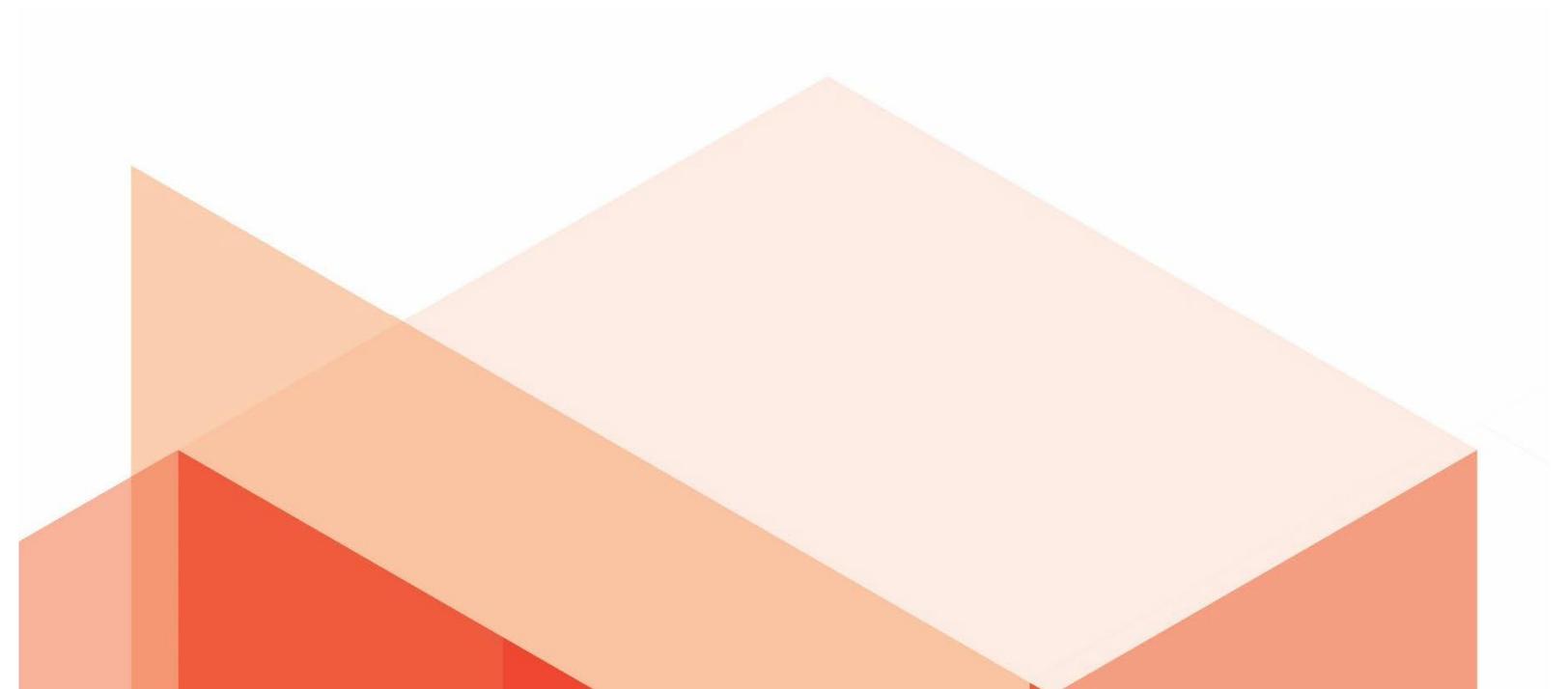# The State of Tennessee
Digital Opportunity Plan

Department of Economic and Community Development

January 2024

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1. Executive Summary

Digital Opportunity in Tennessee

The State of Tennessee is home to rich cultures, histories, and diverse communities that drive innovative and creative work ranging from healthcare, agriculture, entertainment, and much more. For over a decade, Tennessee has experienced explosive population and economic growth, consistently attracting thousands of people to move to the state each year. However, amidst the remarkable innovation and economic potential, the digital divide (defined as the economic, educational, and social inequalities between those with online access and those without) remains prevalent in Tennessee.

The challenges presented in achieving Digital Opportunity for all Tennesseans are immense.[1] The National Telecommunications and Information Administration (NTIA) estimates that over 80% of Tennesseans belong to a covered population or a group of people that may be disproportionately impacted by the digital divide.[2] Rural and urban communities face significant barriers in closing the digital divide. Accessibility gaps and the lack of broadband infrastructure, often influenced by rugged terrains and low population densities, prevent many rural Tennesseans from accessing high- speed internet service. Tennesseans in urban communities face similar challenges due to aging infrastructure, the need for upgraded, future-proof technology, and historical patterns of underinvestment. For both urban and rural Tennesseans, the most significant barrier to accessing the Internet and other digital resources is the cost of reliable, high-speed internet.

Since 2017, the Tennessee Department of Economic and Community Development (TNECD) has invested in expanding broadband infrastructure and digital adoption programs. More than $750 million has been allocated and invested in broadband infrastructure, with over $50 million invested in programs supporting adoption, including basic digital skills training, advanced digital skills certifications, the establishment of broadband-focused community facilities, and free public Wi-Fi access points.

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[1] Digital opportunity is the idea that all individuals and communities have the resources to access the internet, including existing broadband infrastructure in their communities, affordable internet service, access to technology, and digital literacy tools.

[2] Digital Equity Population Viewer. NTIA has identified eight covered populations including: aging individuals (persons aged 60 and up), individuals with language barriers and/or low levels of literacy, individuals with disabilities, incarcerated individuals, individuals who live in a covered household, racial/ethnic minorities, rural residents, and veterans.

Despite our historic investments into infrastructure and adoption programs, many Tennesseans still lack access to high-speed internet, devices, and the digital skills necessary to make full use of the opportunities presented by the digital economy. TNECD is working to address these challenges by creating a comprehensive strategy for Digital Opportunity where all Tennesseans have the resources needed to thrive in the 21st century.

Our Vision for Digital Opportunity
Tennessee's vision for digital opportunity is ensuring that all Tennesseans have access to affordable and reliable internet service, dependable technology, and the digital literacy skills necessary to empower them to access all digital opportunities fully.

In leading statewide efforts to achieve digital opportunity for all Tennesseans, TNECD aims to achieve **three main goals:**

1. Serve as a catalyst to magnify current efforts,
2. Convene stakeholders and communities to develop new relationships, and
3. Communicate success stories and best practices that unfold across the state.

Alignment with Tennessee's Broader Goals

The Digital Equity Plan's stated objectives (see section 3.3) will interact with the State's broader goals around economic and workforce development, educational outcomes, health outcomes, civic and social engagement, and the delivery of other essential services.[3]

Broadly, Tennessee's goals are:
-   Economic and Workforce Development: To be the #1 State in the Southeast for high quality jobs.
-   Educational Outcomes: To be the fastest improving state in the country.
-   Health Outcomes: To promote healthy behavior and provide high quality services to our most vulnerable populations.
-   Delivery of other Essential Services: To be the best managed state, providing high- quality services at the lowest possible price to taxpayers.

Creating the Plan

In the fall of 2022, TNECD began undertaking efforts to assess the state of Digital Opportunity in Tennessee. To do this, TNECD engaged in extensive stakeholder

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[3] Goals listed can be found at Governor's Priorities - Transparent Tennessee - TN.gov

engagement efforts to build new relationships with other state agencies, local governments, non-profits, and other organizations serving covered populations in the state. These efforts included:

- Forming Tennessee's first Digital Opportunity Taskforce
- Hosting 17 community-based listening sessions across the state
- Creating the Digital Opportunity Listening Session Facilitator Toolkit
- Deploying online surveys to identify needs and barriers
- Launching of a statewide Digital Opportunity Asset Inventory
- Convening of covered population working groups
- Hosting Tennessee's first Digital Opportunity Summit with 84 participants
- Countless stakeholder presentations and meetings

From these efforts, TNECD gathered information and data surrounding the needs of Tennesseans as they relate to accessing the Internet and its resources. Additionally, a Digital Opportunity Asset Inventory was built to understand what resources exist today to help close the digital divide for Tennesseans.

What We Learned
Needs and Barriers

TNECD's outreach and engagement efforts yielded better understandings of the challenges faced by individuals and families in our state when trying to utilize the Internet. From our efforts, TNECD has both qualitative and quantitative insights into the key barriers faced by Tennesseans when trying to access digital opportunities.

Affordability emerged as the top barrier across all covered populations and communities in Tennessee. Many Tennesseans reported forgoing an internet subscription to pay for basic needs like food and water. For others who may have internet access, the cost of high-speed internet services that can support online schooling and remote work remains out of their purchasing power and poses a financial burden.

Digital Skills surfaced as another key barrier for Tennesseans. Many communities across the state reported a need for both foundational skills and advanced workforce-related skills. Aging individuals reported lacking basic skills as a barrier at higher rates than other covered populations. During conversations surrounding employment opportunities and higher education, the need for advanced skills was reported statewide particularly in conversations focused on serving covered populations.

Technical Support for devices and internet equipment was communicated by Tennesseans to be a significant barrier. Tennesseans also reported limited resources around troubleshooting, technical repairs, and maintenance services.

Access to Large Screen Devices like laptops and tablets prevents many Tennesseans from leveraging opportunities online. Most Tennesseans have a smartphone, but many lack access to a device that enable remote working, online education, and other useful digital applications.

Online Safety and Privacy is a major concern for many in our state. Tennesseans expressed concerns for the safety of both children and aging individuals utilizing the Internet. Ensuring that personal information remains secure surfaced as a key barrier preventing broader internet use for some in our state. In conversations with Tennesseans, TNECD noticed a correlation between a lack of digital skills and concerns about online safety.

Assets We Found

TNECD's outreach efforts identified over 150 assets relating to digital opportunity. This effort entailed launching an online survey and calling campaign to connect with partners statewide. The assets identified ranged from programs and services provided by stakeholders like non-profits, state agencies, higher education institutions (Tennessee Colleges of Applied Technology (TCAT), Historically Black Colleges and Universities (HBCUs), etc.) and more. Identifying the existing assets helped TNECD build a catalogue of available services and forge new connections in our efforts to cultivate broader awareness and community surrounding Digital Opportunity.

Digital Opportunity Strategies and Activities

The Digital Opportunity plan will outline the goals TNECD aims to achieve and the strategies we hope to deploy to close the digital divide for all Tennesseans.[4] Our primary objective is to expand existing digital opportunities by working with our stakeholders to increase the availability and quality of services provided statewide. TNECD also seeks to build upon existing state programs to ensure longevity to the efforts we currently have underway.

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[4] Please see Section 3.3 for "Strategies and Objectives" and Section 5 for "Implementation and Key Activities"

TNECD has five major goals related to Digital Opportunity:
1. Expand digital opportunity infrastructure and awareness statewide.
2. Enhance broadband availability and affordability.
3. Improve online accessibility and inclusivity of state agency resources.
4. Help Tennesseans develop the digital skills needed for work and life.
5. Expand access to affordable devices and technical support.

Looking Forward

The Digital Opportunity Plan outlines proposed strategies and activities to address the needs of all Tennesseans. They include launching programs to increase digital adoption rates, partnering with community anchor institutions to expand digital skills training opportunities, and investing in grassroots outreach campaigns to connect with covered populations. This plan is just the start of a long-term state investment in digital opportunity initiatives. The Digital Opportunity plan will serve as a guide to craft new programs tailored to the state's digital needs. Collaboration and stakeholder engagement is key to the successful implementation of this plan and monitoring our progress towards achieving Digital Opportunity for all Tennesseans.

Foundational to this effort is recognizing that digital opportunity is a need across the **entire state** of Tennessee. Communities, urban and rural, in our state face both similar but also distinct challenges. TNECD has and will continue to invite stakeholders from throughout our state into this conversation as we prepare to continue and expand our investments towards closing the digital divide. Only through a coalition representative of our state's unique and diverse communities can we truly hope to achieve digital opportunity for all Tennesseans. We approach current and future efforts through a growth-oriented mindset – meaning we look to craft solutions that build upon our strengths, leverage our existing assets, and enhance the economic potentials of our communities.

By working together with nonprofits, educational agencies, community-based organizations, and state and local governments, TNECD can enrich the lives of all Tennesseans and expand access to economic, educational, health, and social opportunities.

2. Vision and Strategies

2.1 Vision

Today, access to high-speed, reliable internet is a necessity, not a luxury. The Internet touches every aspect of daily life, from education to healthcare, entertainment to housing, and civic participation to the labor workforce. Tennessee has long recognized that the Internet is a crucial tool that all residents should be afforded and has taken great strides to make that a reality. In 2017, the state passed the Tennessee Broadband Accessibility Act (TBAA), which allocated funds to build broadband infrastructure in previously unserved areas. Since then, more than $800 million has been invested in broadband infrastructure and digital adoption programs.

Despite these efforts, several portions of the state still need to be equipped with infrastructure capable of sustaining high-speed, high-quality, internet access (here defined as 100mbps download/20 Mbps upload, formerly defined as 25mbps download/3mbps upload). The Department of Economic and Community Development estimates that 568,000 Tennesseans lack access to broadband infrastructure with 100/20mbps speeds. Thousands more in Tennessee struggle to afford internet service or lack the digital skills necessary to take advantage of remote job opportunities, online education programs, and other resources. Where a Tennessean lives often determines the quality of internet service that they have access to and shapes the quality of digital opportunities afforded to them. As the number of quality jobs created in the state increases, it is imperative to equip the entire population with the tools required to fulfill these job opportunities. Moreover, reliable internet access is crucial in accessing social services, receiving healthcare, and connecting with loved ones.

Tennessee's Vision Statement for Digital Opportunity

Tennessee's vision for digital opportunity is ensuring that all Tennesseans have access to affordable and reliable internet service, dependable technology, and the digital literacy skills necessary to empower individuals to fully access all digital opportunities.

In a digitally equitable Tennessee:
- Students and teachers will not struggle to access assignments outside the classroom.
- Doctors and other medical professionals will be able to easily communicate with patients.

- Senior citizens and other vulnerable populations will know how to use digital devices safely and stay connected with friends and loved ones.
- Tennessee will become an even more competitive state for business opportunities once its entire workforce has access to high-speed internet.
- Tennessee can continue honoring its commitment to offering high quality, efficient services.
- All Tennessee communities, regardless of location, will be strengthened when all Tennesseans have access to high-speed internet and have the resources to adopt.

To achieve Digital Opportunity, all Tennesseans must have access to available and affordable broadband infrastructure regardless of their geographic location, educational attainment, or income level. We advocate for a long-term investment in broadband infrastructure maintenance and digital skills training across the state. In a digitally equitable Tennessee, an extensive network exists between internet service providers, digital inclusion non-profits, the state Broadband Office, and the public that collectively works towards closing the digital divide. Innovative and impactful digital opportunity work has been present in the state for years but often with limited resources. The State Broadband Office hopes to support existing digital opportunity work and develop new initiatives to guarantee that every Tennessean who wants to access the Internet can do so easily. The vision for the state's Digital Opportunity Plan is to develop strategies to establish sustainable digital opportunity programming that empowers Tennesseans to expand their capacity for employment, promote information sharing across partners, organizations, and agencies tied to digital opportunity, and most importantly, achieve Digital Opportunity in Tennessee through tangible programs and resources.

The broad goals that accompany our vision are as follows:
- Build a statewide network for Digital Opportunity of state agencies, nonprofits, local governments, and internet service providers.
- Increase job opportunities in Tennessee.
- Improve health outcomes by increasing access to healthcare providers via telehealth.
- Increase internet safety among vulnerable populations.

2.2   Alignment with Existing Efforts to Improve Outcomes

Digital Opportunity is inherently intersectional, touching almost every aspect of life and many communities in many ways. As such, Tennessee's Digital Opportunity Plan is intended to interact with, build upon, and support existing and/or planned efforts in the state to improve outcomes for community members. This section will outline how the Broadband Office anticipates the Digital Opportunity Plan interacting with existing and planned efforts and the ways in which the Broadband Office will coordinate its use of funds from the State Digital Equity Capacity Grant Program, the Broadband, Equity, Access, and Deployment (BEAD) Program, and other funding sources.

Alignment with the BEAD, State Digital Equity Capacity Grant Program, and other Funding Sources

The strategies developed in the Digital Opportunity Plan will be implemented alongside multiple broadband infrastructure and digital adoption funding sources. These funds include Tennessee Emergency Broadband Fund-American Rescue Plan (TEBF-ARP) Act, ARPA State and Local Fiscal Recovery Fund, ARPA Capital Projects Fund, and BEAD funding. TNECD expects to expend all allocated BEAD funds for broadband infrastructure projects. Any remaining funds will be leveraged to support Digital Opportunity programs.

For all TNECD broadband infrastructure programs, we require applicants to participate in the ACP Program or a comparable low-cost plan to promote affordability. Adoption plans are considered as part of the application process and are reported upon in both quarterly and annual grant reports. Through all broadband infrastructure programs since 2018, TNECD has invested $556.7M in state and federal funds to serve over 660,000 Tennesseans across 260,000 locations.[5] TNECD believes the $813 million allocation will be pivotal in ensuring broadband accessibility to all Tennesseans. These projects, listed below, are being leveraged as we build a strategy to get the remaining Tennesseans served with high- speed internet, as well as address other digital opportunity concerns.

TNECD is currently working to deploy $185M in Last Mile and Middle Mile Infrastructure from the American Rescue Plan Act (ARPA) Capital Projects Fund. The Last Mile Program focuses on three specific counties (Polk, Wayne, and Hardin counties) that the state has identified as high-cost areas due to population density and geographic challenges.

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[5] Broadband Assistance (tn.gov) shows the various broadband programs that have been funded and which counties have received the funding.

TNECD will deploy up to $20M per county to connect the remaining unserved households and businesses. For the Middle Mile Program, applicants may apply for any eligible area (locations lacking 100/20mbps) in the remaining 92 Tennessee counties. The Middle Mile Program has a required last mile component and must demonstrate new and or improved service in an unserved (lacks 25/3mbps) or underserved area (lacks 100/20mbps). Both programs are being deployed on the same timeline, with applications due October 16, 2023. We anticipate award announcements to be made in Spring 2024. All awarded grant dollars must be spent within the 2-year contract period. Additionally, in September 2022, TNECD invested $447M in ARPA funding, through the TEBF-ARP Program, to deploy high-speed internet to over 124,000 households and businesses. This program will serve more than 310,000 Tennesseans across 75 projects in 58 counties by August 31, 2025. Construction has begun for many of these projects as of September 2023.

While we expect that all the BEAD funding to be allocated for infrastructure, the Digital Opportunity Plan and the NTIA Digital Equity State Capacity Grant funding will coordinate closely with the BEAD Five-Year Action Plan (FYAP) to create a tactical approach to closing the digital divide in Tennessee. The primary focus of the FYAP will be developing a strategy to equip the entire state with the infrastructure necessary to access high-speed internet. However, the FYAP will also address digital adoption strategies such as digital skills training, device access, broadband affordability, and workforce development. We believe that these factors all contribute to the success of broadband infrastructure projects and impact project take rates. Tennessee's Digital Opportunity Plan will complement the FYAP by crafting detailed strategies to deploy digital opportunity resources that coincide with the infrastructure projects funded through Tennessee's BEAD allocation. In doing so, Tennessee plans to have a comprehensive approach to addressing broadband and digital opportunity needs in the state.

Alignment with Existing and New Broadband Programs

The Digital Opportunity Plan aligns with the State of Tennessee's goals to recruit high-paying, high-quality jobs to the state, improve rural health outcomes, and remove cost barriers to internet services. The plan will build upon two existing state programs that work towards digital adoption and inclusion: Tennessee State Library and Archives' **Training Opportunities for the Public (TOP)** Grants and TNECD's **Broadband Ready Communities (BRC)**. Tennessee established both programs with the Broadband Accessibility Act (2017). The TOP grants allocate funds to public libraries for hotspots, laptop equipment, and digital skills training for their local communities.

BRC encourages counties and localities to attract broadband infrastructure projects in their areas by removing local administrative barriers to deploying broadband. Counties that are "Broadband Ready" pass an ordinance recognizing broadband as an important need and commit to removing administrative barriers *(see Appendix B for sample BRC ordinance)*. Historically, broadband infrastructure applications in counties with the "Broadband Ready" designation are awarded additional points on state grant applications. The Broadband Ready Communities Program has been redesigned to provide funding for every county to promote digital adoption work in their communities. Under the revamped program, counties can apply to be "Adoption Ready" and receive up to $100,000 to pursue digital adoption programming in their local communities, which can include: purchasing digital devices for county residents to utilize, hosting digital skills training, promoting the Affordable Connectivity Program, etc. The non-competitive grant program opened on October 2nd, 2023, and TNECD intends to announce awards in the Spring of 2024.

In addition to the two existing programs above, there are two new digital adoption programs that launched in the Fall of 2023: **Digital Skills, Education, and Workforce Grant Program (DSEW)** and **Connected Community Facilities (CCF).**

DSEW will invest in evidence-based initiatives that focus on improving foundational and advanced digital skills. The goal of this program is to support skilling programs that help individuals develop the technical proficiency required to navigate complex digital environments, participate in the digital economy, and drive innovation. Under workforce development, this program aims to develop a well-trained and diverse telecommunications workforce needed to deploy, manage, and upkeep broadband infrastructure. The competitive grant program opened on October 16th, 2023, and TNECD intends to announce awards in Spring of 2024.

CCF aims to construct and improve digital access through constructing new buildings or rehabilitating current spaces. The Connected Communities Facilities Grant Program is funded by the Capital Projects Fund (CPF) and the State Local Fiscal Recovery Funds (SLFRF). Eligible applicants for this program are units of local government in Tennessee or non-profit organizations applying in partnership with local governments. CCF will allow communities to build new or rehabilitate community facilities to provide these services, including broadband access, in one location. The goal of CCF is to allow for digital skills training and workforce development, virtual health monitoring, and virtual education within one facility. The competitive grant program opened on October 2nd, 2023, and TNECD intends to announce awards in Spring of 2024.

Alignment with State Goals

Goals, strategies, and objectives presented in the Tennessee Digital Opportunity Plan align with state goals in economic and workforce development, education, health, civic and social engagement, and other essential services.

Economic and Workforce Development

Tennessee strives to be the **number one state in the southeast for high quality jobs,** defined as jobs that pay more than the county median wage ([Transparent TN - High Quality Jobs](#)). The Tennessee Digital Opportunity Plan's emphasis on increasing broadband access for covered populations and in underserved areas supports this state goal in many ways. Note that all covered populations have at least one measurable objective connected with the strategies listed below to ensure that they are being served in the pursuit of Tennessee's economic and workforce development goals. Here are a few examples.

1. Strategies 2.1, 2.2, 2.3, and 4.1 will make rural areas more attractive for advanced manufacturing firms that require interconnectivity and a digitally skilled workforce to effectively operate in an Industry 4.0 world. Greater digital opportunity will increase the growth of capital investment in rural areas, create high quality jobs, and build on Tennessee's progress in reducing the number of rural, distressed counties. These are key priorities of the Tennessee Department of Economic and Community Development.

2. Strategies 2.1, 2.2, and 4.1 will increase labor participation by members of all covered populations throughout Tennessee. Employers understand that we must increase labor participation to successfully compete in a highly competitive global market. This means reaching out to members of covered populations with online employment information, training programs, and remote work opportunities. Labor force participation is a key priority of the Tennessee Department of Labor and Workforce Development. Improved digital opportunity for covered populations will significantly impact this critical workforce driver.

3. Strategies 2.1, 2.2, and 4.1 will increase small business development opportunities and entrepreneurship skills throughout the state. These opportunities include access to education and training, entrepreneurship counseling, global markets, e-commerce opportunities, access to capital, and other tools and resources that enhance business creativity and innovation. Making these opportunities accessible to entrepreneurs is a priority of Launch

TN, a State supported public-private partnership with the mission to make Tennessee the best state in the nation for start-up businesses.

It will be important for TNECD and Tennessee Digital Opportunity Plan partners to monitor key economic and workforce development indicators throughout implementation. These include per capita income, capital investment, rural development, labor force participation, employment and income for covered populations, and number of rural, distressed counties.

Education

Tennessee seeks to be the **fastest improving state in the country**, as defined by educational attainment levels and the presence of a skilled workforce. The Tennessee Digital Opportunity Plan's emphasis on increasing broadband access for covered populations and in underserved areas supports this state goal in a variety of ways. Here are two examples.

1. Strategy 4.2 will enable more students representing all covered populations to participate in online learning opportunities that lead to degrees and certificates. This supports Drive to 55, a State initiative to get 55% of Tennesseans equipped with a college degree or certificate by 2025. State initiatives supporting Drive to 55 include Tennessee Reconnect and Tennessee Promise. Tennessee Reconnect helps adults attend a community or technical college to complete a postsecondary degree or certificate, tuition free. Tennessee Promise is a scholarship program to provide free tuition to high school graduates attending a technical or community college. By emphasizing covered populations, the Tennessee Digital Opportunity Plan plays an important role in expanding higher education opportunities to all Tennesseans. In addition to providing greater access to degree and certificate programs, broadband services also increase access to postsecondary application and financial aid process, career and academic counseling, student mentoring, and collaborative learning opportunities.

2. Strategy 4.2 will expand opportunities for educators in K-12 professional development, bachelor's and graduate degrees, and educator interaction. In addition, enhanced broadband services will help educators increase student and parent access to E-learning platforms, homework assignments, and other school

information. The Tennessee Department of Education's mission is to support and influence districts to improve the quality of teaching and learning as well as increase access and opportunity for all students. The Tennessee Digital Opportunity Plan will support this mission, particularly for covered populations.

- Strategy 4.1 will expand participation in the Adult Education Program by members of all covered populations. This program based in American Job Centers across Tennessee, is an important part of the State's education and workforce development efforts. Adult Education services include basic education for adults, preparation for high school equivalency diploma, integrated English literacy and civic education, digital literacy, and useful skills for work. Increased broadband access will support American Job Center efforts to connect with covered populations across the state. The Tennessee Digital Opportunity Plan emphasis on covered populations strongly aligns and supports this State priority.

TNECD and Plan partners will work to ensure continued alignment and track key education indicators as the Plan develops and moves into implementation. These include educational attainment, graduation rates and related K-12 metrics, and American Job Center adult education metrics.

Health

The State's priority is a **healthier Tennessee**, made possible by promoting healthy behavior and providing high quality services to our most vulnerable populations. Here are two examples of how the Tennessee Digital Opportunity Plan aligns with and supports this priority.

1. Strategies 1.2, 4.1 and 5.1 align with and support the Tennessee Department of Health's strategic priorities of access and prevention. Access includes optimizing clinical efficiency, improving external primary care access, leveraging innovation through telehealth, and expanding partnerships. Improved broadband access throughout Tennessee supports these goals by connecting more Tennesseans with healthcare education, information, and services. Prevention includes efforts to decrease youth obesity, tobacco use, substance misuse, and preventing and mitigating adverse childhood experiences. Improved broadband access supports these goals by improving access to education and mental health services by all covered populations. Strategies 1.2, 4.1, and 5.1 also align with TennCare's goal to improve lives through high-quality, cost-effective care.

- Strategies 1.2, 4.1 and 5.1 aligns with and supports the mission of the Tennessee Department of Mental Health and Substance Abuse Services to create collaborative pathways to resiliency, recovery, and independence for Tennesseans living with mental illness and substance abuse disorders. These strategies support this mission by increasing digital access to crisis services and other behavioral health safety net services to covered populations and underserved communities across the state.

The Tennessee Digital Opportunity Plan advances digital literacy skills and access to broadband services that are critical to full participation in today's healthcare environment. It will be important for TNECD and Tennessee Digital Opportunity Plan partners to monitor key economic and workforce development indicators throughout implementation.

Civil and Social Engagement

The Tennessee Digital Opportunity Plan supports the State's interest in **advancing civil and social engagement and making Tennessee the best managed state.** Increased access to broadband services has the potential to improve access to information, enhance civic education, and increase participation in community activities. Here are four examples of how the Plan supports State priorities in this important area.

1. Strategies 1.1 and 1.3 support stakeholder participation in Digital Opportunity Plan implementation and ensure that information about the plan is accessible to all Tennesseans. These strategies will strengthen civil and social engagement by producing transparent, balanced, and accurate information on progress, opportunities, and challenges.

2. Strategies 3.1 and 3.2 align with efforts to make state agency resources more accessible to members of all covered populations, particularly aging individuals, and people with disabilities. The Tennessee Secretary of State website, for example, provides useful information on voting registration and elections, government operations and personnel, government rules and regulations, and other topics that enhance civil and social engagement. Tennessee's Digital Opportunity Plan will support these efforts by increasing digital skills and broadband access to covered populations.

3. In a similar example, strategies 3.1 and 3.2 will increase accessibility of state and local government information for members of covered populations. The

Tennessee Comptroller of the Treasury, for example, has the mission to make government work. In addressing this mission, the Comptroller makes information available on property assessments, audits and reports, state and local budgets, and related topics. This office also provides instructions on how citizens can report fraud, waste, and abuse in state government. Digital literacy and responsible online behavior are critical parts of civic and social engagement in today's world. The Digital Opportunity Plan will support these State priorities through its strategies by increase broadband and digital literacy access throughout the state.

4. Strategies 3.1 and 3.2 also align with The State's Transparency and Efficient Government Program, which has the goals to make Tennessee the best managed state and provide high quality services at the lowest possible price to taxpayers. The program provides information on agency budgets, goals, salaries, and performance. The Tennessee Digital Opportunity Plan also supports this state priority by increasing digital literacy to covered populations and expanding access to underserved communities. This, of course, increases transparency which is key to informed civic engagement.

5. Strategy 4.3 aligns with Tennessee's Cybersecurity Advisory Council's goal to promote the awareness of state security resources and services across the state.

There are many other examples of how the State, along with Tennessee communities, promotes and advances civic and social engagement. The Tennessee Digital Opportunity Plan will support these efforts by ensuring that all Tennesseans have access to broadband services and needed digital skills.

Delivery of Other Essential Services

Strategies 2.1, 2.2, 2.3, 3.1, 3.2, 5.1, and 5.3 align with and support Tennessee's goals to be the best managed state, provide high-quality services at the lowest price to taxpayers, and achieve transparent government. It's important that all Tennesseans have the digital skills and broadband access necessary to secure government services. Unfortunately, not all Tennesseans are currently able to access the essential services that the State currently provides online. Here are a few examples: renew driver's license, file and pay taxes, renew vehicle registration, order birth and other certificates, apply for Supplemental Nutrition Assistance for Needy Families, apply for Temporary

Assistance for Needy Families, access child support services, search for jobs and access employment services, file business documents, apply for financial aid and scholarships, and apply for TennCare (Tennessee's Medicaid program). The move to government e-commerce will continue to expand, and Tennesseans will have an even greater need for broadband access. The Tennessee Digital Opportunity Plan aligns with this trend and will play a significant role in helping members of all covered populations stay abreast of digital developments that impact broadband access.

3. State of Digital Equity: Assets and Barriers

3.1 Asset Inventory Overview

The primary strategy for developing the asset inventory entailed a survey to collect information on existing digital inclusion assets in the state. NDIA's asset inventory template was used to develop Tennessee's Digital Opportunity Asset Inventory survey.[6] Beginning in May 2023, the survey went selectively to the Tennessee Digital Opportunity Task Force members and then to organizations with existing relationships with the Broadband Office. The survey was edited following the initial distribution per recommendations from the Taskforce and others working with TNECD. Following these updates, the survey was distributed widely to organizations serving specific covered populations and other entities we identified as potentially offering digital opportunity resources.

Below is the opening message to the Digital Opportunity Asset Inventory:

Figure 1: Quote from TNECD's Digital Opportunity Asset Inventory Form

> *"As a part of Tennessee's Digital Opportunity planning, the Broadband Office is conducting an asset inventory of the existing digital opportunity programs/organizations. These can be statewide, regional, or local resources provided by public or private entities. If you or the organization you represent offers digital opportunity resources (resources include services around broadband access, device access, digital skills training/technical support, public devices, and internet access, and/or digital inclusion funding), please complete this survey. The State Broadband Office will integrate submitted applicable information into Tennessee's Digital Opportunity Plan. The survey should take about 10 minutes to complete."*

One challenge that emerged from the Asset Inventory Survey was a high abandonment rate. Several sub-sections of the survey asked for details on the type of resources offered, potential costs associated with said services, and the number of Tennesseans served by these programs/resources. Organizations that completed the survey reported that some of the questions required collecting internal information, which made it a lengthier process. Individuals also noted that specific questions were confusing or could be interpreted differently. We addressed this issue by placing clarifying information next to the five major categories (broadband access, device access, digital skills training/technical support, public devices + internet access, and/or digital inclusion funding) so respondents better understood the various categories.

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[6] Please visit Asset Mapping - National Digital Inclusion Alliance to see the Asset Mapping Template TNECD referenced

Beginning in July, we circulated a shorter survey designed to learn what organizations have programs around digital skills training, device access, and public Wi-Fi access.[7] In the condensed survey, we asked respondents if they would be willing to provide more information on their programs; those that selected "yes" were sent the Asset Inventory Survey. In addition to the two surveys, the Broadband Office self-identified active digital inclusion assets in the state. These are organizations or agencies that provide digital opportunity services to their community but have not completed our Digital Opportunity Asset Inventory.

The Broadband Office has identified over 150 Digital Opportunity Assets in Tennessee across the Asset Inventory Survey, the shorter survey, and the office's internal research (please see *Appendix C* for the list of Digital Opportunity Assets). Existing partners in the state were critical to identifying digital inclusion organizations. Several of the organizations identified have primary focuses outside of digital opportunity but still provide services that qualify for the asset inventory. Tennessee's Digital Opportunity Asset Inventory will be updated and revised annually as the office discovers more organizations offering digital opportunity resources around the state. The Broadband Office's broader goal is to utilize the information collected from the Asset Inventory and produce a public-facing map of all the identified resources in Tennessee.

