Fulfilling Oklahoma's Digital Promise

Digital Opportunity Plan





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Oklahoma Broadband Office Digital Opportunity Plan

1 Executive Summary

In communities 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 clear and evident. access to internet enabled devices and digital skills to safely navigate affordable, high-speed internet for all Oklahomans unlocks benefits for individuals and communities in every part of the state.

In Oklahoma, access to affordable, reliable high-speed internet is not uniform across the state. Instead, disparities between rural, urban, and tribal communities exist, restricting access to digital resources, such as telehealth services, remote education opportunities, workforce development resources, and even agricultural-technology advancements. In alignment with the Broadband Equity, Access, and Deployment (BEAD) program, which established a goal of 100% internet infrastructure availability, the Oklahoma Digital Opportunity Plan prescribes a roadmap to bridge availability and utilization gaps, 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.

More specifically, the Digital Opportunity Plan addresses internet adoption and use challenges to ensure that Oklahomans are able to employ 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 reach its goal of achieving universal service.

This Digital Opportunity Plan outlines the strategies, objectives, and implementation actions that the OBO will deploy 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 comprise the framework by which Oklahoma will pursue universal service for all in partnership with tribal nations, Community Anchor Institutions (CAIs), government agencies, non-profit organizations, and others involved in digital education programming.



2 Introduction and Vision for Digital Opportunity

The OBO understands the benefits that digitally connectivity has on individuals and communities across the state. Ensuring that all Oklahomans have safe access, affordable and reliable internet access, along with the skills to use it effectively is essential to fostering economic growth, improving health outcomes, and strengthening community well-being. High-speed internet access is no longer a luxury for some but an essential service for all, as residents, businesses, local and state governments, and communities use connectivity to access information, resources, and services. As technology evolves, so do the requirements for engaging with it, often widening the gap between groups on the wrong side of the divide – who struggle to keep pace – and those able to adapt, gaining event advantages from new advancements. By addressing this divide, Oklahomans will have the information, technology, and competencies to remain competitive and to participate in society to the fullest.

To address 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." This Digital Opportunity Plan is developed in alignment with state statute and the goals of the National Telecommunications and Information Administration's (NTIA) State Digital Equity Planning Grant Notice of Funding Opportunity (NOFO) and describes Oklahoma's coordinated efforts to mitigate and reduce digital access gaps across the state.

A central focus of the OBO's plan is collaboration with the state's 39 tribes, as a significant majority of unserved and underserved areas - approximately 81% and 80%, respectively – are located on tribal lands. Tribal consultations echoed many of the concerns raised during the broader stakeholder engagement, with both groups emphasizing the need for digital skills training, access to digital navigators at their local CAIs, improved infrastructure and more affordable service.

This Digital Opportunity Plan focuses on increasing access, adoption, and use of high-speed internet for all Oklahomans. The barriers, assets, and data discussed are disaggregated by covered populations. 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);
- Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility;
- Veterans;
- Individuals with disabilities;

Oklahoma Broadband Office. https://oklahoma.gov/broadband/office/newsroom/the-oklahoman--thousands-in-oklahoma-don-thave-internet--projec.html#:~:text=The%20Oklahoma%20Broadband%20Office%20was,but%20we%20will%20meet%20it.

- 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.

This plan serves as a comprehensive a roadmap for the advocation and implementation of digital education 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 close the digital divide by encouraging and facilitating partnerships across sectors, offering targeted grants to communities and organizations who address digital access gaps, and by supporting communities' digital opportunity planning and programming.

2.2 Alignment with Existing Efforts to Improve Outcomes

The OBO recognizes that broadband is integral to various facets of life, including health, education, workforce training, and civic engagement. In partnership with state and local entities serving covered populations, the OBO is dedicated to implementing programs statewide to promote programs and policies that promote universal service.

In its inaugural report and the 2022 Oklahoma Statewide Broadband Plan, the OBO highlighted broadband's foundational role for individuals and communities, identifying seven critical areas where broadband is essential for full societal participation:

- 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.

Digital opportunity work intersects with many of the initiatives and strategic priorities of agencies and partners in Oklahoma. It 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 across 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

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

Several economic and workforce development agencies and organizations are making significant strides across Oklahoma to cultivate the skilled workforce needed for attracting and retaining jobs in communities statewide. Recently, Governor Kevin Stitt signed Senate Bill 621, which created the Oklahoma Workforce Commission. This new body is tasked with leading the coordination, and funding efforts, aimed at developing and training a skilled workforce. This initiative is crucial for ensuring that Oklahoma remains competitive and can meet the demands of the evolving job market.

The Oklahoma Office of Workforce Development leads the Oklahoma Works, a program focused on increasing the wealth of all Oklahomans. This program is dedicated to facilitating access to quality employment opportunities, thereby helping workers build financial security and providing businesses with a highly skilled talent pool. ² In alignment with these efforts, the Launch Oklahoma initiative established an ambitious goal; to ensure that 70% of the state's workforce (25-64 years old) receive 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

The state's Workforce Innovation and Opportunity Act plan emphasizes several key sectors poised for employment growth, such as Aerospace and Defense, Agribusiness and Bioscience, Renewable and Traditional Energy, Transportation and Logistics, Automotive, and Manufacturing. As these industries expand, the need for a workforce equipped with advanced digital capacities becomes increasingly crucial.

The Oklahoma Department of Career and Technology Education is focused on developing a "world-class workforce" through a strategic approach that includes offering skills and training services to education institutions across the state, particularly to technology centers.³ Currently, Oklahoma boasts 29 technology centers on 60 campuses which

serve high school and adult learners with specialized career training in over 90 instructional areas, equipping individuals with the necessary skills to thrive in today's job market. 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.

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 Opportunity Plan. Increased access and usage of technology will allow more students and job seekers to participate in education and

² Oklahoma Office of Workforce Development. https://oklahomaworks.gov/wp-content/uploads/2017/04/Launch-OK-Strategic-Recommendations-2017.pdf
³ Oklahoma Department of Career and Technology Education. https://oklahoma.gov/content/dam/ok/en/careertech/about/reports/strategic-plan/strategic-plan.pdf

upskilling programs to earn post-secondary credentials, supporting efforts to reach these learning and workforce goals and create a more skilled Oklahoma workforce.

B. Education Outcomes

Due to the COVID-19 pandemic, schools made the transition to remote learning. For many teachers, students, and families, this represented the first time they were receiving, or teaching, educational content and instruction through an online platform. This transition highlighted the role that reliable connectivity has on educational success. Students without reliable and affordable internet or an internet-enabled high-device missed valuable learning time, leading to lasting impacts on academic performance. While most schools have returned to in-person instruction, many are applying lessons learned during the pandemic to innovate curriculum and lesson design, expanding educational opportunities through enhanced internet access.

The Oklahoma State Department of Education created *Ready Together Oklahoma*, an action plan designed to support students through the pandemic and beyond.⁴ This plan focused on improving key areas of student learning and school innovation by proposing several models of educational support that addressed the digital needs of students and teachers.

The action plan described how schools and public libraries, two key anchor institutions, developed partnerships to enhance student learning experiences. This partnership allowed 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 lending programs. Libraries also provide access to online learning platforms that students can access at the library or on their own devices. This further aligns with the Digital Opportunity Plan's mission to augment the capacity and impact public libraries can have, particularly 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 credentials are aligned with regional workforce needs and allow students to build skills, through short-term programs, and connect with employers looking to hire.

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⁴ Oklahoma Department of Education. https://readytogether.sde.ok.gov/

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

C. Health Outcomes

The Oklahoma State Department of Health's (OSDH) envisions leading Oklahomans to prosperity through improved health outcomes. Broadband is a critical part of improving in this mission, enabling telehealth and other health-related initiatives to reach residents across the state. The department's 2022 annual report outlined key goals for 2023, including advancing a 10-year plan to enhance Oklahoma's health rankings.

As a part its community health services, OSDH, in partnership with local county health departments, operates Mobile Wellness Units. These units deliver public health services to underserved communities across Oklahoma's nine Public Health Districts. Equipped with satellite connectivity, the units ensure access to vital health resources. Similar mobile health initiatives have been launched by Oklahoma State University, Oklahoma Complete Health, and other organizations.

Telehealth expansion is a major focus, particularly in rural regions, across Oklahoma. Southwestern Oklahoma State University received a \$1 million 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 have installed five soundproof telehealth booths in public libraries across Oklahoma. These booths, equipped with diagnostic tools and antimicrobial features, provide private accessible spaces for health consultations, benefiting individuals without transportation or private spaces at home. Additional accessibility features include ADA compliant improvements, motion sensor doors, improved lighting, and larger screens.

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 disparities between rural citizens and specialist providers. Funding at rural hospitals is often tenuous, 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 specialties is time sensitive, citizens receive markedly better care and demonstrate better outcomes as they no longer expend on transportation resources. 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.

Telehealth advancements are also taking place in correctional facilities. A partnership between the University of Oklahoma and the Department of Corrections has piloted programs for incarcerated populations that improve the continuum of care and improve quality of life outcomes. 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. A 2023 JAMA Network Open study estimated telehealth savings at \$147.4 to \$186.1 per visit, with even greater savings in correctional settings due to reduced logistical demands. 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

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. The growth of telehealth providers and platforms has improved accessibility and user experiences. While interoperability between systems remains a challenge, ongoing advancements are expected to address these issues as the industry evolves.

These state led-led initiatives aim to improve health outcomes for all Oklahomans, particularly in rural and aging populations. By increasing access to care, these efforts align with the goals of the Digital Opportunity Plan and underscore OSDH's commitment to expanding access to telehealth services statewide.

D. Civic and Social Engagement

Broadband access is no longer a luxury; it is essential for individuals to remain engaged with their communities. In an increasingly digital world, having access to the internet is crucial to accessing information, maintain communication, and participate in community activities, whether virtual or in-person. This Digital Opportunity Plan is designed to bridge the gap, enabling individuals to acquire the connections and skills needed to stay informed and actively involved in society. By ensuring broadband access, the OBO can foster a more informed and engaged communities.

Libraries, serve as vital anchor institutions, playing an essential role in delivering educational resources and connecting individuals to a wealth of information. In the *Library Services & Technology Act Five-Year Plan*, the Oklahoma Department of Libraries (ODL) identified key goals around increasing information access in all forms, including through digital channels. By prioritizing the development of digital skills, the ODL aims to ensure that Oklahomans can access and navigate these resources. 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.

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.

The effects of inadequate connectivity on tribal communities are profound and multifaceted. For these communities, the lack of reliable communication channels is deeply felt, especially after the loss of many elders to the pandemic.

These tragic outcomes not only affected the community but also led to the erosion of languages and traditions, as these cultural elements are often passed down through generations. Cohesive efforts to expand tribal infrastructure and digitize history have taken the forefront.

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. One service that was highlighted during focus groups was the importance of online dating. According to multiple surveys by Pew, 30% of Americans have used online dating at one point, with almost 10% using it in the last year.

Utilizing online platforms and digital processes allows citizens to be informed, to engage with society, and to participate in the governance of their communities.

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 maintain its collaboration with state and local agencies and partners to accurately identify connectivity needs. The focus of this Office remains on delivering programs and services that align with this plan and effectively support constituents. To enhance accessibility to essential programs, we will leverage online state assets, aiming to reduce inefficiencies and conserve resources through digital platforms.

The Oklahoma Human Services Department provides services to Oklahomans in need, including access to many state and federal resource programs, such as food benefits, temporary cash assistance, childcare assistance, and Sooner Care - the state's Medicaid program. Many of these services and resources are accessible digitally through online portals.

The Oklahoma Department of Rehabilitation Services provides one of the most comprehensive and detailed collection of resources for individuals with disabilities, available through their website. This resource list is widely utilized across the state, attracting tens of thousands of visitors each month. In addition to the extensive list of resources, the department offers valuable information and services related to independent living, job searching, and even a system for self-referral to available resources. Accessing this list, along with many other connected services, requires reliable internet connectivity.

