



Texas Digital Opportunity Plan



TEXAS BROADBAND
DEVELOPMENT OFFICE



Texas Comptroller of Public Accounts

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1. Executive Summary

The Texas Broadband Development Office (BDO), under the Texas Comptroller of Public Accounts, developed the Texas Digital Opportunity Plan (“the plan”) to complement broadband infrastructure programs already underway in the state, including the Bringing Online Opportunities to Texas (BOOT) program and the state’s Broadband Equity, Access, and Deployment (BEAD) program. The BDO released a draft version of this plan for public comment on Nov. 28, 2023, and accepted comments through Jan. 5, 2024.

With a greater focus on the affordability, adoption and safe and effective use of the internet, the plan aligns with National Telecommunications and Information Administration (NTIA) requirements identified in the State Digital Equity Planning Grant Program’s Notice of Funding Opportunity (NOFO) and incorporates feedback from a thorough public engagement initiative.

The purpose of this plan is to guide non-infrastructure-related digital opportunity investments and to position the BDO to receive and deploy Capacity Grant funds from NTIA over the next five years, with a focus on closing the digital divide in Texas and ensuring every Texan has the ability and skills to fully and safely



Image credit: Stock Images, Microsoft

utilize broadband access provided through the BEAD program and other sources of funding.

The plan sets out the BDO's vision and goals for digital opportunity in the state, assesses the current state of access and barriers to digital opportunity, outlines how the BDO will collaborate with stakeholders to address challenges, and describes the strategies and actions the BDO will take to realize its vision and goals.

Texas' Vision for Digital Opportunity

Improve quality of life and promote economic growth by enabling fast, reliable and affordable broadband connectivity for all residents and businesses of Texas, promoting universal broadband adoption and providing access to digital skills development.

Achieving this vision will advance state policy priorities and efforts in six outcome areas:

- **Economic and Workforce Development:** The Texas economy will grow stronger and more resilient through a more skilled workforce from farms to factories, offices to community anchor institutions, with talent staying and growing in communities to support further economic development.
- **Education Access and Advancement:** Texans will have access to a higher quality education no matter where they live, with the opportunity for educational advancement in any stage of life, through online learning opportunities.
- **Health Improvement:** Recognizing that broadband adoption is a “super determinant” of health, widespread broadband adoption will result in improved personal and community health across Texas.

- **Accessibility of Essential Services:** Texans will have greater access to the resources and tools they need, ensuring effective use of public resources and safer and more resilient communities – especially during extreme weather events.
- **Civic and Social Engagement:** Texans will be more connected to one another, their communities and their government with improved tools to participate in civic processes.
- **Business and Telecommunications Growth:** The Texas telecom industry and business community will grow stronger as more Texans adopt internet services and gain digital skills for the future.

The BDO will measure and track outcomes in these outcome areas in five categories of measurable objectives, as defined by the NTIA: (1) the availability of, and affordability of access to, fixed and wireless broadband technology; (2) the online accessibility and inclusivity of public resources and services; (3) digital literacy; (4) awareness of, and the use of, measures to secure the online privacy of, and cybersecurity with respect to, an individual; and (5) the availability and affordability of consumer devices and technical support for those devices.

The BDO conducted a statewide digital opportunity planning process, including 26 public engagement meetings; 37 stakeholder focus groups with outcome area leaders, regional leaders and members of eight “covered populations”¹ (aging individuals, incarcerated individuals, individuals with disabilities, individuals with limited English proficiency, low-income households, racial and ethnic minorities, rural residents and veterans); and engagement with close to 16,500 Texans in total. Through this planning process, the BDO defined the following Texas-specific goals and key performance indicators (KPIs) that will guide implementation efforts:

¹ See *Chapter 1, NTIA Covered Populations*

Texas Goal 1: Expand adoption of reliable, affordable broadband internet service at home for all Texans, including individuals belonging to covered populations.

- KPI 1.1 – Increase the percentage of Texans with reliable broadband subscriptions, including Texans belonging to all covered population groups.
- KPI 1.2 – Decrease the percentage of Texans who cite cost as a barrier to home internet service, including Texans belonging to all covered population groups.
- KPI 1.3 – Increase the percentage of Texans who are aware of the Affordable Connectivity Program (ACP) and/or other low-cost or subsidized internet service options, including Texans belonging to all covered population groups.

Texas Goal 2: All Texans, including those belonging to covered population groups, have access to affordable computers and other internet-enabled devices in their home, with corresponding technical support services.

- KPI 2.1 – Increase the percentage of Texans who have home² access to affordable internet-enabled devices other than a smartphone, including Texans belonging to all covered population groups.
- KPI 2.2 – Increase access to low to no cost technical support for internet-enabled devices for more Texans, including Texans belonging to all covered population groups.

Texas Goal 3: All Texans, including those belonging to covered population groups, have a broad foundation of digital literacy skills and access to a continuum of digital skills development programs.

² This plan uses the term “home” to refer to an individual’s primary place of residence. For incarcerated individuals, “home” refers to the facility in which they are incarcerated.

- KPI 3.1 – Increase the percentage of Texans who have basic digital literacy skills, including Texans belonging to all covered population groups.
- KPI 3.2 – Increase the availability of digital literacy programs and services, including those serving all covered population groups.
- KPI 3.3 – Increase the percentage of Texas workers, including those in all covered population groups, who have the level of skills training jobs require, by supporting a continuum of digital literacy skills beyond basic digital literacy.

Texas Goal 4: All Texans, including those belonging to covered population groups, feel safe online and are familiar with cybersecurity and online privacy measures.

- KPI 4.1 – Increase the percentage of Texans who have cybersecurity and online privacy measures set up on their devices, including Texans belonging to covered population groups,

Texas Goal 5: Improve access to online public resources and services for all Texans, including those belonging to covered population groups.

