them to deliver programs at the scale needed. While high school graduation rates are high here, pathways to higher education are limited. To address the varying needs of the communities in this region, skills training that ranges from foundational to more advanced, are needed.

Barriers for Aging Individuals: Aging individuals in Greenlee County face challenges that impact their ability to access and adopt the internet. In addition to physical challenges, stigmas towards technology hinder participation.

Barriers for Racial or Ethnic Minority Groups and people with a Language Barrier: A significant portion of the Greenlee population is Hispanic. Equity here requires services, resources, and support to be available in Spanish as well as English.

Resources

Community Connections

Most Greenlee County community members use their phones, laptops, or tablets to access the internet. Community members share information about internet resources through Facebook pages and among groups of people who already know each other. These channels and trusted community members should be included and leveraged to increase awareness and build trust as digital equity programs roll out.

Public Libraries

Libraries in Greenlee offer basic digital skills training. While these are not regularly offered

classes, they do help community members with varying levels of digital skill better partici-pate. Libraries offer free printing services up to 10 pages. This service is particularly useful for those who don't have printers at home. Libraries also provide free Wi-Fi access to the community. When the library is closed, community members can access the Wi-Fi in the courtyard. The library staff assists community members with various tasks, from down-loading photos to navigating websites. Librarians have boundaries set to ensure privacy, such as not assisting with online banking or legal matters reimplementation of a Tech Consultant at the local library

Senior Centers
Senior centers can provide digital skills training for aging individuals and can match peers or high schoolers to help with tech training.

Freeport-McMoRa
The Freeport-McMoRan mine in Greenlee County is a key economic driver, providing sub-stantial employment opportunities, community investments, and support for local busi-nesses.

Recommendations from Lived Experts

Encourage Partnership
Encouraging partnerships between senior and community centers, local schools, and busi-nesses can create impactful programs. Tech training for seniors led by high school students could be helpfull. Collaborations with service providers, local businesses, and community leaders are essential for the rejuvenation of towns and enhanced community life.

Expand Digital Infrastructure
There is a pressing need for better digital infrastructure, particularly in areas lacking high-speed internet. Engaging with service providers to extend fiber and other advanced services to rural areas ensures that these communities are not left behind.

Focus on a Thriving Economy
Fostering a thriving economy involves ensuring that every individual, including contractors and transient workers, has the opportunity to participate. Key to this is providing stable housing and consistent internet access, which are vital for attracting and retaining resi-dents and businesses, thereby stimulating economic growth.

Focus on Public Safety
Ensuring digital safety is as important as physical safety. Addressing privacy concerns, particularly among older residents, through awareness campaigns, online safety work-shops, and secure internet access points is vital for fostering trust and encouraging digital adoption.

Foster Resilience

Resilience in Greenlee County means adapting to and overcoming digital inclusion challenges. The community's proactive approach in identifying and addressing issues like infrastructure limitations and generational digital disparities is commendable. Collaborative initiatives, such as pairing youth with seniors for tech training, demonstrate innovative strategies to overcome these challenges.

Increase Accessibility and Access

Improving access to services provided by institutions like libraries, including increasing the availability of public-use devices and expanding Wi-Fi coverage, is crucial. The addition of Digital Navigators and adequately trained staff can address connectivity issues and meet the diverse needs of the community, including those with disabilities, language barriers, and the aging population.

Provide Regular Opportunities for the Community to Learn Digital Skills

Some residents lack even basic computer skills. The library's digital literacy training is a positive step. Regular, structured programs, potentially in partnership with schools or community centers, will help to ensure that all community members, regardless of age, become digitally proficient.

La Paz County
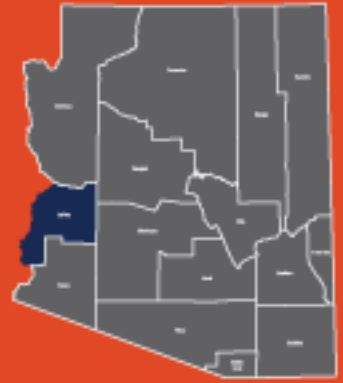
La Paz County

Summary of Comments from the Community Member Survey

In La Paz County there persists a belief that the allocation of funds is biased toward large cities, leaving small towns with severely limited resources. La Paz has a small desert town, Quartzsite, that experiences seasonal population swelling taking the town to a population of a million and a half. While essential to the economy, the swelling makes it challenging for the region to meet the data and connectivity needs of its growing population. The town highlights the necessity for accurate representation beyond census numbers to address real challenges and emphasizes how population swells impact the quality of life, particularly during winter.

Limited internet access during winter months affects businesses and residents, overloading systems, and impacting cell phone service and broadband. The lack of reliable internet hampers education, business growth, and telehealth adoption, while also hindering the development of medical services. One participant questions why fiber infrastructure passing through the town isn't accessible and calls for a trunk system to expand access. The community's struggle for attention and support from larger political entities is evident. The challenges of attracting new businesses and residents without proper infrastructure, including reliable internet, are discussed, along with concerns about economic development and corporate interests.

Local leadership is recognized as helpful, but state and federal assistance is sought for specific issues. The community grapples with mixed reactions to technology and seeks creative solutions. Reliable communication in emergencies is stressed, and the impact of COVID-19 on the town's resilience is acknowledged. The importance of improving internet access for quality of life, remote work, and economic growth is highlighted, along with affordability concerns and potential government funding. The community's resilience and adaptability are commended, and collaboration between communities to access resources is proposed. Local voices and advocacy efforts are seen as crucial,

along with the exploration of multiple funding sources. A survey for collecting community feedback and the concept of "braiding" funding sources are mentioned. Humor and camaraderie punctuate the discussion, recognizing community members' dedication to finding solutions.

Overview of Digital Equity Challenges in La Paz County

La Paz County is situated in the western part of Arizona, bordering the Colorado River to the west and California to the west and south. The county features a diverse landscape, encompassing desert terrain, the Colorado River, and portions of the Sonoran Desert. La Paz County, like many counties in Arizona, may be subject to specific financial considerations related to water management and conservation due to its location along the Colorado River.

La Paz County is the second smallest county in Arizona by population with 16,506 residents as of 2022. The population of the county tends to lean toward an older population, with nearly 42% of its population aged 65 or older. Over 17% of the population identifies as American Indian, while 27% is Hispanic or Latino. Income levels in La Paz County tend to fall below the national average. In 2021, the median household income in the county is approximately $40,000. 53 While some areas benefit from tourism-related industries and retirees, residents in rural areas don't see the same benefits.

Barriers in La Paz County

Access and Infrastructure
The issue of access is twofold: First, physical infrastructure passes through local towns but is not accessible to the residents. This raises questions about why existing resources are not being utilized for the benefit of the local community. Internet and cell phone service are unreliable, especially in rural areas. Second, the seasonal influx of visitors strains the already limited internet resources, affecting permanent residents and businesses. This seasonal variation makes it difficult to maintain consistent service. The seasonal 'Swell' increases the population from 2,500 residents listed on the census to upwards of 750,000 temporary seasonal visitors, only registered with the Bureau of Land Management (BLM).

Being Left Behind
In La Paz County there is a sense of resignation that even a 10-year plan to address connectivity is more of a "wish list" than a practical roadmap, adding to community stress and skepticism. These deeper insights reveal a community grappling with complex, interconnected challenges that go beyond just "getting online." The issues touch on social inequity, economic development, and overall quality of life. The lack of internet also hampers the community's growth prospects, affecting everything from education to emergency services.

Cost
Barriers associated with cost are not just about monthly fees but also includes the prohibi-

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53 From QuickFacts. La Paz County, Arizona by U.S. Census Bureau. 2022,
https://www.census.gov/quickfacts/fact/table/lapazcountyarizona,coconinocountyarizona,apachecountyarizona,yavapaicountyarizona,US/PST045222

tive upfront costs of equipment. These costs make it difficult for residents, particularly those from low-incomes, to even get started. These community members feel left out, especially when they can't even afford the initial installation costs.

Digital Literacy
There is a pervasive lack of comfort and digital skills across all demographics in La Paz. This skills gap is particularly impactful for members of covered populations.

Quality of Life and Medical Needs
The lack of reliable internet has a domino effect on the delivery of essential services like healthcare. Older residents, for example, can't access medical services that require a stable internet connection. This affects their ability to age gracefully and with dignity in their own community. The lack of internet also hampers the community's growth prospects, affecting everything from education to emergency services.

Reliable Internet
The inconsistency in service affects various aspects of life in the region. For businesses, unreliable internet means lost sales opportunities, as they can't process credit card transactions. The unreliability of the internet leaves students unable to complete schoolwork online. For residents, the service is so spotty that they can be locked out at different times, making it unreliable for work, essential service, education, or healthcare needs.

Trust/ Safety and Security Concerns
Free Wi-Fi spots are not secure, posing a risk to users throughout the region.
The ongoing connectivity challenges have led to a stressful environment. Residents feel that their needs are not being addressed. They lack trust in the system and in the state agencies they feel are responsible for their systemic neglect.

Barriers for Covered Populations in La Paz County

Barriers for Individuals with Disabilities: LaPaz County residents with disabilities face challenges accessing medical care. One participant mentioned the difficulty in obtaining Wi-Fi, which is essential for receiving medical exercises and blood work paperwork. The participant used to go to the senior center for Wi-Fi, but it lost its computer and Wi-Fi. Libraries were not considered an appropriate alternative for these needs. Support systems for people with disabilities are limited leaving many unable to access online spaces.

Barriers for Rural Areas: LaPaz County highlights the struggles of people in rural areas, particularly in accessing reliable internet service. Participants mentioned that they are resilient people who make do with what they have, but are reaching a point where they can't survive without better digital infrastructure. The community faces challenges with unreliable cell phone and internet service, affecting both residents and businesses. There is a sentiment that the state government doesn't fully understand the extent of the challenges faced in these communities.

Barriers in Education & Literacy: A significant number of homeschooled youth depend on the internet for their education, yet the limited accessibility and reliability of internet services, particularly during peak tourist seasons, pose challenges in completing schoolwork. Additionally, the community exhibits lower levels of digital literacy, prefers traditional methods of communication such as hard copy mail, and generally self-identifies as not being highly tech-savvy.

Barriers for Aging Individuals: The challenges faced by aging individuals center around accessing medical care. One participant mentioned that they have to drive to another location to get Wi-Fi for their medical needs and shared that they are not the only ones facing this issue. Some older residents have been moved out of the community by their families due to these challenges. The lack of reliable internet service makes it difficult for older individuals to age in place with grace and dignity.

Barriers for Individuals from a Racial or Ethnic Minority Group: Thriving in LaPaz County communities means it is inclusive, where every individual—even someone facing language barriers—has the right to the resources they need to participate fully in society.

Resources

Community Engagement
Community members are the region's greatest asset. They share information about internet resources through Facebook pages and among groups who know and trust each other.

Free Internet
Free internet is available at the libraries and at places like McDonald's. However, the free access is limited and not secure.

Recommendations from Lived Experts

Address Affordability
One participant mentioned the example of Ashton, Oregon, where the entire town has free internet access. This is funded through taxes and has been successful in providing equitable internet access. For low-income families in La Paz, a solution that addresses barriers related to cost is essential.

Create a Scalable Plan
The plan should be scalable to accommodate the LaPaz County community's unique demographic shifts, such as the seasonal influx of a large number of people - this is unique to this county.

Develop and Grow Public-Private Partnerships
Leveraging relationships with multiple service providers to offer more affordable and reli-

able services is vital for LaPaz County.

Encourage Community Input and Support
Collaborate with community members and share information about available resources through platforms like Facebook. The community feels that state-level solutions often do not address their unique challenges. Tailored solutions informed by the local community are needed.

Focus on Local Rather Than State Level Solutions
The need for reliable internet for local businesses was highlighted, suggesting that improving internet access could also boost the local economy. The community feels that state-level solutions often do not address their unique challenges. Tailored, local solutions are needed.

Identify Better and More Sustainable Solutions
People do utilize free internet services available at the library and McDonald's. However, these are not optimal solutions and are often used by visitors rather than local residents.

Improve Digital Literacy Through Community Education and Training Programs
Limited internet access and digital literacy skills pose substantial obstacles to education, particularly impacting homeschooled students who struggle with completing homework and engaging in online learning due to unreliable internet. To make education accessible to all, it is crucial to overcome these barriers. Enhancing digital literacy through community education and training programs is key, and creating pathways to high-wage jobs and higher education will serve as catalysts for economic development.

Plan for Economic Development
Reliable internet is crucial for local businesses in LaPaz County, especially during the winter season when the county sees the most business activity. The lack of reliable internet affects the community's economic development. A separate plan should be created to address key needs of tribal communities.

Prioritize Public Safety and Build Trust
The lack of reliable internet service poses a significant risk to public safety. Emergency services are harder to access, and life safety issues become magnified when connectivity is unreliable. In a world increasingly reliant on digital communication, the absence of reliable internet can be life-threatening. It is important to ensure that free or public Wi-Fi services are secure and users are protected from potential risks. There is skepticism about promises from fiber companies that have not been fulfilled. LaPaz County wants a plan that is realistic where people are accountable.

Respect Community Resilience
Resilience in the face of adversity is a defining characteristic of LaPaz County. However, resilience should not mean making do with subpar services. The state needs to understand the unique challenges LaPaz County faces, from unreliable cell phone and internet service

to limited resources.The community is resilient and tries to "get by with what we have," but this is not a sustainable solution for the long term.

Share Resources and Information Widely
Sharing Information about available internet resources is often shared among community members through Facebook pages and among groups that already know each other. Utilizing community networks and social media to disseminate information about available resources and services.

Think About the Long-Term
The LaPaz County community is looking forward to a 10-year plan, which they hope will be more than just a "wish list" but a realistic roadmap for digital equity in their communities, locally.

Maricopa County

Maricopa County

Summary of Comments from the Community Member Survey

In Maricopa County, survey responses paint a multi-faceted landscape of concerns across the county including poor speed, unreliability, lack of access, and high costs. There is a collective call for more competition and an urgent response to the intersectional challenges faced in the broader community. Respondents complained of latency and bandwidth limitations during peak usage hours which they believe can be ameliorated by increased competition. There are distinct mentions of the challenges faced in underserved neighborhoods, where issues of slow speed, signal loss, and intermittent connectivity persist. These are considered symptomatic of larger systemic issues, including a lack of infrastructural investment in such communities.

Affordability emerges as a recurrent theme, with many respondents identifying the cost of internet services as a significant financial obstacle, particularly for low-income households. This issue is exacerbated by the limited number of service providers in certain areas, which respondents view as antithetical to competition and thus indirectly responsible for the perpetuation of high prices.

There is also a pronounced call for the implementation of targeted digital skills and literacy programs, particularly for aging adults, people with disabilities, veterans, and formerly incarcerated individuals who may face difficulties in effectively navigating the digital landscape. Meanwhile, concerns are raised over the state of existing infrastructure, with users frustrated by outdated technology and the inaccessibility of high-speed internet even in metropolitan areas.

Additionally, community members advocate for the establishment of more public internet access points, particularly in economically disadvantaged communities. This suggestion is seen in the context of a larger discourse on internet inequality and the digital divide, issues that disproportionately affect those in low-income households who are unable to afford reliable internet services.

Quotes from the County

"But of course, you're looking at places in the more rural areas that don't actually have access. Taking in consideration that people who don't know tech and want to learn tech are dealing with insecurity, possibly shame, and fear."

"Making sure that we understand that people aren't necessarily just being stubborn for the sake of being stubborn. But there's an emotional route to the way that they're acting or the way that they come at technology. They feel afraid or embarrassed."

"Trust is a big one. You can't expect people to just automatically feel comfortable working with someone. There has to be a system where they can build a relation-ship, build trust."

The comments touch upon community-specific needs that extend beyond traditional considerations of internet services. These include demands for enhanced security measures on social media platforms, pedestrian-friendly infrastructural improvements, and better access to public transportation. Maricopa County feedback reveals a complex set of challenges and aspirations and a complexity of issues, from basic service quality and affordability to broader socio-economic disparities, that require multifaceted solutions that engage both public and private stakeholders.

Overview of Digital Equity Challenges in Maricopa County

Maricopa County, located in the central part of Arizona, is the state's most populous county and is home to the capital city, Phoenix. Maricopa County covers a vast area of approximately 9,200 square miles and boasts diverse geography. Its central location in Arizona makes it a hub for commerce, culture, and outdoor activities. Maricopa County's economy is dynamic, with a focus on technology and healthcare sectors. It hosts numerous corporate headquarters and has a robust small business community.

4.5 million people call Maricopa County home, with most of these residents living in the Phoenix metropolitan area. Residents over the age of 65 make up 16% of the county's population, and over 30% of the county's population identifies as Hispanic or Latino. African Americans make up nearly 7% of the population, And around 5% of the residents identify as Asian American. Maricopa County is the economic engine of Arizona, with a diverse economy that includes finance, healthcare, technology, manufacturing, and tourism. In 2022, the median household income in the county was around $73,000, reflecting its position as the state's economic center.[54] However, income disparities exist, with variations between urban and rural areas where incomes are markedly lower.

Barriers in Maricopa County

Access and Affordability
A significant gap in internet access exists in Maricopa County, particularly in low-income, rural and tribal areas, where proper infrastructure is lacking and the cost of internet services is prohibitively high. Reliability and speed concerns are reported throughout the county.

Awareness
Maricopa County residents report limited awareness of available resources, services, and programs designed to address access, adoption and skill barriers. This lack of awareness presents a significant barrier to participation.

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[54] *From QuickFacts. Maricopa County, Arizona by U.S. Census Bureau. 2022,*
https://www.census.gov/quickfacts/fact/table/maricopacountyarizona,US,greenleecountyarizona/IPE120222

Education and Digital Literacy

Community members report lacking the skills needed to fully and safely participate online. This deficiency in digital skill spans from basic computer use to recognizing and avoiding online risks. For those in marginalized group skills gaps are compounded by other barriers. Without digital skills people are unable to access education, jobs, telemedicine, and services.