3.1.1 Digital Inclusion Assets by Covered Population

This section contains a select list of organizations and resources that serve specific covered populations in Tennessee. These organizations were identified through the Digital Opportunity Asset Inventory, stakeholder engagement, and internal department research. Several organizations identified serve multiple covered populations. This is not an exhaustive list of digital inclusion assets by covered population. The asset inventory will be regularly updated as TNECD continues to identify organizations offering digital opportunity services. Please note that Tennessee does not have any federally recognized American Indian or Alaska Native tribes.

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[7] The shorter survey was largely informing program development for ARPA- funded Digital Adoption Programs.

Figure 2: Digital Opportunity Assets by Covered Population.

Digital Opportunity Assets	Organization Description	Covered Populations Served							
Title and Link to Organization Website (if applicable)	Brief description of services offered as it relates to Digital Opportunity	Aging Individuals	Covered Households	Incarcerated/Recently Incarcerated Individuals	Individuals with Disabilities	Individuals with Language Barriers/ Low Literacy	Racial/Ethnic Minorities	Rural Residents	Veterans
AARP Older Adult Technology Services (OATS)	The OATS program provides educational programming for seniors around digital skills, online safety, and using digital devices.	X							

Organization	Description								
[American Baptist College]	American Baptist College (ABC) is a recipient of NTIA's Connecting Minority Communities (CMC) Pilot Program that provides grants to address the lack of broadband access and digital adoption in minority-serving institutions. ABC is a core institution in the Nashville community and will be working to expand device and digital literacy access in North Nashville.						X		
[The Arc Tennessee]	Arc Tennessee is an advocacy organization that empowers individuals with disabilities and their families to better participate in their communities. The Arc provides an array of resources and trainings around special education and independent living. In May, Arc TN helped facilitate a Digital Opportunity listening session at the MegaTN conference.	X		X					

Blacks in Technology- Nashville Chapter	Blacks in Technology is a membership organization that promotes community in the technology space, promotes tech education in youth communities, and offers professional development opportunities.						X		
Centro Hispano	Centro Hispano offers workforce development courses for the Latino community in East TN.		X			X	X		
Code Crew	CodeCrew offers coding and other computer science foundational skills to youth and adult learners in Memphis. In May, CodeCrew hosted a community Digital Opportunity Listening Session.						X		
Dismas House	Dismas House provides digital skills trainings within their reentry program for men returning from state prisons or county jails.			X					
Elimu Empowerment Services	Elimu Empowerment Services offers education, training, and career		X			X	X		

		C1	C2	C3	C4	C5	C6	C7	C8
	counseling to immigrants and refugees.								
[Governor's Early Literacy Foundation](#)	The Governor's Early Literacy Foundation serves to strengthen early literacy in Tennessee to help all children have access to the resources, guidance and support they need to become lifelong learners.		X			X			
[Hispanic Family Foundation](#)	Hispanic Family Foundation (HFF) offers a variety of social, health, cultural, and education services for the Hispanic community in the Nashville region. Hispanic Family Foundation offers digital skills trainings and distributes devices. HFF also hosted a Digital Opportunity Listening Session.	X	X		X	X	X	X	
[Lane College](#)	Lane College is a recipient of NTIA's Connecting Minorities Community						X		
[Latino Memphis](#)	Latino Memphis offers an array of educational,		X			X	X		

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	career, community, and policy services for the Latino community in Memphis.								
LeMoyne-Owen College	LeMoyne-Owen College (LOC) is a HBCU in Memphis. LOC's Center of Cybersecurity has been designated as a Center of Academic Excellence in Cybersecurity by the U.S. Department of Homeland Security, one of six higher education institutions in the state with the designation. In March 2023, TNECD hosted a Digital Opportunity Listening Session on LOC's campus.		X				X		
Literacy of Middle Tennessee	The Literacy Council of Middle Tennessee provides free resources including one-on-one tutoring to children, youth, and adults. All services are provided free of charge.		X			X			
Literacy Mid-South	Literacy Mid-South improves the quality		X			X			

Name	Description								
	of life through education by providing literacy programs for adults and children as well as a network of collaborative projects with educational organizations.								
[Persevere Now](#)	Persevere Now offers coding-related programming and re-entry services to incarcerated individuals. They also established a Tech Alliance with Tennessee employers, state agencies, and community organizations to fill high- quality tech positions in the state.			X					
[Refugee Empowerment Program (REP)](#)	Refugee Empowerment Program offers digital literacy and workforce development services for refugees, asylees, and immigrants in the Memphis region.		X			X	X		
[RoaneNet](#)	RoaneNet refurbishes and							X	

	donates devices to individuals in need. RoaneNet also provides basic digital skills trainings in rural East TN.								
[Tennessee Department of Human Services](#)	The Tennessee Technology Access Program (TTAP) is a statewide program designed to increase access to and acquisition of assistive technology devices and services. TTAP is partnered with Signal, Spark, and STAR centers, all of which offer services to individuals with disabilities.				X				
[Tennessee Department of Labor Workforce Development- American Jobs Center](#)	The American Jobs Center provides a variety of resources related to employment needs. There are locations across the state where Tennesseans can access Wi-fi and computers free of charge. American Jobs Center also provide support around job-searching and workforce related trainings	X	X	X	X	X	X	X	X

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	or certifications.								
Tennessee Department of Labor and Workforce Development- Office of Reentry	The Office of Reentry is launching an educational tablet program that will be available in all Tennessee county jails. It offers workforce development and educational programming to incarcerated Tennesseans.			X					
Tennessee Immigrant and Refugee Rights Coalition	Tennessee Immigrant and Refugee Rights Coalition focuses on community organizing and advocacy initiatives across the state. The organization offers workforce development trainings which covers topics like internet browsing and job searching.		X			X	X	X	
The Enterprise Center	Based in Chattanooga, the Enterprise Center is a national leader for digital inclusion work. The organization oversees Tech Goes Home, a program	X	X	X	X	X	X	X	X

	that promotes digital literacy and device access, and the HCS EdConnect program which provides free high-speed internet to low-income students and families attending Hamilton County Public Schools. The Enterprise Center also convenes the Digital Access and Equity Committee that works towards closing the digital divide in the Chattanooga region.								
Thrive Regional Partnership	Thrive hosts a Regional Broadband Alliance with counties in Tennessee, Georgia, and Alabama. As a coalition builder, Thrive supports research efforts, funding opportunities, and tackle challenges around digital opportunity.	X	X	X	X	X	X	X	X
United Ways of Tennessee	The United Ways of Tennessee support digital skills trainings for youth and seniors. United Way leverages the TN	X	X		X	X	X	X	X

	Afterschool Network (TAN) to provide STEM related educational programming. United Way also offers funding to local nonprofits to provide digital opportunity resources.								
[The Urban League of Middle Tennessee](#)	The Urban League of Middle Tennessee offers a range of economic, social, and development services across nine counties. They have offered digital skills trainings ranging from computer basics to job searching.	X	X	X	X	X	X	X	X

3.1.2 Existing Digital Equity Plans

As of this writing, the State did not identify any existing digital equity plans created by municipalities or regions throughout Tennessee. However, some existing economic development strategy documents and technology plans include goals relevant to digital equity. There are also digital equity related efforts occurring in some municipalities throughout the state. Digital equity elements found in municipal development and strategy plans from Memphis, Nashville-Davidson County, Chattanooga, and Clarksville-Montgomery County will be discussed. Local governments (county, municipal and metropolitan) will be crucial in implementing Tennessee Digital Opportunity Plan. TNECD will continue to work with local governments to foster the partnerships and develop the capacities needed to provide services and facilities relating to digital opportunity. TNECD programs like BRC and CCF provide funding to support the local initiatives laid out in the section below. The programs established through the Digital Opportunity Plan will support and expand these investments into local efforts.

City of Memphis

The [2021 Smart Memphis plan](#) identifies digital equity as a larger component of the city's economic development strategy. The plan highlights existing efforts by the Memphis Public Libraries where they offer digital skills trainings and devices to residents of all ages and a city-wide network of unused "dark fiber". The Smart Memphis plan offers recommendations for expanding the libraries efforts including:

- Partnering with community centers to add capacities for offering digital literacy trainings.
- Expanding and operationalizing the city's fiber network to prioritize low broadband subscription areas.
- Expanding free public Wi-Fi access points in the city.
- Investing in programs supporting entrepreneurs, small businesses, and non-profits with digital resources.
- Develop a formal program within the Office of Business Diversity and Compliance to support local tech companies and start-ups for workforce development goals.

A digital equity gap identified in the Smart Memphis Plan concerns the lack of programming and trainings around cyber security. Plans to activate and expand the existing fiber network in Memphis were announced in 2023 through the announcement of the Blue Suede Network (BSN). BSN plans to invest nearly $700 million into expanding the fiber network for public usage citywide.

Metropolitan Government of Nashville and Davidson County

[The Metropolitan Government of Nashville and Davidson County (Metro-Nashville)](#) has identified three digital inclusion goals but not yet outlined a detailed Digital Equity Plan. The goals are to:

- Expand program adoption for the American Connectivity Program (ACP) by increasing awareness of the program's existence for Davidson County residents.
- Train non-profit staff in the county to serve as digital navigators – focusing on organizations working among individuals and communities who are likely to qualify for existing federal programs such as ACP.
- Collect data on digital services and assets to better understand the current state of digital inclusion across Davidson County.

This effort is being undertaken with Vanderbilt University where they will also assist Metro-Nashville with a series of public engagements to better understand community needs and opportunities for collaboration and sharing resources. Nashville is also

home to the Digital Inclusion and Access Taskforce which was established in 2020 to drive community-led digital equity work in Nashville. The taskforce gathered community leaders and digital inclusion experts to conduct Nashville's first digital needs assessment in 2021. For more information and the findings of the assessment, visit Digital Inclusion Nashville. Some digital equity gaps identified in Metro-Nashville's stated goals concern cybersecurity, device access, and building an ecosystem of programming surrounding digital skills and workforce development.

City of Clarksville & Montgomery County Government

The Montgomery County government and City of Clarksville in upper-middle Tennessee put forward a joint Technology Action Plan in May of 2015. The plan includes a detailed analysis of the state of infrastructure, connectivity, and digital inclusion for the county. The plan mentions specific recommendations pertaining to digital equity including lowering the cost barriers to internet services, expanding free access points across the county, distributing digital literacy content, establishing partnerships for digital skills trainings, and facilitating pipelines for refurbishing devices for re-use. The plan also identifies vulnerable populations within Montgomery County and program types that could address their specific digital needs as well as identifying partner organizations to provide those programs. Finally, the plan includes recommendations for digital literacy trainings including cybersecurity basics for new internet users and establishing pathways for device refurbishment.

City of Chattanooga

The Enterprise Center, a Chattanooga-based organization that implements digital skills training and inclusion programs, has a Digital Access and Equity Committee comprised of a wide range of organizations, governmental entities, and educational institutions that meets monthly. This committee was formed so community members could take a multi-channel approach to closing the digital divide in the region. Its membership is a key advocate for digital equity programs, not only in the southeast, but statewide. While Chattanooga hosts a wealth of digital equity programs, there is no formal digital equity plan for the City of Chattanooga or Hamilton County government identified.

City of Knoxville

The Knoxville Utilities Board in Knoxville, Tennessee is currently undertaking efforts to build out a municipal fiber network in their service area. Within their vision statement is a plan to implement equity and inclusion goals surrounding digital literacy and skills development. There are currently no specific action items in the plan.

3.1.2 Existing Digital Equity Programs

The State does identify some existing digital equity/literacy programs operating in Tennessee supported through state grants and non-profit organizations.

TNECD provides **Training Opportunity for the Public (TOP)** grants to support digital inclusion efforts across Tennessee through the public libraries network. This program is a partnership between TNECD and the Tennessee State Library and Archives (TSLA), a division of the Tennessee Department of State. TNECD funds the program, and TSLA administers the grant program to libraries statewide.

Since 2018, nearly $1.2 million of TOP grant funds have been awarded to public libraries across the state to support digital skills trainings, device purchases, circulating hotspots, and other programs that are identified as broadband-related community needs by local libraries. The digital literacy trainings supported by TOP grants have ranged from computer basics (device use, troubleshooting, Microsoft Office tools, setting up an email address, etc.) to more advanced trainings such as video editing and other advanced digital skills. Many of the trainings offered in libraries are geared towards adults and senior learners with limited digital skills. Williamson County and Memphis Public Libraries standout with particularly robust public programs for online skills. Both library systems offer a range of programs including digital creativity-focused classes on photo editing to social media use alongside traditional office-based workforce development digital skills.

The Tech Goes Home (TGH) in Chattanooga is a national leader in digital opportunity programming. TGH programs offer training and technology for Tennesseans in the Chattanooga area to develop digital skills and purchase a low- cost device. **Tech Goes Home Tennessee (TGH-TN)** is an expansion of the original program in Chattanooga focusing on early childcare agencies and educators. TGH-TN features trainings intended to enable childcare providers to receive technology incentives following program completion and operates in 88 of Tennessee's 95 counties. The trainings include classroom-cohort models as well as 1-on-1 coaching on software including: word processing, spreadsheets, slideshows, calendar, and email. Class courses are 15-hours of training total spread over multiple sessions.

EdConnect is a program for students enrolled in Hamilton County Schools and their families. The EdConnect program provides free 100Mbps internet connections to eligible households through a partnership with the Electric Power Board (EPB), their internet service provider. Eligible households include:
   -       those with a student receiving free or reduced lunch.

- a household with a child enrolled in a school where all students are receiving free or reduced lunch.
- households participating in SNAP or another economic assistance program.

The program has funding available for the next ten years and provides continuous internet connection for the duration of a child's enrollment in Hamilton County Schools. There are no restrictions on the use of the service provided to children and their families, meaning other household members can make use of the free service for their needs as well.

The Nashville Digital Inclusion Fund is a digital inclusion resource that provides technical support, digital skills training, free and low-cost devices, as well as low-cost internet connectivity to support families in need.

The Tennessee Broadband Accessibility Map is a public-facing tool that allows users to see where broadband access is distributed in Tennessee as well as the type of speeds and technologies used.

There are several gaps identified among the digital equity programs operating in Tennessee. There is a significant need across our communities for trainings that address online safety and cyber security, device access for low-income individuals and households, and advanced digital skills that increase workforce development opportunities. Few resources exist statewide to educate and inform the public on how to safely navigate the internet and its resources. A deficit of resources exists at the state and local levels to provide access to connected digital devices (i.e. laptops, tablets, or another broadband connected device). Lastly, in areas where internet is lacking due to service or low speed offerings, there is a need for additional outreach on how the internet can provide opportunities for educational attainment, healthcare monitoring, workforce development, precision agriculture, and other resources available through access to the digital economy. TNECD is working to ensure that adoption activities are prioritized in our broadband programs and outreach, as these initiatives boost internet take rates, incentivize broadband build out, increase digital skill attainment, and impact future opportunities for community and economic development.

3.1.4 Broadband Adoption

Overview and Methodology

Broadband Adoption efforts are supported through public and private initiatives that address key barriers including infrastructure access, broadband affordability, digital skills, and device access. State resources focus on both infrastructure buildout and community adoption efforts. Other assets identified in this section consist of public libraries, chambers of commerce, and other community-based organizations. The assets were identified through online surveys developed by TNECD, stakeholder engagement, and internal knowledge within the State Broadband Office.

State Resources

The State of Tennessee provides grant opportunities for the buildout of broadband infrastructure and the deployment of adoption services. ISPs participating in state-funded broadband infrastructure projects are required to undertake adoption efforts and track adoption rates. Additional state adoption resources consist of outreach and communication efforts concerning funding opportunities and best practices for stakeholders. Figure 3 lists broadband adoption assets that are managed by TNECD.

Figure 3: Broadband Adoption Assets managed by TNECD.

State Adoption Assets	
Broadband Ready Communities (BRC)	Beginning in fall 2023, the Broadband Ready Communities (BRC) Program will utilize a portion of the Tennessee Emergency Broadband Fund – American Rescue Plan (TEBF-ARP) to promote community-based digital adoption. BRC funds are available to county governments and can be used for a range of projects including digital skills trainings, education/workforce development opportunities, device access, ACP marketing/outreach, and providing public Wi-Fi access points. BRC will impact broadband adoption statewide by removing barriers relating to digital skills, device access, and broadband affordability at the county level.
Connected Community Facilities (CCF)	Beginning in Fall 2023, the Connected Communities Facilities Grant Program aims to construct and improve digital access through the creation of buildings or rehabilitating spaces. The Connected Communities Facilities Grant Program is funded by the Capital Project Fund (CPF) and the State Local Fiscal Recovery Funds (SLFRF). Eligible applicants for this program are units of local government in Tennessee and non-profit organizations applying in partnership

	with local government. The goal of CCF is to allow for digital skills training and workforce development, virtual health monitoring, and virtual education within one space. It will allow rural and urban communities to build new or rehabilitate community facilities to provide these services, including broadband access, in one building. CCF will impact broadband adoption by removing barriers relating to digital skills, device access, and broadband affordability depending on the types of programs the applicants choose to provide.
Digital Skills Education and Workforce Development (DSEW)	Beginning in Fall 2023, DSEW will invest in evidence-based initiatives that focus on improving introductory and advanced digital skills. The goal of this program is to support skilling programs that help individuals develop the technical proficiency required to navigate complex digital environments, participate in the digital economy, and drive innovation. Under workforce development, this program aims to develop a well-trained and diverse telecommunications workforce needed to deploy, manage, and upkeep broadband infrastructure. This grant will also support digital upskilling across a wide variety of industries, including – but not limited to – technology, music and entertainment, finance, real estate, healthcare, education, and hospitality. DSEW will impact broadband adoption by removing barriers relating to digital skills and device access.
Training Opportunities for the Public (TOP)	The Training Opportunities for the Public (TOP) Grant is available for public libraries to provide services for their communities. Grant funds are available for digital skills training, hotspots, solar charging tables, and internal connections for broadband service. This program is funded by TNECD and managed through TSLA.
State Infrastructure Assets	
Last Mile Grant	The Last Mile Grant program assist with capital expenses related to last mile broadband deployment in Polk, Hardin, and Wayne counties. The Last Mile Grant opportunity is funded by the Capital Projects Fund (CPF) of the American Rescue Plan (ARPA). The goal of this program is to facilitate high-speed broadband access, increase deployment, and encourage adoption of broadband in areas of Polk, Hardin, and Wayne counties that currently lack broadband at speeds of 100 megabytes per second (Mbps) download and 20 Mbps upload.

Middle Mile Grant	The Middle Mile Grant program is established to assist with capital expenses related to middle mile and last mile broadband deployment in unserved and/or underserved areas in the State of Tennessee. The Middle Mile Grant opportunity is funded by the Capital Projects Fund (CPF) of the American Rescue Plan (ARPA). The goal of this program is to facilitate broadband access, increase deployment, and encourage adoption of broadband in areas of Tennessee that currently lack broadband at speeds of 100/20 Mbps.
State Outreach Assets	
Digital Opportunity Taskforce	Since January of 2023, the Digital Opportunity Taskforce has overseen the development of Tennessee's Digital Opportunity Plan to apply for federal digital equity funding.
Digital Opportunity Summit	In August of 2023, the state of Tennessee hosted the first Digital Opportunity Summit that highlighted broadband adoption efforts undertaken by the state and other entities. This summit was useful to communicate best practices, promote new collaborations, and share upcoming state efforts to expand broadband access and adoption.
Digital Opportunity Survey	In May of 2023, the state of Tennessee deployed a survey to identify barriers and needs for covered populations in Tennessee. The survey received over 1,500 responses with each covered population being represented in the data. Supplementary data gathering efforts consisted of focus group conversations with members of covered populations to gather additional qualitative and quantitative data on needs and barriers.

General Adoption Assets

The chart below summarizes the types of programs identified through stakeholder outreach. "Device Access" below means assets reported providing one or more of the following services: equipment (laptops, tablets, or hotspots) for check-out, fixed devices available in the facility, or services related to device refurbishment and donation. "Digital Skills" corresponds to services relating to basic and advanced skills trainings being available. Lastly, "Public Wi-fi Access Points" in this chart refers to the asset providing open access internet connection to the public.

From the data collected in the asset inventory, there is a gap in services relating to device access. Additionally, when basic and advanced digital skills trainings are analyzed separately, advanced skills trainings are not as widely available across Tennessee as

basic skills trainings. We assume device access should be reported higher since most libraries in Tennessee have computers for public use. These gaps will be addressed by state adoption efforts and future Digital Opportunity programming. The final charts are lists of assets in West, Middle, and East Tennessee and the types of services provided. **These are not exhaustive lists of assets**; the asset inventory will be updated regularly as we continue to identify more organizations in the state that offer digital opportunity services.

Figure 4: Types of General Digital Adoption Assets
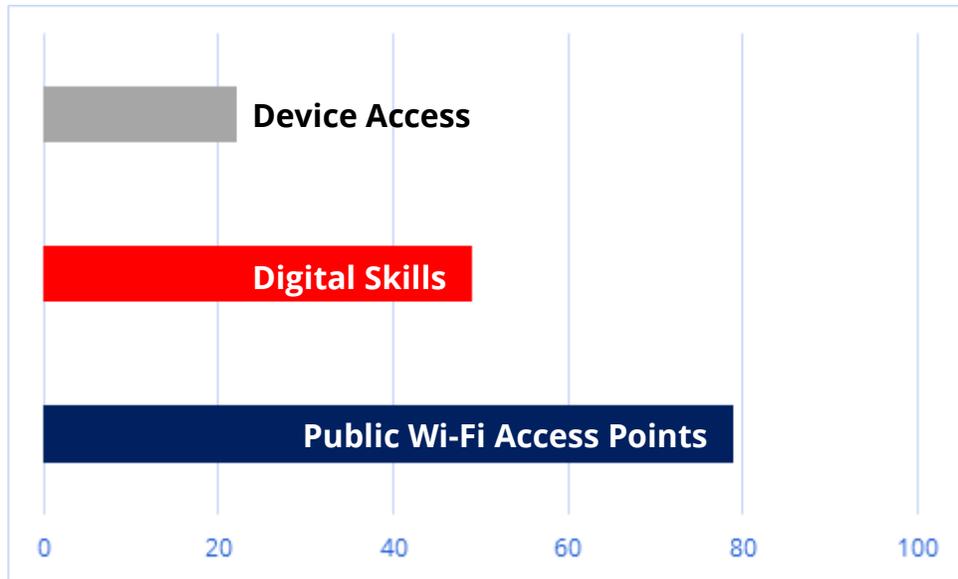
Figure 5: General Digital Adoption Assets in West Tennessee

Organization	Services Provided
Carroll County Library	Digital Skills; Public Wi-Fi Access Points
Chester County Library	Digital Skills
Covington-Tipton County Chamber of Commerce	Public Wi-Fi Access Points; Digital Skills
Crockett Memorial Library	Digital Skills
Decatur County Library	Public Wi-Fi Access Points
Dr Nathan Porter Library	Public Wi-Fi Access Points
Gleason Memorial Library	Public Wi-Fi Access Points
Gleason Memorial Library	Public Wi-Fi Access Points
Jackson-Madison County Library	Digital Skills
Lauderdale County Library	Digital Skills; Device Access; Public Wi-Fi Access Points

Lee Ola Roberts Library	Digital Skills; Device Access; Public Wi-Fi Access Points
Lucius E. and Elsie C. Burch, Jr. Library	Digital Skills
Martin Public Library	Digital Skills
Martin Public Library	Digital Skills; Public Wi-Fi Access Points
Middleton Community Library	Digital Skills; Public Wi-Fi Access Points
Millington Public Library	Digital Skills; Public Wi-Fi Access Points
Munford-Tipton County Memorial Library	Digital Skills; Public Wi-Fi Access Points
Ned R. McWherter Weakley County Library	Public Wi-Fi Access Points
New Direction Christian Church	Digital Skills
Newbern City Library	Digital Skills
Obion County Public Library	Digital Skills
Ridgely Public Library	Public Wi-Fi Access Points; Device Access
Sharon Public Library	Public Wi-Fi Access Points
Star Academy Charter School	Digital Skills
W.G. Rhea Public Library	Public Wi-Fi Access Points

Figure 6: General Digital Adoption Assets in Middle Tennessee

Organization	Services Provided
Charles Ralph Holland Memorial Library	Public Wi-Fi Access Points
Cheatham Co Chamber	Public Wi-Fi Access Points
Cheatham County Public Library	Public Wi-Fi Access Points; Device Access
City of Erin	Public Wi-Fi Access Points
City of Lewisburg Parks and Recreation	Public Wi-Fi Access Points
Clay County Public Library	Public Wi-Fi Access Points
Coffee County Lannom Memorial Public Library	Digital Skills; Public Wi-Fi Access Points
Coffee County Manchester Public Library	Public Wi-Fi Access Points
Collinwood Depot Branch Library	Public Wi-Fi Access Points
Fentress County Public Library	Device Access; Public Wi-fi Access Points
Fred A. Vaught Library	Digital Skills
Gallatin Chamber of Commerce	Public Wi-Fi Access Points
Hardin County Library	Public Wi-Fi Access Points

Hickman County Public Library System	Public Wi-Fi Access Points
iCode Franklin	Digital Skills
John P Holt Brentwood Library	Device Access; Public Wi-Fi Access Points
Lebanon-Wilson County Public Library	Public Wi-Fi Access Points
Lewis County Public Library and Archives	Digital Skills; Device Access; Public Wi-Fi Access Points
Loretto Telecom	Digital Skills; Public Wi-Fi Access Points
McMinnville-Warren County Chamber of Commerce	Digital Skills
Millard Oakley Public Library	Public Wi-Fi Access Points
Moore County Public Library	Public Wi-Fi Access Points
Nashville Public Libraries	Public Wi-fi Access Points; Digital Skills
Pickett County Library	Public Wi-Fi Access Points
Portland Public Library of Sumner County	Public Wi-Fi Access Points
Pulaski Electric System	Public Wi-Fi Access Points
Smyrna Public Library	Digital Skills; Public Wi-Fi Access Points; Device Access
Stewart County Public Library	Digital Skills; Public Wi-Fi Access Points
Stokes Brown Public Library	Digital Skills; Public Wi-Fi Access Points; Device Access
Tennessee Center for Civic Learning and Engagement	Digital Skills; Device Access; Public Wi-Fi Access Points
TERRA (The Electronics Reuse & Recycling Alliance)	Device Access
Wayne County JECDB (Wayne County Government)	Digital Skills; Public Wi-Fi Access Points
White House Public Library	Digital Skills; Public Wi-Fi Access Points

Figure 7: General Digital Adoption Assets in East Tennessee

| Organization	Services Provided
Art Circle Public Library	Public Wi-Fi Access Points
Bean Station Public Library	Public Wi-Fi Access Points
Bledsoe County Public Library	Digital Skills
Blount County Public Library	Public Wi-fi Access Points; Device Access; Digital Skills
Bristol Public Library	Digital Skills; Public Wi-Fi Access Points
Carolyn Stewart Public Library	Public Wi-Fi Access Points
Chattanooga Public Library	Digital Skills; Public Wi-Fi Access Points
Church Hill Public Library	Public Wi-Fi Access Points

Clinton Public Library	Public Wi-fi Access Points; Device Access
Clyde W. Roddy Public Library	Public Wi-Fi Access Points
Coalmont Public Library	Public Wi-Fi Access Points
Cokesbury United Methodist Church	Device Access; Public Wi-Fi Access Points
Cosby Community Library	Public Wi-Fi Access Points
East Ridge City Library	Public Wi-Fi Access Points
Etowah Carnegie Public Library	Digital Skills; Public Wi-Fi Access Points
Grace Fellowship Church Johnson City	Public Wi-Fi Access Points
iCode Tri-Cities	Digital Skills
Jacksboro Public Library	Public Wi-Fi Access Points
Johnson City Langston Centre	Digital Skills
Kingsport Public Library	Digital Skills; Public Wi-Fi Access Points
Knoxville Chamber	Coalition Building; Digital Skills; Device Access
LaFollette Public Library	Public Wi-fi Access Points; Device Access
Lenoir City Public Library	Public Wi-Fi Access Points
Loudon County Chamber of Commerce	Digital Skills
Meigs Decatur Public Library	Digital Skills; Public Wi-Fi Access Points
Morristown-Hamblen Library	Digital Skills; Public Wi-Fi Access Points
Mosheim Public Library	Public Wi-fi Access Points; Device Access
Norris Community Library	Digital Skills; Public Wi-Fi Access Points
Oak Ridge Public Library	Digital Skills; Public Wi-Fi Access Points
Orena Humphreys Public Library	Public Wi-Fi Access Points; Device Access
Parrottsville Community Library	Digital Skills; Public Wi-Fi Access Points
Philadelphia Public Library	Public Wi-Fi Access Points
Pigeon Forge Public Library	Public Wi-Fi Access Points
Rocky Top Public Library	Digital Skills; Public Wi-Fi Access Points; Device Access
Dunlap Chamber of Commerce	Public Wi-Fi Access Points
Sullivan County Public Library	Digital Skills; Public Wi-Fi Access Points; Device Access
Sunbright Public Library	Public Wi-fi Access Points; Device Access
Thrive Regional Partnership	Coalition Building
Thrive Sequatchie	Digital Skills; Device Access; Public Wi-Fi Access Points
Unicoi County Public Library	Digital Skills; Public Wi-Fi Access Points

3.1.5 Broadband Affordability

The Affordable Connectivity Program in Tennessee

The State of Tennessee is invested in promoting the ACP through all means possible. There have been efforts from the state and local levels of government, as well as efforts from the private and non-profit sectors. According to the [Institute for Local Self-Reliance ACP Dashboard](#) and the [Universal Service Administration Company (USAC),](#) the total number of households enrolled in the ACP in Tennessee is 419, 707 households, which is about 35.5% of eligible households.[8]

Figure 8: Distribution of ACP Eligible Household Enrollment (The darker shaded an area is, the higher the enrollment percentage among ACP eligible households)
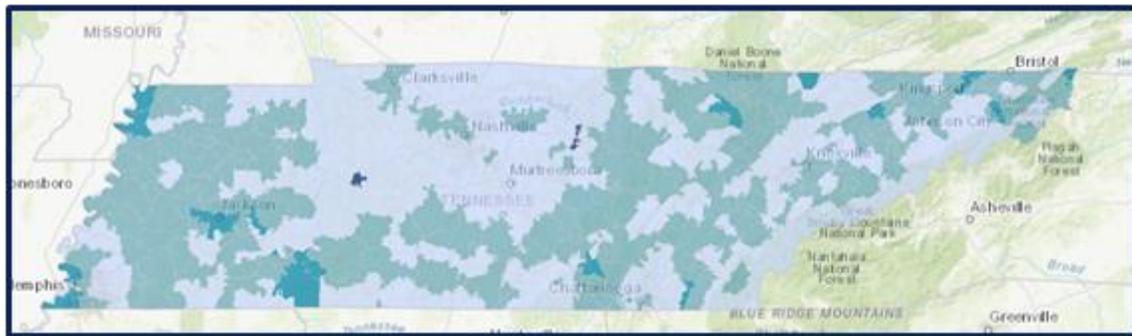
ISP Participation

According to the FCC, there are currently 137 ISPs participating in the ACP in Tennessee. Forty-nine of these ISPs also offered a discounted connected device such as a laptop, desktop, or tablet as part of the program.

State Promotion of ACP

The state has included ACP resources as a part of its Digital Opportunity Listening Sessions to increase awareness of the program. These resources are also included in the Digital Opportunity Listening Session Toolkit and are available for individuals and communities on the [State Broadband Office website.](#)

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[8] Enrollment data from [ACP Enrollment and Claims Tracker - Universal Service Administrative Company (usac.org)](#) last updated on January 8th, 2024. Percentage of eligible households calculated using USAC's enrollment data and ILSR's estimate on eligible households in Tennessee.

Figure 9: Tennessee Broadband Affordability Programs, Organizations, and Resources

Organization	Overview
CivicTN	**Location**: Statewide **Program Description**: Pilot program to facilitate ACP outreach/signup events at anchor institutions.
Tech Goes Home Tennessee (TGH – TN	**Location**: 33 Counties Across East and Middle TN: • East TN: Marion, Sequatchie, Bledsoe, Hamilton, Rhea, Meigs, Bradley, McMinn, and Polk counties. • Knoxville Metro: Knox, Anderson, Loudon, Blount, Roane, Morgan, Campbell, Union, Grainger, • Hamblen, and Jefferson counties. • Nashville Metro area: Davidson, Williamson, Maury, Rutherford, Cannon, Wilson, Smith, Trousdale, Macon, Sumner, Robertson, Cheatham, and Dickson. **Program Description:** Pilot program to facilitate ACP outreach/signup events at anchor institutions.
City of Memphis – Memphis Public Libraries (MPL)	**Location**: Memphis, TN **Program Description:** ACP outreach grant to conduct enrollment efforts across Memphis. Leveraging the Memphis public library staff, branch locations and equipment for digital navigation services. Efforts will also utilize MPL's mobile computer lab to

	bring enrollment services to communities.
Metropolitan Government of Nashville and Davidson County: Nashville Public Libraries (NPL)	**Location**: Davidson County, TN **Program Description:** ACP outreach grant to conduct enrollment efforts across Davidson County. Leveraging the NPL staff, branch locations and equipment for digital navigation services. Davidson County residents will be able to utilize the 311 (hubNashville) service to access a local digital navigator.

3.2 Needs Assessment Methodology

Methodology

TNECD identified needs and barriers through an online survey, listening sessions, and meetings with stakeholders across Tennessee. An online survey launched on May 4th and collected responses until July 31st, 2023. The listening sessions were held in person throughout the state from March to June 2023. These events were organized primarily through Development Districts in Tennessee, with additional sessions organized in partnership with stakeholders such as non-profits and higher education institutions.

Digital Opportunity Survey Methodology

The Broadband Office deployed a survey and received over 1550 responses. The survey focused generally on Tennesseans asking, "What are your barriers to accessing Internet?" was used to capture data on respondents' barriers. Individuals had the option of selecting up to three of the following barriers:

- Broadband Infrastructure (I do not have internet access at my home or residence)
- Cost (I cannot afford Internet service)
- Digital Skills (I do not know how to use digital services like a computer)
- Equipment (I do not have access to a laptop, computer, or a tablet)
- Privacy (I do not know how to use the Internet safely)

- Technical Support (I do not know where to go when I need help using digital devices or services)
- None (I do not face any barriers when accessing Internet)
- Other:

Tablet Survey Methodology

The Tennessee Department of Labor and Workforce Development (TNDLWD) launched a survey focused specifically on incarcerated Tennesseans on December 21st, 2023 utilizing the Office of Reentry's Tablet Program. *Appendix N* shows the questions that appeared on the tablets managed by TNDLWD. The data from this survey was provided to TNECD and **included no personally identifying information from respondents.** TNECD and UT then analyzed the data from TNDLWD's tablet survey to include into this plan.