Connectivity is also essential for disaster and emergency management. A key example of this is how local fire departments maintain databases of storm shelters in their areas to efficiently locate shelters and contact appropriate individuals. It is vital that fire departments remain connected to maintain these lists updated and accessible, just as it is crucial for residents to have access to connectivity for registration, receiving communications, and staying informed through news updates. The Oklahoma Department of Emergency Management's State of Oklahoma Emergency Operations Plan outlines essential communication procedures during times of disaster. In emergency situations, having connectivity is critical to distribute important alerts and action items to residents.

The Oklahoma Department of Corrections, in collaboration with Securus Technologies, has rolled out more than 20,000 tablets to inmates statewide. These tablets enable inmates to stay in touch with loved ones while also providing access to approved education, employment, and entertainment resources.

Furthermore, the Oklahoma Department of Transportation (ODOT) is responsible for establishing a registry for broadband vendors and telecommunication providers in the state. This registry ensures that these companies are informed about upcoming ODOT constructions projects (over the next eight years) in areas [they] may have or are going to install broadband services."5

Aligning The Digital Opportunity Plan with State Goals

Governor Kevin Stitt's vision for Oklahoma prioritizes policies and programs that will guide the state toward becoming a Top 10 State. His priorities include fostering hope for all Oklahomans, safeguarding the state and its way of life, making Oklahoma the most business-friendly state in the nation, and delivering greater value for dollars. Broadband expansion will help attract businesses, grow talent pipelines, improve government service efficiency through online platforms, and enhance outcomes in health, education, and workforce development across the state. Broadband is a key driver of prosperity for Oklahomans, and the goals outlined in this Digital Opportunity Plan support and strengthen ongoing efforts to expand opportunities for Oklahomans. The Oklahoma Broadband Office's (OBO) legislative mandate, as outlined in House Bill 3363, passed in May 2022, aims to provide 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 Opportunity Plan works in tandem with the BEAD program's goals, objectives, and initiatives to expand broadband access and affordability for Oklahomans. Collaboration with state and local partners will help increase resources and address all aspects of the digital divide. By removing barriers to affordable, highspeed internet access and usage, this plan will boost adoption rates and enable more Oklahomans to fully engage in the digital economy.

2.3 Strategy and Objectives

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.

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

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

⁵ Oklahoma Department of Transportation. https://okbroadband.org/#/forms/vendor/landing

Objective: Ensure all Oklahomans have access to affordable and reliable high-speed internet.

- Strategy 1: Increase enrollment in the Lifeline Program and other low- cost internet service programs in unserved and underserved communities.
- Strategy 2: Implement scalable and cost-effective broadband solutions, such as mesh Wi-Fi networks, to bridge connectivity gaps, especially in remote and rural areas.

Strategy 3: Collaborate with rural development organizations to create a joint funding pool that can offer Wi-Fi installation in multi-dwelling units. (MDUs). Objective: Ensure all Oklahomans have access to internet-enabled devices.

- **Strategy 1:** Execute a strategic procurement and distribution of refurbished devices to address barriers to device ownership that many Oklahomans face, particularly in rural, low-income, and underserved areas.
- Strategy 2: Create a referral pipeline to promote free and reduced cost device distribution programs, such as computer refurbishment programs and library lending programs.
- Strategy 3: Implement consumer education programs and outreach strategies to promote affordable device programs for Covered Populations.
- Strategy 4: Support and promote access to quality technical support options.

Fulfilling Oklahoma's Digital Promise - Access

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

Objective: Ensure that all Community Anchor Institutions (CAIs) have access to affordable and reliable high-speed internet.

- Strategy 1: Install and upgrade public access computer labs in CAIs, prioritizing underserved rural and urban areas with limited broadband and technology access.
- Strategy 2: Ensure technology parity and access to modern internet-enabled devices in tribal communities.
- Strategy 3: Expand public access Wi-Fi mesh networks, through nodes, in unserved and underserved communities.

Objective: Increase the number of Oklahomans, including all Covered Populations, thatcan access and use digital resources safely.

- Strategy 1: Incorporate tailored digital skills programs to equip Oklahoma residents, across all age groups, with technology skills essential for education, workforce development, and everyday tasks.
- Strategy 2: Develop internet cyber-safety training curriculum and materials to promote safe internet use practices.

Objective: Increase accessibility of state digital resources for Covered

Populations.

- Strategy 1: Create an online resource to allow all Oklahomans to find and connect to available programs and support.
- Strategy 2: Ensure that digital tools, resources, and services are accessible to persons with disabilities, promoting inclusivity and equal opportunities for all.
- Strategy 3: Develop multi-language digital resources for Tribal communities and English learners.

Fulfilling Oklahoma's Digital Promise - Advancement

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

Objective: Ensure Oklahomans can participate in online opportunities to advance health, education, and economic goals.

- Strategy 1: Promote participation in tele-health initiatives and programs statewide.
- Strategy 2: Develop Digital Navigator curriculum and training programs for rural CAIs.
- Strategy 3: Partner with civic engagement organizations to educate and promote voter registration and electoral participation.

Objective: Ensure that the State of Oklahoma is able to meet workforce and economic development goals so all residents can thrive in a digital world.

- Strategy 1: Ensure local, regional, and state planning processes incorporate best practices.
- Strategy 2: Increase access to workforce training for Covered Populations.
- Strategy 3: Expand Oklahoma's existing resource and funding maps, in partnership with partner agencies and organizations, to collect insights for digital resources and services available locally.

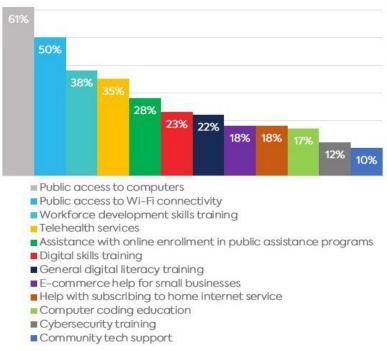
3 Current State of Digital Opportunity: Barriers and Assets

3.1 Digital Access Assets in Oklahoma

The OBO conducted extensive outreach and implemented the advisory supports and data collection activities described in Section 4 of this Digital Opportunity Plan to inventory digital inclusion assets and digital access plans and programs in the state. Many organizations, local governments, tribal nations, education and workforce institutions and other community-based organizations engage in digital education work in varying capacities, from the librarian helping a senior set up an email account, to 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 to understand where they are and what covered populations they serve. This analysis identified digitally focused programming availability, distribution frequency, and gaps areas that require heightened focus and supports.

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 in 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 1 shows the full responses to the prompt.

Figure 1: Digital Inclusion Opportunities Available



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

3.1.1 Digital Opportunity Assets by Covered Population

Communities across Oklahoma leverage available resources to provide digital education and inclusion programming and resources to residents. These local, regional, and statewide assets comprise the existing digital opportunity ecosystem in the state, with many providing tailored 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

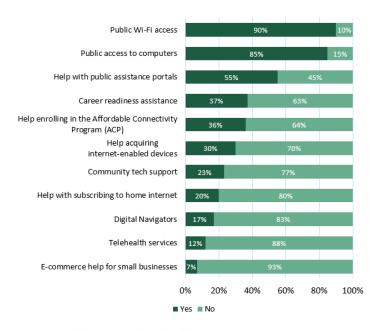
The OBO developed and administered an organizational survey, allowing education institutions, CAIs, local governments, nonprofit and faith-based organizations, health care organizations, and others to submit information about their digital education planning and programming. In addition, the OBO collected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

Throughout these processes, libraries were routinely the most frequent respondent to the organizational survey. Nonprofit organizations, regional governments, and institutions of higher education also provided a high degree of input during the resource mapping and asset collection process.

The table, in Appendix B, provides a detailed list of all digital access and connectivity assets available statewide, including organization details, program type, and covered populations serviced.

Co-locating resources and assetsacross the state allows the OBO to better understand hyperlocal needs, scale and support successful efforts, and mitigate gaps in services across geographies statewide. Figure 2 shows the range of 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) were found to be the services least offered by Oklahoma-based organizations.

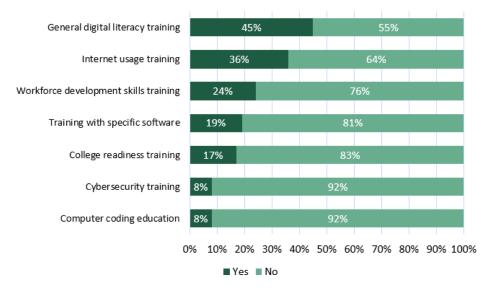
Figure 2: Digital Access and Connectivity Offered by Organizations in Oklahoma



Source: Oklahoma Broadband Office community organization survey, 2023

Many entities offer tailored digital skills training opportunities to covered populations. Figure 3 shows the types of digital skills trainings programs being offered. The most common types of trainings consist of general digital literacy training (45% of respondents) and internet usage training (36% of respondents). These findings aligned with the qualitative metrics collected via the organizational survey - where organizations described their digital literacy offerings or specific support to individuals based on their needs. Cybersecurity training (8% of respondents) and computer coding education (8% of respondents) were found to be the services least offered digital training offered by respondents.

Figure 3: Digital Skills Trainings Offered by Organizations in Oklahoma



Source: Oklahoma Broadband Office community organization survey, 2023

Several of these assets and resources are described in further detail as part of the exploration of existing programs in Section 3.1.3.

3.1.2 Existing Digital Equity Plans

Communities are aware of specific connectivity challenges and have mobilized to create solutions to expand broadband access and increase usage of the internet by their constituents. The OBO collected planning documents from local communities, including digital equity plans, data, and other artifacts that demonstrate local needs. The OBO hosted a 19-stop listening tour (described in Section 4) to hear directly from communities and constituents about these plans and solutions. Additionally, the OBO conducted formal tribal consultations with all tribal nations to understand the barriers and opportunities for digital equity for tribal communities. The OBO also created and administered 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 and inclusion efforts.

The following section describes existing digital equity plans within the state. Although many municipal governments are actively engaged in expanding broadband access, adoption, and use, few have formalized current and future plans. An analysis of local and regional planning documents, along with ongoing digital equity efforts, have been included throughout this Digital Opportunity Plan. The OBO recognizes the importance of local and regional digital equity and inclusion planning and coordination efforts and has included strategies and actions in Section 5 to support the digital equity and inclusion planning efforts of local communities and community anchor institutions.

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 affordability programs, such as Lifeline, to encourage partnerships between workforce and technology centers to increase digital literacy skills essential for workforce opportunities.

City of Tulsa

The City of Tulsa, in collaboration with Governor Kevin Stitt, Mayor G.T. Bynum, and officials from Tulsa Public Schools and Impact Tulsa, formed a 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.⁶

 $^{^6 \} City \ of \ Tulsa. \ https://www.cityoftulsa.org/press-room/officials-announce-internet-access-plan-for-tulsa-upcoming-programs-aimed-to-help-tulsans-impacted-by-covid-19/$

3.1.3 Existing Digital Equity Programs

Several digital equity programs, including those serving covered populations, are available to Oklahoma residents. These programs provide critical support to Oklahomans in digitally vulnerable communities across the state, helping them access and navigate the internet and online applications. During the "Let's Get Digital: Oklahoma Broadband Tour", organizations highlighted this work including hotspot lending programs, for students during the pandemic, supporting library patrons filling out a job application, and helping seniors navigate online portals to access to transit services.

"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.

Affordable Connectivity Program

The Affordable Connectivity Program (ACP) was a key resource to closing the digital divide in Oklahoma, specifically for low-income households that would otherwise be unable to subscribe to a monthly internet subscription. The ACP was a Federal Communications Commission (FCC) benefit program offering a discount, for internet subscriptions, of up to \$30 per month for eligible households and up to \$75 per month for households on qualifying tribal lands. Eligible households could also receive a one-time discount of up to \$100 to purchase a device from participating providers.

Oklahoma was awarded \$1.8 million dollars in early 2023 as a part of the Federal Communications Commission ACP Outreach program.⁸ The OBO received \$500,000 to create an ACP awareness campaign that included 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.