Trust and Safety

Community members report distrust of the government and government run programs. There is also a lack of trust in internet service providers, who are perceived to have overstated their coverage in the county. Community members report concerns about online privacy and security and want help keeping themselves and their families safe. Trust is a recurring theme; building it is essential for community engagement, particularly in marginalized communities and on tribal lands

Language Barriers

Language barriers, particularly in Hispanic communities, hinder digital inclusivity and participation. The lack of digital skills among aging adults further isolates them, making it difficult to access essential services or connect with their community.

Barriers for Covered Populations in Maricopa County

Barriers for Individuals with Disabilities in Maricopa County: Individuals with disabilities encounter difficulties in accessing online services, resources, and medical care, especially those from low-income households or who are veterans. The lack of affordable, reliable Wi-Fi further exacerbates these challenges, hindering their ability to live with grace and dignity.

Barriers for Rural Areas: Rural regions of Maricopa County, including tribal lands, face significant challenges due to unreliable and unaffordable internet connectivity. This limits access to critical services, educational opportunities, emergency assistance, and hinders economic growth. Capacity challenges in rural areas make it difficult to deliver navigator services or provide ongoing support.

Barriers in Education & Literacy: In Maricopa County, foundational educational programs are essential, not only for basic digital literacy but also as a stepping stone to more advanced workforce skills. These programs should be structured to progressively develop competencies that align with current and future job market demands, ensuring that individuals are well-equipped for the digital aspects of various career paths. Key local institutions like nonprofits and libraries as well as Maricopa County Colleges and Arizona State University play a vital role in designing and delivering these programs. Programs should be accessible, should be delivered at a pace that meets the needs of the learner, and should be available in multiple languages.

Barriers for Aging Individuals: Aging individuals face multiple challenges in adapting to digital technology, including discomfort with online environments, safety concerns, and keeping pace with rapid technological advancements. Many have internet access but lack the skills for effective usage. Older adults often depend on younger family members for online tasks and may require assistance for tasks like filling out online applications. Health conditions can further impact their technology use. The need for personal connections, a comfortable learning pace, trust, and peer teaching was emphasized to engage older adults effectively.

Barriers for Veterans: Veterans in Maricopa County face unique challenges in digital literacy and transitioning to civilian digital environments. Addressing these barriers requires targeted digital literacy programs and advanced skills training. Collaboration with local educational institutions and veteran organizations is key to providing relevant support and facilitating veterans' access to high-wage job opportunities. Ensuring the availability of veteran-specific resources and technology access is essential for their successful integration into a digital-centric economy.

Barriers for Incarcerated Individuals: While incarcerated, individuals often have restricted or no access to current technology and the internet. This gap can leave them significantly behind in terms of digital literacy and skills. Upon reentry, justice-impacted individuals may lack basic digital skills that are now considered essential for everyday tasks, such as searching for information online, digital communication, and applying for jobs and accessing services. Most jobs and educational opportunities require at least basic computer skills. The lack of these skills can be a major barrier to employment and education.

Barriers for Individuals from Racial or Ethnic Minority Groups: Economic constraints and a lack of resources pose barriers for individuals from racial and ethnic minority communities. These barriers impact access to the internet, technology, digital skills, and critical resources. For refugee communities, challenges extend to a lack of digital literacy, affecting both individuals and families. There is a need for culturally relevant communication and education strategies and support that is tailored and reflective of the community. Local educational institutions can play a pivotal role in providing these services.

 Barriers for Individuals with a Language Barrier: Language barriers, particularly in Hispanic communities, create significant obstacles accessing and utilizing digital resources. Internet-based resources and essential services are primarily available only in English. This restricts non-English speakers from effectively utilizing critical services. Additionally, programs and services often fail to accommodate the diverse values, norms, and communication styles of different cultural groups. This lack of inclusivity can discourage engagement and limit the effectiveness of online resources for those from varied cultural backgrounds.

Resources

Local government initiatives in Maricopa County focus on bridging the digital divide by offering resources, subsidies, or grants for internet access and devices to low-income residents and specific populations. Programs offered by Affordable Housing have been particularly impactful. By aligning capacity building efforts with existing projects, these initiatives can extend their reach and accelerate their impact.

Libraries, Nonprofits, and Community Centers
Some community centers, libraries, and nonprofits in Maricopa County offer digital literacy and skills training and provide access to technology. These organizations often provide targeted support that caters to the unique needs of individuals with a disability, veterans, aging individuals, minorities, incarcerated individuals and people with a language barrier. Where possible, capacity building should be braided with existing programs leveraging models with proven efficacy and impact.

Internet Service Providers (ISPs)
Some ISPs provide affordable or subsidized internet plans for low-income households. Efforts to increase awareness of these plans should include outreach campaigns and support for enrollment, assisted by local digital navigator groups. Outreach should be in the language of the local community and should address all accessibility challenges for people with disabilities.

Schools and Educational Institutions
Schools and higher education institutions provide internet access, devices, learning opportunities, and a wide range of support for students. Arizona State University and the Maricopa Colleges provide accessible digital and financial literacy and skill-building programs, along with pathways to certificates, credentials, and degrees. They have deep experience creating and providing education to covered populations. Engaging with these institutions will help the state to meet its education and workforce objectives and will significantly contribute to the economic mobility of covered populations in the region.

Local Organizations and Online Resources
There are various Maricopa County organizations that provide digital literacy, skill-building and workforce training programs for covered populations. Programs are available in person, online, and in hybrid formats.

Recommendations from Lived Experts

Bridge Language, Cultural, and Accessibility Barriers
Provide training, classes, and support services in culturally sensitive ways, multiple languages, and accessible formats. Develop and support education programs that are relevant and accessible, and that reflect the demographics of Maricopa County's diverse communities.

Engage Aging Individuals and People with Disabilities as Educators to Help Design Solutions

Focus on digital literacy programs for aging individuals and individuals with disabilities. Encourage their involvement as learners and potentially as educators to create a more comfortable and relatable learning environment.

Engage Diverse Leaders to Design Programs that Reflect the Community

Actively involve community members, including those with disabilities, in teaching, supporting, and planning digital equity initiatives to ensure they are tailored to the specific needs and challenges of all groups within Maricopa County.

Evaluate Progress and Adapt to the Evolving Needs of of the Community

Continuously assess the gaps in Maricopa County and adapt strategies to address evolving needs and challenges.

Foster Resilience

Invest in expanding internet access in high-need urban, rural, and tribal areas in Maricopa County to bolster resilience in these communities. Recognize that internet connectivity is essential for accessing critical services, educational opportunities, and emergency assistance, particularly in times of adversity.

Implement Accessible Digital Literacy and Skill Building Programs:

Implement comprehensive digital literacy and skill building programs, focusing on covered populations and the unique challenges they face safely and effectively engaging online. Programs should be adaptive and inclusive, promoting economic inclusivity and addressing the changing landscape of technology. K-12 schools should prioritize integrating digital literacy into their curriculum. Digital literacy and skill-building programs should accommodate diverse learning styles, preferences, and accessibility needs. Resources should be available in various formats and languages to support individuals with physical or intellectual disabilities.

Invest in Infrastructure

Prioritize the development of reliable, affordable, and accessible internet infrastructure, with a special focus on rural, underserved areas, and accessibility for people with disabilities. A recent investment in broadband and digital equity can serve as the catalyst for connecting the rest of the region, including residents in rural parts of the county and those in high-need urban areas.

Prioritize Trust, Safety, and Security

Develop accessible and user-friendly online resources for community members to access public services and emergency assistance. Ensure that digital accessibility is a priority in public safety initiatives. Build trust through personal connections and relationships by engaging with community members in ways that respect their emotional barriers and fos-

ters a sense of belonging. Ensure programs designed to help people be safe online are available and accessible. Hiring and training individuals from local communities to become digital navigators would help to ensure the needs of the community are met and would help to build trust.

Support Community Engagement

Involve community members in planning and implementation to ensure that initiatives are tailored to the specific needs of Maricopa County. Engaging individuals from within the community to teach and support their peers can be particularly effective. Involve community in the development of content and resources to ensure they resonate with the community prior to deployment. Collaborate with local organizations, governments, and businesses in Maricopa County to collectively address the gaps and develop comprehensive solutions, together.

Tailor Support to Vulnerable Groups

Create targeted support programs for the specific needs and challenges of covered populations, including veterans, incarcerated individuals, aging individuals, people with a disability, and members of a racial or ethnic minority group. Resources and materials must be accessible and user-friendly for individuals with varying levels of skill and ability. Hispanic communities often show reluctance to embrace new digital skills leading to a reliance on younger family members for digital assistance. Engaging local community members in educational roles can provide more culturally attuned and effective training.

Mohave County
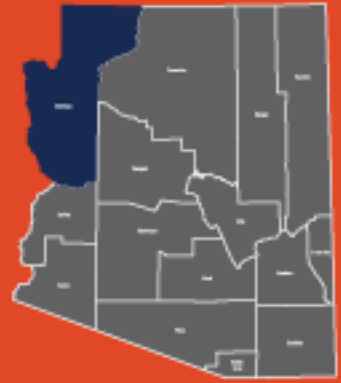
Mohave County

Summary of Comments from the Community Member Survey

In Mohave County, a pervasive issue mentioned by users is the limited availability of internet service providers. The absence of choices often leads to monopolistic or duopolistic scenarios, resulting in high costs and subpar services. Users express discontent with unreliable internet services that frequently suffer outages and disruptions, adversely affecting the ability to work, study, or access crucial information.

The disparity in internet access between urban and rural areas is a recurrent theme. Rural users highlight the challenges associated with poor or nonexistent high-speed internet signals. This lack of access is not just an inconvenience; it's a barrier to safety and education, issues that have been exacerbated by the demands of remote learning during the COVID-19 pandemic.

Affordability is another significant concern. High costs strain household budgets, and there is a strong sentiment that the internet should be considered a utility, subject to regulation, which would either make it free or more affordable. This idea is particularly salient in a society where internet access is increasingly viewed as a necessity rather than a luxury.

Respondents voice frustration and express a need for competitive pricing and diverse plans, indicating a demand for options tailored to meet individual needs and usage. The call for competitive pricing, improved service quality and speed, is particularly profound in rural areas where users often contend with slower speeds and frequent disruptions. The community also voiced a desire for financial credits for service outages, similar to what is sometimes offered for electricity outages. Users feel that paying for a service that is not consistently available is unfair.

Quotes from the County

"You get just a tiny bit (of wifi access) outside of that incorporated area it's zero (access). You know, you get, four or five miles away from town and the service available to you doesn't exist."

"Where I live for 50 bucks a month, you get five megs and it's actually gotten worse."

"They (students) don't know how to use a computer. They can use a smartphone. But when it comes to, like, where do I find my downloaded file or how do I upload my assignment, or how to turn it on, they don't know how to do that."

"Local bars with internet are extremely common in Mohave rural communities."

Overview of Digital Equity Challenges in Mohave County

Mohave County, located in northwestern Arizona, is the fifth largest county in Arizona by population. Mohave County encompasses a vast and diverse landscape, including portions of the Mojave Desert, the Grand Canyon-Parashant National Monument, and the Colorado River.

The population of Mohave County is overwhelmingly white with 75% of residents identifying in this category. Around 18% are Hispanic or Latino, and 3% identifying as American Indian. Income levels in Mohave County can vary across the region. While some areas may have lower median household incomes, others, especially in more urban areas like Kingman and Lake Havasu City, have higher income levels. In 2022, the median household income in the county was approximately $49,738, which is significantly lower than the national average. 55

Barriers in Mohave County

Access and Infrastructure
Mohave County communities lack reliable internet infrastructure. People living just a few miles outside of town centers often have no service at all. Libraries and community centers, traditionally fallback options for internet access, are struggling to provide services due to poor connectivity.

Affordability
The cost of internet service is a significant barrier for many households, particularly for those that are low-income. In some cases, people report paying well over $100 per month for limited and unreliable service.

Digital Literacy and Skills
There is a notable gap in digital literacy and technology skill among aging individuals. Some tradeskill workers report having never used a computer. This lack of skills makes it difficult to navigate the digital world, even for basic tasks. People report having trouble accessing workforce development programs or getting tax help because they are unable to navigate online systems.

Gaps in Internet and Device Access and Use
Some students at Mohave Community College have either a laptop but no home internet or home internet but no computer. They need both to make it work.

Limited Capacity for DSL
In Mohave County, all available DSL capacity is sold out, forcing people to rely on libraries for internet access.

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55 From QuickFacts. Mohave County, Arizona by U.S. Census Bureau. 2022, https://www.census.gov/quickfacts/fact/table/mohavecountyarizona,US/IPE120222

Quality of Cellular Service
In some areas of Mohave County, the cellular service is 'terrible,' and the primary internet service provider is out of state.

Resistance to Technology
There are individuals in Mohave County who are resistant to using technology, either due to fear or a sense of cultural pride. While email has been available for decades, some see it as a new concept and are hesitant to use it.

Transportation Issues
Lack of public transportation makes it difficult for people to access internet centers like libraries or VFWs.

Trust and Reliability
There is a lack of trust in service providers, particularly in rural areas of the County, where providers have overstated their capabilities. Accurate surveying of internet speeds is needed to address this issue.

Barriers for Covered Populations in Mohave County

Barriers for Rural Areas: Residents in Mohave County struggle with unreliable internet access. Some residents in outlying areas go to libraries to use the internet because they can't get reliable service at home. Inconsistent and spotty coverage creates the need for accurate speed testing.

Barriers in Education & Literacy: Even young students in Mohave County, often considered digital natives, lack the skills needed to use a computer effectively. They can use smart-phones but struggle with tasks like finding downloaded files or uploading assignments. Barriers for Aging Individuals: Older individuals in Mohave County struggle with economic challenges. Some retirees, especially those on a fixed income, have never used a computer and expect libraries to train them. Older individuals face challenges in adapting to technology and asking for help.

Barriers for Individuals who are members of a Racial or Ethnic Minority Group: Many non-English speaking residents in Mohave County struggle to understand and navigate digital platforms without language assistance.

Resources

Internet Access
Mohave County libraries and educational institutions like Mohave Community College provide internet access. Libraries provide a variety of resources including help for people

taking online classes and exams, printing, and faxing. However, it is challenging to provide those services with unreliable internet.

Subsidy Programs
During the pandemic, some subsidy programs were introduced that repurpose E-Rate money. For example, people who qualify for Medicaid can get internet for around $15 a month instead of $50.

Recommendations from Lived Experts

Address Affordability and Availability
Advocate for an inclusive economy that is accessible to all. Address the high costs of internet services, especially in Mohave County rural areas with limited and expensive options. Encourage competition among service providers to lower costs and improve service quality. The cost of internet service should be comparable for everyone in Mohave County, regardless of where they live. For example, someone living in a rural area should not have to pay more for lesser service. Internet service should be available even in rural or remote areas of Mohave County. The lack of service in such areas was highlighted as a significant issue.

Focus on Connectivity and Infrastructure
Prioritize investments in improving Mohave County's digital infrastructure. Focus on enhancing both the "last mile" connectivity to homes and the "middle mile" connecting ISPs to the broader internet in Mohave County. Conduct accurate surveys of internet speeds, especially in rural Mohave County areas, to guide infrastructure improvements.

Foster Resilience and Develop Strategies to Ensure Communities Have Reliable Internet Access
Recognize the importance of digital inclusion in Mohave County's ability to recover from adversities. Develop strategies to ensure communities have reliable internet access and can adapt to challenges like transiting to remote work or online schooling during crises. Focus on building digital resilience through infrastructure that can adapt to changing circumstances.

Invest in Telehealth
Invest in improving internet access to support healthcare delivery, especially telehealth services. Address areas, particularly rural areas, that lack access to telehealth due to poor or no internet connectivity.

Prioritize Education for Everyone
Recognize education as a fundamental right and address the digital barriers faced by students in the region. Enhance the digital infrastructure of community centers and libraries to ensure they can provide reliable internet services. Implement programs to equip students with the necessary digital skills and ensure they have access to both computers

and the internet. Prioritize initiatives that bridge the digital divide, ensuring education is accessible regardless of socio-economic status or location throughout Mohave County.

Prioritize Public Safety
Understand the implications of digital equity on public safety and emergency response services in Mohave County. Emphasize that robust and reliable connectivity is a critical public safety issue.

Remember That Internet is Not a Luxury
The opinion that home internet access is a luxury needs to change. It should be considered a necessity, much like electricity, especially for activities like education, access to vital services, and job interviews, which are increasingly being conducted online.

Seek Federal Funding to Help with Infrastructure Cost
Government funding could be used to infuse money into local companies to mitigate the risk of building expensive infrastructure and support digital navigation.

Navajo County
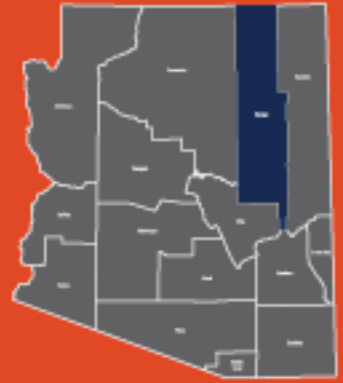
Navajo County

Summary of Comments from the Community Member Survey

In Navajo County, there is a strong community-driven demand for improvements in the reliability, affordability, and accessibility of the internet. These improvements are crucial not only for everyday life but are necessary for programs to effectively address the unique needs of the population.

Concern about the limited selection of internet service providers is notable. This scarcity, similar to what's seen in other counties, results in a lack of competitive pressure, which often leads to increased prices and compromised service quality. This problem is further exacerbated by the reported reliability issues with current internet services, which impact critical areas like work, education, and healthcare. The issue of affordability is also a repeated concern. The high cost of internet services remains a major obstacle for many families and individuals, necessitating immediate and focused attention.

There is distinct concern regarding populations with specific sensitivities, particularly those with electrical hypersensitivity (EHS) or environmental sensitivities. Public feedback indicates a need for wired internet connections to meet the particular needs of this group. Addressing such specific requirements highlights the criticality of diverse and inclusive internet access options.

