# Fulfilling Oklahoma's Digital Promise

Digital Equity Plan





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# Oklahoma Broadband Office Digital Equity Plan

# **1 Executive Summary**

In cities and counties across Oklahoma, people are connecting to and using the internet in a variety of ways to engage in the digital world. From the high school student accessing an advanced online course to the job seeker completing an online training program in pursuit of a promotion to the senior citizen with limited mobility having a telehealth appointment, the application and use of the internet to positively benefit Oklahomans is evident. Having the devices and skills to safely navigate affordable, high-speed internet for all Oklahomans unlocks benefits for individuals and communities in every part of the state.

Access to affordable, reliable high-speed internet is not uniform across the state of Oklahoma. Rural, urban, and tribal communities do not have equitable access to digital resources such as telehealth, online education and workforce development resources, or even ag-tech advancements. In alignment with the Broadband Equity, Access, and Deployment (BEAD) program which sets a goal of 100% internet infrastructure availability, this Digital Equity Plan offers a roadmap for how to bridge gaps in utilization and capitalize on state, regional, and local partnerships to fulfill the mission of the Oklahoma Broadband Office (OBO) to bring affordable, reliable high-speed internet to communities across the state by June 30, 2028.

Specifically, the Digital Equity Plan addresses internet adoption and use to ensure that Oklahomans are able to use affordable, reliable high-speed internet safely and effectively. By focusing on key goals, strategies, and objectives to ensure accessibility, affordability, internet safety, digital skills-building, and device access, the OBO will achieve its goals of digital equity.

This Digital Equity Plan describes the strategies, objectives, and actions that the OBO will take to fulfill Oklahoma's Digital Promise: that Oklahomans can access and use affordable internet to advance health care, education, business, agriculture, public safety, and community development. These are aligned with the three goals of this plan:

- **Affordability.** All Oklahomans, regardless of income, can subscribe to the internet and participate in online programs and resources with high-quality devices.
- Access. All Oklahomans have the ability to access online resources and navigate digital opportunities safely.
- Advancement. All Oklahomans will have increased ability to access online resources and training in ways that advance their health, education, and economic opportunities.

These goals provide the framework by which Oklahoma will pursue digital equity for all in partnership with tribal nations, community anchor institutions, government agencies, nonprofits, and others.



# 2 Introduction and Vision for Digital Equity

The OBO understands the impact that being digitally connected has on individuals and communities across the state. Ensuring that all Oklahomans can access, afford, and use the internet in ways that improve their economic, health, and social well-being is key to ensuring thriving communities. High-speed internet is no longer a luxury for some but essential for all, as individuals, businesses, local and state governments, and communities use connectivity to access information, resources, and services. As technology evolves, the requirements for engaging with that technology also evolve. Groups already experiencing inequity fall further behind due to compounding changes, while those who can adapt are presented with new technology that helps pull them further ahead. By addressing this "digital divide," Oklahomans will have the information, technology, and skills to remain competitive and to participate in society to the fullest.

To best meet the digital needs of Oklahomans, the Oklahoma Legislature, in partnership with Governor Kevin Stitt, created the Oklahoma Broadband Office (OBO) in 2022 with an **ambitious and important goal of bringing reliable, affordable, high-speed internet to Oklahomans.** The office, with oversight from the Oklahoma Broadband Governing Board (OBGB) and advice from Oklahoma Broadband Expansion Council (OBEC), is "putting the right people, policies and procedures in place to ensure [the] mission is met in an open, fair, and efficient manner."<sup>1</sup> This Digital Equity Plan is developed in alignment with state statute and the goals of the State Digital Equity Planning Grant (SDEPG) Notice of Funding Opportunity (NOFO) and describes Oklahoma's coordinated efforts to assess and reduce digital inequity across the state (see Appendix A for Oklahoma Digital Equity Plan: Crosswalk with Digital Equity Act NOFO). It is also aligned with and supports the work OBO is doing through other state and federal broadband infrastructure grant programs, including the BEAD program.

Oklahoma is home to more than 4 million residents, living, working, and contributing to the success of the state and their communities. Technology plays an increasingly important role in each of their lives, and ensuring all have the opportunity to engage in the education, workforce, health, and social opportunities of the digital world will increase digital inclusion and opportunity. The digital equity plan focuses on increasing access, adoption, and use of high-speed internet for all Oklahomans. Because not all Oklahomans have historically had equitable access to digital opportunities, the plan specifically identifies and discusses barriers, assets, and data disaggregated by covered population. These covered populations are specifically identified in the SDEPG NOFO as populations required to be addressed to ensure that the vision and promise of digital equity reaches everyone in Oklahoma.<sup>2</sup> Covered populations include:

- Individuals who live in covered households (household in which the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level);
- Aging individuals (60 and above);

 <sup>&</sup>lt;sup>1</sup> Oklahoma Broadband Office. https://oklahoma.gov/broadband/office/newsroom/the-oklahoman--thousands-in-oklahoma-don-t-have-internet--projec.html#:~:text=The%20Oklahoma%20Broadband%20Office%20was,but%20we%20will%20meet%20it.
 <sup>2</sup> National Telecommunications and Information Administration. Notice of Funding Opportunity: State Digital Equity Planning Grant Program. https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/DE%20PLANNING%20GRANT%20NOFO.pdf

- 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;
- Individuals who are members of a racial or ethnic minority group;
- Individuals who primarily reside in a rural area.

The chart below indicates the number of Oklahomans in each covered population.

<b>Covered Population</b>	Total	Percentage
Aging Individuals (60+)	858,088	21.7%
Veterans	258,556	8.7%
Racial or Ethnic Minorities	1,413,432	35.8%
People with Disabilities	631,051	16.3%
Primarily Reside in Rural Area	1,631,045	41.0%
Incarcerated Persons	34,000	NA
Low-Income (150% of Poverty Threshold)	961,499	25.1%
Individuals with a Language Barrier	142,223	3.8%

#### Figure 1: Covered Populations in Oklahoma

A key aspect to the vision of the OBO's digital equity plan is the collaboration with the state's 39 tribes, as most unserved and underserved locations identified in the state are on tribal land (approximately 81% of unserved and 80% of underserved). Many of the same concerns and barriers identified in stakeholder engagement activities were also raised during the OBO's tribal consultations. Both groups of participants expressed the desire for digital skills training, access to digital navigators at their local community anchor institutions, improved infrastructure, and more affordable service.

This plan addresses those barriers and acts as a roadmap for digital equity in Oklahoma. The programs, assets, strategies, and actions described support the work of the OBO, its partners, and stakeholders across the state who are working together to *fulfill Oklahoma's digital promise*.

#### 2.1 Vision

#### Vision

Oklahomans will have access to the information, resources, and skills needed to participate in society to the fullest and to remain competitive in a digital marketplace.

#### **Oklahoma's Digital Promise (Mission)**

Oklahoma will narrow the digital divide by encouraging and facilitating partnerships across sectors, offering targeted grants to communities and organizations who address digital equity gaps, and by supporting communities' digital equity planning and programming.

#### 2.2 Alignment with Existing Efforts to Improve Outcomes

Broadband intersects and supports much of the work across local, regional, and statewide efforts to improve the quality of life for Oklahomans, whether regarding health, education, workforce training, or civic engagement. In collaboration with state and local partners, who represent and serve covered populations, the OBO is committed to supporting and providing meaningful programs across the state to ensure every resident can access and use the internet and its many resources.

The OBO's first annual report and the Oklahoma Broadband Plan, released in 2022, emphasized the importance of broadband as a cornerstone for individuals and communities and identifies seven key areas where broadband is required to function fully in society. These areas included:

- Education
- Work and workforce development
- Health care
- Emergency services
- Economic development needs
- Social services
- Interpersonal connectivity

This plan also describes the OBO's current and future funding opportunities and efforts to ensure affordable, high-speed internet is available throughout the state.

"Lack of high-speed internet access was highlighted during the pandemic in many ways, including students who were forced to distance-learn. Also, without high-speed internet access, much important information and news fails to reach individuals and households ... specifically during severe weather events and the aftermath of natural disasters." - Oklahoma senior during focus group Digital equity work intersects with many of the initiatives and strategic priorities of agencies and partners in Oklahoma. This work also aligns with ongoing collaboration between tribal nations and the state of Oklahoma. The sections below highlight existing and planned efforts of the OBO partners and collaborators in the state, including state agencies, businesses, educational institutions, community anchor institutions, and other key partners.

#### A. Economic and workforce development goals, plans, and outcomes

Several economic and workforce development agencies and organizations are working across Oklahoma to develop the skilled workforce needed to attract and retain jobs in communities across the state. Most recently, Governor Kevin Stitt signed Senate Bill 621, a bill that created the Oklahoma Workforce Commission and tasked it with coordination and funding efforts for programs that will train a skilled workforce.

The Oklahoma Office of Workforce Development (OOWD) houses Oklahoma Works, "an initiative designed to increase the wealth of all Oklahomans by facilitating the quality employment necessary for workers to increase wealth and improve the availability of highly skilled talent for business and industry."<sup>3</sup> The Launch Oklahoma initiative has set an ambitious goal to have 70% of the state's workforce (25-64 years old) have education or training beyond high school by the year 2025. Two of the main objectives of the initiative are (1) integrating and using workforce and economic development data to inform policy, track progress, and measure success; and (2) building partnerships between local industry and education at the regional level. These align with key goals and programs of the State Digital Equity Plan, which focuses on partnerships and technology as a key driver of upskilling, career advancement, and economic opportunity for Oklahomans.

"[It's important to think about] connecting the last acre. Many small family farms are using direct sales to make money which relies on technology."

- Stillwater listening tour participant

Additionally, the state's Workforce Innovation and Opportunity Act plan identifies key sectors to target for employment growth, including Aerospace and Defense, Agribusiness and Bioscience, Renewable and Traditional Energy, Transportation and Logistics, Automotive, and Manufacturing. Accessing and succeeding in these jobs requires increased levels of digital skills.

Many state agencies provide economic and workforce development programs and resources in support of the state's digital equity mission. One such agency is the Oklahoma Department of Veterans Affairs. The ODVA provides employment services and job placement support for Oklahoma

veterans, among other programs. Interested veterans can receive free access to Google Career Certificates through the "Grow with Google" program in partnership with the ODVA. The program provides training, tools and expertise to fast track an individual into certification in the following fields: UX Design, Data Analytics, IT Support, Digital Marketing & E-Commerce, Project Management. According to the ODVA website, "In the U.S., there are currently 1.5M job openings in these fields, ODVA strives to equip our Oklahoma Veterans with tools to succeed in

 $<sup>\</sup>label{eq:solution} {}^3 \ Oklahoma \ Office \ of \ Workforce \ Development. \ https://oklahomaworks.gov/wp-content/uploads/2017/04/Launch-OK-Strategic-Recommendations-2017.pdf$ 

today's workforce."<sup>4</sup> In alignment with the goals of the digital equity plan, the OBO is committed to creating partnerships that drive community development and investing in workforce solutions.

The Oklahoma Department of Career and Technology Education (CareerTech) is focused on developing a "world-class workforce" by providing skills and training services to education institutions across the state, including technology centers.<sup>5</sup> Oklahoma has 29 technology centers on 60 campuses that "serve high school and adult learners with specialized career training in more than 90 instructional areas." In their strategic plan, they outline key education attainment goals, including expanding enrollment across the system by 25% to increase learning opportunities for career and technology training. They also set goals around partnership, looking to enhance education/industry partnerships and find new student work-based learning opportunities.

CareerTech also operates the Skills Center school system encompassing the entire state of Oklahoma and providing "full-time programs and short-term training at 16 sites housed within Oklahoma Department of Corrections facilities."<sup>6</sup> The program delivers training and other education programs, focused on providing workforce skills. These trainings are focused on specific trade areas, including automotive service technology, construction technology, STEM, and precision machining.

The Oklahoma Department of Career and Technology Education houses the Adult Education and Family Literacy Division. The Division's mission is to assist adults with low levels of literacy with becoming literate, obtaining the knowledge and skills necessary for employment and selfsufficiency, and the opportunity to be fully participating workers, parents, and citizens of the state. According to the office's website, there are more than 30 adult education and family literacy providers in the state with over 100 sites for individuals to visit for assistance.

Additionally, the BEAD plan contemplates workforce strategies to support the telecommunications industry workforce necessary for the deployment and maintenance of networks that will be built to connect all Oklahomans. Multiple public comments spoke to the need to focus on this aspect of workforce development and to include Tribal nations in those efforts, citing the economic development opportunities.

These workforce and economic development goals and strategies at the state and local level align with many of the strategies and objectives of this Digital Equity Plan. Increased access and usage of technology will allow more students and job seekers, including residents representing all covered populations who are able to access these programs, to participate in education and upskilling programs to earn post-secondary credentials, supporting efforts to reach these learning and workforce goals and create a more skilled Oklahoma workforce.

 $<sup>^4</sup>$  ODVA Grow with Google. https://oklahoma.gov/veterans/veterans-services/veterans-employment-services/grow-with-google.html

<sup>&</sup>lt;sup>5</sup> Oklahoma Department of Career and Technology Education.

https://oklahoma.gov/content/dam/ok/en/careertech/about/reports/strategic-plan.pdf

<sup>&</sup>lt;sup>6</sup> CareerTech Skills Center. https://oklahoma.gov/careertech/skills-centers.html

#### **B. Education Outcomes**

When the pandemic started in 2020, schools made the transition to virtual learning. For many teachers, students, and families, this represented the first time they were receiving or teaching educational content through an online platform. Lessons from the pandemic demonstrate the critical role of reliable connectivity for educational attainment. Students that lacked a reliable, affordable connection or a high-quality device lost important educational time during the school year, which continues to negatively impact performance. Even as schools have transitioned back to the classroom, many are capitalizing on lessons learned during the pandemic and innovating curriculum and lesson design, allowing students to take advantage of greater educational opportunities offered by increased access to the internet.

The Oklahoma State Department of Education created *Ready Together Oklahoma*, an action plan for supporting students through the pandemic and beyond.<sup>7</sup> This plan focuses on key areas of student learning and school innovation and proposes several models of educational support that are aligned with addressing the digital equity needs of students and teachers.

The action plan describes how schools and public libraries, two key anchor institutions in all communities, can develop partnerships to benefit student learning. These anchor institutions, as indicated in the asset inventory in Section 3, serve all covered population and provide connection to resources, information, and opportunity. This partnership can allow students to access a reliable internet connection outside of the school building or school day, with many libraries offering access to public computers, 24-7 Wi-Fi, online tutoring, and device checkout programs. Additionally, libraries provide access to online learning platforms that students can access at the library or on their own devices. For low-income students, these community-based services are often the only option for accessing affordable and reliable internet outside of school. This aligns with the digital equity plan's mission to augment the capacity and impact public libraries can have, including with school-aged children.

The Oklahoma State Regents for Higher Education (OSRHE), which oversees the state system of higher education, released *Blueprint 2030: Innovating and Elevating Oklahoma Higher Education for Tomorrow's Workforce* in February 2023. With the overarching goal to support Oklahoma in meeting state workforce development needs, the strategic plan highlights several strategies for higher education. These strategies include "aligning higher education programs with workforce demand, with a goal to produce 100,000 degrees and other credentials in STEM and critical occupations by 2030" and "strengthen online education offerings and use digital tools to improve student success and augment the traditional learning experience".

*Upskill Oklahoma*, an initiative of OSRHE, focuses on micro-credentials "with a goal of helping students digitally showcase their knowledge and skills". These skills-focused credentials are aligned with regional and employer workforce needs and allow students to build skills through short-term programs and connect with employers looking to hire. Students receive digital badges, which document their credential completion.

<sup>7</sup> Oklahoma Department of Education. https://readytogether.sde.ok.gov/

Other partners in the state promoting career and technology education include the Oklahoma Association of Minorities in Career and Technology Education (OAMCTE). OAMCTE is a nonprofit dedicated to ensuring greater participation of minorities in career and technical education across the state of Oklahoma. Through technology education scholarships, OAMCTE provides role models for future generations and supports the educational development of minority youth.

Increased access and use of high-speed internet expands educational opportunities for Oklahomans. The strategies in this Digital Equity Plan align with state goals around digital skillbuilding, upskilling, and increased connection to information resources.

#### C. Health Outcomes

The Oklahoma State Department of Health's (OSDH) vision is to lead Oklahomans to prosperity through health. Broadband is a critical part of improving health outcomes for all Oklahomans, as telehealth and other health-related initiatives increasingly utilize broadband connectivity to reach residents. The 2022 annual report highlighted key goals and strategies for 2023, including implementing the 10-year plan to improve Oklahoma's health rankings.<sup>8</sup>

OSDH, as a part of community health service and in partnership with local county departments of health, provides Mobile Wellness Units, which bring public health services to all parts of Oklahoma. Each of Oklahoma's nine Public Health Districts received a unit, allowing underserved communities to connect to public health resources and services. The vans are equipped with a satellite dish for connectivity. Oklahoma State University, Oklahoma Complete Health, and other organizations have implemented similar mobile services.

There are also significant efforts to expand telehealth across Oklahoma, especially in rural areas. Southwestern Oklahoma State University received a million-dollar grant to provide telehealth equipment in western Oklahoma over a three-year span. Additionally, Oklahoma State University and the Oklahoma Department of Libraries partnered to implement five soundproof telehealth booths in public libraries across Oklahoma. These provide community members (and at least one school), without a private space or transportation to facilities that are often far from their home, with the ability to access health services nearby. Booths are equipped with diagnostic equipment and antimicrobial lighting, filters, and surfaces to reduce cross contamination. Accessibility features include ADA compliance, motion sensor doors, improved lighting, and larger screens.

Additional efforts of OSDH include the Office of Minority Health & Health Equity. The office was first created to address the disproportionately poor health of Oklahoma's racial and ethnic minority populations. In the last decade, the Office's mission has expanded to better address the social determinants of health, while increasing access to quality healthcare and promoting health equity. The Office's guiding principles include community engagement, cultural competency, partnerships, and inclusivity. In partnership with state, local, and regional partners, the Office of Minority Health & Health Equity is dedicated to achieving "health for

 $<sup>\</sup>label{eq:state_$ 

all."<sup>9</sup> This aligns with a key metric in the Digital Equity Plan related to accessing online health opportunities for racial and ethnic minorities.

The Oklahoma Department of Human Services (OKDHS) Aging Services Division provides critical health care services and programs to meet the needs of aging Oklahomans, including caregiver assistance, health promotion, nutrition education, respite care, and more. The agency promotes the quality of life of Oklahomans aged 60 and over and their families by delivering quality program assistance in partnership with 200 organizations statewide.

Besides physical equipment that makes telehealth possible, programmatic expansion is also on the rise. The University of Oklahoma's Health Sciences Center has implemented novel telehealth programs that focus on bridging the gap between rural citizens and specialist providers. Funding at rural hospitals is often tenuous, so programs like tele-stroke and tele-NICU allow rural hospitals to take advantage of specialists who they would normally not be able to afford. Because the treatment plan for both of those specialities is time sensitive, citizens receive markedly better care and demonstrate better outcomes as they no longer waste time and money on transportation. An additional benefit is that the rural hospitals keep the patient in-house, which keeps the funding within the community.

Schools have also begun to see the value in providing telehealth services to students. Not only does it provide fewer disruptions to student learning, but it also makes preventative and chronic care more manageable as parents who work are often not able to take students to appointments during the day. People who were once forced to make choices between schooling and health care can now see the benefits of both. The University of Oklahoma and Oklahoma City Public Schools have partnered on a pilot program to provide telehealth services to six different schools with plans to expand to more schools.

Partnerships between the Department of Corrections and the University of Oklahoma have piloted programs for incarcerated populations. Prison telehealth programs can result in a better continuum of care and an increased quality of life. Incarcerated individuals who would normally require transportation with guards can now regularly visit their provider and provide input on their care plans. In addition to increased access to care, prison telehealth programs are cost-effective and can mitigate emergencies that require major financial and health care resources. According to a 2023 study by JAMA Network Open, the estimated mean total cost savings for telehealth compared to in-person visits ranged from \$147.4 to \$186.1 per visit. When it comes to the incarcerated, that number is significantly higher due to the multiple support staff (guards, nurses, administrators, etc.) who are also impacted.

Telehealth services provide a worthwhile healthcare alternative for aging individuals and those with a disability who may have limited mobility, difficulty driving long distances, or compromised immune systems. Not only do aging individuals typically have more healthcare related visits in general, but they also may use 24/7 monitoring devices or require other time sensitive care. Virtual and remote healthcare offers patients the convenience and comforts of home with the benefits of quality medicine and preventive care.

 $<sup>\</sup>label{eq:state} {}^{9} \ Oklahoma \ State \ Department \ of \ Health, \ Office \ of \ Minority \ Health \ and \ Health \ Equity. \ https://oklahoma.gov/health/health-education/community-outreach/community-development-services/minority-health-and-health-equity. \ https://oklahoma.gov/health/health-education/community-outreach/community-development-services/minority-health-and-health-equity. \ https://oklahoma.gov/health/health-education/community-outreach/community-development-services/minority-health-and-health-equity. \ https://oklahoma.gov/health/health-education/community-outreach/community-development-services/minority-health-and-health-equity. \ https://oklahoma.gov/health/health-education/community-development-services/minority-health-and-health-equity. \ https://oklahoma.gov/health/health-education/community-development-services/minority-health-and-health-equity. \ https://oklahoma.gov/health/health-education/community-development-services/minority-health-and-health-equity. \ https://oklahoma.gov/health/health-education/community-development-services/minority-health-and-health-equity. \ https://oklahoma.gov/health/health-education/community-development-services/minority-health-and-health-equity. \ https://oklahoma.gov/health/health-education/community-development-services/minority-health-and-health-education/community-development-services/minority-health-and-health-education/community-development-services/minority-health-and-health-education/community-development-services/minority-health-and-health-education/community-development-services/minority-health-and-health-education/community-development-services/minority-health-and-health-education/community-development-services/minority-health-and-health-education/community-development-services/minority-health-and-health-education/community-development-services/minority-health-and-health-and-health-education/community-development-services/minority-health-and-health-and-health-and-health-and-health-and-health-and-health-and-health-and-health-and-health-and-h$ 

Besides equipment and specific programs that utilize virtual options, there has been a significant increase in the number of telehealth providers as well as in the quality of telehealth platforms/portals. This has created better opportunities for access by improving accessibility and general appeal. When it comes to interoperability between equipment and platforms, there is still much room for improvement, but that issue will likely sort itself out as the industry matures.

These state goals and programs will impact the health outcomes of all covered populations in the state as they increase access to care. Increasing access to health care, especially in rural communities and among aging populations, is a key goal of this Digital Equity Plan and aligns with the work of OSDH and providers across the state to improve access to care and health outcomes.

#### D. Civic and Social Engagement

Broadband is essential for individuals to stay connected to their communities and provides limitless opportunity to access information, communicate, and participate in both virtual and in-person community-based activities. Individuals who lack access to the internet are disconnected from a vital source of civic and social connection to the world around them. This Digital Equity Plan allows for individuals to gain access to the connection and skills necessary to stay informed and engaged participants in our society.

Libraries, as a primary community anchor institution (CAI) in many communities, play a critical role in providing educational resources and connection to information and resources. In the Library Services & Technology Act Five-Year Plan, the Oklahoma Department of Libraries (ODL) identifies key goals around increasing information access in all forms, including digital. Ensuring that Oklahomans have the digital skills needed to access these information resources will support continuing education efforts and enhance the efforts of ODL. Libraries are key community anchor institutions, offering health care services, genealogy research, digital literacy training, free access to computers, and technical assistance. Libraries provide Digital Navigator programs, hotspot lending programs, computer labs, and makerspaces, making them the go-to community resource for many who are seeking safe and free digital resources. Additionally, ODL provides access to three BrainFuse subscriptions that provide live assistance and support: HelpNow, JobNow, and VetNow. These online platforms "provide homework help, tutoring, job search and resume building assistance, support for navigating the VA system, help in seeking local resources for Oklahoma veterans, and more."10 All Oklahomans, including covered populations, have access to these job and resource supports through their public library, but need an internet connection to access them.

Many local, municipal, and tribal governments, along with state agencies, have transitioned many of their resources and processes online. One major example of this would be the recently implemented online voter portal which allows Oklahomans to register online to vote, look up election information, and register for absentee voting. Municipalities implemented online platforms for citizens to stay connected, including live streaming of local meetings and the ability to provide comment and feedback to elected officials and on local policies, and many have continued these practices to the present. When it comes to the tribes, nobody feels the lack of connectivity like they do. They lost a significant number of elders to the pandemic, and with that came the loss of languages and traditions. For them, connectivity means preserving their way of life for younger generations through access to elders who may not be healthy enough to visit in

<sup>&</sup>lt;sup>10</sup> Oklahoma Department of Libraries. Brainfuse. https://oklahoma.gov/libraries/brainfuse.html

person. Cohesive efforts to expand tribal infrastructure and digitize history have taken the forefront. Connecting Tribal communities is a central goal of this Digital Equity Plan

Social engagement is another leading factor in broadband expansion. Large scale social media is a major way in which citizens remain informed and engage with society, but it also helps connect families, friends, and loved ones who live far away. On a smaller scale, things like neighborhood engagement, local group meetups, and business outreach have gravitated to online platforms. Even groups that meet in-person often utilize social media for the organizational aspects of the meeting.

At its core, broadband helps people connect – to each other and to online resources. With online translation and interpretation services, broadband provides a platform for culturally diverse communities to come together as one. Specifically, people can gather without a language barrier thanks to programs like Google Translate. These resources provide the opportunity for communication at work and social events for people who would otherwise be unable to understand each other. Utilizing online platforms and digital processes allows citizens to be informed, to engage with society and others, and to participate in the governance of their communities. Ensuring all covered populations can access state digital resources is a priority of the OBO and is reflected in the goal of this Digital Equity Plan.

#### E. Delivery of Other Essential Services

Increased connectivity and access to affordable, reliable broadband play an important role in the delivery of essential services across state agencies. The OBO will continue to collaborate with state and local agencies and partners to identify connectivity needs and deliver programs and services that are aligned with this plan and support constituents. This includes using online state assets to increase access to programs, reduce inefficiencies, and save resources through digital platforms.

Oklahoma Department of Human Services (OKDHS) provides a range of services for Oklahomans in need, including access to many state and federal resource programs, including food benefits, temporary cash assistance, childcare assistance, and Sooner Care, the state's Medicaid program. Many of these services and resources are accessible online through their website.

The Oklahoma Department of Rehabilitation Services offers what is likely the most expansive and exhaustive list of resources for people with disabilities, which can be found online at their website. This list is widely used across the state and sees significant traffic with tens of thousands of viewers per month. In addition to the resource list, they offer information and services for independent living, job seeking, and even a system for self-referral for resources. Having connectivity is required to access this list and many of the other resources linked on this website. According to the Oklahoma Department of Agriculture, Food, and Forestry, the state has 77,200 farms, and 34.2 million operational ag acres. The state is ranked third in the nation for the number of female and young producers under the age of 35.<sup>11</sup> The Agricultural Education Division of Oklahoma CareerTech is responsible for administering agriculture education in 365 high schools across the state. Broadband provides critical resources for farmers, including access to weather forecasts, market data, and industry highlights. This information allows Oklahoma farmers to stay on the cutting edge of production.

<sup>&</sup>lt;sup>11</sup> OK Dept. Of Agriculture, Food, and Forestry. https://ag.ok.gov/about/

Connectivity is critical for disaster and emergency management. One salient example of this is how local fire departments manage a database of storm shelters in their area so that they know where to search and who to contact. It is crucial that fire departments maintain connectivity to maintain and access those lists, but it is equally important that citizens have it to register, receive communications, and follow news updates. The Oklahoma Department of Emergency Management, in their State of Oklahoma Emergency Operations Plan, discusses communications requirements and procedures for times of disaster. Having connectivity in times of emergency is critical to share out action items and alerts to residents. One public commenter underscored the critical need for internet connectivity for emergency response and safety, describing difficulty connecting with 911 services.

The Oklahoma Department of Corrections, in partnership with Securus Technologies, deployed more than 20,000 tablets to inmates across the state. Tablets allow inmates to communicate with loved ones and access approved education, employment, and entertainment resources. This program allows inmates to stay in touch with loved ones, while also engaging with updated technology which is vital for successful reentry upon release.

Additionally, the Oklahoma Department of Transportation is "responsible for establishing a registry for Broadband Vendors and Telecommunication Providers in Oklahoma. This registration will notify [the company] of upcoming ODOT constructions projects (for the next eight years) in areas [they] may have or are going to install broadband services."12

Accessing essential services is critical for covered populations, all who are served by these state programs. Many of these services are primarily or only accessible online, connecting these state goals around essential services to the goals and strategies of the Digital Equity Plan. On the whole, these programs highlight the state's varied efforts to support the mission of the digital equity plan in expanding access to affordable and reliable broadband programs and expanding digital equity programs.

### 2.3 Strategy and Objectives

The OBO developed implementation strategies to accelerate efforts across the state to close the digital divide. These strategies and measurable objectives are based on data collection and analysis efforts to identify key barriers for Oklahomans, including those representing covered populations. These implementation strategies align with other state efforts and initiatives described above to increase education, health, economic and workforce, civic and social engagement, and essential services deliveries and outcomes in Oklahoma. These measurable objectives also align with the requirements of the SDEPG NOFO to document and promote, among each covered population<sup>13</sup>:

- a. The availability of, and affordability of access to, fixed and wireless broadband technology;
- b. The online accessibility and inclusivity of public resources and services;
- c. Digital literacy;

<sup>&</sup>lt;sup>12</sup> Oklahoma Department of Transportation. https://okbroadband.org/#/forms/vendor/landing

 $<sup>^{13}</sup> National Telecommunications and Information Administration. State Digital Equity Planning Grant Notice of Funding Opportunity. https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/DE%20PLANNING%20GRANT%20NOFO.pdf$ 

- d. Awareness of, and the use of, measures to secure the online privacy of, and cybersecurity with respect to, an individual; and
- e. The availability and affordability of consumer devices and technical support for those devices.

Additionally, each of the measurable objectives and sub-measurable objectives described below (and discussed further in Section 5.1, along with specific key performance indicators for each measurable objective and for each covered population) aligns to the barriers OBO's data analysis and engagement efforts identified for at least one covered population. These measurable objectives also align to other state plans and goals, as discussed in Section 2.2.

In pursuit of this mission to fulfill Oklahoma's Digital Promise, the OBO will implement the following objectives and strategies to ensure all Oklahomans can access and safely use affordable, reliable high-speed internet in ways that allow them to engage fully with the digital world.