Listening Session Methodology

During community listening sessions, TNECD verbally asked attendees seven questions, including, "What barriers are you currently faced with regarding digital opportunity?". TNECD staff or facilitators recorded the responses into an Excel spreadsheet (see *Appendix D* for the template spreadsheet and questions) and questions). Across all the TNECD listening sessions and four stakeholder listening sessions, around 1,100 responses were recorded; 264 of these responses captured concerned needs and barriers directly. Responses were organized by question and coded by TNECD along five categories outlined by NTIA: broadband affordability and availability, online accessibility and inclusivity, digital literacy, online privacy and cybersecurity, and device availability and affordability.

Throughout the planning process, TNECD connected with organizations serving one or more of the covered populations and organizations that currently engage in digital opportunity work. These conversations offered additional insight into the needs and barriers of various communities.

Data Gaps

TNECD recognizes our data contains gaps that may impact our analysis of needs and barriers. First, TNECD launched the Digital Opportunity Survey online, making participation contingent on internet and device access. Due to this outreach method, we recognize that some barriers, like digital skills or device access, are underreported. This gap is presumed to also be present in the data from the survey conducted by TNDLWD among currently incarcerated people in Tennessee. Second, some of the terms used in the Digital Opportunity Survey lacked supplemental context and could be interpreted in multiple ways by respondents. For example, we found that term "Digital

Skills" was interpreted by various respondents to mean foundational skills like computer basics, advanced skills for workforce development, and even online safety and cybersecurity. Lastly, some covered populations are underrepresented within the data responses. For example, racial/ethnic minorities comprise over 25% of Tennessee's population but only 11% of survey respondents. TNECD plans to do additional outreach with covered populations to ensure that their feedback is recorded with the Digital Opportunity Plan. Following the public comment period and a second round of listening sessions, TNECD plans to address these data gaps by leveraging partnerships with state agencies to ensure that additional data collection and analysis is completed. Despite these limitations, the Broadband Office identified several barriers within the survey.

To address these gaps and gather additional insight into needs and barriers, TNECD connected with organizations serving covered populations and/or currently engaging in digital opportunity work. These conversations offered further insight and context into the challenges experienced when accessing internet services and digital opportunities among covered populations in Tennessee. Finally, we connected with select state agencies and organizations that work with specific covered populations and asked them to react to the initial data we collected from the survey and listening sessions. These meetings helped the Broadband Office identify additional barriers and needs in Tennessee communities.

Needs Assessment Summary

The chart below provides the demographic breakdown of each respondent from the Digital Opportunity Survey. Individuals could select all populations they identified with; for example, an individual who identifies as disabled, aging, and a veteran could choose each of the corresponding categories. We did not collect demographic information during Digital Opportunity Listening Sessions to ensure participant privacy.

Figure 10: Digital Opportunity Survey Demographics Summary
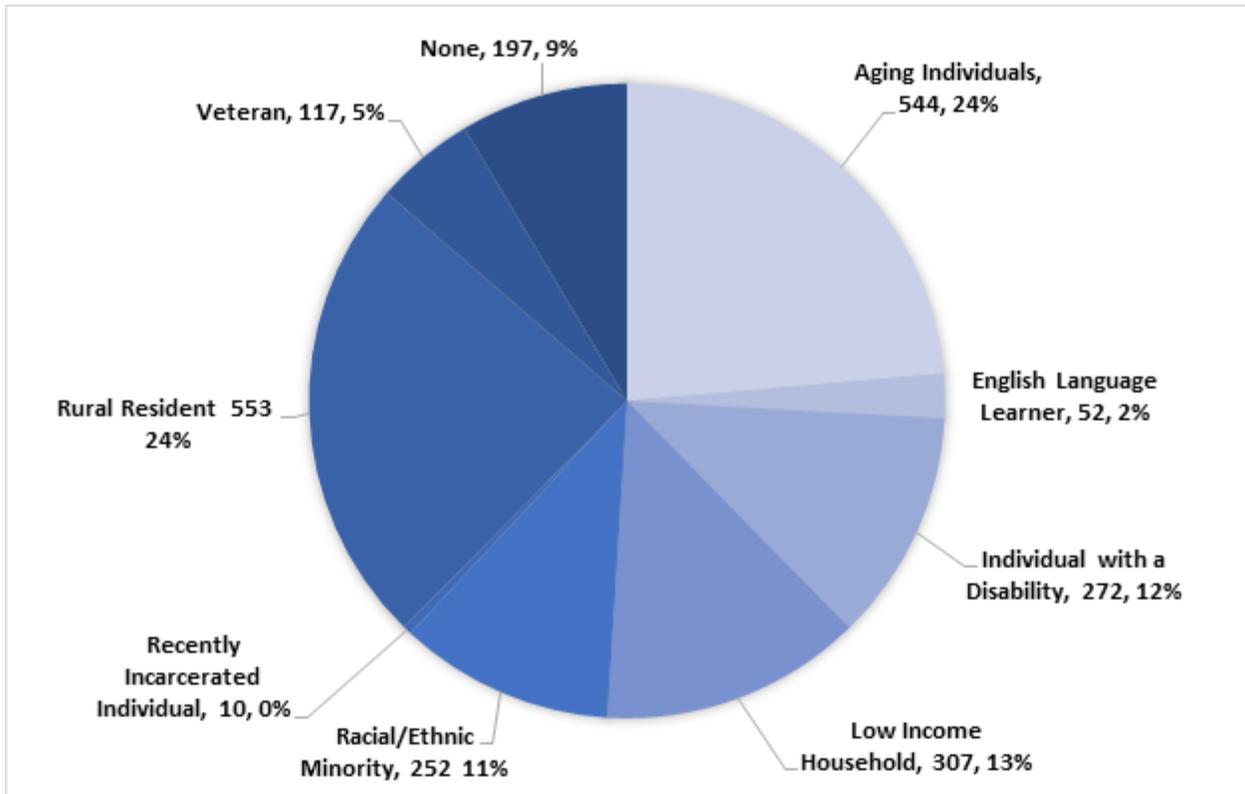
Barriers Identified

Across the survey and the listening sessions, the most significant barriers reported related to broadband affordability or availability, which was understood by most respondents and TNECD as cost and infrastructure. Other notable barriers identified involved digital skills and device access. The two charts below show the barriers reported across all respondents and organized around specific categories. In the Digital Opportunity Survey, survey takers could self-select the barriers they face (these options were listed on page 47). During the Listening Sessions, we had open- ended discussions around barriers, recorded responses, and then coded the responses based on five categories.

Figure 11: Digital Opportunity Survey: Summary of Reported Barriers
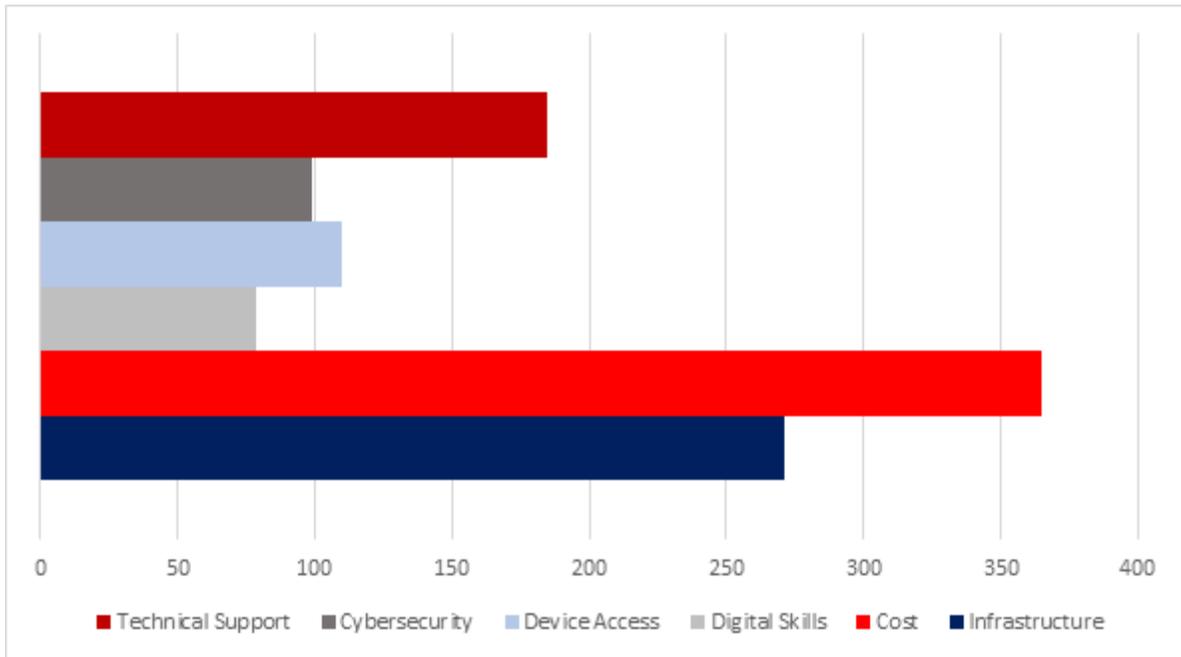
Figure 12: Digital Opportunity Listening Session Data: Summary of Reported Barriers
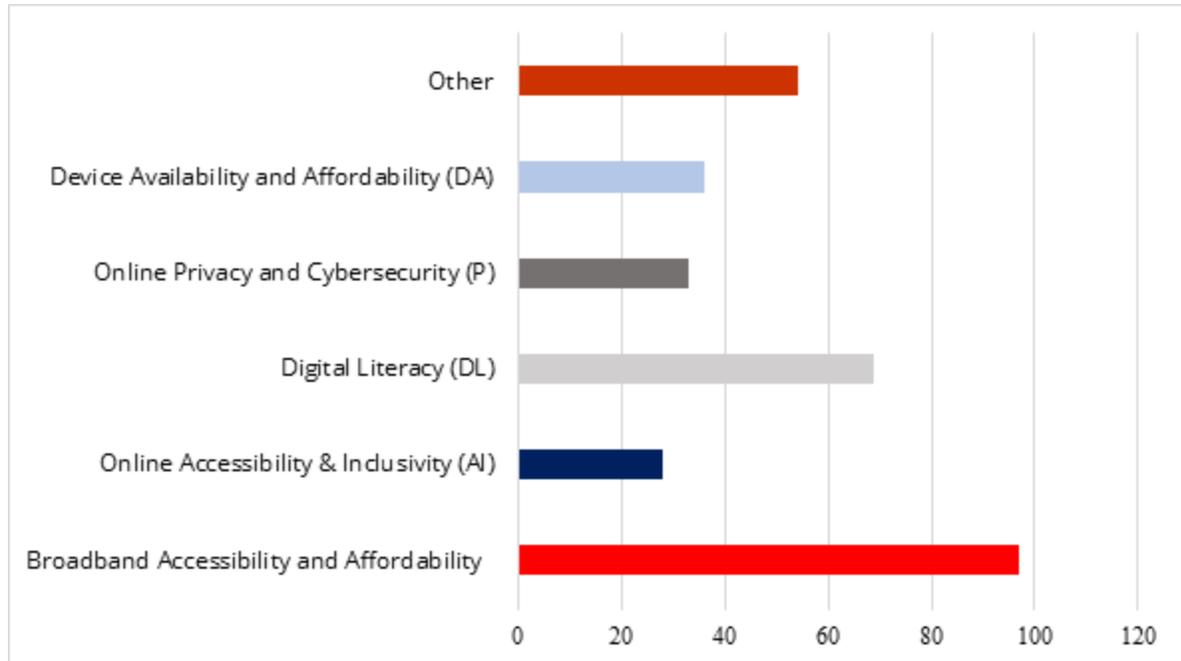
3.2.1 Covered Population Needs Assessment

The following section outlines the various digital opportunity needs the State Broadband Office identified by each covered population. The needs were identified through information collected from regional listening sessions, the Digital Opportunity Surveys, the Digital Opportunity Asset Inventory, and conversations with various non-profit organizations, state agencies, and other stakeholders. The Broadband Office recognizes that "covered populations" are not monoliths; individuals within these federally defined groups do not face all the same barriers or share the same lived experiences. Conversely, there are also shared needs across multiple covered populations.

Across all covered populations, internet service affordability was a central issue. Many Tennesseans expressed that internet subscriptions are too costly and often compete with other necessities such as food or rent. Access to digital skills training was another commonly cited need among covered populations, ranging from essential computer functions and online safety to workforce development certifications. Other barriers identified included accessibility, device access, and cybersecurity concerns. The remainder of this section will discuss the needs of covered populations. Each section lists the main barriers identified for each group in no specific order.[9] The list is not exhaustive but identifies TNECD's known critical needs in each covered population.

Individuals who live in covered households[10]

Key Barriers - Affordability, Device Access, Digital Literacy

Affordability, device access, and digital literacy are central needs for Tennesseans in covered households. At nearly every listening session, attendees reported challenges in paying for necessities and being unable to afford internet subscriptions. The Digital Opportunity Survey Data also suggests that the cost of internet subscriptions may cause financial strain for people living on fixed or constrained incomes.

Pew Research finds that 85% of Americans own a smartphone. Smartphone ownership rates are relatively high even among low-income households with over three-quarters of individuals earning less than $30,000 owning a smartphone.[11] TNECD's findings from the Digital Opportunity Survey also suggest that most individuals, including those in

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[9] "None" and "Other" responses are not listed in the charts that list reported barriers by covered population.

[10] NTIA defines covered households as individuals living in household where the household income no more than 150 percent of federal poverty threshold.

[11] https://www.pewresearch.org/internet/fact-sheet/mobile/

covered households, have smartphones.[12] However, there is a need for affordable laptops, desktops, and tablets in covered households, yet such devices are not always affordable.

Figure 13: Digital Opportunity Survey Reported Barriers for Individuals Living in Covered Households
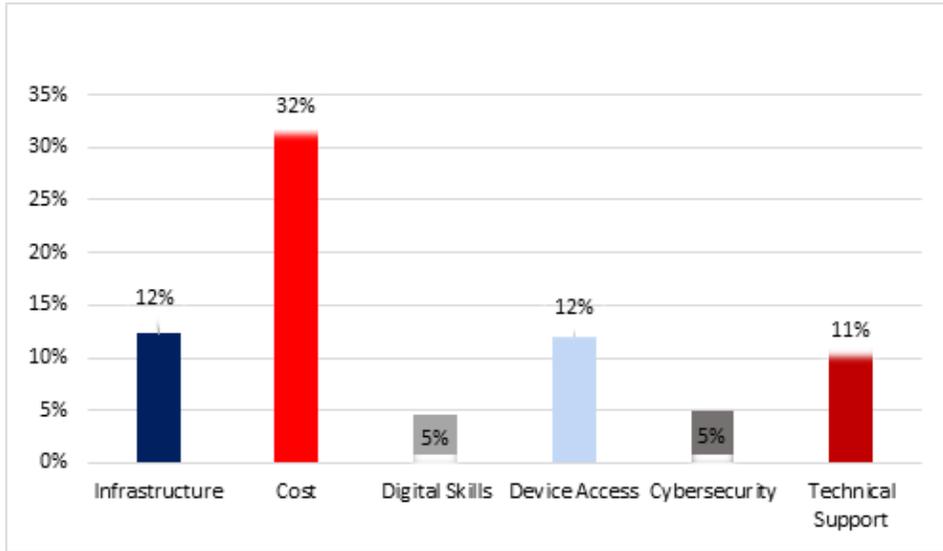
Due to limited access to internet subscriptions and higher-capacity devices (laptops and desktops), low-income households have fewer opportunities to gain and apply digital skills in their everyday lives. Attendees at several listening sessions reported smartphone dependency, where individuals only have access to a smartphone and are therefore uncomfortable using other digital devices. Based on the information above, the Broadband Office identifies a need to support low-cost internet subscriptions, increase the number of public Wi-Fi access points across the state, and support programs that enable device access alongside digital skills training.

Aging individuals

Key Barriers - Affordability, Cybersecurity, Digital Literacy

Aging Tennesseans reported broadband affordability and availability as barriers to Internet access. Aging individuals in urban and rural areas often face high-cost internet options with low-speed subscriptions. For many rural communities, there are no reliable broadband options available, and those that are available entail high costs to consumers. Many aging individuals live on a fixed income and need help paying for

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[12] Digital Opportunity Survey Data. In the Nashville Digital Inclusion Needs Assessment from June 2021, roughly 6% of respondents report no access to smartphones.

quality service, exacerbating the internet affordability issue. Aging Tennesseans also reported concerns with online safety and privacy in survey responses and listening sessions. TNECD found that many aging individuals fear online scams and having sensitive information collected without their consent. In the FTC's 2022 fraud report data, Tennessee ranked 11th in the nation for fraud reporting rates, and Memphis ranked seventh among metropolitan areas.[13] Online scams and fraud schemes significantly harm an individual's sense of safety but also lead to millions of dollars lost in the state's economy.[14] Supporting aging populations, who may be especially vulnerable to online scams, will increase awareness of online safety and reduce successful online attacks on Tennesseans.

Figure 14: Digital Opportunity Survey Reported Barriers for Aging Individuals
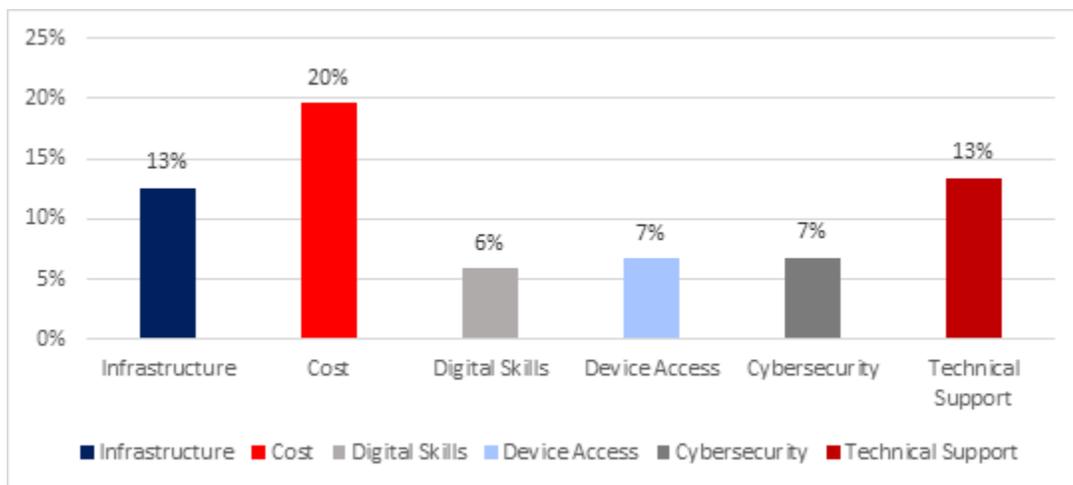
Finally, some aging individuals experience gaps in basic digital skills and, as a result, avoid using digital resources. Many aging individuals do not where they can learn how to develop digital skills or use digital devices. Those who know where to access training opportunities may also lack transportation to attend classes. We identify an intersection among aging individuals around digital literacy and affordability to be that – many are unaware of the potential financial benefits of switching to digital services. For example, households can possibly save money moving some traditional services to online platforms. Aging individuals must have the digital skills necessary to navigate various software efficiently and safely as social services and billing systems begin to switch to fully online platforms.

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[13] State Rankings: Fraud and Other Reports Year: 2022 Fraud Reports | Tableau Public

[14] The FBI's Internet Crime Report provides more information on reported monetary losses from online crimes: 2022_IC3Report.pdf

Incarcerated Individuals

Key Barriers - Affordability and Digital Skills

As of June 2023, the Tennessee Department of Corrections reported that there were 19,007 individuals incarcerated in the state prisons.[15] This number does not include the number of Tennesseans in federal prisons and local/county jails. There are thousands more "justice involved individuals" that are on parole or probation. The Criminal Justice Investment Task Force established by Governor Bill Lee released an interim report in 2019 that also mentioned that Tennessee's incarceration rate had grown by 10% from 2008-2017.[16]

TNDLWD's data reveals that incarcerated individuals faced significant financial barriers to accessing the Internet. As shown in Figure 15, the most selected barrier was "I can't afford to pay for internet services.", closely followed by infrastructure and device access challenges.

Figure 15: Reported Barriers from TDLWD survey with incarcerated Tennesseans[17]

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[15] https://www.tn.gov/content/dam/tn/correction/documents/FelonJuly2023.pdf

[16]https://www.tn.gov/content/dam/tn/governorsoffice-documents/governorlee-documents/CJInvestmentTaskForceReport.pdf
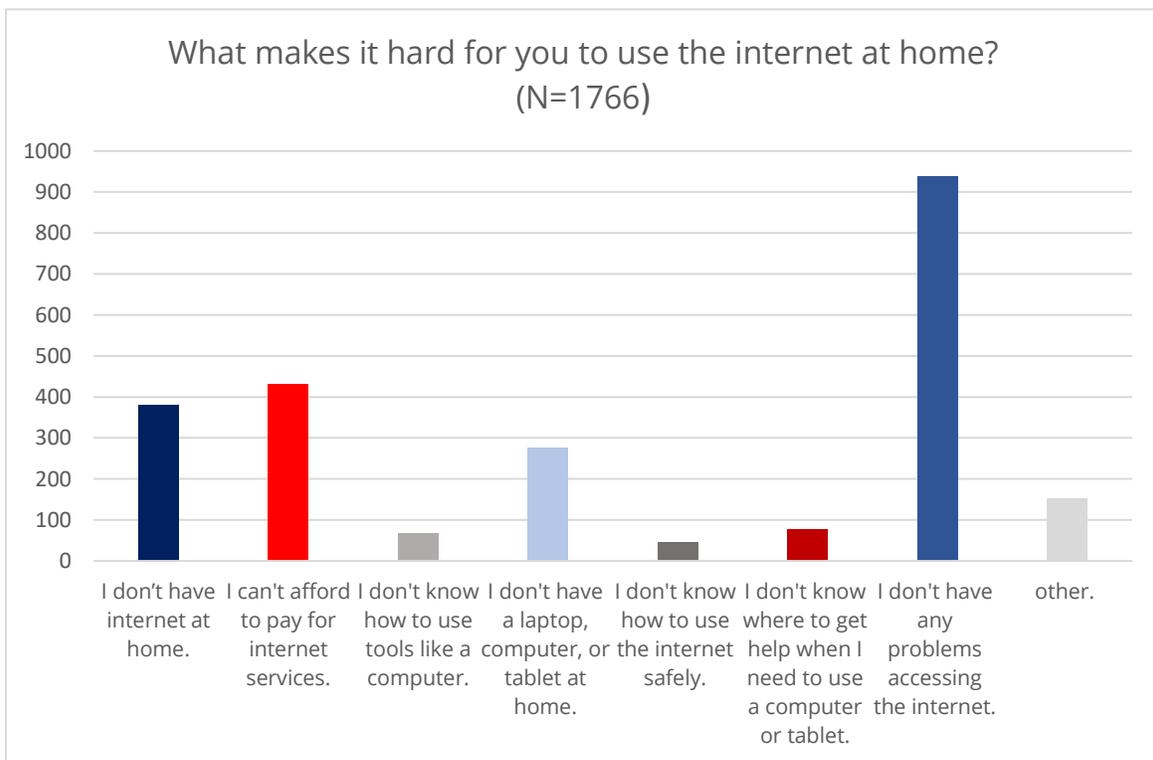
[17] "At Home" is defined as the place of residence prior to incarceration.

In addition to the survey with TDLWD, TNECD allowed respondents to the Digital Opportunity Survey to identify as recently incarcerated. This additional data reinforced cost as a key barrier for incarcerated people.

Figure 16: Digital Opportunity Survey Reported Barrier for Recently Incarcerated Individuals
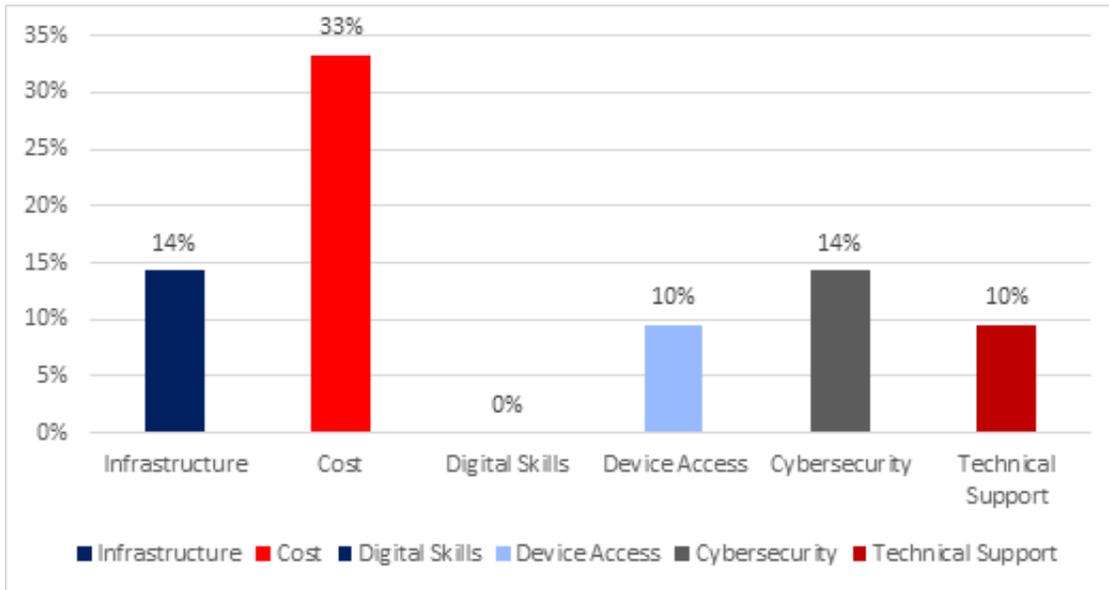
After consulting with the Tennessee Department of Labor and Workforce Development's Office of Reentry, Tennessee Corrections Institute, and the Tennessee Department of Corrections, TNECD learned that access to digital skills training is a significant need for this covered population. Non-profit organizations serving incarcerated/formerly incarcerated individuals also cited digital skills training as a principal need. Digital skills however were not reported as a top barrier for among incarcerated or recently incarcerated people in TNECD's research. This could be a result of the impact of TDLWD's tablet program that provides opportunities for learning inside jails or the result of a gap in TNECD's research where only people who have access to the tablets were able to respond. Still, advocates and service organizations for incarcerated people including TDLWD cite a need for more opportunities to develop digital skills inside carceral facilities. Additionally, people need continued opportunities and support after release as many struggle to afford internet service and large-screen devices.

Veterans

Key Barriers - Affordability and Device Access

According to the Department of Veteran Services, there are 449,263 veterans in Tennessee.[18] Like other covered populations, veterans face affordability challenges accessing internet services, especially those living on fixed incomes. Disabled veterans may face mobility issues and need assistive devices. In the Digital Opportunity Survey, several veterans identified as aging individuals, meaning that there is also a need for digital skills training to address this covered population's needs. A veterans-focused listening session revealed that veterans often depend on telehealth services and need access to reliable infrastructure and devices to connect with healthcare providers. Access to large-screen devices and adequate digital literacy was reported as a need for veterans to utilize healthcare services and online medical forms.

Figure 17: Digital Opportunity Survey Reported Barriers for Veterans
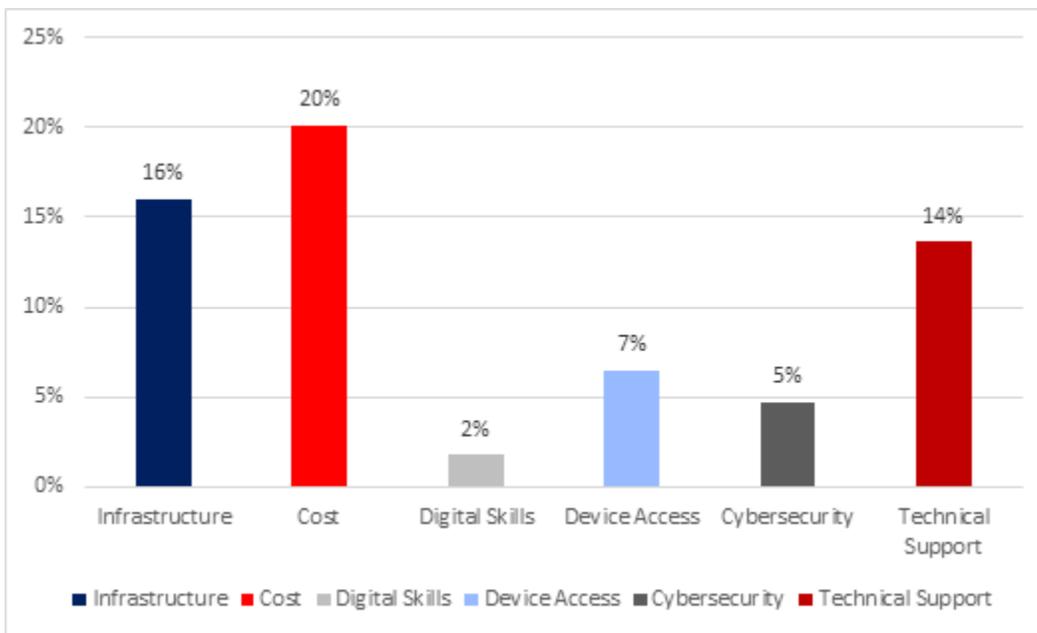
Individuals with Disabilities

Key Barriers - Accessibility, Affordability, Digital inclusion, and Digital Skills

The Center for Disease Control and Prevention reports that nearly 1 in 3 adult Tennesseans have a disability including: mobility (15%), cognition (16%), independent

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[18] https://www.tn.gov/veteran/tnvetmap

living (9%), hearing (7%), vision (6%), and self-care (5%).[19]Additionally, there are thousands of children in Tennessee that have a disability.

Affordability is the highest need for individuals with disabilities as many live on a fixed income and require high-speed internet services, specific devices, or software to use the Internet entirely. For Tennesseans with visual or audio impairments, websites, and digital software can be extremely challenging to navigate or completely inaccessible. Beyond this, individuals living with audio impairments reported relying on video conferencing software and applications to communicate with others. As a result, we saw the need for reliable, high-speed Internet with enough bandwidth to support video conferencing for the hard-of-hearing community. Some people with disabilities benefit from assistive digital devices or services when accessing the Internet. Assistive devices range in application and usage but are generally very expensive and can pose a financial challenge for individuals and families. Some individuals with disabilities have mobility challenges and rely on the Internet more heavily than others to access social services or connect with loved ones. Therefore, these individuals must have quality Internet access.

Figure 18: Digital Opportunity Survey Reported Barriers for Individuals with Disabilities
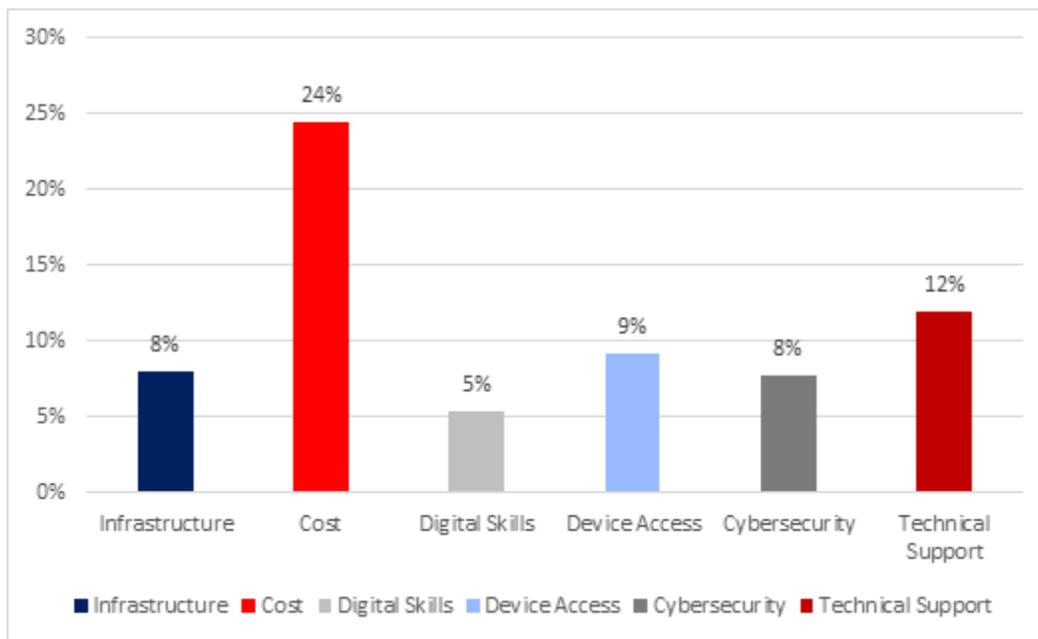
Individuals with intellectual or developmental disabilities have limited access to digital opportunities that are accessible and responsive to their unique needs. Ensuring all individuals with disabilities have equal access to the essential digital skills needed to

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[19] Disability & Health U.S. State Profile Data: Tennessee | CDC.

access online opportunities, such as remote jobs, social services, and online community spaces, is critical for digital inclusion. The capability and desire for individuals with disabilities to utilize digital opportunities and participate in virtual spaces is often overlooked but invaluable to our society. Finally, members of this covered population expressed a need for a virtual "one-stop-shop" where they can access several digital resources from their homes. One potential and highly effective way to address this concern is to incorporate accessible digital resources and information into the existing social services they rely on.