Tourism presents a unique challenge that isn't commonly seen in other counties. It acts as a double-edged sword: while beneficial for the local economy, it also overburdens the existing internet infrastructure. This results in decreased service quality during peak tourist seasons, which is problematic for both visitors and residents.

Improving infrastructure is seen as a key solution to these challenges. Investments in expanding cellular towers and laying fiber optic lines are believed to enhance service quality and availability. This is particularly vital for people using the internet for educational purposes, and in low-income areas. The

Quotes from the County

"The internet's important to the students, so we've been looking at the affordable connectivity grant from the federal government. And unfortunately, some of the places that offer internet to our more rural places are not on the plan. And I don't know if it's their choice. The federal government's choice, whose choice. But, I mean, if you don't have hard wire internet in the area, you have to go satellite and, because you don't have cell service out there, it's tough."

"There's a lack of internet access, it's just astounding. Even not so much from an education standpoint, but just, you know, getting access to the internet for business using Google Maps, knowing when things are open, I mean, there's just no internet here. I mean, it's insane."

concept of establishing community access points for free or public Wi-Fi is highly favored. These access points could help those who can't afford home internet access and provide connectivity for county visitors.

Overview of Digital Equity Challenges in Navajo County

Navajo County is situated in the northeastern part of the state. It shares its borders with New Mexico and Utah. The county is known for its significant Native American population, primarily consisting of members of the Navajo Nation and Hopi Tribe. These indigenous communities have a strong cultural presence in the county and contribute to its rich cultural diversity and heritage. Navajo County encompasses a diverse landscape, including portions of the Navajo Nation Reservation.

In 2022, Navajo County had a population of 108,650 residents. Around 20% of the population are aged 65 or older, and 25% are under the age of 18. Nearly 44% of the population identify as American Indian, and 12% identify as Hispanic or Latino. Income levels vary significantly among its residents. While some areas benefit from economic activities like tourism and agriculture, rural parts of the county have lower incomes. In 2021, the median household income in the county was approximately $46,000, which falls below the national average. [56]

The diversity of the Navajo community is among its greatest assets.

Barriers in Navajo County

Access and Use
There is a notable lack of infrastructure and internet availability in Navajo County that prohibits many residents from getting internet service in their homes and businesses. The impact on education, health, and the economy is profound. In rural areas and on tribal lands the impact is even more pronounced. Some communities, like Heritage and Pioneer (traditional homelands), are resistant to adopting internet technologies. Even in areas where the internet service is available, such as libraries, the service is often spotty and unreliable. The internet service market in the county is dominated by a single provider, resulting in a lack of competition and choice for residents. This monopoly leads to higher prices and less incentive for the provider to improve services.

Affordability Challenges
The cost of broadband for the entire county is prohibitively high. For residents, particularly those in low-income areas and on tribal lands, high costs of service pose a barrier to access and adoption. Even with grants, some people may not be able to afford to connect. Additionally, Navajo County is home to a significant number of single-income families. For these families, every penny counts, and any additional costs, such as taxes for infrastructure, are challenging.

[56] From QuickFacts. Navajo County, Arizona by U.S. Census Bureau. 2022,
https://www.census.gov/quickfacts/fact/table/navajocountyarizona,US/IPE120222

Cultural Considerations
Each Tribal nation has unique beliefs and attitudes towards the internet and it is important that those beliefs are honored. Cultural sensitivity and respect for sovereignty will be important as programs to increase access advance.

Barriers for Covered Populations in Navajo County

Barriers for Rural Areas: Conversations with residents highlighted the challenges faced in rural parts of the county. These challenges include a lack of accessible services, difficulties in obtaining building permits, and limited internet connectivity. Some people in rural Navajo County have to drive for hours to access basic services, including the internet.

Barriers in Education & Literacy: The importance of internet access for education, especially for remote learning, is highlighted by community members. Libraries provide internet hotspots that are often used for education but they struggle with getting the hotspots returned. There is a need for computer classes as well as skill-building. To overcome barriers related to trust, community groups could play the role of digital navigator- educating their community about the benefits and uses of the internet.

Barriers for Aging Individuals: Navajo County has an aging adult population struggling to adapt to the use of digital technologies. Offering community learning classes could help aging individuals understand how to work with digital devices and how to be safe online.

Barriers for Individuals from a Racial or Ethnic Minority Group: Insights were provided into the unique challenges faced by the Navajo Nation including communication barriers, challenges with water rights and potential future challenges related to internet access.

Resources

Libraries and Higher Education
Libraries provide digital literacy programs and support for members of the community. Universities provide "success coaches" that help students navigate online learning and digital environments.

Recommendations from Lived Experts

Collaborate and Expand Services
One idea is to collaborate with local law enforcement, libraries, and other institutions to share benefits and resources. Support and expand educational programs and library ser-

vices that can serve as community hubs for digital literacy training. Collaborate with local law enforcement, libraries, and other institutions to share benefits and resources.

Create Additional Income-Based Programs
There is a call for more income-based programs to make internet access affordable for everyone, beyond just those who qualify for specific grants.

Develop Local-Level Initiatives
There is a suggestion that the local municipalities should take charge of internet infrastructure, including satellites and towers, to ensure equal access to everyone in the county.

Educate Everyone
Students in rural areas lack the internet access necessary for remote learning, putting them at a disadvantage. Schools and libraries can serve as community hubs for digital access, ensuring that everyone, regardless of their age or background, has the opportunity for lifelong learning.

Encourage Competition Among Providers
A thriving economy is an inclusive economy. However, the high costs associated with improving internet speeds can be a significant barrier for small municipalities. Public-private partnerships could be a solution, encouraging competition among providers and driving down prices, thus making it more affordable for businesses and residents alike.

Foster Resilience In The Community
Challenges, such as natural disasters and economic downturns, are combated by strong community networks. Digital tools can facilitate these networks, but only if communities have the infrastructure to support them. In Navajo County, tax measures and community investments are often barriers to building this necessary infrastructure.

Fund Programs
There are plans to conduct digital literacy programs in libraries and educational institutions in Navajo County. These programs could be funded by grants that cover full-time and part-time personnel. Grants and funding need to be expanded to meet the needs of the population in Navajo County. Current grants are not enough to cover a full-time person / part-time person for two years to work on digital literacy.

Invest in Infrastructure
The lack of robust internet infrastructure in rural Navajo County areas and reservations, such as the Navajo Nation, is a glaring issue. Investment in infrastructure should be a priority, not just for the sake of connectivity but as a means to improve all other areas of life, from education to public safety to economic development.

Protect the Safety of the Community

Educate community members about internet safety, passwords, and avoiding scams. This is particularly crucial for vulnerable populations like aging individuals who may not be fully digitally literate.

Pima County

Pima County

Summary of Comments from the Community Member Survey

AIn Pima County, there is a clear call for improved competition among Internet Service Providers (ISPs), with residents voicing frustration over the limited choices that lead to high costs and poor service quality. Additionally, commercial activities by ISPs are perceived as negatively affecting internet speed.

While some residents express gratitude for existing digital resources, there's also a notable lack of awareness about programs working to bridge the digital divide. Affordability is a recurring theme, with particular attention paid to the needs of individuals with limited resources. Several respondents appreciate programs like the Affordable Connectivity Program but suggest that eligibility could be more inclusive.

Support for vulnerable populations and increased digital literacy efforts are also emphasized. Users acknowledge that those who are digitally savvy have a responsibility to help others who aren't as equipped. The need for internet reliability extends beyond convenience, impacting essential services like education, jobs, and healthcare.

Issues of online privacy and security are also on the radar, with residents showing concern especially for families. Positive community benefits from digital tools, like the use of Zoom during the pandemic, are acknowledged. However, there's a desire for more education on safely using digital payment platforms.

There's a strong call for focused efforts in underserved areas, including Native Nations and economically disadvantaged communities. Residents appreciate local ISPs but believe financial assistance programs could make these services more accessible. Overall, there is a consensus on the need for governmental intervention to ensure affordable or even free internet access, underlining its role as an essential utility.

Finally, there's a palpable willingness among some residents to assist in bridging the digital divide, emphasizing that collective efforts are crucial for meaningful progress.

Quotes from the County

"If you choose to live in rural communities, you shouldn't be punished for it because you can't get online. If you rely on the internet, it's like relying on electricity and water. If you move there without knowing there's no internet, that's not ideal for anyone."

Overview of Digital Equity Challenges in Pima County, Arizona

Pima County is situated in southern Arizona where it shares a border with Mexico. Tucson, the largest city, serves as a cultural and educational center for the county. Tucson is also home to the University of Arizona, which enrolled over 51,000 students in 2022. Pima is the second largest county in Arizona with a population of 1,057,597 in 2022. Around 20% of Pima residents are aged 65 or older, and just under 20% are aged 18 or younger. Just over 4% of the population identify as American Indian, and the county is home to the Tohono O'odham Nation and Pascua Yaqui Tribe. Nearly 39% of Pima County residents identify as Hispanic or Latino, and around 50% of the population is white. In 2021, the median household income in the county was around $59,000. [57]

In the Pima County community, as in many others, disparities in internet access and use persist. Pima County requires a bridge to cross the digital divide and ensure that all Pima County community members can reap the benefits of a connected world. Digital equity is a concern in Pima County, with efforts aimed at bridging the digital divide among its residents. Some individuals and communities may face challenges related to limited internet access, hindering their ability to access education, healthcare, and economic opportunities. Initiatives to address these disparities often involve improving broadband infrastructure and promoting digital literacy programs.

Barriers in Pima County

Access Disparity
A significant gap in internet access exists in Pima County, particularly in low-income, rural and tribal areas, where proper infrastructure is lacking and the cost of services is prohibitively high.

Awareness Barriers
There is a lack of awareness about available resources, services, and programs to overcome digital barriers, hindering individuals from seeking help and support.

Digital Literacy Barriers
Pima County faces a digital literacy and skills gap. The gap is particularly evident among aging individuals, people in rural parts of the county, and among people with a language barrier.

Language and Cultural Barriers
Language barriers pose barriers for non-English speakers, making it challenging to access information and services that are not available in their native language. A culturally centered approach is needed to address this gap.

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[57] From QuickFacts. Pima County, Arizona by U.S. Census Bureau. 2022, https://www.census.gov/quickfacts/fact/table/pimacountyarizona/LND110210

Infrastructure & Cost Barriers

The existing internet infrastructure in Pima County is insufficient to provide access to all residents, and the cost of internet service is prohibitively high..

Predatory Marketing

Concerns exist about predatory marketing schemes for internet services in Pima County, potentially taking advantage of covered populations.

Quality and Equity Barriers

Rural areas of Pima County receive lower-quality technology compared to more affluent areas, resulting in a technology quality gap. Ensuring equitable access to quality technology is crucial.

Reliability Issues

Internet services in rural Pima County areas often suffer from unreliability and spotty connectivity, impacting the consistent use of online tools and resources.

Transportation Barriers

The distance to public facilities with internet access, such as libraries, poses a transportation barrier, particularly for those with limited access to affordable transportation.

Barriers for Covered Populations in Pima County

Barriers for Individuals with Disabilities: Individuals with disabilities face a host of barriers including concerns about safety and security, a lack of access to accessible devices, and cost barriers for devices and internet services.

Barriers for Rural Areas: Rural parts of Pima County are among the most affected by the lack of internet access. The infrastructure is not there, and the cost is high. Libraries do provide some access, but their hours are limited. Relying on public services like Pima County libraries for internet access is not always feasible due to infrastructure limitations in rural areas. Rural Pima County communities are described as being hard-hit by the lack of internet access. The cost of building infrastructure in these areas is high and the nearest neighbor could be 10 miles away in a highly isolated community, so traditional approaches to internet service do not always work. Residents in rural Pima County often depend on community members with internet access to assist with tasks such as job applications, schoolwork, and accessing social services.

Barriers in Education & Literacy: Many people, including those with low literacy levels, rely on public services like libraries, nonprofits, and education institutions. There is a need for digital literacy as part of a broader ecosystem that includes access, connectivity, and equipment. Training is needed to help people learn to be safe online including learning to interpret information, to be aware of cybersecurity risks. For young people who are often

assumed to be digital natives, safety training is particularly important. In Pima County, those without regular internet access are challenged in finding a job, particularly when the job hiring offices are not local to rural Pima County areas.

Barriers for Aging Individuals: Pima County's aging residents have barriers related to online safety and security. They worry about and are more vulnerable to scams like phishing and catfishing and worry that their social security checks or pension checks will be stolen. Additionally, Older people often find new technology more challenging and may lack the digital skills needed to fully participate in the digital world.

Barriers for Individuals who are members of a Racial or Ethnic Minority Group: Language barriers in Pima County affect teachers who often have to serve as educators for both students and their parents, especially when the students are first-generation or non-English speakers. Pima County refugee populations and others who may not speak English fluently face language barriers which makes it difficult to navigate the complexities of internet services. Pima County community members not fluent in English also find it difficult to understand internet costs and packages.

Resources

Church-Based Technology Classes
Some local churches offer technology classes, although maintaining up-to-date devices is noted as a considerable challenge.

Community Organizations
Community organizations play a pivotal role in addressing individual and community digital inequity. The Pima County One Stop provides individuals with rent, utilities, and employment, and provides free computer classes and labs. Pima County Public Libraries offer free internet access at various locations, digital navigator support, and have a program that gives out mobile hotspots. SAAVI, a non-profit organization, focuses on education and job skills training specifically for the visually impaired, offering programs that enable participants to lead independent and fulfilling lives. Tucson House contributes by providing free internet access and services that assist residents, including affordable housing tenant services, further demonstrating the community's commitment to digital inclusion and support services.

Community Workforce Development
Workforce development programs in Pima County help with skill-building and digital literacy. However, a noted limitation of these programs is their reliance on the library system for additional support. PCC, TCC, and the University of Arizona all have robust workforce programs that are accessible to the community.

Education
In Pima County, higher education institutions, including University of Arizona, Pima Community Colleges, and Tohono O'odham Community College provide a range of digital and financial literacy as well as pathways to certificates, credentials, and degrees. Each has deep experience creating and providing education to covered populations. The Telemedicine Center at the University of Arizona plays an important role in the region's telehealth landscape.

Recommendations from Lived Experts

Address Affordability and Reliability
Develop initiatives for more affordable internet services, including subsidies or reduced-cost plans to make services more affordable for low-income residents in rural and tribal communities. Improve the reliability of rural Pima County internet services by addressing connectivity issues with service providers.

Address Transportation Challenges
Improve transportation options to public facilities with internet access, ensuring easier access to community resources including internet connections, training, and devices for residents.

Conduct Outreach and Build Trust
Conduct outreach and awareness campaigns to inform Pima County community members about available resources, services, and programs to overcome digital barriers. Develop initiatives to build trust in technology usage and online services, addressing privacy and security concerns. Raise awareness about available internet services and resources, especially in rural Pima County communities.

Encourage Policy Development
Develop policies and programs that prioritize equity and inclusion, with the goal of reducing inequity in internet access among Pima County communities.

Enhance Accessibility
Ensure online content and services are available in multiple languages to address language barriers. Increase awareness about the availability of resources, services, and programs.

Implement Strategic Solutions
Implement a mobile broadband one-stop bus for digital classes and device distribution. Adopt a culturally centered approach to bridge the digital divide.

Prioritize Infrastructure Expansion
Prioritize the expansion of proper internet infrastructure, focusing on underserved Pima

County areas and implementing innovative approaches to infrastructure development. Invest in expanding proper internet infrastructure in rural Pima County communities to enhance access and availability. Explore innovative, cost-effective ways to set up infrastructure to provide reliable internet connections.

Public Safety and Resilience

Reliable internet services in rural Pima County areas are crucial for public safety and resilience, especially during crises.

Upskill the Community

Implement digital literacy programs in Pima County targeting all age groups, with a special focus on covered populations. These programs should enhance digital competence and empower users to safely and effectively navigate the digital world.

Pinal County
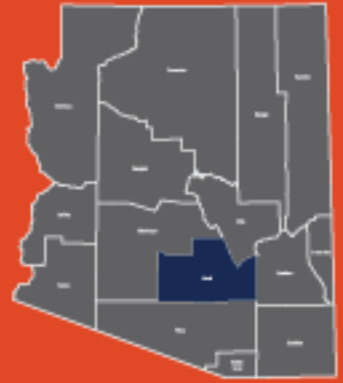
Pinal County

Summary of Comments from the Community Member Survey

In Pinal County there is an urgent demand for reliable and affordable high-speed internet access, particularly via fiber optic infrastructure. Residents want reliable and economical internet solutions, which they view as crucial for community well-being. There is a push for educational initiatives aimed at increasing digital literacy, especially given the perception that poor internet access is contributing to the decline of small-town populations. Some suggest that local governments could step in to offer internet services as a way to reverse this trend.

Frustrations over the current state of internet and phone services are common among Pinal County residents, with complaints about spotty service, high costs, and lack of reliability. Residents are not only looking for better access, but also quality service and the digital skills to navigate the online world effectively. The limited bandwidth in certain areas adds another layer of complexity, making it hard for people to fully engage in online activities. There is also a need for more flexible options, as some residents express a desire to keep their existing landline services while improving their internet connectivity.

Overview of Digital Equity Challenges in Pinal County, Arizona

Pinal County is in south-central Arizona and encompasses a diverse range of geographical features, from desert to mountainous regions. The county has experienced significant population growth and urban development in recent years, driven in part by its proximity to the Phoenix metropolitan area. Pinal County recorded a population of 464,154 residents in 2022 and demonstrated a 9% increase in population from 2020-2022. The county is home to a growing population of retirees, and around 21% of the residents of Pinal County are aged 65 or older. African Americans and American Indians each make up approximately 6% of the county's population and just

over 30% of the County's residents identify as Hispanic or Latino. In terms of income, Pinal County exhibits a mix of socioeconomic conditions. While some areas benefit from economic growth and urbanization, others, especially in rural parts of the county, face economic challenges and lower income levels. The median income in 2021 was just over $65,000 a year and nearly 11% of the Pinal County residents live in poverty.