# **Fulfilling Oklahoma's Digital Promise – Affordability**

Goal: All Oklahomans, regardless of income, can subscribe to the internet and participate in online programs and resources with high-quality devices.

Measurable Objective: Increase the number of Oklahomans, including all covered populations, that have access to affordable high-speed internet.

Sub-Measurable Objective: Increase the number of low-income households that have access to affordable high-speed internet.

Sub-Measurable Objective: Increase the number of individuals with language barriers that are familiar with ACP or other low-cost adoption programs.

• Strategy 1: Increase enrollment in the Affordable Connectivity Program and other low-cost internet service programs.

Covered populations: All.

State goal alignment: All.

NOFO alignment: a. The availability of, and affordability of access to, fixed and wireless broadband technology.

# Measurable Objective: Increase the number of Oklahomans, including those in covered populations, that have access to internet-enabled devices.

Sub-Measurable Objective: Increase the number veterans that have access to internetenabled devices.

- Strategy 1: Identify and support free and reduced cost device distribution programs, such as computer refurbishment programs and library lending programs.
- Strategy 2: Support and promote access to quality technical support options.
- Strategy 3: Identify and partner with other federal and state device programs, such as Lifeline.

Covered populations: All.

State goal alignment: All.

NOFO alignment: e. The availability and affordability of consumer devices and technical support for those devices.

### **Fulfilling Oklahoma's Digital Promise – Access**

# Goal: All Oklahomans have the ability to access online resources and navigate digital opportunities safely.

Measurable Objective: Increase the number of Oklahoma residents, including all covered populations, and community anchor institutions that have access to reliable high-speed internet.

Sub-Measurable Objective: Increase the number of rural residents that have access to reliable high-speed internet.

- Strategy 1: Ensure all CAIs can connect to affordable, high-quality internet.
- Strategy 2: Ensure tribal communities have equitable access to broadband services.
- Strategy 3: Increase ability of multifamily dwelling units (MDUs) to implement free, reliable high-speed internet and/or Wi-Fi for their residents.

Covered populations: All.

State goal alignment: This measurable objective is aligned with the State of Oklahoma's goal that 95% of residents are connected to affordable, reliable high-speed internet by June 30, 2028, as required by the legislature in House Bill 3363.

NOFO alignment: a. The availability of, and affordability of access to, fixed and wireless broadband technology.

# Measurable Objective: Increase the number of Oklahomans, including all covered populations, that can access and use digital resources safely.

Sub-Measurable Objective: Increase the number of aging individuals that can access and use digital resources safely.

- Strategy 1: Incorporate digital literacy and internet safety training into existing education, training, and community outreach programs.
- Strategy 2: Create an online resource to allow all Oklahomans to find and connect to available programs and support.
- Strategy 3: Develop internet safety training materials to ensure Oklahomans can stay safe online.
- Strategy 4: Promote safe online banking, especially in communities with low access to physical bank locations.

Covered populations: All.

State goal alignment: All.

NOFO alignment: c. Digital literacy; d. Awareness of, and the use of, measures to secure the online privacy of, and cybersecurity with respect to, an individual.

# Measurable Objective: Increase accessibility of state digital resources for covered populations.

Sub-Measurable Objective: Increase the number of individuals with disabilities who access state digital resources.

• Strategy 1: Support state agencies with required accessibility audits, reporting, and best practices to ensure accessibility across all government websites.

Covered populations: All.

State goal alignment: All.

NOFO alignment: b. The online accessibility and inclusivity of public resources and services.

### <u> Fulfilling Oklahoma's Digital Promise – Advancement</u>

Goal: All Oklahomans will have increased ability to access online resources and training in ways that advance their health, education, and economic opportunities.

Measurable Objective: Increase the number of Oklahomans, including all covered populations, that can participate in online opportunities to advance health, education, and economic goals.

Sub-Measurable Objective: Increase the number of individuals from racial or ethnic minorities and the number of rural residents that participate in online opportunities to advance health goals.

• Strategy 1: Increase access to telehealth programs across the state.

- Strategy 2: Ensure local, regional, and state planning processes include digital equity planning components.
- Strategy 3: Increase the availability of digital literacy supports, including digital navigators, in the state.
- Strategy 4: Identify potential areas of coordination and partnership across state agencies.

Covered populations: All.

State goal alignment: All.

NOFO alignment: b. The online accessibility and inclusivity of public resources and services; c. Digital literacy.

#### Measurable Objective: Increase the ability of Oklahoma to meet workforce and economic development goals so all covered populations can thrive in a digital world.

Sub-Measurable Objective: Increase the number of incarcerated individuals that can access workforce development programs to meet workforce and economic development goals.

- Strategy 1: Collaborate with partner agencies and organizations to leverage technology to support rural economic and community development.
- Strategy 2: Increase access to workforce training programs for covered populations.
- Strategy 3: Encourage CAIs to create technology focused five-year plans that can be leveraged for future funding opportunities.

Covered populations: All.

State goal alignment: This measurable objective is aligned with the OSRHE's state goals to produce 100,000 degrees and other credentials aligned with critical occupations to meet workforce goals, as described in the economic and workforce development description in Section 2.2.

NOFO alignment: c. Digital literacy.

# **2.4** Aligning The Digital Equity Plan with BEAD & State Goals

Governor Kevin Stitt's vision for Oklahoma prioritizes policies and programs that put Oklahoma on a path to becoming a Top 10 State. These priorities include driving hope for all Oklahomans, protecting Oklahoma and our way of life, making Oklahoma the most business-friendly state in the nation, and delivering taxpayers more for their money. Expanding access, adoption, and use of affordable, high-speed internet supports this vision. From attracting businesses and broadening talent pipelines to delivering efficiencies in government services from online platforms and increasing statewide health, education, and workforce outcomes, broadband is a key driver for prosperity in the state. The goals and programs of this Digital Equity Plan align and complement existing and ongoing efforts to increase opportunities for Oklahomans. The OBO's legislative mandate in House Bill 3363, enacted in May 2022, set the goal of bringing reliable, affordable, high-speed internet to 95% of the state population by June 30, 2028. With the announcement of state allocations from BEAD and project planning underway, the BEAD Five-Year Action Plan updates this goal to 100% complete state coverage by June 30, 2028. This Digital Equity Plan aligns with and complements the goals, objectives and programs of the BEAD program and will increase the number of Oklahomans able to afford and use new and existing broadband infrastructure. Alignment with other state and local partners will allow increased resources to address all aspects of the digital divide. Removing barriers to accessing and using affordable high-speed internet will increase adoption rates and allow more Oklahomans to participate in the digital marketplace.

As the eligible entity for the BEAD and DEA grant programs, OBO can successfully align the work and goals of both programs to ensure efficient implementation and meaningful impact of the programs. The increased access to broadband facilitated by the BEAD program will support many of the availability and affordability strategies of this plan, as increasing access to high-speed internet for residents and community anchor institutions is a goal. Additionally, internet service providers participating in the BEAD program will offer low-cost plans to subscribers in these new networks, which will support affordability goals, also described in Section 5.1. Many of the other strategies and objectives in this digital equity plan will be accomplished in partnership with expanded access to broadband infrastructure, ensuring that as Oklahomans get connected, they have the skills and devices to use the affordable, high-speed connection.

Several of the strategies discussed throughout this plan support local capacity building and planning efforts. This includes technology planning support for CAIs and local, regional, and Tribal governments and promotion of public-private partnership opportunities. These capacity-building and planning supports will help communities prepare to apply for funding from the NTIA's Digital Equity Competitive Grant Program, which will complement and expand the impact of the OBO's efforts through their office and the Digital Equity Capacity Grant Program, which this plan contemplates effective goals and strategies for.

Beyond BEAD and DE funding and programs, the state is also administering \$382 million in American Rescue Plan Act (ARPA) State and Local Fiscal Recovery Funds to expand access to high-speed internet across the State. Competitive proposals were accepted through October 9, 2023. The OBO will also administer \$167.7 million from the ARPA Capital Projects Fund. The Office is overseeing ACP enrollment efforts in partnership with community anchor institutions and assisting Tribes with the Tribal Connectivity Program. Leveraging all funding opportunities and programs, the OBO looks forward to the day when every resident has access to affordable, high-speed internet across the state and can fully participate in the digital landscape.

# 3 Current State of Digital Equity: Barriers and Assets

# 3.1 Digital Equity Assets in Oklahoma

The OBO conducted extensive outreach and utilized the advisory supports and data collection activities described in Section 4 of this Digital Equity Plan to inventory digital inclusion assets and digital equity plans and programs in the state. Many organizations, local governments, tribal nations, education and workforce entities, and other community-based organizations engage in digital equity work daily. This work takes many forms. It is the librarian helping a senior set up an email account, the community clinic worker teaching a patient how to use their online health portal, or a community college offering digital literacy and upskilling classes. The OBO catalogued these programs and assets to understand where they are and which covered populations they serve. This analysis identified both bright spots to highlight and learn from and gap areas to focus on and support.

During the OBO's listening tour, participants responded to the prompt, "To the best of your knowledge, which of the following digital inclusion opportunities are offered in your community?" Respondents identified a variety of digital inclusion assets and programs within their communities. Statewide, public access to computers (61%), public access to Wi-Fi connectivity (50%), workforce development and skills training (38%), and telehealth service (35%) were the most identified digital inclusion opportunities. Community technical support (10%), cybersecurity training (12%), and computer coding education (17%) were the least known and available resources statewide. Figure 2 shows the full responses to the prompt.



#### Figure 2: Digital Inclusion Opportunities Available

Source: Oklahoma Broadband Office "Let's Get Digital: Oklahoma Broadband Tour", 2023

# 3.1.1 Digital Equity Assets by Covered Population

Organizations and communities across Oklahoma leverage available resources to provide digital inclusion programs, opportunities, and resources to residents. These local, regional, and statewide assets comprise an important ecosystem of digital opportunity in the state. Many of these programs provide specific programming for covered populations.

"[Our] digital navigator has assisted over 100 citizens applying and receiving ACP benefits. [We have]10 chrome books for in-house use, along with 6 adult computers and 2 AWE children's computers. We offer telehealth services [and] reemployment services thru Oklahoma Works."

- Rural library

The OBO developed and administered an organizational survey, allowing education institutions, CAIs, local governments, nonprofit and faith-based organizations, health care organizations, and others to submit information about their digital inclusion work and programming. Additionally, the OBO collected data from listening tour stops, stakeholder meetings, and the Digital Equity Coalition to build a robust list of assets. As the OBO continues its outreach and engagement work through the planning and implementation of this Digital Equity Plan, the office will continue to catalog assets to track digital equity work and ensure Oklahomans can access these programs.

Libraries were the most frequent respondent to the organizational survey. Nonprofits, regional governments, and higher education institutions also provided input during the digital inclusion asset collection process.

The table in Appendix B provides a detailed list of digital inclusion assets in the state, including organization, type of program offered, and covered populations reached. This list is updated as of submission by December 11<sup>th</sup>. Organizations can submit digital inclusion resources for inclusion in future versions of the digital inclusion asset inventory using the <u>survey link</u>.

Identifying digital inclusion programs and services across the state allows the OBO to understand local needs, scale and support successful programs, and address gaps in services and geographies across the state. Figure 3 shows digital inclusion services offered by organizations. Statewide, public Wi-Fi access (90% of respondents) and public access to computers (85% of respondents) are the most available digital inclusion services for covered populations. Telehealth services (12% of respondents) and e-commerce help for small businesses (7% of respondents) are the least offered by Oklahoma organizations.

#### Figure 3: Digital Inclusion Services Offered by Organizations in Oklahoma



Source: Oklahoma Broadband Office community organization survey, 2023

Many entities offer specific types of digital skills training to community members and covered populations. Figure 4 shows the types of digital skills trainings offered. The most common types of digital skills trainings are general digital literacy training (45% of respondents) and internet usage training (36% of respondents). This aligned with qualitative responses on the organizational survey, where many organizations described offering basic digital literacy training or specific support to individuals based on their needs. Cybersecurity training (8% of respondents) and computer coding education (8% of respondents) are the least offered digital training offered by respondents.



#### Figure 4: Digital Skills Trainings Offered by Organizations in Oklahoma

Source: Oklahoma Broadband Office community organization survey, 2023

Several of these digital inclusion assets are described in further detail as part of the exploration of existing digital equity programs in Section 3.1.3.

# 3.1.2 Existing Digital Equity Plans

Communities understand their connectivity challenges and have been mobilizing to create solutions to increase access and use of the internet. The OBO has collected assets from local communities, including local, municipal, and regional digital equity plans, data, and other artifacts that demonstrate local needs. The OBO hosted a listening tour (described in Section 4) to hear directly from communities about these local plans and solutions. The OBO held formal tribal consultations with all Oklahoma tribes to understand the barriers and opportunities for digital equity planning work and received two tribal digital equity plans. Several tribes indicated they were drafting plans and would share them with the office; this plan will be updated as those are received. The OBO also created a community organization survey to collect information directly from nonprofits, faith-based organizations, anchor institutions, and local governments about their programs, data, and plans to close the digital divide in their communities. These data collection and stakeholder engagement processes provided insight to local and regional digital equity efforts.

This section describes digital equity plans in the state. OBO analyzed these plans, including locally collected data and goals, for inclusion in this plan. Several of the implementation strategies in these plans, including digital literacy training, digital navigator programs, collaboration with community-based organizations and CAIs, have been included in Section 5 as statewide strategies.

While many municipalities are actively engaged in expanding broadband access, adoption, and use, few have formal documents that describe current and future plans. Analysis of available local and regional planning documents, along with ongoing digital equity efforts, have been included throughout this Digital Equity Plan. The OBO recognizes the importance of local and regional digital equity planning and coordination efforts and has included strategies and actions in Section 5 to support the digital equity planning efforts of local communities and community anchor institutions.

#### Choctaw Nation

The Choctaw Nation developed a Digital Equity Location and Assistance Plan. This plan acknowledges the importance of community centers as a vital resource to tribal members. The Choctaw Nation operates 17 community centers across the reservation, including in the moral rural areas of the reservation. Community centers provide access to local computers with internet access and provide classes on accessing the internet, email usage, social media usage, news and information gathering, genealogy research, medical terms and disease, telemedicine access, and local event information.

#### Chickasaw Nation

The Chickasaw Nation, as part of its Letter of Intent to participate in the NTIA's Digital Equity Planning Program, outlined its vision of "enhancing the overall quality of life of the Chickasaw people by supporting community access to reliable and affordable broadband." The plan proposal identified several goals, including establishing a team of qualified broadband professionals for a future Chickasaw Nation Broadband Office, maintaining positive and productive relationships with broadband stakeholders at the local, state, and federal level, as well as with other tribal broadband organizations, administering federal and state broadband funds, managing and facilitating the relationship between the Chickasaw Nation and Trace Fiber Networks, LLC, and establishing a broadband workforce development program.

#### Comanche County

Comanche County developed a Technology Action Plan, which was released in January 2023. The plan assessed broadband access, adoption, and use in the county based on a county survey and discussions with a local broadband team. The plan includes action items about ensuring affordable broadband access, sharing informational materials about ACP and other affordability programs, encouraging partnerships between workforce and technology centers for workforce development, and increasing digital literacy skills training opportunities.

#### <u>City of Tulsa</u>

The City of Tulsa, in partnership with Governor Kevin Stitt, Mayor G.T. Bynum, and officials from Tulsa Public Schools and Impact Tulsa, formed an internet access task force to identify the digital needs of residents. The task force published an internet access plan in 2020 in response to the COVID-19 pandemic. The plan states that 15% of Tulsa County families have no internet access at home through any means. The task force identified three funding programs to help bridge the access gap including: providing high-speed, reliable Wi-Fi to all Tulsa Housing Authority complexes; providing high-speed internet for up to 20,000 public school families that currently lack an internet subscription; and funding for the internet access navigators program through Tulsa Responds and local nonprofits. Future work of the Tulsa Internet Task force – including research, community outreach and planning – will be included in state planning deliverables.<sup>14</sup>

### 3.1.3 Existing Digital Equity Programs

Several digital equity programs, including those serving covered populations, exist within Oklahoma communities. These programs provide critical support to Oklahomans in communities across the state, helping them access, afford, and use the internet and online applications. During the "Let's Get Digital: Oklahoma Broadband Tour", organizations talked about this work of connecting people, including loaning hotspots during the pandemic so students could complete classes online, supporting library patrons filling out a job application, and helping seniors navigate online portals to get access to transportation.

"When someone finally gets online using a hotspot and they can finally pay bills, apply for a job, do schoolwork, they can see the importance of internet connection compared to when they were not connected."

#### - Librarian

A selection of these programs is highlighted below.

 $<sup>{}^{\</sup>rm 14}\ {\rm City}\ of\ {\rm Tulsa.}\ https://www.cityoftulsa.org/press-room/officials-announce-internet-access-plan-for-tulsa-upcoming-programs-aimed-to-help-tulsans-impacted-by-covid-19/$ 

#### Affordable Connectivity Program

The Affordable Connectivity Program (ACP) is a key resource to closing the digital divide in Oklahoma, specifically for low-income households who would otherwise be unable to afford a monthly internet subscription.<sup>15</sup> The ACP is an FCC benefit program offering a discount of up to \$30 per month for eligible households and up to \$75 per month for households on qualifying tribal lands. Eligible households can also receive a one-time discount of up to \$100 to purchase a device from participating providers. Qualifying households can go to <u>getinternet.gov</u> to enroll or print a mail-in application.

Oklahoma was awarded \$1.8 million dollars in early 2023 as a part of the Federal Communications Commission ACP Outreach program.<sup>16</sup> The OBO received \$500,000 to create an ACP awareness campaign that includes media outreach and in-person signup events. Six additional awards were made to the following tribal governments and CAIs:

- Choctaw Nation of Oklahoma \$592,341
- Delaware County Community Partnership, Inc. \$67,209
- Kickapoo Tribe of Oklahoma \$420,446
- Pawnee Nation of Oklahoma \$292,529
- The ARC Foundation: Strengthening Communities \$316,376
- Cheyenne and Arapaho Housing Authority \$241,200

#### Oklahoma Broadband Office Digital Equity Coalition

The Digital Equity Coalition, formed by the OBO, provides insights and recommendations around barriers accessing and using affordable, reliable high-speed internet. They are also the main working group tasked with carrying out the goals and objective in this Digital Equity Plan. Representatives from research institutions, nonprofit organizations representing covered populations, state agencies, and tribal governments serve on the coalition. A list of organizations participating in the Digital Equity Coalition can be found in Section 4.1.

#### Goodwill Industries of Oklahoma

The vision of Goodwill Industries of Tulsa states, "With your help, we can create a community where all people have the training and opportunities they need to be successful in the workplace, regardless of the barriers to employment they must overcome."<sup>17</sup> Through the TulsaWORKS Career Academy, participants can enroll in career readiness training, workplace computer skills classes, and even complete digital readiness training. Digital readiness training covers basic skills for operating computers and working on the internet. Workplace computer skills classes are a step-up, specifically designed for students who are pursuing careers that require computer proficiency. The classes are part of the ongoing curriculum offered free-of-charge to the public through TulsaWORKS Career Academy.

In 2023, Goodwill Industries of Central Oklahoma received a \$10,000 grant from the Kirkpatrick Family Fund for the creation of a new Digital Literacy Lab.<sup>18</sup> The lab is expected to open in late 2023 and features 25 laptop computers, a printer, training curriculum, and staff.

<sup>&</sup>lt;sup>15</sup> Federal Communications Commission. https://www.fcc.gov/acp

<sup>&</sup>lt;sup>16</sup> FCC Announces \$66m in Affordable Broadband Outreach Grants. https://www.fcc.gov/document/fcc-announces-66m-affordable-broadband-outreach-grants-0

<sup>&</sup>lt;sup>17</sup> Goodwill Industries of Oklahoma. https://www.goodwilltulsa.org/gwt/TulsaWorks3.asp

<sup>18</sup>City Sentinel. "Kirkpatrick Family Funds Supports New Digital Literacy Lab. https://www.city-

 $sentinel.com/community/kirkpatrick-family-funds-supports-new-digital-literacy-lab-with-grant-to-goodwill-industries/article_01d80bb2-11c1-11ee-94b0-dbcfd50d55b5.html$ 

Services will include one-on-one training on topics such as computer basics, cell phone basics, job placement, and more. Access to the lab and training programs will be free.

#### OSU's Rural Library Hotspot Lending Program

Oklahoma State University's Division of Agricultural Sciences and Natural Resources partners with public libraries in some of the most rural parts of the state to, in their words, "Loan out the internet!"<sup>19</sup> This work enhances broadband access by loaning out hotspot devices to library patrons. The program has enabled employees to work remotely, residents to surf the web at home, and provided students with additional learning resources. The program currently serves more than 20 libraries with hopes to add four to seven new libraries each year as the program grows. Each participating library receives multiple hotspot devices with unlimited data for a year. Interested libraries can apply to participate through the OSU Hotspot Lending website.

#### Lawton Public Library: Digital Inclusion Resources

The Lawton Public Library offers a variety of free resources to the public, including a telehealth booth and digital literacy classes. Digital literacy workshops cover topics ranging from internet basics to email basics to cybersecurity. Classes are free and open to the public. One-on-one assistance is available. The library also fulfills a critical health care role in the community, offering a free telehealth booth. The small space provides library patrons with a quiet, private space to conduct online/virtual visits with a medical provider. Like most libraries in the state, the Lawton Public Library offers public computers, free Wi-Fi, and digital assistance to patrons. The library is a foundational community anchor institution, providing a multitude of services and resources to the public.

#### Moore High School Device Refurbishment Program

Moore High School offers an elective course for high school students interested in technology, teaching computer repairs and device refurbishment. Students learn about computers and associated technologies and then spend time with hands-on application, repairing donated devices for distribution in the school and community.

#### Tulsa City-County Library, American Electric Power Foundation Digital Literacy Lab

The AEP Digital Literacy Lab at the Tulsa City-County Library is a creator-focused working space for library patrons.<sup>20</sup> The Digital Literacy Lab provides a space for library-goers to develop new apps and software skills, try out new equipment, digitize family history, and much more. Orientation is offered twice monthly to familiarize community members with the Lab. The library offers special programs and classes throughout the year in the Lab for all age groups.

#### <u>Urban League of Greater Oklahoma City</u>

The Urban League of Greater Oklahoma City provides programs and support focused on economic mobility for the poor and people of color. This work includes workforce and career development for individuals who are unemployed, underemployed, seeking a career change, and previously or currently justice involved. The After Prison Work Initiative addresses challenges faced by individuals with barriers to employment, including the need for basic computer skills.<sup>21</sup>

<sup>&</sup>lt;sup>19</sup> Oklahoma State University, Division of Agriculture Sciences and Natural Resources.

https://extension.okstate.edu/programs/rural-library-hotspot-lending-program/

<sup>&</sup>lt;sup>20</sup> Tulsa City-County Library. https://www.tulsalibrary.org/programs-and-services/aep-foundation-digital-literacy-lab
<sup>21</sup> Urban League of Greater Oklahoma: After Prison Work Initiative program page. https://urbanleagueok.org/programs/after-prison-work-initiative-apwi/

In 2023, staff completed a train-the-trainer program in basic digital literacy skills to support efforts to expand digital literacy training.

#### <u>Miami Public Library</u>

The Miami Public Library offers free, publicly available Wi-Fi to library patrons, most of whom cannot access internet at home because it isn't available or it isn't affordable. The library has 13 hot spots to loan to patrons; there is always a waiting list to access these devices. Library staff assist residents with basic computer skills, directions to job resources, and finding the appropriate websites for tribal or government assistance programs. Patrons often use library and internet services for translation, Medicare enrollment, and homeschool activities.<sup>22</sup>

#### Oklahoma State University Institute of Technology

The OBO has supported workforce initiatives to support the buildout of broadband infrastructure through the Broadband Equity, Access, and Deployment program, other grant programs, and privately funding projects. Oklahoma State University Institute of Technology (OSUIT) received \$365,068 from the American Rescue Plan Act to provide job training to increase the pipeline of fiber technicians, especially in rural areas. OSUIT also received \$754,970 from the Connecting Minority Communities Pilot Program grant to expand efforts to connect and train minority populations, with a focus on training fiber optic technicians.<sup>23</sup> This will expand existing efforts to develop industry-specific training programs for the Muscogee and Cherokee Nations. OSUIT focuses recruitment on covered populations, including formerly incarcerated individuals.

#### Northeast Oklahoma Accelerate Program

Heartland Forward, through its Connecting the Heartland Initiative, partnered with the Benton Institute for Broadband & Society to "creat[e] a new planning and capacity-building program to help northeast Oklahoma communities plan for and use infrastructure funding for community-driven high-speed internet expansion."<sup>24</sup> Applications opened in September 2023 for the Oklahoma Accelerate program. Local governments in northeast Oklahoma communities will receive support and training as they prepare to participate in federal funding opportunities available through the Infrastructure Investment and Jobs Act.

### 3.1.4 Broadband Adoption in Oklahoma

Many Oklahomans have adopted and are subscribing to and using high-speed internet. The United States Census Bureau's American Community Survey (ACS) collects data about home internet subscriptions and the internet-enabled computing devices in the household. These data exist at multiple levels of aggregation, including at the county level and the state level, and can be broken down by household income. Figure 5 below illustrates ACS 2017-2021 five-year estimates of whether households have adopted fixed home internet at the county level; these numbers exclude households with a cellular data plan but no other type of internet subscription,

<sup>&</sup>lt;sup>22</sup> Information from public comment submitted by Miami Public Library.

<sup>&</sup>lt;sup>23</sup> Biden Administration Awards OSUIT \$750k Grant. https://osuit.edu/news/biden-administration-awards-osuit-grant.php <sup>24</sup> Connecting the Heartland. https://connectingtheheartland.com/heartland-forward-and-the-benton-institute-for-broadbandsociety-open-applications-for-northeast-oklahoma-accelerator-program-to-prepare-communities-for-internet-infrastructureinvestment/#:~:text=The%20Oklahoma%20Accelerator%20is%20designed,week%200f%20October%2023%2C%202023.

households with dial-up internet but no other internet service, and households that rely on satellite internet service.

At the state level, while 84.2% of households subscribe to internet services of some kind, only 61.2% of households subscribe to fixed home internet (broadband such as cable, fiber optic, or DSL).



Figure 5: Fixed Home Internet Adoption Rates by County

At the county level, there are large differences between counties. The highest rate of any county is 75% in Cleveland County, which is southeast of Oklahoma City. In fact, the five counties with the highest adoption rates (Cleveland, Canadian, Wagoner, Tulsa, and Oklahoma) either include urban areas or are adjacent to urban areas. Meanwhile, the five counties with the lowest adoption rates are in rural areas and predominantly on tribal lands.

Data from a residential technology survey administered by the OBO show higher rates of internet adoption. From that sample, 91.3% of Oklahomans subscribe to home internet service of some kind. A smaller percentage of respondents (86.9%) indicated that they subscribe to fixed home internet.

"It (the internet) is a great way to catch up on family. Grandparents use it for Facebook and communicate with me and family."

– Focus group participant

Of those respondents who subscribe to home internet service, 94.1% reported that their advertised download speeds were higher than 25 Mbps – the Federal Communications Commission's current definition of broadband. The average reported download speed was 276 Mbps.

Oklahomans who subscribe to home internet service, including those who belong to covered populations, use their internet service for many different purposes.

The United States Census Bureau's 2021 Current Population Survey included a computer and internet use supplement which showed that many Oklahoma households use the internet to telework, participate in virtual health care meetings, and videoconference for work and to stay connected with their community. Figure 6 shows the full results for specific covered populations.

Source: Five-Year Estimates, American Community Survey, 2017-2021.

	Aging Individuals	Veterans	Racial or Ethnic Minorities	Total
Use Internet for Video Conferencing	43.7%	53.8%	50.4%	55.3%
Use Internet for Teleworking	29.4%	33.3%	26.6%	37.9%
Use Internet for Job Classes and Online Training	9.5%	20.5%	24.8%	21.2%
Use Internet for Online Banking	60.1%	64.1%	68.8%	71.7%
Use Internet for Accessing Medical Records	44.7%	50%	40.1%	48.5%
Use Internet for Telemedicine Appointments	37.4%	36.6%	32.1%	36.6%

#### Figure 6: Internet Use Among Covered Populations in Oklahoma

Source: Current Population Survey, Computer and Internet Use Supplement, November 2021

In addition, the residential technology survey showed that adults in Oklahoma use the internet for a variety of different activities. Communicating through email or other messaging applications was the top activity, with 76% of respondents using the internet in this way. More than one-half of respondents use their internet connection for online banking or paying bills (71%) and reading online newspapers or other news sources (60%). Figure 7 displays the full results of internet usage.



#### Figure 7: Residential Internet Use by Activity Type

Source: Oklahoma Broadband Office residential technology survey, 2023

When asked in focus groups about how community members access the internet, some answers included:

- "Many households rely on free Wi-Fi locations such as libraries, schools, businesses and restaurants."
- "Library, fast food restaurants, Walmart, and friends/relatives who have service."
- "People often use public spaces and stores; may be helpful if these places do more advertising to people that they are providing resources."
- "In-home internet service is only available through a wired modem connection and is available mostly to members living in town. For rural areas, this service is not available."

# 3.1.5 Broadband Affordability in Oklahoma

Broadband affordability serves as an important determinant for home internet adoption. While many households may have access to broadband, some Oklahomans still struggle to pay for the service each month. According to data derived from a series of listening tours across the state, 59.2% of respondents believed that high costs were a barrier to households subscribing to home internet.

# Based on responses from the residential technology survey, residents pay an average of \$61.60 for their internet service.

Several government programs exist to make home internet more affordable and reduce the gap between access and adoption rates. The Affordable Connectivity Program (ACP), created by the Infrastructure Investment and Jobs Act, provides a monthly \$30 discount towards internet subscriptions and a one-time \$100 discount towards an internet-enabled device for all eligible households. For residents living on tribal lands, that monthly discount increases to \$75 per month. Household eligibility is determined either by household income (must be below 200% of federal poverty guidelines) or through participation in other federal or tribal assistance programs (such as SNAP, Medicaid, or Federal Housing Assistance). The other major federal program that helps low-income households afford home internet service and phone connections is Lifeline. The Universal Service Administrative Company (USAC) manages this program, which lowers the monthly cost of telephone or internet service for eligible households by \$9.25. Residents living on tribal lands receive an enhanced benefit of \$34.25 per month, as well as up to a \$100 reduction for first-time connection charges.