⁷ Federal Communications Commission. https://www.fcc.gov/acp

 $^{{}^8} FCC \ Announces \$ 66m \ in \ Affordable \ Broadband \ Outreach \ Grants. \ https://www.fcc.gov/document/fcc-announces-66m-affordable-broadband-outreach-grants-0$

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." Through the TulsaWORKS Career Academy, participants 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 more advanced and designed for students actively pursuing careers that require heightened computer fluency and overall proficiency. The classes are part of the ongoing curriculum offered free-of-charge to the public through the TulsaWORKS Career Academy.

In 2023, Goodwill Industries of Central Oklahoma received a \$10,000 grant from the Kirkpatrick Family Fund to create a new Digital Literacy Lab. 10 The lab, which opened in late 2023, feature 25 laptop computers, a printer, training curriculum, and staff. Services will include one-on-one training opportunities on topics such as computer basics, cell phone basics, job placement, and more. In order to promote digital opportunity locally, access to the lab and training programs will be free.

OSU's Rural Library Hotspot Lending Program

The Oklahoma State University's Division of Agricultural Sciences and Natural Resources collaborates with rural to expand public access internet solutions"¹¹ This work increases broadband access through hotspot devices lending programs to enable employees to work remotely, residents to surf the web at home, and provide students with additional learning bandwidth. The program currently serves over 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.

Lawton Public Library: Digital Inclusion Resources

The Lawton Public Library offers a diverse set of free resources to the public, including telehealth booths and digital literacy instruction. Digital literacy workshops cover topics ranging from internet navigation basics, to email basics, and internet safety and cybersecurity. Learning opportunities are free and open to the public. The library also performs a critical health care role in the community through its existing telehealth provisions. The library provides a channel through which patrons can attend virtual visits with a medical provider. As is the case statewide, the Lawton Public Library also offers public access computers, free Wi-Fi, and digital support and assistance to patrons. The library is a foundational anchor institution providing a multitude of services and resources to the Lawton community.

⁹ Goodwill Industries of Oklahoma. https://www.goodwilltulsa.org/gwt/TulsaWorks3.asp

¹⁰City 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_01d8obb2-11c1-11ee-94bo-dbcfd5od55b5.html

 $^{^{\}rm u}$ Oklahoma State University, Division of Agriculture Sciences and Natural Resources. https://extension.okstate.edu/programs/rural-library-hotspot-lending-program/

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

The American Electric Power Digital Literacy Lab, located in the Tulsa City-County Library, is a creator-focused working space for library patrons. The lab provides a space for library-goers to develop new apps and software skills, test new technology, digitize family history, and much more. Orientation is offered twice a month to familiarize community members with the lab's offerings. The library offers special programs and classes throughout the year in the Lab for all age groups.

Urban League of Greater Oklahoma City

The Urban League of Greater Oklahoma City offers empowerment programs that focus on facilitating economic mobility for the poor and for people of color. This work encompasses the following: workforce and career development for individuals who are unemployed, underemployed, or seeking a career change, and previously or currently justice involved individuals. The After Prison Work Initiative specifically addresses challenges faced by individuals with barriers to employment, including need for basic computer skills. In 2023, staff completed a train-the-trainer program in basic digital literacy skills to support efforts to expand digital literacy training statewide.

Oklahoma State University Institute of Technology

The OBO has supported workforce initiatives to support the buildout of broadband infrastructure through the BEAD Program, other grant programs, and privately funded projects. The 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, specifically in rural areas. OSUIT also received an additional \$754,970 from NTIA's Connecting Minority Communities Pilot Program to expand efforts to train minority populations to become fiber optic technicians. This effort aims to scale existing industry-specific training programs for members of the Muscogee and Cherokee Nations, respectively. OSUIT also focuses recruitment on covered populations, including formerly incarcerated individuals.

Northeast Oklahoma Accelerate Program

Heartland Forward, through the Connecting the Heartland Initiative, partnered with the Benton Institute for Broadband & Society to "creat[e] a new planning and capacity-building program to support northeastern Oklahoma communities plan for and use infrastructure funding for community- driven high-speed internet expansion." ¹⁵ Applications opened in September of 2023 for the Oklahoma Accelerate program. Local governments in northeastern Oklahoma communities received support and training as they prepared to participate in federal funding opportunities available through the Infrastructure Investment and Jobs Act (IIJA).

¹² Tulsa City-County Library. https://www.tulsalibrary.org/programs-and-services/aep-foundation-digital-literacy-lab ¹³ Urban League of Greater Oklahoma: After Prison Work Initiative program page. https://urbanleagueok.org/programs/after-prison-work-initiative-apwi/

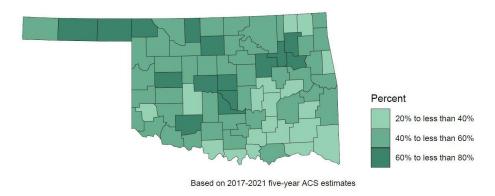
¹⁴ Biden Administration Awards OSUIT \$750k Grant. https://osuit.edu/news/biden-administration-awards-osuit-grant.php ¹⁵ Connecting the Heartland. https://connectingtheheartland.com/heartland-forward-and-the-benton-institute-for-broadband-society-open-applications-for-northeast-oklahoma-accelerator-program-to-prepare-communities-for-internet-infrastructure-investment/#:~:text=The%20Oklahoma%20Accelerator%20is%20designed,week%20of%20October%2023%2C%202023. Page | 23

3.1.4 Broadband Adoption in Oklahoma

Many Oklahomans adopt and are subscribed to high-speed internet services. The United States Census Bureau's American Community Survey (ACS) collects data about home internet subscriptions and internet-enabled computing devices in the household. These data metrics exist at multiple levels of aggregation, including at the County and State level, and can be broken down by household income. Figure 4 below illustrates the ACS 2017-2021 five-year estimates of household adoption rates to fixed home internet services at the County level; these numbers exclude households with a cellular data plan but no other type of additional internet subscription, households with a dial-up internet connection 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 a fixed home internet service (broadband such as cable, fiber optic, or DSL).

Figure 4: Fixed Home Internet Adoption Rates by County



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

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.

OBO data, from the residential technology survey, illustrated higher rates of internet adoption, concluding that 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 is important to note that these findings are skewed, given the small sample size, and not indicative of the current state of broadband statewide.

"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 services, 94.1% reported that their advertised download speeds were higher than 25 Mbps – the Federal Communications Commission's current definition of broadband. The average download speed reported was 276 Mbps.

Oklahomans who subscribe to home internet service, including those who belong to covered populations, use their internet services 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 video conference for work and to stay connected with their community. Figure 5 shows the full results for specific covered populations.

Figure 5: Internet Use Among Covered Populations in Oklahoma

	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%

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

In addition, the residential technology survey found that adults in Oklahoma use the internet for a variety of different activities. Communicating via 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, 71%, reported using their internet connection for online banking or paying bills

and approximately 60% used the internet to read online newspapers or other news sources. Figure 6 expands on the full range of internet usage based on survey findings.

Communicate through e-mail or other ways of sending messages Online banking or paying bills Reading online newspapers or other news sources Search for medical or health care information Communicate with your doctor or other health care Access or search for government services Search or apply for jobs Conduct research for schoolwork Taking online classes Advertise or sell products or services 40% 60% 80% 0% 20% 100% ■ Yes ■ No

Figure 6: 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, answers included the following:

- "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 ACP provided 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 increased to \$75 per month. Household eligibility was 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. This program, administered by the Universal Service Administrative Company (USAC), 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 through the Link Up Program.

Identifying the population eligible for the ACP program proved 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 were eligible for the ACP.¹6 Of those eligible, 45.3% of households successfully enrolled in the program.

Figure 7 below depicts the percentage of eligible households that subscribed 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). 17 **Overall, Oklahoma ranked ninth in the country in ACP participation.**

Figure 7: ACP Participation by State

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%

¹⁶ Education Superhighway. https://www.educationsuperhighway.org/no-home-left-offline/acp-data/

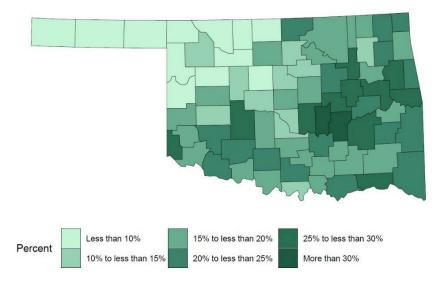
https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state

¹⁷ Universal Services Administrative Company.

Rank	State / Territory	Enrolled	Eligible	Percent
10	Michigan	753,076	1,690,382	44.6%

Unfortunately, eligibility data could not be discerned at the county level from these data sources. To visualize ACP participation, Figure 8 below displays the percentage of total households in each county that have enrolled in the program as of June 2023. ACP enrollment data is sourced 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 had the highest rate of ACP participation (33%), followed by Hughes County (31.8%), Okmulgee County (28.1%), and Pottawatomie County (28.1%).

Figure 8: Households Participating in the ACP by County

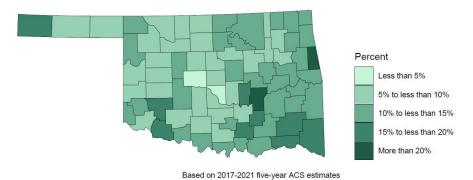


Based on USAC's ACP Enrollment and Claims Tracker and 2017-2022 five-year ACS estimates

Device Ownership

Device ownership is another key indicator of broadband adoption and affordability. Figure 9 below illustrates the percentage of households in every county that do not own any internet-enabled devices. These numbers derive from the 2017-2021 five-year estimates from the ACS. Statewide, 8% of households do not own a computer.

Figure 9: Households without a Computing Device by County



"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 often face multiple barriers preventing them from accessing and using the internet safely. The State of Oklahoma has taken multiple steps to identify the challenges that households are facing preventing 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 subsequently informed the strategies and actions found in Section 5.

In Oklahoma, adoption rates vary across county and community types statewide. Additionally, many households have a physical internet connection available but are not currently adopting the internet. Figure 10 shows Oklahoma counties with the lowest fixed home internet adoption rates.

Figure 10: Fixed Home Internet Adoption Rate by County

Rank	County	Fixed Home Internet Adoption Rate
68	Choctaw County	31.0%
69	Latimer County	30.6%

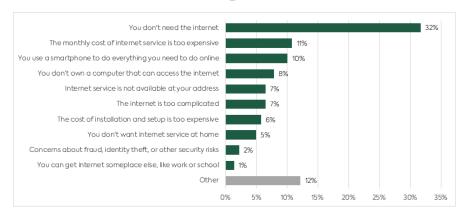
Rank	County	Fixed Home Internet Adoption Rate
70	Adair County	30.3%
71	Johnston County	28.1%
72	McIntosh County	28.1%
73	Love County	27.9%
74	Pushmataha County	27.7%
75	Hughes County	27.3%
76	Nowata County	27.3%
77	Atoka County	22.3%

Source: Based on 2017-2021 five-year ACS estimates

Understanding the barriers that prevent covered populations from adopting internet services is necessary to build a Digital Opportunity Plan and the appropriate programs that can both mitigate and remove these barriers and support more households to get connected. 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 11 below illustrates the primary reasons why residential survey respondents were found to not subscribe to home internet service.

Figure 11: Barriers to Home Internet Adoption



Source: Oklahoma Broadband Office residential technology survey, 2023

The most cited rationale, or barrier to adoption, was that respondents did not feel that they needed the internet. This was closely followed by the monthly cost of internet service. The OBO concluded that the large percentage of respondents who claim not to need the internet could reflect their overall digital skills – namely, without proper digital skills to navigate the broadband world, it would be difficult to recognize the advantages that having internet tends to afford people.

To supplement the residential survey data and barrier analysis, the OBO polled participants at the "Let's Get Digital: Oklahoma Broadband Tour" about the challenges they and their communities face to connect to the internet. Figure 12 displays the most pronounced barriers reported.