Individuals with Language Barriers (Including English Language Learners and/or individuals with low levels of literacy)

Key Barriers - Accessibility, Affordability, Digital Skills, Digital Inclusion

Existing digital opportunity resources are often inaccessible for those with language barriers because they tend to be available only in English. Internet subscriptions can pose financial burdens for English Language Learners who are also in covered households. There is an acute need for digital skills training to be available in spoken languages other than English in Tennessee. Non-profit organizations serving immigrant communities reported that staff often offer informal technical support and digital skills trainings because existing resources or programs are not tailored to English Language Learners or individuals with low literacy levels. Some digital skills curricula, like NorthStar, have modules available in Spanish (only one of several languages spoken in the state). However, English Language Learners do not enjoy the same equitable access to digital skills training as other Tennesseans. Even if materials are produced are available in multiple languages, that information may not be accessible to those who face low levels of literacy in their native languages.[20] Finally, due to language barriers and a need for translation services, there can be less trust among those with language barriers and state agencies providing social services.

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[20] Information collected during a discussion with a Tennessee nonprofit organization serving refugee communities.

Figure 19: Digital Opportunity Survey Reported Barriers for English Language Learners
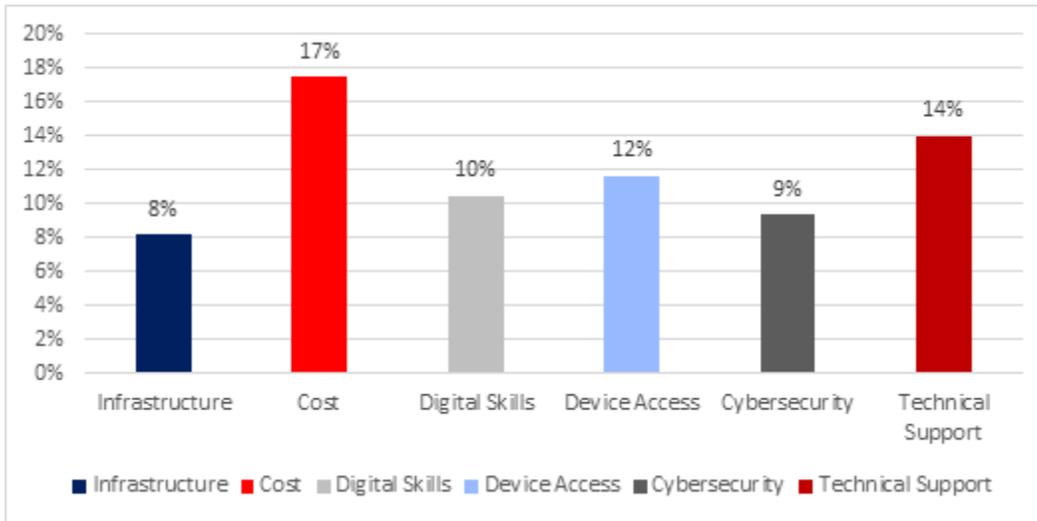
Individuals with low literacy levels are another population likely underrepresented in our data since the Digital Opportunity Survey requires a certain level of literacy. TNECD recognizes that Tennesseans with low literacy levels face accessibility barriers when accessing the Internet. According to the Barbara Bush Foundation for Family Literacy, over 20% of adult Tennesseans have low literacy levels.[21] Information presented online may be challenging for individuals with low literacy levels to comprehend. A central theme in listening sessions was the importance of using accessible language when explaining Digital Opportunity initiatives. One strategy that the Broadband Office can do to address this need is extensive, community-based outreach and awareness campaigns around Digital Opportunity in the state.

Individuals who are members of a racial or ethnic minority group

Key Barriers - Affordability, Device Access, Digital Skills, Digital Inclusion

Racial and ethnic minorities face affordability and device access struggles like other covered populations. For racial/ethnic minorities residing in rural areas across Tennessee, broadband infrastructure access is a genuine concern due to possible geographical restrictions. FCC maps show that urban parts of the state are largely served but reports from community members suggest gaps in broadband infrastructure in metropolitan areas. Recent research also indicates a correlation between broadband access and historically redlined urban neighborhoods, where individuals residing in traditionally redlined areas report lower broadband access

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[21] https://map.barbarabush.org/assets/cards/BBFFL-Literacy-Card-TN.pdf

rates.[22] For individuals who lack accessible Internet service, there will be a more vital need for digital skills training and online safety resources. The section will be broken down further by select racial/ethnic minority groups. It is essential to acknowledge that individuals can be members of multiple minority groups.

Figure 20: Digital Opportunity Survey Reported Barriers for Racial/Ethnic Minorities
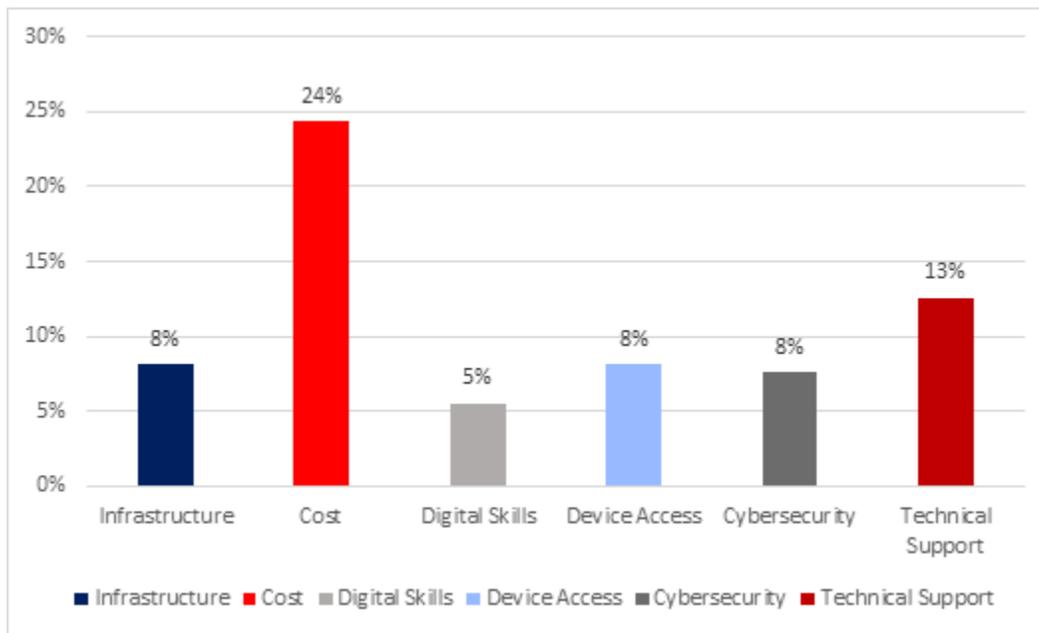
African American/Black Tennesseans

U.S. Census Data from 2020 reports that roughly 17% of Tennesseans identified as Black and/or African Americans, the largest racial/ethnic minority group in the state. The map below shows the percentage of black Tennesseans by county, revealing a higher percentage of African Americans and Black Tennesseans in West and Middle Tennessee, especially in Shelby, Haywood, and Davidson counties. Among K-12 public school students, black students comprised nearly 24% of the total population in 2022.[23]

Affordability is a principal need for the black communities of Tennessee. Tennessee's poverty rate is 13%, but over 20% of black residents live in poverty, signaling a greater need for affordable internet service. Through regional listening sessions in Memphis and Nashville, stakeholders and community members cited broadband access was a

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[22] Skinner, B. T., Levy, H., & Burtch, T. (2023). Digital Redlining: The Relevance of 20th Century Housing Policy to 21st Century Broadband Access and Education. Educational Policy, 0(0). https://doi.org/10.1177/08959048231174882

[23] https://comptroller.tn.gov/office-functions/research-and-education-accountability/interactive-tools/k12-education-portal--mapping-tennessee-education.html

principal concern across these communities. Although black Tennesseans often reside in urban areas of the state, that does not guarantee that they have broadband infrastructure in their communities. Many Black Tennesseans in urban areas reported that internet service was either unavailable, unreliable, or too slow for usages like working from home, online schooling, streaming, and other increasingly common digital uses. Access to digital skills training is another major need in the black communities of Tennessee.

Figure 21: Percent Black or African American Alone or in Combination Total Population by County: 2020

Tennessee: 17.3%

The American Community Survey (ACS) estimates show that roughly 10% of the black population lacks an Internet subscription or a device at their residence, meaning that there are less opportunities to develop digital skills.[24] Existing digital skills trainings or resources are often not seen as accessible to black Tennesseans because they are not available in black communities or provided by individuals not from the black communities of Tennessee. During a listening session at LeMoyne-Owen College in Memphis, attendees emphasized the importance of representation when providing digital opportunities; services should be locally based, and service providers should reflect the racial demographics of the communities they serve.

Hispanic/Latino Tennesseans

Roughly 7% of Tennesseans identified as "Hispanic or Latino" in the 2020 U.S Census.[25] Individuals identifying as Hispanic or Latino primarily reside in the major metropolitan regions of the state: Memphis, Nashville, Chattanooga, and Knoxville but also in more suburban and rural counties in Middle Tennessee. In the K-12 public school population,

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[24] B28009B: PRESENCE OF A COMPUTER AND … - Census Bureau Table

[25] Race and Ethnicity in the United States: 2010 Census and 2020 Census

Hispanic/Latino students comprised 13% of the total population.[26] The highest reported barrier for this group were language barriers. Many individuals only speak Spanish fluently and cannot access digital skills training/online resources in Spanish. In our conversations with service organizations across the state, affordability was another primary concern for the Latino community At the Plaza Mariachi Listening Session in Nashville, Hispanic/Latino attendees expressed concerns and frustrations over low speeds and high costs.

Figure 22: Percent Hispanic or Latino by County: 2020
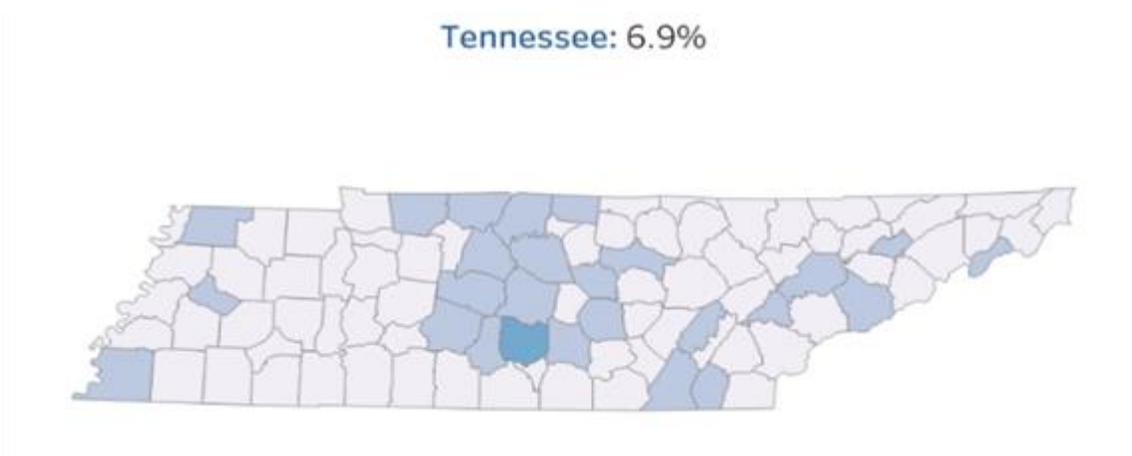
Tennessee: 6.9%

Census data affirms that affordability is a crucial barrier where roughly 20% of all Tennesseans identifying as Hispanic or Latino live in poverty. Additionally, conversations with other minority groups in urban areas report that internet services are often not up to par with the needs and uses of today. Like other covered populations as well, there is an acute need for digital skills training and devices (laptops, tablets, etc.), supported by ACS data where 10% of Hispanic/Latino respondents reported no access to an Internet subscription or a computer.[27]

Asian and Pacific Islander Tennesseans

Asians and Native Hawaiians or Other Pacific Islanders comprise roughly 3% of the state's total population, and 3% of K-12 public school students.[28] The map below shows the percentages by county, revealing concentrations in Shelby, Hamilton, and Williamson Counties.[29] The principal barrier identified for Asian and Pacific Islander (API) Tennesseans was the lack of accessible digital resources. There are a variety of API

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[26] K12 Education Portal: Mapping Tennessee Education (tn.gov)

[27] B28009I: PRESENCE OF A COMPUTER AND … - Census Bureau Table

[28] K12 Education Portal: Mapping Tennessee Education (tn.gov)

[29] Race and Ethnicity in the United States: 2010 Census and 2020 Census

ethnic groups present in Tennessee that speak languages other than English including but not limited to: Chinese, Korean, Arabic, and Kurmanji Kurdish. Digital skills trainings and online websites are often not accessible for these individuals.

Figure 23: Percent Asian Alone or in Combination Total Population by County: 2020
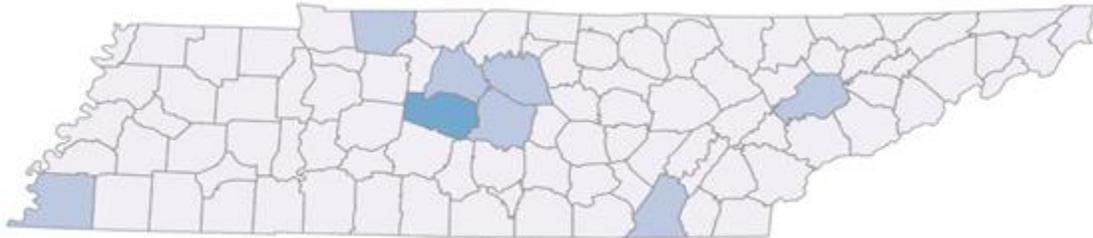
For elderly API communities, there is also an affordability challenge because many live on a fixed income. Although Asian Tennesseans had lower poverty rates than the state average, affordability is still a challenge, especially for Asian immigrant and/or refugee communities across the state.

Rural Households

Key Barriers- Affordability, Device Access, Digital Skills, Infrastructure, Lack of Trust

Infrastructure is a crucial barrier for rural Tennesseans, coupled with access and affordability. Access to broadband services is a fundamental limitation for many rural Tennesseans because of a general lack of availability of broadband infrastructure. If services are available, they can be costly and insufficient for taking advantage of digital resources such as telehealth, working from home, etc. In some rural communities, the historical lack of internet service leaves individuals with limited opportunities to develop digital skills. Geography and mobility also present challenges for rural Tennesseans, especially in remote areas of East Tennessee. Accessing location-based services presents challenges for residents of mountain communities as they must travel greater distances for services than most in the state.

The need for broadband infrastructure also impacts device access and digital skills in rural communities. Households in areas without broadband infrastructure access do not generally have higher capacity devices like laptops and desktops. Additionally, rural residents lacking infrastructure access generally have less access to digital skills trainings. There is an essential need to build more trust and transparency between rural residents, federal and state government agencies, and internet service providers. Across all covered populations, we found there was confusion around broadband

deployment and who is responsible for providing services. Among rural residents, the confusion is compounded by the frustration with the lack of service availability issues and provider options in their area. Rural residents reported challenges of community trust with internet service providers to offer quality services that are affordable and reliable. Rural Tennesseans reported wanting more transparency around state and federal agencies' roles in supervising broadband infrastructure projects. Building trust should be a priority to ensure that rural residents, and all covered populations, feel confident accessing broadband infrastructure and other digital opportunity services (i.e., digital skills training, Affordable Connectivity Program, etc.).

Figure 24: Digital Opportunity Survey Reported Barriers for Rural Households
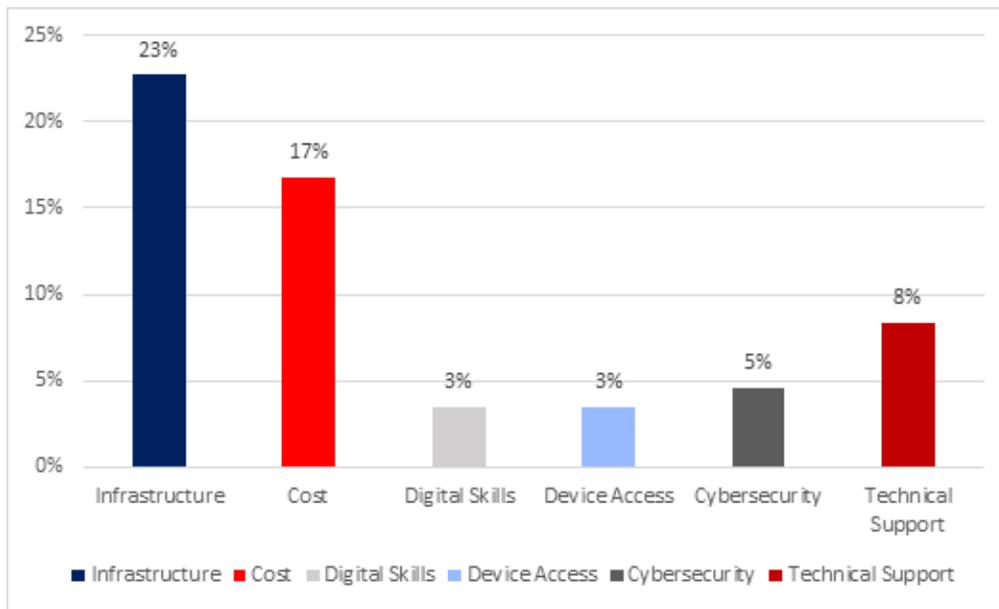
Tennesseans who are not members of Covered Populations

The digital opportunity survey also engaged Tennesseans who do not describe themselves as members of the any of the covered population communities. Among respondents not identifying with a covered population, 70% reported no barriers to accessing the internet or using digital resources. However, infrastructure and cost emerged as the two leading barriers reported for this group followed by digital skills and cybersecurity. Devices did not emerge as a significant barrier for non-covered population Tennesseans-less than 1% reported having no device and over 65% reported having a large or medium-size screen device.

3.2.2 Broadband Adoption

Tennessee will need to address several barriers to increase broadband adoption rates. The section will list additional needs and barriers that impact Tennessee's broadband adoption.

Broadband Infrastructure and Capacity

Due to the geographic terrain, there are regions across the state where it is difficult to lay broadband infrastructure. For example, laying infrastructure in a mountainous part of the state can be very challenging. These geographic challenges contribute to the lower internet access rates and the limited access to digital devices in rural Tennessee. Moreover, several rural Tennesseans deal with inconsistent connectivity or inadequate speeds. Our office estimates that one-fifth of rural Tennessee households lack access to 100 mbps download/20 mbps upload speeds.[30]

Similarly, Tennessee's urban areas face challenges around broadband infrastructure availability and accessibility. While broadband infrastructure may be more widely available, the infrastructure is outdated in several areas. Due to high population density, broadband in these areas may lack the capacity to provide the speeds residents need, exacerbating current network capacity issues as employees engage in remote work and social services continue to rely on online platforms. Based on data from the U.S. Census Bureau's 2019 American Community Survey (ACS), several Tennessee households in cities lack broadband access.[31] Table 2 shows the percentage of households that are not connected to broadband service or access to cellular data plans, in Tennessee cities with more than 65,000 residents. Although the data does not necessarily indicate that these areas lack broadband infrastructure, stakeholders in metropolitan regions have reported that major portions of cities such as Memphis lack infrastructure despite FCC maps reporting these areas as largely served. Increasing broadband availability, broadband adoption, and speed capacities to satisfy consumer demand will remain a challenge statewide.

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[30] Connected Nation, 2022

[31] Data gathered from NDIA's Worst Connected Cities, 2019. 2019 American Community Survey One Year Estimates, Table B28002

Figure 25: Percentage of Households in TN Cities Without Broadband Subscriptions[32]

TN Municipalities with Population of at least 65,000	% of Households without any Broadband Subscriptions
Memphis	26.35%
Knoxville	21.71%
Jackson	17.29%
Chattanooga	14.95%
Johnson City	13.43%
Clarksville	10.40%
Nashville – Davidson County	10.25%
Murfreesboro	6.35%
Franklin	5.52%

Cost

Tennesseans living on a fixed income or struggling to pay for their expenses may forgo an internet subscription to pay for necessities like food, medicine, etc. One's willingness to pay may not align with the current subscription rates set by providers. Cost is a barrier to broadband adoption, even for Tennesseans that do not live on a fixed income or identify as a member of low-income households. In our Digital Opportunity Survey, cost was identified as the top barrier to accessing the internet, and over half of the respondents expressed interest in lowering their internet bill. Additionally, many Tennesseans struggle with the cost of electricity and housing which are prerequisites for acquiring broadband access at one's residence.

Digital Skills

Raising digital literacy rates will be central to increasing broadband adoption in the state, specifically around device use, basic digital skills, workforce development, cyber security, and online services such as telehealth, banking, shopping, and education. Tennessee needs to develop a framework and resources to help individuals understand

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[32] 2019 American Community Survey One Year Estimates, Table B28002 Data compiled by NDIA

the multitude of digital opportunities and the various pathways for accessing them. The Broadband Office will oversee digital adoption grant programs supporting digital skills training. The Department of Education's newly implemented computer science requirements and existing programs within the Department of Labor and Workforce Development are other opportunities to further develop Tennesseans' digital skills.

Institutional Awareness and Cross Collaboration

A common theme expressed in the Digital Opportunity Listening Sessions was the desire for a "one-stop shop" where individuals can access all the digital opportunity resources available to their community. The Broadband Office's Connected Community Facilities program and other ongoing initiatives will work to create a comprehensive framework that encourages Tennesseans to adopt broadband technology and utilize broadband to enhance access to telehealth, education, and other social services. We also plan to collaborate across state agencies to streamline resources and provide consistent communication to help Tennessee residents easily access digital resources.

Another key barrier is a lack of awareness between the Broadband Office and Tennesseans as well as relationship gaps between the digital inclusion organizations and our office. Many Tennesseans are unfamiliar with the Department of Economic and Community Development and its broadband programs. The Broadband Office has identified several non-profit organizations and community anchor institutions that do digital inclusion work in the state but there could be more that we are not aware of. Organizations may not label themselves as a digital inclusion organization but nonetheless may offer valuable digital opportunity resources (a free computer lab or digital skills training for their community members, for example) which can make it difficult to identify and connect with these groups. To overcome this barrier, our office must develop a robust outreach strategy with stakeholders, nonprofits, and other state agencies to increase awareness around broadband adoption.

3.2.3 Broadband Affordability

The Need for ACP

Only about 35% of Tennessee households that are eligible for the ACP are enrolled in the program. This leaves approximately 760,000 households that are eligible to participated in this low-cost option. This is incredible opportunity for broadband subscription in households where cost is a barrier. The bridging the ACP enrollment gap in Tennessee can be addressed in a few ways.

First, it must be acknowledged that not all ACP eligible households have access to broadband at all, whether it be affordable or not. According to the [Tennessee Broadband Accessibility](#) map, 8.26% of residential addresses in Tennessee lack access to 100/20 Mbps. Many of these locations are in rural, low-income areas; meaning that many of these households are eligible for the ACP but are not enrolled due to lack of broadband access. This general need for increased access is paramount to increasing affordability.

Next, to address the need for more participation in the ACP, there must be increased awareness among eligible households and organizations that serve eligible households. The State Broadband Office believes lack of awareness to be a primary cause in the lack of ACP enrollment. However, outreach programs continue to develop both nationally and in the state. The FCC's ACP Outreach Grant program will fund several ACP outreach efforts in Tennessee. Tennessee's Broadband Office fully endorses and supports these efforts and will coordinate with grantees to assist where possible.

The Need for Low-Cost Broadband

High quality, affordable broadband is a necessity for economic success; however, there are many areas throughout Tennessee which lack these options. There is a persistent disparity between income levels as it relates to internet usage and broadband adoption. [According to Pew](#), only about 80% of households with an income of less than $30,000 per year use the internet compared to nearly 100% of households with an income of over $50,000 per year. This disparity is multifaceted; however, lack of affordable broadband is contributing factor.

3.3   Strategies and Objectives

Tennessee's ultimate objective is to expand existing digital opportunities by working with community anchor institutions to provide quality digital services and resources. The designed strategies suggested in the Digital Opportunity Plan craft an interconnected approach to digital opportunity. Each individual strategy is designed to address one facet of digital opportunity; taken together, they form a nuanced approach to addressing multiple barriers to internet access. Several strategies build upon existing initiatives and involve cross-sector collaboration.

Goal #1: Expand digital opportunity infrastructure and awareness statewide.

Digital opportunity is a naturally intersectional concept; it impacts a broad range of issues, including education, health, civil and social engagement, and social services. Over the next several years and into the future, TNECD will expand and strengthen the

state's "Digital Opportunity Infrastructure." This consists of the state's Digital Opportunity Taskforce; strong connections with covered populations; resources such as digital skills training, access to workforce development courses, and telehealth; and outreach efforts that raise awareness of digital opportunities throughout Tennessee.

This goal supports and aligns with existing state goals, notably those impacting education, health, civic and social engagement, and economic and workforce development. For example, the goal will contribute to educational attainment by increasing online learning opportunities; enhance healthcare by improving access to telehealth services; strengthen civic and social engagement by increasing access to online voter registration and essential services; and support economic and workforce development by increasing entrepreneurship opportunities and advanced manufacturing technologies.

Strategy 1.1

Strengthen and expand the Digital Opportunity Taskforce of key public and private stakeholders who will work collaboratively to provide guidance, advice, and outreach for Digital Opportunity Plan goals, strategies, and objectives concerning but not limited to telehealth, workforce development, broadband data, and reporting.

The Taskforce currently includes 14 members representing internet service providers, nonprofits, government agencies, and other partners. TNECD will expand the Taskforce to further enhance the voice of covered populations and ensure that all groups and geographic areas are represented. A strong mission, bylaws, and plan will strengthen and sustain the statewide partnerships needed for long term success. In growing the Taskforce, TNECD will work closely with current members to identify and select new members.

Figure 26: Core activities and timeline for Strategy 1.1

Core Activities	Timeline
Establish mission, bylaws, member terms, annual taskforce plan	Feb-Apr 2024
Work with stakeholders to nominate and recruit new members	Feb-Apr 2024
Finalize 2024-2025 Taskforce and host monthly meetings	May 2024-June 2025
Finalize 2025-2026 Taskforce and host monthly meetings	July 2025-June 2026
Finalize 2026-2027 Taskforce and host monthly meetings	July 2026-June 2027
Finalize 2027-2028 Taskforce and host monthly meetings	July 2027-June 2028

Measurable Objective 1.1(1)

Increase the number of representatives on the Digital Opportunity Taskforce to ensure engagement, collaboration, and continuous improvement as the State Broadband Office implements the Digital Equity State Capacity Grant.

The baseline presented below represents the current number of Taskforce members.

Figure 27: KPI for Strategy 1.1

Covered Population	Baseline	Target	Timeline
N/A	14 members	25 members	July 2025

Barriers Addressed

Strengthening the Taskforce will provide a strong and inclusive foundation for developing the systems, approaches, and mechanisms needed for a successful Digital Opportunity Plan. The Taskforce will ensure that, as TNECD implements the Digital Opportunity Plan, the wants, needs, and barriers of all covered populations remain front and center. It will also ensure that policy decisions and office actions make sense for our partners in this work.

Strategy 1.2

Increase the percentage of at-risk and distressed counties (as defined by the Appalachian Regional Commission) with at least one telehealth access point.

Distressed counties rank among the 10 percent most economically distressed counties in the nation. Each year, the Appalachian Regional Commission prepares an index of economic status for every county in the United States. Economic status designations are identified through a composite measure of each county's three-year average unemployment rate, per capita market income, and poverty rate. Based on these indicators, each county is then categorized as distressed, at-risk, transitional, competitive or attainment.

Tennessee has eight distressed counties and 27 counties at-risk of slipping into distressed status. The eight distressed counties are: Bledsoe, Clay, Cocke, Hancock, Hardeman, Lake, Perry, and Scott. Tennessee's distressed and at-risk counties are in rural regions which have experienced hospital closings and declining access to direct healthcare services. This makes telehealth access particularly important for members of covered populations living in these counties.

Figure 28: Core activities and timeline for Strategy 1.2

Core Activities	Timeline
Consult with healthcare professionals and Taskforce to determine an effective framework for a telehealth access point program	Oct-Dec 2024
Design a telehealth access point grant program	Jan-Apr 2025
Deploy a telehealth access point grant program	July-Sept 2025

Measurable Objective 1.2(1)

Increase the percentage of at-risk and distressed counties (as defined by the Appalachian Regional Commission) with at least one telehealth access point.

The baseline is the percentage of Tennessee's 35 at-risk and distressed counties that has at least one telehealth access point through the state's Uninsured Adult Healthcare Safety Net Program.

Figure 29: KPI for Strategy 1.2

Covered Population	Baseline	Target	Timeline
Low-Income, Rural & Aging Residents, Veterans, Racial and Ethnic Minorities	34.2%	100%	Dec 2028

Strategy 1.3

Raise awareness about TNECD Digital Opportunity efforts and impact.

This strategy raises awareness by providing the framework to regularly evaluate and communicate progress toward the implementation of the Digital Opportunity Plan. TNECD will incorporate this information in an annual report that will describe achievements, opportunities for improvement, challenges, and updates. The process will ensure that the plan is accurate, up-to-date, timely, and useful. Timely and useful information is critical to raising awareness, sustaining program partnerships and support, making effective implementation decisions, and achieving digital opportunity success.

Figure 30: Core activities and timeline for Strategy 1.3

Core Activities	Timeline
Develop framework for annual report and dashboard that, at a minimum, tracks the measurable objectives and implementation progress presented in this Digital Opportunity Plan	July-Nov 2024
In partnership with the DO practitioners and the Taskforce, develop an approach to communicating and promoting digital opportunity awareness throughout Tennessee	Aug 2024-June 2025

Release the inaugural report	Nov-Dec 2024
Create a targeted annual survey to the stakeholder network providers to gather insight about awareness and other issues	Jan-Mar 2025
Survey released and results submitted	Apr-June 2025

Measurable Objective 1.3(1)

Increase the percentage of digital opportunity practitioners that are aware of at least 80% of our DO initiatives.

To develop a baseline, TNECD will work with the Taskforce to use a stratified survey methodology. TNECD and the Taskforce will first identify a representative sample of organizations across the state that provide services impacting digital opportunity. From that group of organizations, TNECD will annually develop a random sample of digital opportunity practitioners that will receive a survey measuring awareness of initiatives. Initial baselines will be established for measurable object 1.3(1) in Winter 2024 as TNECD closes first and second rounds of CCF, DSEW, and BRC. TNECD will review its methodology annually and adjust as needed to enhance accuracy and reliability.

Figure 31: KPI for Strategy 1.3

Covered Populations	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
N/A	See above	See above	Dec 2025	See above	Dec 2028

Measurable Objective 1.3(2)

Increase the views of the DO annual report over time.

Given that the annual Digital Opportunity Reports are a new project, the baseline is zero. TNECD, in collaboration with the Taskforce, will review short-term and long-term targets each year to ensure that they are sufficiently aggressive to drive progress.

Figure 32: KPI for Strategy 1.3

Covered Populations	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
N/A	0	1,000	June 2025	5,000	June 2029

Barriers Addressed

The goal to expand digital opportunity infrastructure and awareness, with its accompanying strategies and objectives, establishes foundational practices that will continually identify and address barriers that impede digital opportunity for all Tennesseans. These practices include regular evaluation and improvement of approaches and activities. The publication of an annual report detailing TNECD's progress towards addressing key barriers to digital opportunity will benefit all covered populations as it provides a mechanism of analysis and accountability. Internally, TNECD will utilize the annual report to refocus digital opportunity efforts based on findings. Externally, digital opportunity stakeholders will use the report to advocate for additional coverage in areas where impact is not being felt. Individuals with disabilities, individuals learning English and with low levels of literacy, and individuals who are members of racial and ethnic minority groups will benefit as TNECD works to ensure organizations and agencies serving these groups review and provide feedback on progress, opportunities, and challenges.

Goal #2: Enhance broadband availability and affordability.

Access to high-speed and affordable broadband infrastructure is a prerequisite to achieving Digital Opportunity. As such, Tennessee intends to encourage communities to subscribe to Internet services and work with Internet Service Providers (ISPs) to provide internet access among disadvantaged communities. TNECD will coordinate Digital Equity funding with BEAD funding and other public and private funding to maximize alignment, focus resources, and achieve this goal. The Digital Opportunity Taskforce, along with community partners and ISPs, will provide the guidance, assistance, and outreach needed to serve covered populations throughout Tennessee.

This goal supports and aligns with state goals impacting education, health, civil and social engagement, economic and workforce development. For example, enhancing broadband availability and affordability will strengthen tutoring opportunities for K-12 students and degree options for college students; increase access to healthy living information and mental health services; provide greater transparency of government information and improved access to government services; and increase labor participation rates through online training and increased access to employment information.

Strategy 2.1

Using federal funds, including those allocated through the BEAD program, deploy broadband to all remaining unserved and underserved Tennessee households and businesses that lack a 100/20mbps connection.

As shown by the Core Activities presented below, this strategy incorporates TNECD's efforts to deploy broadband with ARPA and BEAD funding. TNECD will use this funding in coordination with Digital Equity Funding to provide a comprehensive approach to achieving broadband access.

Figure 33: Core activities and timeline for Strategy 2.1

Core Activities	Timeline
ARPA-Funded Grant Areas Built Out	Present – Dec 2026
BEAD Application Open	July-Sept 2024
BEAD Subgrantees Build Out Grant Areas	May 2025-Dec 2028

Measurable Objective 2.1(1)

Using federal funds, including those allocated through the BEAD program, deploy broadband to all remaining unserved and underserved Tennessee households and businesses that lack a 100/20mbps connection.

The baseline below was derived from Tennessee's BEAD proposal.

Figure 34: KPI for Strategy 2.1

Covered Population	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
All (except those incarcerated)	367,700 unconnected locations	243,717	Dec 2026	0	Dec 2028

Barriers Addressed

The strategy above helps resolve the barriers of broadband availability for low-income individuals, aging individuals, formerly incarcerated individuals, veterans, individuals with disabilities, individuals with a language barrier, including English learners and those with low literacy skills, individuals in a racial or ethnic group, and rural residents. According to the Digital Opportunity Survey, infrastructure/broadband availability is the most significant barrier for rural residents.

Strategy 2.2

Ensure all state prisons that currently do not have internet speeds of at least a gig are aware of the BEAD Challenge Process and have the resources and knowledge they need to opt in as a community anchor institution (CAI).