Barriers in Pinal County

Access Barriers
Certain Pinal County areas are underserved and lack proper internet infrastructure, which means that they cannot connect to the internet. Other rural communities in Pinal County face challenges with limited providers, resulting in poor service quality.

Cost Barriers
The cost of internet services and necessary equipment like computers was identified as a significant barrier for many Pinal County individuals and families.

Digital Literacy
A lack of digital skills and comfort with technology hampers effective use of the internet, especially among aging adults in Pinal County.

Infrastructure Barriers
In rural Pinal County areas, outdated or lacking infrastructure leads to poor service quality, spotty service, and limited internet access.

Skill Barriers
Many individuals in Pinal County face challenges in effectively utilizing the internet, even after receiving training. This knowledge gap, coupled with limited understanding of how to make the best use of the internet and computers, leaves many residents in the county at a disadvantage. A need for ongoing training was identified as an immediate need.

Barriers for Covered Populations in Pinal County

Barriers for Individuals with Disabilities: Physical health barriers prevent people from effectively accessing digital resources without the use of accessible devices.

Barriers for Rural Areas: The reliability of internet connections in some parts of Pinal County, internet speed, and the cost of devices are all barriers for rural residents. The number of internet providers in rural Pinal County communities is limited, making it difficult to get good service. The infrastructure in older neighborhoods is also lacking, making internet access almost non-existent in some areas.

Barriers in Education & Literacy: Pinal County Libraries were cited as places where people can access the internet and receive training. However, these resources are limited, posing a challenge for those who need them for educational purposes.

Barriers for Aging Individuals: Aging individuals in Pinal County face barriers as they are often on fixed incomes and prioritize groceries or rent over internet service. The lack of internet access limits their ability to socialize and engage in activities that could benefit their cognitive skills. Many seniors in rural Pinal County areas like Saddlebrook use tele-health services, emphasizing its importance for those who cannot travel and highlighting the challenges faced by seniors in rural areas, particularly those who can't afford to travel for essential services. Pinal County seniors, especially those who are homebound or live alone, need internet access and would benefit from things like neighborhood support security cameras and socializing with family over FaceTime.

Barriers for Incarcerated Individuals: The conversation touched on the topic of incarcerated individuals, mentioning that jails and prisons offer some internet-based resources like classes. The participants emphasized the need for rehabilitation rather than just incarceration, suggesting that internet access could be a part of that by supporting individuals when they get out and ensure they have a marketable skill set.

Barriers for Individuals who are members of a Racial or Ethnic Minority Group:
Pinal County sees language barriers, particularly for Spanish-speaking individuals. Social and economical language barriers prevent people from accessing digital resources and online services that are not in their native language.

Resources

Jails and Prisons Support Systems
Arizona Correctional Facilities offer classes and/or training support systems for incarcerated individuals. These programs can be extended to reach more people and offer more services for individuals recently released from incarceration.

Lifeline Program
A program provided by the Federal Communications Commission (FCC), offers free or discounted internet access to low-income recipients or those on reservations.

Public Libraries and Community Colleges
Public libraries and community colleges often provide free internet access and may offer computer stations for public use. Additional support for these programs would allow them to reach more residents.

USDA Grants for Telehealth
Provided by the United States Department of Agriculture (USDA), these grants are focused on rural communities and telehealth services.

Recommendations from Lived Experts

Communicate Effectively with the Community
Effective communication strategies are needed to raise awareness about existing resources in Pinal County, as many resources remain underutilized or insufficiently publicized. Better communication and outreach efforts are needed to ensure that existing resources are effectively utilized by all residents.
Create tailored solutions for specific demographics:
Programs should be designed to meet the unique needs of seniors, those with disabilities, and other vulnerable groups.

Fund Local Digital Literacy and Training Programs:
Local organizations offer free or low cost training programs designed to improve digital literacy skills with a focus on seniors and those with low literacy levels.Supporting and expanding these programs would benefit all residents.

Increase Accessibility
Provide support systems for individuals with disabilities or language barriers to ensure they can access and utilize the internet.

Improve the Affordability of the Internet and Devices
Make internet services and devices affordable- especially for low-income families and seniors. Collaborations between government agencies and private companies could offer solutions like subsidized rates or community Wi-Fi.

Investment in Modernizing Infrastructure
Both the public and private sectors need to invest in improving connectivity, especially in rural Pinal County areas. Investment in modernizing infrastructure, particularly in rural Pinal County areas, is crucial for improving internet service quality.

Leverage Existing Community Spaces
Utilizing public spaces, libraries, and community colleges as hubs for free internet access and digital literacy training could be an effective strategy.

Provide Subsidized Internet
Public-private partnerships and collaboration between government and private sectors could provide subsidized internet rates and community Wi-Fi solutions for Pinal County community members.

Santa Cruz County
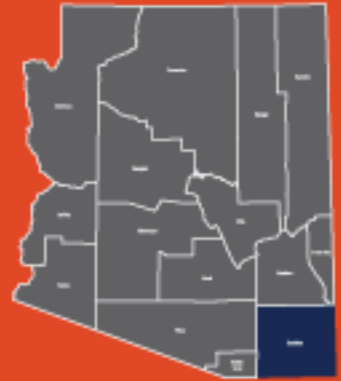
Santa Cruz County

Summary of Comments from the Community Member Survey

In Santa Cruz County, residents conveyed a strong sense of frustration and a call for more effective support, especially from governmental bodies. While the sample size is limited, the sentiments expressed convey a message of frustration among many residents.Residents expressed a feeling of abandonment by local and regional governments in matters of broadband access. They report feeling that they are essentially 'on their own,' citing limited communication and support from even higher levels of state government, including the Arizona Commerce Authority (ACA). Promises surrounding the introduction of fiber internet in areas like Patagonia seem to have soured public trust. The community has experienced delays ranging from several months to nearly a year in the actual rollout of these services, causing skepticism about the reliability of such promises.

Technical expertise is another area where the community feels let down. According to respondents, local governments and institutions appear to lack the knowledge needed to effectively address broadband challenges, exacerbating the sense of isolation and frustration. Moreover there's a noted absence of any organized bodies within either the municipality or the county that is solely dedicated to resolving broadband issues. This lack of dedicated resources and focus contributes to the overall sentiment of neglect and the urgent need for informed action.

Overview of Digital Equity Challenges in Santa Cruz County

Santa Cruz County is located in the southern part of Arizona, bordering Mexico to the south. In Santa Cruz County, the digital divide is a stark reality that hinders access to essential online resources for many residents. Despite its scenic beauty, the area faces significant barriers in internet connectivity and affordability. This lack of reliable internet service exacerbates existing social and economic inequalities, making digital equity an

Quotes from the County

"We aren't attractive to providers because there's not a lot of money in the county. And so there's no reason to build. So unless it's basically 100% government assistance, it's very difficult with the lack of competition. Our income level is one of the major barriers that we have for the county when it comes to high speed account."

urgent priority for the region.

Santa Cruz County has a diverse population, with a significant Hispanic presence, reflecting its proximity to the Mexican border. In 2022, Santa Cruz County recorded a population of 48,759 residents. Approximately 83% of these residents identify as Hispanic or Latino, and around 15% are white. In 2021, the median household income in Santa Cruz County was around $45,000, which is well below the national average. Of note, the county's high school graduation rate of 77% among residents aged 25 years or older is lower than the national average of 87%. [59]

Barriers in Santa Cruz County

Affordability Barriers
The cost of internet service in Santa Cruz is prohibitive. The region is facing economic challenges that extend to the affordability of housing.

Access and Use Barriers
Infrastructure is still lacking in several parts of the county. While there is an effort to construct a loop, many areas remain unconnected. Geographic challenges make it difficult to provide consistent internet access to the region.

Lack of Awareness
Even when resources like free Wi-Fi are available, not everyone is aware of them or how to use them effectively.

Limited Providers
In certain areas of Santa Cruz County , there's only one provider, limiting choices and potentially leading to monopolistic pricing or service constraints.

Restrictions
Some internet services, especially those provided by schools or government programs, come with restrictions that deter users.

Speed and Quality Barriers
In some areas, the internet speed is as low as 3 megabits per second, which is insufficient for tasks like video conferencing. The need for rapid deployment of internet services is needed to catch up with current demands for fiber-to-home, which was not feasible for the community in the past.

Training & Support Barriers
There is an emphasis on understanding why offered services aren't being utilized, which suggests there might be a gap in user education or awareness in Santa Cruz County.

59 From QuickFacts. Santa Cruz County, Arizona by U.S. Census Bureau. 2022,
https://www.census.gov/quickfacts/fact/table/santacruzcountyarizona,pinalcountyarizona/RHI425222

Barriers for Covered Populations in Santa Cruz County

Barriers for Individuals with Disabilities: Limited access to assistive technologies and resources was mentioned often as a barrier. Challenges in navigating online platforms for individuals with certain disabilities were noted often as well.

Barriers for Rural Areas: Limited access to high-speed internet in remote and rural Santa Cruz County areas. Long distances to healthcare facilities and other essential services for Santa Cruz County community members create a need for telehealth.

Barriers in Education & Literacy: Limited digital literacy skills, particularly among older or less educated individuals pose challenges in accessing online educational resources. Limited awareness of available educational programs and resources prevents Santa Cruz County community members from thriving in a digital world.
Barriers for Aging Individuals: Aging individuals often lack the digital literacy skills to navigate online services and programs. Difficulty in accessing online healthcare services, which is crucial for seniors. Was also noted as a barrier.

Barriers for Incarcerated Individuals: Incarcerated individuals in Santa Cruz County have limited access to technology and the internet while incarcerated, which creates challenges in transitioning to the digital world after release.

Barriers for Veterans: Veterans in Santa Cruz County have limited access to telehealth and other online benefit services. A lack of awareness of available benefits and programs also creates a barrier for this group.

Barriers for Individuals who are members of a Racial or Ethnic Minority Group: Limited access to information and services for Spanish-speaking Santa Cruz County community members may hinder understanding and utilization of digital available resources. Potential disparities in access to digital resources and opportunities was noted. Limited representation and cultural sensitivity in online services was mentioned as well.

Resources

Devices
The 1-to-1 program, which typically means one student is provided with one piece of technology, provides school-age students in the community with technological devices for educational purposes.

Internet Access
There's free Wi-Fi provided in county buildings, including Rio Rico. Users can connect to the county Wi-Fi without a password after accepting terms of use. The network has minimal restrictions, ensuring broad access.

Recommendations from Lived Experts

Address Affordability
Address concerns about the high cost of certain internet packages, ensuring that services are affordable for all Santa Cruz County community members.

Collaborate on Infrastructure
There's a need for collaborative efforts to fund and complete missing infrastructure points. Building infrastructure is acknowledged as a significant expense, and warrants collaboration with various partners and stakeholders to fund the projects. Emphasize the importance of developing robust and sustainable digital infrastructure that meets the needs of the community. Emphasize the importance of collaborative efforts to bring resources like fiber to all schools and libraries. Consider establishing co-working or learning facilities where community members can access the internet and other resources.

Create Tailored Solutions for Specific Demographics
Programs (affordability, education, cybersecurity) should be designed to meet the unique needs of seniors, those with disabilities, and other vulnerable groups.

Device Availability
Beyond just internet access, ensure that Santa Cruz County community members have access to the necessary devices to utilize the internet effectively.

Ensure that Every Student has Access to Educational Resources
Educating the community about available resources and how to use them was mentioned repeatedly. This includes promoting the benefits of telehealth, online education, and other online services. Ensure that every student has access to the necessary devices for their educational needs.

Evaluate Programs with an Eye Towards Sustainability
Efforts should be made to understand why certain resources aren't being utilized so that efforts can be made to increase engagement and interest in available services. There is a concern about the sustainability of internet services and infrastructure including the maintenance of devices and infrastructure, as well as the continued training and onboarding of local talent to support these services.

Explore a Variety of Internet Solutions
Emphasize the importance of broadband access for all, recognizing that different communities in Santa Cruz County may have different preferences for delivery methods. Explore all options available to meet the needs. Understand that solutions like fiber-to-home might not be feasible for all areas, and be open to alternative methods of delivering internet access. A blend of technological solutions, including point-to-point and direct fiber, is needed to cater to the diverse needs of Santa Cruz County.

Explore Economic Impact Opportunities

Recognize the potential economic impact of improved connectivity, including its effect on real estate transactions and property values. Ideas like creating a revenue stream by renting out internet infrastructure (like towers) were discussed as a way to maintain and expand the infrastructure for Santa Cruz County.

Consider Geographical Challenges

Address the unique geographical challenges of the Santa Cruz County area, such as mountains and valleys, which can impact the delivery of internet services and require creative solutions.

Foster Public Safety

Consider the establishment of communication towers that serve multiple purposes, including public safety communication. However, it's essential to be aware of community sentiments in Santa Cruz County regarding towers and include the residents in planning conversations.

Yavapai County

Yavapai County

Summary of Comments from the Community Member Survey

Residents in Yavapai County voice a multitude of concerns that underscore the critical importance of accessible, reliable, and affordable internet services. These concerns range from limited competition among service providers to the pressing need for improved infrastructure and literacy initiatives. It is important to note that residents in Yavapai County had the highest respondent rates in the state survey project and demonstrate a marked interest in bringing reliable connectivity to their county.

A significant concern in Yavapai County is the lack of competition in internet services, leading to near-mo-nopolistic conditions in many regions. These limitations not only result in high costs but also contribute to subpar service quality. Reliability of internet connec-tions is a prevalent concern; as frequent disruptions and slow speeds are affecting residents' productivity and access to educational and work opportunities. The call for increased competition among service providers is loud and clear, with residents believing it would drive improvements in service quality and cost. The high cost of internet services is especially problematic for individ-uals on fixed incomes, further widening the digital divide. Compounding the issue are poor customer ser-vice experiences, which elevate community frustration levels.

Infrastructure is clearly top of mind, with residents pointing out that implementation of technologies like fiber optics is crucial for overcoming existing issues. Poor connectivity has significant ramifications for edu-cation and remote work—timely concerns given today's digital landscape. Although some residents have attempted to mitigate connectivity issues with alterna-tive solutions like Mi-Fi devices and booster antennas, these are generally viewed as insufficient and unreliable.

Transparency in funding and decision-making processes is important to Yavapai residents and they seek clarity on how improvement projects are financed.

Additionally, there is a demand for educational initiatives focusing on digital literacy and technology utilization, further underscoring the community's awareness of the multi-faceted nature of the digital divide.

Overview of Digital Equity Challenges in Yavapai County

Yavapai County, located in north-central Arizona, is characterized by a mix of high desert landscapes, mountain ranges, and extensive forested areas. The county has a diverse demographic makeup, with a mix of urban and rural populations. It is home to residents of various ages, including a growing number of retirees.

Yavapai County reported a population of 246,191 in 2022 with a 4% growth in population reported between 2020 and 2022. Approximately 34% of the population is aged 65 or older, and a little more than 15% of the population is aged 18 years or younger. The population is overwhelmingly white, with 79% of the population falling in this group. Around 15% of the population identifies as Hispanic or Latino. Only around 2% of the population in the county identifies as American Indian.[59]

Barriers in Yavapai County

Access to Device and Services
Not everyone in Yavapai County has access to devices at home, which limits their ability to engage in digital activities. There are limited places in the county where residents can access devices for free, which is especially challenging for rural residents. While resources like hotspots are available for students, they sometimes don't work effectively in certain areas due to lack of data capacity.

Affordability Barriers
Some community members in Yavapai County face financial challenges, making it hard to afford consistent internet access or devices. A lack of affordable internet plan options make these challenges more difficult.

Awareness Barriers
Many Yavapai County community members are unaware of the opportunities and services available to them if they had internet access. They might not know about services like Teledoc or the benefits of having a digital connection.

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[59] *From QuickFacts. Yavapai County, Arizona by U.S. Census Bureau. 2022,*
https://www.census.gov/quickfacts/fact/table/yavapaicountyarizona,US/PST045222

Digital Literacy Barriers

Many community members in Yavapai County lack basic digital skills. This includes not knowing how to use a computer, understanding social media, or being aware of who has access to their information.

Digital Transition

The shift to digital permits and other online-only services can be challenging for those who are not familiar with digital platforms and residents that do not have access to devices or a reliable internet connection.

Emotional and Trust Barriers

Some community members in Yavapai County feel embarrassed about their lack of digital skills. They might wait for other people to leave before asking for help, or avoid using technology in front of others. Community members might not read terms and conditions and could be unknowingly sharing personal information. Misconceptions about digital tools, like the belief that QR codes can introduce viruses, can hinder digital adoption for Yavapai County community members.

Infrastructure Barriers

The infrastructure for internet connectivity is not uniformly available throughout Yavapai County, leading to "dead spots" or areas with slow internet. Dead zones for Wi-Fi and cell data exist in many parts of the region. Mountainous terrain in Yavapai County requires more towers for connectivity.

Barriers for Covered Populations in Yavapai County

Barriers for Rural Areas: The challenges confronted by rural Yavapai County community members include limited internet connectivity and data capacity in many Yavapai County areas. Transportation issues make it hard for individuals to access places with internet facilities, like Yavapai County libraries.

Barriers in Education & Literacy: There is a great need for digital access in Yavapai County and the obstacles experienced by those community members without it are mounting. Students encounter challenges in accessing digital tools and resources and often depend on friends and family for internet access. Many students live in campgrounds or remote areas without electricity, water, or internet access and must come on to campus for those services. Many community members lack basic digital skills including not knowing how to use a computer, understanding social media, or being aware of who has access to their information.

Barriers for Aging Individuals: The transition to digital tools has been challenging for older Yavapai residents. There was mention of applications like digital permits, and the difficulties encountered by those who aren't tech-savvy. Many older individuals resist learning new

digital methods, with some refusing to use email or other online services. Some older individuals in Yavapai County perceive digital tools, like QR codes, as potential threats (e.g., viruses).

Barriers for Individuals who are members of a Racial or Ethnic Minority Group: Members of racial or ethnic minority groups in Yavapai County encounter barriers in education, healthcare, employment, and social services due to. language barriers, cultural differences, and systemic inequalities.