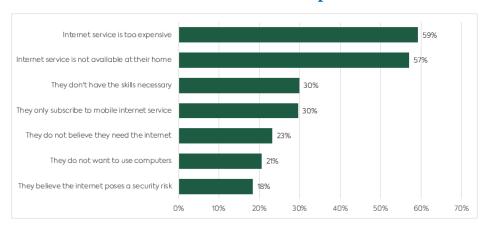


Figure 12: Perceived Barriers to Home Internet Adoption

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

Overall, attendees cited affordability (59%) and availability (57%) of internet services as the most prominent barriers that community members experienced.

Thirty percent of listening tour attendees cited lacking digital skills as another key barrier for their communities. An internet service provider (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."

OK resident at listening tour stop For households in Oklahoma, including covered populations, one of the most prominent barriers to a home internet subscription is the high cost of a monthly service. For many, the high cost of a monthly service renders Oklahomans to rely on public access Wi-Fi, cellular data plans, or other publicly available connectivity solutions.

In focus groups, affordability also emerged as a key barrier, primarily 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 lacked promotion within their communities.

3.2.1 Covered Population Needs Assessment

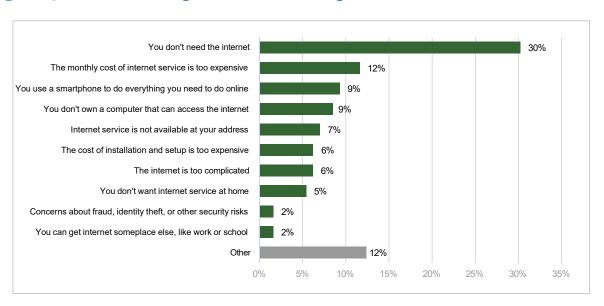
Understanding the specific affordability, accessibility, and navigation barriers that covered populations experience is key to developing effective strategies, plans, and programs to adequately address these circumstances.

Stakeholder engagement efforts, including listening tours, focus groups, and the OBO's residential survey, highlighted the many challenges that Oklahomans barriers and how they affect covered populations, face across the state, with many Oklahomans experiencing a combination of circumstances that affect their ability to be safely connect and navigate the internet. The qualitative and quantitative data collected, and disaggregated by the OBO illustrates the challenges that covered populations these impediments to connectivity. 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 13 shows barriers to adoption for all covered populations.

Figure 13: Barriers to Adoption for Covered Populations



 $Source: Oklahoma\ Broadband\ Office\ residential\ technology\ survey, {\it 2023}$

These datasets are further aggregated in the section below.

Aging Individuals (60+)

For aging individuals, the primary barrier to internet subscription identified 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 14 below illustrates the barriers that aging individuals without home internet service experience.

You don't need the internet

The internet is too complicated
You don't own a computer that can access the internet
You don't want internet service at home
The monthly cost of internet service is too expensive
The cost of installation and setup is too expensive
You use a smartphone to do everything you need to do online
Internet service is not available at your address
You can get internet someplace else, like work or school
Other

0% 5% 10% 15% 20% 25% 30% 35%

Figure 14: Barriers to Internet Subscription for Aging Individuals (60+)

Source: Oklahoma Broadband Office residential technology survey, 2023

An in-depth analysis of the survey results uncovers further challenges faced by this population.

While 91% of aging individuals reported having a computer at home, those 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, 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 indicate that aging individuals often find it difficult to navigate the internet, likely because they lived without the internet for much of their lives.

These findings align with data collected during the Aging Populations Focus Group. Participants identified several challenges related to accessing and using the internet. These challenges included the need for increased education, an understanding of where resources are in the community and how to

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.

"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

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

For low-income households, the barrier to internet access was the perception that they did not need the internet, with 23% of respondents citing this reason. Following that, affordability issues emerged as significant barriers:15% cited not having a computer capable of accessing he internet, and another 15% indicated that the monthly cost of internet service was too high.

Figure 15 below illustrates the reasons respondents from low-income households that lack home internet service do not subscribe.

You don't need the internet

The monthly cost of internet service is too expensive
You don't own a computer that can access the internet
The internet is too complicated
You use a smartphone to do everything you need to do online
The cost of installation and setup is too expensive
You don't want internet service at home
Internet service is not available at your address
Concerns about fraud, identity theft, or other security risks
Other

0% 5% 10% 15% 20% 25%

Figure 15: Barriers to Internet Subscription for Low-Income Households

Source: Oklahoma Broadband Office residential technology survey, 2023

Compared to all respondents without home internet, those from low-income households were more likely to cite cost as the reason for not subscribing. They were also nearly twice as likely to report not having a computer that could access the internet.

When looking at the data more closely, individuals from low- income households without a computer were nearly twice as likely to say they did not own one because computers are too expensive.

Additionally, respondents from low-income households with home internet reported slower internet service than others surveyed. Over 16% subscribed to speeds slower than 25 Mbps - the FCC's current definition of broadband. Among all respondents with home internet, only 6% subscribed to such slow speeds.

Racial or Ethnic Minorities

The primary barrier reported by racial and ethnic minorities regarding internet access was the belief that they did not need the internet, with 29% of respondents citing this reason. Additionally, 12% indicated that the monthly cost of internet was too high, and another 12% mentioned that they did not own a computer capable of accessing the internet.

Figure 16 below illustrates the reasons why racial or ethnic minorities without home internet service choose not to subscribe.

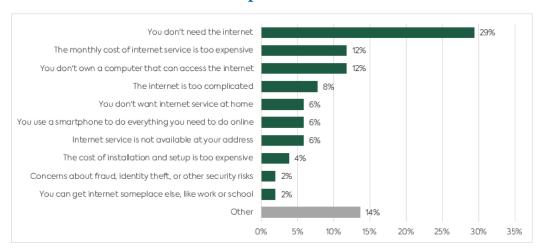


Figure 16: Barriers to Internet Subscription for Racial or Ethnic Minorities

Source: Oklahoma Broadband Office residential technology survey, 2023

The survey did not explore the reasons why some individuals felt they did not need the internet. However, the most cited barriers were related to affordability. Among racial or ethnic minorities who do not own a computer, 18% stated that the main reason was that computers are too expensive, compared to 14% of all respondents without computers. Additionally, 21% reported using a cell phone instead of a computer for all their needs, compared to 18% of all respondents without computers.

Focus groups supported the survey findings. While these respondents the importance of the internet, 25% mentioned that immediate family members who did not see the need for it. Nearly 13% did not own a computer capable of accessing the internet. Although all respondents identified cost as a primary barrier, none were aware of programs that offer more affordable internet service or devices.

The ACP which offered discounted internet, and free or more affordable internet enabled devices to those who enrolled, was a solution to these affordability concerns; however, that program has since been terminated. Transition efforts, from the ACP to Lifeline, can mitigate existing affordability concerns going forward, specifically for those residents living on tribal lands. Compared to all survey respondents, racial or ethnic minorities were less likely to be familiar with these programs and less likely to participate.

Individuals who Reside in a Rural Area

The top reason why rural households do not subscribe to home internet service is the belief that they do not need it, reported by nearly one in five non-subscribers (Figure 17). This is followed by a lack of available internet service, a concern for 12% of rural non-adopters. Additionally, 10% of respondents indicated that they don't want home internet service, find the monthly costs too expensive, or do not have a home computer. These challenges suggest that many rural Oklahomans have not yet concluded that that home internet service is valuable enough to justify the installation and monthly fees.

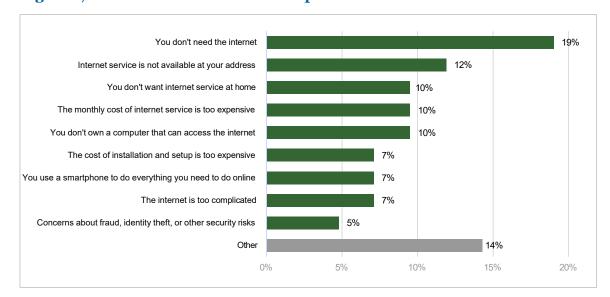


Figure 17: Barriers to Internet Subscription for Residents in Rural Areas

Source: Oklahoma Broadband Office residential technology survey, 2023

Rural residents were also involved in several of the covered population focus groups administered by the OBO. When discussing their experiences, they expressed many internet accessibility and affordability challenges. Respondents also highlighted the difficulties associated with telehealth engagement. 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."

Persons with Disabilities

Persons living with disabilities, the most common barrier to home internet adoption is the belief that they do not need the internet, as cited by 35% of respondents. Additionally, 11% of participants indicated that they do not subscribe to home internet because they rely on their smartphones for all their online needs. Figure 18 below illustrates the primary barriers to home internet adoption experienced by persons living with disabilities.

Figure 18: Barriers to Internet Subscription for Persons with Disabilities

Source: Oklahoma Broadband Office residential technology survey, 2023

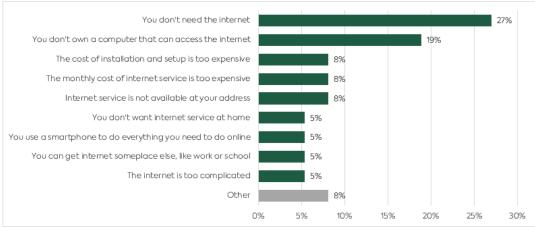
Unlike other covered populations, the use of technology and the internet by persons with disabilities is significantly hindered by accessibility issues. Websites and resources that do not meet standards can be physically impossible to access, making the internet less appealing overall. This can make it seem more complicated, and there may be fewer available websites that are accessible. Additionally, assistive technologies are often highly specialized and do not always leverage interoperability to the same extent as comparable devices used by people without disabilities. For instance, certain applications that may be available for iPhone but not for 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 19 below illustrates why veterans without home internet service do not subscribe.





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.

Promotion of the ACP program to this covered population helped to offset the price that they paid. 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 qualified for the program, but those that received the Veterans Pension and Survivors Benefit were eligible. Another solution would be to promote the Lifeline Program and free or low-cost device distribution programs to increase connectivity access.

In their focus group, veteran participants identified reliability as the main barrier to using the internet. Many cited affordability as another concern, but all agreed that broadband is a necessity they are willing to pay for. Several participants also talked about accessing military resources online, including using ID.me to verify military status and access those resources. Overall, participants expressed less interest in telehealth. One veteran remarked, "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 commonly cited reason people with a language barrier do not subscribe to an internet service is that they feel they do not need the internet, accounting for 44% of respondents. Additionally, 25% of respondents highlighted that the monthly cost of internet service is too expensive.

Figure 20 below illustrates the main reasons why people with language barriers do not subscribe to home internet service.

You don't need the internet

The monthly cost of internet service is too expensive

You use a smartphone to do everything you need to do online

Concerns about fraud, identity theft, or other security risks

Other

13%

Other

13%

Other

13%

Other

13%

Other

13%

Figure 20: Barriers to Internet Subscription for Persons with Language Barriers

 $Source: Oklahoma\ Broadband\ Office\ residential\ technology\ survey, 2023$

 ${}^{18}\ Federal\ Communications\ Commission.\ https://www.affordable connectivity.gov/do-i-qualify/$

Compared to all survey respondents without home internet, individuals with language barriers were more than twice as likely to find the cost of internet as the primary obstacle to subscribing. This finding aligns with the results of the focus group for individuals with a language barrier focus group, where 100% of respondents cited the cost as their main barrier.

Individuals with language barriers were also more likely to subscribe to home internet technologies associated with higher latency, which often leads to slower speeds for many activities. Specifically, compared to all respondents with home internet service, those 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 discussed several barriers they encounter when trying to access and use high-speed internet. They described different options for accessing the internet, 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 major concern among participants, who mentioned issues such as "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 obstacles to obtaining a home internet connection.

Additionally, participants identified challenges within their community regarding internet navigation and locating relevant content. These challenges 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 participants were asked if they knew of any low-cost or affordable internet subscription programs, all of the participants responded no. This suggests that increased outreach about the Lifeline Program and other low-cost programs is needed to boost enrollment.