Figure 35: Core activities and timeline for Strategy 2.2

Core Activities	Timeline
Determine which prisons do not currently have gig internet and plan an outreach strategy in partnership with the Tennessee Department of Corrections (TDOC)	Jan-Feb 2024
Carry out outreach strategy, share resources, and host an informational session for prison officials	Feb-Mar 2024
Identify how many prisons successfully opted in as a CAI	Mar-Apr 2024

Measurable Objective 2.2(1)

Ensure all state prisons that currently do not have internet access speeds of at least a gig are aware of the BEAD Challenge Process and have the resources and knowledge they need to opt in as a community anchor institution (CAI).

TNECD will work with TDOC to assess awareness of the BEAD Challenge Process and determine what assistance will be needed to develop resources and knowledge that state prison leadership will need to be informed. In working through this process, TNECD will confirm that the baseline provided below is correct. The zero percent baseline, presented below, is based on preliminary conversations with state agencies about the BEAD Challenge Process and community anchor institutions. TNECD will further assess this baseline in early 2024 and revise as needed.

Figure 36: KPI for Strategy 2.2

Covered Population	Baseline	Target	Timeline
N/A	0%	100%	Mar 2024

Measurable Objective 2.2(2)

Using federal funds, including those allocated through the BEAD program or non-federal match funds, ensure all prisons have access to at least 100/20 internet speeds (The Tennessee Department of Corrections operates 14 prisons).

The baseline was derived from the FCC's National Broadband Map data. TNECD will be working closely with TDOC to accurately assess the number of state prisons that do not currently have access to at least 100/20 internet speeds and develop plans to devise appropriate targets, methods, and timelines.

Figure 37: KPI for Strategy 2.2

Covered Population	Baseline	Target	Timeline
Incarcerated Individuals	9 Tennessee Prisons have access to at least 100/20 speeds	All 14 state prisons have access to at least 100/20 speeds	Dec 2028

Barriers Addressed

Continuing the buildout of broadband infrastructure in Tennessee will address the primary barrier identified for rural households, low-income households, formerly incarcerated individuals, aging individuals, veterans, and others who are not members of covered populations. In addition, ensuring that prisons have access to high-quality internet will significantly increase access to education and workforce training for incarcerated individuals. An increased access to educational trainings will equip those who are currently incarcerated with resources that will help individuals lead successful lives upon release. This effort builds on other state and local workforce development efforts to reduce recidivism for justice-involved individuals and increase labor participation rates.

Strategy 2.3

Make the internet more affordable to all covered populations.

TNECD will work closely with Digital Opportunity Taskforce members and other partners to promote participation in the Affordable Connectivity Program (ACP), increase subscription take rates, and increase the number of organizations providing low or no-cost internet access to covered populations. This includes designing and implementing the core activities listed below. TNECD will closely coordinate Digital Equity and BEAD efforts to fully leverage resources and maximize impact.

Figure 38: Core activities and timeline for Strategy 2.3

Core Activities	Timeline
Design a grant program that helps partner organizations subsidize access for covered populations	Jan-Apr 2025
Design a grant program that helps partners enroll covered populations in ACP	Jan-Apr 2025
Launch affordability and ACP enrollment grant programs	July-Sept 2025

Measurable Objective 2.3(1)

Increase subscription take rates.

The grant program, in combination with continued outreach by Taskforce members and other partners, will increase subscription take rates by the general population as well as specific covered populations.

The baseline data presented below are derived from the American Community Survey (ACS) 2022 1 Year Estimates data.[33] As illustrated in the table, 91.5% of the total population in Tennessee have a computer with a Broadband internet subscription.

Figure 39: KPI for Strategy 2.3

Covered Population	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
General Population	91.5%	94%	Dec 2026	97%	Dec 2028
Aging Individuals[34]	81.6%	84%	Dec 2026	87%	Dec 2028
Individuals with language barriers, including English learners and those with low literacy skills[35]	72.6%	75%	Dec 2026	78%	Dec 2028
Individuals of a racial or ethnic minority group[36]	90.5%	93%	Dec 2026	95%	Dec 2028

Measurable Objective 2.3(2)

Increase percentages of eligible households participating in the Affordable Connectivity Program (ACP).

TNECD will work closely with the Taskforce and other partners to promote ACP and enroll households with a particular emphasis on covered population households. As

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[33] U.S. Census Bureau. "Types of Internet Subscriptions by Selected Characteristics." American Community Survey, ACS 1-Year Estimates Subject Tables, Table S2802, 2022, https://data.census.gov/table/ACSST1Y2022.S2802?t=Telephone, Computer, and Internet Access&g=040XX00US47. Accessed on January 3, 2024.

[34] Calculated from ACS data population 65 years and over with broadband internet subscription.

[35] Measure was generated from the ACS measure "Household population 25 years and older with less than high school graduate or equivalency with broadband internet subscription."

[36] Individuals of a racial or ethnic minority group value was calculated from ACS data for African American, American Indian and Alaska Native, Asian, and Hispanic or Latino origin broadband internet subscription.   The baseline value was calculated by taking the average of the percent of population with a broadband internet subscription for each covered population with data available.

part of this effort, TNECD will closely monitor ACP status, assess progress, and revise activities where needed.

United Communications, a communication provider for middle Tennessee, estimates as many as 1,131,000 households in Tennessee are eligible for the ACP program in Tennessee. Of those eligible households only 420,010 are reported to be enrolled in ACP. Developing baseline data specifically for covered populations is difficult because ACP eligibility criteria do not align with defined covered population characteristics. As such, there is limited information regarding ACP enrolled households by covered population. Using available data, the baseline data presented below illustrate total household enrollment levels and enrollment level among aging individuals. Baseline data are based on Tennessee household eligibility estimates from resources at United Communications[37] and the ACP enrollment and claims tracker database developed by Universal Service Administration Company.[38]

Figure 40: KPI for Strategy 2.2

Covered Population	Baseline	Short Term		Long Term	
		Target	Timeline	Target	Timeline
Low-income Individuals	28.6%	35%	Dec 2026	50%	Dec 2028
Aging Individuals	19.99%	35%	Dec 2026	50%	Dec 2028

Measurable Objective 2.3(3)

Increase the number organizations that provide reduced or no cost internet access for covered populations through grant awards.

Although this objective is applicable to all organizations that serve the different covered populations, TNECD will specifically focus on working with state prisons to provide access to incarcerated individuals. TNECD efforts will lower the cost of access for prisons and encourage them to increase internet speeds. This, in turn, will result in more training opportunities for inmates, leading to improved employment opportunities upon reentry. TNECD will intentionally recruit specific state prisons based on Tennessee Department of Corrections recommendations. The zero baseline for this

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[37]https://united.net/blog/how-middle-tennesseans-can-access-the-affordable-connectivity-program/#:~:text=Eligible%20households%20must%20both%20apply,qualifies%20for%20one%20ACP%20benefit.

[38]https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/

objective shows that no organizations are providing reduced or no-cost internet access for incarcerated individuals through grant awards.

Figure 41: KPI for Strategy 2.3

Covered Population	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
All (except incarcerated individuals)	0	5	Dec 2026	20	Dec 2028
Incarcerated Individuals	0	1	Dec 2026	5	Dec 2028

Barriers Addressed

All covered populations, except recently incarcerated individuals, reported cost as a critical barrier in response to TNECD surveys and listening sessions. The strategies and objectives presented here will improve digital access and affordability for members of covered populations. Strategies 2.3(1) and 2.3(2) will improve access and affordability for covered population households, while Strategy 2.3(3) will work to increase access for incarcerated individuals. By coordinating these Digital Equity efforts with the BEAD program, TNECD will leverage the use of all available resources to achieve maximum results. In addition, by working closely with the Digital Opportunity Taskforce and other partners, TNECD will ensure that resources are efficiently directed to address covered population needs.

Goal #3: Improve online accessibility and inclusivity of state agency resources.

State agency online resources can be inaccessible to covered populations, especially individuals with disabilities, individuals with language barriers, and individuals with low levels of literacy. TNECD wants to ensure that state agency online resources are accessible to all Tennesseans.

Improving online accessibility and inclusivity of state agency resources supports and aligns with several state goals, notably those impacting civil and social engagement, economic and workforce development, health, and education. For example, Tennessee's Comptroller of the Treasury has the goal to "make government work," which greater online accessibility supports. Improved online accessibility of education, training, and employment information will make it easier for covered populations to take advantage of these opportunities. Improved access to health resources will support a "healthy Tennessee" by making program information and telehealth services easier to find.

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Strategy 3.1

Conduct assessments of state department websites to identify barriers and opportunities to improve online accessibility for specific covered populations.

Figure 42: Core activities and timeline for Strategy 3.1

Core Activities	Timeline
Work with Digital Opportunity Taskforce and University of Tennessee (UT) to design online accessibility assessments	Aug 2024-June 2025
Conduct formal assessments of online accessibility for selected state programs per year	Jun 2025-Dec 2027
Provide technical assistance to help state agencies improve online accessibility for specific covered populations	Dec 2025-Dec 2027

Measurable Objective 3.1(1)

Conduct targeted formal assessments of online accessibility for selected state departmental websites that serve specific covered populations and provide technical assistance to make improvements.

Some state websites are difficult to navigate and follow, making it challenging to find information about needed services. The formal assessments will focus on specific departments and sites that members of covered populations could regularly access for needed services. When this objective is successfully completed, the state agencies listed below will have information needed to make revisions that improve accessibility for one or more specific covered populations. Note that the assessment for the Tennessee Department of Labor and Workforce Development (TNLWD) addresses all covered populations, including incarcerated individuals. TNLWD provides services to help incarcerated individuals and recently released individuals prepare for reentry, develop needed skills, and find employment. The zero baseline reflects the fact that no state websites have been assessed by the State Broadband Office for accessibility of specific covered population groups.

Figure 41: KPI for Strategy 3.1

Covered Population	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
Low Income (Dept of Human Services)	0	1	Dec 2025		
All Covered Populations	0	1	Dec 2025		

(Dept of Labor & Workforce Development)					
Low Income, Aging, Disabilities (TennCare)	0			1	Dec 2026
Individuals with Disabilities Dept of Intellectual Disabilities)	0			1	Dec 2026
Veterans (Dept of Veterans Affairs)	0			1	Dec 2027
Rural Residents (Dept of Agriculture)	0			1	Dec 2027

Barriers Addressed

Improving the accessibility of certain state websites will deliver solutions for covered populations who reported digital inclusion as a key barrier in the needs assessment. For example, members of the disability communities, veterans, and rural residents reported digital inclusion as a significant barrier. TNECD understands that accessibility for covered populations will require an ongoing process that includes assessments, improvements, and review. With improved accessibility, members of covered populations will be better able to identify, understand, and secure government services.

Strategy 3.2

Develop training modules for all covered populations that teach users how to navigate government websites and access resources.

In addition to improving state agency websites, TNECD will develop training modules, targeting the needs of specific covered populations. This strategy will help members of covered populations better navigate, understand, and qualify for government services.

Figure 42: Core activities and timeline for Strategy 3.2

Core Activities	Timeline
Develop an RFP to produce training modules for each covered population that include best practices on navigating agency websites and accessing online resources	May 1-31, 2024
Award the RFP	Sept-Oct 2024
RFP Awardee creates the training modules based on TNECD requirements	Oct 20-May 2025
Subgrantees embed the online accessibility module in state funded digital skilling programs.	July 2025

Measurable Objective 3.2(1)

Increase the number people completing the online accessibility training modules.

The training modules will be open to all Tennesseans and promoted specifically to covered populations by grant recipients and other partners across the state. For example, TNECD intends to work with the TDLWD Office of Reentry to provide a module that is specifically developed for devices provided to incarcerated individuals through the Department's Tablet Program. Because the training modules will be a new development with no participants, the baseline is zero. TNECD derived these targets for each covered population by looking at the NTIA Covered Population Viewer and the reported scopes of impact for current grant applicants for the DSEW, BRC, and CCF programs.

Figure 43: KPI for Strategy 3.2

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	0	4601	Dec 2025	13642	Dec 2027
Aging Populations	0	200	Dec 2025	600	Dec 2027
Incarcerated Individuals	0	275	Dec 2025	550	Dec 2027
Veterans	0	50	Dec 2025	215	Dec 2027
Individuals with Disabilities	0	110	Dec 2025	325	Dec 2027
English Learners	0	600	Dec 2025	2000	Dec 2027
Low Literacy Skills	0	400	Dec 2025	1500	Dec 2027
Racial or ethnic minority groups	0	1500	Dec 2025	5000	Dec 2027
Rural residents	0	3000	Dec 2025	8000	Dec 2027

Barriers Addressed

This strategy will benefit all covered populations by providing targeted trainings that optimize benefits for each covered group. TNECD will work closely with the Taskforce and other partners to determine specific online needs for each covered population. This includes websites, critical resources, and other information that are important to specific groups. The strategy also addresses barriers identified in the Digital Opportunity Survey where online accessibility and inclusion intersects with digital skills needs. The strategy is particularly important in that it empowers covered population members with the skills needed for everyday life, as well as a gateway for individuals to increasingly develop practical and advanced digital skills.

Goal #4: Help Tennesseans develop the digital skills needed for work and life.

As Tennessee continues to recruit high-quality jobs, Tennesseans must have the digital skills necessary to use various software and equipment that professions require across many sectors. There is also an increased demand for coding and other technology-specific digital skills in the job market. TNECD will partner with education and training providers throughout Tennessee to expand opportunities to acquire general digital and industry-specific skills that are essential for success in the workplace.

This goal supports and aligns with state goals impacting education, economic development, and workforce development. Regarding education, this goal increases online opportunities to gain higher education degrees and certificates, a key component of the state's goal to increase educational attainment levels. This, in turn, contributes to a highly skilled workforce that supports sectors like advanced manufacturing and small businesses, that are rapidly moving into the digital age and creating high quality jobs.

Strategy 4.1

Continue to expand the availability of digital skills programs through a competitive grant program.

This strategy builds on current TNECD efforts to expand digital skills training programs. The Digital Skills, Education, and Workforce Development Grants Program (DSEW) for example, will fund local educational organizations, community-based organizations, higher education institutions, and other nonprofits. The core activities shown below reflect TNECD's approach of evaluating and continuously improving current programs. This approach builds on existing networks and enhances future success.

Figure 44: Core activities and timeline for Strategy 4.1

Core Activities	Timeline
Evaluate current grant program that provides funding for digital skills and make necessary changes and updates	Feb-Apr 2025
Launch digital skills grant program	Aug-Oct 2025
Award subgrantees	Dec 2025-Feb 2026
Evaluate current grant program that provides funding for digital skills and make necessary changes and updates	Feb-Apr 2026
Launch digital skills grant program	Aug-Oct 2026
Award subgrantees	Dec 2026-Feb 2027

Measurable Objective 4.1(1)

Increase the number digital skills programs receiving grant funding from TNECD to serve all covered populations.

The baselines shown below are based on TNECD's current DSEW program. The baseline has not been established because awards have not been finalized. The baseline will be established by Summer 2024 when TNECD formally scores and awards DSEW grants. After the baseline is established reasonable growth targets will be set.

Figure 45: Core activities and timeline for Strategy 4.1

Covered Population	Baseline	Target	Timeline
Low Income	See above	See above	Dec 2028
Aging Populations	See above	See above	Dec 2028
Incarcerated Individuals	See above	See above	Dec 2028
Veterans	See above	See above	Dec 2028
Individuals with Disabilities	See above	See above	Dec 2028
English Learners	See above	See above	Dec 2028
Low Literacy Skills	See above	See above	Dec 2028
Racial or ethnic minority groups	See above	See above	Dec 2028
Rural residents	See above	See above	Dec 2028

Measurable Objective 4.1(2)

Increase number of those in covered populations who receive training from TNECD digital skills programs.

The zero baselines reflects that this is a new initiative and no members of covered populations have received training. TNECD derived these targets for each covered population by looking at the reported scopes of impact for current grant applicants for the DSEW, BRC and CCF programs.

Figure 46: KPI for Strategy 4.1

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	0	4601	Dec 2026	13642	Dec 2028
Aging Populations	0	200	Dec 2026	600	Dec 2028
Incarcerated Individuals	0	275	Dec 2026	550	Dec 2028
Veterans	0	50	Dec 2026	215	Dec 2028
Individuals with Disabilities	0	110	Dec 2026	325	Dec 2028
English Learners	0	600	Dec 2026	2000	Dec 2028
Low Literacy Skills	0	400	Dec 2026	1500	Dec 2028
Racial or ethnic minority groups	0	3000	Dec 2026	8000	Dec 2028

Measurable Objective 4.1(3)

Increase TNECD-funded training participants' confidence in their knowledge and digital skills.

TNECD will develop a survey process that grantees will follow when delivering training to participants. The survey will require participants to assess their level of confidence in their digital knowledge and skills before and after the training. TNECD will compile and report results for the general population as well as by covered population. TNECD will use survey results from initial training participants to establish baselines for confidence levels and targets. TNECD will evaluate this approach annually and make improvements where needed. Baselines and targets for this survey will be developed in Fall 2024 as TNECD begins reporting periods for DSEW grantees.

Figure 47: KPI for Strategy 4.1

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	See above	See above	Dec 2026	See above	Dec 2028
Aging Populations	See above	See above	Dec 2026	See above	Dec 2028
Incarcerated Individuals	See above	See above	Dec 2026	See above	Dec 2028

Veterans	See above	See above	Dec 2026	See above	Dec 2028
Individuals with Disabilities	See above	See above	Dec 2026	See above	Dec 2028
English Learners	See above	See above	Dec 2026	See above	Dec 2028
Low Literacy Skills	See above	See above	Dec 2026	See above	Dec 2028
Racial or ethnic minority groups	See above	See above	Dec 2026	See above	Dec 2028
Rural residents	See above	See above	Dec 2026	See above	Dec 2028

Barriers Addressed

TNECD's needs assessment showed that every covered population, other than incarcerated individuals, identified digital skills as a barrier. In addition, TNECD's listening session data revealed that several responses were tied to a need for digital literacy. Our conversations with stakeholders, community leaders, and institutions serving covered populations consistently identified digital skills as a priority need in their communities. Nonprofits and state agencies that work with justice involved individuals were especially emphatic about digital skills as a priority need.

Strategy 4.2

Continue to expand the availability of workforce development programs through a competitive grant program.

Although Tennessee has a strong and extensive workforce development system, there is a critical need to make digitally focused workforce development programs increasingly accessible to members of covered populations. The activities shown below build on Tennessee's existing workforce development network by providing focused grants to achieve digital equity goals.

Figure 48: Core activities and timeline for Strategy 4.2

Core Activities	Timeline
Evaluate current grant program that provides funding for workforce development programs and make necessary updates	Feb-Apr 2025
Launch workforce development grant program	Aug-Oct 2025
Award subgrantees	Dec 2025-Feb 2026
Evaluate current grant program that provides funding for workforce development programs and make necessary changes and updates	Feb-Apr 2026
Launch workforce development grant program	Aug-Oct 2026

Measurable Objective 4.2(1)

Increase the number of workforce development programs receiving grant funding from TNECD to serve all covered populations.

Baselines will be established by Summer 2024 when TNECD awards DSEW grants. After the baseline is established reasonable growth targets will be set.

Figure 49: KPI for Strategy 4.2

Covered Population	Baseline	Target	Timeline
Low Income	See above	See above	Dec 2028
Aging Populations	See above	See above	Dec 2028
Incarcerated Individuals	See above	See above	Dec 2028
Veterans	See above	See above	Dec 2028
Individuals with Disabilities	See above	See above	Dec 2028
English Learners	See above	See above	Dec 2028
Low Literacy Skills	See above	See above	Dec 2028
Racial or ethnic minority groups	See above	See above	Dec 2028
Rural residents	See above	See above	Dec 2028

Measurable Objective 4.2(2): *Increase number of those in covered populations who receive training from TNECD-funded workforce development programs.*

TNECD derived these targets for each covered population by looking at the reported scopes of impact for current grant applicants for the DSEW, BRC and CCF programs.

Figure 50: KPI for Strategy 4.2

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	0	1150	Dec 2026	3411	Dec 2028
Aging Populations	0	50	Dec 2026	150	Dec 2028
Incarcerated Individuals	0	69	Dec 2026	138	Dec 2028
Veterans	0	13	Dec 2026	54	Dec 2028
Individuals with Disabilities	0	28	Dec 2026	81	Dec 2028
English Learners	0	150	Dec 2026	500	Dec 2028

Low Literacy Skills	0	100	Dec 2026	375	Dec 2028
Racial or ethnic minority groups	0	375	Dec 2026	1250	Dec 2028
Rural residents	0	750	Dec 2026	2000	Dec 2028

Measurable Objective 4.2(3)

Increase the number of those in covered populations who receive a workforce credential, including certifications and/or degrees, from a TNECD-funded grant program.

The baselines shown below are based on TNECD's current digital skills programs. Incarcerated individuals, not included in current grant programs, will be when digital equity funding is expanded. Targets for job placements will be established by Winter 2024 as TNECD works with DSEW grantees to gauge impacts.

Figure 51: KPI for Strategy 4.2

Covered Population	Baseline	Target	Timeline
Low Income	0	See above	Dec 2028
Aging Populations	0	See above	Dec 2028
Incarcerated Individuals	0	See above	Dec 2028
Veterans	0	See above	Dec 2028
Individuals with Disabilities	0	See above	Dec 2028
English Learners	0	See above	Dec 2028
Low Literacy Skills	0	See above	Dec 2028
Racial or ethnic minority groups	0	See above	Dec 2028
Rural residents	0	See above	Dec 2028

Measurable Objective 4.2(4)

Increase the number of those in covered populations who receive a job placement from a TNECD-funded grant program.

The baselines shown below are based on TNECD's current digital skills programs. Incarcerated individuals are not included in current programs but will be when digital equity funding is expanded. TNECD will work to have target goals established by Winter 2024 after consulting with state agency and non-profit partners.

Figure 52: KPI for Strategy 4.2

Covered Population	Baseline	Target	Timeline
Low Income	0	See above	Dec 2028
Aging Populations	0	See above	Dec 2028
Incarcerated Individuals	0	See above	Dec 2028
Veterans	0	See above	Dec 2028
Individuals with Disabilities	0	See above	Dec 2028
English Learners	0	See above	Dec 2028
Low Literacy Skills	0	See above	Dec 2028
Racial or ethnic minority groups	0	See above	Dec 2028
Rural residents	0	See above	Dec 2028

Barriers Addressed: Workforce development and the need to improve digital skills across covered populations were major themes in TNECD listening sessions and conversations with other state agencies. Ensuring that Tennesseans have access to advanced educational opportunities outside the traditional pathway will build on current workforce development efforts by increasing digital skills of covered population members, improving labor participation rates, and strengthening the competitiveness of the Tennessee workforce. By specifically targeting members of covered populations, these efforts will broaden and deepen skill levels throughout the state, contributing to enhanced economic opportunity for more Tennesseans.

Strategy 4.3

Develop cybersecurity training modules, digital safety best practices, and promotional messages, specifically customized for all covered populations.

This strategy builds on previous digital skills efforts to increase the ability of covered population members to safely navigate the internet. This ability will, in turn, enhance confidence levels which are needed as digital access and opportunities increase in the future. The core activities shown below will integrate cybersecurity training with other digital skills training programs to ensure long term continuity, growth, and success.

Figure 53: Core activities and timeline for Strategy 4.3

Core Activities	Timeline
Develop an RFP to produce training modules for each covered population	May2024
Award the RFP	Sept-Oct 2024
RFP Awardee creates the training modules based on TNECD requirements	Oct 20-May 2025

Subgrantees embed the cybersecurity module in state funded digital skilling programs.	July 2025

Measurable Objective 4.3(1)

Increase the number people completing the cybersecurity training modules.

Although the cybersecurity modules will be open to all and embedded within all TNECD funded digital skills training programs, TNECD will work with the Digital Opportunity Taskforce, grant recipients and other partners throughout the state to specifically promote cybersecurity training programs to covered populations. The zero baseline reflects that this is a new initiative with no module completions. TNECD derived these targets for each covered population by looking at the reported scopes of impact for current grant applicants for the DSEW, BRC and CCF programs.

Figure 54: KPI for Strategy 4.3

Covered Population	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
Low Income	0	4601	Dec 2026	13642	Dec 2028
Aging Populations	0	200	Dec 2025	600	Dec 2027
Incarcerated Individuals	0	275	Dec 2025	550	Dec 2027
Veterans	0	50	Dec 2025	215	Dec 2027
Individuals with Disabilities	0	110	Dec 2025	325	Dec 2027
English Learners	0	600	Dec 2025	2000	Dec 2027
Low Literacy Skills	0	400	Dec 2025	1500	Dec 2027
Racial or ethnic minority groups	0	1500	Dec 2025	5000	Dec 2027
Rural residents	0	3000	Dec 2025	8000	Dec 2027

Measurable Objective 4.3(2)

Increase TNECD-funded training participants' confidence in their knowledge of cybersecurity.

TNECD will use information from the inaugural DSEW grantees report to develop baselines and targets.

Figure 55: KPI for Strategy 4.3

Covered Population	Baseline	Short-Term Target	Short-Term Timeline	Long-Term Target	Long-Term Timeline
Low Income	0	4601	Dec 2026	13642	Dec 2028
Aging Populations	0	200	Dec 2026	600	Dec 2028
Incarcerated Individuals (Specific module for the Tablet program must be developed)	0	275	Dec 2026	550	Dec 2028
Veterans	0	50	Dec 2026	215	Dec 2028
Individuals with Disabilities	0	110	Dec 2026	325	Dec 2028
English Learners	0	600	Dec 2026	2000	Dec 2028
Low Literacy Skills	0	400	Dec 2026	1500	Dec 2028
Racial or ethnic minority groups	0	1500	Dec 2026	5000	Dec 2028
Rural residents	0	3000	Dec 2026	8000	Dec 2028

Barriers Addressed

Digital Opportunity Survey and Listening Session data revealed a need for Internet safety and cybersecurity resources for Tennesseans. As the Internet becomes increasingly important in society, it is imperative that we prepare community members to stay safe online. As covered population members increase digital and cybersecurity skills, they will have greater confidence in their ability to access the range of broadband services fully and safely.

Goal #5: Expand availability of affordable devices and technical support.

High-speed broadband access will still be inaccessible to many Tennesseans without access to affordable, digital devices, like a computer or tablet. TNECD will work with the Taskforce and other partners to help increase device access in the state and the availability of public devices in community anchor institutions like libraries.

Strategy 5.1

Require TNECD-funded digital skills and workforce programs to provide a no or low-cost laptop or desktop pathway.

This requirement will be incorporated into program guidelines and grant agreements.

Figure 56: Core activities and timeline for Strategy 5.1

Core Activities	Timeline
Incorporate requirement into guidelines	Feb-Apr 2025
Receive first subgrantee quarterly report	May-June 2026
Final annual report from subgrantees	Feb-Mar 2027

Measurable Objective 5.1(1)

Increase number of no- to low-cost devices provided to members of covered populations by TNECD-funded programs.

No low-cost devices are currently provided by TNECD programs but will be starting in Summer 2024. Targets for this measurable objective will be established in Winter 2024.

Figure 57: KPI for Strategy 5.1

Covered Population	Baseline	Target	Timeline
Low Income	0	See above	Dec 2028
Aging Populations	0	See above	Dec 2028
Incarcerated Individuals	0	See above	Dec 2028
Veterans	0	See above	Dec 2028
Individuals with Disabilities	0	See above	Dec 2028
English Learners	0	See above	Dec 2028
Low Literacy Skills	0	See above	Dec 2028
Racial or ethnic minority groups	0	See above	Dec 2028
Rural residents	0	See above	Dec 2028

Barriers Addressed

Low-cost devices will help address the cost barrier. As shown by TNECD survey results, cost was consistently the top or second highest barrier for all covered populations. Making devices more affordable will increase accessibility for all covered populations and particularly for low-income households. Device access was also identified as a barrier across all covered populations. Increasing access to quality low-cost devices will allow Tennesseans to have easier access to job opportunities, educational resources, and other social services.

Strategy 5.2

Develop a refurbishment platform to promote device availability and affordability to organizations that serve covered populations.

The refurbishment platform will provide the mechanism for developing and capturing a supply of refurbished digital devices that can meet the needs of covered populations. The core activities shown below identify a process for developing and delivering a device matching platform.

Figure 58: Core activities and timeline for Strategy 5.2

Core Activities	Timeline
Design and launch an RFP process to manage a device matching and refurbishment platform	May-Sept 2025
Award the contract	Nov 2025
Contractor creates the refurbishment platform	Jan-Apr 2026
Begin using the platform	Jul 2026

Measurable Objective 5.2(1)

Increase the number of organizations that donate devices through the refurbishment platform.

The baseline is zero because the refurbishment platform has not been developed.

Figure 59: KPI for Strategy 5.2

Covered Population	Baseline	Target	Timeline
N/A	0	50	Dec 2028

Measurable Objective 5.2(2)

Increase the number of refurbished devices provided through the refurbishment platform to members of covered populations.

The zero baseline reflects that this will be a newly developed program. Target will be established during the RFP Process or by September 2025.

Figure 60: KPI for Strategy 5.2

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	0	See above	Dec 2026	See above	Dec 2028
Aging Populations	0	See above	Dec 2026	See above	Dec 2028
Incarcerated Individuals	0	See above	Dec 2026	See above	Dec 2028
Veterans	0	See above	Dec 2026	See above	Dec 2028
Individuals with Disabilities	0	See above	Dec 2026	See above	Dec 2028
English Learners	0	See above	Dec 2026	See above	Dec 2028
Low Literacy Skills	0	See above	Dec 2026	See above	Dec 2028

Racial or ethnic minority groups	0	See above	Dec 2026	See above	Dec 2028
Rural residents	0	See above	Dec 2026	See above	Dec 2028

Barriers Addressed

Creating an online device refurbishment platform will expand access to the devices by addressing the affordability barrier. As mentioned previously, cost and affordability are significant barriers for all covered populations. Organizations and companies may want to donate devices but may not know where to do so; conversely, individuals and service organizations may struggle to find access to refurbished devices. The platform will be a great tool to facilitate donations and device access by members of covered populations.

Strategy 5.3

Create a statewide technical assistance hub to provide support to Tennesseans who need basic assistance with digital devices at no cost.

Figure 61: Core activities for Strategy 5.3

Core Activities	Timeline
Develop an RFP to create the technical assistance hub	Apr-May 2025
Award the contract	Oct-Dec 2025
RFP Awardee creates the technical assistance hub	Dec 2025-Apr 2026
Begin promoting the hub	Apr 2026-Dec 2028

Measurable Objective 5.3(1)

Increase the number of organizations that are promoting the technical assistance hub (have it listed on their website/social media pages, promote directly to customers and clients, etc.).

TNECD will work with the Taskforce and other partners to promote the technical assistance hub to members of all covered populations.

Figure 62: KPI for Strategy 5.3

Covered Population	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
N/A	0	20	Apr 2026	50	Dec 2028

Measurable Objective 5.3(2)

Increase the number of Tennesseans accessing the service.

This objective addresses all covered populations, including incarcerated individuals. TNECD will work with the appropriate state agencies to provide online technical assistance that can be accessed through tablets provided to inmates.

Figure 63: KPI for Strategy 5.3

Covered Population	Baseline	Target	Timeline
All	0	2,500	Dec 2028

Barriers Addressed

Technical support was third most identified need in the Digital Opportunity Survey. It was the second most identified need for several covered populations, notably aging and people with disabilities. Similarly, those attending TNECD's Listening Sessions expressed a need for Tennesseans to have in-person, individualized technical support. The technical assistance hub will also address digital skills and online safety, important barriers to full internet access as indicated in Goals 3 and 4.

These strategies and objectives will serve as a guide for the implementation of Digital Equity and the core activities pursued. The State Broadband Office expects all covered populations to be impacted through these goals and strategies.

4. Collaboration and Stakeholder Engagement

Stakeholder Engagement Overview

TNECD's stakeholder engagement strategy entailed building new relationships with other state agencies, local governments, non-profits, and other organizations serving covered populations in the state. Beginning in the fall of 2022, TNECD began significant stakeholder engagement efforts, including:

- Formation of a Digital Opportunity Taskforce.
- 21 listening sessions (including four sessions hosted by community organizations in the state).
- Creation of the Digital Opportunity Listening Session Facilitator Toolkit.
- Deployment of online surveys.
- Convening of covered population working groups.
- First ever Digital Opportunity Summit with 84 participants providing feedback to the plan.
- Stakeholder presentations and meetings.

Key Stakeholders

TNECD spent significant time establishing new connections with organizations and agencies serving covered populations or providing digital equity-related services. This entailed connecting with over 100 contacts across East, Middle, and West Tennessee. *Appendix E* has a list of the organizations/agencies contacted throughout the planning process. We leveraged these contacts to communicate TNECD's efforts and events.

Key to shaping TNECD's stakeholder engagement efforts, the Broadband Office formed the Digital Opportunity Taskforce to collaborate and develop strategies for the Digital Opportunity Plan in December of 2022. It consists of fourteen regular members working in various sectors across Tennessee, including but not limited to digital equity and inclusion non-profit organizations, telecommunication associations, higher education, and labor workforce development. A complete list of taskforce members can be found in *Appendix F*. Since January 2023, the Taskforce has convened monthly to share resources and offer feedback on the State's proposed strategies in the Digital Opportunity Plan. Other key stakeholders were invited into this process via covered population-specific working groups to review findings and data for the Digital Opportunity Plan. *Appendix G* has a complete list of focus group participant organizations.

On August 8th, 2023, TNECD held Tennessee's first Digital Opportunity Summit, convening stakeholders statewide to provide feedback on the plan before posting it for public comment in September 2023. Representatives from rural and urban areas and the three geographic divisions (East, Middle, and West Tennessee) were in attendance, sharing and collaborating vital institutional knowledge from the perspective of state/local government, higher education, telecommunications, and non-profit sectors. *Appendix H* has a complete list of organizations present for the Digital Opportunity Summit.