Identifying the population eligible for the ACP program is challenging; while the ACS provides information on household incomes and estimates of the percentage of households below different poverty levels, it does not provide information on the number of households enrolled in other assistance programs. Based on eligibility estimates produced by Education Superhighway and the number of total households from the 2021 iteration of the ACS, roughly 46.4% of households in Oklahoma are eligible for the ACP.<sup>25</sup> Of those eligible, 45.3% of households have enrolled in the program.

Figure 8 below depicts the percentage of eligible households that subscribe to the ACP, using eligibility numbers from Education Superhighway and enrollment numbers from USAC's ACP Enrollment and Claims Tracker (with data as of August 28, 2023).<sup>26</sup> **Overall, Oklahoma ranks ninth in the country in ACP participation.** 

Rank	State / Territory	Enrolled	Eligible	Percent
1	Puerto Rico	627,398	962,129	65.2%
2	District of Columbia	57,958	104,893	55.3%
3	Louisiana	498,859	904,157	55.2%
4	Ohio	1,050,943	1,984,218	53.0%
5	Kentucky	420,155	846,290	49.6%
6	North Carolina	836,462	1,741,427	48.0%
7	Nevada	235,847	493,948	47.7%
8	New York	1,513,533	3,276,799	46.2%
9	Oklahoma	315,823	697,600	45.3%
10	Michigan	753,076	1,690,382	44.6%

#### **Figure 8: ACP Participation by State**

<sup>&</sup>lt;sup>25</sup> Education Superhighway. https://www.educationsuperhighway.org/no-home-left-offline/acp-data/

<sup>&</sup>lt;sup>26</sup> Universal Services Administrative Company.

https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-stateget and the stateget and th

Unfortunately, eligibility data cannot be discerned at the county level from these data sources. To visualize ACP participation, Figure 9 below shows the percentage of total households in each county that have enrolled in the program as of June 2023. Data on ACP enrollment comes from USAC's ACP Enrollment and Claims Tracker, while data on the number of households in each county comes from 2017-2021 five-year ACS estimates. Seminole County has the highest ACP participation percentage (33%), followed by Hughes County (31.8%), Okmulgee County (28.1%), and Pottawatomie County (28.1%).



#### Figure 9: Households Participating in the ACP by County

Based on USAC's ACP Enrollment and Claims Tracker and 2017-2022 five-year ACS estimates

#### **Device Ownership**

Device ownership is another key indicator of broadband adoption and affordability. Figure 10 below illustrates the percentage of households in every county that do not own any internetenabled devices. These numbers derive from the 2017-2021 five-year estimates from the ACS. Statewide, 8% of households do not own a computer.

#### Figure 10: Households without a Computing Device by County



Based on 2017-2021 five-year ACS estimates

"Every computer was a family computer or a public computer until I got to college. I never had access to personal computers."

- Oklahoma student in focus group Like the adoption map, urban and urban-adjacent counties have the highest rates of device ownership. In Canadian County, only 4.1% of households lack a computing device; meanwhile, in Cleveland County, only 4.3% of households do not own an internet-enabled device. Alternatively, several counties in Oklahoma have large populations (more than 15%) that lack household access to devices. Of note, many counties with the greatest need for computing devices also have the lowest internet adoption rates in the state; these include Hughes County, Pushmataha County, Adair County, Johnston County, and Choctaw County.

# 3.2 Barriers to Adoption and Affordability in Oklahoma

Many Oklahomans face a barrier, and often multiple barriers, which prevent them from accessing and using the internet safely. Oklahoma has taken multiple steps to identify the challenges facing households that prevent them from subscribing to home internet service and learning how to use the technologies necessary to succeed in education and the workplace. Through data collection efforts, the OBO identified the reasons many Oklahomans are not online; these insights formed the strategies and actions discussed in Section 5.

Many public comments submitted referenced lack of available service, especially in rural areas. Commenters relied on satellite internet connection, citing that the speeds are often "extremely slow and the cost is very high." This Digital Equity Plan is designed to complement the work of the BEAD program, which addresses many of the challenges described by commenters about lack of high-speed internet access in rural communities. These comments also described the types of opportunities Oklahomans want to engage in if they were able to get online, including remote work, access to emergency services, and access to healthcare. One commenter talked about the importance of connectivity, saying "I think resident demand is great and technology adoption rates will be significant. This can have a huge impact on real estate demand, electric service expansion into phases 2 and 3, property development and public safety."

Many Oklahomans face barriers beyond physical access to a high-speed internet connection, and are not subscribing to and using the internet for other reasons. Adoption rates vary by county and community across Oklahoma. Many households have a physical internet connection available but are not adopting the internet. Figure 11 shows Oklahoma counties with the lowest fixed home internet adoption rate.

#### Figure 11: Fixed Home Internet Adoption Rate by County

Rank	County	Fixed Home Internet Adoption Rate
68	Choctaw County	31.0%

Rank	County	Fixed Home Internet Adoption Rate
69	Latimer County	30.6%
70	Adair County	30.3%
71	Johnston County	28.1%
72	McIntosh County	28.1%
73	Love County	27.9%
74	Pushmataha County	27.7%
75	Hughes County	27.3%
76	Nowata County	27.3%
77	Atoka County	22.3%

Source: Ba	sed on 2017-2	021 five-year	ACS estimates

Understanding the barriers preventing covered populations from adopting the internet is necessary to build a Digital Equity Plan and programs that can remove these barriers and support more households getting online. The OBO conducted a residential survey to understand barriers and challenges Oklahomans face when accessing and using the internet. This survey is further discussed in Section 4, with the methodology described in Appendix C.

Figure 12 below illustrates the main reasons why residential survey respondents do not subscribe to home internet service.

#### Figure 12: Barriers to Home Internet Adoption



Source: Oklahoma Broadband Office residential technology survey, 2023

The most cited rationale was that respondents did not feel that they needed the internet, followed by the monthly cost of internet service. The large percentage of respondents who claim not to need the internet could be reflective of their digital skills – without proper digital skills to navigate the broadband world, it would be difficult to recognize the advantages that having internet affords people.

In addition to the residential survey data and analysis that provided insight into barriers to broadband adoption described above, the OBO polled participants at the "Let's Get Digital: Oklahoma Broadband Tour" about the barriers they and their communities face. Figure 13 illustrates these perceived barriers.



#### Figure 13: Perceived Barriers to Home Internet Adoption

Source: Oklahoma Broadband Office "Let's Get Digital: Oklahoma Broadband Tour", 2023

Overall, listening tour attendees cited the affordability of internet service (59%) and the availability of internet service (57%) as the two largest barriers facing members of their communities.

Thirty percent of listening tour attendees cited lacking digital skills as another key barrier for their communities. An ISP in Lawton noted that they often perform activities outside the scope of a traditional internet service provider, "making house calls for customers that don't know how to do basic functions on their computer." In Sulphur, lack of digital skills was cited multiple times in the discussion.

"For my job, I used to telework. Paying for my internet bill meant other bills could not get paid because we could not afford everything." For Oklahoma households, including covered populations, one of the most discussed barriers to having a home internet subscription is the cost of monthly service. For many, the monthly service cost is too high, leaving Oklahomans to rely on public Wi-Fi, cellular data plans, or other publicly available connectivity resources.

– OK resident at listening tour stop In focus groups, affordability also emerged as a key barrier for covered populations. While many participants could identify programs or places to access low-cost or free internet, many noted that they were less available in rural areas and not wellpromoted within communities.

### 3.2.1 Covered Population Needs Assessment

Understanding the specific barriers covered populations face in affording, accessing, and using the internet is critical to developing strategies, plans, and programs that address these barriers. The OBO engaged extensively with covered populations and organizations supporting covered populations to build a deep understanding of the unique barriers to internet adoption. This engagement, further described in Section 4, included a residential phone survey, in-person listening tour stops, stakeholder meetings, coalition meetings, and the public comment process.

These stakeholder engagement efforts elucidated these barriers and how they affect covered populations and communities in the state. For many Oklahomans, a combination of barriers is affecting their ability to be online and navigate the internet safely. The qualitative and quantitative data collected and disaggregated illustrate the challenges covered populations face adopting and using the internet. The section below explores these barriers.

Broadband adoption rates among individuals who identify as members of a covered population tend to be slightly lower than the statewide average. More than 1 in 10 survey respondents who are members of covered populations (10.8%) do not subscribe to home internet service.

Figure 14 shows barriers to adoption for all covered populations.




Source: Oklahoma Broadband Office residential technology survey, 2023

These data are further explored below.

#### Aging Individuals (60+)

In Oklahoma, 858,088 residents are aged 60 or older, representing 21.7% of the population. According to the residential survey, 90.6% of this population subscribes to home internet service, slightly lower than the state average (91.3%).

The primary barrier to internet subscription identified for aging individuals is the belief that they did not need the internet (29%). Another 12% of respondents cited not having a computer that can access the internet, and another 12% said that the internet was too complicated.

Figure 15 below shows why aging individuals without home internet service do not subscribe.

#### Figure 15: Barriers to Internet Subscription for Aging Individuals (60+)



Source: Oklahoma Broadband Office residential technology survey, 2023

Looking deeper into the survey results reveals additional challenges that this population faces.

While 91% of aging individuals have a computer at home, respondents without one were twice as

likely to say that they did not own one because computers are too complicated (compared to all respondents without a computer).

Moreover, while over 90% of aging individuals subscribe to home internet service of some kind, those without it were nearly twice as likely to say they didn't because the internet was too complicated (compared to all respondents without home internet).

These results suggest that aging individuals struggle with navigating the internet – likely because they survived without the internet for much of their lives – and could benefit from digital skills training.

These results align with data collected in the Aging Populations Focus Group. Participants there identified challenges with accessing and using the internet, including a need for increased education, an understanding of where resources are in the community and how to "I am looking to retire. I will be on a fixed income with other large expenses like prescriptions so internet at \$75 a month can be very pricy." – OK senior at listening tour stop

access them, and affordability of high-quality devices and internet service. Some of the comments included:

- "Some still use older systems and iPhones. These choices can impact quality. Updated operating systems with better memory can help. iPads and newer iPhones may help."
- "Still a level of resistance to using web-based services by persons over 65. Bill pay, tax filings and online grocery shopping and how to maximize savings is still needed. Using health care websites for appointments and communication with physicians is vital to better care."

The focus group identified internet safety as a key challenge for aging populations. One participant stated, "I worry about my identity." Another participant identified this as a risk since fraudulent activities are always evolving and recommended coupling fraud awareness with ongoing education from trusted sources for aging populations. Ensuring aging individuals feel safe navigating online applications and platforms is critical to reducing barriers and increasing adoption rates.

#### Low-Income Households (At or Below 150% of Federal Poverty Threshold)

In Oklahoma, 961,499 individuals (25.1%) live in low-income households. 83% of low-income residents subscribe to home internet service, the lowest rate of subscription across all covered populations.

For low-income households, the primary barrier facing this population was feeling like they did not need the internet (23%). Following that, the next most mentioned barriers related to affordability – 15% cited not having a computer that could access the internet, and another 15% said that the monthly cost of internet service was too expensive. For both of these affordability barriers, low-income individuals cited the barrier at the second-highest rate of all covered populations.

Figure 16 below shows why respondents from low-income households that lack home internet service do not subscribe.



# Figure 16: Barriers to Internet Subscription for Low-Income Households

Source: Oklahoma Broadband Office residential technology survey, 2023

Compared to all respondents without home internet, respondents from low-income households were more likely to say they did not subscribe because of cost and nearly twice as likely to say that they didn't subscribe because they didn't have a computer that could access the internet.

Disaggregating further, compared to all respondents without a computer, individuals from lowincome households were nearly twice as likely to say they didn't own one because computers are too expensive.

In addition to affordability concerns, respondents from low-income households with home internet had slower internet service than others surveyed; over 16% subscribed to speeds slower than 25 Mbps – the FCC definition of broadband. Among all respondents with home internet, only 6% subscribed to such slow speeds.

Low-income residents cited several barriers to accessing and using an affordable, high-speed internet connection. Cost and lack of devices were a major concern, with every participant stating that the monthly subscription cost was "too much" or "not in my budget". Other concerns included:

- "The internet that is affordable, the speed is not as fast as the higher priced internet."
- "I'm concerned about my personal information being used. I make sure I don't use my any of my information when I'm on a public computer."
- "(I use) a laptop that I borrow from school, phone, TV. Having my own laptop would be better.

Focus group participants indicated difficulty accessing and using affordable internet service programs. When asked about low-cost internet programs like the ACP, participants responded:

- "I know about the programs but the cheaper internet runs a lot slower."
- "If it's not free, I can't afford it."
- "The programs I know about are not in my area."
- "I tried a program that let you get Wi-Fi for \$20 a month and it never would last for a whole month it usually stopped working within a few days. The data always ran low."

#### **Racial or Ethnic Minorities**

In Oklahoma, members of racial or ethnic minority groups represent 35.8% of Oklahoma residents, totaling 1,413,432 people. 87.9% of racial or ethnic minorities subscribe to home internet service according to the residential survey, slightly lower than the overall average and the average for all covered populations.

The most cited barrier for racial and ethnic minorities was feeling like they did not need the internet (29%). Following that, 12% of respondents said that the monthly cost of internet was too expensive, and another 12% did not own a computer that could access the internet.

Figure 17 below shows why racial or ethnic minorities without home internet service do not subscribe.



#### Figure 17: Barriers to Internet Subscription for Racial or Ethnic Minorities

Source: Oklahoma Broadband Office residential technology survey, 2023

While the survey did not probe why individuals said that they did not need the internet, the next most cited barriers revolve around affordability. In addition to the numbers highlighted above, among racial or ethnic minorities that do not own a computer, 18% said the main reason was that computers are too expensive (compared to 14% of all respondents without computers) and 21% used a cell phone instead of a computer for everything (compared to 18% of all respondents without computers).

Focus groups reinforced the survey findings. While these respondents saw the need for the internet, 25% referred to immediate family members who did not see the need. Almost 13% did not own a computer that could access the internet. Despite all 100% of respondents listing cost as a primary barrier, none of them knew about any programs that offer cheaper internet service or devices.

The ACP program, which offers discounted internet and free or cheaper devices to those who enroll, could be a potential solution to these affordability concerns. Compared to all survey respondents, racial or ethnic minorities were less likely to be familiar with the program and less likely to participate.

#### Individuals who Reside in a Rural Area

A belief that they do not need home internet service is the top barrier among rural households, cited by nearly 1 in 5 of those who do not subscribe to home internet service (Figure 18). This barrier is followed by a lack of available internet service (cited by 12% of rural non-adopters), while 1 in 10 say they don't want home internet service, the monthly cost is too expensive, and they lack a home computer. These challenges suggest that many rural Oklahomans have not determined that home internet service is beneficial enough to pay the installation and monthly costs.



#### Figure 18: Barriers to Internet Subscription for Residents in Rural Areas

Source: Oklahoma Broadband Office residential technology survey, 2023

Rural residents participated in several of the covered population focus groups. When talking about their barriers, they spoke of challenges accessing and affording internet, especially to engage online with telehealth. These comments included:

- "Internet needs to be sufficient enough for individuals to access important telehealth options. It is important to those in rural areas that would not have access to specialty care otherwise."
- "Home access give us more access to medical care, telemedicine helps with emergency situations, especially rural areas."
- "I worked in a public library for years and know that many community members need help finding and applying for jobs, navigating benefits (VA, Social Security), managing utilities, registering for school."

During public comment, one response described the inadequacies of rural broadband connections and the barriers facing residents, saying "Many of the rural residents are not financially stable enough to have access to any internet services. Many families only have access through whatever cellular service they have. Cellular service is as inadequate as internet service." This was a common theme during listening sessions and stakeholder meetings, that many parts of the state struggle with cellular service alongside internet service, and that, even when available, cellular service is not a substitute for a high-speed internet connection.

#### **Persons with Disabilities**

For persons with disabilities, the most cited barrier was feeling like they did not need the internet (35%). Beyond that, another 11% of respondents did not subscribe because they use a smartphone to do everything they need to do online.

Figure 19 below details the primary barriers to home internet adoption facing persons with disabilities.

#### Figure 19: Barriers to Internet Subscription for Persons with Disabilities



Source: Oklahoma Broadband Office residential technology survey, 2023

Unlike some of the other covered populations, the use of technology and the internet by persons with disabilities is heavily gated by accessibility. Websites and resources that do not meet standards may be physically impossible to access, which would make the internet less appealing in general. Not only would it seem more complicated, but there would be fewer available websites to access. Additionally, assistive technologies are highly specialized and do not always leverage interoperability to the same extent as comparable devices used by people without disabilities. For example, applications that may exist for iPhone may not be available on other operating systems. To transition from one device to another would involve finding, installing, and learning new software.

#### Veterans

For this group of Oklahomans, the top barrier to subscribing was feeling like they did not need the internet (27%). The second most cited reason was that they did not own a computer that could access the internet (19%).

Figure 20 below illustrates why veterans without home internet service do not subscribe.



#### Figure 20: Barriers to Internet Subscription for Veterans

Source: Oklahoma Broadband Office residential technology survey, 2023

While rates of computer ownership among veterans are on par with the survey average, veterans were more than twice as likely to cite not having a computer as the main barrier to subscribing (compared to all respondents without home internet).

Additionally, veterans pay comparatively more for their home internet than other covered populations. The average cost of internet among those surveyed was \$61.60; veterans pay an average of \$73.54 for their internet.

Promoting the ACP program to this covered population could help offset the price they pay. Veterans had the lowest rate of familiarity with and participation in the ACP program of all covered populations. While 55% of all survey respondents were familiar with the ACP, only 37% of veterans had heard of it. Moreover, while 41% of respondents who had heard of the ACP participated, only 22% of veterans did. Not all veterans would qualify for the program, but any that receive the Veterans Pension and Survivors Benefit would be eligible.<sup>27</sup> Another solution would be to help promote free or low-cost device distribution programs to increase access.

In the Veterans focus group, participants identified reliability as the biggest barrier to using the internet. Many cited affordability as another issue, but all participants concurred that broadband is a necessity they were willing to pay for. Several participants also talked about accessing military resources online, including using ID.me to verify military status and access resources. As a group, participants were less interested in telehealth, with a veteran remarking, "I live close enough to Tulsa that getting to a doctor is not an issue, as it may be for Veterans in more rural areas or those that lack transportation."

#### **Persons with Language Barriers**

The most cited reason for not subscribing for persons with language barriers was feeling like they did not need the internet (44%). Beyond that, an additional 25% of respondents emphasized that the monthly cost of internet service was too expensive.

<sup>&</sup>lt;sup>27</sup> Federal Communications Commission. https://www.affordableconnectivity.gov/do-i-qualify/

Figure 21 below shows the main reasons why people with language barriers do not subscribe to home internet service.



#### Figure 21: Barriers to Internet Subscription for Persons with Language Barriers

Source: Oklahoma Broadband Office residential technology survey, 2023

Compared to all survey respondents without home internet, persons with language barriers were more than twice as likely to cite the cost of internet as the main barrier to subscribing. This finding coincides with the language barrier focus group in which 100% of respondents cited the cost of internet as the main barrier.

Again, promotion of the ACP program could be a solution to these affordability concerns. Individuals with language barriers were not less familiar with the program than other respondents, but they were much less likely to participate. Out of all survey respondents familiar with the program, 41% participated; for persons with language barriers, only 24% participated.

Individuals with language barriers were also more likely to subscribe to home internet technologies associated with higher latency (and therefore slower speeds for many activities). Compared to all respondents with home internet service, individuals with language barriers were four times more likely to have dial-up internet and nearly twice as likely to have DSL or satellite internet.

In a Spanish-language focus group, participants shared about some of the barriers they face accessing and using high-speed internet. For accessing the internet, participants described various options, including:

- "I use the one provided by my apartment. It has its bad days and good days."
- "If the public Wi-Fi is being slow, I use my personal hot spot."
- "I never use public Wi-Fi. I use my data plan. If I really need to use my laptop, I will use the ethernet cord."

Affordability was a key concern, with participants citing "the cost of going up in the tier of faster internet," "cost and if the option of fiber optic is available," and "financial barriers, having to pay rent," as barriers to having an internet subscription at home.

Participants also cited barriers for their community in navigating the internet and finding relevant content. These barriers included:

- "My family needs help in translating the web pages from English to Spanish at times."
- "Language. My parents only know Spanish, so having a representative that speaks Spanish would be beneficial."
- "Support on where to find resources for the Latinx community and help searching for services in health, involvement, and social events."

When asked if they knew of any low-cost or affordable internet subscription programs, all the participants said no. This indicates increased outreach about the ACP and other low-cost programs is needed to increase enrollment.

In an East Tulsa focus group conducted by the City of Tulsa and Partner Tulsa, participants reported barriers to digital skill development, including "financial demands (need to work several jobs and not having financial means to pay for training), family care needs, lack of information for developing digital skills, and skill development to opportunities not offered in native language."<sup>28</sup>

#### **Incarcerated Persons**

According to the National Institute of Corrections, Oklahoma has 93 jails in 77 counties. As of December 31, 2020, there were 22,462 prisoners under the jurisdiction of Oklahoma correctional authorities.<sup>29</sup> This includes state prisons, private prisons, and local jails. State operated facilities had a staff of 4,902 and a budget of \$634,500,000. Additionally, 23,027 offenders were under probation and 2,237 were under parole.

While the residential survey did not reach incarcerated individuals specifically, the OBO did meet with organizations and community leaders who work with and represent currently and formerly incarcerated individuals through DE Coalition meetings, focus groups, and direct outreach. These conversations provided insight into the general and technology-specific challenges that inmates face upon re-entry. Many of the barriers to re-entry formerly incarcerated individuals face, including employment, housing, and transportation, could be supported through increased access and adoption of high-speed internet.

During the Digital Equity Coalition call, community leaders cited workforce development and access to health care as leading barriers faced by recently released inmates. For example, many job applications and job interviews are online only. Not only do many recently released inmates leave the justice system with little money to afford a computer, tablet, or internet subscription, oftentimes recently released inmates are not familiar with the specific technology required to complete online forms and processes. The combination of the affordability and digital skills gap places an added barrier for recently released inmates transitioning back into society. This cycle often leads to mental health struggles. As noted on the call, access to affordable and reliable health care, specifically resources for mental health, is an integral part of reducing recidivism.

<sup>&</sup>lt;sup>28</sup> City of Tulsa and Partner Tulsa Report. *Engaging Tulsa's Immigrant Communities in Tulsa's Digital Tech and STEM workforce*. September 2023.

<sup>&</sup>lt;sup>29</sup> National Institute of Corrections: https://nicic.gov/resources/nic-library/state-statistics/2020/oklahoma-2020

#### **Indigenous and Native American Persons**

"Cost is always a barrier, but almost half of tribe live in rural areas where the only service can be obtained through a costly satellite connection. This issue also prevents some members the opportunity of working from home since no signal is available."

- Focus group participant

Tribal communities have historically been one of the most underserved communities, which is reflected in the map of unserved and underserved locations. The OBO engaged with all 39 tribes with invitations for formal consultations and conducted these consultations throughout the planning process. During these tribal consultations, issues related to the mitigation of that lack of service took the forefront. Due to the lack of availability and investment in broadband infrastructure, tribal communities have often been relegated to using inferior technologies that may have poorer speeds, higher latency, higher upkeep costs, and/or inconsistent availability. The lack of infrastructure has also limited the number of providers in these regions. With fewer providers and a lack of competition to drive prices down, the tribes have been forced into paying higher costs for worse service.

This lack of adoption and use of internet services directly impacts tribal communities and their access to resources. In one of the focus groups, a participant noted that the "majority of our tribal elders do not have internet services and have to request help from other resources that are not usually available due to location in rural areas or low income [areas]." The Choctaw Nation, in their Digital Equity Plan, highlighted the popularity of Wi-Fi and computer access at community centers, especially in more rural areas of the reservation, as a response to lack of internet connectivity and device access. Another issue that was repeatedly mentioned during tribal consultations was the lack of grant writing experience that impacted their ability strategize and apply for tribal specific grant funding. Often being led by elders, the tribes experienced a significant amount of turnover during COVID, which negatively impacted administrative work. Larger tribes with more consistent income were able to mitigate this to an extent, but the smaller, poorer tribes were left in a position where they could not take advantage of the large windfalls of federal funds.

OBO conducted a focus group with Tribal communities to understand barriers to accessing and using the internet safely. While most participants subscribed to internet service at home, multiple people described their connection as "slow" or "wanting higher speeds". Other findings included:

- "Cost is a barrier as far as start up or for the high-grade usage."
- "(The internet) doesn't seem to get in the hands of the people who can/ need the help."

When asked what online activities members in their communities needed help with, participants cited "how to use and engage with (the internet), how to pay bills" and "how to interact with a computer". One participant indicated that a lack of connection made people "unable to engage with people in prison/jail."

Section 5 of this Digital Equity Plan includes technical assistance and support for tribal communities to develop their own digital equity plans.

# 4 Collaboration and Stakeholder Engagement

# 4.1 Coordination and Outreach Strategy

The OBO developed and implemented an inclusive engagement model that provided opportunities for residents, organizations, and leaders across the state to provide insight into planning priorities. Leveraging existing structures, such as the OBGB and the OBEC, and expanding outreach through coordination with state agencies, local and regional governments, community anchor institutions, and community-serving organizations providing services to covered populations, the OBO gleaned a holistic understanding of broadband challenges, assets, and priorities across Oklahoma.

The stakeholder engagement model outlined below demonstrates the breadth of engagement across Oklahoma and the variety of mechanisms for outreach and engagement. Stakeholders in established advisory entities provided ongoing feedback and insights into broadband challenges and opportunities. Meaningful outreach and multiple participatory mechanisms allowed for comprehensive engagement and qualitative data collection from key groups, including covered populations. Quantitative data collection activities provided deeper understanding of the barriers and assets in the state. Figure 22 describes the OBO stakeholder engagement model.

Advisory Supports			
Broadband Governing Board	Broadband Expansion Council	Digital Equity Coalition	
Participatory Mechanisms			
Tribal Consultations	Local and State Government Coordination	Stakeholder Meetings	
Listening Tours	Industry Roundtables	Focus Groups w/ Covered Populations	
Quantitative Data Activities			
Residential Phone Survey	Community Organization Survey	Data Sets Analysis	

## Figure 22: Oklahoma Broadband Office Stakeholder Engagement Model

This model ensured the OBO received meaningful engagement across covered and underrepresented populations throughout the Digital Equity Plan development process and that organizations, governments, residents, and other stakeholders had multiple opportunities to provide input.

## Stakeholders & Advisory Supports

Having access to a reliable, affordable broadband connection is critical for Oklahoma residents and is a requirement for many governmental and private-sector activities. The OBO engaged in extensive outreach to identify and interact with critical stakeholders with whom engagement on digital equity priorities is essential to a holistic understanding of connectivity challenges and opportunities in the state. These stakeholder groups were engaged across the varied participatory mechanisms and data collection activities. Figure 23 documents public engagement involvement by stakeholder type.

	Listening	Focus	Residential	Organization			Tribal	Local Coordination	Media
Oklahoma Stakeholder Groups	Tours	Groups	Survey	Survey	<b>DE Coalition</b>	ISP Roundtable	Consultation	Workshops	Outreach
State Agencies									
Federal Agencies									
County and Municipal Governments									
Tribal Governments									
Regional Associations of Governments									
Nonprofits and Community-Based Organizations									
Organizations providing digital inclusion									
Civil Rights Organizations									
Labor Organizations and Unions									
Workforce Development Organizations									
Economic Development Organizations									
Chambers of Commerce									
Internet Service Providers									
Public Utility Commissions									
Broadband Coalitions									
Consumer Advocacy Organizations									
Faith-Based Organizations									
Neighborhood Associations									
Community Anchor Institutions									
Public Education									
Libraries									
Healthcare Entities									
Public Safety									
Higher Education									
Public Housing Authorities									
Individuals & Organizations that represent:									
Individuals with disabilities									
Individuals in households under 150% of FPL									
Individuals who are 60 years of age or older									
Individuals with language barriers									
People of color									
Immigrants									
Veterans									
Incarcerated individuals									

## Figure 23: Participatory Mechanisms for Oklahoma Stakeholders

This ongoing collaboration and partnership with stakeholder groups ensured robust data collection and capture throughout the planning process. The OBO also specifically focused on unserved and underserved communities during these engagement efforts to better understand the places and people who will be most affected by this Digital Equity Plan. These engagement activities are described in further detail in the following sections. Appendix E contains a full list of stakeholder meetings.

The OBO engaged with three formal sets of advisory supports for collaborative purposes during the planning process for the Digital Equity Plan. These groups are described below.

**The Oklahoma Broadband Governing Board (OBGB)** oversees the work of the OBO and sets broadband expansion policy. Membership includes the Lieutenant Governor, State Treasurer, three appointees of the Governor, and two appointees each from the Speaker of the Oklahoma House of Representatives and the President Pro Tempore of the Oklahoma State Senate.

Current members of the board are:

- Katy Boren, CEO, Oklahoma City Innovation District Inc. Oklahoma City
- Mike Erhart, Managing Partner, Erhart & Associates LLC Oklahoma City
- Dwight Hughes, Superintendent/CEO, Autry Technology Center Enid
- Fob Jones, Attorney, Fob F. Jones Law Sulphur
- Jim Meek, District 9 Director, The Oklahoma Farm Bureau Inc. Okmulgee
- Amanda Mullins, Managing Attorney, Amanda Mullins PLLC Chickasha
- Matt Pinnell, Lieutenant Governor Oklahoma City
- Todd Russ, State Treasurer Cordell
- Russ Teubner, CEO, HostBridge Technology LLC Stillwater

**The Oklahoma Broadband Expansion Council (OBEC)** advises the OBO and provides recommendations for policies that can improve, expand, and reduce the cost of high-speed internet in the state. The 14-member council includes the Executive Director of the Broadband Office along with appointees by the Governor, Speaker of the Oklahoma House of Representatives, President Pro Tempore of the Oklahoma State Senate, and Oklahoma Corporation Commission. One member, appointed by the President Pro Tempore of the Oklahoma State Senate, shall be an Oklahoma resident and tribal leader of a tribe recognized in the state.