In a focus group conducted by the City of Tulsa and Partner Tulsa in East Tulsa, participants identified several 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." ¹⁹

¹⁹ City of Tulsa and Partner Tulsa Report. *Engaging Tulsa's Immigrant Communities in Tulsa's Digital Tech and STEM workforce*. September 2023.

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 which includes state and private prisons, as well as local jails.²⁰ State operated facilities employed 4,902 and had a budget of \$634,500,000, while 23,027 offenders were under probation and 2,237 were under parole.

The Office of Behavioral Health (OBO) consulted with organizations representing currently and formerly incarcerated individuals. These discussions highlighted technology-related challenges faced by inmates re-entering society. Barriers such as employment, housing, and transportation could be eased with better access to high-speed internet.

During the Digital Equity Coalition call, leaders noted that access to workforce development and health care is critical for recently released inmates. Many job applications and job interviews are online, yet many ex-inmates lack the funds to afford a device or internet service and may be unfamiliar with the necessary technology. This digital divide can lead to mental health issues, making affordable healthcare and mental health resources essential for reducing recidivism.

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 evident in the in the mapping of unserved and underserved locations. The OBO engaged with all 39 tribes, inviting them to participate informal consultations, which were conducted throughout the planning process. During these consultations, the focus largely revolved around addressing the lack of broadband service. Due to limited investment and availability of broadband infrastructure, tribal communities often have to rely on inferior technologies that come with slower speeds, higher latency, increased maintenance costs, and inconsistent service availability. The absence of sufficient infrastructure has also resulted in a smaller number of service providers in these regions. With fewer providers and a lack of competition, costs for internet services remain high, forcing tribes to pay more for subpar service.

This limited access to internet services significantly affects tribal communities and their ability to access essential resources. In one 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]."

²⁰ National Institute of Corrections: https://nicic.gov/resources/nic-library/state-statistics/2020/oklahoma-2020

During tribal consultations, an issue that was repeatedly highlighted was a lack of grant writing experience, which hindered the ability to develop strategies and apply for tribal specific grant funding. Many tribes, often being led by elders, experienced significant turnover during COVID pandemic, which negatively impacted administrative work. Larger tribes, with more consistent income, were somewhat better equipped to manage this challenge. In contrast, smaller, less affluent tribes struggled to take advantage of the substantial federal funding opportunities that were available. Section 5 of this Digital Opportunity Plan outlines the 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 created opportunities for residents, organizations, and leaders statewide to share their insight on planning priorities. By leveraging existing structures, such as the OBGB and the OBEC, and expanding outreach through coordination with state agencies, local and regional governments, CAIs, and organizations that serve covered populations, the OBO gained a comprehensive understanding of broadband challenges, assets, and priorities across Oklahoma.

The stakeholder engagement model outlined below illustrates the extensive engagement across Oklahoma and the various methods used for outreach. Stakeholders from established advisory entities provided continuous feedback and insights into broadband challenges and opportunities. Meaningful outreach and multiple participatory mechanisms facilitated comprehensive engagement and qualitative data collection from key groups, including covered populations. In addition, quantitative data collection activities helped to further illuminate the barriers and assets present in the state.

Figure 21: Oklahoma Broadband Office Stakeholder Engagement Model

Advisory Supports				
Broadband Governing Board	Broadband Expansion Council	Digital Equity Coalition		
I	Participatory Mechanisms	S		
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		

This model ensured that the OBO engaged effectively with diverse populations during the development of the Digital Opportunity Plan, providing organizations, governments, residents, and other stakeholders had multiple opportunities to provide input.

Stakeholders & Advisory Supports

Access to a reliable, affordable broadband connection is essential for Oklahomans. It is a requirement for many activities in both the government and private sectors. The OBO conducted extensive outreach to identify and engage with key stakeholders for meaningful collaboration.

The table below documents public engagement involvement by stakeholder type.

Figure 22: Participatory Mechanisms for Oklahoma Stakeholders

	Listening Tours	Focus Groups	Residential Survey	Organization Survey	DE Coalition	ISP Roundtable	Tribal Consultation	Local Coordination Workshops	Media 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									

The OBO conducted extensive discussions with various stakeholder groups and entities across the state, including organizations that represent covered populations. Particular emphasis was placed on engaging with unserved and underserved communities to gain a better understanding of the areas and individuals most impacted by this Digital Opportunity Plan. More details about these engagement activities are provided in the following sections. A complete list of stakeholder meetings can be found in Appendix D.

During the planning process for the Digital Opportunity Plan, the OBO collaborated with three formal advisory groups. 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:

- Micah White, Chief Engineer, Veri Wat. Bixby
- 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 regarding policies that can improve, expand, or 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
- 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 insights regarding 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 opportunity 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

Local Coordination

The model developed by the OBO for engaging stakeholders during the planning and implementation phases of the BEAD and Digital Equity Act programs aligned with and supports all aspects of local coordination. While this section provides a comprehensive overview of outreach activities, highlights from the strategies to address each of these criteria are included below:

- Full geographic coverage The OBO actively engaged with stakeholders and gathered feedback from communities throughout the state. To ensure geographic representation, the "Let's Get Digital: Oklahoma Broadband Tour" was organized and 19 communities were visited statewide. The OBO also conducted a second set of listening sessions in 10 additional communities to continue to discuss barriers to and solutions to broadband affordability, access, and advancement.
- Meaningful engagement and outreach to diverse stakeholder groups The OBO developed and engaged in meaningful outreach 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, 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 identified the 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

o Focus groups

- Roundtables
- o Tribal consultations
- o Site visits
- Organizational and residential surveys
- o Email updates
- Board meeting updates
- o Press releases
- Social media
- o 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 stay informed about the OBO's work. The OBO posted regular updates about engagement activities on its website, including registration links to listening tour stops and the organization survey. The OBO also provided monthly updates about digital equity planning work at OBGB and OBEC meetings, sharing upcoming opportunities for involvement.

- Clear policies to ensure transparency The OBO operated transparently throughout the planning process by using its website, email distribution lists, and monthly updates to inform the OBGB and OBEC. The approach, by the OBO, maintained and updated the outreach page on its website, which included information about listening tour stops, roundtables, and local coordination events. Listening tour stops were open to the public and media and were promoted through social media, as well as through statewide and local press releases. The public comment process for this Digital Opportunity Plan will be shared with stakeholders across the state, with feedback being addressed and incorporated into the plan as appropriate.
- Outreach and engagement of unserved and underserved communities The OBO prioritized outreach and made significant efforts to engage with unserved and underserved communities. Representatives from these populations are part of the Digital Equity Coalition. Additionally, the OBO supported outreach initiatives to share engagement opportunities with affected populations throughout the state. To fain insights from underrepresented communities, the OBO conducted focus groups and ensured that these populations were adequately represented in the residential survey. This survey was available in English, Mandarin, ad Spanish to accommodate Oklahomans with language barriers. The OBO specifically targeted unserved and underserved communities during outreach efforts to better understand the places and individuals who will be most impacted by the BEAD program. Furthermore, the OBO hosted consultations with tribal governments in the state.

Outreach and Engagement Activities

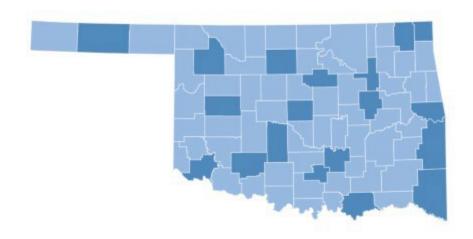
The OBO collaborated with stakeholders through various awareness and participatory methods. These mechanisms ensured that the public was informed about ongoing planning efforts and could provide feedback on connectivity challenges and opportunities.

This variety of engagement activities, combining of digital and in-person opportunities, offered stakeholders clear ways to express their connectivity priorities. Several of these mechanisms are described are detailed below.

Statewide Listening Tour

The OBO traveled over 6,000 miles across Oklahoma on the "Let's Get Digital: Oklahoma Broadband Tour", hosting 19 listening sessions.

Figure 23: 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 regional assets and success stories, as well as pain points and needs, was essential for developing this Digital Opportunity Plan. The tour included interactive polling to gather quantitative data for analysis, aggregation, and comparison across different regions. During guided discussions, participants identified key barriers, regional strengths, and top priorities for the state. Several members of the Broadband Governing Board supported and attended these events, often serving 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.

Efforts to engage local and regional governments, nonprofits, and CAIs ensured diverse participation and outreach to the intended covered populations. The OBO developed a communications plan to promote these meetings, which included regular social media content and graphics, a statewide press release, and rolling regional press releases prior to each meeting. An outreach toolkit, featuring sample social media posts, email newsletter language, and flyers, enabled organizations to promote these events within their networks. OBO staff participated in several regional and statewide media interviews to promote the listening tour and raise awareness among residents about 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%

Key stakeholders involved in the implementation of the digital equity program, such as nonprofits, education institutions, local governments, and CAIs, attended regional events to discuss their connectivity challenges, opportunities, and both current and planned partnerships. The representation by organization type during the tour was as follows:

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, utilized a listening tour to inform communities about its work, introduce key leadership and staff, and foster relationships with local networks. This effort was aimed at supporting the Office during the planning and implementation phases of the Digital Opportunity Plan.

When participants asked to describe the internet in their region in three words, they shared a range of experiences. The most common responses can be found in the table below:

The responses from participants were consistent across different locations. Notably, many participants described "challenges with terrain being hilly and tree covered" (as mentioned in the Sallisaw public meeting), and uncertainties regarding internet access during bad weather (noted in the Altus public meeting). Additionally, there was a concern that access to broadband is divided between "the haves and the have nots," (discussed in the Stillwater public meeting).

The OBO analyzed both the quantitative and qualitative data gathered throughout the listening tour, to identify the most pronounced barriers and challenges related to internet adoption for Oklahomans. The findings are highlighted in in Section 3.

Residential Survey

The OBO conducted a residential survey involving 1,802 Oklahomans from across the state. The survey, which took place in the summer of 2023, was administered as a computer-assisted telephone questionnaire and was available in three languages: English, Spanish, and Chinese. The survey aimed to include representation from all covered populations, excluding incarcerated people. Below you can find the survey findings for covered populations.

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 the first broadband asset inventory of 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 launched in May 2023 and is still open for responses. Participants who allowed their programs and offerings to be named publicly will be included on a digital inclusion resources map. This will enable residents to explore and find local resources conveniently.

Libraries were the largest group to respond to the survey. The chart below illustrates the responses categorized 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 are 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 to August 2023, the OBO engaged all 39 tribal nations, inviting them to participate in consultations. These included in-person, individual consultations, and statewide gatherings, providing valuable insights into the unique perspectives, needs, and challenges of Oklahoma's tribal nations. 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 access 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
- Remote work opportunities

Industry Roundtables

Internet service providers, and other companies in the broadband sector, play a crucial role in ensuring affordable internet access for all. On June 15, 2023, the OBO hosted an industry roundtable to discuss important aspects of BEAD and DE planning efforts with ISPs. Thirty representatives joined in the call, and the breakdown of provider type was as follows:

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 most prevalent, with

fixed wireless being the second most available provision, and cable being the least available technology. The roundtable discussed several BEAD policy decisions, offering feedback to the OBO regarding workforce priorities, low-cost options, and methods to achieve universal coverage through implementation of the BEAD program.

The OBO intends to continue these engagements by convening regular roundtables discussions open to all ISPs.

Local Coordination Workshops

The OBO held two local coordination meetings during the planning process. In partnership with NTIA, the OBO 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, as well as industry representatives, and other important stakeholders. The discussion focused on coordinating broadband efforts as the state prepares to receive significant broadband funding from the IIJA.

The OBO held a follow-up event in Tulsa on May 24, 2023, to provide updates on workforce priorities, engagement with tribal nations, and funding programs. During this event, the OBO organized two roundtable panels focusing on workforce and tribal coordination. A key takeaway from the workforce panel emphasized the opportunity for Oklahomans to receive training as fiber technicians.