Resources

Community Members
There's an emphasis on community-based conversations and grassroots movements in Yavapai County to identify and address challenges. The community members themselves play a significant role in identifying needs and potential solutions.

Devices
Libraries in Yavapai County lend out devices like Chromebooks and hotspots. However, there's a challenge with these devices not always being returned, with around 20 to 30% being never returned. This indicates a significant need in the community for such devices, and an opportunity to redesign lending programs to ensure that more residents have access to the devices they need.

Free Access
Libraries in Yavapai County provide free WiFi. For example, the library in Camp Verde offers free WiFi from 6 to 10 p.m., and people often park in the parking lot to access it. The town of Camp Verde has set a goal to provide free WiFi in all their parks. While they have faced challenges in achieving this, they have managed to cover the main street with free WiFi. Many businesses, including coffee shops and grocery stores, offer free WiFi hotspots for their customers.

Local Businesses & Local Government
Many businesses in Yavapai County, including coffee shops and grocery stores, provide free WiFi for their customers. Local Government bodies in Yavapai County have initiatives to provide free WiFi in public spaces like parks.

Recommendations from Lived Experts

Address Rural Challenges
Consider the challenges faced by particular communities like the Yavapai-Apache Nation, which may lack basic infrastructure such as electricity and water.

Conduct Campaigns to Increase Digital Skills

Organize digital literacy campaigns within Yavapai County's schools, community centers, and libraries, covering essential topics like digital citizenship, computer skills, and social media awareness. Collect insights and knowledge from Yavapai County communities to understand their unique needs, considering the diverse requirements across different regions of Arizona.

Develop Public Safety Preparedness Plans

Develop specific emergency communication plans for Yavapai County, particularly for areas with limited or no internet access during crises like wildfires or floods.

Explore Options for Connecting the Community to the Internet

Prioritize the development of high-speed internet infrastructure throughout Yavapai County to ensure universal access. Address the challenge of slow and unreliable internet connections in certain areas of Yavapai County, known as the "turtle" effect. Explore alternative connectivity solutions, such as cellular networks or satellite internet, in areas with challenging terrains or limited options. Recognize the vital role of connectivity in Yavapai County's businesses and economy, addressing concerns about misleading coverage claims by ISPs.

Empower the Community and Preserve Rural Identity

Empower Yavapai County residents to advocate for their specific digital needs and concerns, fostering a sense of ownership and trust within the community. Respect and preserve the unique rural identity and independence valued by Yavapai County's communities while introducing modern services and connectivity.

Help People Learn to be Safe Online

Educate Yavapai County residents on data privacy, terms and conditions, and the implications of online data sharing to reduce hesitancy and inform residents about online safety.

Incentivize Participation

Offer incentives to encourage Yavapai County residents to engage with digital resources and offer programs and support to households that are financially disadvantaged.

Make Data-Informed Decisions

Collect insights and knowledge from Yavapai County communities to understand their unique needs, considering the diverse requirements across different regions of the county. Encourage ISPs to share data to identify coverage gaps and better address the digital needs of Yavapai County's communities.

Yuma County

Yuma County

Overview of Digital Equity Challenges in Yuma County

Yuma County is situated in the southwestern part of Arizona, sharing a border with California and Mexico. It is known for its desert landscape, characterized by arid plains and the Colorado River, which flows along its western edge. Yuma County is reliant upon agriculture, specifically the cultivation of crops for much of the country during the winter months.

Yuma County's population was 207,842 in 2022 and around 66% of the population identifies as Hispanic or Latino. About 25% of the population is under the age of 18, and around 20% are aged 65 or above. Unlike many other counties in Arizona, Yuma County has a lower population of residents that identify as American Indian, with only 2.4% of the population in this group. In 2021, the median household income in the county was approximately $53,000. Around 17% of the population lives in poverty. [61]

Barriers in Yuma County

Access, Reliability and Affordability
There is a lack of reliable internet in the county, particularly in rural parts of the region. This lack of access impacts educational opportunities, jobs, and the delivery of essential services like healthcare and benefit service enrollment.The high cost of the internet is also a significant barrier to internet adoption. Service monopolies limit choices and allow for high prices. Residents report issues of frequent disconnections and outages with service providers not based in Yuma County, with little support from customer service.

Awareness
Community members lack awareness of available digital equity programs, services, and resources. This lack of awareness is due, in part, to poor dissemination of information. This information barrier exacerbates issues related to trust which affects people's willingness to adopt digital solutions.

[61] From QuickFacts. Yuma County, Arizona by U.S. Census Bureau.
2022, https://www.census.gov/quickfacts/fact/table/yumacountyarizona,US/INC110221

Quote From The County

"You have a lot of monopolies in Yuma. And I think it, they make you pay for it. I mean, you definitely pay out the nose for your internet service here and you only have a very, very selective view to choose from."

"If people don't have access to the internet, they don't have access to that online application, which if they have to wait to get a ride to come into and physically fill out an application, that means two more people who are on the internet has gotten that application and that job."

"I think access to the information, you know, where, where is the right distribution points? It probably should be at the WIC office. It probably should be at the economic security buildings, housing. It should be a part of every packet of information received in the county."

Language and Cultural Barriers
Cultural factors, such as language and familiarity with technology, also play a role. Older Hispanic individuals, for example, are reluctant to use digital applications and do not feel comfortable asking for help.

Digital Literacy and Skills Training
A lack of digital literacy and skills is a significant barrier, particularly among aging individuals and Hispanic communities in Yuma County. This gap hinders the ability of Yuma residents to fully utilize digital services and exposes them to risks like scams. While there are some skill training programs, not everyone is aware of them or can access them.

Specialized Needs
Groups, like individuals with a disability, veterans, and aging individuals, have specialized digital needs that are not being adequately addressed. For example, older adults, particularly veterans, face challenges in traveling great distances for medical appointments and accessing benefit services online.

Transportation Issues
The cost and availability of transit can be a barrier to accessing places with free internet like libraries and community centers.

Barriers for Covered Populations in Yuma County

Barriers for Individuals with Disabilities: Individuals with physical and intellectual disabilities experience challenges accessing the internet and resources in Yuma County. Their challenges are compounded by a lack of support systems that cater to their needs.

Barriers for Rural Areas: Information dissemination in Yuma County is hyper-local and often does not reach rural areas. Tribal elders in rural Yuma County areas still use flip phones and may need an additional source of information delivery.

Barriers in Education & Literacy: One of the biggest gaps in Yuma County is knowledge and education, thus widening the digital divide. Yuma County community members are not aware of available programs like the Affordable Connectivity Program. A good percentage of Yuma County community members don't have internet or even a device, affecting their ability to apply for services like home rehabilitation.
Barriers for Aging Individuals: Older adults in Yuma County are generally open to using the internet, although some aging individuals remain resistant to using computers. Aging Yuma County residents, particularly those looking into retirement, face challenges with insurance providers. There's also a discussion about older people embracing broadband for solutions like telehealth, especially since COVID-19. Older Hispanics are mentioned as being reluctant to use digital applications, partly due to fear of scams.

Barriers for Veterans: Veterans, particularly those who are older, have specialized digital needs that are not being adequately addressed. Because telehealth is not widely available, older veterans have to travel great distances for medical appointments.

Barriers for Individuals who are members of a Racial or Ethnic Minority Group: A large portion of the culture in Yuma County is Hispanic and older Hispanics are reluctant to use digital applications. They prefer not to use computers or phones for tasks like filling out applications and often rely on family members for help.

Resources

Access
Public places like libraries, Starbucks, and colleges offer free Wi-Fi. Some libraries have hotspots that Yuma County community members can borrow, although this program has faced challenges.

Cybersecurity Training
Yuma County and some local organizations offer cybersecurity training to help community members navigate online safely.

Libraries
Yuma County Libraries offer a range of services including technical training for people who struggle with devices. They also have "Gadget days" to teach people how to use new devices like phones or iPads. Libraries were identified as major providers of free internet, training, and device support.

Skill and Workforce Training
Arizona at Work and Goodwill offer skill and workforce training to Yuma County residents.

Technical Support
Some local internet companies offer in-home technical support to help Yuma County community members connect their devices to the internet, especially for older people.

Training Programs
Programs are available for skill and workforce training. These are offered by organizations like "Arizona at Work" and Goodwill. Some are free, while others may have a fee.

Recommendations from Lived Experts

Adapt to New Modes of Living and Working
Resilience in the digital age means more than just weathering storms; it means adapting to new modes of living and working. For the covered populations in Yuma County, such as disabled individuals and those with special needs, the lack of targeted information and services can be a significant barrier to resilience.

Address Affordability

Affordability is a recurring theme. From the high cost of internet services in monopolistic markets to the challenges of accessing affordable healthcare for veterans, the digital divide is as much an economic issue as it is a technological one.

Allow Remote Options for Learning

Allow more students to potentially "zoom into" their classes from home if they need to miss class due to illness or absence.

Create More Skill Training Centers

Partnering with existing organizations like Goodwill Industries to offer more skill training for Yuma County community members.

Help People Learn to Be Safe Online

The digital divide also has implications for public safety in Yuma County. Older adults who are not digitally literate are more susceptible to online scams and misinformation. Moreover, the lack of reliable internet in rural areas could hinder emergency services and disaster response efforts.

Improve Access to Healthcare

There's an emphasis on better access to healthcare for the aging population, veterans, and the general public. Due to the full schedules of doctors in Yuma, it often takes weeks to get an appointment, and residents believe telehealth could be a solution to this problem. The community sees potential in telehealth for addressing various needs, from routine check-ups to specialized care. This could be especially beneficial for those who have difficulty traveling or those who live in more remote areas.

Increase Awareness of Affordability Programs

Information about affordable internet programs should be distributed at places like WIC offices, economic security buildings, medical facilities, and on grocery store receipts. There is a lack of awareness about available programs and services, partly because information is not effectively disseminated, causing information barriers in Yuma County.

Support Community Partnerships

Create collaborations between local organizations, including the city and county, to form a strong coalition to advocate for funding and resources in Yuma County.

Prioritize Education for Everyone

Education is not just about schools; it's about lifelong learning and skills development. Yuma County has community members reluctant to use digital applications due to a lack of digital literacy. In rural areas, a lack of reliable internet access hampers educational opportunities for children and adults alike.

Support Telehealth for Veterans

Veterans often have to travel long distances to places like Tucson or Phoenix for special-ized medical care. Telehealth could eliminate the need for these long trips, saving on costs like gas and hotel stays. There's a VA clinic for veterans, but for specialized needs they often have to travel to other cities. Telehealth could bridge this gap, providing specialized care without the need for travel.

4. Collaboration and Stakeholder Engagement

Outreach and awareness campaigns played a pivotal role in engaging the community, increasing participation in planning, increasing awareness about digital equity, and emphasizing the significance of digital inclusion. To effectively engage the community, the planning team developed a strategic communications plan that served as a roadmap for outreach. This plan outlined clear objectives, identified target audiences, and specified key messages and tactics to ensure a consistent and impactful approach across all channels.

The team created visually appealing and informative materials, including brochures and infographics. Materials were tailored to each county, taking into consideration cultural diversity, rhetoric, and language. To maximize the reach and impact of the campaign, various communication channels, including social media platforms, websites, community newsletters, and local events were leveraged. By disseminating messages through these channels, the team engaged the full diversity of Arizona residents while fostering a sense of ownership and participation in planning.

The team established strong partnerships with local media outlets to amplify their reach and impact. The team collaborated with local newspapers, radio stations, and online platforms to share invitations to listening sessions, to share the survey, to conduct interviews, and shared stories of positive outcomes of digital equity initiatives as the Plan was implemented. By engaging with the media in this way, the team aimed to increase awareness of Digital Equity planning activity while generating public interest and enthusiasm in digital equity efforts across the region.

To ensure meaningful stakeholder engagement, the team organized in-person and virtual listening sessions, conducted interviews, and ran focus groups. Listening sessions provided platforms for residents, community leaders, and key stakeholders to actively participate in discussions surrounding digital equity and the unique needs of their communities. During these interactive sessions, the facilitator encouraged dialogue and created a safe space for the participants to share their experiences and express concerns about the barriers and challenges that limit access and adoption of the internet.

The sessions were recorded and transcribed to ensure insights were captured and themes were identified and integrated into the plan. By inviting lived experts as well as subject matter experts, practitioners, and local leaders, the team created a wide aperture through which to identify barriers and challenges that impacted full and meaningful digital participation. Moreover, through the lens of the local community, the team could better identify potential solutions, local champions, and possible future collaborations.

Between June and August of 2023, the team visited each of Arizona's 15 counties, conducting a total of 41 in-person listening sessions. Additionally, a virtual all-county session was held for those people who were not able to attend on-site. To ensure the needs of covered populations were prioritized, listening sessions focused on veterans, aging individuals, people with disabilities, and incarcerated individuals were held. Qualitative feedback from each session, including barriers and challenges and proposed solutions, was leveraged to create the state Plan.

Recognizing the importance of reaching underserved communities, particularly Arizonans in rural, remote, and Tribal areas, the planning team participated in targeted outreach events in collaboration with community centers, libraries, schools, and local organizations. These events provided opportunities to address specific needs and challenges unique to each county and region. At each local event, the team set up an information booth where attendees could learn about digital equity programs, ask questions, and participate in the survey.

Leveraging Social Media Platforms, Community Newsletters, and Local Influencers:

To amplify messaging and engage a wider audience, the team leveraged social media platforms such as

Facebook, Twitter, and LinkedIn. Through regular and strategic content posting, the team shared success stories, opportunities for engagement, and updates on planning progress. The team encouraged community members to share their experiences using designated hashtags and tagging their organization's social media accounts and using keywords. Additionally, the team collaborated with local influencers, bloggers, and community leaders who had a strong online presence to endorse and promote digital equity initiatives.

4.1   Coordination and Outreach Strategy

Arizona's outreach strategy was thoughtfully designed to employ both top-down and bottom-up approaches, employing a diverse range of communication methods to ensure that we effectively reached and included a broad spectrum of Arizonans in the planning process. The planning strategy is firmly grounded in the principles of trust-building, the creation of welcoming and inclusive spaces, and a steadfast commitment to forming and nurturing sustainable relationships.

The coordination and outreach efforts were spearheaded by the Arizona Commerce Authority, working in close collaboration with the Digital Equity Institute. Throughout this process, our team worked closely with a broad spectrum of stakeholders, including individuals with lived experiences, community anchor institutions, organizations serving covered populations, state agencies, and local government bodies. These coordination and outreach activities took various forms, including listening sessions, in-person and remote interviews, as well as focus groups. Each of these processes was carefully designed for replication as the state transitions from the planning phase to capacity building implementation.

Recognizing the importance of inclusivity and ensuring that the voices of underserved communities take precedence, the outreach team in Arizona engaged in intentional collaborations with organizations deeply embedded in these communities. These collaborations played a pivotal role in fostering a more equitable approach to outreach.

Engagement with Lived Experts: The outreach team accorded top priority to engaging with individuals who possess firsthand experiences with digital inequity and marginalization. Through one-on-one interviews and focus groups with these lived experts, we gathered invaluable insights and personal stories that have greatly informed our initiatives. These interactions were instrumental in shaping the human-centered approach to addressing the myriad challenges experienced by covered populations.

Community Anchor Institutions and Organizations Serving Covered Populations: The team thoughtfully engaged with community anchor institutions throughout the planning process. Ahead of each listening session, we reached out to a wide range of entities, including teachers, superintendents, libraries, food banks, shelters, public housing agencies, faith-based groups, community centers, nonprofits, and local government entities. This engagement was conducted through email, personal phone calls, and word of mouth, ensuring a meaningful connection with the community. Before each listening tour, our engagement team visited the local region to post flyers, engage with residents, and identify trusted messengers and channels for effective communication.

State Agencies: Engaging with state agencies was of paramount importance in gaining an understanding of the broader policy landscape and leveraging available resources. The team reached out to state agencies such as the Arizona Department of Economic Security, Department of Education, the Department of Homeland Security, and others to align planning with state-level initiatives.

Local Government: Local governments played a pivotal role in the planning process and are likely to be key catalysts for successfully implementing and sustaining progress toward digital inclusion. We consistently engaged with local governments, including city councils and county boards of supervisors, to gain insights into regional needs and priorities and to foster an environment of open dialogue, active listening, and collaboration.

In addition to coordinating with community and stakeholder groups, we placed emphasis on listening sessions and interviews with organizations that serve covered populations, particularly those in rural and remote regions. This style of engagement was employed to gain a deeper understanding of the unique challenges and opportunities faced by aging adults, veterans, people with disabilities, and incarcerated

individuals, as well as the organizations that serve them.

Aging Adults: Aging adults may encounter barriers related to technology adoption and digital literacy. The outreach team proactively sought input from organizations dedicated to serving seniors and engaged directly with seniors themselves. We conducted targeted outreach to AARP, Area Agency on Aging, senior centers, organizations focused on elder care, and individuals over the age of 60.

Veterans: Arizona is home to a significant veteran population. We engaged with veterans' associations, veterans' affairs offices, and veteran support organizations. We conducted interviews and focus groups to understand the specific challenges and opportunities in delivering digital services and support to veterans.

People with Disabilities: Accessibility and inclusion for people with disabilities were central to our efforts. We coordinated with disability advocacy groups, organizations serving individuals with disabilities, and state agencies like DES and Developmental Disability Advisory Council throughout the planning process to increase participation among people with disabilities in planning and dovetail with existing efforts and interventions.

Incarcerated Individuals: We worked closely with organizations supporting incarcerated individuals, both within correctional facilities and those whose work focuses on the reentry process including both with juveniles and with adults. We conducted a targeted listening session and targeted interviews to understand how best to meet the education, work, and technology needs of people during incarceration and throughout reentry. Included among the participants were the Arizona Department of Corrections, the Arizona Department of Juvenile Corrections, and more.