Current members of the council are:

- Mark Argenbright, Director, Public Utility Division & Consumer Services, Oklahoma Corporation Commission Oklahoma City
- Darlene Brugnoli, Vice President Governmental Affairs, Verizon
- Jason Constable, Director, Regulatory Affairs, AT&T Corp. Oklahoma City
- Representative of a wireless telecommunications provider with operations in Oklahoma and 24 other states
- Sachin Gupta, Director of Government Business and Economic Development, Centranet LLC Stillwater
- Mike Hilliary, Chief Administrative Officer, Hilliary Communications Lawton
- Ernie Martens, Mayor, City of Sallisaw Sallisaw
- Stacie Pace, Associate Director, Canopy Healthtech Owasso
- Mike Sanders, Executive Director Kingfisher
- Josh Snow, President, Trace Fiber Networks LLC Ada
- Robbie Squires, Director of Government & Regulatory Affairs, Cox Oklahoma Telecom LLC Yukon
- Billy Frank Staggs, President, Chickasaw Holding Co. Sulphur
- Daniel Webster, CEO, Northeast Oklahoma Electric Cooperative Vinita
- Jerry Whisenhunt, General Manager, Pine Telephone Co. Inc. Broken Bow
- Dr. Brian Whitacre, Professor of Agricultural Economics, Oklahoma State University, Department of Agriculture Economics Stillwater

**The Oklahoma Digital Equity Coalition** provides insight on barriers to accessing and using affordable, reliable high-speed internet for covered populations. Organizations serving on this

coalition represent nonprofits, libraries, local and state government, health care, and other entities providing digital equity services to covered populations throughout the state.

Members of the coalition include:

- Urban League of Greater OKC
- Oklahoma Department of Libraries
- Southern Prairie Library System
- Oklahoma Complete Health
- Heartland Forward
- YWCA
- Hinton Public Library
- Oklahoma State University
- Oklahoma Department of Career and Technology Education
- Bristow Public Library
- OU Health
- City of Tulsa
- Rise Broadband

The OBO will continue to evaluate and expand the coalition as needed to ensure diverse perspectives and representation for all covered populations. Public comment highlighted additional representation that OBO will consider when the coalition reconvenes.

OBO previously convened a digital equity work group in late 2022 and early 2023 at the start of the planning process. Those meetings included many of the stakeholder groups above, as well as representatives from tribal nations. A key action described of this Digital Equity Plan is to increase tribal nation representation as part of the coalition.

## **Local Coordination**

The model the OBO developed to engage with stakeholders during the planning and implementation phases of the BEAD and Digital Equity Act programs aligned with and supported all aspects of local coordination. While a full description of outreach activities occurs in this section, highlights from the strategies to address each of these criteria include:

• **Full geographic coverage** – The OBO visited 19 sites during its "Let's Get Digital: Oklahoma Broadband Tour", with stops in all parts of the state. These locations were selected to maximize proximity to Oklahomans in all regions of the state and drew attendees from 42 different counties. A map of visited counties is in the Statewide Listening Tour section below. Additionally, the OBO visited an additional 11 sites in October and November to discuss and share about the planning and implementation work of the office. The OBO conducted a statewide residential survey, spanning the geography of the state, to understand the barriers to broadband adoption. The OBO also held stakeholder meetings with groups virtually and in-person from different communities and regions of the state. Ensuring geographic coverage across the state and Tribal lands ensures that the OBO has a comprehensive understanding of the challenges and opportunity of broadband deployment and adoption.

- **Meaningful engagement and outreach to diverse stakeholder groups** The OBO developed and engaged with a diverse group of organizations, governments, and leaders representing covered populations. These groups include local and regional governments, community- and faith-based organizations, education institutions, agriculture organizations, businesses and chambers of commerce, labor organizations, tribal nations, state agencies, public safety entities, health care providers and organizations, and organizations serving covered populations. Through focus groups, a statewide listening tour, survey collection, and interviews, the OBO learned about barriers to access, adoption, and use for diverse stakeholders. Additionally, the OBO hosted consultations with tribal governments in the state.
- **Utilization of multiple awareness and participatory mechanisms** The OBO leveraged digital and non-digital means of communication for education and outreach purposes. These mechanisms included:
  - Statewide listening tour
  - Focus groups
  - Roundtables
  - Tribal consultations
  - Site visits
  - Organizational and residential surveys
  - Email updates
  - Board meeting updates
  - o Press releases
  - Social media
  - TV, radio, and print interviews
  - o Partnerships with organizations across the state

All these efforts ensured that stakeholders could engage with the planning process and were informed of the OBO's work. The OBO posted regular updates about engagement activities on the website, including registration links to listening tour stops and the survey link for the organization survey. The OBO provided monthly updates about digital equity planning work at OBGB and OBEC meetings and shared upcoming opportunities to get involved.

• **Clear policies to ensure transparency** – The OBO operated transparently throughout the planning process, utilizing its website, email distribution lists, and monthly updates to the OBGB and OBEC to provide updates to stakeholders and promote opportunities to engage in the process. The OBO maintained and updated the outreach page on its website with information about listening tour stops, roundtables, and local coordination events. Listening tour stops were open to the public and media and promoted through social media, statewide and local press releases. The public comment process for this Digital Equity Plan will be shared with stakeholders across the state, with comments addressed and incorporated into the plan as appropriate.

• **Outreach and engagement of unserved and underserved communities** – The OBO prioritized outreach and made substantial efforts to engage with unserved and underserved communities. Entities representing these populations serve on the Digital Equity Coalition. They also supported outreach and engagement efforts to share engagement opportunities with covered populations throughout the state. The OBO conducted focus groups with underrepresented populations and ensured representative sampling of these populations in the residential survey. The residential survey was conducted in English, Mandarin, and Spanish to ensure participation from Oklahomans with a language barrier. The OBO also specifically focused on unserved and underserved communities during these engagement efforts to better understand the places and people who will be most affected by the BEAD program.

Additionally, the OBO hosted consultations with tribal governments in the state. The OBO ensured transparency of both opportunity and results of the outreach and engagement conducted during the development of the Digital Equity Plan. Perspectives and input gathered during the engagement process were included in the Digital Equity Plan draft that was available for public comment. The survey and stakeholder meeting data collection analysis are discussed extensively in throughout this document, Additionally, OBO provided regular updates about the results and outcomes of coordination and outreach efforts at monthly OBEC and OBGB meetings, sharing out top priorities, barriers, and other data collection findings from the listening tour.

#### **Outreach and Engagement Activities**

The OBO engaged with stakeholders by utilizing multiple awareness and participatory mechanisms. Through these mechanisms, the OBO ensured the public was aware of ongoing planning efforts and could provide feedback to the OBO on connectivity challenges and opportunities.

This variety of engagement activities, with a combination of digital and in-person opportunities, provided stakeholders clear ways to share their connectivity priorities. Several of these mechanisms are described in more detail below.

#### **Statewide Listening Tours**

The OBO traveled over 6,000 miles across Oklahoma on the "Let's Get Digital: Oklahoma Broadband Tour", hosting 19 listening sessions. Figure 24 depicts the geographic coverage of the listening tour stops.

#### Figure 24: Map of "Let's Get Digital: Oklahoma Broadband Tour" Stops by County



Meetings, held in libraries, university campuses, veterans' halls, and other local venues, allowed the OBO to hear from communities about regional needs and priorities. The OBO visited the following communities:

- Weatherford (May 8, 2023)
- Stillwater (May 12, 2023)
- Vinita (May 15, 2023)
- Poteau (May 16, 2023)
- Broken Bow (May 18, 2023)
- Oklahoma City (May 22, 2023)
- Durant (May 23, 2023)
- Tulsa (May 24, 2023)
- Chickasha (May 26, 2023)
- Altus (June 2, 2023)
- Enid (June 5, 2023)
- Sallisaw (June 6, 2023)
- Miami (June 7, 2023)
- Sulphur (June 8, 2023)
- Lawton (June 9, 2023)
- Ada (June 13, 2023)
- Okmulgee (June 20, 2023)
- Goodwell (June 22, 2023)
- Woodward (July 18, 2023)

Understanding local context, including assets and success stories from the region, as well as pain points and needs, provided the understanding necessary to craft this Digital Equity Plan.

The tour incorporated interactive polling to collect quantitative data for analysis, aggregation, and comparison across the regions. Through guided discussion, participants elucidated key barriers, regional assets, and top priorities for the state. Several Broadband Governing Board members promoted and attended these events, often as co-facilitators.

These listening sessions were held at different times throughout the day, with many occurring during evening hours to allow residents to attend after work. Food was provided at each event.

Outreach to local and regional governments, nonprofits, and CAIs ensured diverse participation and reach to covered populations. The OBO developed a communications plan to promote these meetings, with regular social media content and graphics, a statewide press release, and rolling regional press releases in advance of each meeting. An outreach toolkit, with sample social media, email/newsletter language, and flyers, allowed organizations to promote these events within their networks. The OBO staff participated in multiple regional and statewide media interviews to promote the listening tour and to ensure that residents were aware of the meetings.

Overall, 299 Oklahomans participated in one of the listening tour stops. Covered population representation at the tour was as follows:

Aging individuals	40.4%
Incarcerated Individuals	12.7%
Veterans	32.4%
People with disabilities	31.8%
Individuals with a language barrier	28.4%
Racial and ethnic minorities	33.8%
Individuals who reside in a rural area	56.2%
Low-income individuals	42.1%

Critical stakeholders to digital equity program implementation, including nonprofits, education institutions, local governments, and CAIs, attended these regional events to share their

perspectives on connectivity challenges, opportunities, and current and planned partnerships. Representation by organization type on the tour was:

Representing an internet service provider	24.7%
Representing a government agency	19.4%
Attending as a resident interested in home internet news and service options	15.4%
Representing a for-profit business	12.0%
Representing a nonprofit organization	8.4%
Other	5.7%
Representing a college, university, or other institution of higher (post-secondary) learning	5.7%
Representing a library	2.7%
Representing a tribal government	2.7%
Representing a hospital, doctor's office, or other health care provider	2.0%
Representing a K-12 school or school system	1.7%

Organizations represented at the listening tour events covered a variety of service areas within the state, with most organizations providing service or having geographic coverage in multiple counties in Oklahoma.

Multiple counties within the region	48.7%
One county	30.0%
Statewide	14.8%
National	6.5%

The OBO, as a new state agency, leveraged this listening tour to educate communities about the work of the office, make introductions to key leadership and staff, and build relationships with

local networks to support the OBO during the planning and implementation phases of the Digital Equity Plan. Appendix D has the full public meeting agenda.

Participants, when asked to describe the internet in their region in three words, reported a variety of experiences. Top responses included:

Non- existent	Slow	Inconsistent	Improving
Fast	Lacking	Dependent on location	Unreliable
Limited	Expensive	Available	Fiber
Costly	Spotty	Lacking	Good

The variety of responses was consistent from location to location, with participants further describing "challenges with terrain being hilly and tree covered" (Sallisaw public meeting), "when the weather is bad, you never know if you are going to have internet or not" (Altus public meeting), and access to broadband being about "the haves and the have nots," (Stillwater public meeting).

The OBO analyzed the quantitative and qualitative data collected at each listening tour stop, allowing for identification of key barriers and challenges for Oklahomans, as discussed in Section 3.

In the fall of 2023, the OBO embarked on a second round of listening tour stops as a part of the "Oklahoma's Digital Promise" listening tour. These tour sites included new counties not previously visited by the OBO, as the office expanded its geographic footprint further in the state. The OBO visited communities across Oklahoma to continue discussions around barriers to accessing, affording, and using the internet. Local governments, community anchor institutions, education institutions, community-based organizations serving covered populations, and residents were invited to participate in these events.

During the event, participants received updates from the OBO and engaged in structured conversations about the connectivity barriers and assets in their communities. Participants also had the opportunity to complete a survey about digital connectivity. During these events, OBO discussed the Digital Equity Plan and promoted the public comment process for BEAD and DEA. Stops on the fall listening tour include:

- Hobart (October 3, 2023)
- Muskogee (October 5, 2023)
- Krebs (October 11, 2023)
- Burns Flat (October 12, 2023)
- Atoka (October 17, 2023)
- Oklahoma City (October 19, 2023)
- Okarche (October 24, 2023)
- Duncan (October 25, 2023)
- Watonga (October 26, 2023)
- Ponca City (November 9, 2023)
- Miami (November 14, 2023)

## **Residential Survey**

The OBO conducted a residential survey with 1802 Oklahomans, sampling a cross-section of Oklahoma residents across the state. The survey was administered as a computer-assisted telephone questionnaire in summer 2023. The survey was administered in three languages: English, Spanish, and Chinese. The survey included representation from all covered populations except incarcerated people. Participation in the survey by covered population included:

Aging individuals	33.1%
Low-income households	23.4%
Individuals with a language barrier	8.3%
Racial or ethnic minorities	25.9%
Individuals with disabilities	29%
Veterans	16.7%
Individuals who primarily reside in a rural area	31.1%

Section 3 discusses findings for each covered population.

#### **Organization Survey**

The OBO administered an organization survey to develop a broadband soft asset inventory with available digital inclusion resources in communities across the state. The survey was open to any Oklahoma entity providing digital inclusion services, including community and faith-based organizations, local and regional governments, libraries, universities and school systems, private industry, and more. This survey was deployed in May 2023 and remains open. Respondents who indicated that their programs and offerings could be named publicly will be featured on a digital inclusion resources map, allowing residents to visit the map and find local resources.

Libraries were the largest entity type to respond to the survey. The chart below shows response by institution type.

Library	75%
College or University	3%
Nonprofit	4%
Local Government	3%
Regional Government	2%
No response	12%

Organizations completing the survey shared the types of services offered, including:

- Public Wi-Fi access
- College readiness training

- Workforce development skills training
- Help with subscribing to home internet
- Career readiness assistance
- Help with public assistance portals
- Training with specific software
- Public access to computers
- Computer coding education
- Community tech support
- Help enrolling in the Affordable Connectivity Program (ACP)
- Computer refurbishing services
- Help with acquiring internet-enabled devices
- E-commerce help for small businesses
- General digital literacy training
- Telehealth services
- Internet usage training
- Cybersecurity training
- Assistance from Digital Navigators

Organizations also indicated which covered populations they served. Any entity or organization providing these services is encouraged to share that information with the OBO by completing the <u>survey</u>. This information will support ongoing planning and information efforts.

## **Tribal Consultations**

From April through November 2023, the OBO engaged all 39 tribal nations with communications and invitations to attend tribal consultations. In-person, individual tribal consultations, and statewide tribal consultations were held, which gleaned important insights into the unique perspectives, needs, and challenges of Oklahoma's tribal nations. Thirty-eight of the 39 tribal nations participated in a consultation with the OBO. NTIA tribal representatives were included in these consultation meetings and conversations. Tribal consultations include:

Tribal Nation	Consultation Date
Wichita and Affiliated Tribes	4/15/2023
<b>Southwest Tribal Meeting</b> - Apache Tribe of Oklahoma, Fort Sill Apache Tribe, Kiowa Tribe, Cheyenne and Arapaho Tribes, Wichita and Affiliated Tribes, Caddo Tribe	4/19/2023
Wichita and Affiliated Tribes	5/4/2023

Kiowa Tribe	5/4/2023
Osage Nation	5/10/2023
Sac and Fox Nation	5/12/2023
Kickapoo Tribe of Oklahoma	5/12/2023
<b>Southwest Tribal Meeting</b> - Apache Tribe of Oklahoma, Fort Sill Apache Tribe, Kiowa Tribe, Cheyenne and Arapaho Tribes, Wichita and Affiliated Tribes, Caddo Tribe	5/19/2023
Choctaw Nation	5/23/2023
<b>State-Wide Consultation</b> - Fort Sill Apache Tribe, Shawnee Tribe, Osage Nation, Seneca Cayuga Tribe, Eastern Shawnee Tribe	5/25/2023
Muscogee Nation	6/6/2023
<b>Southwest Tribal Meeting</b> - Apache Tribe of Oklahoma, Fort Sill Apache Tribe, Kiowa Tribe, Cheyenne and Arapaho Tribes, Wichita and Affiliated Tribes, Caddo Tribe	6/9/2023
Chickasaw Nation	6/12/2023
Seneca Cayuga Nation	6/23/2023
Kickapoo Tribe of Oklahoma	6/26/2023
Cherokee Nation	8/8/2023
United Keetoowah Tribe	8/10/2023
Iowa Tribe of Oklahoma	8/12/2023
Cheyenne and Arapaho Tribes	8/22/2023
Quapaw Nation	8/23/2023

Cheyenne and Arapaho Tribal Meeting	8/24/2023
<b>Southwest Tribal Meeting -</b> Apache Tribe of Oklahoma, Fort Sill Apache Tribe, Kiowa Tribe, Cheyenne and Arapaho Tribes, Wichita and Affiliated Tribes, Caddo Tribe	9/21/2023
Fort Sill Apache Tribe	11/6/2023
Citizen Potawatomie Nation	11/1/2023
Otoe-Missouria Tribe	11/1/2023

The Tonkawa Tribe acknowledged receipt of the Dear Tribal Leader Letter but declined to establish a formal relationship for broadband infrastructure and adoption planning. The OBO has indicated a willingness to engage in a partnership if the tribe determines they would like to do so at a later date.

Key takeaways from these consultations include:

- Within the tribes, there is a Digital Divide between some who have tribal-owned ISPs and those who do not, and some who have made connections with workforce education resources and those who have not (OSU IT and Career Tech were named as available resources at several listening tour stops). Many tribes desire more fiber technicians and installers.
- Of the tribes that do not have tribal-owned ISPs, they wish to work cooperatively and in collaboration with existing ISPs in their territories.
- The cost of laying fiber is very expensive. (This is something we have heard from ISPs across the state at most listening tour stops).
- Several of the tribes do not have sufficient grant writing experience in-house, which led to their first attempts at securing TBCP funding being denied.
- Several tribes desire to use BEAD funding to connect non-tribal households.
- Some tribes expressed concern for ongoing equipment and maintenance of infrastructure into the future.

Digital equity needs expressed include:

- Home computer assistance;
- Digital navigators in libraries, tribal community centers, or CAIs to provide digital skills training and/or tech mobiles that could visit smaller communities to train people;
- Telehealth resources; and
- Remote work opportunities.

Tribal nations had opportunities to participate in all of the stakeholder engagement activities described in Section 2.3. During the "Let's Get Digital: Oklahoma Broadband Tour", 2% of the

attendees represented tribal governments. A tribal member focus group was conducted to provide qualitative data about the barriers to internet access and use.

The OBO sought and received written feedback from Oklahoma's tribal nations in the development and drafting of the Five-Year Action Plan. This feedback was incorporated into both the Five-Year Action Plan and relevant sections of this Initial Proposal. The OBO also conducted specific outreach to tribal nations to share the Initial Proposal, Volume I, and Initial Proposal, Volume 2, as well as the Digital Equity Plan, and requested feedback. OBO received feedback for all documents and has analyzed and revised these documents as appropriate.

## **Industry Roundtables**

Internet service providers and other companies in broadband-related industries are important constituents in the work of ensuring affordable internet access for all. The OBO hosted an industry roundtable on June 15, 2023, to engage with ISPs on key aspects of BEAD and DE planning. Thirty representatives joined the call, with a provider type breakdown of:

Telephone company	20%
Electric cooperative	12%
Investor-owned utility	16%
Private business	48%
Other	4%

Most providers had between 1,000 and 10,000 customers and served at least two to five contiguous counties. In terms of technology, end-to-end fiber was the most represented, with fixed wireless being the second most represented, and cable being the third. The roundtable engaged on various BEAD policy decision points, providing feedback to the OBO on workforce priorities, low-cost options, and ways to ensure universal coverage through implementation of the BEAD program.

The OBO intends to continue this engagement with regular roundtable discussions open to all ISPs.

#### **Local Coordination Workshops**

The OBO hosted two local coordination meetings during the planning process. The OBO, in partnership with NTIA, hosted an "Internet for All: Oklahoma Local and Tribal Nation Coordination Workshop" in Oklahoma City on January 19, 2023. The event brought together key participants in Oklahoma from federal, state, tribal, and local governments, industry, and other important stakeholders to discuss coordination on broadband efforts as the state prepares to receive significant broadband funds from the Infrastructure Investment and Jobs Act.

The OBO hosted a follow-up event in Tulsa on May 24, 2023, to provide updates on workforce priorities, tribal nation engagement, and funding programs. At this event, the OBO hosted two roundtable panels: workforce and tribal coordination. A key takeaway from the workforce panel highlighted the opportunity available for Oklahomans to receive training as fiber technicians.

These are critical jobs that will be needed for broadband infrastructure deployment and ongoing maintenance of networks and can provide upskilling opportunities for Oklahomans looking to transition into the sector. The panel also discussed opportunities to strengthen placement pipelines to ensure highly trained individuals get hired upon completion of their training programs.

## **Focus Groups**

The OBO conducted focus groups with covered populations and underrepresented populations, along with organizations serving these populations, to build a deeper understanding of the challenges these populations face accessing and using the internet and of the programs and solutions that would be most beneficial. Focus group facilitators asked a structured set of questions, including questions related to broadband access, satisfaction with current service, device access and use, barriers to internet adoption, affordability of internet service and awareness of Affordable Connectivity Program, ways to find technical assistance and support navigating online applications, and internet safety. These results are referenced throughout Section 3, specifically in the needs assessment for covered populations.

The OBO partnered with AARP to conduct a focus group with aging populations in September 2023. Representation from covered populations included:

Members of a racial or ethnic minorit	y
group	40%
Aging individuals	90%
Rural residents	10%

The OBO performed a focus group with LGBTQIA+ populations in September 2023. Representation from covered and underrepresented populations included:

Members of a racial or ethnic	minority
group	20%
Rural residents	60%
Low-income	20%
LGBTQI+ individuals	100%

The OBO partnered with the University of Oklahoma's Office of Student Life to conduct focus groups with Spanish language speakers in September 2023. This focus group was conducted in Spanish. Representation from covered populations included:

Members of a racial or ethnic minority	
group	100%
People with language barriers	100%
Rural residents	25%

Low-income households	25%
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The OBO conducted a focus group with Veterans in May 2023. Representation from covered populations included:

Veterans		100%
Aging individual	S	100%

The OBO partnered with OSU-IT to conduct three focus groups in October 2023. Representation from covered populations included:

Low Income	22%
Tribal	56%
Rural	22%

## **Public Comment**

The OBO released the Oklahoma Digital Equity Plan for public comment from October 13 – November 13, 2023. The plan was posted on the OBO's website and accompanied by a public comment form. The form allowed commenters to provide feedback on the plan section by section, according to the formatted document. Any questions could be emailed to the office at broadband@broadband.ok.gov.

OBO promoted the public comment period widely and circulated the document through state and local networks to ensure residents, community anchor institutions, industry professionals, local government, and community-based organizations were aware of the document and could provide feedback. including at listening tour stops, OBEC and OBGB meetings, and social media posts. Key outreach activities included:

- Promotion during the Oklahoma's Digital Promise listening tour stops
- Promotion at OBEC and OBGB meetings
- Promotion during stakeholder meetings
- Promotion through GovDelivery listserv
- E-mails to stakeholder groups and Tribal governments
- Social media promotion, including LinkedIn

This outreach ensured stakeholders that had provided feedback during the data collection efforts, as well as other organizations and Oklahoma residents, could review the plan and provide feedback.

The OBO encouraged residents, community-based organizations, local governments, community anchor institutions, and other entities serving covered populations to review the plan and provide public comment. The OBO received 22 public comments, including comments

on behalf of the following organizations: Miami Public Library, OSUIT, Digitunity, AARP Oklahoma, Oklahoma Department of Libraries, Benton Institute for Broadband and Society, and the Chickasaw Nation.

As part of the public comment process, respondents were asked if they identified and/or represented covered populations through community work (and could select as many fields as applicable). Feedback shows that public commenters identify with and/or represent organizations that work directly with all covered populations. The following highlights the specific covered population representation of the participants in the public comment process:

Aging population	59%
Veterans	41%
Individuals with disabilities	41%
Incarcerated	9%
Individuals of a racial or ethnic minority group	36%
Rural residents	77%
Low-income households	41%
Individuals with language barrier	14%

#### **Representation of Covered Populations in Public Comment Responses**

The OBO reviewed all comments and made updates to the Digital Equity Plan as appropriate. Feedback, including quotations from public comments providing more context about barriers to digital equity, are included in Sections 2 and 3.

Upon review of public comments received from residents, libraries, community partners, and national stakeholders, the following themes emerged as priority for OBO to consider in pursuit of digital inclusion for all. Many commenters stressed the importance of reliable and affordable internet access, sharing stories of how the internet is not readily available at their home or in their community. Some commenters discussed how limited connectivity is impacting their access to emergency services, such as 911. Further, many commenters stressed the affordability challenges many Oklahomans face when subscribing to home internet. These comments have been addressed and included throughout the Digital Equity Plan to spotlight the need for accessible and affordable programs that drive digital learning and inclusion.

OBO received multiple comments regarding the importance of continued stakeholder engagement, workforce development programs, and digital inclusion activities. For example, commenters discussed the need to develop workforce training opportunities in rural communities and other underrepresented populations to ensure the state is equipped to close the digital divide. As evidenced in the measurable objectives outlined by the Office, workforce development and digital inclusion are key goals of this Plan and remain at the forefront of the OBO's mission. Other comments highlighted the need to provide digital inclusion resources to aging populations, such as telehealth programs. While other comments discussed the general need for affordable device access and accessibility in communities across the state. OBO is heartened to see public response echo their commitment to driving device accessibility and commitment to serving all covered populations.

The OBO appreciates public feedback on the Digital Equity Plan as the office strives to implement a plan that's inclusive and representative of the digital needs of residents and community partners across the state. The office looks forward to partnering with these community stakeholders to implement the Digital Equity Plan.

In response to these comments, the OBO made multiple updates to the Digital Equity Plan. Some of those updates include adding the recommendation that tribal representation be increased on the Digital Equity Coalition based on feedback from the Chickasaw Nation. Additionally, the OBO updated the language of Section 5.1, Goal 3, Strategy 3 to include "digital literacy" specifically based on feedback from libraries. The OBO has included public comment excerpts throughout the document to provide additional context for readers.

A full list of public comments and responses can be found in Appendix F.

# 4.2 Ongoing Engagement & Partnerships

The OBO plans to continue stakeholder engagement and outreach through many of these established advisory groups, communications channels, and an additional listening tour. This will ensure ongoing awareness of and participation in the OBO's work from stakeholder groups, local governments, tribal nations, and communities.

Sustainability is a critical aspect of this engagement and planning work. Maintaining engagement and partnership throughout the implementation of the program will ensure that the goals of this plan are met and that the capacity and resources needed to close the digital divide are built. As one public commenter noted, "Sustainability is also important because covered populations are not static: for example, residents grow older and so join the 60 and over population; new immigrants, lacking English proficiency, move to Oklahoma and other immigrants gain English proficiency; and household incomes change over time."

Many of the stakeholders engaged will be active partners in the implementation of the Digital Equity Plan. The implementation section describes their role in this process. OBO will engage with stakeholders and conduct additional data collection and analysis activities, described in Section 5, to ensure that the Digital Equity Plan remains updated and informed by the stakeholders and communities it supports.

Many of the activities of the Digital Equity Plan prioritize collaboration, partnership, and planning. Ensuring that digital equity activities are considered and embedded in economic and workforce strategies, education plans, health programs, and other essential service strategies

will ensure that the programs and work can continue to be implemented and that new funding streams can be identified to continue to support this work as it evolves and changes.

Section 5.3 provides additional details about the ongoing progress monitoring, outreach, and engagement activities OBO intends to implement to ensure ongoing engagement with organizations representing covered populations and other key stakeholders whose partnership will be essential to implementing this plan.

Additionally, as relationships with and between the tribes continue to evolve, it is vitally important that communication channels remain robust and open. In no other community is the digital divide more apparent, nor is bridging that divide more important. With almost half of Oklahoma being ruled tribal lands, it would be impossible to provide universal coverage without proper coordination. Tribal consultations will remain a priority throughout the life of the OBO.

# 5 Implementation

# 5.1 Implementation Strategy & Key Activities

Throughout the extensive engagement and planning process, the OBO garnered deep understanding of barriers to accessing, adopting, and using affordable, reliable high-speed internet. Oklahomans shared not only the barriers and the challenges they faced getting online but what increased connection would mean for them and their communities. Having a reliable, affordable high-speed internet connection is a force multiplier across communities; increasing connectivity supports education outcomes, health care access, agriculture productivity and sustainability, small business growth, and so many other individual and community-level outcomes that benefit Oklahoma.

"Connectivity benefits communities in ways we don't even realize. Workforce development, education attainment, economic development, telework, health care. As we inch forward as society and become more technical, it is ethical to make sure everyone has equal footing technically."

- Community advocate

The barriers and challenges highlighted in Section 3 are what the OBO seeks to address in implementing the Digital Equity Plan. **By building and expanding programs**, **partnerships, and outreach in every region across the state, the OBO will accomplish its mission and vision to** *fulfill Oklahoma's digital promise*.

During the listening tour, participants ranked their top priorities for a more connected Oklahoma. These priorities, shown in the table below, along with the other analysis in this plan, informed the objectives, strategies, actions, and measures of success discussed in this section.

Priority #1	Improved high-speed infrastructure
Priority #2	Increased speed/reliability of internet connections
Priority #3	Making internet service more affordable
Priority #4	Upskilling and workforce development
Priority #5	Improved access to public computing centers and public Wi-Fi

Each goal in this Digital Equity Plan supports the OBO's vision that **Oklahomans will have** access to the information, resources, and skills needed to participate in society to the fullest and to remain competitive in a digital marketplace.

When developing the goals, objectives, strategies, and actions to achieve Oklahoma's vision of digital equity, the OBO considered the qualitative and quantitative data collected during the planning period, current programs and assets available across the state, and ongoing state efforts in education, health, economic and workforce development, essential services, and civic and social engagements. Aligning this implementation plan with these factors ensures that the OBO's efforts are complementary, not duplicative, to existing programs and plans and that they are grounded in the identified needs of Oklahomans in communities across the state. Additionally, this implementation plan specifically considers and addresses the barriers facing Oklahoma's covered populations, with appropriate strategies, actions, and partnerships to shrink digital equity gaps and close the digital divide.

The goals, objectives, strategies, and actions are aligned with the SDEPG's statutory requirements for developing measurable objectives (described in Section 2.3) and make provisions for each of the covered populations. While each section describes specific actions to achieve each objective and goal, the actions fall into four general categories for implementation. These implementation strategies and activities describe both funding strategies, which will be developed as a grant program, and coordination and support strategies, which will be led by OBO. These categories describe how OBO envisions the work, and include:



**Promote** – OBO will leverage current and future networks, communications channels, and platforms to share resources, information, and opportunities.



**Partner** – OBO will engage with external stakeholders, including state agencies, local governments, Tribal nations, community-based organizations, community anchor institutions, and other entities to partner with existing programs and networks to increase access to information and services.