These positions are vital for the deployment of broadband infrastructure and the ongoing maintenance of networks, offering upskilling opportunities for Oklahomans seeking to transition into the sector. The panel also discussed opportunities to strengthen placement pipelines to ensure that highly trained individuals are employed upon completion of their training programs.

Focus Groups

The OBO organized focus groups involving both covered populations and underrepresented groups, as well as organizations that serve these communities. The objective was to gain a deeper understanding of the challenges these populations face in accessing and using the internet to identify the most beneficial programs and solutions.

Focus group facilitators posed a structured set of questions covering various topics, including: Broadband access,

Satisfaction with current internet service

Access to and usage of devices

Barriers to internet adoption

Affordability of internet service

Awareness of low-cost plans

Ways to access technical assistance and support navigating online applications Internet safety The insights gathered from these focus groups are referenced throughout Section 3 particularly 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 minority	
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%

The OBO conducted a focus group with Veterans in May 2023. Representation from covered populations included:

Veterans	100%
Aging individuals	100%

Ongoing Engagement & Partnerships

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

In the fall of 2023, the OBO will visit communities across Oklahoma to continue discussions about the barriers to accessing, affording, and using the internet. The stops on the fall listening tour will 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)

Many of the stakeholders engaged will be active partners in the implementation of the Digital Opportunity Plan. The implementation section describes their role in this process.

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 designated as tribal lands, it would be impossible to provide universal coverage without proper coordination. Tribal consultations will remain a priority throughout the lifespan of the agency.

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 the implementation of the Digital Opportunity 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 Opportunity 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.

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

Oklahomans identified affordability as a key barrier to being online. Having an affordable high-speed internet connection and an affordable high-quality device are prerequisites for accessing and using many of the modern applications and functions of the internet.

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

Objective: Ensure all Oklahomans have access to affordable high-speed internet.

- Strategy 1: Increase enrollment in the Lifeline Program and other lowcost internet service programs.
 - Action: Disseminate Lifeline outreach materials through cCommunity Anchor Institution networks and other partners to drive program awareness and increase enrollment.
 - Action: Collaborate with existing and planned digital navigator programs at public access computer labs and libraries to help Covered Populations enroll in Lifeline.
 - Action: Partner with the Oklahoma State Department of Education to provide Lifeline resources to households with students receiving free and reduced cost breakfast and lunch or other Lifeline qualifying programs.
- Strategy 2: Implement scalable and cost-effective broadband solutions, such as mesh Wi-Fi networks, to bridge connectivity gaps, especially in remote and rural areas.
 - o Action: Assess infrastructure, conduct surveys to identify connectivity gaps in remote and rural areas.
 - Action: Executive RFP to contract with ISPs to offer scalable broadband solutions suited for rural areas.
 - Action: Install mesh network Wi-Fi systems in identified locations for wide coverage and minimal infrastructure.

С

- Strategy 3: Collaborate with rural development organizations to create a joint funding pool that can offer Wi-Fi installation in multi-dwelling units. (MDUs).
 - o Action: Identify stakeholders, such as rural development groups, local governments, and property managers of MDUs.
 - o Action: Create a funding pool to cover installation and maintenance costs.
 - Action: Develop proposal templates for funding applications to streamline the process for MDUs.
 - Action: Pilot installations in select MDUs to demonstrate the impact of Wi-Fi access.

What success looks like:

- Increase the percentage of Oklahoma residents with reliable broadband subscriptions.
 - o Increase Lifeline enrollment by 10%.
- Increase the percentage of Oklahoma residents who are aware of the Lifeline Program and/or other low-cost or subsidized internet service options.
- Increase the number of partners working with the OBO on Lifeline Program enrollment.

- Increased percentage of Oklahomans who have access to affordable internet-enabled devices (other than a smartphone).
- Decrease the percentage of individuals who cite cost as a barrier to device ownership.
- Increased access to technical support for more Oklahoman's with internet-enabled devices.
- Train digital navigators and partner staff in CAIs in Lifeline enrollment.
- Develop a CRM tool to track outreach, referrals, and enrollment efficiently.
 - Provide CRM tool training to digital navigators and CAI staff.
- Expanded access in rural areas and MDUs through public access Wi-Fi enhancements and expansion.

Objective: Ensure all Oklahomans have access to internet-enabled devices.

- **Strategy 1:** Execute a strategic procurement and distribution of refurbished devices to address barriers to device ownership that many Oklahomans face, particularly in rural, low-income, and underserved areas.
 - Action: Collaborate with certified refurbishes and tech companies to procure quality, affordable refurbished devices.
 - o Action: Conduct surveys and community outreach to identify the number of devices needed in rural, low-income, and underserved areas.
 - Action: Develop a targeted distribution plan to reach the identified areas, including local partnerships with schools, community centers, and nonprofits.
 - Action: Provide training and tech support to help recipients set up and maintain their devices.
- Strategy 2: Create a referral pipeline to promote free and reduced cost device distribution programs, such as computer refurbishment programs and library lending programs.
 - Action: Create a centralized, up-to-date list of existing programs with details regarding eligibility criteria, device types, and contact information.
 - Action: Develop an easily accessible webpage with a search for end users to find device programs based on location and eligibility.
 - Action: Build partnerships with CAIs, including local nonprofits, libraries, schools, and workforce development agencies.
 - Provide technical assistance and best practices to these partners.
 - Explore the development of grant programs to increase access to devices.
 - Action: Partner with businesses offering refurbished devices or running Corporate Social Responsibility (CSR) programs.
- Develop a CRM tool to track outreach and referrals efficiently.
 - o Provide CRM tool training to digital navigators and CAI staff.
- Strategy 3: Implement consumer education programs and outreach strategies to promote affordable device programs for Covered Populations.

- Action: Run targeted campaigns (e.g., through social media, radio, flyers, and community events) to inform the public about available device programs.
- Action: Engage trusted local leaders and organizations to spread awareness about device programs and assist with referrals.
- Strategy 4: Support and promote access to quality technical support options.

Create a centralized, up-to-date list of existing technical support programs. What success looks like:

Increase the number of device access programs in the state.

- •
- Increased percentage of Oklahomans who have access to affordable internet-enabled devices (other than a smartphone).
- Decrease the percentage of individuals who cite cost as a barrier to device ownership.
- Increased access to technical support for more Oklahoman's with internet-enabled devices.

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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. 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.

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

Objective: Ensure Oklahoma residents and community anchor institutions have access to reliable high-speed internet.

- Strategy 1: Install and upgrade public access computer labs in CAIs, prioritizing underserved rural and urban areas with limited broadband and technology access.
 - Action: Create or update map of existing Community Anchor Institutions (e.g., libraries, schools, community centers) to the Oklahoma Broadband Map to identify funding gaps in areas with limited broadband and technology access.
 - Action: Create a framework to inform funding allocation, using broadband availability data, income levels, and digital equity metrics – including a technology audit – to rank CAIs to identify space and leverage existing infrastructure.
 - Action: Implement a grant funding program specific to CAIs for digital opportunity advancement and expansion.
 - Action: Conduct an annual audit of CAIs technology capabilities.
 - Action: Coordinate with CAIs to identify space and leverage existing infrastructure.

- o Action: Procure/install technology and implement lab design and setup.
- o Action: Evaluate a statewide solution for E-Rate filing assistance.
- Strategy 2: Ensure technology parity and access to modern internet-enabled devices in tribal communities.
 - o Action: Develop a baseline, of existing technology provisions, to develop a benchmark to inform procurement and technology allocations.
 - Action: Encourage internet service providers to provide digital equity resources to tribal communities within their service areas/build-out areas.
 - o Action: Provide technical support to tribal communities in creating their own digital equity plans.
 - Action: Encourage tribes to implement tribal digital navigators and provide support as needed.
- Strategy 3: Expand public access Wi-Fi mesh networks, through nodes, in unserved and underserved communities.

- Action: Implement mesh network expansion plan.
- Action: Partner with Education Superhighway to encourage multifamily dwelling units (MDUs) to increase access to high-speed internet.
- Action: Reach out to cities to promote links to city internet.
- Action: Identify and fund pilot MDU locations through a grant program throughout the life cycle of the funding program.
- Action: Leverage existing partnerships with rural development and economic development organizations to help promote and fund installation of Wi-Fi infrastructure in MDUs.
- Action: Evaluate best practices for implementing free apartment Wi-Fi and distribute resources to support implementation.

What success looks like:

- Increased number of public access technology provisions at CAIs in unserved and underserved areas. Expanded access to public access technology in underserved and underserved locations, namely Tribal communities.
- Increased use of public access internet services, namely at CAIs.
- The OBO develops and implements a CAI-specific grant program.
- Tribal communities are encouraged to develop digital equity plans.
- Tribal members have access to digital navigators in their areas.
- Grant programs are implemented to expand internet access in MDUs.

Objective: Ensure Oklahomans can access and use digital resources safely.

- Strategy 1: Incorporate tailored digital skills programs to equip Oklahoma residents, across all age groups, with technology skills essential for education, workforce development, and everyday tasks.
 - o Action: Build digital skills training and tailored curriculum to enhance end user experience.
 - Action: Develop technology training programs for rural communities.
 - Action: Train digital navigators and partner staff to instruct foundational digital skills and assist in real-time to digital navigation needs.
 - o Action: Offer virtual option for those accessing the services outside of regular hours.
 - Action: Identify virtual training resources that can be incorporated into workforce training programs for covered populations.
 - Action: Provide grant funding for CAIs and community support organizations to offer digital literacy training to seniors and other covered populations.
- Strategy 3: Ensure that digital tools, resources, and services are accessible to persons with disabilities, promoting inclusivity and equal opportunities for all.
 - Action: Create disability accessible online resources, by providing alternative text for images (alt text), sufficient color contrast, captions for videos, ad ensuring content is compatible with screen readers.
 - o Action: Partner with the Oklahoma Information Sharing and Analysis Center to create internet safety best practices outreach toolkit for public distribution.
 - Action: Encourage public computing centers to implement policies and procedures that are compliant with the Children's Internet Protection Act (CIPA).
- Strategy 4: Develop multi-language digital resources for Tribal communities and English learners.

Action: Translate digitals skills resources to the most spoken languages in Oklahoma - English, Spanish, Vietnamese, and Native American languages. What success looks like:

- Increase the number of digital literacy training courses offered in the state.
- Digital equity map published and used by residents.
- Online publishing of internet safety toolkit.
- All public computing centers maintain CIPA compliance.
- Increase utilization of safe online banking.
- Increase number of Oklahomans who utilize the internet to access public resources and services.

Objective: Increase accessibility of state digital resources for Covered Populations.

- Strategy 1: Support state agencies with required accessibility audits, reporting, and best practices to ensure accessibility across all government websites.
 - o Action: Strategy 5: Create an online resource to allow all Oklahomans to find and connect to available programs and support.
 - Action: Ensure that digital tools, resources, and services are accessible to persons with disabilities, promoting inclusivity and equal opportunities for all
 - Action: Create disability accessible online resources, by providing alternative text for images (alt text), sufficient color contrast, captions for videos, and ensuring content is compatible with screen readers.
 - Action: Help distribute the Oklahoma Department of Rehabilitation Services' Disability Resource Guide to CAIs to ensure accessibility of resources.

What success looks like:

- Increase accessibility of state agency websites.
- Annual report from NewView of accessibility recommendations for state agency websites.

Fulfilling Oklahoma's Digital Promise - Advancement

Ensuring Oklahomans have equitable access to affordable high-speed internet, along with the skills needed to leverage these digital tools, is crucial for full participation in the online world. A digitally connected population enhances engagement in educational, health, economic, and civic activities – advancing individual prosperity and fostering statewide growth. The goal is not only to increase access but to ensure that Oklahomans are equipped to thrive in a digital-first society, both now and in the future.

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

Objective: Ensure Oklahomans can participate in online opportunities to advance health, education, and economic goals.