4.1 Coordination and Outreach Strategy

Stakeholder Engagement Strategies and Activities

TNECD's outreach strategy entailed a multi-pronged approach to stakeholder engagement that included engagement with individual Tennesseans as well as organizations and agencies that serve covered populations. In the Spring of 2023, the Broadband Office travelled across Tennessee for in-person listening sessions organized through partners "on the ground." Additional outreach efforts relied on local governments, regional economic development agencies, and grassroots organizations to share TNECD announcements, events, and resources with their communities. TNECD Broadband Office also acted as a convener, hosting numerous calls, conversations, and in-person events with partners statewide. The following sections will detail the stakeholder engagement efforts mentioned above.

Listening Sessions

As part of our outreach strategy, the Broadband Office conducted several listening sessions across the state to achieve four main goals:

- Inform the public about TNECD's broadband programs.
- Gather data on the current barriers to digital opportunities.
- Receive input on digital opportunity programs Tennesseans would like in the future.
- Provide individuals with resources that may alleviate barriers to affordable, high-speed internet access.

In total, TNECD hosted 17 listening sessions across the state. The Tennessee Development Districts helped host or organize nine listening sessions; two sessions were virtual, and six were in-person at community anchor institutions across the state. The feedback and testimonies at these listening sessions provided valuable information incorporated into the Digital Opportunity Plan. In May, TNECD released the Digital Opportunity Facilitator Listening Session Toolkit to encourage local communities or

nonprofit organizations to host conversations and discussions around digital opportunity needs. Four organizations in the state hosted additional listening sessions: Code Crew, Innovate Memphis, the Greater Memphis IT Council, and the Knoxville Chamber of Commerce. Across all 21 listening sessions, TNECD collected about 1,108 responses across seven questions. A full list of listening session locations, dates, and times can be found in *Appendix I.*

Digital Opportunity Survey

TNECD prepared an online survey to gather additional information on needs and barriers for Tennesseans. The Digital Opportunity Survey questions can be found in *Appendix J.* To share the survey with communities, we relied on over 100 contacts across Tennessee. With the help of numerous state agencies, non-profit organizations, and community groups, this survey received over 1,500 responses, providing crucial data surrounding needs and barriers afflicting covered populations. Additionally, TNECD collected insight into the types of institutions Tennesseans would rely on to gain information on digital opportunity resources (available in *Appendix G*).

Covered Population Focus Groups

TNECD convened multiple focus groups consisting of relevant state/local government agencies and non-profit organizations serving covered populations in the state. We convened these groups to review the Digital Opportunity Survey findings of specific covered populations. In these conversations, TNECD reviewed qualitative and quantitative data and discussed possible gaps. During these calls, the Broadband Office also collected feedback on best practices around data collection to inform future efforts related to each covered population. Lastly, these conversations served as an opportunity to educate organizations on programs such as ACP and to connect them with available resources.

Outreach to Covered Population Service Organizations and Agencies

TNECD connected with many organizations and agencies serving covered populations via email and virtual meetings. Conversations with these stakeholders included discussion of information regarding the Digital Opportunity Plan and surrounding efforts, in addition to ACP outreach, and TNECD's upcoming ARPA digital adoption programs.

Digital Opportunity Summit

In August 2023, TNECD hosted the state's first-ever Digital Opportunity Summit. This one-day event brought stakeholders from across the state together to provide input on the Digital Opportunity Plan. Invited attendees worked together in groups to review

sections of the plan, including vision, strategies, objectives, needs assessment, stakeholder engagement, and critical activities. Input for each section was captured and recorded for review by TNECD. Additionally, TNECD garnered specific feedback about our findings, such as the perceived accuracy, knowledge of gaps, and strategies for future data-gathering efforts.

The Digital Opportunity Summit achieved TNECD's goal of gathering additional input before our public comment period and was vital for inviting more organizations, communities, and voices into the conversation of Digital Opportunity. TNECD was also able to showcase current digital opportunity efforts by non-profits and ISPs and offer a platform for stakeholders to connect and establish new connections amongst the broader Digital Opportunity Ecosystem in Tennessee. The Digital Opportunity Summit program can be found in *Appendix L*.

Initial Public Comment Period – September – October 2023

The first draft of the Digital Opportunity Plan entered a public comment period from September 6 to October 9, 2023. During this time, Tennesseans had access to an online comment form where they could comment on each section of the draft plan. The public comment announcement was sent to all State Broadband Office stakeholders including ISPs, non-profits, state agencies, local governments, regional agencies, and other organizations serving covered populations. TNECD also hosted six in-person meetings during the public comment period to gather additional feedback. The details of these meetings are in *Appendix I*. Generally, attendees of these in-person meetings included non-profits, representatives from local governments and CAIs. Additionally, the Digital Opportunity Taskforce members were encouraged to promote the public comment period to their contacts and materials were circulated through the Tennessee Digital Inclusion Coalition network. In total, 8 comments were submitted through the online public comment form and 48 responses were gathered from in-person meetings across Tennessee. The chart below outlines the comments received through the public comment form that resulted in edits to the plan.

Figure 64: Comments and Responses Received During Public Comment Period

Comments from Public	Responses/Edits	Section
TNECD must consider developing a specific timeline for achieving the six goals laid out and provide dates by which the strategies and key activities should be completed. Given the numerous activities and processes across all the goals,	Section 5 of this plan lays out a timeline achieving the goals laid out in this plan. Definitive markers of progress are presented in the plan in the form of KPIs in section 3. TNECD is working alongside UT	Sections 5 and 3.3.

definitive markers of progress throughout the implementation process can ensure that the statewide network of state agencies, nonprofits, local governments, and internet service providers are on track to driving impact and seeing outcomes for covered populations.	to develop practices across existing and future grants to ensure congruency across all data gathered surrounding outcomes for digital opportunity.	
I think in implementation it is very important that the Digital Opportunity Task force include organizations that are serving qualified populations (i.e. traditional social service agencies).	The Digital Opportunity Taskforce will be expanded to include more organizations serving covered populations among others who conduct work relating to workforce development, telehealth, and digital skilling.	Section 3.3
TNECD could consider adopting a series of state- funded & sponsored high-tech workforce development programs similar to the Arkansas Fiber Academy. By collaborating with public sector departments such as Job and Family Services, Department of Corrections, and Department of Education, along with private sector organizations, a robust, targeted high-tech training program could be created.	Thank you for providing this example. TNECD is examining partnerships such as this to deliver a skilled telecommunications workforce.	Section 3.3
For the goal of increasing device availability and affordability, TNECD should consider an additional strategy of providing increased opportunities for device use and access in public spaces (e.g., device loans from libraries).	TNCD's TOP grant provides capital for public libraries in TN to procure devices for rental use. This plan outlines a goal to expand device access through future programs.	Section 3.3
The Plan cites supporting statewide efforts of enrollment into the	TNECD identifies ACP as vital resource for ensuring digital	Sections 3.3

Affordable Connectivity Program (ACP) as a strategy to achieve TNECD's goal of increasing digital adoption rates in the state. A key activity within this strategy is to leverage statewide contacts to increase ACP awareness. This is essential for covered populations.	adoption among the most economically vulnerable Tennesseans. TN's Digital Opportunity Plan will support enrollment efforts statewide.	
The state's formula and/or criteria used to prioritize funds for non-deployment/digital equity activities should consider the outcome disparities in predominantly Black and rural communities.	While the state's formula and criteria for Digital Opportunity funding allocation has not been established yet, the activities in the Digital Opportunity Plan must directly address covered populations (racial and/or ethnic minorities and rural residents are both covered populations). TNECD also aims to target funds to distressed counties and communities.	Please see grant guidelines from CCF and DSEW for examples of TNECD grant scoring frameworks.
A significant population of Americans who have not yet adopted home broadband do not recognize the relevance of such connectivity.	Our research shows this is a factor for some Tennesseans without internet service. Additional research efforts will work to explore perceived significance more with specific research into its connections to digital skills and affordability/cost-burden.	Section 3

Second Public Comment Period – January 2024

A public comment period was held from January 16 – January 31, 2024. TNECD invited Tennesseans to view and provide feedback on the plan using an online feedback survey like the first period of public comment. Additionally, TNECD hosted a virtual office hour to discuss the plan and garner additional feedback from stakeholders and representatives of covered populations, circulate materials to promote the period with the Digital Opportunity Taskforce, and the Tennessee Digital Inclusion Coalition. TNECD received one comment during the second public comment period.

Workforce, Labor, and Higher Education Partnerships

TNECD engaged with a myriad of partners such as the University of Tennessee (UT), the TN Department of Labor and Workforce Development, the Tennessee College of Applied Technologies (TCAT), and others in developing the Digital Opportunity Plan. TNECD collaborated with the University of Tennessee, the University of Memphis, and LeMoyne-Owen College to organize focus groups and in-person gatherings to collect information on obstacles to internet access. These initiatives helped to develop a Digital Opportunity Plan that addresses the identified challenges and enables more individuals to benefit from the advantages of the digital age. In addition, TNECD has engaged with TCATs in Tennessee about how to bridge gaps in the broadband buildout workforce pipeline.

Stakeholder Engagement and Outreach Future Efforts

Key Stakeholder & Covered Population Collaboration

Stakeholder collaboration is an important theme of the Digital Opportunity Plan and will play a central role during implementation. The scope of and breadth of the plan calls for significant stakeholder collaboration to address barriers faced by covered populations throughout Tennessee. TNECD will collaborate with stakeholders to develop a statewide network that will provide guidance on program implementation, deliver services to covered population members, and promote services across the state. The following examples illustrate how TNECD will collaborate with the following stakeholders to address goals, support strategies, and achieve measurable objectives.

Example Outreach Activities

1. TNECD will collaborate with community anchor institutions (CAIs), including cultural centers, healthcare systems, and nonprofits to:
   - Increase CAI representation on the Digital Opportunity Taskforce (Strategy 1.1).
   - Design and deploy telehealth access points that serve rural households (Strategy 1.2).
   - Promote the Affordable Connectivity Program and enroll low-income and other covered population households (Strategy 2.3).
   - Promote and deliver digital skills programs to veterans, English learners, and other covered population members (Strategy 4.1).

2. TNECD will collaborate with county and municipal governments, including public libraries, county jails, and local utility systems that work directly with members of covered populations to:
   - Increase local government representation on the Taskforce (Strategy 1.1).

- Raise awareness about TNECD Digital Opportunity efforts and impacts to local government employees and community residents (Strategy 1.3).
- Efficiently deploy broadband to rural households and businesses that lack a 100/20mbps connection (Strategy 2.1).
- Promote and deliver digital skills programs to incarcerated individuals, low-income households, and other covered population members (Strategy 4.1).

3. TNECD will collaborate with local educational agencies, including K-12 public school systems, Tennessee Colleges of Applied Technology (TCATs), community colleges, and higher education institutions to:
   - Increase local educational representation on the Taskforce (Strategy 1.1).
   - Develop, promote, and deliver digital skills programs to low-literacy individuals (Strategy 4.1).
   - Develop, promote, and deliver workforce development programs that help incarcerated individuals, members of racial and ethnic minority groups, and others achieve certifications (Strategy 4.2).
   - Develop, promote, and deliver cybersecurity programs to increase the digital confidence of aging individuals (Strategy 4.3).

4. TNECD will collaborate with nonprofit organizations, including community centers, cultural centers, and chambers of commerce to:
   - Increase nonprofit representation on the Taskforce (Strategy 1.1).
   - Raise awareness of the full range of TNECD digital opportunity efforts and impacts (Strategy 1.3).
   - Provide digital skills training to low literacy individuals and members of covered populations (Strategy 4.1).
   - Provide no or low-cost laptops or desktops to low-income individuals and other covered population members (Strategy 5.1).

5. TNECD will collaborate with organizations that represent individuals with disabilities and aging individuals to:
   - Determine an effective framework for telehealth access and provide needed services to persons with disabilities and aging individuals (Strategy 1.2)
   - Increase participation in the Affordable Connectivity Program and other efforts to make the internet more affordable to low income and aging individuals (Strategy 2.3).
   - Provide advice and guidance on how to improve accessibility of state agency websites (Strategy 3.1).

6. TNECD will collaborate with the Tennessee Commission on Aging and Disability, the nine regional Area Agencies on Aging and Disability, and non-profit organizations (such as the AARP, Tech Helps, the West End Home Foundation and Tech Goes Home) to:
   - To continue assessing digital opportunity needs of aging Tennesseans.
   - Receive feedback on the effectiveness of the state's Digital Opportunity initiatives as it pertains to aging individuals.

7. TNECD will collaborate with state agencies, notably the Tennessee Department of Corrections, Tennessee Department of Labor and Workforce Development, and the Tennessee Department of Health to:
   - Increase the percentage of distressed and at-risk counties with at least one telehealth access point (Strategy 1.2).
   - Ensure that state prisons have the resources and knowledge needed to opt in as a CAI and assist incarcerated individuals (Strategy 2.2).
   - Conduct assessments of state department websites to identify barriers and opportunities to improve accessibility for aging individuals, persons with disabilities, and other covered population members (Strategy 3.1)
   - Expand the availability of workforce development programs for veterans, individuals who are members of a racial or ethnic minority group, individuals with low levels of literacy (Strategy 4.2).

8. TNECD will collaborate with Taskforce members and the University of Tennessee to conduct research and develop an annual report that describes achievements, opportunities for improvement, challenges, and updates (Strategy 1.3). This process will strengthen TNECD efforts to ensure alignment with stakeholders across the system and balance various interests to ensure a proper implementation focus.

9. TNECD will also collaborate with American Job Centers (AJCs) across the state. AJC teams work directly with members of covered populations and will provide research support and training where needed to address implementation gaps and maintain balance across stakeholders, covered populations, and geographic areas (Strategy 1.3, 4.1, 4.3).

To carry out TNECD's Digital Opportunity initiatives, we plan to pursue the following:
   - Continue expanding the Digital Opportunity Asset Inventory and develop it into an online tool for Tennesseans to find resources in their communities and for the Broadband Office to continue identifying service gaps in the state.

- Continue regional, in-person engagements to gather testimony and feedback on proposed initiatives.
- Continue convening ACP Outreach Grant recipients to receive quarterly progress updates and offer support.
- Expand the Digital Opportunity Taskforce to include more experts and stakeholders who can inform specific efforts surrounding workforce development, telehealth, basic digital skills training, and growing the workforce for Tennessee's telecommunications industry.
- Host the Digital Opportunity Summit annually to provide updates on the state's initiatives, share best practices, and foster innovative collaboration amongst stakeholders in Tennessee.
- Continue networking and communicating updates and announcements to stakeholders statewide on Digital Opportunity initiatives.
- Engage with American Baptist College and Lane College to support efforts surrounding their CMC grant initiatives including exploring opportunities to fund further efforts in support of CMC activities.
- Use the Digital Opportunity Survey findings to establish new relationships with organizations and agencies serving covered populations to inform future stakeholder engagement and data-gathering efforts.

Additional Future Efforts

Throughout the planning process, the Broadband Office also identified opportunities for new forms of stakeholder engagement and future partnerships that we intend to develop during the implementation phase. Some of these include:
- Conduct regular focus groups across Tennessee's three grand divisions on digital equity, targeting covered populations and individuals with lived experiences.
- Partner with county jails and Sheriff's offices to continue identifying barriers with incarcerated individuals and monitor the success of the Department of Labor and Workforce Development's Tablet Program. Additionally, TNECD will work to expand the number of training modules accessible through the Tablet Program.
- Intensive grassroots outreach (mailers, newspaper advertisements, radio advertisements) to spread awareness and resources around digital opportunity.
- Continue developing partnerships with telecommunications focused labor unions to bolster better workforce development efforts, including inviting a telecommunications union representative to serve as members of the Digital Opportunity Taskforce and help oversee the rollout of programs aimed at expanding Tennessee's telecommunications workforce output.

- Partner with organizations serving individuals with literacy barriers or English language learners to ensure Digital Opportunity resources are accessible to these communities.

5. Implementation

5.1   Implementation Strategy & Key Activities

To achieve digital opportunity in the state, the State Broadband Office must craft robust programs that address the identified digital opportunity needs and barriers, engage with current and new partners to deploy resources, and utilize communication practices that reach the people most in need of digital opportunity resources. The Broadband Office intends to collaborate with its stakeholders to produce resources, coordinate digital opportunity efforts, and share best practices across the state. TNECD recognizes that digital opportunity is a need across all Tennessee communities, for both rural and urban areas in the state. The implementation plan and its key activities are designed to provide proactive solutions to the digital divide that can be accessed throughout every corner in the state. It has also been intentionally designed to address the gaps in the existing state, local, and private efforts that were identified in the crafting of the plan. Reference *Appendix O* to easily see how goals, strategies, measurable objectives, and barriers are aligned for maximum impact. As TNECD develops new digital opportunity programs, there will be an intentional focus to build sustainable programs that last beyond the funding sourced from NTIA.

Measures to Ensure Sustainability

TNECD will work with partners to establish a strong and sustainable framework that continuously expands broadband accessibility for covered populations and all Tennesseans. The following measures build on each other to ensure a long, sustainable future for Tennessee's digital opportunity efforts.

-   The designation of TNECD as Tennessee's lead broadband agency provides the strong base that is needed for sustainability. TNECD has an outstanding reputation for high performance and financial accountability, extensive relationships with other state agencies and private companies, and experience in developing lasting partnerships at the national, state and community levels. For example, TNECD's relationship with the Tennessee Department of Corrections will contribute to sustainable programs that increase digital access and skills training for incarcerated individuals (Strategy 2.2). Its relationships with education and training organizations will lead to strong, ongoing workforce development initiatives (Strategy 4.1). Further, TNECD's relationships with both internet service providers and community nonprofits will produce an aligned and balanced approach that demonstrates success and builds long term, sustainable support (Strategy 2.1).

- TNECD's establishment and planned expansion of the Digital Opportunity Taskforce brings together people representing a range of organizations, covered populations, and perspectives (Strategy 1.1). These include internet service providers, government agencies, educational institutions, and nonprofits representing members of covered populations. The Taskforce provides a foundation for collaboration and alignment of digital opportunity initiatives. This contributes to a balanced focus that builds the trust and support needed to ensure sustainability. The Taskforce, for example, will play a leading role in evaluating and communicating digital opportunity progress, challenges, and opportunities. These activities, including the publication of an annual report, contribute to continuous improvement and statewide support; essential ingredients for sustainability (Strategy 1.3).

- TNECD views the Digital Opportunity Plan as one part of a comprehensive broadband effort that integrates digital opportunity with BEAD and other programs to achieve 100% digital access for all Tennesseans (Strategies 2.1, 2.2, 2.3). This vision can only be achieved by a sustainable approach that leverages resources and integrates capabilities of multiple partners and programs. To this end, TNECD and Taskforce leadership will continue to expand and deepen partnerships that enhance digital outreach, capabilities, and support. TNECD's partnership with the University of Tennessee, Tennessee Board of Regents, and American Job Centers, for example, significantly increases the likelihood of successful grant development and private fundraising needed to grow and sustain digital skills training for members of covered populations (Strategies 4.1, 4.2, 4.3). Developing multiple sources of funding is essential to increasing program sustainability. In another example, TNECD will work with healthcare partners to increase telehealth access in rural distressed counties (Strategy 1.2). Similarly, partnerships with private firms and nonprofit organizations will establish a sustainable platform that provides digital devices to covered populations (Strategies 5.1, 5.2, 5.3). By demonstrating success, partners will position the refurbishment platform and technical assistance hub to attract investment required for long term sustainability.

5.2   Timeline

Goal #1: Expand digital opportunity infrastructure and awareness statewide.

Figure 65: Timeline for Goal 1 strategies and activities.

Strategy	Activity	Start Date	End Date
Strategy 1.1: *Strengthen and expand the Digital Opportunity Taskforce (DOT) of key public and private stakeholders who will work collaboratively to provide guidance, advice, and outreach for Digital Opportunity Plan goals*	Establish mission, bylaws, member terms, annual taskforce plan (Strategy 1.1)	Jan 2024	Mar 2024
Strategy 1.1	Work with fellow state agencies, internet services providers, and nonprofit groups to nominate and recruit new members (Strategy 1.1)	Jan 2024	Apr 2024
Strategy 1.1	Finalize 2024-2025 Taskforce and host monthly meetings (Strategy 1.1)	Apr 2024	May 2025
Strategy 1.1	Finalize 2025-2026 Taskforce and host monthly meetings (Strategy 1.1)	Jun 2025	May 2026
Strategy 1.1	Finalize 2026-2027 Taskforce and host monthly meetings (Strategy 1.1)	Jun 2026	Jun 2027
Strategy 1.1	Finalize 2027-2028 Taskforce and host monthly meetings (Strategy 1.1)	Jul 2027	Jun 2028
Strategy 1.2: *Increase the percentage of at-risk and distressed counties (as defined by the*	Consult with healthcare professionals and DOT to determine an effective framework for a telehealth	Oct 2024	Dec 2024

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Appalachian Regional Commission) with at least one telehealth access point	access point program (Strategy 1.2)		
Strategy 1.2	Design a telehealth access point grant program (Strategy 1.2)	Jan 2025	Apr 2025
Strategy 1.2	Deploy a telehealth access point grant program (Strategy 1.2)	Jul 2025	Sept 2025
Strategy 1.3 *Raise awareness about TNECD Digital Opportunity efforts and impact*	Develop framework for annual report and dashboard that, at a minimum, tracks the measurable objectives and implementation progress presented in this Digital Opportunity Plan (Strategy 1.3)	Jul 2024	Nov 2024
Strategy 1.3	In partnership with the DO practitioners and DOT, develop an approach to communicating and promoting digital opportunity awareness throughout Tennessee (Strategy 1.3)	Aug 2024	Aug 2024
Strategy 1.3	Develop and release inaugural report (Strategy 1.3)	Nov 2024	Dec 2024
Strategy 1.3	Create a targeted annual survey to the stakeholder network providers to gather insight about awareness and other issues (Strategy 1.3)	Jan 2025	Mar 2025
Strategy 1.3	Release survey and submit results report (Strategy 1.3)	Apr 2025	Jun 2025

Goal #2: Enhance broadband availability and affordability.

Figure 66: Timeline for Goal 2 strategies and activities.

Strategy	Activity	Start Date	End Date
Strategy 2.1: *Using federal funds, including those allocated through the BEAD program, deploy broadband to all remaining unserved and underserved Tennessee households and businesses that lack a 100/20mbps connection.*	ARPA-Funded grant areas built out (Strategy 2.1)	Jan 2024	Dec 2026
Strategy 2.1	BEAD application opens (Strategy 2.1)	Jun 2024	Aug 2024
Strategy 2.1	BEAD Subgrantees Build Out Grant Areas (Strategy 2.1)	Apr 2025	Nov 2028
Strategy 2.2: *Ensure all state prisons that currently do not have internet access speeds of at least a gig are aware of the BEAD Challenge Process and have the resources and knowledge they need to opt in as a community anchor institution (CAI)*	Determine which prisons do not currently have gig internet and plan an outreach strategy in partnership with the TN Dept of Correction (Strategy 2.2)	Jan 2024	Feb 2024
Strategy 2.2	Carry out outreach strategy, share resources, and host an informational session for prison officials (Strategy 2.2)	Feb, 2024	Mar, 2024
Strategy 2.2	Identify how many prisons successfully opted in as a CAI (Strategy 2.2)	Mar, 2024	Apr, 2024
Strategy 2.3: *Make the internet more*	Design a grant program that helps partner organizations	Jan, 2025	Apr, 2025

Strategy	Activity	Start Date	End Date
affordable to all covered populations	subsize access for covered populations (Strategy 2.3)		
Strategy 2.3	Launch affordability and ACP enrollment grant programs (Strategy 2.3)	July, 2025	Sept, 2025

Goal #3: Improve online accessibility and inclusivity of state agency resources.
Figure 67: Timeline for Goal 3 strategies and activities.

Strategy	Activity	Start Date	End Date
Strategy 3.1: *Conduct assessments of state departmental websites to identify barriers and opportunities to improve online accessibility for specific covered populations*	Work with DOT and UT to design online accessibility assessments. (Strategy 3.1)	Aug 2024	Jun 2025
Strategy 3.1	Conduct formal assessments of online accessibility for selected state programs per year (Strategy 3.1)	Jun 2025	Dec 2027
Strategy 3.1	Provide technical assistance (Strategy 3.1)	Dec 2025	Dec 2027
Strategy 3.2: *Develop training modules for all covered populations that teach users how to navigate government websites and access resources*	Develop an RFP to produce training modules for each covered population that include best practices on navigating agency websites and accessing online resources (Strategy 3.2)	May 2024	May 2024
Strategy 3.2	Award the RFP to produce training modules for covered populations that include best practices on navigating agency websites and accessing online resources (Strategy 3.2)	Sept 2024	Oct 2024

Strategy	RFP Awardee creates the training modules based on TNECD requirements. (Strategy 3.2)	Oct 2024	Jun 2025
Strategy 3.2	Subgrantees embed the online accessibility module in state funded digital skilling programs. (strategy 3.2)	Jul 2025	Jul 2025

Goal #4: Help Tennesseans develop the digital skills and knowledge needed for work and life.

Figure 68: Timeline for Goal 4 strategies and activities.

Strategy	Activity	Start Date	End Date
Strategy 4.1: *Continue to expand the availability of digital skills programs through a competitive grant program*	Evaluate current grant program that provides funding for digital skills and make necessary changes and updates (Strategy 4.1)	Feb 2024	Apr 2025
Strategy 4.1	Launch 2025 digital skills grant program (Strategy 4.1)	Aug 2025	Oct 2025
Strategy 4.1	Award 2026 digital skills subgrantees (Strategy 4.1)	Dec 2025	Feb 2026
Strategy 4.1	Evaluate current grant program that provides funding for digital skills and make necessary changes and updates. (Strategy 4.1)	Feb 2026	Apr 2026
Strategy 4.1	Launch 2026 digital skills grant program (Strategy 4.1)	Aug 2026	Oct 2026
Strategy 4.1	Award 2027 digital skills subgrantees (Strategy 4.1)	Dec 2026	Feb 2027
Strategy 4.2: *Continue to expand the availability of workforce*	Evaluate current grant program that provides funding for workforce	Feb 2025	Apr 2025

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development programs through a competitive grant program	development programs and make necessary changes and updates. (Strategy 4.2)		
Strategy 4.2	Launch 2025 workforce development grant program. (Strategy 4.2)	Aug 2025	Oct 2025
Strategy 4.2	Award 2026 workforce development subgrantees (Strategy 4.2)	Dec 2025	Feb 2026
Strategy 4.2	Evaluate current grant program that provides funding for workforce development programs and make necessary changes and updates (Strategy 4.2)	Feb 2026	Apr 2026
Strategy 4.2	Launch 2026 workforce development grant program. (Strategy 4.2)	Aug 2026	Oct 2026
Strategy 4.2	Award 2027 workforce development subgrantees (Strategy 4.2)	Dec 2026	Feb 2027
Strategy 4.3: *Develop cybersecurity training modules, digital safety best practices, and promotional messages, specifically customized for all covered populations.*	Develop an RFP to produce training modules for each covered population. (Strategy 4.3)	May 2024	May 2024
Strategy 4.3	Award RFP to produce training modules for each covered population. (Strategy 4.3)	Sept 2024	Oct 2024
Strategy 4.3	RFP Awardee creates the training modules based on	Oct 2024	May 2025

	TNECD requirements (strategy 4.3)		
Strategy 4.3	Subgrantees embed the cybersecurity module in state funded digital skilling programs. (Strategy 4.3)	Jul 2025	Jul 2025

Goal #5: Expand availability of affordable devices and technical support.

Figure 69: Timeline for Goal 5 strategies and activities.

Strategy	Activity	Start Date	End Date
Strategy 5.1: *Require TNECD-funded digital skills and workforce programs to provide a no- or low-cost laptop or desktop pathway*	Incorporate requirement into guidelines (Strategy 5.1)	Feb 2025	Apr 2025
Strategy 5.1	Receive first subgrantee quarterly report (Strategy 5.1)	May 2026	Jun 2026
Strategy 5.1	Final annual report from subgrantees (Strategy 5.1)	Feb 2027	Mar 2027
Strategy 5.2: *Develop a refurbishment platform to promote device availability and affordability to organizations that serve covered populations*	Design and launch an RFP process to manage a device matching and refurbishment platform (Strategy 5.2)	May 2025	Sept 2025
Strategy 5.2	Award the contract (Strategy 5.2)	Nov 2025	Nov 2025
Strategy 5.2	Contractor creates the refurbishment platform (Strategy 5.2)	Jan 2026	Apr 2026
Strategy 5.2	Begin using the device matching platform. (Strategy 5.2)	Jul 2026	Jul 2026

Strategy 5.3: *Create a statewide technical assistance hub to provide support to Tennesseans who need basic assistance with digital devices at no cost*	Develop an RFP to create the technical assistance hub. (Strategy 5.3)	Apr 2025	May 2025
Strategy 5.3	Award the contract for technical assistance hub. (Strategy 5.3)	Oct 2025	Dec,2025
Strategy 5.3	RFP Awardee creates the technical assistance hub. (Strategy 5.3)	Dec 2025	Apr 2026
Strategy 5.3	Begin promoting the hub (Strategy 5.3)	Apr 2026	Dec 2028

6. Conclusion

High-speed Internet access is necessary to fully take advantage of health, education, economic, and social opportunities in our society. Without access to affordable high-speed Internet, quality digital devices, and digital skills trainings, Tennesseans are not empowered to fully participate in our society. With a collaborative approach that involves private actors, nonprofits, community organizations, and state and local government agencies, Tennessee is well positioned to make great strides towards achieving digital opportunity for all.

TNECD will regularly update the Digital Opportunity Plan as we identify other barriers to Digital Opportunity, discover additional existing assets, and as technology continues to evolve. The conversation around Digital Opportunity is one that should be happening across all corners, counties, and cities of Tennessee. It is our hope that the Digital Opportunity Plan will generate more awareness around the importance of ensuring every Tennessean has access to high-speed Internet.

Achieving Digital Opportunity cannot be done in isolation, it requires a collective effort of various partners, communities, and stakeholders. Thank you to the communities, organizations, and Tennesseans that offered their time, resources, and energy to provide valuable insight and feedback to the State Broadband Office throughout the planning process.

7. Appendix

Appendix A: Glossary and Acronyms

Affordable Connectivity Program (ACP): The Affordable Connectivity Program is an FCC benefit program that helps ensure that households can afford the broadband they need for work, school, healthcare and more. The benefit provides a discount of up to $30 per month toward internet service for eligible households and up to $75 per month for households on qualifying Tribal lands. Eligible households can also receive a one-time discount of up to $100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than $10 and less than $50 toward the purchase price.

Broadband Equity, Access, and Deployment Program (BEAD): The Broadband Equity, Access, and Deployment (BEAD) Program, provides $42.45 billion to expand high-speed internet access by funding planning, infrastructure deployment and adoption programs in all 50 states, Washington D.C., Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

Broadband: Broadband or high-speed Internet access allows users to access the Internet and Internet-related services at significantly higher speeds than those available through "dial-up" services. Broadband speeds vary significantly depending on the technology and level of service ordered. Broadband services for residential consumers typically provide faster downstream speeds (from the Internet to your computer) than upstream speeds (from your computer to the Internet).

Community Anchor Institutions (CAI): Based on the definition of a CAI (as defined by NTIA) the ECD Broadband Office defines a "community anchor institution" to be an entity such as a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization, faith-based institutions, or community support organization that facilitates greater use of broadband service by vulnerable populations, including, but not limited to, low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals.

Covered Households: Individuals living in households with incomes not exceeding 150 percent of the poverty level.

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Covered Populations (As defined by the Digital Equity Act): The term 'covered populations' means— (A) individuals who live in covered households; (B) aging individuals; (C) incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility (D) veterans; (E) individuals with disabilities; (F) individuals with a language barrier, including individuals who— (i) are English learners; and (ii) have low levels of literacy; (G) individuals who are members of a racial or ethnic minority group; and (H) individuals who primarily reside in a rural area.

Digital Equity Act (DEA): The Digital Equity Act provides $2.75 billion to establish three grant programs that promote digital equity and inclusion. They aim to ensure that all people and communities have the skills, technology, and capacity needed to reap the full benefits of our digital economy.

Digital Adoption: The act of subscribing to Internet service.

Digital Divide: The economic, educational, and social inequalities between those with computers and online access and those without.

Digital Equity (As defined by the NDIA and the Digital Equity Act): A condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.

Digital Inclusion (National Digital Inclusion Alliance): Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs). This includes 5 elements: 1) affordable, robust broadband internet service; 2) internet-enabled devices that meet the needs of the user; 3) access to digital literacy training; 4) quality technical support; and 5) applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration. Digital Inclusion must evolve as technology advances.

Digital Literacy (The American Library Association's definition)**:** The ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills. The Broadband Office uses digital literacy and digital skills interchangeably.

Digital Opportunity: Digital opportunity is the idea that all individuals and communities have the resources to access the internet, including existing broadband infrastructure in their communities, affordable internet service, access to technology, and digital literacy tools. Digital Opportunity encompasses digital adoption, literacy, and equity.

Internet Service Providers (ISPs): Internet Service Providers are companies or municipalities that provide access to the Internet and other internet-related services to customers.

Key Performance Indicators (KPIs): The metrics used to measure progress and effectiveness of a program.

National Telecommunications and Information Administration (NTIA): The National Telecommunications and Information Administration (NTIA), part of the U.S. Department of Commerce, is the Executive Branch agency that is principally responsible for advising the President on telecommunications and information policy issues. NTIA is the administering entity for the BEAD and DE programs.

Take-Rate: Percentage of potential customers (units passed) who commit to service.

Appendix B: Broadband Ready Communities Ordinance Example

The following EXAMPLE, drafted by a fellow Tennessee community, is available to assist political subdivisions in drafting their own ordinance or policy. This example should be used for informational purposes only and does not constitute legal advice. Political subdivisions should consult with their legal counsel concerning the appropriate approach for their respective communities to customize as necessary to comply with any local laws, rules, procedures or policies.