**Develop** – OBO and partners will create or oversee materials, supports, and partnerships.



**Fund** – OBO will develop grant program(s) or provide funding to implement or scale programs, partnerships, and planning processes.

The strategies and actions described build on the current work and partnerships of the OBO and consider ongoing efforts at the local, regional, and state level to address the digital divide. These actions consider a wide range of partners, including community anchor institutions, community-based organizations, municipalities, Tribal nations, and others, because the OBO

understands it will take all of these partners working together, sharing data and best practices, and supporting communities to achieve the mission and vision of digital equity in the state.

To track progress as the office implements these digital equity strategies and actions, OBO developed KPIs for each measurable objective and each sub-measurable objective that is directly tied to a covered population. These KPIs are aligned with strategic priorities of the OBO and the Digital Equity Plan and are grounded in the data collected during the planning period. The matrix below describes the KPI, baseline measurement, target measurement for the end of the grant period, and the data collection source.

Additionally, each measurable objective has a KPI for the state as a whole, all covered populations, and for the covered population specifically targeted by the measurable objective. The covered population(s) identified for each measurable objective are based on the data analysis on barriers discussed in Section 3.2.1.

Key Performance Indicator	Baseline	Target	Data Source
Measurable Objective: Increase the number of Oklahomans, including all covered			
populations, that have access to affordable high-speed internet.			
Sub-Measurable Objective: Increas	e the number	r of low-incor	ne households that have access
to aff	ordable high-	speed interne	et.
Sub-Measurable Objective: Increase	the number	of individuals	s with language barriers that are
familiar with ACI	or other lov	v-cost adoption	on programs.
Increase enrollment in ACP or other	45.3%	60%	ESH eligibility numbers and USAC
low-cost adoption programs.			enrollment and claims tracker
Covered population:			
Low-income households	45.3%	60%	
Increase formiliarity with ACD or other	FF 10/	60%	Desidential survey
Increase familiarity with ACP or other	55.1%	60%	Residential survey
low-cost adoption programs.			
Covered population:			
All covered populations	54.7%	60%	Residential survey
Individuals with language barriers	45%	60%	
Measurable Objective: Increase	the number o	of Oklahomaı	ns, including those in covered
populations, that	have access t	o internet-er	nabled devices.
Sub-Measurable Objective: Incre	ease the num	ber veterans	that have access to internet-
enabled devices.			
Increase the percentage of	89.9%	95%	Residential survey
Oklahomans with access to a high-			
quality device in their home.			
Covered population:			
All covered populations	89.1%	95%	Residential survey

Veterans	75.9%	90%		
Measurable Objective: Increase t	he number of	f Oklahoma r	esidents, including all covered	
populations, and community a	nchor institu	tions have a	ccess to reliable high-speed	
popolo ()	intern	et.		
Sub-Measurable Objective: Incr	ease the num	ber of rural r	esidents that have access to	
reli	iable high-spe	eed internet.		
Increase the number of households	81.7%	100%	Oklahoma State Broadband Map	
with access to high-speed internet.				
Covered population:	00.70/	1000/		
All covered populations	89.7%	100%	Residential survey on	
Rurui residents	92.3%	100%	subscription to nome internet	
Measurable Objective: Increase	se the numbe	er of Oklahor	nans, including all covered	
populations, that ca	an access and	l use digital r	esources safely.	
Sub-Measurable Objective: Increas	e the numbe	r of aging ind	ividuals that can access and use	
(	digital resour	ces safely.		
Decrease the percentage of people	7.9%	1%	Residential survey	
who say the internet is too			,	
complicated.				
Covered population:				
All covered populations	8.6%	1%	Residential survey	
Aging individuals	13.6%	5%		
Measurable Objective: Increas	se accessibili	ty of state di	gital resources for covered	
	populat	ions.		
Sub-Measurable Objective: Increa	se the numbe	er of individu	als with disabilities who access	
	state digital r	esources.		
Increase the percentage of people	42.3%	52.3%	Residential survey	
accessing government services or				
resources online				
Covered approximition.				
All covered populations	44 20/	E4 20/	Residential survey	
Individuals with disabilities	44.2%	54.2%		
	50.578	00.578		
Measurable Objective: Increase the number of Oklahomans, including all covered				
populations, that can participate in online opportunities to advance health, education, and				
Sub-Measurable Objective: Increase the number of individuals from racial or ethnic				
minorities and the number of ru	ral residents	that particina	ate in online opportunities to	
	advance hea	Ith goals.		
advance health goals.				

Increase the percentage of			Residential survey
individuals accessing online			
opportunities:			
<ul> <li>Health (talk to doctor online)</li> </ul>	47.9%	57.9%	
<ul> <li>Education (take online class)</li> </ul>	22.2%	32.1%	
<ul> <li>Workforce (search for jobs)</li> </ul>	32.1%	42.1%	
Covered populations:			Residential survey
All covered populations (health)	52.3%	62.3%	
Individuals from racial or ethnic	46.1%	56.1%	
minorities (health)			
Rural residents (health)	48.2%	58.2%	
Measurable Objective: Increase the	ne ability of C	Oklahoma to	meet workforce and economic
development goals so all o	overed popu	lations can t	hrive in a digital world.
Sub-Measurable Objective: Increas	se the numbe	er of incarcera	ated individuals that can access
workforce development program	ns to meet wo	orkforce and e	economic development goals.
Increase the percentage of	47%	55%	National Skills Coalition data
Oklahomans with digital skills needed			
for jobs of the future			
Increase the number of Skills Centers			
completers			
Covered population:			
Incarcerated individuals	991	1090	Oklahoma CareerTech data
		1	

# <u>Fulfilling Oklahoma's Digital Promise – Affordability</u>

Oklahomans identified affordability as a key barrier to being online. Having an affordable highspeed internet connection and an affordable high-quality device are prerequisites for accessing and using many of the modern applications and functions of the internet. This barrier affected all covered populations, but specifically impacted the ability of low-income households, individuals with a language barrier, and veterans from being able to subscribe to home internet service. These strategies and actions will support the OBO and its partners' efforts to ensure that reliable, high-speed internet service is affordable and that individuals have at least one highquality device in their homes.

#### Goal: All Oklahomans, regardless of income, can subscribe to the internet and participate in online programs and resources with high-quality devices.

# Measurable objective: Increase the number of Oklahomans, including all covered populations, that have access to affordable high-speed internet.

Sub-Measurable Objective: Increase the number of low-income households that have access to affordable high-speed internet.

Sub-Measurable Objective: Increase the number of individuals with language barriers that are familiar with ACP or other low-cost adoption programs.

# Strategy 1: Increase enrollment in the Affordable Connectivity Program (ACP) and other low-cost internet service programs.



Disseminate ACP outreach materials through community anchor institution networks and other partners serving people with language barriers, low-income households, veterans, and others who qualify to drive program awareness and accessibility.



Utilize existing and planned digital navigators to help covered populations enroll in the ACP.



Partner with the nonprofits and educational entities to provide ACP resources to students utilizing free and reduced cost lunches or other ACP-qualifying programs.

#### What success looks like:

Key Performance Indicator	Baseline	Target	Data Source
Increase enrollment in ACP or other low-cost adoption programs.	45.3%	60%	ESH eligibility numbers and USAC enrollment and claims tracker
Covered population: Low-income households	45.3%	60%	
Increase familiarity with ACP or other	55.1%	60%	Residential survey
low-cost adoption programs.			
Covered population:			Residential survey
All covered populations	54.7%	60%	
inalviauals with language barriers	45%	60%	

Measurable objective: Increase the number of Oklahomans, including those in covered populations, that have access to internet-enabled devices.

Sub-Measurable Objective: Increase the number veterans that have access to internetenabled devices.

Strategy 1: Identify and support free and reduced cost device distribution programs, such as computer refurbishment programs and library lending programs.


Expand tablet program in Oklahoma correctional facilities.



Engage with local CAIs, technology centers, and nonprofits who participate in or are interested in participating in device refurbishment and distribution programs, including providing technical assistance and best practices and exploring the development of a grant program to increase access to devices.



Partner with K-12 and higher education institutions to support 1:1 device programs.



Partner with veteran-serving organizations, including VFWs, to promote device distribution programs.

#### Strategy 2: Support and promote access to quality technical support options.



Encourage technology centers and education institutions to implement technical support programs that are freely accessible to covered populations.

# Strategy 3: Identify and partner with other federal and state device programs such as Lifeline.



Partner with Lifeline providers to help promote ACP adoption alongside the Lifeline Program.



Train digital navigators on Lifeline enrollment processes and outreach.

#### What success looks like:

Key Performance Indicator	Baseline	Target	Data Source
Increase the percentage of Oklahomans with access to a high-	89.9%	95%	Residential survey
Covered population:			Residential survey
All covered populations	89.1%	95%	
Veterans	75.9%	90%	

### **Fulfilling Oklahoma's Digital Promise – Access**

With the expansion of online content and the transition of many governmental and private sector services and resources to online platforms, having the ability to access and safely engage with the digital world is essential. Increasing access to the internet unlocks a set of resources and possibilities, from online banking to staying engaged with your child's school and education journey to decreasing social isolation by increasing the ability to connect with family and friends. Having an affordable, reliable high-speed internet connection at home and the ability to access the internet in public spaces like community anchor institutions opens opportunity for digital access. Increasing access to the internet, especially in rural communities, whose residents most often cited poor or non-existent connections, is a key tenant of the digital equity work in Oklahoma.

Staying safe while being online is a critical component of this access, ensuring that Oklahomans have the ability and skills to engage with online opportunities while protecting themselves from online threats. Many Oklahomans, especially seniors, individuals with disabilities, and incarcerated individuals, experience challenges accessing and using digital resources safely and knowing how to navigate the myriad of online applications and portals required to engage with online resources.

# Goal: All Oklahomans have the ability to access online resources and navigate digital opportunities safely.

Measurable objective: Increase the number of Oklahoma residents, including all covered populations, and community anchor institutions that have access to reliable high-speed internet.

Sub-Measurable Objective: Increase the number of rural residents that have access to reliable high-speed internet.

### Strategy 1: Ensure all community anchor institutions can connect to affordable, high-quality internet.



# Strategy 2: Ensure tribal communities have equitable access to broadband services.



Encourage internet service providers to provide digital equity resources to tribal communities within their service areas/build-out areas.



Provide technical support to tribal communities in creating their own digital equity plans.



Encourage tribes to implement tribal digital navigators and provide support as needed.



Increase tribal representation on Digital Equity Coalition.

### Strategy 3: Increase ability of multifamily dwelling units (MDUs) to implement free, reliable high-speed internet and/or Wi-Fi for their residents.



Identify and fund pilot MDU locations through a grant program to expand internet access.



Leverage existing partnerships with rural development and economic development organizations to help promote and fund installation of Wi-Fi infrastructure in MDUs.



Evaluate best practices for implementing free apartment Wi-Fi and distribute resources to support implementation.

#### What success looks like:

Key Performance Indicator	Baseline	Target	Data Source
Increase the number of households with access to high-speed internet.	81.7%	100%	Oklahoma State Broadband Map
Covered population:			
All covered populations	89.7%	100%	Residential survey on
Rural residents	92.3%	100%	subscriptions to home internet
			service

# Measurable objective: Increase the number of Oklahomans, including all covered populations, that can access and use digital resources safely.

Sub-Measurable Objective: Increase the number of aging individuals that can access and use digital resources safely.

# Strategy 1: Incorporate digital literacy and internet safety training into existing education, training, and community outreach programs.



Develop technology training programs for rural communities.



Identify virtual training resources that can be incorporated into workforce training programs for covered populations.



Provide grant funding for CAIs and community support organizations to offer digital literacy training to seniors and other covered populations.

### Strategy 2: Create an online resource to allow all Oklahomans to find and connect to available programs and support.



Continue to collect resources and develop an interactive public map with digital equity programs for covered populations in the state.

# Strategy 3: Develop internet safety training materials to ensure Oklahomans can stay safe online.



Identify and partner with the other entities to create an internet safety best practices outreach toolkit for public distribution.



Encourage public computing centers to implement policies and procedures compliant with the Children's Internet Protection Act (CIPA).

# Strategy 4: Promote safe online banking, especially in communities with low access to physical locations.



Partner with nonprofits to promote or create trainings and best practices for safe online banking.

#### What success looks like:

Key Performance Indicator	Baseline	Target	Data Source
Decrease the percentage of people who say the internet is too complicated.	7.9%	1%	Residential survey
Covered population:			Residential survey
All covered populations	8.6%	1%	
Aging individuals	13.6%	5%	

# Measurable objective: Increase accessibility of state digital resources for covered populations.

Sub-Measurable Objective: Increase the number of individuals with disabilities who access state digital resources.

Strategy 1: Support state agencies with required accessibility audits, reporting, and best practices to ensure accessibility across all government websites.



Encourage state agencies to develop multilingual materials in multiple formats to increase access to state data and resources.



Partner with NewView to annually assess accessibility of state agency websites and provide recommendations for improvement.



Distribute the Oklahoma Department of Rehabilitation Services' Disability Resource Guide to CAIs to ensure accessibility of resources.

#### What success looks like:

Key Performance Indicator	Baseline	Target	Data Source
Increase the percentage of people	42.3%	52.3%	Residential survey
accessing government services or			
resources online			
Covered population:	44.2%	54.2%	Residential survey
All covered populations	50.5%	60.5%	
Individuals with disabilities			

#### **Fulfilling Oklahoma's Digital Promise – Advancement**

Ensuring Oklahomans have the access to, and the skills needed to use, affordable, reliable highspeed internet will allow every resident to fully participate in the online world. Having increased participation in digital spaces and marketplaces advances community and state-level goals and ensures Oklahomans can thrive in digital ecosystems. For Oklahoma to reach its ambitious education, health, and workforce and economic development goals, all Oklahomans must have the ability to participate online. These strategies and actions aim to reduce barriers and address gaps faced by many covered populations, including individuals from racial or ethnic minorities, individuals living in rural areas, and incarcerated individuals.

#### Goal: All Oklahomans will have increased ability to access online resources and training in ways that advance their health, education, and economic opportunities.

# Measurable objective: Increase the number of Oklahomans, including all covered populations, that can participate in online opportunities to advance health, education, and economic goals.

Sub-Measurable Objective: Increase the number of individuals from racial or ethnic minorities and the number of rural residents that participate in online opportunities to advance health goals.

#### Strategy 1: Increase access to telehealth programs across the state.



# Strategy 2: Ensure local, regional, and state planning processes include digital equity planning components.



Provide technical support and model documents for local and regional digital equity planning.



Encourage economic development and workforce strategic plans to include digital equity components.

### Strategy 3: Increase the availability of digital literacy supports, including digital navigators, in the state.



Develop a grant program to provide communities with additional digital literacy program supports, including digital navigators.



Develop and provide training and resources to existing digital literacy and digital navigator programs in the state.

# Strategy 4: Identify potential areas of coordination and partnership across state agencies.



Share annual report of the OBO activities with state agencies.



Identify potential state agencies to serve as additional members of the Digital Equity Coalition.



Explore programmatic and data collection activities that support increased connectivity and other statewide goals in workforce, education, health, civic and social engagement, and essential services.

#### What success looks like:

Key Performance Indicator	Baseline	Target	Data Source
Increase the percentage of			Residential survey
individuals accessing online			
opportunities:			
<ul> <li>Health (talk to doctor online)</li> </ul>	47.9%	57.9%	
<ul> <li>Education (take online class)</li> </ul>	22.2%	32.1%	
<ul> <li>Workforce (search for jobs)</li> </ul>	32.1%	42.1%	
Covered populations:			Residential survey
All covered populations (health)	52.3%	62.3%	
Individuals from racial or ethnic	46.1%	56.1%	
minorities (health)			
Rural residents (health)	48.2%	58.2%	

Measurable objective: Increase the ability of Oklahoma to meet workforce and economic development goals so all covered populations can thrive in a digital world. Sub-Measurable Objective: Increase the number of incarcerated individuals that can access workforce development programs to meet workforce and economic development goals.

### Strategy 1: Collaborate with workforce agencies and organizations to leverage technology to support rural economic and community development.



Encourage work-from-home job placement in rural communities.



Partner with economic development agencies to support CAIs and communitybased organizations in expanding their digital inclusion efforts.

### Strategy 2: Increase access to workforce training programs for covered populations.



Encourage public-private partnerships to develop workforce programs targeted at the point of need.



Partner with Technology Centers across the state to build or enhance accessible technology-specific workforce curriculum.



Partner with Oklahoma CareerTech Skills Centers, libraries, and other workforce development organizations to implement digital literacy programs or incorporate digital literacy in existing programs in correctional facilities.

# Strategy 3: Encourage CAIs to create technology focused five-year plans that can be leveraged for future funding opportunities.



Develop templates and general guidance on creating technology plans and identifying potential funding opportunities.

Identify resources to help CAIs inventory their current technology hardware and programs.

#### What success looks like:

Key Performance Indicator	Baseline	Target	Data Source
Increase the percentage of Oklahomans with digital skills needed for jobs of the future	47%	55%	National Skills Coalition data

Increase the number of Skills Centers			
completers			
Covered populations:			Oklahoma CareerTech data
Incarcerated individuals	991	1090	tracking

This implementation strategy is complex and multi-faceted. This represents the breadth of the challenge and opportunity that lies ahead as all Oklahomans access and use the internet in ways that support their personal goals. This strategy provides statewide goals, objectives, and KPIs to support and scale the important digital equity work already occurring in communities and Tribal nations across the state and to fill in gaps for communities lacking the programs, opportunities, and resources to ensure all residents thrive in the digital world.

### **5.2 Partnerships**

The digital divide is a result of many intersecting systemic and technological inequities, and it would be beyond the scope of this plan to solve them all. However, through robust partnerships that encapsulate those most in need, this Plan can make significant strides in closing that divide. The implementation of this Plan requires a collective ecosystem of governmental entities, nonprofit and faith-based organizations, tribal entities, CAIs, and dedicated individuals all working together to fulfill the digital equity vision and mission described in this Digital Equity Plan. These partnerships are critical to the success of this work; no one agency or organization can do this work alone. The work across sectors and organizations will complement and enhance collective efforts to close the digital divide.

The OBO, while playing a central leadership role in these efforts, will partner with stakeholder groups engaged in these planning efforts to ensure successful implementation. In many cases, this Digital Equity Plan supports and expands work happening at the community and state-level to address barriers to digital connectivity. In others, the OBO strategizes innovative ways to bring digital programs, services, and resources to underserved communities and populations in the state, relying on new partners and partnerships. This combination of activities will ensure that OBO is supporting a sustainable digital equity ecosystem and building local, regional, and statewide capacity to continue to advance digital equity priorities.

Specifically, key stakeholders identified and engaged with in Section 4.1 will be important partners. The implementation strategy above details potential partnership opportunities; in some cases, specific partners have been identified, while in others, OBO continues to engage with community-based organizations, local governments, anchor institutions, and state agencies to determine what collaboration is a best fit. To accomplish many of the strategies above, OBO will build on current engagement efforts to ensure collaboration across entities. Beyond maintaining engagement, OBO has described partnership and development strategies to deepen these connections and support the implementation of this plan. Some of these partnerships may include:

• Workforce organizations and agencies – Advancing workforce development and economic opportunity for communities is a key goal of the Digital Equity Plan. Collaborating with workforce agencies and partnering with training and higher education institutions to increase access to workforce development progress are two specific strategies to drive advancement of opportunity for Oklahomans. OBO will

partner with local workforce organizations and state agencies supporting workforce priorities to support training aligned with local workforce needs and to ensure digital skills training opportunities are available to local communities.

- **Community-based organizations (CBOs) and labor organizations** CBOs and labor organizations have been involved in the development of this plan. Several strategies contemplate collaboration with CBOs to promote digital opportunity, partner to expand the reach and scale of work for the OBO and other organizations and develop materials and resources for local communities. As trusted local voices and partners, CBOs are critical to the successful implementation of the strategies and measurable objectives. These organizations will also be potential recipients of grant funding to implement programs to close the digital divide.
- **Institutions of higher learning** Training and workforce development are an important focus of this plan, as increasing the digital skills and the workforce training opportunities for Oklahomans will allow more residents to leverage the benefits of technology to increase their economic opportunity. These organizations are specifically targeted for funding and partnership opportunities in this plan because of the importance of their roles as CAIs in local communities. This includes partnerships with OSU IT and Career Tech to integrate digital skills training in existing programs, expanding their role where appropriate in other digital inclusion activities, and promoting connectivity resources to the people they serve.

There are several active and supporting roles for community partners. Key partners who have been involved in the digital equity planning process are described in Section 4. All organizations looking to be involved are encouraged to reach out to the OBO directly via email or phone.

### **5.3 Progress Monitoring**

The OBO serves as convenor and resource on digital connectivity, broadband infrastructure expansion, and affordability for state agencies, local, regional, and municipal governments, tribal nations, community-based organizations, and other stakeholders described throughout this Digital Equity Plan. The OBO will continue to monitor and engage in efforts to increase digital equity and opportunity in the state. The OBO also will conduct regular outreach, engagement, and data collection activities to ensure fidelity during the implementation of the Digital Equity Plan. These actions include:

- Regular convenings of the Digital Equity Coalition and related sub-committees
- Outreach and education efforts to local, municipal, regional, and tribal entities, CAIs, and community-based organizations
- Best practices reports aligned with identified strategies and objectives
- Survey and data collection efforts to track internet adoption, use, and other digital equity metrics related to the KPSs
- Regular reporting from subgrantees
- Bi-annual Internet for All convenings to allow stakeholders to gather and share best practices and receive updates on BEAD and DEA implementation

These progress monitoring and stakeholder engagement activities will allow the OBO to track progress towards meeting each of the KPIs and achieving the office's vision of digital equity. As the OBO collects more data and evaluates implementation strategy and programs, the office will make updates, as appropriate, to this plan to ensure that the digital inclusion needs of all Oklahomans, including those in covered populations, are being addressed through the programs and work of this plan. Regular engagement activities, ongoing Internet for All convenings, and data collection work are all mechanisms planned for in the timeline in Section 5.4 to ensure regular evaluation and updating of this plan.

### **5.4** *Timeline*

The OBO will implement the strategies and actions described above throughout the five-year life cycle of the Digital Equity Plan. This section contains the proposed timeline for key activities related to each measurable objective. The timeline lists each of the measurable objectives, strategies, and actions described in Section 5.1. For each action, there are two main phases: planning and implementation. During the planning phase (indicated in the timeline in light blue), the OBO will study and develop the necessary programs, partnerships, or resources needed to execute the action item. During the implementation phase (indicated in the timeline in dark blue), the OBO will enact each action item as it works to meet the goals of the plan. Each action item contains a start and end date, recognizing that while much of this activity will be ongoing and occurring simultaneously, different programs and actions will begin and conclude at different points. Several activities, especially the ones related to partnership and promotion, continue throughout the timeline, as the OBO will continually engage in those activities as it conducts outreach, local coordination, and grant implementation.

The activities on the timeline include monitoring and engagement activities to demonstrate the OBO is engaging with stakeholders and monitoring the progress of grant programs and other activities. The timeline also includes the KPI for each measurable objective, along with interim goals to ensure the OBO is on-track to meet the final metrics. The data for each KPI will be collected in the same way as the baseline data was collected (as described in Section 5.1). Most of the data will come from residential surveys, which the timeline indicates will occur in 2025 and 2027. Therefore, the interim KPI targets are shown on the timeline in the fourth quarter of the years 2025 and 2027 on the timeline. OBO will routinely monitor this plan and make updates as appropriate to ensure digital equity efforts in the state are supporting the vision of this plan.

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		20	024			20	25			202	26			202	7		202	8		202	29	
the & all cess to t.	Strategy 1: Increase enrollment in the Affordable Connectivity Program (ACP) and other low-cost internet service programs.																					
ease Iudin reac	Disseminate outreach materials through partners and networks																					
ttive: Incr mans, inc , that hav speed int	Engage with exisiting and planned digital navigators to enroll people in low-cost programs.																					
objec laho tions high-	entities to provide resources to students.																					
asurable o nber of Ok ed popular ffordable	KPI: 5% increase of households participating in low-cost programs from baseline.																					
Me nun covers a	KPI: 10% increase of households participating in low-cost programs from baseline.																					
those in ces.	Strategy 1: Identify and support free and reduced cost device distribution programs, such as computer refurbishment programs and library lending programs.																					
uding devi	Expand tablet program in Oklahoma correctional facilities.																					_
ans, incl enabled	Engage with partners interested in device programs and explore development of grant program.																					
ahom ernet	Partner with education systems to support 1:1 device programs.																					
of Okk to int	Partner with veteran-serving organizations to promote device distributions.																					
umber o	Strategy 2: Support and promote access to quality technical support options.																					
the nu have:	Encourage partners to implement technical support programs that are freely accessible.																					
Increase t	Strategy 3: Identify and partner with other federal and state device programs such as Lifeline.																					
ctive:   pulatic	Partner with Lifeline providers to promote ACP adoption alongside Lifeline Program.																					
le Obje red po	Train digital navigators in Lifeline enrollment process.																					
asurabl	KPI: 2% increase in Oklahomans with high-quality device in home.																					
N N N N N N N N N N N N N N N N N N N	KPI: 5% increase in Oklahomans with high-quality device in home.																					

	(	GC	)AI	L I	W	0	: /	10	C	ES	S								
			2024	4		20	)25			202	26	2	027		202	28		202	9
ns, and	Strategy 1: Ensure all community anchor institutions can connect to affordable, high-quality internet.																		
Ē	Add CAIs to Oklahoma Broadband Map.																	$\square$	
opula	Implement grant funding program for CAI digital inclusion advancement.																		
ernet.	Conduct annual audit of CAI technology capability.																		
al inte	Evaluate statewide solution for E-rate filing assistance.																		
cluding a high-spee	Strategy 2: Ensure tribal communities have equitable access to broadband services.																		
ints, in liable I	Encourage ISPs to provide digital equity resources to tribal communities.																		
a reside ss to re	Provide technical support to tribal communities in creating their own digital equity plans.																		
la hom re acce	Encourage tribes to implement digital navigator programs.																		
of Ok Is hav	Increase tribal representation on DE coalition.																		
number stitutio	Strategy 3: Increase ability of MDUs to implement free, reliable high-speed internet and/or Wi-Fi for their residents.																		
e the thor in	Identify and fund pilot MDU locations with grant program.																		
: Increase unity and	Leverage partnerships with economic development organizations to promote Wi-Fi infrastructure in MDUs.																		
Objective: comm	Evaluate best practices for implementing free Wi-Fi and distribute resources.																		
surable	KPI: 5% increase in the number of households with access to high- speed internet.																		
Mea	KPI: 10% increase in the number of households with access to high- speed internet.																		

P	Strategy 1: Incorporate digital literacy and internet safety training into existing programs.																						
	Develop technology training programs.																						
5	Identify winteral tentining recommend that	$\vdash$	-	$\rightarrow$		-	-	-	-			-		-+	-	-	-	$\rightarrow$	+	+	+	+	+
<u> </u>	Identity virtual training resources that													- 1				- 1					
	can be incorporated into workforce													- 1				- 1					
말 중	programs.																						
ie we	Provide grant funding to partners to																						
寻양	offer digital literacy training																						
,ĕ ĕ	Strategy of Grante an online recourse to		_	_						_	_	-		_	_					_	_	_	
E ē	allow all Oklanomans to fina and																						
Ëğ	connect to available programs and																						
요금	Develop interactive public map of																						
	digital inclusion resources and undate																						
5 ∰	algreat increasion resources and update																						
÷ .	regularly.						_		_					_		_		_		_	_		_
2 9	Strategy 3: Develop internet safety																						
<u> </u>	training materials to ensure Oklahomans																						
2 2	can stay safe online.																						
2 SS	Create an internet safety best practices					Ť						1							1			+	
e g	outreach toolkit with partners and																						
t X	Jania and Jania and Jania																						
alse	distribute.	$\left  \right $	-+																		+	+	+
5 G	Encourage public computing centers to																						
등 볼	implement CIPA-compliant policies.																						
= स्																							
ë e	Strategy 4: Promote safe online banking.																						
승규 운 문	Danta en te premete en eneste traininge		_	-	-	-																	
<u>a</u> <u>a</u>	Partner to promote or create trainings																						
ਲ ਹ	and best practices for safe online																						
<u> </u>	banking.																						
1			_	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$	_		$\rightarrow$	_	_		$\rightarrow$	_		_	$\rightarrow$	$\rightarrow$	_	$\rightarrow$	_	
<u>e</u>	KPI: Decrease by 2% the percentage													- 1				- 1					
5	of people who say the internet is													- 1				- 1					
ĕ	too complicated.																						
2	KPI: Decrease by 4% the percentage													- 1				- 1					
	of people who say the internet is													- 1				- 1					
	too complicated.																	- 1					
e e	Strategy 1: Support state agencies with																						
a de la companya de l	required accessibility audits, reporting,																						
	and best practices to ensure																						
5 2	accountability across all aovernment																						
2 S	websites																						
			-	-	-	-	-	-											-		-	-	
15 d	Encourage state agencies to develop																						
õ S	multilingual materials in multiple																						
a a	formats.																						
9 2	Dents on the second line of the second state		+	+																	+	+	
Se as	Farther to annually assess accessibility																						
58	of state websites and provide																						
<u>د</u> ک	recommendations.		- 1																				
<u>a</u>	Distribute Disability D C 11 1	$\vdash$	+							+											+	+	
g ti	Distribute Disability Resource Guide to																						
) III	CAIs.																						
jdo iso																							
	KPI: Increase by 3% percentage of																						
ta pr	people who access government		- 1																				
2 🗇	services or resources online.																						
2 P	KPI: Increase by 6% percentage of		+	+	+	+	+					1							+	+	+		
Ē	people who access government																						
	ACCORDED THIS HOUSE EVICE HITCHL			- 1		- I	- I				1	1	i	I				I	- 1	- I	- I		
2	services or resources online									1									I				

	GOAL	T	HI	ł	EE	AJ	D٦	7 <b>A</b>	N	C	EI	Æ	IN	Т							
			202	24		20	25			20	26			202	27		202	8		202	9
ta	Strategy 1: Increase access to telehealth programs Partner to create telehealth onboarding																				
tions, thai goals.	Ensure healthcare facilities are on OBC Ensure dealthcare facilities are on OBC broadband map.																				
vered popula nd economic,	Strategy 2: Ensure local, regional, and state planning processes include digital equity planning components. Provide technical support for local and																				
cluding all co education, a	regional digital equity planning. Encourage economic development and workforce plans to include digital equity. Stratemus: Increase the availability of																				
mans, inc	digital literacy supports. Develop grant program for digital literacy programs.																				
of Oklaho advance	Develop and provide training for existing digital literacy and navigator programs.																				
umber o inities to	Strategy 4: Identify potential areas of coordination and partnership across state agencies.																				
se the n opportu	Share annual report of OBO activities. Identify state agencies to serve on DE coalition.																				
: Increa	Explore programmatic and data collection activities that align with other statewide goals.																				
de Objective articipate ir	KPI: Increase by 3%percentage of individuals accessing online health, workforce, education opportunities.																				
Measurab	KPI: Increase by 6%percentage of individuals accessing online health, workforce, education opportunities.																				

ce and al world.	Strategy 1: Collaborate with workforce agencies and organizations to support rural economic and community development.																		
orkfor a digit	Encourage work-from-home job placement in rural areas.																		
neet w	Partner with economic development orgs to support local organizations in expanding digital inclusion efforts.																		
oma to n ns can th	Strategy 2: Increase access to workforce training programs for covered populations.																		_
of Oklahi opulatio	Encourage development of targeted workforce programs. Partner with Technology Centers to																		_
ability c rered pr	build or enhance workforce Partner to implement digital literacy programs in correctional facilities.																		_
crease the is so all cov	Strategy 3: Encourage CAIs to create technology focused five-year plans that can be leveraged for future funding opportunities.																		
ve: In nt goa	Develop templates and guidance on creating technology plans.																		
: Objecti elopme	Identify resources to help CAIs inventory current technology hardware and programs.																		
eas ura ble omic de v	KPI: Increase by 2% Oklahomans with digital skills needed for jobs of the future.																		_
econ	KPI: Increase by 4% Oklahomans with digital skills needed for jobs of the future.																		
	MONIT	OR	IN	IG	Al	NI	D	EN	GA	١G	EI	Æ	N	Т					
e.	Digital Equity Coalition meetings		+									_	_	-			_	-	_
ıg and Activit	Progress monitoring on measurable objectives																		
onitorii ement	Best practices reports Survey and data collection work		+															$\downarrow$	_
M. Engag	Subgrantee reporting Internet for All convenings Submit final report to NTIA																	+	

Survey and data collection work Subgrantee reporting Internet for All convenings Submit final report to NTIA

### 6 Conclusion

Accessing and using the internet is no longer a luxury for Oklahomans; in today's world, it is an essential component of being connected to information, resources, opportunities, and community. Through the digital equity planning process, the OBO has built a deep understanding of the challenges and barriers that many Oklahoma communities face getting online, especially individuals in covered populations. The OBO has also learned about the resiliency and creativity that exists in these same communities, where governmental, nonprofit, and private sector entities have all partnered together in innovative ways to begin the work of closing the Digital Divide.