The outreach team actively partnered with community-rooted organizations that had long-standing relationships and trust within underserved communities, particularly those serving low-income individuals, members of racial and ethnic minority groups, and people with a language barrier. These organizations included local nonprofits, grassroots community groups, and cultural associations. Building trust was foundational to our coordination and outreach efforts. We invested time in building authentic relationships with community-rooted organizations, understanding their unique perspectives, and acknowledging their expertise in serving their communities.

Tribal communities: Tribal engagement was conducted with hybrid community roundtables that served as listening sessions, leadership to leadership meetings, webinars, and targeted outreach events in collaboration with the National Tribal Telecommunications Association Broadband Summit and the Tribal Diabetes Health Summit where tribes received updates and information for both the BEAD and Digital Equity programs. This included the May 2023 Tribal Consultation led by Governor Hobbs, demonstrating her administration's strong commitment to broadband and tribal relations. The qualitative nature of the feedback received from these engagements and roundtable discussions further informed the state's outreach plan. Due to the considerable number of tribal members and its expansive geography spanning over 27,000 square miles, the SBO continues to meet bi-weekly with the Navajo Nation Telecommunication Regulatory Commission to stay apprised of its broadband plans and digital equity activities. Tribal communities are not considered a separate and distinct covered population under the Digital Equity NOFO, but the SBO has made a concerted effort to ensure tribes feel connected, informed, and engaged.

For a comprehensive list of organizations that participated in the planning process, please refer to the appendix.

4.2   Stakeholder Engagement

The ACA Broadband Office recognizes the importance of ongoing community feedback to track the impact of execution strategies and planned activities, ensuring that the priorities identified in the plan are achieved. The ACA Office will be hiring a community engagement and outreach specialist to coordinate with the stakeholder engagement activities.

The stakeholder engagement process for the BEAD program in Arizona was developed to align with the requirements of the Digital Equity Plan Act and give a voice to communities with the greatest digital needs. The ACA Broadband Office recognizes the importance of ongoing community feedback to track the impact of execution strategies and planned activities, ensuring that the priorities identified in the plan are achieved.

Moving Forward: Statewide In-Person Outreach

Frequency: One-time

Activity: The State Broadband Director and the State Digital Equity Manager will engage with local government officials and community leaders in all fifteen counties to gather direct input on the unique challenges facing these individual communities. Through this outreach tour, we hope to increase the diversity of participants among covered populations to ensure representative feedback.

Engagements are intended to happen one-time and then evaluated to determine frequency thereafter.

Quarter	
Quarter 1	*North-East Region* – Apache County and Navajo County Northern Region – Coconino County
Quarter 2	*Eastern Region* - Gila County, Graham County, Greenlee County South-East Region – Cochise County and Santa Cruz County
Quarter 3	*South-West Region* – Pima County and Yuma County *Central Region* – Maricopa County and Pinal County
Quarter 4	*Western Region* – La Paz County, Mohave County and Yavapai County

For Tribal Nations, the State Broadband Director, members of the SBO, including the Tribal Liaison will engage with Tribal leaders, tribal ISPs, and tribal stakeholders in all 22 sovereign nations to gather direct input in regard to barriers and opportunities. Engagements are intended to occur one-time and then evaluated to determine the frequency thereafter.

Frequency – One-Time

Quarter	
Quarter 1	*North-East Region* – Navajo Nation Shiprock Agency, Chinle Agency, and the Fort Defiance Agency *Northern Region* – Navajo Nation Western Agency, Hopi Tribe, San Juan Southern Paiute, and Havasupai Tribe
Quarter 2	*Eastern Region* – White Mountain Apache Tribe, Tonto Apache Tribe, and San Carlos Apache Tribe
Quarter 3	*South-West Region* – Pascua Yaqui Tribe, Tohono O'odham Nation, San Xavier District, Fort Yuma – Quechan Tribe, and Cocopah Tribe *Central Region* – Ak-Chin Indian Community, Salt River Pima-Maricopa Indian Community, and Fort McDowell Nation
Quarter 4	*Western Region* – Yavapai-Prescott Indian Tribe, Yavapai-Apache Nation, Colorado River Indian Tribes, Fort Mojave Indian Tribe, Hualapai Tribe, and Kaibab-Paiute Tribe

Arizona Commerce Authority Community Roundtable Conversations

Frequency: Monthly

Activity: The ACA will continue hosting virtual Community Roundtable Conversations that bring together community and non-profit organizations (faith-based, school, library, health, housing, etc.), industry leaders, local governments, Tribal Nations, and other key stakeholder groups from around the state. The SBO will identify specific content around covered populations to strategically engage with community members and organizations to discuss specific goals and objectives towards implementation of the Digital Equity strategy and BEAD Deployment.

In the future, we plan to host roundtables:

- Community Roundtables dedicated to covered populations, and stakeholders that serve them
- Local Governments
- Dedicated to Tribal members and tribal specific topics
- ISP Roundtables (including Tribal ISPs)

To date, the Arizona Commerce Authority has hosted seven Community Roundtables:

	Date	Attendees
May Community Roundtable Conversation	05/16/2023	75
June Community Roundtable Conversation	6/20/2023	89
July Community Roundtable Conversation	7/18/2023	68
August Community Roundtable Conversation	8/15/2023	33
September Community Roundtable Conversation	9/19/2023	43
October Community Roundtable Conversation	10/17/2023	[CANCELED]
November Community Roundtable Conversation	11/21/2023	64
December Community Roundtable Conversation	12/19/2023	63

Additionally, we have also hosted a Formal Tribal Consultation with Governor Hobbs and three Tribal Broadband Community Roundtables:

	Date	Attendees
Formal Tribal Consultation with Governor Hobbs	05/19/2023	34
Virtual Tribal Broadband Community Roundtable	07/11/2023	44
Northern Arizona Tribal Broadband Community Roundtable	10/18/2023	26
Southern Arizona Tribal Broadband Community Roundtable	12/11/2023	33

Governor's Interagency and Community Broadband Advisory Council Interagency

Frequency: Quarterly

Activity: The Governor's Office in coordination with the State Broadband Office will hold quarterly meetings to analyze and recommend strategies to advise the Governor to ensure universal connectivity to all households in rural, urban, suburban and tribal communities across Arizona. These groups will facilitate engagement on state broadband and digital inclusion, bringing together experts from the field.

Community Broadband Advisory Council Working Groups

Frequency: Monthly

Activity: Bringing together experts from the field to facilitate engagement in state broadband and digital inclusion dialogues. Working group members offer expertise, assist with stakeholder engagement, and contribute to other tasks that support the Council's objectives.

Infrastructure and Permitting	Focuses on streamlining infrastructure projects and permitting processes for increased efficiency.
Mapping	Supports the creation and maintenance of geospatial data to support informed decision-making.
Digital Inclusion	Provides guidance to ensure equitable access to digital resources and technologies for all community members.
Affordability	Identifies solutions to make essential services more affordable and accessible to residents.
Workforce	Concentrates on strategies to enhance the local workforce, fostering economic growth and prosperity.
Outreach	Promote awareness and participation making sure the group engages with the community and stakeholders in our advisory group's initiatives.

State Agencies Interagency Coordination Meetings

Frequency: Quarterly

Activity: Coordination of state agencies' activities related to infrastructure development, permitting, digital inclusion, use of broadband for improvement of health and education outcomes, workforce development and cybersecurity with a specific focus on state activities that address covered populations.

State Universities, Institutions of Higher Education, and LEA Coordination Meetings

Frequency: As Requested

Activity: The State Broadband Director and the State Digital Equity Manager will provide updates to State Universities, Institutions of Higher Education, and local educational agencies and collaborate to achieve the objectives of the Digital Equity Plan.

Tribal Colleges, Institutions of Higher Education, and Local Educational Agencies

Frequency: As Requested

Activity: The State Broadband Director and the Tribal Liaison will provide updates to tribal colleges, Institutions of Higher Education, and local educational agencies and collaborate to achieve the objectives of the Digital Equity Plan.

Arizona Council of Governments (COGS)

Frequency: One-time

Activity: The State Broadband Director and the State Digital Equity Manager will meet with each of Arizona's Council of Governments to provide updates on broadband activities and get feedback from the membership.

- Quarter 1: Northern Arizona Council of Governments (NACOG)

- Quarter 2: Central Arizona Governments (CAG), Maricopa Association of Governments (MAG)

- Quarter 3: South-Eastern Arizona Council of Government (SEAGO)

- Quarter 4: Western Arizona Council of Governments – (WACOG)

Inter-Tribal Council of Arizona (ITCA)

Frequency: As Requested

Activity: The State Broadband Director and the Tribal Liaison will meet with ITCA leadership and its members to provide updates on BEAD and Digital Equity activities and get feedback from the membership.

Navajo Nation Telecommunication Regulatory Commission

Frequency: Bi-Weekly

Activity: The SBO, including the Tribal Liaison will continue to provide updates, share resources, and get feedback in their bi-weekly calls with the NNTRC to inform their outreach and engagement efforts.

Stakeholder Meetings

Frequency: As Requested

Activity: The ACA will provide updates to various stakeholder groups including Community Anchor Institutions, Non-profit Organizations that represent covered populations, Digital Inclusion Coalitions, homeless continuum of care providers, labor unions and organizations and local public housing associations. Examples include, but are not limited to:

- Arizona Broadband Stakeholder Network

- Arizona Digital Inclusion Network

- Arizona Telecommunications & Information Council

- Southwest Cable Communications Association

- Apache County Coal Communities Economic Development

- Maricopa County Broadband Task Force

- County Supervisors Association

- League of Arizona Cities and Towns

- Workforce Arizona Council

- Indigenous Digital Inclusion Working Group

- Alliance for Navajo Broadband

- Arizona Tribal Broadband Working Group

Broadband Newsletter

Frequency: Quarterly

Activity: The Arizona Commerce Authority State Broadband Office will publish and widely distribute a newsletter to stakeholders and post it on their website. The newsletter will include updates on broadband

infrastructure deployment progress, State and Federal Policy and Legislative Updates, Digital Inclusion and Broadband Success Stories, Community Spotlights, Tribal Corner, and a Calendar of Events.

Broadband Website

Frequency: Ongoing

Activity: The ACA State Broadband Office will redesign and build a public-facing website that engages and updates stakeholders across sectors on Broadband and Digital Equity information.

Social Media

Frequency: Ongoing

Activity: The ACA State Broadband Office will develop a robust social media strategy and actively utilize various social media platforms to share timely and relevant information about Digital Equity and Broadband activities.

The stakeholder engagement plan for the Digital Equity Program is comprehensive and considers the unique needs of different regions, tribes and communities in Arizona. By leveraging stakeholder engagement and prioritizing key areas of focus, ACA intends to overcome barriers and maximize the impact of the Digital Equity and BEAD programs, ultimately achieving its goal of universal broadband access in a way that is also conducive to advancing digital equity more broadly. This stakeholder engagement plan will only be possible with the combined efforts of ACA, Governor Hobbs, stakeholders, subgrantees, local and tribal governments, and the NTIA.

5. Implementation

5.1 Implementation Strategy & Key Activities

Goal 1: Increase access and affordability of reliable broadband Internet.

Key Activities:

- Increase support of digital navigators and leverage them to support enrollment.
- Increase collaboration with ISPs providing ACP.
- Increase awareness of ACP through targeted campaigns and collaborations.
- Increase awareness of low-cost plan.
- Provide local and Tribal Digital Navigators training on low-cost plan.
- Prioritize outreach in areas with high volume of covered populations.

Goal 2: Increase Inclusivity and Accessibility of Public Resources and Services

Key Activities:

- Support nonprofits and CAIs in providing digital literacy and skills programs tailored to aging individuals and those with disabilities.
- Identify and support programs that offer accessible devices and assistive technologies, ensuring they meet the physical challenges faced by aging individuals.
- Partner with workforce agencies to ensure their forms meet accessibility standards and provide job application assistance programs.
- Invest in library resources to make them more accessible, including adaptive technology and trained support staff.
- Determine core needs of how Tribes can view language and cultural preservation with digital equity lens.
- Create dashboard that depicts local and Tribal digital equity resources.

Goal 3: Provide Relevant Digital Literacy and Skills Training Tailored to the Needs of Covered Populations

Key Activities:

- Increase awareness of digital navigator programs around the state.
- Increase capacity of Digital Navigator and skill building programs
  - Coordinate with Digital Navigator network to incorporate targeted resources available to people across covered populations.
  - Incorporate monitoring into navigator intake forms.
- Increase support to organizations serving individuals across covered populations that provide informal and formal digital skills training.
- Increase awareness of digital skills learning platforms and resources.

- Ensure digital skills learning platforms and resources are available in multiple languages and formats as reflected by individuals across covered populations.

- Provide support to institutions of higher education or organizations with partnerships to implement training.

- Provide workforce development opportunities for individuals that will be needed to roll out BEAD.

- Provide Digital Literacy upskilling opportunities for students in the K-12 system that will prepare them for the workforce or post-secondary education.

- Coordinate with Arizona@Work and BuilditAZ Apprenticeship initiative.

- Coordinate with local workforce boards and the Workforce Arizona Council, established under the Workforce Innovation and Opportunity Act (WIOA).

Goal 4: Enhance the Safety and Security of Arizona's Digital Spaces

Key Activities:

- Increase awareness and use of online safety training and cybersecurity resources.

- Partner with AZDOHS to conduct online safety and cybersecurity training for Community Anchor Institutions and community members.

- Partner with the Arizona Department of Homeland Security to increase cyber preparedness especially for businesses.

- Enhance information sharing among stakeholders to reduce risk.

Goal 5: Ensure Arizonans Have an Affordable Device That Meets Their Unique Needs

Key Activities:

- Launch public awareness campaigns to inform the covered populations about the availability of affordable devices and the benefits of digital inclusion.

- Use various communication channels, including social media, community events, and local media. Set up community distribution centers in underserved areas where individuals can access affordable devices.

- Identify the device distribution and affordability programs that have shown the most success in the near term and expand them to cover a broader population.

- Form partnerships with corporate entities that can donate or subsidize devices for the covered populations.

- Determine criteria around appropriateness of users' devices and encourage Digital Navigators to gather data regarding appropriateness of devices.

- Coordinate with organizations that provide devices to user.

- Determine minimum requirements for devices.

- Coordinate with Digital Equity Specialists and Digital Navigators to create periodic check-ins with individuals who have received devices.

- Increase support for organizations that provide refurbished devices and outreach to people across covered populations.

- Create state benchmarks and best practices surrounding affordability and accessibility features of devices.

- Encourage technology companies to integrate a refresh plan into distribution to ensure that devices are updated as technology evolves.

- Highlight the benefits of refurbishing devices, emphasizing their affordability, reduced environmental impact, and alignment with various user needs.

Goal 6: Monitor and Evaluate Impact and Progress towards Digital Equity

Key Activities:

- Communicate with local and state government to encourage participation.

- Identify and meaningfully engage trusted members of the community.

- Regularly connect with communities through town halls, focus groups, and surveys to understand their experiences and gauge the effectiveness of digital equity initiatives.

- Create feedback loops for individuals to provide ad-hoc and regular feedback to the ACA.

- Establish clear channels for communicating the outcomes of digital equity initiatives to all stakeholders.

5.1.1   State Agencies, Community-Based Organizations, and Higher Education

Representatives from state agencies, workforce organizations, community-based organizations and higher education institutions thoughtfully participated throughout the planning process. Their qualitative and quantitative feedback is integrated throughout the state plan. As the state moves into the implementation phase of digital equity planning, the continued involvement of these entities is vital.

Engagement will include the following groups:

- **State and Local Workforce Agencies and Workforce Organizations:** Partnering with these organizations is a crucial step in breaking down barriers to digital equity. By working together on a digital equity plan, we ensure that members of covered populations gain access to the digital skills and resources needed to thrive in today's job market. This alignment with workforce development goals fosters a more inclusive and competitive workforce.

- **Labor Organizations and Community-Based Organizations (including nonprofits):** Collaborating with labor organizations and community-based nonprofits is essential for dismantling barriers to digital equity. These groups have deep connections with covered populations and understand their unique challenges, enabling us to tailor digital equity initiatives to specific community needs. This approach empowers grassroots efforts to address digital disparities.

- **Institutions of Higher Learning (State Universities and Community Colleges), and Educational Organizations:** Collaborating with higher education institutions and educational organizations is a pivotal step in breaking down barriers to digital equity. This partnership extends beyond just access; it also involves the creation of educational materials and harnessing research in the field of digital equity. Together, we ensure that students from covered population communities not only gain access to high-quality digital education and resources but also benefit from tailor-made educational content.

- **Internet Service Providers, Tech Companies, and Device Manufacturers:** Joining forces with internet service providers, tech companies, and device manufacturers is a key strategy in eliminating barriers to digital equity. Their infrastructure and technological resources are vital for expanding access to the internet, devices, and digital services. Through partnerships, they can offer discounted services and affordable devices, supporting digital inclusion initiatives. This collaboration benefits both underserved populations and the industry, making digital resources and opportunities more accessible.

5.2   Timeline

The Arizona Commerce Authority plans to leverage Digital Equity Capacity Grant Funding to ensure every Arizonan has the information technology capacity to participate in every aspect of society, democracy, and the economy. Where possible, additional funding sources will be identified and leveraged for the benefit of accomplishing program goals. The Digital Equity team will collaborate with BEAD stakeholders throughout the capacity building phase to ensure programmatic alignment, accelerate access and adoption of broadband infrastructure, increase impact, and identify opportunities for increased efficiency. The following timeline is designed to position the state to successfully achieve this goal.