Whereas, (County Name), Tennessee finds that broadband internet availability in the County is of critical importance to all people living, visiting, and doing business in (County Name), Tennessee, and

Whereas, the Tennessee State Legislature recently created the ability for Tennessee communities to be designated as "Broadband Ready Communities" through the Tennessee Department of Economic and Community Development, and

Whereas, (County Name), Tennessee seeks to promote private investment in broadband infrastructure, and

Whereas, (County Name), Tennessee seeks to be designated as a Broadband Ready Community pursuant to Tennessee Public Chapter 228, 4-3-709.,
Public Chapter 228, S 4-3-709

(a)(1) A political subdivision may apply to the department of economic and community development for designation as a "broadband ready community" pursuant to guidelines established by the department. The guidelines for designation must include a requirement that the political subdivision has adopted an efficient and streamlined ordinance or policy for reviewing applications and issuing permits related to projects relative to broadband services.

NOW THEREFORE, BE IT ENACTED BY THE GOVERNING BODY OF THE COUNTY OF, THAT:
AN ORDINANCE FOR A BROADBAND READY COMMUNITY

Section 1. *As used in this chapter, "permit" means any local permit, license, certificate, approval, registration, or similar form of approval required by policy, administrative rule, regulation, or ordinance with respect to a project.*

Section 2. *As used in this chapter, "project" means the construction or deployment of wireline or wireless communications facilities to provide communications services in a unit.*

Section 3: *Notwithstanding any other provision of (County Name)'s ordinance, the following shall apply to a project:*

(1) *(County Name), Tennessee has:*

(A)   Adopted an efficient and streamlined policy for reviewing applications and issuing permits related to projects relative to broadband services.
(B)   Appointed a single point of contact in the (County Name) for all matters related to a broadband project;
(C)   Established procedures to allow all forms, applications, and documentation related to a project be reviewed and either approved or denied within thirty (30) business days after the application is submitted; and to allow the project to be filed or submitted and signed by electronic means, where possible;

(2)   (County Name) will not:
(A)   Require an applicant to designate a final contractor to complete a project;
(B)   Impose an unreasonable fee for reviewing an application or issuing a permit for a project. The fee will not exceed one hundred dollars ($100);
(C)   Impose a seasonal moratorium on the issuance of permits for projects; and
(D)   Discriminate among communications services providers or utilities with respect to any action related to a broadband project, including granting access to public rights-of-way, infrastructure and poles, and any other physical assets owned or controlled by the political subdivision

(3)   (County Name) acknowledges that:
(A)   Tennessee Certified Broadband Ready Community has an affirmative duty to notify the Tennessee Economic and Community Development Department (TNECD) of any changes to the information submitted as part of its application.
(B)   Failure to notify TNECD of changes may result in revocation of (County Name)'s Broadband Ready Certification.

Section 4. This ordinance shall take effect immediately upon adoption by the governing body upon final reading, the public welfare requiring.

PASSED AND SO ORDERED, this day of   , insert year.

_____(Mayor's Name) Mayor
_____ (County Name)

Appendix C: Tennessee's Digital Opportunity Asset Inventory

This contains a list of organizations that self-reported that they offered Digital Opportunity services and/or organizations the Broadband Office identified through desktop research.

1. AARP Older Adult Technology Services (OATS)
2. Al-Farooq Center
3. American Baptist College
4. API of Middle Tennessee
5. Art Circle Public Library
6. Bean Station Public Library
7. Black Tech Futures Research Institute
8. Blacks in Technology-Nashville Chapter
9. Bledsoe County Public Library
10. Blount County Public Library
11. Bristol Public Library
12. Bunkers Lab
13. Carolyn Stewart Public Library
14. Carroll County Library
15. Centro Hispano
16. Chattanooga Public Library
17. Cheatham County Chamber
18. Cheatham County Public Library
19. Chester County Library
20. Church Hill Public Library
21. City of Erin
22. City of Lewisburg Parks and Recreation
23. Civic TN
24. Clay County Public Library
25. Cleveland State Adult Education
26. Clinton Public Library
27. Clyde W. Roddy Public Library
28. Coalmont Public Library
29. Code Crew
30. Coffee County Lannom Memorial Public Library
31. Coffee County Manchester Public Library
32. Cokesbury United Methodist Church
33. Collinwood Depot Branch Library
34. Conexión Americas
35. Cosby Community Library

36. Covington-Tipton County Chamber of Commerce
37. CreatiVets
38. Crockett Memorial Library
39. Decatur County Library
40. Delta Human Resource Agency
41. Disability Rights TN
42. Dismas House
43. Dr. Nathan Porter Library
44. Dunlap Chamber of Commerce
45. East Ridge City Library
46. Elimu Empowerment Services
47. Elmahaba Center
48. Er2
49. Etowah Carnegie Public Library
50. Fentress County Public Library
51. Fifty Forward
52. Fisk University
53. Fred A. Vaught Library
54. Gallatin Chamber of Commerce
55. Gleason Memorial Library
56. Goodwill Construction Class
57. Goodwill Excel Center, Memphis
58. Grace Fellowship Church Johnson City
59. Greater Memphis Chamber of Commerce
60. Greater Memphis IT Council
61. Hardin County Library
62. Hickman County Public Library System
63. Hispanic Family Foundation
64. HopeWorks, Inc.
65. iCode Franklin
66. iCode Tri-Cities
67. Innovate Memphis
68. Jacksboro Public Library
69. Jackson-Madison County Library
70. John P Holt Brentwood Library
71. Johnson City Langston Centre
72. Kingsport Public Library
73. Knoxville Area Urban League
74. Knoxville Chamber of Commerce
75. Knoxville College
76. Korean American Association of Nashville
77. La Paz
78. LaFollette Public Library

79. Lane College
80. Latino Memphis
81. Lauderdale County Library
82. Lebanon-Wilson County Public Library
83. Lee Ola Roberts Library
84. LeMoyne-Owen College
85. Lenoir City Public Library
86. Lewis County Public Library and Archives
87. Loretto Telecom
88. Loudon County Chamber of Commerce
89. Lucius E. and Elsie C. Burch, Jr. Library
90. Martin Public Library
91. McMinnville-Warren County Chamber of Commerce
92. Meharry Medical College
93. Meigs Decatur Public Library
94. Memphis Urban League
95. Men of Valor
96. Metropolitan Government of Nashville and Davidson County-Information and Technology Services
97. Mid-Cumberland Human Resource Agency
98. Middleton Community Library
99. Millard Oakley Public Library
100. Millington Public Library
101. Moore County Public Library
102. Morristown-Hamblen Library
103. Mosheim Public Library
104. Munford-Tipton County Memorial Library
105. NAACP
106. Nashville International Center for Empowerment Adult Education
107. Nashville Public Libraries
108. Nashville Technology Council
109. Ned R. McWherter Weakley County Library
110. New Direction Christian Church
111. Newbern City Library
112. Norris Community Library
113. Northeast State Community College Adult Education

114. Northwest TN Adult Education
115. Northwest TN Human Resource Agency
116. Oak Ridge Public Library
117. Obion County Public Library
118. Orena Humphreys Public Library
119. Parrottsville Community Library
120. Persevere Now
121. Philadelphia Public Library
122. Pickett County Library
123. Pigeon Forge Public Library
124. Portland Public Library of Sumner County
125. Pulaski Electric System
126. Putnam County Schools
127. Refugee Empowerment Program (REP)
128. Regional Housing Authorities
129. Ridgely Public Library
130. RoaneNet
131. Rocky Top Public Library
132. Sharon Public Library
133. Signal Centers Inc.
134. Smyrna Public Library
135. Spark Center
136. Star Academy Charter School
137. Star Center
138. South Central Human Resource Agency
139. Southern Middle TN Adult Education
140. Southwest TN Adult Education
141. Southwest TN Human Resource Agency
142. Stewart County Public Library
143. Stokes Brown Public Library
144. Sullivan County Public Library
145. Sunbright Public Library
146. Tech 901
147. Tennessee Center for Civic Learning and Engagement
148. Tennessee Chamber of Commerce
149. Tennessee College of Applied Technologies System
150. Tennessee College of Applied Technology

Northwest Adult Education
151. Tennessee Department of Education
152. Tennessee Department of Human Services- Tennessee Technology Access Program
153. Tennessee Department of Intellectual and Development Disabilities- Enabling Tech Program
154. Tennessee Department of Labor and Workforce Development- American Jobs Center
155. Tennessee Department of Labor and Workforce Development- Office of Reentry
156. Tennessee Farm Bureau Federation
157. Tennessee Immigrant and Refugee Rights Coalition
158. Tennessee State Parks
159. Tennessee State University
160. Tennessee STEM Innovation Network (TSIN)
161. Tennessee Tech University
162. TERRA (The Electronics Reuse & Recycling Alliance)
163. The Arc Tennessee
164. Tipton County Adult Education
165. The Enterprise Center
166. The University of Tennessee System
167. Thrive Regional Partnership
168. Thrive Sequatchie
169. Together for Hope
170. Unicoi County Public Library: Charles Ralph Holland Memorial Library
171. United Ways of Tennessee
172. University of Memphis
173. Urban League of Middle Tennessee
174. Vol State Adult Education
175. W.G. Rhea Public Library
176. Wayne County JECDB (Wayne County Government)

177. West End Home Foundation
178. West TN A&M Veteran's Program
179. White House Public Library
180. Women's Foundation for a Greater Memphis
181. Workforce Essential Adult Education

Appendix D: List of Listening Session Questions and Snapshot of Facilitator Feedback Template

Questions:

1. What would digital opportunity look like in your community?
2. What barriers are you currently faced with in terms of digital opportunity?
3. When you can access the Internet, do you feel confident that you have the skills necessary to use virtual resources? (Examples: do you feel able to apply for an online job, making an online purchase?)
4. What, if anything, have been tools or initiatives that have helped you or your community achieve digital opportunity?
5. Where would you prefer to access digital opportunity resources? (Ex. Local/state government, schools, non-profits, private entities like internet service providers)
6. What have been the challenges accessing existing digital opportunity resources? Are there specific suggestions on making them more accessible?
7. What would you like to see reflected in TN's Digital Opportunity Plan?

Attendee responses were recorded in an excel file and coded by various NTIA categories. A screenshot of the excel template is below.

	1. What would digital opportunity look like in your community?					
Responses	Broadband Accessibility and Affordability	Online Accessibility & Inclusivity (AI)	Digital Literacy (DL)	Online Privacy and Cybersecurity (P)	Device Availability and Affordability (DA)	Othe

Appendix E: List of TNECD's Statewide Digital Opportunity Contacts

1. AARP Tennessee Al Farooq Center
2. American Baptist College
3. Centro Hispano De East TN
4. Chattanooga Housing
5. Authority Chattanooga
6. Public Library Civic TN Clinch
7. River Regional Library
8. CodeCrew Community
9. Foundation of Middle TN
10. Conexión Americas
11. Department of Human
12. Services Office of Vocational
13. Rehabilitation Disability
14. Rights TN
15. East Tennessee Area Agency on Agency and Disability East
16. Tennessee State University
17. Hispanic Student
18. Community Alliance
19. Elmahaba Center Enterprise Center/Tech Goes Home
20. Falling Water River Regional Library
21. Fifty Forward
22. Fisk University
23. Goodwill Construction Class
24. Greater Memphis IT Council
25. Greater Nashville Chinese Association
26. Hatchie River Regional Library
27. Hispanic Family Foundation
28. Holston River Regional Library
29. Innovate Memphis
30. Islamic Center of Jackson
31. Islamic Society of Greater Chattanooga
32. Jackson Housing Authority
33. Johnson City Housing Authority
34. Kingsport Housing and Redevelopment Authority
35. Knox County Public Library
36. Knoxville College
37. Knoxville Chinese Culture
38. Knoxville Community Development Corporation
39. Knoxville Urban League
40. La Paz
41. Lane College
42. Latino Memphis
43. Meharry Medical College
44. Memphis Housing Authority
45. Memphis Public Library and Information Center
46. Memphis Urban League
47. Metropolitan Development and Housing Authority
48. Metropolitan Government of Nashville and Davidson County - Metropolitan Council
49. Metropolitan Inter-Faith Association (MIFA)
50. Middle Tennessee State University
51. Muslim Community of Knoxville Nashville Area
52. Hispanic Chamber of Commerce
53. Nashville International Center for Empowerment
54. Nashville Korean United Methodist Church
55. Nashville Public Libraries
56. Nashville Sheriff Office

57. Obion Regional Library
58. Ocoee River Regional Library
59. Operation Stand Down
60. Persevere Now
61. Project Return
62. Red River Regional Library
63. RoaneNet
64. Salahadeen Center of Nashville
65. Stones River Regional Library
66. Tech901
67. Tech Goes Home
68. Tennessee Council on Developmental Disabilities
69. Tennessee Farm Bureau Federation
70. Tennessee Immigrant and Refugee Rights Coalition
71. The Enterprise Center
72. The Chinese Historical Society of Memphis and the Mid-South
73. The United Way of Greater Nashville
74. The Village
75. Thrive TN
76. NAACP
77. Together for Hope
78. Tri-Cities Chinese Association
79. United Way of West Tennessee
80. University of Memphis
81. University of Tennessee (UT) Extension
82. Urban League of Greater Chattanooga
83. West End Home Foundation
84. Workforce Essentials
85. Wounded Warrior Project (TN)
86. AARP Tennessee
87. Adobe Digital Experience Skill Finder
88. Aeneas
89. All Saints Immigration Services
90. API Middle Tennessee
91. API TN
92. Arab American Club of Knoxville
93. Arc Tennessee
94. Black Churches for Digital Equity
95. Black Tech Futures
96. Blacks in Technology
97. Buffalo River Regional Library
98. Catholic Charities of East TN
99. CDE Lightband
100. Centro Hispano
101. Chattanooga Chinese Association
102. Community Action Coalition of Knoxville and Knox County
103. Community Foundation of Middle Tennessee
104. DD Council
105. Department of Labor and Workforce - Office of Reentry
106. DIDD
107. Dismas House
108. Elevate TN
109. First Tennessee Development District
110. Goodwill Industries
111. Greater Nashville Regional Council
112. Hispanic Family Foundation Jackson City Council
113. Jackson Energy Authority
114. Knoxville Area Urban League
115. Knoxville Chamber of Commerce
116. Knoxville Utilities Board

117. Korean Association of Greater Nashville
118. Lane College
119. Latino Memphis
120. LeMoyne-Owen College
121. Louisiana State Broadband Office
122. Madison County Court Appointed Special Advocates for Children
123. Metropolitan Government of Nashville and Davidson County - IT Department – Metro Digital Inclusion
124. Metropolitan Nashville Trustees Office
125. Middle Tennessee State University
126. NAACP Tennessee
127. Nashville Public Library
128. Nashville Technology Council
129. Northside Neighborhood House
130. Persevere Now
131. Refugee Empowerment Program
132. Rhodes College
133. School, Health, and Libraries Coalition
134. South Central Tennessee Development District
135. Southeastern Tennessee Development District
136. Southwest Tennessee Electric
137. Tech Goes Home
138. Tennessee Corrections Institute
139. Tennessee Department of Agriculture
140. Tennessee Department of Corrections
141. Tennessee Department of Education
142. Tennessee Department of Finance and Administration - Office of Criminal Justice Programs
143. Tennessee Department of Health
144. Tennessee Department of Human Services
145. Tennessee Department of Labor and Workforce Development
146. Tennessee Digital Inclusion Coalition
147. Tennessee Livability Collaborative
148. Tennessee State University
149. Tennessee Technology Access Program (TTAP)
150. The Enterprise Center
151. TRICOR
152. United Way of Knoxville
153. United Way of West Tennessee
154. University of Tennessee System
155. Upper Cumberland Development District
156. Urban League of Middle Tennessee
157. Wounded Warrior Tennessee

Appendix F: List of Digital Opportunity Taskforce Members and List of Individuals/Organizations Represented

- Pearl Amanfu, Digital Inclusion Officer for Metropolitan Government of Nashville and Davidson County
- Jay Baker, Tennessee Department of Labor and Workforce Development
- Kelsey Bensch/Angie Cooper, Heartland Forward
- Jennifer Cowan-Henderson, Tennessee State Library and Archives
- Meka Egwuekwe, Code Crew
- Jeremy Elrod, Tennessee Municipal Electric Association
- Mike Knotts, Tennessee Electric Cooperative Association
- Levoy Knowles, Tennessee Broadband Association
- Shannon Millsaps, Thrive Regional Partnership
- Matt Owen, Tennessee Advisory Council on Intergovernmental Relations
- Kim Sasser-Hayden, Tennessee Cable Broadband Association
- Deb Socia, Enterprise Center
- Sreedhar Upendram, University of Tennessee- Knoxville
- Regina Whitley, Greater Memphis IT Council
- Fallon Wilson, Black Tech Futures Research Institute

Appendix G: Covered Population Working Groups

Below is a list of organizations TNECD contacted to host needs assessment working groups to review initial findings and gather feedback on additional barriers for specific covered population. Organizations that are bolded are organizations that participated in the covered population working groups. TNECD recognizes that none of these groups represent the covered populations entirely; rather, they provided key perspective on needs and barriers among the specific communities they work with.

Aging Individuals
- **Department of Health**
- **Department of Human Services**

Incarcerated/Recently Incarcerated
- **Tennessee Corrections Institute**
- **Department of Corrections**
- **Department of Finance and Administration- Office of Criminal Justice Programs**
- **Department of Labor and Workforce-Office of Reentry**
- **TRICOR**

Individuals with Disabilities
- **Council on Developmental Disabilities**
- **Department of Intellectual and Developmental Disabilities**

Individuals with Language Barriers/Low Levels of Literacy
- **REP (Refugee Empowerment Program)**
- Al-Farooq Center
- Elmahaba Center
- Tennessee Immigrant and Refugee Rights Coalition
- Salahadeen Center of Nashville

Racial/Ethnic Minorities: Black Tennesseans
- **Knoxville Area Urban League**
- **Blacks in Technology**
- **Urban League of Middle Tennessee**
- Urban League of Chattanooga
- NAACP

Racial/Ethnic Minorities: Hispanic/Latino Tennesseans

- **Latino Memphis**
- **Centro Hispano**
- Hispanic Family Foundation
- La Paz
- Conexión Americas
- Nashville Hispanic Chamber

Racial/Ethnic Minorities: Asian Tennesseans
- API of Middle Tennessee
- Greater Nashville Chinese Association
- Greater Memphis United Chinese Association
- Korean American Association of Nashville

Rural Residents
- **Department of Agriculture**

Veterans
- Tennessee Department of Veteran Services

Appendix H: Organizations at Digital Opportunity Summit

1. Tennessee Department of Economic and Community Development
2. Metropolitan Government of Nashville and Davidson County
3. Tennessee Department of Labor & Workforce Development
4. Rhea Economic and Tourism Council, Inc
5. Clarksville Department of Electricity
6. Tennessee Department of Economic and Community Development
7. Tennessee Department of Education
8. Tennessee Broadband Association
9. United Communications
10. DTC Communications
11. Nashville Public Library
12. Middle Tennessee State University
13. Tennessee County Services Association
14. Communications Workers of America
15. Lane College
16. CodeCrew
17. LeMoyne-Owen College
18. Tennessee Municipal Electric Power Association
19. Upper Cumberland Development District
20. East Tennessee Development District
21. Scott County Telephone Cooperative
22. Electric Power Board Chattanooga
23. Memphis Public Library
24. Northwest Tennessee Development District
25. Heartland Forward
26. Operation Stand Down
27. Southeast Tennessee Development District
28. Urban League of Middle Tennessee
29. Workbay
30. The STAR Center, Inc.
31. Southwest Tennessee Development District
32. University of Memphis
33. Hispanic Family Foundation
34. University of Tennessee
35. Latino Memphis
36. Tech Goes Home
37. Accenture
38. Persevere Now
39. The Community Foundation of Middle Tennessee
40. Dismas House
41. Memphis Area Association of Government
42. The Enterprise Center
43. Thrive Regional Partnership
44. Tech901
45. Knoxville Chamber of Commerce
46. Middle Tennessee State University

47. Tennessee Advisory Commission on Intergovernmental Relations
48. Highland Telephone Coop
49. U.S. Department of Housing and Urban Development
50. Tennessee Cable and Broadband Association
51. Comcast
52. National Telecommunications & Information Administration
53. Loretto Telecom
54. Tennessee Council on Developmental Disabilities
55. Matthew 25, Inc.
56. The Arc Tennessee
57. Tennessee STEM Innovation Network - Battelle
58. Aeneas Communications, LLC
59. Tennessee State University
60. Greater Memphis IT Council
61. Citizens Fiber Initiative Group
62. Black Tech Futures Research Institute
63. American Baptist College

Appendix I: Regional Listening Session Information
Figure 70: Details for TNECD-hosted in-person listening sessions.

Region	Date/Time	Address
Northwest Tennessee	March 7th ,2023 12:00-2:00 PM (CST)	Northwest Tennessee Development District 124 Weldon Dr, Martin, TN 38237
Memphis	March 8th, 2023 4:00-6:00 PM (CST)	LeMoyne-Owen College Alma Hanson Student Center 807 Walker Ave, Memphis, TN 38126
Southwest Tennessee	March 9th, 2023 12:00-2:00 PM (CST)	March 9th, 2023 12:00-2:00 PM (CST)
Upper Cumberland	March 28th, 2023 12:00-2:00 PM (CST)	Upper Cumberland Development District 1104 England Drive, Cookeville, TN 38501
Southeast Tennessee	April 10th, 2023 12:00-2:00 PM (EST)	Southeast Tennessee Development District 1000 Riverfront Pkwy, Chattanooga, TN 37402
East Tennessee	April 11th, 2023 11:00-1:00 PM (EST)	Blount County Public Library 508 N Cusick St, Maryville, TN 37804
Northeast Tennessee	April 12th, 2023 5:30-7:30 PM (EST)	Chucky Doak High School 365 Ripley Island Rd, Afton, TN 37616
Northeast Tennessee	April 13th ,2023 5:30-7:30 PM (EST)	Elizabethton Chamber of Commerce 615 E Elk Ave, Elizabethton, TN 37643

South Central Tennessee	April 25th, 2023 12:00-2:00 PM (CST)	South Central Tennessee Development District 101 Sam Watkins Blvd, Mount Pleasant, TN 38474
Nashville	May 2nd, 2023 5:00-7:00 PM (CST)	The Temple 5015 Harding Pike Nashville, TN 37205
Nashville	May 9th, 2023	Jefferson Street Baptist Church 2708 Jefferson Street Nashville, TN 37208
Statewide	May 18th, 2023 6:00PM (CST)	Wounded Warrior (Virtual)
Nashville	May 24th, 2023 5:30PM (CST)	Plaza Mariachi 3955 Nolensville Pike, Nashville, TN ,37211
Nashville	May 25th, 2023 2:00PM (CST)	MEGA Tennessee Conference Loews Nashville, 2100 West End Ave, Nashville, TN, 37203
Nashville	June 8th, 2023 5:00PM (CST)	Bordeaux Public Library 4000 Clarksville Pike, Nashville, TN, 37218
Public Comment- Jackson	September 12th, 2023 12:00-2:00 PM CST	Southwest Tennessee Development District 102 E College St, Jackson, TN 38301
Public Comment- Memphis	September 13th, 2023 5:30-7:00 PM (CST)	LeMoyne-Owen College 807 Walker Ave, Memphis, TN

Public Comment-Chattanooga	September 19th, 2023 5:30-6:30 PM (EST)	Edney Innovation Center 1100 Market St. Chattanooga, TN 37402
Public Comment- Knoxville	September 20th, 2023 3:30-4:30 PM (CST)	Knoxville Community Action Committee 2247 Western Avenue Knoxville, TN 37921
Public Comment- Johnson City	September 21st, 2023 6:00-7:30 PM (EST)	Science Hill High School 1509 John Exum Pkwy Johnson City, TN 37604
Public Comment- Nashville	October 5th, 2023 6:00-8:00 PM (CST)	Tennessee State University: Avon Williams Campus 330 10th Ave N Nashville, TN 37203
Public Comment- Nashville Hosted by Blacks in Technology (BiT) Nashville Chapter	October 6th, 2023 6:00-7:00 PM (CST)	Community Foundation of Middle Tennessee 3421 Belmont Blvd Nashville, TN 37215

Appendix J: Digital Opportunity Survey Questions

1. Do you consider yourself a part of any of the following populations? (Select all that apply)
   a. Aging Individual
   b. English Language Learner
   c. Individual with a Disability
   d. Low Income Household
   e. Racial/Ethnic Minority
   f. Recently Incarcerated Individual (within the last 6 months)
   g. Rural Resident
   h. Veteran
   i. I do not consider myself a member of any of these populations

2. What is your zip code?

3. What types of devices, if any, do you have at home to connect to the Internet?
   a. Desktop
   b. Laptop
   c. Smartphone
   d. Tablet
   e. I do not have any of these devices in my home
   f. Other:

4. What are your barriers to accessing the Internet? Please select your top three reasons.
   a. Broadband Infrastructure (I do not have internet access at my home or residence)
   b. Cost (I cannot afford to pay for internet service)
   c. Digital Skills (I do not know how to use digital resources like a computer)
   d. Equipment (I do not have access to a laptop, computer, or a tablet)
   e. Privacy (I do not know how to use the internet safely)
   f. Technical Support (I do not know where to go when I need help using digital devices or services)
   g. None (I do not face any barriers to accessing the Internet)
   h. Other:

5. What are you interested in learning more about? (Please select all that apply)

a. Finding public Wi-Fi locations
b. Lowering my internet bill
c. Attending classes to learn how to use a computer
d. Purchasing a discounted device
e. None
f. Other:

6. What have been some challenges accessing digital opportunity resources? Are there suggestions on how to make these resources more accessible?

7. Where would you go to learn more about the items listed above? (Ex. Affordable Connectivity Program (ACP), Digital Skills Trainings, Equipment Access Programs, Broadband Infrastructure Projects, etc.)
a. Community Institutions (Schools, Churches, Libraries, etc.)
b. Internet Service Providers
c. Non-Profit Organizations
d. State/Local Government Agencies
e. Social Media
f. Word of Mouth
g. Other:

Appendix K: Digital Opportunity Survey Responses to Question 7

Q7: Where would you go to learn more about the items listed above? (Ex. Affordable Connectivity Program (ACP), Digital Skills Trainings, Equipment Access Programs, Broadband Infrastructure Projects, etc.

   a. Community Institutions (Schools, Churches, Libraries, etc.)
   b. Internet Service Providers
   c. Non-Profit Organizations
   d. State/Local Government Agencies
   e. Social Media
   f. Word of Mouth
   g. Other:

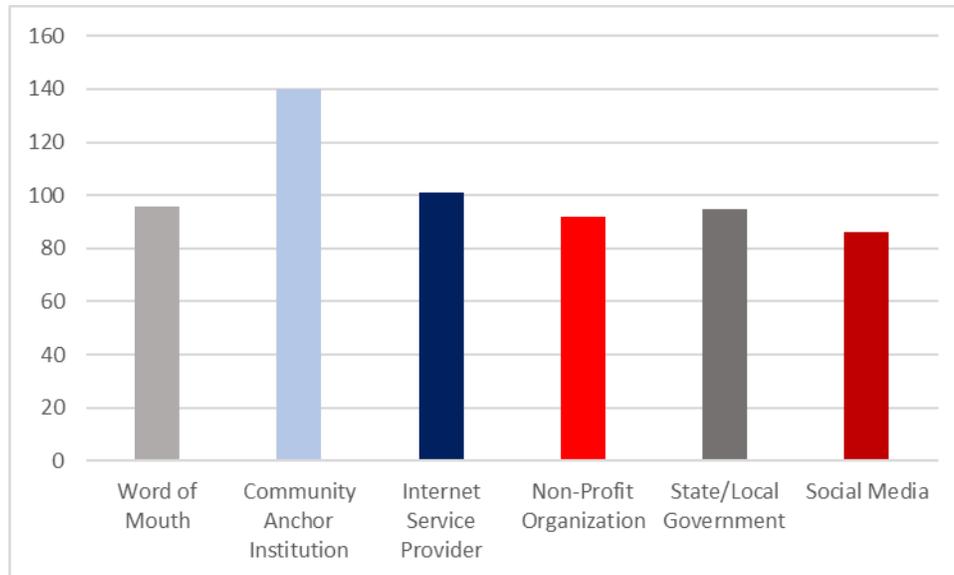**General Responses:**
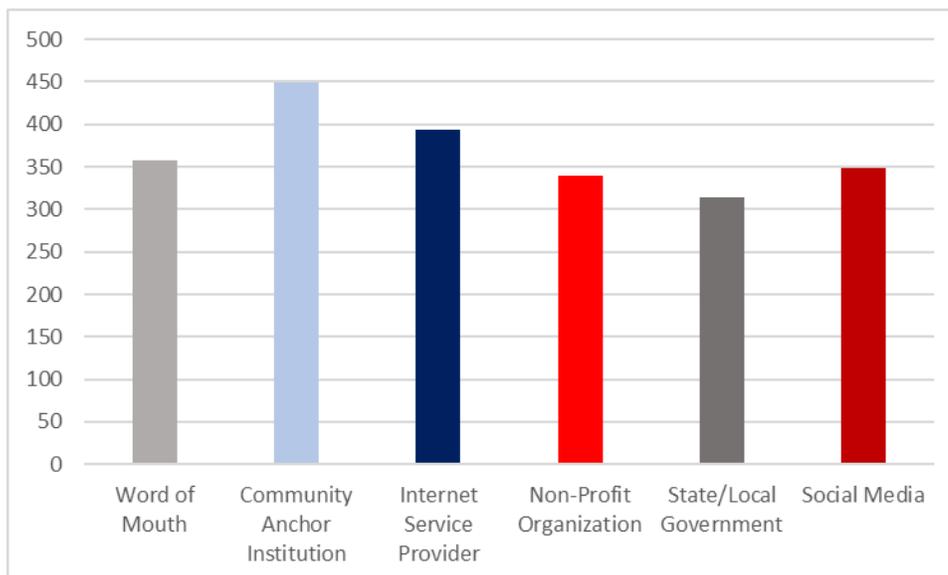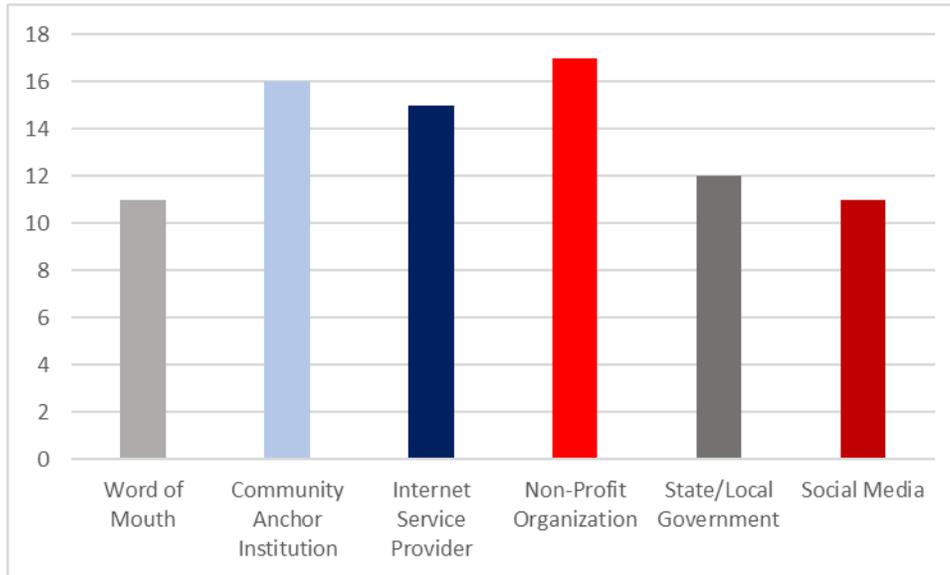
Responses for Racial/Ethnic Minorities:
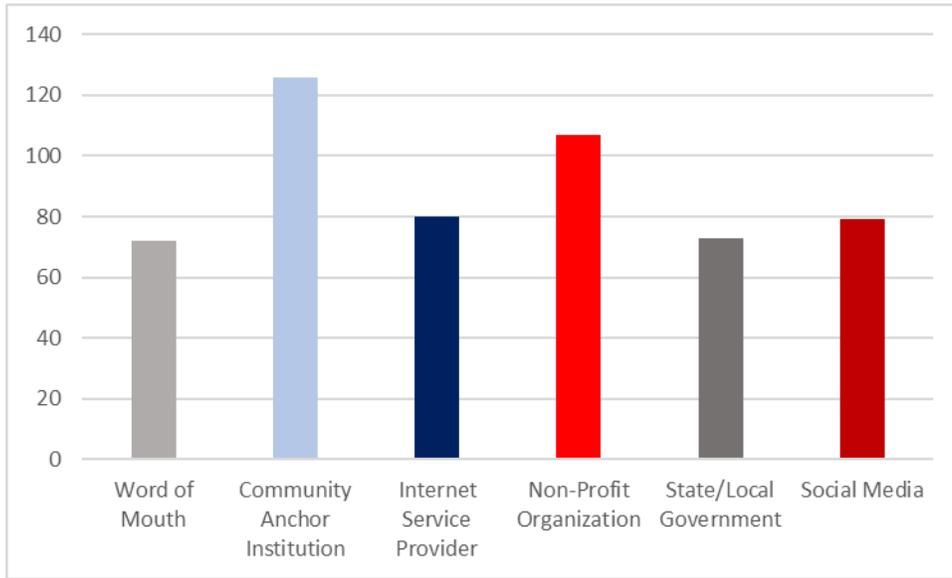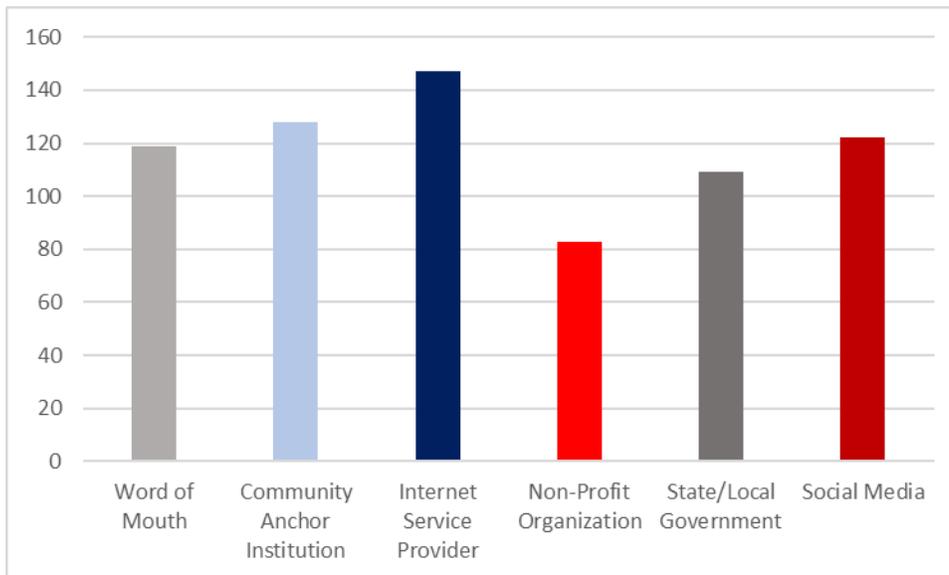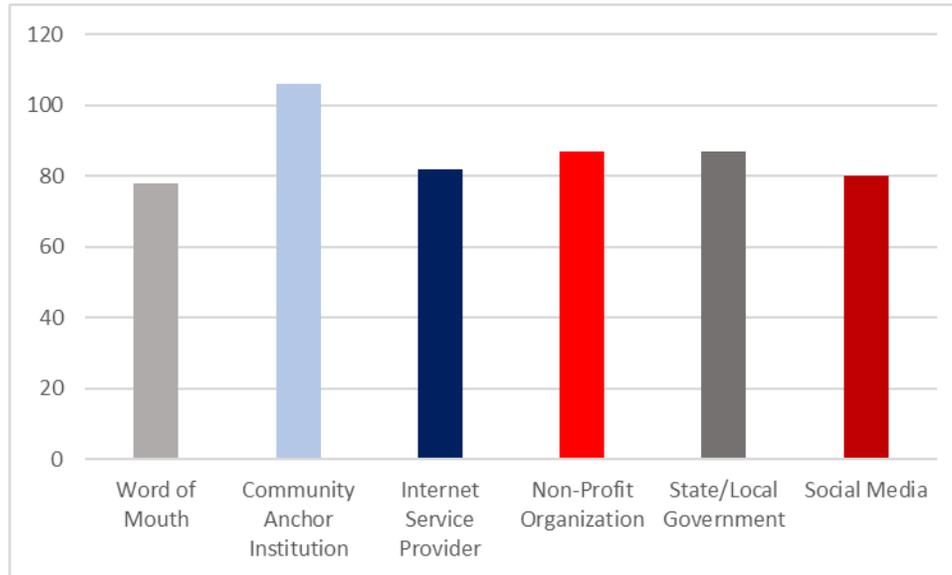