Over the next five years, the OBO and its partners will leverage the data analysis, outreach and engagement, and planning work to implement innovative and efficient programs and solutions aligned with the three goals of this plan. These actions will support:

- **Affordability.** All Oklahomans, regardless of income, can subscribe to the internet and participate in online programs and resources with high-quality devices.
- Access. All Oklahomans have the ability to access online resources and navigate digital opportunities safely.
- Advancement. All Oklahomans will have increased ability to access online resources and training in ways that advance their health, education, and economic opportunities.

The goals, objectives, strategies, and actions in this Digital Equity Plan represent the next steps in ensuring every Oklahoman can access and use the internet. The partnerships, programs, and resources described in this plan will increase access, adoption, and use of affordable, reliable high-speed internet.

Through this work, the state will achieve its vision that **Oklahomans will have access to the information**, **resources**, **and skills needed to participate in society to the fullest and to remain competitive in a digital marketplace** and fulfill its digital promise.

### 7 Appendices

#### Appendix A: Oklahoma Digital Equity Plan: Crosswalk with Digital Equity Act NOFO

### Digital Equity Act NOFO Requirements

#### OK Digital Equity Plan Sections

Page Number

STATUTORY REQUIREMENTS		
Identification of barriers to digital equity faced by Covered	Section 3.2 Barriers to	32
Populations in the State	Adoption and Affordability	
	in Oklahoma	
Measurable objectives for documenting and promoting, among	Section 2.3 Strategies and	13
each Covered Population located in that State:	Objectives	
a. The availability of, and affordability of access to, fixed and		
wireless broadband technology;	Section 5.1	66
b. The online accessibility and inclusivity of public resources and	Implementation Strategy	
services;	and Key Activities	
c. Digital literacy;		
d. Awareness of, and the use of, measures to secure the online		
privacy of, and cybersecurity with respect to, an individual; and		
e. The availability and affordability of consumer devices and		
technical support for those devices.	Section 2.2 Alignment with	
All assessment of now the measurable objectives identified will impact and interact with the State's:	Existing Efforts to Improvo	5
Economic and workforce development goals plans and	Outcomes	
	outcomes	
b Educational outcomes:		
c. Health outcomes:		
d. Civic and social engagement: and		
e. Delivery of other essential services		
Description of how the State plans to collaborate with key	Section 4.1 Coordination	46
stakeholders in the State (CAIs, local government, LEAs, tribal	and Outreach Strategy	
nations, nonprofits, organizations representing covered		
populations, civil rights orgs, workforce development	Section 5.1	66
organizations, adult literacy organizations, public housing) to	Implementation Strategy &	
achieve measurable objectives identified above	Key Activities	
A list of organizations with which the Administering Entity for	Section 4.1 Coordination	46
the State collaborated in developing the Plan	and Outreach Strategy	
	Section 7 Appendix	91
ADDITIONAL REQUIREMENTS		
A stated vision for digital equity	Section 2.1 Vision	5
A digital equity needs assessment, including a comprehensive	Section 3.2 Barriers to	32
assessment of the baseline from which the State is working and	Adoption and Affordability	
the State's identification of the barriers to digital equity faced	in Oklahoma	
generally and by each of the covered populations in the State		

	Section 3.2.1 Covered Population Needs Assessment	35
An asset inventory, including current resources, programs, and strategies that promote digital equity for each of the covered populations, whether publicly or privately funded, as well as existing digital equity plans and programs already in place	Section 3.1.1 Digital Equity Assets by Covered Population	20
among municipal, regional, and tribal governments	Section 3.1.2 Existing Digital Equity Plans	22
	Section 3.1.3 Existing Digital Equity Programs	23
To the extent not addressed in connection with item 4 of Section IV.C.1.b.i, a coordination and outreach strategy, including opportunities for public comment by, collaboration with, and ongoing engagement with representatives of each category of covered populations within the State and with the full range of stakeholders within the State	Section 4.1 Coordination and Outreach Strategy	46
A description of how municipal, regional, and/or tribal digital equity plans will be incorporated into the State Digital Equity Plan	Section 3.1.2 Existing Digital Equity Plans	22
An implementation strategy that is holistic and addresses the barriers to participation in the digital world, including affordability, devices, digital skills, technical support, and digital navigation. The strategy should (a) establish measurable goals, objectives, and proposed core activities to address the needs of covered populations, (b) set out measures ensuring the plan's sustainability and effectiveness across State communities, and (c) adopt mechanisms to ensure that the plan is regularly evaluated and updated	Section 5.1 Implementation Strategy & Key Activities	66
An explanation of how the implementation strategy addresses gaps in existing state, local, and private efforts to address the barriers identified pursuant to Section IV.C.1.b.i, item 1, of this NOFO	Section 5.1 Implementation Strategy & Key Activities	66
A description of how the State intends to accomplish the implementation strategy described above by engaging or partnering with: a. Workforce agencies such as state workforce agencies and	Section 5.1 Implementation Strategy & Key Activities	66
state/local workforce boards and workforce organizations; b. labor organizations and community-based organizations; and	Section 5.2 Partnerships	81
<ul> <li>c. Institutions of higher learning, including but not limited to four-year colleges and universities, community colleges, education and training providers, and educational service agencies.</li> </ul>	Section 5.3 Progress Monitoring	82
A timeline for implementation of the plan	Section 5.4 Timeline	83
A description of how the State will coordinate its use of State Digital Equity Capacity Grant funding and its use of any funds it receives in connection with the Broadband Equity, Access, and Deployment Program, other federal or private digital equity funding.	Section 2.2 Alignment with Existing Efforts to Improve Outcomes	5

Section 2.4 Aligning the	17
Digital Equity Plan with	
BEAD and State Goals	

#### Appendix B: Section 3.1.1 Digital Inclusion Assets by Covered Populations

This table describes the digital inclusion assets by organization in Oklahoma, as collected from the organization survey. This table will be updated as more organizations respond to the survey.

Organization	Location	Туре	Digital Inclusion Services	<b>Covered Populations Served</b>							
				Aging Individuals	Incarcerated Adults	Veterans	Racial and Ethnic Minorities	Indigenous Persons or Native Americans	Individuals with Disabilities	Individuals with Language Barrier	Rural Residents
OSUIT	Okmulgee	Higher Ed	ACP enrollment, Help with public assistance portals, Career readiness assistance, Help with acquiring internet- enabled devices, Workforce development skills training, College readiness training, Digital literacy training	✓	✓	✓	*	¥	*	¥	•
Anadarko	Anadarko	Library	Public Wi-Fi access, Public	1			<i>.</i>	<i>.</i>	<i>.</i>		1
Muskogee Bridges Out of Poverty	Muskogee	Nonprofit	Internet usage training, Workforce development skills training, Help with public assistance portals	√		✓	✓	✓	✓	✓	✓
Yale Public Library	Yale	Library	Public Wi-Fi access, Public access to computers	~	✓	✓	√	~	✓	~	~
Southern Oklahoma Library System	Ardmore	Library	Career readiness assistance, Public access to computers, Help subscribing to home internet, Internet usage training, Public Wi-Fi access, Help with public assistance portals, Digital literacy training, Computer coding education, Help with acquiring internet-enabled devices, Workforce development skills training, E- commerce help for small businesses, Telehealth services, ACP enrollment, College readiness training, Digital navigators	~		✓	✓	✓	✓	✓	~

Geary Public			Help with public assistance portals, ACP enrollment, Public access to computers, Public Wi-Fi access, Career								
Library	Geary	Library	readiness assistance	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$
Will Rogers Library	Claremore	Library	Public Wi-Fi access, Help with acquiring internet-enabled devices, Public access to computers, Digital literacy training, College readiness training, Internet usage training								
Tuttle Public Library	Tuttle	Library	Help with acquiring internet- enabled devices, Digital literacy training, Public Wi-Fi access, Help with public assistance portals, Public access to computers, Internet usage training, Training with specific software	v		~	~	¥	v		¥
Sanulna Public			Public Wi-Fi access Help with								
Library	Sapulpa	Library	public assistance portal	$\checkmark$		$\checkmark$	~	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Lawton Public Library	Lawton	Library	Digital navigators, Help subscribing to home internet, Career readiness assistance, College readiness training, Internet usage training, ACP enrollment, Cybersecurity Training, Public access to computers, Public Wi-Fi access, Help with public assistance portals, Help with acquiring internet-enabled devices, Training with specific software, Telehealth services, Community tech support, Digital literacy training, Workforce development skills training, E-commerce help for small businesses	~	V	v	*	✓	¥	~	~
Mabel C. Fry Public Library	Yukon	Library	Digital navigators, Community tech support, Public access to computers, Internet usage training, Public Wi-Fi access, Help with public assistance portals, Digital literacy training, Training with specific software	✓	✓	✓	v	•	v	¥	~

Miami Public Library	Miami	Library	Help with public assistance portals, Digital literacy training, Public Wi-Fi access, Public access to computers	✓		~	✓	~	✓	✓	~
Elk City Carnegie Library	Elk City	Library	Public access to computers, Career readiness assistance, Help with public assistance portals, Help with acquiring internet-enabled devices, Digital literacy training, Public Wi-Fi access	~		V	✓	✓	v	V	•
Ardmore Public Library	Ardmore	Library	Public Wi-Fi access, Public access to computers, Internet usage training, ACP enrollment, Digital navigators, Digital literacy training, Help with public assistance portals	✓		✓	V	✓	~	✓	✓
Western Plains	Clinton	Library	Training with specific software, Help subscribing to home internet, Public Wi-Fi access, Career readiness assistance, Internet usage training, Help with public assistance portals, Public access to computers, ACP enrollment, Digital literacy training, Community tech support	✓	✓	~	✓	✓	v	✓	×
El Reno Carnegie Library	El Reno	Library	Help with public assistance portals, College readiness training, Career readiness assistance, Internet usage training, Public access to computers, Public Wi-Fi access	·	✓	✓	✓	✓	✓	✓	~
Delaware County Library	Јау	Library	Help subscribing to home internet, Public access to computers, ACP enrollment, Community tech support, Digital literacy training, Public Wi-Fi access, Help with acquiring internet-enabled devices, Help with public assistance portals	✓	✓	✓	V	✓	v	✓	✓

Fairview City Library	Fairview	Library	Digital literacy training, Community tech support, Internet usage training, Public access to computers, ACP enrollment, Digital navigators, Public Wi-Fi access, Help with public assistance portal	✓		✓	~	*	~	*	✓
Madill City County Library	Madill	Library	Public Wi-Fi access, Public access to computers	✓		✓	✓	~	✓	~	~
Healdton Community Library	Healdton	Library	Help subscribing to home internet, Public Wi-Fi access, Public access to computers, ACP enrollment, Career readiness assistance, Help acquiring internet-enabled devices	~		✓	✓	✓	~		✓
Guthrie Public Library	Guthrie	Library	Career readiness assistance, Public access to computers, Public Wi-Fi access, Community tech support	~		✓	✓	✓	✓	✓	~
Guymon Public Library and Arts Center	Guymon	Library	Public Wi-Fi access, Public access to computers, Career readiness assistance, Internet usage training, Workforce development skills training, Cybersecurity Training, Digital literacy training	*		✓	V	✓	~	v	~
Stillwater Public Library	Stillwater	Library	Public Wi-Fi access, Help with public assistance portals, Internet usage training, Public access to computers, Community tech support, Help subscribing to home internet, Training with specific software, Cybersecurity training, Digital literacy training, Workforce development skills training, ACP enrollment	~	~	~	~	✓	×	~	×

			Public Wi-Fi access, Digital								
			navigators, E-commerce help								
			for small businesses, College								
			readiness training, Career								
			readiness assistance, Public								
			access to computers. Digital								
			literacy training Computer								
			coding education ACP								
			enrollment Help with public								
			assistance portals Workforce								
Eastern OK Library			development skills training								
System	Muskogee	Library	Internet usage training	1		1	1	1	1	1	1
Зузсент	WIUSKOgee	Library	Caroor roadinoss assistance	•		•	•	•	•	•	•
			E commorco holp for small								
			businesses ACD enrollment								
			Jusinesses, ACP enronment,								
			portais, workforce								
			Dublic concerts constructors								
			Public access to computers,								
Austiana Duiblia			Talah salth samiasa Dublis Mi								
Antiers Public			Telenealth services, Public Wi-					,			
Library	Antlers	Library	Fiaccess	✓		✓	✓	✓	✓	✓	✓
			Help with public assistance								
			portals, Public access to								
Catoosa Public			computers, Public Wi-Fi								
Library	Catoosa	Library	access	✓		$\checkmark$	✓	✓	✓	$\checkmark$	$\checkmark$
			Help with acquiring internet-								
			enabled devices, ACP								
			enrollment, Career readiness								
			assistance, Public Wi-Fi								
			access, Digital navigators,								
			Help with public assistance								
			portals, Public access to								
			computers, Digital literacy								
			training, Workforce								
Wilson Public			development skills training,								
Library	Wilson	Library	College readiness training	<ul> <li>✓</li> </ul>	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$
			Internet usage training,								
			Career readiness assistance,								
			Digital literacy training, Public								
			access to computers, Public								
			Wi-Fi access, Training with								
			specific software, Workforce								
			development skills training.								
Southern Prairie			Help with public assistance								
Library System	Altus	Library	portals	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$

Donald W. Reynolds Community Center & Library	Durant	Library	Public Wi-Fi access, Career readiness assistance, Workforce development skills training, Digital literacy training, Community tech support, Training with specific software, Public access to computers, E-commerce help for small businesses, Help with public assistance portals, Help subscribing to home internet, Internet usage training, College readiness training, Digital navigators, ACP enrollment	~	~	✓	✓	✓	✓	✓	~
Urban League of Greater Oklahoma City	Oklahoma City	Nonprofit	Help subscribing to home internet, Workforce development skills training, E- commerce help for small businesses, Internet usage training, Career readiness assistance	✓	~	✓	✓	✓	~	✓	~
Heavener Public Library	Heavener	Library	Public Wi-Fi access, Public access to computers, Digital literacy training, Help with public assistance portals	~	✓	✓	✓	✓	✓	✓	~
Mustang Public Library	Mustang	Library	Digital literacy training, Public access to computers, Public access to Wi-Fi	~			√				~
Wewoka Public Library	Wewoka	Library	Public access to computers, Public access to Wi-Fi	✓		✓	~	✓			~
Pawhuska Public Library	Pawhuska	Library	Public Wi-Fi access, Public access to computers	~	~	✓	~	~	~	~	~
Benson Media Center Okemah Public Library	Okemah	Library	Help with public assistance portals, Telehealth services, Help with acquiring internet- enabled devices, Workforce development skills training, Public access to computers, Help subscribing to home internet, Community tech support, Internet usage training, Digital literacy training, Public Wi-Fi access, Digital navigators, Career readiness assistance, ACP enrollment	*		✓	×	✓	×	*	~
Chouteau Public Library	Chouteau	Library	Public Wi-Fi access, Public access to computers	✓			✓	~	~	~	~

Blackwell Public Library	Blackwell	Library	Internet usage training, Community tech support, Help subscribing to home internet, Public Wi-Fi access, Digital literacy training, Public access to computers, Help with public assistance portals, Help with acquiring internet- enabled devices	✓	•	✓	✓	✓	•	V	•
Lindsay Community Library	Lindsay	Library	Community tech support, Digital literacy training, Public access to computers, Workforce development skills training, Help with public assistance portals, Public Wi- Fi access, Internet usage training, Career readiness assistance, ACP enrollment	✓		✓	~	v	✓	v	v
Bartlesville Public	D. H. III		Help with public assistance portals, Public Wi-Fi access, Digital literacy training, Public access to computers, Career								
Library Chickasha Public Library	Chickasha	Library	Digital literacy training, Public Wi-Fi access, Public access to computers	✓ ✓	•	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	<ul> <li>✓</li> <li>✓</li> </ul>
Waynoka Public Library	Waynoka	Library	Public Wi-Fi access, Public access to computers	✓					✓		~
Mabel C. Fry Public Library	Yukon	Library	Public access to computers, Community tech support, Help with public assistance portals, Help subscribing to home internet, Public Wi-Fi access, ACP enrollment	~		✓	~	✓	✓	✓	✓
Elk City Carnegie Library	Elk City	Library	Help with acquiring internet- enabled devices, Public access to computers, Public Wi-Fi access, Help with public assistance portals, Internet usage training	~		✓	V	✓	~	✓	~
Locust Grove Public Library	Locust Grove	Library	Public Wi-Fi access, Public access to computers	✓		✓	✓	~	~	~	~
Fairview City Library	Fairview	Library	Internet usage training, Help with public assistance portals, Career readiness assistance, Community tech support, Public access to computers, Public Wi-Fi access, ACP enrollment, Digital literacy training	V		~	~	V	~		✓

			Public Wi-Fi access, Public								
Beyond the Pages	Mooreland	Library	access to computers	✓			✓				✓
Chandler Public Library	Chandler	Library	Public access to computers, Public Wi-Fi access, Help with acquiring internet-enabled devices	~		✓	✓	√	~	×	~
Alva Public Library	Alva	Library	Public Wi-Fi access, Help with acquiring internet-enabled devices, Telehealth services, Public access to computers, ACP enrollment, Computer coding education, Internet usage training, Workforce development skills training, Digital navigators, Digital literacy training, Help subscribing to home internet, Training with specific software, Help with public assistance portals, Career readiness assistance, Community tech support	✓		✓	•	✓	v	•	*
Norman Smith Memorial Hinton Public Library	Hinton	Library	ACP enrollment, Community tech support, Digital literacy training, Public access to computers, Career readiness assistance, Internet usage training, Digital navigators, Public Wi-Fi access	~	✓	✓	✓	✓	v	✓	✓
Miami Public Library	Miami	Library	Digital literacy training, Cybersecurity training, College readiness training, Help with public assistance portals, Workforce development skills training, Training with specific software, Internet usage training, Public Wi-Fi access, Public access to computers, Career readiness assistance, Help acquiring internet- enabled devices	~		~	*	✓	¥	~	~
Sayre Public			Public Wi-Fi access, Public								
Library	Sayre	Library	access to computers	✓			✓	✓	✓		✓
Geary Public Library	Geary	Library	ACP enrollment, Public access to computers, Digital literacy training, Public Wi-Fi access	✓		✓	✓	~	✓	~	✓

Watonga Public Library	Watonga	Library	Public access to computers, Digital literacy training, Public Wi-Fi access, ACP enrollment	~	✓	✓	✓	✓	~	✓	~
Grandfield Public Library	Grandfield	Library	Help subscribing to home internet, Telehealth services, Internet usage training, Digital navigators, Help with public assistance portals, Public access to computers, Public Wi-Fi access, ACP enrollment, Community tech support	V			v		v	✓	¥
SE Oklahoma Library System Arkoma Public Library	Arkoma	Library	College readiness training, Public access to computers, Public Wi-Fi access, Help with public assistance portals, Computer coding education	✓		✓	✓	✓	√	✓	✓
Tulsa City-County Library	Tulsa	Library	Training with specific software, Public Wi-Fi access, Workforce development skills training, College readiness training, cybersecurity, ACP enrollment, Career readiness assistance, Help with public assistance portals, Telehealth services, Digital literacy training, Help subscribing to home internet, Internet usage training, Public access to computers	*	~	✓	v	✓	¥	*	v
Chelsea Public Library	Chelsea	Library	Help with public assistance portals, College readiness training, Digital literacy training, Public access to computers, Career readiness assistance, Public Wi-Fi access, Workforce development skills training	✓		✓	~	*	~	*	✓
Hydro Public Library	Hydro	Library	Public Wi-Fi access, Public access to computers	~		✓				~	~

Stillwater Public Library	Stillwater	Library	Career readiness assistance, Help with acquiring internet- enabled devices, Help with public assistance portals, ACP enrollment, Help subscribing to home internet, Public access to computers, Internet usage training, Computer coding education, Public Wi-Fi access, Digital literacy training, Training with specific software	✓			✓	✓	~	✓	✓
Apache Public											
Library Buffalo Public Library	Apache Buffalo	Library	Public Wi-Fi access Public access to computers, Help with acquiring internet- enabled devices, Public Wi-Fi access, Community tech support	✓		✓ ✓	✓ ✓	✓ ✓	✓	✓ ✓	✓
, Kingfisher Memorial Library	Kingfisher	Library	Public Wi-Fi access, Digital literacy training, Career readiness assistance, Help with acquiring internet- enabled devices, Public access to computers, Internet usage training	~		✓	~	✓	~	✓	~
Ingersoll (Inola) Public Library	Inola	Library	Help with acquiring internet- enabled devices, Public Wi-Fi access, Help with public assistance portals, Career readiness assistance, Public access to computers	✓		✓	<b>√</b>	✓	✓	✓	~
Metropolitan Library System	Oklahoma City	Library	Public access to computers, Internet usage training, Digital literacy training, Public Wi-Fi access, Help acquiring internet-enabled devices	*		✓	V	✓	v	✓	*
Tryon Public Library	Tryon	Library	Public Wi-Fi access, Career readiness assistance, Community tech support, Help with acquiring internet- enabled devices, Public access to computers	~		✓	~	✓	~		✓
Gleason Memorial Library	Ringling	Library	Public access to computers, Digital literacy training, Help with public assistance portals, Internet usage training, Public Wi-Fi access	✓	~	~	✓	✓	✓	✓	✓

Hominy Public Library	Hominy	Library	Community tech support, Help with public assistance portals, Public access to computers, Public Wi-Fi access, Help with acquiring internet-enabled devices	<ul> <li>✓</li> </ul>	✓	✓	✓	~	✓		✓
Mannford Public Library	Mannford	Library	Public access to computers, Public Wi-Fi access	✓		~	✓	~	✓		✓
Pioneer Library System	Norman	Library	Career readiness assistance, Help with public assistance portals, Public access to computers, Internet usage training, Public Wi-Fi access, Digital literacy training, Training with specific software, Community tech support, College readiness training, Workforce development skills training, Cybersecurity training	v	V	V	×	•	v	~	v
OSU-Tulsa Library	Tulsa	Higher Ed	Help with acquiring internet- enabled devices College readiness training, Help with public assistance portals, Workforce development skills training, Public Wi-Fi access, Career readiness assistance			•	V	~	~	~	✓

#### Appendix C: Section 3.2.1 Covered Populations Needs Assessment – Residential Survey Methodology

To explore the internet access and adoption challenges that Oklahomans face, particularly covered populations in the state, the OBO partnered with several nonprofits and government agencies to conduct a survey of adults across the state. These surveys were designed to gather insights into households' computer ownership, home internet adoption, barriers to adoption, and how they use their internet service. Additionally, the survey collected demographic data from participants to identify differences among covered populations in the state.

The survey was administered as a computer-assisted telephone survey in three languages – English, Spanish, and Mandarin. From July 10 to August 18, 2023, this effort collected information from 1,802 adults across the state, with a cooperation rate of 34%. These respondents represent seven of the eight covered populations as defined by Section I.C. of the Digital Equity Act's Notice of Funding Opportunity: individuals living in covered households (i.e., those with annual household incomes below 150% of the federal poverty rate); individuals age 60 or older; veterans; individuals with disabilities; individuals with a language barrier (including English learners and individuals with low levels of literacy); members of racial or ethnic minority groups; and individuals living in rural parts of the state. Inmates are considered a vulnerable population due to the constraints of being incarcerated, precluding the survey from interviewing incarcerated individuals. Of the 1,802 adults surveyed, 1,404 identify as members of at least one of these covered populations.

#### Appendix D: Meeting Agenda for the "Let's Get Digital: Oklahoma Broadband Tour"

- Oklahoma landscape & broadband context
- Overview of BEAD and DEA (federal funding programs)
- Discussion about regional broadband context
  - Barriers
  - Opportunities
  - Priorities for state planning
- Next Steps

#### **Appendix E: Section 4.1 Coordination and Outreach Strategy**

The table below describes the full set of stakeholder meetings conducted during the planning for the Digital Equity Plan.