- Strategy 1: Increase access to telehealth programs across the state.
 - Action: Collaborate with the Corporation Commission to create a telehealth onboarding toolkit that includes information about broadband funding options and eligibility
 - Action: Integrate telehealth data layer to the OBO broadband map to visualize telehealth access and gaps.
 - o Action: Establish a telehealth subcommittee within the Digital Equity Coalition to monitor progress and provide guidance on programmatic improvements.
 - Action: Scale telehealth programs to reach additional sites, including public libraries, correctional facilities, schools, and rural health clinics, ensuring these locations are equipped to offer service.
- Strategy 2: Expand and strengthen digital navigator programs, especially in rural

libraries.

 Action: Establish a state-supported grant program to fund digital navigators at rural libraries.

- o Action: Provide comprehensive training, resources, and professional development across Oklahoma.
- Action: Develop a statewide certification to accreditation process to ensure digital navigators are well equipped to assist residents with a wide range of digital needs.
- Strategy 3: Partner with civic engagement organizations to educate and promote voter registration and electoral participation.
 - Action: Develop partnerships and civic engagement curriculum for use during advanced digital skills training opportunities.
- Strategy 4: Ensure Embed digital equity planning localin local, regional, and state level planning processes include digital equity planning components.
- Action: Provide ongoing technical support assistance, templates, and model documents for local and regional digital equity planning.
- Action: Encourage inclusion of digital equity principles in state and regional development and workforce planning, ensuring that digital infrastructure is the cornerstone of economic development and workforce strategic plans to include digital equity components
- Action: Foster collaboration between state agencies to align with digital equity goals with broader policy agendas, ensuring coherence across sectors.
 Stratom 5: Enhance coordination and narthership across state agencies to
- Strategy 5: Enhance coordination and partnership across state agencies to advance digital equity.
 - Action: Share annual reports detailing OBO activities and outcomes with other state agencies to enhance transparency and accountability.
 Action: Expand membership of the Digital Equity Coalition by inviting
 - Action: Expand membership of the Digital Equity Coalition by inviting additional state agencies and community stakeholders to actively engage in planning and decision-making.
 - Action: Identify and implement programmatic and data collection strategies that support statewide objectives in education, workforce development, health, social services, and civic engagement.

What success looks like:

- Increase the number of digital navigators by 10% annually through the grant program, with a focus on rural and underserved communities.
- Develop and disseminate digital equity planning resources for local communities, encouraging proactive, long-term planning for technology access and usage.
- Expand access to telehealth services and resources, ensuring equitable access to telehealth care across all regions.
- Conduct regular evaluations of existing telehealth programs and publish a comprehensive report on best practices, lessons learned, and areas for improvement.

Objective: Enable Oklahoma to meet workforce and economic development goals so all residents can succeed in a digitally connected world.

- Strategy 1: Partner with agencies and organizations to leverage technology in support of rural economic and community development.
- **Action:** Collaborate with the Oklahoma Taskforce for Workforce Development to align broadband expansion efforts with workforce development goals.
- Advocate for remote work opportunities and tech-enabled job placements in rural communities, helping to retain and attract talent.
- Action: Partner with economic development agencies to support Community Anchor Institutions

(CAIs) in expanding their digital outreach, connectivity, and services.

- Strategy 2: Increase access to workforce training programs for Covered Populations.
 - Action: Develop public-private partnerships to design workforce development programs that are responsive to regional skill gaps and aligned with current and future job market needs.
 - Action: Collaborate with Oklahoma CareerTech and other educational institutions to integrate technology-focused curricula that align with workforce demands.
 - Action: Expand digital literacy and job-readiness programs in correctional facilities, providing incarcerated individuals with the skills needed for reintegration into the workforce.
- Strategy 3: Encourage CAIs to create technology-focused five-year plans to secure future funding opportunities.
 - Action: Develop and distribute tools, templates, and guidance on creating comprehensive technology and digital inclusion plans that can help CAIs qualify for state and federal funding..
 - Action: Provide technical assistance to CAIs in conducting inventory assessments of their existing technology resources and identifying future needs..

What success looks like:

- Ensure that digital skills, technology access, and technology-related job opportunities are integral components of workforce development plans across the state.
- Increase the number of public-private partnerships focused on developing and supporting workforce training programs, particularly in rural areas.
- Equip a significant percentage of CAIs with a clear understanding of their technology needs and well-defined strategies for upgrades and digital inclusion initiatives.

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 Opportunity 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 Opportunity 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.

There are several active and passive 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 Opportunity 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 Opportunity 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 and use
- 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

5.4 Timeline

The OBO will implement the strategies and actions described above throughout the five-year life cycle of the Digital Opportunity Plan.

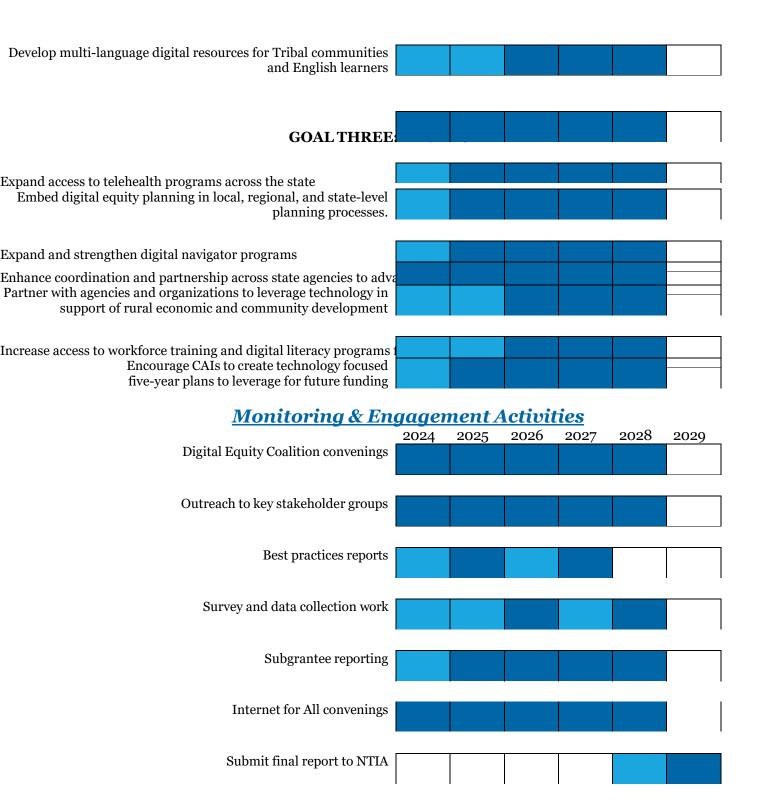
Timeline key **PLAN IMPLEMENT Digital Equity Plan Processes** 2024 2026 2027 2028 2029 2025 Finalize and submit plan to NTIA Identify & educate partners Develop needed grant programs **Strategy Implementation** GOALONE: AFFORDABILITY 2025 2026 2028 2024 2027 2029 Increase Lifeline/low-cost plan enrollment Create a referral pipeline to promote free and reduced cost device distribution programs Support & promote quality tech support options **GOAL TWO: ACCESS** Install and upgrade public access computer labs in CAIs Ensure technology parity and access to modern internet-enabled devices in tribal communities Expand public access Wi-Fi mesh networks Incorporate tailored digital skills programs to equip Oklahoma residents

persons with disabilities

Create an online resource to allow all Oklahomans to find and

Ensure that digital tools, resources, and services are accessible to

connect to available programs and support.



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 Opportunity 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 Opportunity Plan: Crosswalk with Digital Equity Act NOFO

OK Digital

Opp. Plan

Page

Number

Digital Equity Act NOFO

Requirements

riequirements	Sections	1 dillipoi
STATUTORY REQUIREMENTS		
Identification of barriers to digital equity faced by Covered Populations in the State	Section 3.2 Barriers to Adoption and Affordability in Oklahoma	26
Measurable objectives for documenting and promoting, among each Covered Population located in that State: 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; 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 2.3 Strategies and Objectives	11
An assessment of how the measurable objectives identified will impact and interact with the State's: a. Economic and workforce development goals, plans, and outcomes; b. Educational outcomes; c. Health outcomes; d. Civic and social engagement; and e. Delivery of other essential services	Section 2.2 Alignment with Existing Efforts to Improve Outcomes	5
Description of how the State plans to collaborate with key stakeholders in the State (CAIs, local government, LEAs, tribal nations, nonprofits, organizations representing covered populations, civil rights orgs, workforce development organizations, adult literacy organizations, public housing) to achieve measurable objectives identified above	Section 4.1 Coordination and Outreach Strategy Section 5.1 Implementation Strategy & Key Activities	39 53
A list of organizations with which the Administering Entity for the State collaborated in developing the Plan	Section 4.1 Coordination and Outreach Strategy Section 7 Appendix	39 77
ADDITIONAL REQUIREMENTS		
A stated vision for digital equity	Section 2.1 Vision	5
A digital equity needs assessment, including a comprehensive assessment of the baseline from which the State is working and the State's identification of the barriers to digital equity faced generally and by each of the covered populations in the State	Section 3.2 Barriers to Adoption and Affordability in Oklahoma	26
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	Section 3.1 Digital Equity Assets in Oklahoma	14

existing digital equity plans and programs already in place among municipal, regional, and tribal governments	Section 3.1.2 Existing Digital Equity Plans	18
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	39
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	18
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	53
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	53
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 state/local workforce boards and workforce organizations; b. labor organizations and community-based organizations; and 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.	Section 5.1 Implementation Strategy & Key Activities Section 5.2 Partnerships Section 5.3 Progress Monitoring	53 59 59
A timeline for implementation of the plan 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 5.4 Timeline Section 2.2 Alignment with Existing Efforts to Improve Outcomes	59

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	(Cov	ere	d Po _l	oulati	ons S	Serve	d
				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 internetenabled devices, Workforce development skills training, College readiness training, Digital literacy training	✓	✓	√	✓	√	√	√	√
Anadarko Community Library	Anadarko	Library	Public Wi-Fi access, Public access to computers	✓			√	√	√		✓
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	✓		√	→	√	√	√	✓

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Geary Public Library	Geary	Library	Help with public assistance portals, ACP enrollment, Public access to computers, Public Wi-Fi access, Career readiness assistance	\		√	√	√	\	√	·
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	√		✓
Sapulpa Public Library	Sapulpa	Library	Public Wi-Fi access, Help with public assistance portal	✓		✓	✓	✓	✓	✓	✓
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	✓	√	✓	√	✓	√	✓	√
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	✓	✓	✓	√	√	✓	✓	✓
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	✓		✓	√	✓	✓	✓	✓
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	✓		√	√	✓	√	√	✓
Western Plains Library System	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	✓	✓	\	√	√	✓	✓	✓
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	Jay	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	✓	✓	✓	√	✓	✓	✓	√
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	√		✓	√	√	✓	√	✓
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	✓	•	•	√	√	√	✓	√
Eastern OK Library System	Muskogee	Library	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 development skills training, Internet usage training	✓		✓	✓	√	✓	✓	√
Antlers Public Library	Antlers	Library	Career readiness assistance, E-commerce help for small businesses, ACP enrollment, Help with public assistance portals, Workforce development skills training, Public access to computers, Internet usage training, Telehealth services, Public Wi- Fi access	✓		√	√	√	✓	✓	√

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Catoosa Public Library	Catoosa	Library	Help with public assistance portals, Public access to computers, Public Wi-Fi access	✓		✓	√	√	✓	√	✓
Wilson Public Library	Wilson	Library	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 development skills training, College readiness training	✓	✓	✓	√	✓	✓	√	✓
Southern Prairie Library System	Altus	Library	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, Help with public assistance portals	√		√	√		√	✓	√
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, Ecommerce 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 internetenabled 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	√	✓	✓	√	√	√	√	✓
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	√		√	✓	√	√	√	√
Bartlesville Public Library	Bartlesville	Library	Help with public assistance portals, Public Wi-Fi access, Digital literacy training, Public access to computers, Career readiness assistance	√	√	✓	√	✓	√	√	√
Chickasha Public Library	Chickasha	Library	Digital literacy training, Public Wi-Fi access, Public access to computers	✓		✓	✓	√	✓	√	✓