	Task Name	2024				2025				2026				2027				2028				2029				2030			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Goal 1																												
2	ACP – Near Term																												
3	ACP – Long Term																												
4	BEAD low-cost plan – Near Term																												
5	BEAD low-cost plan – Long Term																												
6																													
7	Goal 2																												
8	Online Spaces Partnerships – Near Term																												
9	Online Spaces Partnerships – Long Term																												
10	Digital Equity Specialists – Near Term																												
11	Digital Equity Specialists – Long Term																												
12	Local DE Planning and Activities – Near Term																												
13	Local DE Planning and Activities – Long Term																												
14	TAPs and Health Navigators – Near Term																												
15	TAPs and Health Navigators – Long Term																												
16																													
17	Goal 3																												
18	Digital Literacy Skills – Near Term																												
19	Digital Literacy Skills – Long Term																												
20	Digital Navigator Utilization – Near Term																												
21	Digital Navigator Utilization – Long Term																												
22	Workforce Development – Near Term																												
23	Workforce Development – Long Term																												
24	K 12 Standards – Near Term																												
25	K 12 Standards – Long Term																												
26																													
27	Goal 4																												
28	Online Safety Workshops – Near Term																												
29	Online Safety Workshops – Long Term																												
30	Online Safety Information – Near Term																												
31	Online Safety Information – Long Term																												
32																													
33	Goal 5																												
34	Affordability of Devices – Near Term																												
35	Affordability of Devices – Long Term																												
36	Match Device to Individual Needs – Near Term																												
37	Match Device to Individual Needs – Long Term																												
38	Sustainable Device Distribution – Near Term																												
39	Sustainable Device Distribution – Long Term																												
40																													
41	Goal 6																												
42	Assess Impact, Communicate Findings – Near Term																												
43	Assess Impact, Communicate Findings – Long Term																												

Year 0 (2024): Secure funding, create parameters for Digital Equity Capacity Grant, establish and strengthen partnerships.

- Q1-Q4: Establish baseline data where necessary, continue to assess existing programs and add to Asset Inventory, begin collating additional local resources, evaluate current communication channels, expand existing website, and integrate information into County Dashboards. Pre-work towards the Goals and Objectives set forth in this Digital Equity Plan that can be implemented, will be. See Section 2.3 for a complete description of Goals and Objectives.

Year 1 (2025): Detailed activities across all quarters, focusing on stakeholder meetings, enrollment campaigns, feedback loops, partnerships, and pilot programs.

- Q1-Q4: Initiate quarterly BEAD/Digital Equity stakeholder meetings (focus on low-income, rural communities), conduct community listening sessions in each county (participation from covered populations), establish collaborations with Digital Equity Specialists and NGOs for accessibility best practices.

- Q2-Q4: Begin statewide ACP enrollment campaign (target 10,000 household increase, focus on covered populations), partner with higher education and workforce agencies (align training with high-wage job requirements).

- Q2: Establish feedback loops with business, industry, and higher education.

- Q3: Partner with higher education and workforce agencies for workforce training, begin consultations with tech companies for refresh plans.

- Q4: Work with partners to determine best mechanisms for device support for covered households, update digital priorities based on year 1 feedback.

Year 2 (2026): Emphasis on strengthening collaborations, continuing existing programs, and introducing new initiatives like tech centers and specialized navigator roles.

- Q1-Q4: Strengthen BEAD collaboration (integrate more local leaders), continue partnerships with ISPs for affordable internet, continue quarterly stakeholder meetings (identify strategies for ACP uptake), conduct second series of annual community listening sessions.

- Q1: Partner with CAIs (libraries, nonprofits, higher education) for culturally responsive digital literacy and skills programs, deploy online safety training modules (tailored for covered populations), establish partnerships for telehealth access expansion.

- Q2: Fund initial tech centers in marginalized communities (access to digital navigators), establish pathways from digital skill building into higher education.

- Q3-Q4: Introduce specialized navigator roles (focus on aging, telehealth, disability support), launch workforce development workshops (target jobseekers from covered populations), develop telehealth resource repository.

- Q4: Assess increase in ACP enrollment, adjust strategies, update digital priorities based on year 2 feedback.

Year 3 (2027): Focus on assessing enrollments, compliance, program monitoring, and expanding initiatives like cybersecurity courses.

- Q1-Q4: Assess progress towards 50,000 additional ACP enrollments, monitor digital literacy and skills program completion, collaborate for advanced cybersecurity courses (establish community cybersecurity response teams).

- Q2: Launch programs celebrating local digital achievements and partnerships.

- Q3: Expand accessibility initiatives (focus on user feedback, emerging assistive technologies).

- Q4: Update digital priorities based on year 3 feedback.

Year 4 (2028): Continued partnerships, program expansions, community sessions, and setting specific coverage goals.

- Q1-Q4: Continue BEAD and Digital Equity program alignment (support, safety training, skill building as regions gain internet access), implement changes to improve ACP enrollment, expand local tech centers (increase digital navigator services), support distribution of 20,000 accessible devices, conduct fourth round of community listening sessions, partner with higher education, workforce agencies, and business for specialized courses on emerging technologies.

- Q4: Achieve 40% coverage of the state's baseline for underserved areas with digital infrastructure, update digital priorities based on year 4 feedback.

Year 5 (2029): Final push for enrollment targets, celebrating achievements, evaluating programs, and updating plans based on feedback.

- Q1-Q4: Final push to meet 50,000 ACP enrollment target, continue partnership with BEAD, support digital equity capacity building of local CAIs, improve and expand digital skill building initiatives (partnerships with nonprofits and higher education), maintain and enhance online safety training, review and adjust device distribution and refresh plans, expand telehealth training and resources, conduct final round of community listening sessions and plan updates.

- Q2-Q4: Celebrate state's digital diversity (events, showcases), focus on long-term industry partnerships, identify current community needs and gaps.

- Q3-Q4: Evaluate impact of navigator programs, conduct comprehensive review of all accessibility initiatives, evaluate impact of cybersecurity initiatives, plan for continuous updates to cybersecurity training modules.

6. Conclusion

The Digital Equity Plan is not merely about creating systems and structures that support digital access but about ensuring every Arizonan can actively and meaningfully engage in an increasingly digital world. Central to this strategy is a vision of a digitally inclusive Arizona where access is ubiquitous, and participation is affordable. It's not just about laying down infrastructure; it's about listening to each community, identifying their unique barriers, and finding creative and collaborative ways to break down the barriers for good. Every Arizonan, particularly the most vulnerable—covered households, aging individuals, incarcerated individuals, veterans, individuals with disabilities, individuals with a language barrier, racial and ethnic minorities, rural inhabitants, and tribal communities—should have access to affordable and reliable internet service, devices that meet their unique needs, support systems to help navigate challenges, and the digital skills needed to thrive.

Collaboration is this plan's bedrock. We acknowledge the vital role of partnership, particularly with anchor institutions, state and local government, nonprofits, higher education, and tech companies in achieving success. We support and encourage the exchange of information through collaborative problem-solving that is unique in their own communities. Additionally, by aligning with Arizona's Governor's priorities and integrating initiatives from local and Tribal governments, we ensure a unified, resource-efficient approach.

Achieving digital equity in Arizona is no small feat. The intricacies and challenges demand not just strategic planning but also substantial financial investment. While the state's commitment is unwavering, the scale of the endeavor necessitates a deep dive into funding avenues.

This journey towards digital inclusivity is a marathon, not a sprint. It requires foresight, persistence, and a thoughtful commitment that extends beyond mere implementation. As we chart this course, securing robust funding isn't just a recommendation—it's an imperative.

As we look to the future, this plan is our roadmap for the next half-decade and beyond. Arizona is not just aiming to bridge the digital divide; we aspire to be the gold standard in digital equity.

7. Appendices

7.1 Glossary

Glossary	Definitions
Accessibility	Digital accessibility is an extension of ADA principles to the use of assistive or adaptive technology. For example, closed captioning of video helps deaf and hard-of-hearing people read what is being said, and audiobooks turn text to speech to assist blind or partially sighted people.
Access	Access is the ability to fully participate in a digital society. It includes access to tools and technologies, such as internet and computers, that allow for full participation
Affordability	Addressing affordability involves ensuring that the cost of internet access, devices, and related services is affordable. Addressing affordability involves ensuring that the cost of obtaining and maintaining internet connectivity, devices, and related services is within reach of all individuals, regardless of their income level or socioeconomic status.
Broadband	Broadband, as defined by the United States government, refers to any high-speed internet access that is always on and meets minimum benchmark speed criteria for advanced telecommunications capability defined by the FCC, which are updated periodically. The US Census includes cellular service as a type of broadband because it differentiates broadband as anything other than dial-up internet service. The current speed standards for "high-speed" broadband is 100 Mbps download, 20 Mbps upload or "100/20". The prior speed benchmark was 25 Mbps download, 3 Mbps upload (25/3) which is still considered broadband but does not meet the benchmark for the advanced telecommunications capability in BEAD.
Cybersecurity	Cybersecurity refers to the practice of protecting computer systems, networks, and data from theft, damage, unauthorized access, or disruption. It encompasses a broad range of technologies, processes, and practices designed to safeguard digital information and infrastructure from cyber threats
Cyber hacking	Cyber hacking refers to the unauthorized access, use, or manipulation of computer systems, networks, and data with malicious intent. It involves exploiting vulnerabilities in digital systems to gain unauthorized access, steal sensitive information, disrupt services, or carry out other malicious activities.
Devices	Refers to the availability of computers, laptops, tablets, smartphones, and other digital devices that enable individuals to engage online. Access to devices is essential to ensure that individuals have the necessary tools to connect, communicate, learn, and participate.
Digital Disruption	Digital disruption is an effect that changes the fundamental expectations and behaviors in a culture, market, industry or process that is caused by, or expressed through, digital capabilities, channels or assets.
Digital Divide	The gap between those who have access to technology, the internet and digital literacy training and those who do not.
Digital Equity	The condition in which individuals and communities have the information technology capacity that is needed for full participation in the society and economy.
Digital Literacy and Skill Building	Digital literacy and skill-building focuses on developing the knowledge, skills, and competencies needed to use digital technologies safely and effectively. It encompasses various aspects such as basic computer skills, internet usage, online safety, information literacy, and responsible digital citizenship.
Digital Navigator	Trusted guides who assist community members in internet adoption and the use of computing devices. Digital navigation services include ongoing assistance with affordable internet access,

	device acquisition, technical skills, telehealth navigation and ACP application support.
Financial Literacy	Financial literacy programs cover topics such as online banking, budgeting, digital payment systems, and identity theft prevention, empowering individuals to make informed financial decisions in the digital space.
Flags	Indicators (also known as "flags") indicate a specific threat future is underway. Sometimes referred to as "signals," these flags are sequential, with less apparent precursors already in effect and more alarming ones still over the horizon.
Infrastructure	The basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies, internet) needed for the operation of a society or enterprise.
Internet access	The availability and ability to connect to the internet.
Misinformation	This term refers to inaccurate or false information that is spread without the intention to deceive or manipulate.
Disinformation	Deliberately false or misleading information that is spread with the explicit purpose of deceiving, manipulating, or influencing people.
Subject Matter Expert	An individual who possesses a high level of expertise, knowledge, and experience in a specific field, subject, or area. SMEs are recognized as authorities in their respective domains due to their in-depth understanding and practical insights.
STEM	Stands for Science, Technology, Engineering, and Mathematics. It is an educational and professional acronym used to refer to the academic disciplines and fields of study that are collectively focused on these four key areas.
Sustainability	The practice of meeting the needs of the present without compromising the ability of future generations to meet their own needs. It encompasses various aspects, including environmental, social, and economic considerations.
Tech support	Organizations provide technical assistance and support services to address technological challenges and ensure individuals can overcome barriers to digital access. Services can include troubleshooting issues, providing guidance on device usage, and resolving connectivity problems.
Telehealth	Is the distribution of health-related services and information via electronic information and telecommunication technologies. It allows long-distance patient and clinician contact, care, advice, reminders, education, intervention, monitoring, and remote admissions.
Underserved locations	Locations that have reliable access to broadband at minimum speeds of 25/3 but lower than 100/20.
Unserved locations	Locations that lack reliable access to broadband at minimum speeds of 25/3.
Vulnerable populations	Groups of people who are at a higher risk of experiencing negative health, social, or economic outcomes due to various factors. These factors can include socioeconomic status, age, race, ethnicity, gender, disability, and access to resources and services.
Wi-Fi	The ability to connect to the internet through a wireless connection through a Wi-Fi "hotspot" which may or may not be free to the user.
Workforce Development or Upskilling	Workforce development or upskilling initiatives aim to enhance individuals' skills and capabilities for the current job market and future employment opportunities. Program offerings can include job training, career counseling, vocational education, and the skill-scaffolding required in the evolving workforce.

7.2   Arizona's Stakeholder Asset and Resource Map

Organization	Covered Population								Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
AARP					A					X	X	X	X	X	X
Ability 360		D							X			X	X		
ADOT				R		M			X				X		
AireBeam				R					X					X	
Ajo Unified	L	D		R		M		E	X			X			
Alexander's Abilities		D				M						X			
Alhambra Elementary School District	L	D				M		E	X			X			
ALL in Education	L					M		E				X			
Alliance for Navajo Broadband				R		M		E	X			X	X	X	
Allo				R					X				X	X	
AMVets				R			V					X	X		
Amazon		D				M				X			X	X	
American Indian Policy Institute				R		M							X		
Amerind				R		M					X		X	X	
Anodyne Independent Living		D								X	X	X			
Apache County Town Hall				R					X						
Apache County Library District	L			R					X	X		X	X		
Apple		D						E		X		X	X		
Area Agency on Aging					A					X		X			
Arivaca Community Ctr	L			R	A				X						
Arizona @ Work	L						V					X	X		
Arizona Advisory Council on Indian Healthcare				R		M		E							X
Arizona Association for Economic Development				R									X		
Arizona Broadband Stakeholder Network				R					X						
Arizona Center on Aging					A						X				X
Arizona Center for Civic Leadership (Flinn)						M							X		
Arizona Center for the Deaf and Blind		D								X		X	X		
Arizona City Community Library	L			R	A				X	X		X	X	X	
Arizona Coalition for Military Families							V						X		
Arizona Commission for the Deaf and Hard of hearing		D										X	X		
Arizona Community Action Association	L													X	
Arizona Community Foundation	L	D		R	A	M	V	E				X		X	
Arizona Department for Veteran Services							V			X			X		
Arizona Department of Administration	L	D	I	R	A	M	V	E					X		

Organization	Covered Population	Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
Arizona Department of Corrections, Rehabilitation &	L, I				X	X		
Arizona Department of Economic Opportunity	L, R		X		X	X	X	
Arizona Department of Economic Security	L, D, R, A, M, V, E		X			X		
Arizona Department of Education	L, D, R, M, E	X	X	X	X	X		
Arizona Department of Health Services	L, D, R, A, M, E				X			X
Arizona Department of Homeland Security	R				X	X		
Arizona Department of Housing	L, R	X	X		X	X	X	
Arizona Department of Juvenile Corrections	I				X	X		
Arizona DES Div. of Developmental Disabilities	D				X	X		
Arizona Dept. of Education (Tribal school)	L, D, R, M, E	X			X	X		
Arizona Dept. of Education ODTL	L, D, R, M, E	X	X				X	
Arizona Dept. of Education- E-RATE	R	X						X
Arizona Developmental Disabilities Advisory Council	D					X		
Arizona Health Care Cost Containment System	L		X				X	
Arizona Hispanic Chamber of Commerce	M				X	X		
Arizona Kinship Support Services – Children of Incarcerated Parents	L, I	X						
Arizona LeadingAge	D, A							
Arizona Literacy & Learning Center	M, E		X	X	X	X		
Arizona Public Libraries (services vary by library)	L, D, R, A, M, V, E	X	X	X	X	X	X	X
Arizona Rural Schools Association (ARSA)	L, R, E	X	X		X	X	X	
Arizona State University	L, D, I, R, A, M, V, E	X	X	X	X	X	X	
Arizona Technology Access Program (AzTAP)	L, D	X	X		X	X	X	
Arizona Technology Council	R, M		X		X	X		
Arizona Technology in Education Association (AZTEA)	L, M		X		X	X		
Arizona Telemedicine Program	R, A	X	X	X	X			X
Arizona Western College	R, M, E	X			X	X		
AZNext	L, D, R, M, V, E					X		
WIOA Arizona@Work	L, E	X				X		
Arizona Western College; Southwest Technical Education of	L, R, M	X			X	X		
Arouet	R				X			
ASU Experience Center	L, D, M, E			X				
ASU Office of Community, Health, Engagement, and Resiliency	L, M							X
ASU Prep	L, D, M, E	X			X			
ASU Sustainable Cities Network	R					X		

Organization	L	D	I	R	A	M	V	E	Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
ASU Thunderbird School of Global Management								E	X				X		
AT&T	L								X	X				X	
AZ Common Ground	L		I						X						
AZ PBS/EC Workforce Registry & Scholarships	L					M						X	X		
AZ State Land Department									X						
AZ State Library	L			R		M		E	X	X	X	X	X	X	
AZ State Parks	L	D		R	A	M	V	E	X						
AzStrut	L					M				X		X		X	
Banner University Medical Center South	L				A	M									X
Base Arizona	L		I			M							X		
Black Chamber of Arizona						M							X		
Blue Public Library	L			R	A	M		E	X	X		X	X		
Bouse Public Library	L			R	A	M		E	X	X		X	X		
Boys & Girls Club of Greenlee County	L			R		M			X	X		X			
Boys & Girls Club of Santa Cruz County	L			R		M			X	X					
Boys and Girls Club	L			R		M				X		X	X		
Bureau of Indian Education/Cottonwood Day				R		M			X						
C.R.I.T Public Library	L			R		M			X	X					
Camp Verde Community Library	L			R	A				X	X		X	X		
Cartwright Elementary School District	L	D				M			X						
Casa Grande Main Library	L					M			X	X		X	X		
Casa Grande Teen Center	L					M			X	X		X	X		
Catholic Charities MANA House	L						V						X		
Centennial Community Center				R	A				X						
Centennial Public Library				R					X	X					
Center for the Future of Arizona	L					M							X		
Central Arizona College - Superstition Mountain Campus	L	D			A	M		E	X						
Central Arizona Shelter Services (CASS)	L	D			A	M	V		X				X	X	
Chandler Unified School District	L	D				M		E	X	X					
Chicanos Por la Causa	L					M		E	X	X	X	X	X	X	
Childrens Clinics		D													X
Chino Valley USD	L	D		R		M		E	X				X		
Chrysalis Veteran's Services							V		X				X		
City of Apache Junction	L	D					V		X						