		Covered Population								
Stakeholder Meeting	Date	Individuals who live in covered households	Aging Individuals	Incarcerated Individuals	Veterans	Individuals with Disabilities	Individuals with a language barrier	Individuals who are members of a racial or ethnic minority group	Individuals who primarily reside in a rural area	
Oklahoma Broadband Expansion Council Meeting	12/15/2022	x	x	x	x	x	x	x	х	
Oklahoma Broadband Governing Board	12/20/2022	x	x	x	x	x	x	x	х	
Oklahoma Broadband Governing Board	1/17/2023	x	x	x	x	x	x	х	х	
Oklahoma Broadband Expansion Council Meeting	1/18/2023	x	x	x	х	x	x	х	х	
Internet for All: Oklahoma Local and Tribal National Coordination Workshop	1/19/2023	x	x	x	x	x	x	x	х	
Oklahoma Broadband Governing Board	2/15/2023	x	x	x	x	x	x	х	х	
Oklahoma Broadband Expansion Council Meeting	2/22/2023	x	x	x	х	x	x	х	х	
Oklahoma Broadband Governing Board	3/22/2023	x	х	x	x	x	x	х	х	
Oklahoma Broadband Expansion Council Meeting	3/22/2023	x	х	x	x	x	x	x	х	
Oklahoma Broadband Governing Board	3/31/2023	x	x	x	x	x	x	x	х	
Wichita and Affiliated Tribes	4/15/2023	Х	Х	Х	х	Х	Х	х	Х	
Oklahoma Broadband Expansion Council Meeting	4/19/2023	x	x	x	x	х	x	x	х	
BEAD Success Summit	4/19/2023									

Southwest Tribal Meeting	4/19/2023	Х	Х	x	x	х	х	x	x
Oklahoma Broadband Governing									
Board	4/28/2023	х	х	х	х	Х	х	х	Х
Autry Tech Center ELC	4/28/2023								
70th Annual Pioneer Coop Meeting	5/1/2023								
State Legislature Office Visits	5/1/2023	Х	Х	Х	Х	Х	Х	Х	Х
Wichita and Affiliated Tribes	5/4/2023	х	Х	х	Х	Х	Х	Х	Х
Kiowa Tribe	5/4/2023	х	Х	х	х	Х	х	х	х
Let's Get Digital Weatherford	5/8/2023	х	Х	Х	Х	Х	Х	Х	Х
Oklahoma Broadband Governing									
Board	5/9/2023	Х	Х	Х	Х	Х	Х	Х	Х
ConnectX	5/10/2023								
Osage Nation	5/10/2023	Х	Х	х	Х	Х	Х	х	Х
Let's Get Digital Stillwater	5/12/2023	Х	Х	х	Х	Х	Х	х	Х
Sac and Fox Nation	5/12/2023	Х	х	х	х	Х	Х	х	х
Kickapoo Tribe of Oklahoma	5/12/2023	х	Х	Х	Х	Х	Х	Х	Х
Let's Get Digital Vinita	5/15/2023	х	Х	х	х	Х	х	х	х
Let's Get Digital Poteau	5/16/2023	х	Х	Х	Х	Х	Х	Х	Х
Oklahoma Turnpike Authority Panel	5/16/2023								
Oklahoma Broadband Expansion									
Council	5/17/2023	Х	Х	Х	Х	Х	Х	Х	Х
Kiamichi Tech Center	5/18/2023								
Let's Get Digital Broken Bow	5/18/2023	х	Х	Х	Х	Х	Х	Х	Х
Pine Telephone Company	5/18/2023								
Southwest Tribal Meeting	5/19/2023	х	Х	х	Х	Х	х	Х	Х
Let's Get Digital OKC	5/22/2023	Х	х	х	х	Х	Х	х	Х
Arkansas Broadband Office	5/22/2023								
Let's Get Digital Durant	5/23/2023	х	Х	х	Х	Х	Х	Х	Х
Choctaw Nation	5/23/2023	х	Х	х	Х	Х	х	Х	Х
Let's Get Digital Tulsa	5/24/2023	х	Х	х	х	Х	х	х	х
Internet For All Tulsa	5/24/2023	х	Х	х	Х	Х	х	х	Х
Tribal Consultation State-Wide									
Consultation	5/25/2023	Х	Х	Х	Х	Х	Х	Х	Х
Let's Get Digital Chickasha	5/26/2023	Х	Х	х	Х	Х	Х	Х	Х
Cox Communications	5/31/2023								
Rural Electric Cooperative, Inc.	6/1/2023								
Let's Get Digital Altus	6/2/2023	Х	х	Х	Х	Х	Х	х	х

Greater Oklahoma City Urban									
League	6/2/2023							х	
Let's Get Digital Enid	6/5/2023	Х	х	Х	Х	Х	Х	Х	х
Oklahoma Telephone Association	6/6/2023								
Let's Get Digital Sallisaw	6/6/2023	х	х	х	х	Х	х	Х	х
Muscogee Nation	6/6/2023	х	х	х	х	Х	x	х	х
Let's Get Digital Miami	6/7/2023	х	x	х	х	х	х	х	х
Northeast Oklahoma Electric									
Cooperative	6/7/2023								
Let's Get Digital Sulphur	6/8/2023	х	Х	х	Х	Х	х	Х	Х
Let's Get Digital Lawton	6/9/2023	х	Х	х	х	Х	х	Х	Х
Southwest Tribal Meeting	6/9/2023	х	х	х	х	Х	x	х	х
Chickasaw Nation	6/12/2023	Х	Х	х	Х	Х	х	Х	Х
Let's Get Digital Ada	6/13/2023	х	Х	х	Х	Х	х	Х	Х
AT&T	6/14/2023								
Bixby Telephone Company/BTC									
Broadband	6/15/2023								
Internet Service Provider	c / 1 = /2 2 2 2								
Roundtable	6/15/2023								
Lake Region Technology &	c /1 c /2022								
Communications	6/16/2023								
Chip Carter and Kurt Primuth	6/20/2023								
Let's Get Digital Okmuigee	6/20/2023	X	X	X	X	X	X	X	X
	6/21/2022	v	v	Y	v	v	v	v	v
	0/21/2023	^	~	~	^	^	^		~
Tracon Global	6/21/2023								
TechFreedom and Oklahoma									
Council of Public Affairs	6/22/2023								
City of Miami	6/22/2023								х
Let's Get Digital Goodwell	6/22/2023	Х	Х	х	Х	Х	х	Х	Х
Let's Get Digital Woodward	6/23/2023	Х	Х	Х	Х	Х	Х	Х	Х
Seneca Cayuga Nation	6/23/2023	Х	Х	Х	Х	Х	Х	Х	Х
Telecompetitor	6/26/2023								
Kickapoo Tribe of Oklahoma	6/26/2023	Х	Х	Х	Х	Х	Х	Х	Х
The Oklahoman	6/27/2023								
Oklahoma Broadband Governing	x x								
---	-----								
Board 6/27/2023 X X X X X X X X X X	x x								
Oklahoma Association of Electric									
Cooperatives 6/28/2023									
Urban League of Greater Oklahoma									
City 6/29/2023 X X X X X	X								
Best Buy 7/3/2023									
Chickasaw Telephone Company 7/5/2023									
Pott's Family Foundation 7/5/2023 X X X X	X X								
U.S. Representative Stephanie Bice 7/6/2023 X X X X X X X X X X	X X								
OK Federal Delegation 7/6/2023 X X X X X X X X X X	X X								
Infrastructure Association 7/10/2023									
Oklahoma Broadband Governing									
Board 7/11/2023 X X X X X X X X X X	X X								
Oklahoma Department of Libraries 7/12/2023 X X X X X X X X X X	X X								
OSU Libraries       7/13/2023       X	X X								
OU Health 7/17/2023									
Redlands Community College 7/18/2023									
Oklahoma Broadband Expansion									
Council 7/19/2023 X X X X X X X X X X	X X								
Oklahoma Farm Bureau 7/20/2023									
Oklahoma State University's									
Institute of Technology 7/21/2023									
American Indian Chamber of									
Commerce Panel Discussion 7/24/2023 X	X								
The Gathering (American Indian									
Chamber of Commerce) 7/24/2023 X	X								
The Gathering Business Summit									
of Commerce) 7/25/2023	x								
Corneration Commission 7/27/2022									
Governor's Council for Workforce									
and Economic Development 7/28/2023									
City of Okemah 8/3/2023	x								
Oklahoma Complete Health 8/3/2023									

Chisholm Broadband	8/7/2023								
Oklahoma Pro temp's COS	8/7/2023								
360 Communications	8/8/2023								
NGA Broadband Advisors	8/8/2023								
Oklahoma Broadband Governing									
Board	8/8/2023	Х	Х	Х	Х	Х	x	Х	Х
Cherokee Nation	8/8/2023	Х	Х	Х	Х	х	x	х	Х
OneNet	8/9/2023								
United Keetoowah Tribe	8/10/2023	Х	Х	Х	Х	Х	х	Х	Х
KGOU Capitol Insider	8/11/2023								
Dell	8/11/2023								
Iowa Tribe of Oklahoma	8/12/2023	Х	Х	Х	Х	Х	х	Х	Х
Iowa Tribe	8/12/2023	х	х	х	х	х	x	x	х
Oklahoma Broadband Expansion									
Council	8/16/2023	Х	Х	Х	Х	Х	х	Х	Х
OBO Digital Equity Coalition	8/17/2023	Х	Х	Х	Х	Х	х	Х	Х
USDA Rural Development	8/18/2023								
Cheyenne and Arapaho Tribes	8/22/2023	Х	Х	Х	Х	Х	х	Х	Х
US Department of Education	8/23/2023								
Quapaw Nation	8/23/2023	Х	Х	Х	Х	Х	х	Х	Х
City of Tulsa	8/24/2023								
Cheyenne and Arapaho Tribal									
Meeting	8/24/2023	Х	Х	Х	Х	Х	Х	Х	Х
OSUIT Site Visits	8/24/2023								
coreNoc	8/29/2023								
District 3 Convention Meeting	8/31/2023								
Schools, Health & Libraries									
Broadband (SHLB) Coalition	8/31/2023								
Okeene Kiwanis Club	9/1/2023								
OKSDE	9/1/2023								
Lightspeed Systems	9/5/2023								
State Auditor Cindy Byrd	9/7/2023								
CareerTech	9/8/2023								
Oklahoma Department of Libraries	9/8/2023								
Trans-Tel Central	9/8/2023								
"The Hot Seat" Interview	9/9/2023								

Schools, Health & Libraries									
Broadband (SHLB) Coalition	9/11/2023								
Oklahoma Broadband Governing									
Board	9/12/2023	Х	Х	Х	Х	Х	Х	Х	Х
American Indian Chamber of									
Commerce	9/13/2023							X	
Education Superhighway	9/14/2023	Х							
Office of U.S. Representative Kevin									
Hern	9/18/2023	Х	Х	Х	X	Х	X	X	X
NTIA (Department of Commerce)	9/20/2023	Х	Х	Х	Х	Х	Х	X	Х
U.S. Department of Treasury	9/20/2023	Х	Х	Х	Х	Х	Х	Х	Х
U.S. Representative Kevin Hern	9/20/2023	х	Х	Х	Х	Х	Х	Х	Х
U.S. Representative Josh Brecheen	9/20/2023	х	Х	Х	Х	Х	х	Х	Х
U.S. Representative Frank Lucas	9/20/2023	х	Х	х	х	х	х	х	Х
U.S. Representative Tom Cole	9/20/2023	х	Х	Х	Х	Х	х	Х	Х
U.S. Representative Stephanie Bice	9/20/2023	Х	Х	Х	х	Х	Х	Х	Х
Southwest Tribal Meeting	9/21/2023	Х	Х	Х	Х	Х	Х	Х	Х
Benton Institute	9/22/2023								
Heartland Forward	9/25/2023								Х
Bethany Kiwanis Club	9/26/2023								
Oklahoma Department of Libraries	9/26/2023	Х	Х	Х	Х	Х	Х	Х	Х
Connected Oklahoma	9/27/2023	Х	Х	Х	Х	Х	Х	Х	Х
Kiowa Tribe/City of Pharr	9/27/2023	х	Х	Х	Х	Х	х	Х	Х
Communication Workers of									
America	10/2/23								
OK Digital Promise Tour: Hobart	10/3/2023	Х	Х	Х	Х	Х	Х	Х	Х
Thick Descriptions	10/3/2023								
Qualtrics	10/4/2023								
OK Digital Promise Tour: Muskogee	10/5/2023	Х	Х	Х	Х	Х	Х	Х	Х
Watonga Kiwanis Club	10/5/2023								

# **Appendix F: DE Public Comments & Response**

In total, the OBO received 22 comments from residents, community anchor institutions, nonprofits, and other organizations representing covered populations across the state. The OBO reviewed all comments and made updates to the Digital Equity Plan as appropriate. Public comments have been grouped based on theme and are discussed below with accompanying responses and feedback from the OBO.

### **Reliable and Affordable Access**

The comments below related to affordable, reliable broadband infrastructure access. Commenters shared about the lack of availability or reliability at the commenter's home or in their community.

### **Commenter I**

My family and I are part time residents of the Kiamichi Wilderness since 2020. We own property in phase 1 of the development. We currently use internet services provided by HughesNet. Expensive, slow, but we will take it to fill the communications gaps of no land lines and poor cellular service. Utilizing wi-fi calling and VOIP calling is a huge improvement for cellular service, even with a 3-5 second conversation delay. The availability of affordable broadband service can drastically improve security, voice calling, TV streaming, and emergency response services such as EMS and volunteer fire. These types of services which are otherwise ubiquitous are woefully lacking in the Kiamichi Wilderness where most of the time it is a challenge to complete a voice call. I think resident demand is great and technology adoption rates will be significant. This can have a huge impact on real estate demand, electric service expansion into phases 2 and 3, property development and public safety.

#### **Commenter II**

I live roughly one mile outside Elgin city limits I only have access to DSL which only guarantees me speeds up to15 MGBS I've talked to a couple of companies and was told I live to far out to get fiberoptics but I have a neighborhood across the highway from me and they have high-speed internet was told it would be at least 5-10 yrs before they would be out my way and there is another neighborhood Hilliard Estates just to the East of me and they also have it feel like I am being discriminated against cause I don't live in "city limits" but neither do the neighborhoods around me.

#### **Commenter III**

I live in SE OK. In Pushmataha countyy. I do not have access to broadband internet. I work from home and need access badly.

#### **Commenter IV**

I live in a trailer park and whenever I try to get a type of Internet other than satellite I'm told the park does not allow the lines to be put in.

#### **Commenter V**

There is no high speed internet in our rural area.

### **Commenter VI**

My parents, both over 60, live in SWOK and have to rely on Satellite internet. The speeds are extremely slow and the cost is very high. Hillary Communications has fiber in the area but refuses to run fiber to their house, which is 0.5 miles from their main line along Highway 19.

Hillary Communications has received millions of dollars to expand their fiber network to rural areas, but refuse to run fiber to house holds that are not located next to the main line. The fiber can be ran along the existing electrical poles to my parents house. There are also a few other houses down the same road that would benefit from high speed internet. I know is a teacher that could use it for work.

### **Commenter VII**

I have fiber optic internet at 220mbps because I live right on Hwy-39. My brother live 1 mile off Hwy-39. His internet speed is only 18mbps. Rural Oklahoma is bad in need of fast Internet

### **Commenter VIII**

Pioneer installed "fiber optic" at our house about a year ago. They did not tell us at the time that we would lose our landline. We still have the landline number but it is tied to the fiber optic. If we have no power we have no communication. They did bring out a "back up" unit that was a lithium. We had a power outage and the battery "burned" to the point we had to have the fire department out. If it had been placed on carpet or next to a wall there would have been a true fire rather than a hot meltdown. They did bring out another but if we have an emergency and the battery is dead I'm sure we will be able to find the battery and put it in the back up unit in good time to call for an emergency crew. We have little to no cell service at our house or surrounding area. The fiber optic is not reliable at our house. During the day it is fast or extremely slow - like dial up slow. I am extremely disappointed in the service and the Pioneer service. People living closer to the Pioneer building at Selman have great service. The further out the line is the slower and more unreliable the service is. The price of the fiber optic is high for the service received. Pioneer always says "we will talk to you about it" and they have but nothing is ever better. We had better service with the outside "shoebox" that ran off of the cell tower. We at least knew we would not have service before 8 a.m. to about 9:30 a.m. and from 4 p.m. to 8 p.m. It would be wonderful to have cell service and also Internet service that works.

## **Commenter IX**

The State should be working on ways to put fiber to the middle mile, not fiber to every home. Fiber costs are through the roof. The timelines to deploy fiber are years long. The money you award today won't pay for the same fiber you are ready to buy and build in three years. Everything is very expensive and getting more so. Awarding say 1 million dollars for someone to put 100 miles of fiber in the ground today won't put 70 miles in the ground in three or four years. Companies that take that money and that commitment will be upside down and unable to afford it. If the State would support Middle Mile fiber that provided access for wireless deployment, then you have a winning strategy. a good analogy is the State building highways and major roads, and letting cities and neighborhoods build the local streets. People don't need gigabit fiber speeds. I have 50 down and 10 up and I've been very satisfied with that for 10 years at my home office. I can stream anything and have no issues conducting business. This pipe dream of gigabit is guilding the lily. Build fiber to a school or office, but to the home is a waste of taxpayer resources and we all know it. There's no good argument for it. What the State is doing is picking FIBER winners. Throwing millions away and taking years to deploy, forcing businesses to obligate themselves and then causing those who took the money, couldn't buy the fiber, or the trenching equipment, or hire the people or all the other issues that it takes to run a project, be find themselves behind the 8 ball down the road. Build wireless. Let small businesses do what they do and bring internet to these very rural areas. Don't give points to fiber and reward fiber to the home. Build INFRASTRUCTURE, like highways and get out of the way of the local WISP providers and let them run their businesses and serve their communities as they have done for a while now. Get off the Gigabit charade. We're not beaming people from space.

### **OBO Response**

Many commenters provided specific feedback about their struggles accessing reliable and affordable internet – especially in rural locations. It should be noted, these topics are addressed at length in OBO's BEAD Plan, which was initially published for public comment on September 20, and in the state's Initial Proposal, Volumes 1 and 2. The state's BEAD plan seeks to build an infrastructure development plan that leverages affordability and long-term sustainability. This Digital Equity plan functions in partnership with the BEAD plan and considers the necessity of updated infrastructure to provide reliable and affordable internet for Oklahomans to access community programs, telehealth services, remote work opportunities, and more. After all, reliable and affordable access to the internet provides the basis of the state's digital literacy and upskilling efforts. OBO has updated Section 3.2, which addresses the barriers to broadband adoption and affordability in Oklahoma, to reference these public comments. The state's DE Plan and BEAD Plan complement each other and provide a path to internet for all Oklahomans. At its core, this plan is committed to ensuring residents have access to reliable and affordable internet and related services.

## Affordability of Internet Services

Public comments addressed the affordability challenges many Oklahomans face in subscribing to home internet.

## **Commenter X**

The current access to internet services in rural Oklahoma are very inadequate. Many of the rural residents are not financially stable enough to have access to any internet services. Many families only have access through whatever cellular service they have. Cellular service is as inadequate as internet service. The current most usable internet service is through StarLink which is cost prohibitive to most rural residents. The \$600 cost for equipment added to tax and delivery raises the initial cost for more than \$700. The actual service is another \$120 per month which places this service beyond the financial ability for families in the poorest county in Oklahoma.

#### **Commenter XI**

The plan states that the area where I live (74354) is well served with high speed internet. I believe that the options we have are limited and expensive. Having other providers would create competition and bring lower costs with improved service.

# **OBO Response**

Commenters described the high cost of service in their area. Affordable, reliable internet access is one of the three goals of this plan, as described in Section 2.1. The OBO, recognizing this barrier for many Oklahomans, has included many strategies to address affordability in Section 5, when discussing the implementation plan.

# **Chickasaw Nation**

The Chickasaw Nation provided comments to OBO about stakeholder engagement, digital inclusion activities specific to tribes, and workforce development.

# **Commenter XII**

## Stakeholders and Advisory Supports

The Chickasaw Nation (CN) encourages the Oklahoma Broadband Office (OBO) to include tribal stakeholders in the Oklahoma Digital Equity Coalition (ODEC), the Oklahoma Broadband Expansion Council (OBEC) and the Oklahoma Broadband Governing Board (OBGB). Each of these groups is currently represented by a wide variety of stakeholders, yet representation of tribal communities is nearly non-existent. The OBGB is the policy making council; of its nine members, none are tribal representatives. ODEC and OBEC are advisory councils; of their 28 members, one represents Trace Fiber Networks, a wholly owned subsidiary of the CN. Given the significant economic impact the tribes impart on the state economy, their demonstrated commitment to supporting the communities in which they reside and their status, as identified in the OBO Digital Promise, as "historically being one of the most underserved," it is essential that membership in each group is expanded to include tribal representatives.

#### Access

The CN encourages OBO to incorporate self-reported data from tribes identifying unserved and underserved areas into the statistical analysis of its BEAD Initial Proposal to ensure equity in internet access within tribal communities. Recently developed and updated Federal Communication Commission (FCC) broadband maps continue to rely on self-reported data from Internet Service Providers (ISP). While an improvement to the original FCC Form 477 repo1ting, the data remains unreliable with respect to communities within the CN's territorial boundaries. This conclusion is supported by resources such as M-Lab Speed Tests.

As noted in the OBO's Digital Promise plan, most unserved areas within the state are located on tribal lands. No party understands the needs of tribal citizens more than the tribal government. Accordingly, OBO must develop a transparent and accessible challenge process by which tribal nations may request reevaluation of an area's degree of available service to ensure equitable broadband access for all tribal citizens.

Strategies Specific to Tribes

The CN encourages the OBO to integrate strategies specific to tribes and other historically underserved populations into each actionable item identified in its plan as a systemic approach to provide the most comprehensive solution to achieving its identified goals. There are cuITently a limited number of action items specifically designed to ensure tribal communities have equitable access to broadband services.

These action items should include funding specifically allocated for tribes. OBO should also clarify how 'tribal digital navigators' will be funded and what support it plans to offer tribes to ensure this endeavor's success.

Enhancing Workforce Development Programs through Tribal Partnerships

One identified OBO action plan priority is the establishment of workforce development programs focused on career resources and skills specific to the telecommunications industry. The OBO should include tribal nations as partners on this effort, as many tribes already manage their own workforce development programs for tribal citizens.

This will not only work to address the labor shortage affecting the telecommunications and broadband development sector generally, but also enhance economic development within tribal communities by creating employment opportunities for tribal citizens. Economic development is a key component to ensuring access for more individuals in tribal communities as the cost of broadband is an essential component of adoption. OBO could facilitate this process by creating a pilot program to incentivize organizations to partner with tribal nations on this effort.

Furthermore, incorporating local language and culturally relevant concepts into digital literacy programs will enhance these efforts. Engaging with local schools and community centers to host workshops and seminars will ensure these materials reach a broader audience of community members, including elders and young people. OBO should consider offering funding to support these programs.

# **OBO Response**

The OBO thanks the Chickasaw Nation for the thoughtful response and feedback to the Digital Equity Plan. In response to feedback from the Chickasaw Nation, OBO has updated Section 5.1, Goal 2, Strategy 2 (Fulfilling Oklahoma's Digital Promise- Access) to include the recommendation that tribal representation be increased on the Digital Equity Coalition. The OBO notes that the existing digital equity programs section describes an existing workforce development program with Tribal partnerships. Additional workforce development strategies are discussed in the Initial Proposal, Volume II.

The OBO has also included the Letter of Intent to participate in the NTIA's Digital Equity Planning Program submitted by the Chickasaw Nation in the analysis and description of existing digital equity plans and work. Tribal Nations play an integral role in closing the digital divide and their representation in state efforts is paramount to providing an equitable and representative solution for all Oklahomans. OBO is committed to partnering with Tribal Nations across the state and values their feedback and collaboration.

The OBO also added additional clarification that all digital equity grant program funding opportunities will be open to all tribal communities.

# **Digital Inclusion Assets**

Commenters provided additional information about existing digital inclusion programs and opportunities in their communities.

## **Commenter XIII**

At Miami Public Library we provide the only free internet to the public that is on fiber. It is the fastest internet and most reliable. The community that we serve use our Wi-Fi and computers because of this. Most of our patrons do not have internet at home because they can't afford it or it isn't available. We also provide hot spots from Mobile Beacon but we are limited on how many people we can serve because we only have 13 hot spots and there is always a waiting list. Then there is the problem of the internet available is highly unreliable. We have people drive to the library after hours that sit in their car to connect to our Wi-Fi because their internet drops or is too slow to complete school work or employment work. Daily we assist people with basic computer skills, directing them to job resources, and assisting them with finding the right sites for tribal or government assistance. The older population needs help with many things because so many assistance programs are online and not in person. We have patrons who use our meeting rooms and internet for translation services, Medicare Enrollment, and homeschool or Epic Charter groups. When people need help or internet access we are it. And we are struggling to serve everyone. On a personal note, I live in Commerce l, OK and I can't get cable internet at my house even though the houses less than 300 feet away have it. I had to have a telephone pole installed and have a satellite mounted on top. My internet cuts out in any bad weather and with 5 kids, 2 of whom have homework every night, our internet slows down often. We had to upgrade just to make sure all our devices would run somewhat normally. The numbers may say we have internet. But the internet here is not good. It's causing more problems than helping. So many stories have been shared recently about telehealth call dropping, people unable to work from home without a hot spot, and so much more. Many of our county residents are even more rural than our town is. It's not easy for everyone to access the library or another internet hub.

#### **OBO Response**

OBO thanks Miami Public Library for providing additional information about their digital inclusion programs and offerings. This information, while captured in the appendix, has also been added in Section 2.3 of the plan to highlight the important work happening at the library.

## **Digital Literacy**

A commenter provided additional information about the digital literacy work occurring in public libraries.

## **Commenter XIV**

The Oklahoma Department of Libraries recommends using the term "digital literacy" in addition to, or as replacement of, the term "digital navigator program" as it provides more flexibility in

developing services and is a more widely known concept. According to NDIA, digital literacy is "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills." Digital literacy is a term widely used by educators, librarians, and non-profits. By using "digital literacy" as opposed to "digital navigators" the emphasis is on skills building, instead of being limited to a staffing/program model. It provides flexibility in determining the best way to achieve the intended outcome- to ensure Oklahoman's have the skills needed to safely access the internet and thrive in today's digital world. We fully support the connection between digital skills building and public libraries. Libraries are often the first place people go to get access to the internet, to get help with a device, apply for jobs online, set up an email account, and apply for assistance programs. What brings all of these people to the library is a lack of access and a lack of knowledge. Through BEAD funding, access will be addressed and through DE we can meet the need of improving digital literacy. We recommend Strategy 3 be updated to "Support and increase digital literacy initiatives in public libraries."

### **OBO Response**

In response to feedback from the Oklahoma Department of Libraries, OBO updated the language of Section 5.1, Goal 3, Strategy 3 (Fulfilling Oklahoma's Digital Promise-Advancement) to include "digital literacy" in addition to digital navigator to fully reflect the broad spectrum of services and programs that provide support to people getting online. OBO looks forward to partnering with community anchor institutions, such as public libraries, during the implementation stage of this plan.

## **Emergency Services**

Public commenters provided data from their lived experiences about the critical role broadband connectivity plays in accessing emergency services and public safety.

## **Commenter XV**

I live in a very remote area that has very limited access to emergency services. It is essential for our health and wellbeing that we have access to the same resources that others do.

## **Commenter XVI**

November 2, 2023 To Whom It May Concern: Residents of Pushmataha County definitely feel like "The Forgotten" when it comes to having access to high speed internet. On Memorial weekend 2023, members of The Little River Ranch Property Association (LRRPOA) were informed that Pine (Hugo/Antlers) was awarded a grant to bring high speed internet to Little River Ranch (LRR). Pine presented us with plan options and we were told to get our water and electric lines marked so they could run lines to our homes. We signed waivers giving them access to our properties. We were told that they would provide LRR with a small building so that all residents would have a place to access high speed internet. That has been the last we have heard from Pine. Some residents have been told that Choctaw Electric will not allow Pine to use their poles/right of way to bring high speed internet in to LRR, so everything has come to a standstill. We would truly appreciate any help concerning this matter. Little River Ranch

(LRR) is a community in Pushmataha County and consists of approximately 400 lots. There are approximately 200 owners due to some owning multiple lots. We have 15 miles of logging roads to get to the closest towns (Cloudy or Pickens). We have NO cell phone coverage so many have to rely on land line phone service provided to us by Kinetic/Windstream. Our basic telephone service, WITHOUT long distance, has recently been raised to \$75.00 per month. Many residents have had to cancel due to no longer being able to afford it. For over a year now, when our electricity would go down, so would our telephone service. A formal complaint was filed with Oklahoma Corporation Commission to get Kinetic to address the problem. Also, for years, our 911 service was routing to Muskogee (3 hours away) instead of Antlers. Antlers is a long distance phone call and Muskogee could not forward our calls to Antlers. Kinetic/Windstream continued charging the residents each month for 911 services. They kept closing our work order tickets while telling us there was nothing they could do to correct the situation. June 2022, an individual at LRR suffered a stroke $\hat{e}_{i,911}^{i}$  went to Muskogee who could not help us $\hat{e}_{i,1}^{i}$  he later died. June 2023, a construction worker fell off the roof and had to be care-flighted out of LRR $\hat{a} \in 1.911$  still going to Muskogee who could not help us. A formal complaint was filed with the OK 911 Management Authority. Thanks to Stacy and Michael for putting in endless hours and finally getting our 911 calls routed to Antlers. Kinetic/Windstream has refused to reimburse residents for the years of 911 services they charged us for without actually providing us with the service. We truly appreciate the opportunity to give our input. Please contact us if you have any questions. Sincerely PERSONAL INFORMATION REDACTED.

### **OBO Response**

Many commenters provided feedback about their troubles accessing reliable 911 and emergency services from "remote" locations. Section 2.2 of the DE Plan highlights state programs and agencies who provide digital equity services, including those who deliver essential services, such as disaster and emergency management. OBO has updated Section 2.2 to include reference to these public comments. The OBO recognizes the critical need for reliable connectivity, especially in times of emergency, and is committed to ensuring all communities, regardless of location, have the necessary connections to contact emergency personnel in times of need.

# **Community Development & Workforce Readiness**

Commenters shared about the importance of workforce development and the need to have a local workforce training programs, including those available in rural communities and for individuals from underrepresented populations, to ensure that Oklahoma is prepared to close the digital divide.

## **Commenter XVII**

I am working on a multi-year plan that addresses workforce needs in this industry and actively pursuing any reasonable means of providing training, education, or other related supportive resources which will positively impact individuals residing in rural areas, come from minority/marginalized/under-represented populations, as well as those who currently work in the industry and their employers. It would be great to see industry state their specific and actual needs for training and their overall plans for their own workforce development, as that informs me as to which direction I should go, with how much expediency, and with what resources.

Workforce training is crucial but right now we are seeing that industry is still able to cherry-pick employees as their roll out efforts haven't peaked yet. Once they have exhausted that pool I see a need to rapidly ramp up the flow of trained fiber technicians, aerial installers, network engineers, etc. More than anything, if there is a way to know what industry needs in terms of numbers of employees and specific skill sets it would be incredibly helpful for us as we are using federal grant funding to deliver training to help bolster their workforce. I feel it is important that we not waste this funding by providing unnecessary training. If there is any way to tie industry federal funding to a requirement to hire individuals who have been through similarly grantfunded training, it would be beneficial to those who have taken the initiative to receive training. It also establishes a full-circle effect, whereupon actively engaged members of communities can go to work in a new industry earning thriving wages, installing the very high speed internet from which they themselves will benefit, while simultaneously providing the ISPs with their new, larger customer base, in the form of the newly created workforce.

# **OBO Response**

Broadband plays an important role in community development—especially in economic and workforce development. Section 2.2 of this plan provides an overview of economic and workforce development agencies and organizations who are working to develop a skilled workforce needed to attract and retain jobs in communities across the state. Section 5.1 discusses increasing access to workforce training programs targeted to covered populations, which would include programs to address broadband industry-related jobs. Further, the state's BEAD Plan also addresses this very important topic and provides a 'workforce readiness' plan in alignment with state goals and resources.

# AARP & Aging Individuals

Commenters shared their perspective on the barriers to digital equity for aging populations and provided input, based on work supporting that population, on the DE plan.

# **Commenter XVIII**

AARP welcomes the opportunity to comment on the draft Digital Equity Plan ("Fulfilling Oklahoma's Digital Promise") issued by the Oklahoma Broadband Office (OBO). AARP's comments on the draft digital equity plan (Plan) reflect in part our many years of high-speed internet advocacy at the federal and state level on behalf of older adults as well as AARP's advocacy on issues that relate to internet access (such as health and housing). This advocacy has included, for example, AARP's review to date of thirteen other draft state digital equity plans, AARP's familiarity with the Digital Equity Act, AARP's submission of comments regarding NTIA's implementation of the Digital Equity Act, and AARP's familiarity with the Broadband, Equity, Access, and Deployment (BEAD) Program. AARP concurs that: "Having the devices and skills to safely navigate affordable, high-speed internet for all Oklahomans unlocks benefits for individuals and communities in every part of the state." Plan, page 2. AARP supports fully the Plan's focus on "internet adoption and use to ensure that Oklahomans are able to use affordable, reliable high-speed internet safely and effectively." Plan, page 2.