Responses for Low-Income Households:

Responses for English Language Learners:

Responses for Rural Residents:

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Responses for Individuals with Disabilities:

Appendix L: Digital Opportunity Summit Program Agenda

WELCOME TO

DIGITAL OPPORTUNITY SUMMIT 2023

TUESDAY, AUGUST 8

9:00 AM
WELCOME ADDRESS AND INTRODUCTIONS
» Brooxie Carlton, TNECD Assistant Commissioner of Community and Rural Development
» Taylre Beaty, TNECD Broadband Director

9:45 AM
SESSION 1:
ENVISIONING SESSION

10:15 AM
SESSION 2:
DIGITAL OPPORTUNITY PLAN SECTION REVIEW: VISION AND GOALS

11:00 AM
SESSION 3:
DIGITAL OPPORTUNITY PLAN SECTION REVIEW: COLLABORATION, STAKEHOLDER ENGAGEMENT AND NEEDS ASSESSMENT

11:35 AM
LUNCH

12:35 PM
SESSION 4:
DIGITAL OPPORTUNITY INNOVATORS
» Christy Batts, Chief Broadband Officer for CDE Lightband
» Meka Egwuekwe, co-founder and Executive Director of CodeCrew
» Sammy Lowdermilk, Program Director of Tech Goes Home Tennessee

1:05 PM
SESSION 5:
DIGITAL OPPORTUNITY PLAN SECTION REVIEW: ACTION STEPS | STRATEGY AND IMPLEMENTATION

1:40 PM
SESSION 6:
ISPs: PAVING THE PATH FOR DIGITAL OPPORTUNITY
» William Bradford, President and CEO of United Communications
» Evann Freeman, Director of Government Relations of EPB
» Stephen Thorpe, Chief Executive Officer of Aeneas Communications

2:20 PM
SESSION 7:
DE & BEAD PLAN UPDATE

2:50 PM
TASKFORCE CELEBRATION

3:00 PM
CLOSING REMARKS

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Appendix M: Tennessee Promise Information Overview

Tennessee Promise is both a scholarship and mentoring program focused on increasing the number of students that attend a postsecondary institution in our state. It provides students a last-dollar scholarship, meaning the scholarship may cover the cost of tuition and mandatory fees not covered by the federal Pell grant, the HOPE Scholarship, or the Tennessee Student Assistance Award at any of the state's 13 community colleges or 27 colleges of applied technology. Students may also use the scholarship at other eligible institution offering an associate degree program, but at these institutions the award would be capped at the average cost of tuition and mandatory fees at the community colleges.

While removing the financial burden is key, a critical component of Tennessee Promise is the individual guidance each participant will receive from a mentor who will assist the student as he or she navigates the college admission process. Students may apply for the Tennessee Promise Scholarship by the November 1 deadline of the academic year the student will graduate from high school, complete a home school program, or complete a GED/HiSET program. Students are required to participate in a mandatory meeting where there will be provided resources pertinent to the Tennessee Promise Scholarship program. Students are also required to complete eight (8) hours of community service for each term in which he/she is enrolled, and students are required to maintain satisfactory academic progress (2.0 GPA) at their respective institution. Students are also required to enroll in the fall semester following graduation from high school, completion of a home school program or a GED/HiSET program. Students who graduate early may be eligible to participate in the spring semester immediately following graduation. For more information, visit https://www.tn.gov/tnpromise.

Appendix N: Digital Opportunity Survey for Currently Incarcerated Individuals Launched December 21st, 2023 by TNDLWD

1. Which of these groups do you belong to? (Select all that apply)
a. I am a Senior Citizen (60 or older).
b. I am learning English.
c. I have a disability.
d. I live in a low-income household.
e. I am a member of a racial/ethnic minority (Black/African American, Hispanic/Latino, Asian, Native American/Indigenous, Native Hawaiian/Pacific Islander).
f. I live in a rural area.
g. I am a veteran.
h. I do not belong to any of these groups.

2. How long have you been incarcerated?
a. Less than 1 year
b. 1-3 years
c. 3-6 years
d. 6-10 years
e. More than 10 years

3. What county did you live in prior to incarceration?

4. What do you use at home to get on the Internet? (Choose all that apply)
a. Desktop computer
b. Laptop
c. Smartphone
d. Tablet
e. I don't have any of these devices at home

5. What makes it hard for you to use the Internet at home? Please pick your top three reasons.
a. I don't have internet at my home.
b. I can't afford to pay for internet service.
c. I don't know how to use digital tools like a computer.
d. I don't have a laptop, computer, or tablet at home.
e. I don't know how to use the internet safely.

f. I don't know where to get help when I need to use a computer or tablet.
g. I don't have any problems accessing the Internet.
h. Other:

6. After your release, what would you use the Internet for at home? Please rank your top three uses:
a. Apply for government programs
b. Find a place to live
c. Keep learning
d. Look for a job
e. Talk to family and friends
f. Have fun on the Internet
g. None
h. Other:

7. Where would you go to get help with using the Internet? Please select rank your top three choices:
a. Schools, Churches, Libraries, etc.
b. Internet Companies
c. Non-Profit Organizations
d. Government Agencies
e. Social Media
f. Family and Friends
g. Other:

8. What other services would you want on the tablets from the Department of Labor in the place where you are now? Pick what you think would help:
a. Learn job skills and make a resume
b. Find a job when you leave
c. Discover resources from non-profit groups
d. Get help for your mental health
e. Find legal services
f. Other: _____

9. Please list three topics or programs you would like to see added to the jail tablet.
1.
2.
3.

10. How did you learn about the jail tablet?
a. Jail staff
b. Friend
c. Flyer
d. Staff from another department
e. D.E. Other: _____

11. Only answer if you have used the tablet for education, personal and work readiness. Do you feel more prepared for work after using the programs on the tablet?
a. No, why not?
b. Yes, if so why?

Appendix O: Planning Document – Goals, Strategies, Measurable Objectives, Timelines

Goal #1: Expand digital opportunity infrastructure and awareness statewide	
State Goal(s) Aligned to Strategies & Measurable Objectives 1. *Civil & Social Engagement:* Make TN the best managed state (Strategies 1.1 & 1.3) 2. *Health:* Leverage Innovation: Telehealth (Strategy 1.2)	
Strategy 1.1: Strengthen and expand the Digital Opportunity Taskforce (DOT) of key public and private stakeholders who will work collaboratively to provide guidance, advice, and outreach for Digital Opportunity Plan goals, strategies, and objectives concerning but not limited to telehealth, workforce development, broadband data, and reporting.	
Core Activities	**Timeline**
Establish mission, bylaws, member terms, annual taskforce plan	Feb-Apr 2024
Work with fellow state agencies, internet services providers, and nonprofit groups to nominate and recruit new members	Feb-Apr 2024
Finalize 2024-2025 Taskforce and host monthly meetings	May 2024-June 2025
Finalize 2025-2026 Taskforce and host monthly meetings	July 2025-June 2026
Finalize 2026-2027 Taskforce and host monthly meetings	July 2026-June 2027
Finalize 2027-2028 Taskforce and host monthly meetings	July 2027-June 2028

MO #1: Increase the number of representatives on the Digital Opportunity Taskforce to ensure engagement, collaboration, and continuous improvement as the State Broadband Office implements the Digital Equity State Capacity Grant			
Covered Population	Baseline	Target	Timeline
N/A	14 members	25 members	July 2025

Barriers Addressed: Strengthening the Taskforce will ensure that, as the Broadband Office implements the Digital Opportunity Plan, the wants, needs, and barriers of all covered populations remain front and center. It will also ensure that policy decisions and office actions make sense for our partners in this work.

Strategy 1.2: Increase the percentage of at-risk and distressed counties (as defined by the Appalachian Regional Commission) with at least one telehealth access point	
Core Activities	**Timeline**
Consult with healthcare professionals and DOT to determine an effective framework for a telehealth access point program	Oct-Dec 2024
Design a telehealth access point grant program	Jan-Apr 2025
Deploy a telehealth access point grant program	July-Sept 2025

MO #1: Increase the percentage of at-risk and distressed counties (as defined by the Appalachian Regional Commission) with at least one telehealth access point			
Covered Population	Baseline	Target	Timeline
Low-Income, Rural & Aging Residents,	34.2%	100%	Dec 2028

Veterans, Racial and Ethnic Minorities			

Barriers Addressed: Increased access to telehealth services via ensuring there are functional access points in Tennessee's distressed and at-risk counties will enable greater access to medical services for our state's most challenged communities.

Strategy 1.3: Raise awareness about TNECD Digital Opportunity efforts and impact	
Core Activities	**Timeline**
Develop framework for annual report and dashboard that, at a minimum, tracks the measurable objectives and implementation progress presented in this Digital Opportunity Plan	July-Nov 2024
In partnership with the DO practitioners and DOT, develop an approach to communicating and promoting digital opportunity awareness throughout Tennessee	Aug 2024-June 2025
Release the inaugural report	Nov-Dec 2024
Create a targeted annual survey to the stakeholder network providers to gather insight about awareness and other issues	Jan-Mar 2025
Survey released and results submitted	Apr-June 2025

MO #1: Increase the percentage of digital opportunity practitioners that are aware of at least 80% of our DO initiatives

Covered Populations	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
N/A	See Page 70	See Page 70	Dec 2025	See Page 69	Dec 2028

MO #2: Increase the views of the DO annual report over time

Covered Populations	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
N/A	0	1,000	June 2025	5,000	June 2029

Barriers Addressed: The publication of an annual report detailing the TNECD's progress towards addressing key barriers to digital opportunity stands to benefit all covered populations across all barriers as it provides a mechanism of analysis and accountability for TNECD. Internally, TNECD can utilize the annual report to refocus digital opportunity efforts based on findings. Externally, digital opportunity stakeholders can advocate for additional coverage in areas where impact is not being felt by utilizing the findings of the reports. Individuals with disabilities, individuals learning English and with low levels of literacy, and individuals who are members of racial and ethnic minority groups will benefit from this goal specifically as TNECD will work to ensure organizations and agencies serving these groups review and provide feedback on the annual reports.

DE Goal #2: Enhance broadband availability and affordability

State Goal(s) Aligned to Strategies & Measurable Objectives
1. *Workforce & Economic Development:* Become number one state in the southeast for high quality jobs (Strategy 2.1, 2.2, 2.3)
2. *Delivery of Essential Services:* **To be the best-managed state, providing high quality services at the lowest possible price to taxpayers. (Strategy 2.1, 2.2, 2.3)**

Strategy 2.1: Using federal funds, including those allocated through the BEAD program, deploy broadband to all remaining unserved and underserved Tennessee households and businesses that lack a 100/20mbps connection.	
Core Activities	**Timeline**
ARPA-Funded Grant Areas Built Out	Present – Dec 2026
BEAD Application Open	July-Sept 2024
BEAD Subgrantees Build Out Grant Areas	May 2025-Dec 2028

MO #1: Using federal funds, including those allocated through the BEAD program, deploy broadband to all remaining unserved and underserved Tennessee households and businesses that lack a 100/20mbps connection.					
		Short-Term		Long-Term	
Covered Populations	Baseline	Target	Timeline	Target	Timeline
All (except those incarcerated)	367,700 unconnected locations	243,717	Dec 2026	0	Dec 2028

Barriers Addressed: The strategy above helps resolve the barriers of broadband availability for low-income individuals, aging individuals, formerly incarcerated individuals, veterans, individuals with disabilities, individuals with a language barrier, including English learners and those with low literacy skills, individuals in a racial or ethnic group, and rural residents. According to the needs assessment, infrastructure/broadband availability is one of the largest barriers for rural residents.

Strategy 2.2: Ensure all state prisons that currently do not have internet access speeds of at least a gig are aware of the BEAD Challenge Process and have the resources and knowledge they need to opt in as a community anchor institution (CAI)	
Core Activities	**Timeline**
Determine which prisons do not currently have gig internet and plan an outreach strategy in partnership with the TN Dept of Correction	Jan-Feb 2024
Carry out outreach strategy, share resources, and host an informational session for prison officials	Feb-Mar 2024
Identify how many prisons successfully opted in as a CAI	Mar-Apr 2024

MO #1: Ensure all state prisons that currently do not have internet access speeds of at least a gig are aware of the BEAD Challenge Process and have the resources and knowledge they need to opt in as a community anchor institution (CAI)			
Covered Population	Baseline	Target	Timeline
N/A	0%	100%	Mar 2024

MO #2: Using federal funds, including those allocated through the BEAD program, or private match funds, reduce the number of prisons that do not currently have access to gig internet speeds by half (TN operates 14 prisons)			
Covered Population	Baseline	Target	Timeline

Incarcerated Individuals	5 Tennessee Prisons do not have access to 100/20 speeds	All 14 state prisons have access to 100/20 speeds	Dec 2028

Barriers Addressed: Continuing the buildout of broadband infrastructure in Tennessee stands to address the primary barrier identified for rural households, low-income households, formerly incarcerated individuals, aging individuals, veterans, and individuals who are not members of covered populations where infrastructure was reported as a primary barrier in the digital opportunity survey. In addition, ensuring prisons have access to high-quality internet can assist in increasing the amount of available education and workforce training to help equip those who are currently incarcerated to be successful upon release.

Strategy 2.3: Make the internet more affordable to all covered populations					
Core Activities				**Timeline**	
Design a grant program that helps partner organizations subsize access for covered populations				Jan-Apr 2025	
Design a grant program that helps partners enroll covered populations in ACP				Jan-Apr 2025	
Launch affordability and ACP enrollment grant programs				July-Sept 2025	
MO #1: Increase subscription take rates					
		Short-Term		Long-Term	
Covered Population	Baseline	Target	Timeline	Target	Timeline
General Population	91.5%	94%	Dec 2026	97%	Dec 2028
Aging Individuals	81.6%	84%	Dec 2026	87%	Dec 2028
Individuals with language barriers, including English language learners and those with low literacy skills	72.6%	75%	Dec 2026	78%	Dec 2028
Individuals of a racial or ethnic minority group	90.5%	93%	Dec 2026	95%	Dec 2028
MO #2: Increase percentages of eligible households participating in the Affordable Connectivity Program (ACP)					
		Short-Term		Long-Term	
Covered Population	Baseline	Target	Timeline	Target	Timeline
Low-income individuals	28.6%	35%	Dec 2026	50%	Dec 2028
Aging Individuals	19.99%	35%	Dec 2026	50%	Dec 2028
MO #3: Increase the number organizations that provide reduced or no cost internet access for covered populations through grant awards					
		Short-Term		Long-Term	
Covered Population	Baseline	Target	Timeline	Target	Timeline
N/A	0	5	Dec 2026	20	Dec 2028
Incarcerated Individuals (Based on awarding organizations who	0	1	Dec 2026	5	Dec 2028

house these residents)					

Barriers Addressed: All covered populations, except currently incarcerated individuals, reported cost as a critical barrier in the needs assessment including in the digital opportunity survey and in listening sessions.

DE Goal #3: Improve online accessibility and inclusivity of state agency resources

State Goal(s) Aligned to Strategies & Measurable Objectives

1. **Delivery of Essential Services:** To be the best-managed state, providing high quality services at the lowest possible price to taxpayers. (Strategy 3.1, 3.2)
2. **Civic and Social Engagement**

Strategy 3.1: Conduct assessments of state departmental websites to identify barriers and opportunities to improve online accessibility for specific covered populations

Core Activities	Timeline
Work with DOT and UT to design online accessibility assessments	Aug 2024-June 2025
Conduct formal assessments of online accessibility for selected state programs per year	Jun 2025-Dec 2027
Provide technical assistance	Dec 2025-Dec 2027

MO #1: Conduct targeted formal assessments of online accessibility for selected state departmental websites that serve specific covered populations and provide technical assistance to make improvements

Covered Population	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
Low Income (Dept of Human Services)	0	1	Dec 2025		
All Covered Populations (Dept of Labor & Workforce Development)	0	1	Dec 2025		
Low Income, Aging, Disabilities (TennCare)	0			1	Dec 2026
Individuals with Disabilities Dept of Intellectual Disabilities)	0			1	Dec 2026
Veterans (Dept of Veterans Affairs)	0			1	Dec 2027
Rural Residents (Dept of Agriculture)	0			1	Dec 2027

Barriers Addressed: Improving the accessibility of certain state websites will deliver solutions for covered populations who reported digital inclusion as a key barrier in the needs assessment. Particularly in listening sessions with members of the disability communities, veterans, and rural residents, digital inclusion was reported as a significant barrier.

Strategy 3.2: Develop training modules for all covered populations that teach users how to navigate government websites and access resources

Core Activities	Timeline

Develop an RFP to produce training modules for each covered population that include best practices on navigating agency websites and accessing online resources	May 1-31, 2024
Award the RFP	Sept-Oct 2024
RFP Awardee creates the training modules based on TNECD requirements	Oct 20-May 2025
Subgrantees embed the online accessibility module in state funded digital skilling programs.	July 2025

MO #1: Increase the number people completing the online accessibility training modules

Covered Population	Baseline	Short-Term		Long-Term	
		Target	Timeline	Target	Timeline
Low Income	0	4601	Dec 2025	13642	Dec 2027
Aging Populations	0	200	Dec 2025	600	Dec 2027
Incarcerated Individuals (Specific module for the Tablet program must be developed)	0	275	Dec 2025	550	Dec 2027
Veterans	0	50	Dec 2025	215	Dec 2027
Individuals with Disabilities	0	110	Dec 2025	325	Dec 2027
English Learners	0	600	Dec 2025	2000	Dec 2027
Low Literacy Skills	0	400	Dec 2025	1500	Dec 2027
Racial or ethnic minority groups	0	1500	Dec 2025	5000	Dec 2027
Rural residents	0	3000	Dec 2025	8000	Dec 2027

Barriers Addressed: This strategy will benefit all covered populations by providing targeted trainings concerning the websites and resources each group needs to access the most. This strategy addresses reported barriers identified in the digital opportunity survey digital inclusion intersected with digital skills.

DE Goal #4: Help Tennesseans develop the digital skills and knowledge needed for work and life
State Goal(s) Aligned to Strategies & Measurable Objectives   1. **Educational Outcomes:** Drive to 55- initiative to get 55% of Tennesseans equipped with a college degree or certificate by 2025 (Strategy 4.1, 4.2)   2. **Economic and Workforce Development:** Become number one state in the southeast for high quality jobs (Strategy 4.1)   3. **Civic and Social Engagement:** Promoting the awareness of state security resources and services across the state (Strategy 4.3)

Strategy 4.1: Continue to expand the availability of digital skills programs through a competitive grant program

Core Activities	Timeline
Evaluate current grant program that provides funding for digital skills and make necessary changes and updates	Feb-Apr 2025
Launch digital skills grant program	Aug-Oct 2025
Award subgrantees	Dec 2025-Feb 2026
Evaluate current grant program that provides funding for digital skills and make necessary changes and updates	Feb-Apr 2026
Launch digital skills grant program	Aug-Oct 2026
Award subgrantees	Dec 2026-Feb 2027

MO #1: Increase the number digital skills programs receiving grant funding from TNECD to serve all covered populations

Covered Population	Baseline	Target	Timeline
Low Income	See Page 82	See Page 82	Dec 2028
Aging Populations	See Page 82	See Page 82	Dec 2028
Incarcerated Individuals	See Page 82	See Page 82	Dec 2028
Veterans	See Page 82	See Page 82	Dec 2028
Individuals with Disabilities	See Page 82	See Page 82	Dec 2028
English Learners	See Page 82	See Page 82	Dec 2028
Low Literacy Skills	See Page 82	See Page 82	Dec 2028
Racial or ethnic minority groups	See Page 82	See Page 82	Dec 2028
Rural residents	See Page 82	See Page 82	Dec 2028

MO #2: Increase number of those in covered populations who receive training from TNECD-funded digital skills programs

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	0	4601	Dec 2026	13642	Dec 2028
Aging Populations	0	200	Dec 2026	600	Dec 2028
Incarcerated Individuals	0	275	Dec 2026	550	Dec 2028

	Baseline	Target	Timeline	Target	Timeline
Veterans	0	50	Dec 2026	215	Dec 2028
Individuals with Disabilities	0	110	Dec 2026	325	Dec 2028
English Learners	0	600	Dec 2026	2000	Dec 2028
Low Literacy Skills	0	400	Dec 2026	1500	Dec 2028
Racial or ethnic minority groups	0	3000	Dec 2026	8000	Dec 2028

MO #3: Increase TNECD-funded training participants' confidence in their knowledge and digital skills

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	See Page 84	See Page 84	Dec 2026	See Page 84	Dec 2028
Aging Populations	See Page 84	See Page 84	Dec 2026	See Page 84	Dec 2028
Incarcerated Individuals	See Page 84	See Page 84	Dec 2026	See Page 84	Dec 2028
Veterans	See Page 84	See Page 84	Dec 2026	See Page 84	Dec 2028
Individuals with Disabilities	See Page 84	See Page 84	Dec 2026	See Page 84	Dec 2028
English Learners	See Page 84	See Page 84	Dec 2026	See Page 84	Dec 2028
Low Literacy Skills	See Page 84	See Page 84	Dec 2026	See Page 84	Dec 2028
Racial or ethnic minority groups	See Page 84	See Page 84	Dec 2026	See Page 84	Dec 2028
Rural residents	See Page 84	See Page 84	Dec 2026	See Page 84	Dec 2028

Barriers Addressed: Digital skills was identified as a barrier by every covered population in our needs assessment except recently incarcerated individuals. The listening session data reveals that several responses were tied to a need for digital literacy. Our conversations with stakeholders, community leaders, and institutions serving covered populations consistently identified digital skills as a priority need in their communities, especially nonprofits and state agencies engaging with justice involved individuals.

Strategy 4.2: Continue to expand the availability of workforce development programs through a competitive grant program	
Core Activities	**Timeline**
Evaluate current grant program that provides funding for workforce development programs and make necessary changes and updates	Feb-Apr 2025

Launch workforce development grant program	Aug-Oct 2025
Award subgrantees	Dec 2025-Feb 2026
Evaluate current grant program that provides funding for workforce development programs and make necessary changes and updates	Feb-Apr 2026
Launch workforce development grant program	Aug-Oct 2026
Award subgrantees	Dec 2026-Feb 2027

MO #1: Increase the number workforce development programs receiving grant funding from TNECD to serve all covered populations

Covered Population	Baseline	Target	Timeline
Low Income	See Page 85	See Page 85	Dec 2028
Aging Populations	See Page 85	See Page 85	Dec 2028
Incarcerated Individuals	See Page 85	See Page 85	Dec 2028
Veterans	See Page 85	See Page 85	Dec 2028
Individuals with Disabilities	See Page 85	See Page 85	Dec 2028
English Learners	See Page 85	See Page 85	Dec 2028
Low Literacy Skills	See Page 85	See Page 85	Dec 2028
Racial or ethnic minority groups	See Page 85	See Page 85	Dec 2028
Rural residents	See Page 85	See Page 85	Dec 2028

MO #2: Increase number of those in covered populations who receive training from TNECD-funded workforce development programs

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	0	1150	Dec 2026	3411	Dec 2028
Aging Populations	0	50	Dec 2026	150	Dec 2028
Incarcerated Individuals	0	69	Dec 2026	138	Dec 2028
Veterans	0	13	Dec 2026	54	Dec 2028
Individuals with Disabilities	0	28	Dec 2026	81	Dec 2028
English Learners	0	150	Dec 2026	500	Dec 2028
Low Literacy Skills	0	100	Dec 2026	375	Dec 2028
Racial or ethnic minority groups	0	375	Dec 2026	1250	Dec 2028
Rural residents	0	750	Dec 2026	2000	Dec 2028

MO #3: Increase the number of those in covered populations who receive a workforce credential, including certifications and/or degrees, from an TNECD-funded grant program

Covered Population	Baseline	Target	Timeline
Low Income	0	See Page 86	Dec 2028
Aging Populations	0	See Page 86	Dec 2028
Incarcerated Individuals	0	See Page 86	Dec 2028
Veterans	0	See Page 86	Dec 2028
Individuals with Disabilities	0	See Page 86	Dec 2028
English Learners	0	See Page 86	Dec 2028

Low Literacy Skills	0	See Page 86	Dec 2028
Racial or ethnic minority groups	0	See Page 86	Dec 2028
Rural residents	0	See Page 86	Dec 2028
MO #4: Increase the number of those in covered populations who receive a job placement from an TNECD-funded grant program			
Covered Population	Baseline	Target	Timeline
Low Income	0	See Page 87	Dec 2028
Aging Populations	0	See Page 87	Dec 2028
Incarcerated Individuals	0	See Page 87	Dec 2028
Veterans	0	See Page 87	Dec 2028
Individuals with Disabilities	0	See Page 87	Dec 2028
English Learners	0	See Page 87	Dec 2028
Low Literacy Skills	0	See Page 87	Dec 2028
Racial or ethnic minority groups	0	See Page 87	Dec 2028
Rural residents	0	See Page 87	Dec 2028
Barriers Addressed: Workforce development was a major theme in listening sessions and conversations with other state agencies. Ensuring that Tennesseans have access to advanced educational opportunities outside the traditional pathway will help Tennesseans become competitive workers in the labor workforce market.			

Strategy 4.3: Develop cybersecurity training modules, digital safety best practices, and promotional messages, specifically customized for all covered populations				
Core Activities			**Timeline**	
Develop an RFP to produce training modules for each covered population			May 1-31, 2024	
Award the RFP			Sept-Oct 2024	
RFP Awardee creates the training modules based on TNECD requirements			Oct 20-May 2025	
Subgrantees embed the cybersecurity module in state funded digital skilling programs.			July 2025	
MO #1: Increase the number people completing the cybersecurity training modules				
		Short-Term		Long-Term
Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	0	4601	Dec 2026	13642	Dec 2028
Aging Populations	0	200	Dec 2025	600	Dec 2027
Incarcerated Individuals (Specific module for the TDLWD Tablet program must be developed)	0	275	Dec 2025	550	Dec 2027
Veterans	0	50	Dec 2025	215	Dec 2027

Individuals with Disabilities	0	110	Dec 2025	325	Dec 2027
English Learners	0	600	Dec 2025	2000	Dec 2027
Low Literacy Skills	0	400	Dec 2025	1500	Dec 2027
Racial or ethnic minority groups	0	1500	Dec 2025	5000	Dec 2027
Rural residents	0	3000	Dec 2025	8000	Dec 2027

MO #2: Increase TNECD-funded training participants' confidence in their knowledge of cybersecurity

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	0	4601	Dec 2026	13642	Dec 2028
Aging Populations	0	200	Dec 2026	600	Dec 2028
Incarcerated Individuals	0	275	Dec 2026	550	Dec 2028
Veterans	0	50	Dec 2026	215	Dec 2028
Individuals with Disabilities	0	110	Dec 2026	325	Dec 2028
English Learners	0	600	Dec 2026	2000	Dec 2028
Low Literacy Skills	0	400	Dec 2026	1500	Dec 2028
Racial or ethnic minority groups	0	1500	Dec 2026	5000	Dec 2028
Rural residents	0	3000	Dec 2026	8000	Dec 2028

Barriers Addressed: The Digital Opportunity Survey and Listening Session data revealed a need for Internet safety and cybersecurity resources for Tennesseans. As the Internet becomes increasingly important in society, it is imperative that we prepare community members to stay safe online.

DE Goal #5: Expand availability of affordable devices and technical support

State Goal(s) Aligned to Strategies & Measurable Objectives
1. **Health Outcomes:** TennCare: Improving lives through high-quality, cost-effective care (Strategy 4.1, 5.1)
2. **Delivery of Essential Services:** To be the best-managed state, providing high quality services at the lowest possible price to taxpayers (Strategy 5.2, 5.3)

Strategy 5.1: Require TNECD-funded digital skills and workforce programs to provide a no- or low-cost laptop or desktop pathway

Core Activities	Timeline
Incorporate requirement into guidelines	Feb-Apr 2025
Receive first subgrantee quarterly report	May-June 2026
Final annual report from subgrantees	Feb-Mar 2027

MO #1: Increase number of no- to low-cost devices provided to members of covered populations by TNECD-funded programs

Covered Population	Baseline	Target	Timeline
Low Income	0	See Page 90	Dec 2028
Aging Populations	0	See Page 90	Dec 2028

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Incarcerated Individuals	0	See Page 90	Dec 2028
Veterans	0	See Page 90	Dec 2028
Individuals with Disabilities	0	See Page 90	Dec 2028
English Learners	0	See Page 90	Dec 2028
Low Literacy Skills	0	See Page 90	Dec 2028
Racial or ethnic minority groups	0	See Page 90	Dec 2028
Rural residents	0	See Page 90	Dec 2028

Barriers Addressed: Device access was identified as a barrier across all covered populations. Increasing access to quality low-cost devices will allow Tennesseans to have easier access to job opportunities, educational resources, and other social services. X, Y, Z

Strategy 5.2: Develop a refurbishment platform to promote device availability and affordability to organizations that serve covered populations	
Core Activities	Timeline
Design and launch an RFP process to manage a device matching and refurbishment platform	May-Sept 2025
Award the contract	Nov 2025
Contractor creates the refurbishment platform	Jan – Apr 2026
Begin using the platform	Jul 2026

MO #1: Increase the number of organizations that donate devices through the refurbishment platform

Covered Population	Baseline	Target	Timeline
N/A	0	50	Dec 2028

MO #2: Increase the number of refurbished devices provided through the refurbishment platform to members of covered populations

Covered Population	Baseline	Target	Timeline	Target	Timeline
Low Income	0	See Page 91	Dec 2026	See Page 91	Dec 2028
Aging Populations	0	See Page 91	Dec 2026	See Page 91	Dec 2028
Incarcerated Individuals	0	See Page 91	Dec 2026	See Page 91	Dec 2028
Veterans	0	See Page 91	Dec 2026	See Page 91	Dec 2028
Individuals with Disabilities	0	See Page 91	Dec 2026	See Page 91	Dec 2028
English Learners	0	See Page 91	Dec 2026	See Page 91	Dec 2028
Low Literacy Skills	0	See Page 91	Dec 2026	See Page 91	Dec 2028
Racial or ethnic minority groups	0	See Page 91	Dec 2026	See Page 91	Dec 2028
Rural residents	0	See Page 91	Dec 2026	See Page 91	Dec 2028

> **Barriers Addressed:** Creating an online device refurbishment platform will support expanding access to the devices. Organizations and companies may want to donate devices but may not know where to do so; conversely, individuals and service organizations may struggle to find access to refurbished devices. The platform will be a great tool to facilitate donations and device access.

Strategy 5.3: Create a statewide technical assistance hub to provide support to Tennesseans who need basic assistance with digital devices at no cost

Core Activities	Timeline
Develop an RFP to create the technical assistance hub	Apr-May 2025
Award the contract	Oct-Dec 2025
RFP Awardee creates the technical assistance hub	Dec 2025-Apr 2026
Begin promoting the hub	Apr 2026-Dec 2028

MO #1: Increase the number of organizations that are promoting the technical assistance hub (have it listed on their website/social media pages)

		Short-Term		Long-Term	
Covered Population	Baseline	Target	Timeline	Target	Timeline
N/A	0	20	Apr 2026	50	Dec 2028

MO #2: Increase the number of Tennesseans accessing the service

Covered Population	Baseline	Target	Timeline
All	0	2,500	Dec 2028

Barriers Addressed: Technical support was third most identified need in the Digital Opportunity Survey. Similarly Listening Sessions expressed a need for Tennesseans to have in-person, individualized technical support. The technical assistance hub will also address digital skills and online safety needs.