Organization	Covered Population	Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
City of Avondale	L D M V	X				X		
City of Buckeye	L D A M V	X				X		
City of Carefree	D R M V	X				X		
City of Casa Grande	L D R A M V	X				X		
City of Cave Creek	D R V	X				X		
City of Chandler	L D A M V	X				X		
Town of Clarkdale	R	X				X		
City of Flagstaff	L D I R A M V E	X				X		
City of Fountain Hills	I A M V E	X				X		
City of Gilbert	L A M V E	X				X		
City of Glendale	L A M V E	X		X		X		
City of Goodyear	L A M V E	X				X		
City of Kingman	L R A M V E	X				X		
City of Mesa	L D A M V E	X	X	X		X	X	
City of Page	L R	X				X		
City of Peoria	L M V	X		X		X		
City of Phoenix	L D I A M V E	X	X	X	X	X	X	
City of Queen Creek	L A M V E	X				X		
City of Safford	L R A M V E	X				X		
City of Scottsdale	L A M V	X				X		
City of Sierra Vista	L R A M V E	X				X		X
Town of Superior	L A M V E	X				X		
City of Surprise	L A M V E	X				X		
City of Tempe	L D A M V E	X	X	X	X	X	X	
City of Tolleson	L A M E	X				X		
City of Tucson	L D I A M V E	X				X		
City of Tucson Housing & Community Development	L D A M E	X			X	X	X	
Clifton Community Center	L R A							
Clifton Community Center @ Historic Train Depot	L R	X						
Clifton Public Library	L R M E	X	X		X	X		
Cochise College	L R M V E	X			X	X		
Cochise County	L R	X				X		
Cochise County reentry program	I	X				X		
Coconino Department of Health and Human Servcies	L D R A M E	X			X			X

Organization	Covered Population	Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
College Connect Tempe	L, M	X						
College of Health Solutions	L, D, M	X		X		X		X
Comcast	L, R	X						
Common Sense Media	L, D, R, M, E				X	X	X	
Connect Pima	L, D, R, A, M, E	X	X	X	X	X	X	
ConnectAZ	L, R, A, M			X			X	
Conrad Foundation	L, R, M				X	X		
Consumer Reports						X		
Coolidge Public Library	L, R, A, M, E	X	X		X	X		
Cox Communications	L, R, M, V, E	X	X	X	X	X	X	
Curator Solutions	R, E				X	X		
CVS Health	L, D, R, A, M, V, E							X
DELL (Dell Technologies)	D, R, A			X				
Deloitte	L, M			X	X	X		
Department of Veterans Affairs	L, A, V					X		
Department Of Veterans' Services	A, V				X	X	X	
Desert Heights Charter School	M	X	X		X			
Developmental Enrichment Centers (DEC)	D	X			X			
Digital Connect	L, R, A, M, E	X	X	X	X	X	X	
Digital Equity Institute	L, D, R, A, M, V, E	X	X	X	X	X	X	X
Digital Payson	R	X				X		
Dine College	L, R, M	X	X		X	X		
Direct Advocacy & Resource Center	L, D	X						
Disability Resource Center at Arizona State University	D	X	X					
Disability Resource Center at Northern Arizona Univ	D	X	X					
Disability Resource Center at University of Arizona	D	X	X					
Disabled American Veterans	D, M, V	X	X			X		
Division of Developmental Disabilities/DES	D				X	X		X
Downtown Phoenix Partnership		X						
Duet: Partners In Health & Aging	D, A				X			X
Duncan Public Library	L, R, A, M, V, E	X	X		X	X		
Eastern Arizona College	L, D, R, A, M, V, E	X				X		
Edgagement	D, A, M					X		X
Eloy Santa Cruz Library	L, R, A, M, V, E	X	X		X	X		

Organization	Covered Population	Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
Epilepsy Foundation		X			X			
Equality Health Foundation	L D A M E						X	X
EveryoneOn Arizona	R E	X	X	X			X	
Expect More Arizona	L						X	
Financial Empowerment Foundation					X	X		
Finding Balance	L D R A M E				X	X	X	X
Flagstaff Unified School District	L D A M E	X			X	X		
Flinn Foundation						X		
Florence Public Library	L R A M V E	X	X		X	X		
Flowing Wells Unified School District	L D R M E	X						
Fortinet							X	
Foundation for Blind Children	D		X		X			
Fredonia Public Library	R	X			X	X		
Friendly House Adult Education	A				X	X		
Friends of Daisy Mountain Trails		X						
Friends of the Paulden library	R	X	X			X		
Future Stars	L M		X					
GateWay Community College	L D M V E	X		X		X		
Geeks 2 You	A			X				
Gila County Communiy College	L D R M V E	X	X		X	X		
Gila County Library District	R	X	X		X	X	X	
Gila County	R E	X	X		X	X		
Gila Valley YMCA	L R M E	X						
Girl Scouts of Arizona	M	X		X	X	X		
Glendale Community College	M E	X				X		
Globe Public Library	R A M E	X	X		X	X		
GoEducate	L M					X		
Gonzales Group LLC	M	X						
Goodwill of Central and Northern Arizona	L M E				X	X		
Goodwill- Reentry services	L I M	X				X		
Google Cloud	L	X				X	X	
Google Fiber	L	X						
Gorman USA	L	X						
Graham County Chamber of Commerce	R	X				X		

Organization	Covered Population	Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
Greasewood Springs Community School	R, M				X	X	X	
Greater Phoenix Economic Council	M					X		
Greater Phoenix Leadership	M					X		
Greater Phoenix Urban League	L, M					X		
Greater Vail Community ReSources	L, R, A	X						
Greenlee County Community Action	L, R				X			
Greenlee County Library District	R, A, M	X	X		X	X		
Grow with Google	L, M, E		X			X		
Hayden Public Library	R	X	X		X	X		
Healthy Communities, Vitalyst Health Foundation	L, R, M							X
Helios Education Foundation	L, R, M, E	X				X		
Hesperus	L, R, M, V							
Hispanic Chamber of Commerce	M	X				X		
Hope's Crossing	L, M				X	X		
HP	L, D, R, A, M, V, E			X				
Indian Hills Community Center	L, R, M	X						
Inmate Programs and Reentry Arizona Department of	L, I, M					X		
InsideOut Network	L, I					X		
Intel	L, R, A, M	X	X					
Interfaith Community Services	L, D, A, M	X				X		
Isaac School District	L, D, M, E	X	X		X			
Isabelle Hunt Memorial Library	R	X	X		X	X		
Jerry Ambrose Veterans Council	V	X				X		
JMA Wireless		X						
Job Path	L, M	X				X		
Kearny Public Library	R	X	X		X	X		
Komputer Kids	L, M		X		X			
League for Innovation in the Community College	M, E					X		
League of Cities and Towns	R, M					X		
Learning.com	L, M, E				X			
Litchfield Elementary School District	L, D, M, E	X						
Literacy Connects	L, M				X			
Local First Arizona	R				X	X		
Lumen Technologies	L, R	X					X	

Organization	Covered Population								Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
	L	D	I	R	A	M	V	E							
Machusak Recreation Center	L			R					X						
Mammoth Public Library				R					X	X		X	X		
Maricopa Association of Governments	L			R	A	M		E					X		
Maricopa Community Colleges	L	D				M		E	X	X		X	X		
Maricopa County	L	D		R	A	M		E	X						
Maricopa Library & Cultural Center						M			X	X		X	X		
Miami High School	L	D		R		M		E	X						
Miami Public Library	L			R	A	M		E	X	X		X	X		
Microsoft										X					
Middle Ground Prison Reform	L		I										X		
Mohave Community College	L	D		R		M		E	X	X		X	X		
Mohave County	L			R	A	M									
Moonshot at NACET				R		M							X		
Morenci Recreation Center				R					X						
Murdoch Center	L				A	M			X	X			X		
Nacog Area Aging Agency					A										
NACOG Community Services	L			R					X	X			X		
Narbha Institute	L	D		R											
Native American Connections	L					M					X	X	X		
Native Americans for Community Action, Inc. (NACA)				R		M							X		
Native Forge	L					M			X	X			X		
NAU-Education Technology Consortium	L	D		R		M		E	X				X		
Navajo County	L	D	I	R	A	M	V	E	X						
Navajo County Education Service Agency	L	D		R		M		E				X	X		
Navajo County Library District				R					X	X		X			
Navajo Nation, Department of Dine Education	L	D		R		M		E				X	X		
Navajo Schools	L	D		R		M		E	X			X			
New Horizons Disability Empowerment Center (NHDEC)		D							X			X	X		
Noah Webster Schools	L					M			X	X					
Nogales Unified School District	L	D		R		M		E	X						
Northern Arizona University	L	D	I	R	A	M	V	E	X	X	X	X	X		
One n Ten	L					M			X	X		X	X		
Oracle Public Library	L			R					X	X		X	X		
Osborn School District	L	D			A	M		E	X	X					

Organization	Covered Population	Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
Oscar Yrun Community Center	L R A M	X			X	X		
Page Unified School District	L D R M E	X	X					
Paiute Neighborhood Center	L R M E	X			X	X		
Paradise Valley Unified School District	L D M E	X						
Parker Police Department	I	X				X		
Parker Public Library	L R A M	X	X	X	X	X		
Partnership for Economic Innovation	M					X		
Peoria Public Library	L D A	X	X	X	X	X		
Phoenix Chamber of Commerce	L D M	X						
Phoenix College	L D I R A M V E	X	X			X		
Phoenix Community Alliance		X				X		
Phoenix Elementary School District #1	L D M E	X	X					
Phoenix Indian Center	L A M E	X						
Phoenix Oasis Reentry Services	I					X		
Phoenix Public Housing	L D I A M V E	X	X	X	X	X	X	
Phoenix Sister Cities		X			X	X		
Phoenix VA Healthcare System	V				X			X
Pima Community College	L D M V E	X	X	X	X	X		
Pima County Community Action Agency	L	X				X		
Pima County Government	L D R A M E	X				X		
Pima County Public Library	D R M E	X	X	X	X	X		
Pinal County Schools	L D R M E	X	X					
Pipeline AZ	L R M E					X		
Prescott Chamber of Commerce	R	X				X		
Prescott Public Library	D R	X	X	X	X	X		
Presidio								
Primavera Foundation PREP Program	L D M E				X	X		
Promise AZ	M E							
Pueblo del Sol K-8 School	L D M E	X						
Puente	I M E				X			
Quartzsite Community Center	L R A	X			X			
Quartzsite Public Library	L R A	X	X		X	X		
Rainbow Housing Assistance	L R M	X						
Read Better Be Better	L M	X			X			

Organization	Covered Population								Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
RefurbIT	L	D	I	R	A	M	V	E		X				X	
Regional Economic Development Center at Yavapai College				R					X	X			X		
RISE		D							X				X		
Round Valley Public Library				R					X	X			X		
Arizona Rural Development Council	L			R		M							X		
Saavi Services for the Blind		D							X			X	X		
Safford Senior Center					A							X			
Sahuarita Food Bank	L	D		R	A	M	V	E	X	X		X	X		
Saint Michael Indian School	L			R		M						X	X		
Salt River Project	L			R		M							X		
San Carlos Public Library				R		M			X	X		X	X		
San Manuel Library				R		M			X	X		X	X		
San Tan Valley Library						M			X	X		X	X		
Sanders Unified Schools	L	D		R		M		E	X						
Senita Valley Elementary	L	D				M		E	X						
Santa Cruz Community Foundation	L			R	A	M		E	X				X		
Santa Cruz Training Programs, Inc.		D											X		
School Connect AZ				R		M						X			
SciTech Institute	L			R								X	X		
Services Maximizing Independent Living & Empowerment (SMILE)		D							X			X	X		
Show Low Library				R					X	X	X	X	X		
Siklu	L								X						
Skyline Education, Inc.	L	D				M									
Sonoran Schools	L	D				M		E	X			X			
Southside Community Association	L											X	X		
Southwest Human Development		D				M						X	X		
Special Olympics		D		R		M		E		X			X		X
Spectrum Healthcare, Prescott	L			R		M			X						X
Springerville Town Hall				R		M			X				X		
St John's High School	L			R		M			X	X			X		
St Johns County Health Center	L	D		R	A	M									X
St. Johns Library	L			R	A				X	X	X	X	X		
Step Up Schools Mesa	L	D				M			X	X		X			
Student Success Innovations, ASU Office of the University	L	D				M			X						

Organization	Covered Population							Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
Summit Healthcare Clinic	L	D				M								X
Sun Corridor Network	L			R	A	M	E	X		X			X	
Sunnyside Unified School District	L	D				M		X	X		X			
Superior Public Library				R				X	X		X	X		
SUSD #18 (Scottsdale Unified School District)	L	D				M		X	X					
T-Mobile	L							X	X		X	X	X	
Take Charge America	L										X			
Tanque Verde High School, Tucson	L	D				M	E	X			X	X		
Tech Launch Arizona, Tucson						M		X				X		
TechBridge Arizona	L					M	E				X	X		
TechSupport Arizona	L	D			A	M	E			X				
Tek Compass								X						
Tempe Elementary School District	L	D				M	E	X	X		X			
Tempe Public Library						M	E	X	X		X	X		
Tempe Union High School District	L	D				M	E	X	X					
TGen North, Flagstaff								X				X		
The Arc of Arizona		D						X			X			
The Arizona Justice Project			I								X	X		
The Connective												X		
The Gathering Space														X
Ting Wireless	L			R				X						
Tohono O'odham Community College	L			R		M	E	X			X	X		
Tohono O'odham Utility Authority	L			R		M		X					X	
Tonto Basin Public Library				R				X	X		X	X		
Town of Camp Verde	L			R		M		X				X		
Town of Clarkdale				R				X				X		
Town of Eager	L			R		M		X				X		
Town of Fountain Hills					A			X				X		
Town of Gilbert						M	E	X				X		
Town of Miami	L			R		M		X						
Town of Oro Valley				R		M		X				X		
Town of Parker Public Library				R				X	X		X	X		
Town of Patagonia				R				X						
Town of Payson	L				A			X	X		X	X		

Organization	Covered Population	Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
Town of Queen Creek, AZ	L, M	X						
Town of Superior	L, R, M	X				X		
Town of Youngtown	L, R, A	X				X		
Triad wireless	L, M, E	X					X	
TRIADVOCATES LLC		X					X	
Tubac Community Center	L, R, M, E	X				X		
Tucows								
Tucson Alliance for Autism	D	X						
Tucson Hispanic Chamber of Commerce	M	X				X		
Tuscson Connected	L, D, R, A, M, V, E	X		X	X		X	
Tucson House	L, D, A, M, V, E	X	X			X		
Tucson Metro Chamber	M	X				X		
Tucson Youth Development Inc	L, M, E	X						
TUSD/Utterback Middle School (Tucson Unified School District)	L, D, M, E	X			X			
Tynkertopia	L, D, R, M, E	X	X		X	X	X	
Unified Arizona Veterans	L, D, R, A, V	X				X		
United Cerebral Palsy of Southern Arizona (UCPSA)	D	X			X			
United Way of Tucson and Southern Arizona	L, R, M, E	X	X		X	X		
United Way of Yuma County	L, R, M, E	X						
University of Arizona	L, D, I, R, A, M, V, E	X	X		X	X		
University of Arizona Cooperative Ext	L, D, R, A, M, E	X			X	X		
University of Arizona Online	L, D, R, A, M, V, E	X			X	X		
Valley of the Sun United Way	L, M, E	X	X		X	X		
Valley of the Sun YMCA	L, M	X	X		X	X		
Valley of the Sun YMCA - Outreach Program for Aging	A			X	X			
Verizon	L	X	X		X	X	X	
Viney Jones Community Center	L, D, M	X	X	X	X	X		
Viney Jones Library	L, R, A, M	X	X		X	X		
Vista Grande Public Library	L, R, M	X	X		X	X		
VMware		X						
We Care Tucson	L, D, M	X	X	X				
Westward Ho- Collaboratory	L, D, A, M	X			X			
Wickenburg	L, R, A	X						
Wilcox Theater of the Arts	R, M	X						

Organization	L	D	I	R	A	M	V	E	Internet Access	Devices	Digital Navigators	Digital Literacy	Workforce Development	Affordability	Telehealth
Winslow Public Library				R					X	X		X	X		
Workforce Board	L					M		E	X	X			X		
Workforce Development Association	L					M		E				X	X		
Working Alternatives	L		I			M						X	X		
World Enabled/Victor Pineda Foundation, Inclusive Cities lab		D				M						X			
World Wide Technology									X						
Yavapai College	L			R		M	V	E	X			X	X		
Yavapai County	L			R	A	M	V		X				X		
Yavapai Reentry Project	L		I	R		M			X			X	X		
YMCA	L					M			X	X		X	X		
Young Public Library				R					X	X		X	X		
Youth on their own	L					M		E					X		
Yuma County	L			R	A	M		E	X						
Yuma County Library				R		M		E	X	X	X	X	X		
Yuma Crossing National Heritage Area Corporation				R		M									
YWCA	L					M			X	X		X			X
YWCA Metropolitan Phoenix	L					M			X	X		X	X		
YWCA of Southern Arizona	L					M		E	X	X		X	X		

7.3   Digital Equity Plan Statutory Requirements

The statutory requirements are met and the associated contents that meet the requirements can be found integrated throughout the document.

7.4   Digital Equity Plan Additional Requirements

All additional requirements are met and the associated contents that meet the requirements can be found integrated throughout the document.

Key Contributors

The Digital Equity Plan is a deeply collaborative effort. Several parties contributed to the writing and research including:

Arizona Commerce Authority (Administering Entity)
Digital Equity Institute (Research Organization)
Public Health Innovators, Inc
Project Over Zero
Chicanos Por La Causa
SciTech Institute
Arizona AARP
Arizona State Library, Archives & Public Records
Arizona State University
Northern Arizona University
University of Arizona Telemedicine Center
United Way
Town of Superior
Phoenix Public Housing
Connect Pima
Mignonne Hollis
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Ryan Murray

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