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	✓	√	√	√	✓	√	√
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	✓	✓	√	✓	✓		✓
Beyond the Pages	Mooreland	Library	Public Wi-Fi access, Public access to computers	✓		√				✓
Chandler Public Library	Chandler	Library	Public access to computers, Public Wi-Fi access, Help with acquiring internet-enabled devices	✓	√	√	√	✓	√	✓
			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,							
Alva Public Library	Alva	Library	Community tech support	✓	✓	✓	✓	✓	✓	✓

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	✓	✓	✓	√	√	✓	√	✓
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	✓		~	√	V	✓	√	✓
Sayre Public Library	Sayre	Library	Public Wi-Fi access, Public 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	√			√		✓	√	✓
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	✓	~	√	√	√	√	✓	✓
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	V			~	1	√	√	√
Apache Public Library	Apache	Library	Public Wi-Fi access	✓		√	√	✓	✓	✓	✓
Buffalo Public Library	Buffalo	Library	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 internetenabled devices, Public access to computers, Internet usage training	✓		√	√	V	✓	√	✓

			Help with acquiring internet-								
			enabled devices, Public Wi-Fi								
			access, Help with public								
			assistance portals, Career								
Ingersoll (Inola)			readiness assistance, Public			,					
Public Library	Inola	Library	access to computers	✓		✓	✓	✓	✓	✓	✓
			Public access to computers,								
			Internet usage training, Digital literacy training, Public Wi-Fi								
Metropolitan	Oklahoma		access, Help acquiring								
Library System	City	Library	internet-enabled devices	✓		√	✓	✓	√	✓	√
	City		Public Wi-Fi access, Career								
			readiness assistance,								
			Community tech support,								
			Help with acquiring								
Tryon Public			internet-enabled devices,								
Library	Tryon	Library	Public access to computers	✓		1	✓	✓	✓		✓
Library	TTYOTT	Library	Public access to computers,	,		ľ	·	•	· ·		<u> </u>
			Digital literacy training,								
			, ,								
Gleason			Help with public assistance								
Memorial Library	Dinalina	Libuani	portals, Internet usage	✓	1	1	✓	✓	√	✓	√
iviemonal Library	Ringling	Library	training, Public Wi-Fi access	V	V	V	V	V	V	V	V
			Community tech support,								
			Help with public assistance								
			portals, Public access to								
The section By July			computers, Public Wi-Fi								
Hominy Public		1.11	access, Help with acquiring			1	√	✓	✓		
Library	Hominy	Library	internet-enabled devices	✓	✓	٧	V	V	V		V
Mannford Public			Public access to computers,								
Library	Mannford	Library	Public Wi-Fi access	✓		✓	✓	✓	✓		✓
			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								
Pioneer Library			development skills training,								
System	Norman	Library	Cybersecurity training	✓	✓	✓	✓	✓	✓	✓	✓
			-								

OSH-Tulsa Lihrany	Tulsa		Help with acquiring internet- enabled devices College readiness training, Help with public assistance portals, Workforce development skills training, Public Wi-Fi access,								
OSU-Tulsa Library	Tulsa	Higher Ed	Career readiness assistance		✓	✓	✓	✓	✓	√	

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: Section 4.1 Coordination and Outreach Strategy

The table below describes the full set of stakeholder meetings conducted during the planning for the Digital Opportunity 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	x		
Oklahoma Broadband Governing Board	12/20/2022	х	Х	х	Х	х	х	х	х		
Oklahoma Broadband Governing Board	1/17/2023	х	Х	х	Х	х	х	х	х		
Oklahoma Broadband Expansion Council Meeting	1/18/2023	х	Х	х	Х	х	Х	х	Х		
Internet for All: Oklahoma Local and Tribal National Coordination Workshop	1/19/2023	X	x	X	Х	X	X	x	x		
Oklahoma Broadband Governing Board	2/15/2023	х	Х	х	Х	х	Х	х	Х		
Oklahoma Broadband Expansion Council Meeting	2/22/2023	х	Х	х	Х	х	Х	x	х		
Oklahoma Broadband Governing Board	3/22/2023	х	Х	х	Х	х	х	х	х		
Oklahoma Broadband Expansion Council Meeting	3/22/2023	х	Х	х	Х	х	х	х	х		
Oklahoma Broadband Governing Board	3/31/2023	Х	Х	Х	Х	Х	X	X	X		
Wichita and Affiliated Tribes Oklahoma Broadband Expansion	4/15/2023	Х	Х	Х	Х	Х	Х	X	Х		
Council Meeting	4/19/2023	Х	Х	Х	Х	Х	Х	Х	Х		
BEAD Success Summit	4/19/2023										
Southwest Tribal Meeting	4/19/2023	Χ	Χ	X	Χ	Χ	Χ	Χ	Χ		

Oklahoma Broadband Governing				1	1				
Board	4/28/2023	Х	Х	Х	Х	Х	Χ	Х	X
Autry Tech Center ELC	4/28/2023								
70th Annual Pioneer Coop Meeting	5/1/2023			1		1	1		
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	Χ	Х	Х	Х	Х	Χ	Х	Х
ConnectX	5/10/2023								
Osage Nation	5/10/2023	Χ	Х	Χ	Х	Х	Χ	Х	X
Let's Get Digital Stillwater	5/12/2023	Χ	Х	Х	Х	Х	Х	Х	Х
Sac and Fox Nation	5/12/2023	Χ	Х	Χ	Х	Х	Χ	Х	X
Kickapoo Tribe of Oklahoma	5/12/2023	Х	Х	Х	Х	Х	Х	Х	Х
							T		
Let's Get Digital Vinita	5/15/2023	Χ	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							T		
Council	5/17/2023	Х	Х	Х	Х	Х	Х	Х	X
Kiamichi Tech Center	5/18/2023								
Let's Get Digital Broken Bow	5/18/2023	Х	Х	Х	Х	X	Х	Х	Х
Pine Telephone Company	5/18/2023								
Southwest Tribal Meeting	5/19/2023	Х	Х	Х	Х	Х	Х	Х	X
Let's Get Digital OKC	5/22/2023	Χ	Х	Х	Х	Х	Χ	Х	Х
Arkansas Broadband Office	5/22/2023								
Let's Get Digital Durant	5/23/2023	Χ	Х	Χ	Х	Х	Χ	Х	X
Choctaw Nation	5/23/2023	Χ	Х	Χ	Х	Х	Χ	Х	X
Let's Get Digital Tulsa	5/24/2023	Χ	Х	Х	Х	Х	Х	Х	Х
Internet For All Tulsa	5/24/2023	Χ	Χ	Χ	Х	Х	Χ	Х	X
Tribal Consultation State-Wide									
Consultation	5/25/2023	Х	Х	Х	Х	Х	Х	Х	X
Let's Get Digital Chickasha	5/26/2023	Χ	Х	Х	Х	Х	Χ	Х	Х
Cox Communications	5/31/2023								
Rural Electric Cooperative, Inc.	6/1/2023								
Let's Get Digital Altus	6/2/2023	Χ	Х	Χ	Х	Χ	Χ	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	X
Oklahoma Telephone Association	6/6/2023		1	1			1		
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	Х	Х	Х
	-, ,	1	+	+			+		
Let's Get Digital Miami	6/7/2023	Х	Х	Х	Х	Х	х	Х	X
Northeast Oklahoma Electric									
Cooperative	6/7/2023					<u> </u>			
Let's Get Digital Sulphur	6/8/2023	Х	Х	Х	Х	X	Х	Х	X
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	Х	Х	Х
Chickasaw Nation	6/12/2023	Χ	Х	Х	Х	X	Х	Х	X
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	6/45/2022								
Roundtable	6/15/2023	 	_	+		<u> </u>	+		
Lake Region Technology & Communications	6/16/2023								
Chip Carter and Kurt Primuth	6/20/2023	+	+	+		+	+		
Let's Get Digital Okmulgee	6/20/2023	Х	X	Х	Х	Х	Х	Х	X
Oklahoma Broadband Expansion	0/20/2023		^_	^	^	^	 ^ 	^	^
Council	6/21/2023	Х	Х	Х	X	X	X	x	X
Council	9,,	 		+'`	 '`	'	+,	 	
Tracon Global	6/21/2023								
TechFreedom and Oklahoma				1			1		
Council of Public Affairs	6/22/2023								
				1			1		
City of Miami	6/22/2023								X
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		+				+		
KOCO-TV, Channel 5	6/27/2023		+	+			+	+	
Oklahoma Broadband Governing		+					+	+	
Board	6/27/2023	Х	Х	Х	Х	X	х	x	X
504.4	0,2,,2023			^_				^	^

Oklahoma Association of Electric Cooperatives	6/28/2023								
Urban League of Greater Oklahoma	0,20,2020								
City	6/29/2023	Χ		Х			Х	Х	
Best Buy	7/3/2023								
Chickasaw Telephone Company	7/5/2023								
Pott's Family Foundation	7/5/2023	Х						Х	х
U.S. Representative Stephanie Bice	7/6/2023	Χ	Х	Х	Х	Х	Х	Х	Х
OK Federal Delegation	7/6/2023	Х	Х	Х	Х	Х	Х	Х	х
Infrastructure Association	7/10/2023								
Oklahoma Broadband Governing									
Board	7/11/2023	Х	Х	Х	Х	Х	Х	Х	Х
Oklahoma Department of Libraries	7/12/2023	X	X	x	x	X	x	X	X
OSU Libraries	7/13/2023	Χ	Х	Х	Х	Х	Х	Х	Х
OU Health	7/17/2023								
Redlands Community College	7/18/2023								
Oklahoma Broadband Expansion									
Council	7/19/2023	Х	Х	Х	Х	Х	Х	X	Х
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							Х	
The Gathering (American Indian Chamber of Commerce)	7/24/2023							х	
The Gathering Business Summit (American Indian Business Chamber of Commerce)	7/25/2023							х	
Corporation Commission	7/27/2023								
Governor's Council for Workforce and Economic Development	7/28/2023								
City of Okemah	8/3/2023								Х
Oklahoma Complete Health	8/3/2023		1						
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	Χ	Х	Х	Х	Х	Х	Х	Χ
Cherokee Nation	8/8/2023	Χ	Х	Х	Х	Х	Х	Х	Χ
OneNet	8/9/2023								
United Keetoowah Tribe	8/10/2023	Χ	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	Χ	Х	Х	Х	Х	Х	Х	Х
Oklahoma Broadband Expansion									
Council	8/16/2023	Χ	Х	Χ	Х	Х	Х	X	Χ
OBO Digital Equity Coalition	8/17/2023	Χ	Х	Χ	Х	Х	Х	X	Χ
USDA Rural Development	8/18/2023								
Cheyenne and Arapaho Tribes	8/22/2023	Χ	Χ	Χ	Χ	Χ	Х	Х	Χ
US Department of Education	8/23/2023								
Quapaw Nation	8/23/2023	Χ	Х	Х	Х	Х	Х	Х	Χ
City of Tulsa	8/24/2023								
Cheyenne and Arapaho Tribal									
Meeting	8/24/2023	Х	Х	Х	Х	Х	Х	X	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				\perp				
Oklahoma Broadband Governing	0/42/2022								
Board	9/12/2023	X	Х	Х	X	X	X	X	X

American Indian Chamber of								1	
Commerce	9/13/2023							Х	
Education Superhighway	9/14/2023	Χ							
Office of U.S. Representative Kevin									
Hern	9/18/2023	Χ	Х	Χ	Х	Х	Х	Х	Х
NTIA (Department of Commerce)	9/20/2023	Χ	Χ	Χ	Х	Χ	Х	X	Χ
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	x	x
U.S. Representative Josh Brecheen	9/20/2023	Х	Χ	Х	Х	Х	Χ	Х	X
U.S. Representative Frank Lucas	9/20/2023	X	x	x	x	x	X	x	X
U.S. Representative Tom Cole	9/20/2023	Χ	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	Χ	Х	Χ	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	Χ	Х	Х	Х	Х	Х	Х	Х
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								