#### Section 2

AARP fully supports the Plan's vision for reliable, affordable, high-speed internet for Oklahomans. Plan, page 3. The Plan recognizes and seeks to address the glaring digital divide that exists on tribal lands: "A key aspect to the vision of the OBO's digital equity plan is the collaboration with the state's 39 tribes, as most unserved and underserved locations identified in the state are on tribal land (approximately 81% of unserved and 80% of underserved)." Plan, page 3. Importance of digital equity to older adults: High-speed internet access is particularly important to older adults, including those on tribal lands as well as those in other Oklahoma communities, to help them age in place safely (providing access to telehealth, maintaining social connections, etc.). High-speed internet access also helps older adults to maintain their active participation in the workforce. Yet studies continue to show that older adults, including many who reside in rural areas, are less likely to have a high-speed internet connection or fully utilize the wide-ranging capabilities of broadband service. Through its participation in this program, Oklahoma can help to overcome these gaps. The Plan's goal of ensuring that Oklahomans can access and use digital resources safely resonates with AARP. Older adults are often vulnerable to online scams and may be concerned about threats to their privacy. For example, a recent Pew Report states: • "Two-thirds (67%) of adults say they understand little to nothing about what companies are doing with their personal data, up from 59%."  $\hat{a} \in \mathfrak{c}$ About seven-in-ten Americans are overwhelmed by the number of passwords they have to remember. And nearly half (45%) report feeling anxious about whether their passwords are strong and secure. https://www.pewresearch.org/short-reads/2023/10/18/key-findings-about-americans-anddata-privacy/ Specific feedback to 2.2 and 2.3: Regarding the implementation of telehealth booths mentioned on page 8 of the Plan, AARP recommends OBO consider the addition of wrap-around telehealth technical assistance and/or skills training within the public libraries hosting the telehealth booths, thereby covered populations can "test-drive" telehealth programs and learn how to use the program within their own residence. OBO should also consider many older adults, especially rural older adults, rely on public transportation or loved ones to access public resources and may be restricted by income or access to transportation. AARP also recommends the development of an evaluation report on the success of the telehealth booths. In reference to the strategy "Increase enrollment in the Affordable Connectivity Program and other low-cost internet service programs" outlined on page 12, AARP recommends OBO consider additional low-cost internet services promotion, with the uncertainty of the ACP Program and the number one perceived barrier to home internet adoption being affordability, as shown in Figure 12 on page 28. AARP further recommends OBO consider programs for households that are strained by high-cost high-speed internet programs (e.g., ALICE - Asset Limited, Income Constrained, Employed), but ineligible for government benefits. AARP recommends OBO consider how Oklahomans can also access digital skills training or tech assistance affordably (e.g., free tech help hotline). In reference to strategy, "Increase number of digital navigator programs in rural libraries" on page 13, AARP recommends OBO consider a communications campaign in concert with a digital navigator program and/or local community anchor institutions, especially as Figure 14 "Barriers to Internet Subscription for Aging Individuals (60+)" on page 30 shows the primary barrier to internet subscription for older adults is the belief they do not need internet (29%). Also consider how rural residents, especially those with accessibility/transportation issues, will access rural libraries. Regarding strategy, "Encourage CAIs to create technology-focused five-year plans that can be leveraged for future funding opportunities" on page 13, local CAIs may not have the capacity and resources to create

technology-focused five-year plans. AARP encourages OBO to fund pilot projects with local CAIs to build capacity and resources. AARP commends Oklahoma for committing to partner with the Oklahoma Information Sharing and Analysis Center to create an internet safety best practice outreach toolkit for public distribution. AARP encourages the creation of formal or informal avenues for CAI and OBO to share best practices as it relates to adoption, telehealth, and other digital skills training topics. Affordability, availability, reliability and sustainability are key objectives: The Plan appropriately includes among the many objectives to "Ensure all Oklahomans have access to affordable high-speed internet and to internet-enabled devices," including also a goal of increasing ACP enrollment. Plan, page 12. Affordable, available and reliable high-speed internet access and devices, supported by ongoing digital literacy training, has been a long-running advocacy goal for AARP. AARP also values sustainability of digital equity programs. For example, older adults may need ongoing digital literacy support (as opposed to one-time digital literacy training sessions). As such, AARP recommends that sustainability be more fully incorporated into the Plan's vision statement (Oklahomans will have the knowledge and skills to access the information). Sustainability is also important because covered populations are not static: for example, residents grow older and so join the 60 and over population; new immigrants, lacking English proficiency, move to Oklahoma and other immigrants gain English proficiency; and household incomes change over time. Alignment of Digital Equity Plan with BEAD and Oklahoma's goals: The Plan appropriately seeks to align with the BEAD program. Plan, page 2. This interdependence is essential -- infrastructure on its own does not benefit Oklahomans "high-speed internet access deployment needs to be combined with affordable access and digital literacy training to ensure that the hundreds of millions spent on broadband deployment in Oklahoma benefit households, businesses, and communities throughout the state. AARP supports fully the Plan's alignment with state policy goals. Plan, page 11. Digital equity is one of various tools to help Oklahomans reach their potential, to have access to state-of-the-art health care, and to participate fully in a digital economy and society.

#### Section 3

Digital equity as viewed in the context of overarching Oklahoma policy goals Achieving digital equity cannot occur in a vacuum, but also, digital equity will not in and of itself resolve major societal issues. Instead digital equity, although essential in today's economy and society, is simply one more element in Oklahoma's efforts to address multiple policy challenges including health, transportation, and housing, among others. AARP appreciates OBO's comprehensive engagement with organizations to evaluate assets and barriers. Among other things, the OBO reports: "Statewide, public Wi-Fi access (90% of respondents) and public access to computers (85% of respondents) are the most available digital inclusion services for covered populations. Telehealth services (12% of respondents) and e-commerce help for small businesses (7% of respondents) are the least offered by Oklahoma organizations." Plan, page 15. In light of the significance of telehealth to older adults and to their ability to age in place, AARP is hopeful that OBO's research will inform its future awarding of digital equity grants so that state-of-the-art health care is available to all Oklahomans, regardless of where they reside. In reference to Figure 1 and Figure 2 on page 14 and 16, with the limited availability of "cybersecurity training", "community tech support", "help subscribing to home internet service" and "digital skills training", AARP suggests these activities should feature more predominately in OBO's overarching strategies (e.g., free hotlines, mobile digital navigation programs delivered by local CAIs, embedding digital skills curriculum and programs into local CAIs programs). AARP

requests the Plan elaborate on "Internet usage training" as documented in Figure 3, page 16, and explain how this differs from "General digital literacy training." Although Older Adults Technology Services (OATS) from AARP do not have physical locations within Oklahoma, OATS operates a licensing program through its digital skills training program, Senior Planet. Senior Planet licensing equips local organizations across the country with the tools to help older adults access technology and use it to enhance their lives. Local community organizations can become licensed through a train the trainer program, with a one-year commitment. Differing platforms AARP commends the OBO for analyzing and highlighting Oklahomans' differing high-speed internet access platforms: "At the state level, while 84.2% of households subscribe to internet services of some kind, only 61.2% of households subscribe to fixed home internet (broadband such as cable, fiber optic, or DSL)." Plan, page 21. AARP recommends that the final plan include a commitment to continue to track this technological disparity on an ongoing basis, especially as the technology gap exists among the various covered populations. (USAC also reports ACP participation by the platform used). Barriers and Assets – Older Adults AARP appreciates the Plan's inclusion of information specific to older adults (see, e.g., Figure 5: Internet Use Among Covered Populations in Oklahoma, page 22, and discussion of barriers at pages 29-30, addressing issues such as perceived relevance, concerns about internet safety, perceived complexity of the use of computers, etc.). These findings are consistent with AARP's experience with digital equity barriers for older adults, and can inform the effective use of digital equity grants. AARP also recognizes that the population of older Oklahomans overlaps with other covered populations, for example, with older adults on Tribal lands and older adults with low incomes. AARP is fully prepared to work with OBO to assist with its collaborative approach to achieving digital equity through the implementation of OBD's Plan, working in concert with representatives of other covered populations. One of many positive outcomes of the plan's implementation will be increased social engagement. Indeed high-speed internet access is invaluable as a way to help older adults overcome social isolation, which, in turn, fosters health. See, e.g., https://www.nytimes.com/2023/09/06/opinion/loneliness-epidemic-solutions.html and https://www.nytimes.com/2023/04/30/opinion/loneliness-epidemic-america.html https://www.nia.nih.gov/news/social-isolation-loneliness-older-people-pose-health-risks Affordability AARP echoes the Plan's identification of affordability as a barrier to digital equity: "Broadband affordability serves as an important determinant for home internet adoption. While many households may have access to broadband, some Oklahomans still struggle to pay for the service each month. According to data derived from a series of listening tours across the state, 59.2% of respondents believed that high costs were a barrier to households subscribing to home internet." Plan, page 23. See also Figure 12, page 28. The Plan states: "For Oklahoma households, including covered populations, one of the most discussed barriers to having a home internet subscription is the cost of monthly service. For many, the monthly service cost is too high, leaving Oklahomans to rely on public Wi-Fi, cellular data plans, or other publicly available connectivity resources. In focus groups, affordability also emerged as a key barrier for covered populations. While many participants could identify programs or places to access low-cost or free internet, many noted that they were less available in rural areas and not well-promoted within communities." Plan, page 28. The Affordable Connectivity Program (ACP) helps income-eligible households afford high-speed internet access, but for those households with fixed incomes and those struggling to pay bills who are not ACP-eligible, the high price of highspeed internet access (and necessary devices) deters adoption. AARP has been a long-time advocate for affordable high-speed internet access, promoting measures such as at the ACP (which subsidizes income-eligible households' internet subscriptions) as well as municipallyowned (or regionally-owned) internet access networks (which typically result in lower monthly prices than those charged by commercial providers, and also can offer substantial benefits for communities such as economic development, remote learning, etc.). To contribute to the goal of digital equity, all BEAD recipients should commit to provide high-speed internet access at \$30/month maximum to customers who qualify for the ACP and should commit to offering services affordable to middle class households. Education Superhighway estimates that approximately 46.4% of households in Oklahoma are eligible for the ACP. Of those eligible, 45.3% of households have enrolled in the program. Plan, page 24, footnotes omitted. AARP is actively advocating for continuing funding for ACP and is fully prepared to assist with achieving the Plan's goal of conducting ACP outreach in order to increase ACP enrollment. The Plan could also include data regarding the distribution, by age, of Oklahoma's ACP participants, as is shown, for example, in the following data as of August 2023, which AARP obtained from the USAC website: https://www.usac.org/about/affordable-connectivity-program/acp-enrollmentand-claims-tracker/additional-acp-data/ AARP supports: (1) a commitment to track ACP participation, and, to the extent feasible, to track the participation by geography, age, and any other attribute for which data are available; and (2) objectives for increasing ACP participation by covered population. See discussion of Section 5 below. It would of course be useful if the USAC age categories coincided with the Digital Equity Act's definition of older adults: The final Plan could also point out that it would be helpful, if USAC's age brackets aligned with the Digital Equity Act's definition of older adults (aged 60 and over).

#### Section 4

AARP commends OBO for its comprehensive and diverse ways of soliciting feedback from Oklahomans, covered populations, and representatives of covered populations. AARP appreciates that as part of its development of the Plan, among many other ways of engaging Oklahomans' input, OBO conducted a residential survey with 1802 Oklahomans, of which 33 percent were aging individuals, the OBO engaged all 39 tribal nations with communications and invitations to attend tribal consultations, and OBO partnered with AARP to conduct a focus group with aging populations in September 2023. Plan, pages 47, 49, and 50. (As a minor point, AARP recommends that the table on page 47 include a statement explaining that percentages do not add to 100 percent because the covered populations overlap, with a single respondent being reflected in more than one of the categories shown.) The Plan also describes the Digital Equity Coalition: "The Digital Equity Coalition, formed by the OBO, provides insights and recommendations around barriers accessing and using affordable, reliable high-speed internet. They are also the main working group tasked with carrying out the goals and objectives in this Digital Equity Plan. Representatives from research institutions, nonprofit organizations representing covered populations, state agencies, and tribal governments serve on the coalition." Plan, pages 18-19. Members of the coalition include many important organizations and government agencies. Plan, page 42. AARP is hopeful that the Digital Equity Coalition can be expanded to encompass representatives of all covered populations including, among others, older adults, and tribal nations. Widespread, multifaceted stakeholder participation in the development of the Plan, which OBO successfully achieved, is important. So, too, is ongoing stakeholder participation by the covered populations in the implementation and evaluation of the Plan. In that regard, AARP appreciates OBO's commitment to collaborating with tribal nations. The Plan states: "Additionally, as relationships with and between the tribes continue to evolve, it is vitally important that communication channels remain robust and open. In no other

community is the digital divide more apparent, nor is bridging that divide more important. With almost half of Oklahoma being ruled tribal land, it would be impossible to provide universal coverage without proper coordination. Tribal consultations will remain a priority throughout the life of the OBO." Plan, page 52. It is not clear from the Plan, however, whether that communication with tribal nations is proposed to occur separately from the Digital Equity Coalition. [For internal reference, the Coalition includes: Urban League of Greater OKC, Oklahoma Department of Libraries, Southern Prairie Library System, Oklahoma Complete Health, Heartland Forward, YWCA, Hinton Public Library, Oklahoma State University, Oklahoma Department of Career and Technology Education, Bristow Public Library, OU Health, City of Tulsa, Rise Broadband.

#### Section 5

Publicly owned and operated networks The Plan appropriately recognizes that affordability is a major barrier to digital equity (see earlier discussion). To the extent that publicly owned and operated internet access networks can lead to more affordable prices than do commercially owned ones, and can also include community-based organizations in the planning and implementation phases, AARP suggests that the final Plan explicitly emphasize this as one of various approaches to achieving affordability. Affordability Affordability is a major obstacle to achieving digital equity among older adults. Plan, page 54. AARP is fully prepared to assist in outreach for ACP (as well as any other successor or related programs) to increase participation by eligible participants by the Plan's goal of 10 percent. Plan, page 54. AARP recommends that the final plan clarify whether the OBO seeks to increase ACP participation by 10 percentage points (i.e., from its present level of 45.3% (see Plan, page 24) to attain 55.3% ) or whether it seeks to enroll an additional 31,796 households – i.e., an increase of 10% from the present number of 317,960 participants (see https://www.usac.org/about/affordable-connectivityprogram/acp-enrollment-and-claims-tracker/additional-acp-data/). Partnerships AARP supports fully the Plan's emphasis on partnerships as a way to achieve digital equity goals. Plan, page 59. Progress Monitoring AARP supports the Plan's commitment to monitoring progress through such measures as best practices reports; survey and data collection efforts to track internet adoption and use; and regular reporting from subgrantees. Plan, page 59 If needed, AARP urges the OBO to seek legislative authority to require providers to submit data to assist with the implementation and assessment of the progress of the Digital Equity Plan (e.g., regarding deployment, prices, adoption, speeds, and technology). AARP has engaged in state legislative high-speed internet access advocacy in many jurisdictions throughout the country and is fully prepared to assist with legislative advocacy that would facilitate OBO's achievement of digital equity. Also, when the quality of internet access (e.g., speed, reliability, technology) varies significantly depending on where a person lives, digital equity has not yet been achieved. AARP urges the final Plan to include a commitment to regularly collect, analyze, and report internet access adoption and deployment, by technology and speed, at a geographically granular level so that OBO can monitor the extent to which some communities or some covered populations may be being offered inferior high-speed internet access options (see, e.g., Plan, at 21: "At the state level, while 84.2% of households subscribe to internet services of some kind, only 61.2% of households subscribe to fixed home internet (broadband such as cable, fiber optic, or DSL).") Digital equity dashboard: AARP recommends that the final Plan include an ongoing commitment to continue to build off of the data collected and reported in the Plan, and to make that data (and maps) readily accessible to stakeholders throughout the state. In its review of

draft states' digital equity plans, AARP advocates for states to establish and to maintain a wellpublicized, easy-to-use digital equity "dashboard" that monitors availability, affordability (speeds, prices), and adoption (numbers of subscribers, if possible, disaggregated by covered population and geography). This information would enable OBO and stakeholders to track general trends; maps could display information visually on an ongoing basis. Similarly, AARP supports transparency and widespread access to data. This can inform state agencies and stakeholders as they measure progress in achieving digital equity, and can guide and inform the adoption of best practices. General implementation observations/recommendations AARP recommends OBO include a strategy related to natural disaster preparedness as highlighted by an "Oklahoma senior during focus group" comment on page 5, ".... without high-speed internet access, much important information and news fails to reach individuals and households ... specifically during severe weather events and the aftermath of natural disasters". This could be included within the objective "Increase accessibility of state digital resources for covered populations". AARP recommends creating step-by-step handouts, providing tech support during natural disaster preparedness periods (e.g., before summer). Please find more examples by AARP here. AARP recommends the Strategy 1 action "Provide grant funding for CAIs and community support organizations to offer digital literacy training to seniors and other covered populations" on page 56 includes "develop curriculum and identify CAIs to develop digital literacy training to seniors" (e.g., multi-week course curriculum). Adding a curriculum component will ensure all older adult Oklahomans will receive uniform training and increase the ability to evaluate the success of the program. On page 54, AARP requests the Plan elaborate how OBO plans to "Encourage technology centers and education institutions to implement technical support programs...". AARP recommends conducting an analysis on successful technical support options (e.g., hotline, 1:1 tech support, and pilot those programs with CAIs representing covered populations). Success could also include "increased confidence in an individual protecting themselves from fraud and scams and managing their money safely". On page 58, AARP commends Oklahoma for committing to evaluate existing telehealth programs and provide a report describing best practices. AARP encourages Oklahoma to consider creating evaluation opportunities around the digital navigator program, workforce development and any other pertinent plan strategies. AARP commends Oklahoma for planning to increase accessibility of state digital resources for covered populations. AARP suggests also including comprehensive education around the benefits of using these accessible state resources to encourage adoption among the covered populations.

#### Section 6

AARP supports the Plan's goal: "Through this work, the state will achieve its vision that Oklahomans will have access to the information, resources, and skills needed to participate in society to the fullest and to remain competitive in a digital marketplace and fulfill its digital promise." Plan, page 62. AARP remains committed to expanding older Americans' access to and productive use of the internet to contribute to the social and economic welfare of Oklahoma. AARP welcomes the opportunity to partner with the Oklahoma Broadband Office in the successful implementation of Oklahoma's Digital Equity Plan. In conclusion, AARP commends the OBO for its insightful and comprehensive digital equity plan, and looks forward to supporting OBO and other stakeholders with its successful implementation.

#### **OBO Response**

AARP provided an extensive review of the Oklahoma DE Plan. As an organization that serves individuals over the age of 50, much of their feedback was specific to the covered population of aging individuals. The barriers facing aging individuals are deeply discussed in Section 3.2.1 of the Digital Equity Plan. Additional insight from this comment was added to that section to ensure comprehensive understanding of the barriers facing aging populations. The comment also underscored how many aging individuals are also represented in other covered populations; the DE plan recognizes the overlap between many of the covered population groups and attempts to propose multi-faceted strategies to ensure all barriers are addressed.

AARP mentioned telehealth as a specific priority for older adults, and Section 5.1 outlines a strategy to "increase telehealth access in the state", including in rural areas, which the comment highlighted as a need.

The OBO appreciates AARP's feedback and has updated language in Section 4.1, Ongoing Engagement & Partnerships, to reflect the importance of sustainable and enduring public engagements and stakeholder partnerships. It is the goal of the OBO to develop ongoing partnerships with organizations and with the public to ensure successful implementation of this plan and continued feedback with covered populations.

# **Digitunity & Device Access**

Commenters provided perspective of the importance of device access and accessibility for Oklahomans.

## **Commenter XIX**

As a national nonprofit organization focused on the device ownership aspect of digital equity, we are delighted to see the inclusion of devices as a goal within Oklahoma's plan. Owning a computer is crucial for thriving in the modern economy. Those without a computer are unable to harness the vast opportunities that the internet provides, such as employment, education, telehealth, commerce, finance, communication, and much more. Everyone who needs a computer should have one. This is a watershed moment for advancing digital equity. We offer this feedback as a means to share our unique perspective, leveraging nearly 40 years of work on the issue of device ownership, a national lens into how states are approaching the issue, and our role in administering a nationwide practitioner network. We are truly and sincerely vested in your success. First, we would like to emphasize four overarching points: Large screen device ownership: Personal device ownership provides a unique computing experience that cannot be replicated through public use of computers or shared devices. Large screen devices such as laptops, desktops, Chromebooks, and tablets, are critical for a full and equitable computing experience. While smartphones are often more affordable than the upfront cost of a computer, evidence shows the use of smartphones alone may limit the range of one's online activity and depth of overall digital skills. Ecosystem approach: To ensure that all Oklahoma residents are able to obtain a free or low cost computer, establishing a robust supply of free and affordable devices through accessible, resilient, community-level distribution systems is critical. Systems thinking is required, with active involvement from a diverse range of actors and stakeholders. Digitunity's Methodology for a Sustainable Device Ecosystem (found here) provides a

framework for addressing this issue on a large scale. Sustainability: While short-term gains are possible, our collective efforts must aim for sustainable solutions that far outlast this five-year federal investment. Building a plan around merely purchasing devices would be shortsighted, missing this landmark opportunity to create comprehensive change. Instead, we must develop solutions that transform the way corporate, government, and institutional IT assets are managed at scale. Repurposing previously used technology for community support can make computer ownership more accessible. Technology reuse is a practical and environmentally friendly solution for expanding device ownership. Device quality and intended use: Affordable devices must be reliable; quantity cannot replace quality. It is also critical that the choice of device matches a recipient's intended use and context. While less expensive devices may be a quick win within a limited budget, a healthy device ecosystem will provide economical solutions that meet the full range of recipients' needs.

Kudos!: The plan's goal of ensuring that "all Oklahomans, regardless of income, can subscribe to the internet and participate in online programs and resources with high-quality devices" is excellent. We also appreciate the goal of to "support and promote access to quality technical support options." Aim high: Ensuring that Covered Populations are able to own a large screen device is an attainable objective. While intermediate steps of loaning devices and computer labs through schools and libraries may be necessary, true equity is when all Oklahoma residents have full access to the devices that meet their needs. We encourage the state to strive for device ownership for all who need it. We encourage you to also consider how multi-member households often don't have a sufficient number of devices to allow for concurrent use. Device type clarification: While devices are mentioned throughout Oklahoma's plan, there is not a clear goal to prioritize large-screen computers over smartphones. Only using smartphones to interact with the online world is limiting. Clarifying this distinction throughout the plan for large screen device ownership will ensure that the focus remains on providing individuals with the tools necessary for full digital access and participation. Supply is critical: Generating a robust and ongoing supply of technology to be refurbished is necessary for a sustainable device ecosystem. This supply can be generated through donations from individuals, corporations, government and other organizations. In December 2022, Digitunity spearheaded the effort to pass the federal Computers for Veterans and Students Act which will soon direct repairable federal computers to nonprofit technology refurbishers. Oklahoma can be a beneficiary of this program. Efforts such as a statewide campaign for businesses donations will be extremely helpful to your efforts as well as targeted engagement of organizations with large amounts of technology. Digitunity has deep knowledge regarding the generation of supply, and can be utilized as a resource. Standards and capacity for refurbishing: Technology reuse enables a pathway to ensuring that a robust supply of affordable devices can be made available to Covered Populations. Refurbishing computers requires technical knowledge to ensure that data is properly handled. It also requires working with certified vendors to ensure that e-waste is responsibly handled and that the entire process is financially viable. We are pleased to see the intention of "developing standards and requirements for device programs", which can be applied across all aspects of the device ecosystem - supply, logistics, preparation and deployment. Digitunity stands ready to assist with this work, leveraging the role we play in administering a national practitioner network that includes 90 nonprofit computer refurbishers. Digitunity can support both with technical knowledge of refurbishing as well as our deep

familiarity of the wide range of business models and practices found within our practitioner network. Support for device deployment: Deployment is the process of distributing largescreen, internet-enabled devices to individuals, and is a complex, multi-step, multifaceted process. Specific training and support should be provided to entities that are tasked with providing devices to Covered Populations. Intentional effort should be placed on developing a deployment network through community-based organizations, with formalized connections made between device sources in populated hubs and rural deployment points. While public libraries are often thought of in this role, many libraries played this role during the pandemic (via federal Emergency Connectivity Funds) and found that they were ill-equipped and not interested in further serving as deployment partners in the future. It will be important to ensure that deployment partners are interested, have the capacity, and are supported in this role. Workforce opportunity: Refurbishing computers can be a viable workforce development program with a low entry point for staff and a robust career ladder to family sustaining wages. Plus, it may come with its own set of funding sources (such as the Workforce Innovation and Opportunity Act) to support the work on an ongoing basis. Developing a new program or integrating into an existing refurbishing program that is designed to train personnel in technical skills and refurbishment would not only increase the State's capacity but also create a pipeline of technology talent for future initiatives. ACP: A note of caution regarding relying too heavily on the ACP subsidy for device access. Use of device subsidy is reliant on the internet service provider offering a device, and, if they do, they are often low quality tablets with limited features. Our analysis of data regarding use of the device subsidy component of the ACP is shockingly low. Evaluation: We strongly recommend that performance indicators go beyond measuring the number of devices distributed. Establishing connections between and among various actors and stakeholders within an ecosystem, and the performance of the ecosystem itself, should be monitored as well. Technical support: Stronger emphasis and planning for help desk and technical support of devices is needed in the plan. Digital Navigators may not be equipped to provide this type of in-depth technical support. Connecting supply to deployment: Digitunity has a longstanding online technology donation matching platform that can be utilized to connect the supply of new and refurbished devices to vetted community organizations for deployment. This is a critical and often overlooked part of the overall device ecosystem, and we'd be happy to share more about this with your team. Regenerative process: The plan acknowledges that devices have a lifecycle, from acquisition to end of use. We encourage the development of a more detailed strategy and plan to ensure that this lifecycle is understood by stakeholders, and that end of use options such as recycling, repair, or refurbishing for further use are easily accessible and fully operationalized.

## **OBO Response**

Digitunity submitted multiple comments on the Oklahoma DE Plan. In alignment with the mission of Digitunity, one of OBO's objectives is to "ensure all Oklahomans have access to internet-enabled devices." The Office has developed key performance indicators (KPI) to measure progress throughout the implementation phase for each objective. For this specific objective, OBO will be tracking the percentage of Oklahomans with access to a high-quality device in the home. The baseline is 90%, the goal is 95%.

Digitunity suggests several considerations for device access programs; OBO will consider these recommendations when developing future grant programs and partnerships. OBO added to the DE plan a description in Section 3.1.3 about Moore High School and its device refurbishment program. This and other similar device programs are being considered by OBO as part of the objective to ensure access to internet-enabled devices. Partnerships with nonprofits, government entities, and local communities, including the added consideration for partnership with veteran-serving organizations, as veterans have lower device access rates than the state average, will allow the OBO to reach its device access goal.

# **Benton Institute**

Commenters provided input on the vision and overarching strategy of the Digital Equity Plan.

## **Commenter XX**

One key requirement of state digital equity plans is that they include a state's vision of digital equity. The National Telecommunications and Information Administration (NTIA) suggests that digital equity visions address at least these two questions: 1. What will digital equity look like in the context of your state? 2. What are the broad goals that should be accomplished in executing this plan (e.g., improve rural health outcomes, increase underrepresented youth employment in technology-related fields)? NTIA has specifically advised states to "lead with equity," intentionally identifying, amplifying, and centering the voices of those most affected by the digital divide and disconnected communities. With the extraordinary task and responsibility of state policymakers and local communities in mind, the Benton Institute for Broadband & Society launched the Visions of Digital Equity project to aid both in ensuring that more community voices are heard in crafting visions that increase opportunity for all. Through surveys, community meetings, interviews, conversations, and a collaborative writing process with community contributors, we have arrived at a set of principles to help guide both the process and the resulting visions of digital equity. We learned that a well-crafted vision of digital equity has the potential to be very powerful. It can: Offer a glimpse of a state transformed by universal connectivity, Provide a roadmap and resources for the digital inclusion efforts to come, and Act as a north star for goal setting, planning, and implementation efforts over the months and years to come. The best visions of digital equity will be community centered and focused on creating change, specific and clearly articulated, and ambitious but attainable. The Benton Institute for Broadband & Society reviewed Fulfilling Oklahoma's Digital Promise and shared a summary of it with our readers (https://www.benton.org/blog/fulfilling-oklahomasdigital-promise). Upon review, we offer 10 Principles for Digital Equity Visions (see https://www.benton.org/sites/default/files/VisionsDigitalEquity.pdf). We hope these principles help the people of Oklahoma evaluate both the draft Digital Equity Plan and the Oklahoma Broadband Office's revision of the plan. To that end, we also offer A Checklist for Evaluating Digital Equity Visions (see https://www.benton.org/sites/default/files/DEV\_checklist.pdf) Thank you for the opportunity to weigh in on the plan; I would be happy to answer any questions or discuss the potential of Oklahoma's vision for digital equity.

## **OBO Response**

The OBO appreciates the feedback from the Benton Institute for Broadband & Society and their efforts to share this DE Plan with their network. OBO's defined vision and mission in Section 2.1 provides the north star referenced to ensure that digital equity efforts are effective and inclusive of all Oklahomans. As a respected name in broadband advocacy, Benton's "10 Principles for Digital Equity Visions" is a helpful resource for measuring the effectiveness of OBO's stated digital equity vision. OBO looks forward to bringing this vision to life in the coming years.

# **General Comments**

Commenters provided feedback on other parts of the plan and on the general strategy of closing the digital divide.

## **Commenter XXI**

Without enough public spaces to allow for digital education and navigation, the public will lack critical skills needed to utilize new high speed internet access, as well as the benefits and disadvantages that come with it, i.e. cyber safety and privacy, telehealth and virtual learning. Educational entities can function as a hub for digital navigation, education, community outreach, and more. We represent populations from nearly every demographic and are working on programs tailored to address all of their needs, but securing funding is the only way we can really move forward, as the financial burden is significant. Members of our community have expressed concerns regarding our aging community members, tribal elders, and those with various disabilities in relation to how they can access services that may benefit them. I would love to see what options there are that might allow us to assist in bridging this divide. There are also questions being asked about ISPs that are stating they are running "100% fiber" when the reality is that they are running copper, sometimes with "fiber to the home" being a piece of fiber from the pole to the house.

#### **OBO Response**

OBO recognizes that local organizations and communities have been doing the work of digital equity and providing robust support for individuals in their area. This plan is meant to provide a statewide strategy, and includes resources for local communities to build out their own plans and strategies to ensure all members of the community can access services. The OBO has added some additional detail about the strategies and actions that will result in future grant programs to support programs described in this comment. OBO encourages communities and organizations to stay involved during the implementation of the DE plan and to look for future information about funding opportunities.

## **Commenter XXII**

Our State should have no part in any program based on equity. The internet is a privilege and is not something which should be provided to anyone by the State. Anyone who has access to a library can access the internet, and school children already have a program that provides internet access. Also, any program based on equity automatically violates the Constitution because it requires discrimination to accomplish.

### **OBO Response**

According to the NTIA, "too many communities lack access to high-speed internet. Many more can't afford it or don't know how to use it. The divide between those who have internet access and those who don't is stark. To create an equitable economy, we all need access to reliable and affordable high-speed internet."1 It is the stated mission of this digital equity plan to close the "digital divide by encouraging and facilitating partnerships across sectors, offering targeted grants to communities and organizations who address digital equity gaps, and by supporting communities' digital equity planning and programming." The OBO offers this plan as a comprehensive roadmap for community partners and anchor institutions, industry professionals, and residents to access online resources and programs for the enrichment of daily life in partnership with the OBO.