- KPI 5.1 – Increase the percentage of Texans, including those in all covered population groups, who utilize the internet to access public resources and services (using health care access as a baseline).

These statewide goals are intended to advance digital opportunity for all covered populations. Access to reliable broadband service is the first step toward achieving these goals and the focus of billions of dollars in infrastructure investment in the state. Nonetheless, as demonstrated through the needs assessment and asset inventory completed for this plan, even after reliable broadband service is available, Texans need greater options for affordability and

access to a continuum of digital literacy training and skills development to make the most of the internet.

This plan includes an assessment of the state's current baseline as related to each specific goal and KPI. The data demonstrate that needs are not equal across populations and geographies, and thus the plan requires approaches tailored to the communities most in need. For example, rural and economically disadvantaged communities demonstrate a higher overall need for services and support than other parts of Texas. The Upper Rio Grande and South Texas regions experience the highest rates of digital disparity,³ coupled with limited organizational resources.⁴

Among other priorities, this plan seeks to address the need for:

- Foundational digital literacy skills for all Texans and especially low-income households, individuals with limited English proficiency and individuals with disabilities.
- Language and culture-specific resources for individuals with limited English proficiency, who have some of the highest digital disparities among covered populations.
- Expanded access to devices other than smartphones, especially for covered populations such as low-income households.
- Improved adoption of online privacy and cybersecurity measures and increased awareness of online privacy and cybersecurity among individuals with limited English proficiency.
- Improved online accessibility and inclusivity of public resources and service among covered populations.
- Reliable, affordable broadband connections for rural residents and organizations implementing community-based programs.

³ See map from [Microsoft's Digital Equity Data Dashboard](#)

⁴ See Digital Resources Mapping Tool Survey (DRMTS)

- Increased adoption of broadband service beyond mobile data plans for low-income households and rural residents.
- Enrollment support for low-cost internet services and subsidy programs like the ACP.
- Support for organizations to engage communities in existing programs.

The BDO will advance the following four primary strategies to address these needs and other barriers identified in this plan and to realize its goals and overall vision:



Strategy 1: Partner With and Fund Statewide Organizations.

The BDO will work with a range of state agencies and other statewide partners already actively involved in advancing digital opportunity across the state, ensuring that work is supportive of realizing the goals of this plan. The BDO will partner and collaboratively plan with agencies such as the Texas Workforce Commission (TWC) and Texas State Library and Archives Commission (TSLAC), with the goal of enhancing and expanding those agencies' programs through funding available from the state's forthcoming State Capacity Grant Program administered by NTIA.



Strategy 2: Fund Local Partners. Broadband adoption, digital literacy, device access and many other aspects of digital opportunity require locally based, culturally appropriate efforts. Leadership should come from the same communities that these efforts aim to serve; trust, safety and confidence are essential components of digital opportunity. The BDO will allocate a portion of its Capacity Grant to create a digital opportunity grant program to fund local initiatives addressing the gaps in digital opportunity for covered populations and regions most impacted by the digital divide.



Strategy 3: Promote Internet Adoption. The BDO recognizes that building the physical infrastructure to connect unserved and underserved Texans to broadband is only one component of expanding broadband adoption. Therefore, the BDO will promote activities to support Texans in signing up for and using broadband service as it is made available across the state – benefitting Texans, multiple statewide priorities and the telecom industry through an expanded customer base.



Strategy 4: Maintain a Living Digital Opportunity Plan. The BDO envisions this plan as a living document, to be updated through continued research. The BDO has gathered extensive baseline data, established relationships with stakeholders and residents and gained a firm understanding of the current needs and barriers of Texans statewide – regionally and among covered populations. The BDO aims to build upon this foundation and make this plan a sustainable resource to promote digital opportunity statewide by measuring progress while continuing to collect critical data to enable the state and its local partners to advance and iterate impactful programs.

By delivering on these strategies over the next five years, Texas will make the most of broadband infrastructure investments and sustainably advance the statewide vision of digital opportunity for all Texans. The BDO is committed to building a resilient and sustainable digital opportunity ecosystem to serve as a foundation for future impact for the next five years and well beyond.⁵

⁵ Comments 280 and 302 received during the public comment period informed changes to this section of the plan.

Glossary of Key Terms

Acronyms and Key Terms

ACP	The Affordable Connectivity Program, a program administered by the Federal Communications Commission (FCC), providing subsidies for low-income, tribal and/or other qualifying households to access home broadband subscriptions and/or internet-enabled devices.
ACS	The American Community Survey, an annual demographic survey conducted by the United States Census Bureau.
Affordable	<p>Broadband service is affordable if the cost to maintain always-on, high-speed service in the home or a business is not a barrier to subscription.</p> <p>Devices are affordable if the cost for a device that meets a household or business' needs is not a barrier.</p>
BDO	Texas Broadband Development Office
BEAD	NTIA's Broadband Equity, Access, and Deployment Program, which will provide \$42.45 billion nationally for broadband infrastructure planning and implementation.
BOOT	The Bringing Online Opportunities to Texas Program: Texas' first competitive broadband grant program aimed at funding infrastructure

	<p>projects that bring broadband access to end users in eligible areas of the state.</p>
Broadband	<p>Always-on, high-speed internet service. The FCC’s benchmark for high-speed internet is at least 25 megabits per second (Mbps) for downloads and 3 Mbps for uploads.</p>
CAI	<p>The state’s Initial Proposal for BEAD funding defines a community anchor institution as a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization (including any public housing agency, HUD-assisted housing organization or tribal housing organization) or community support organization that facilitates greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, children, incarcerated individuals and aged individuals.</p>
CBO	<p>A community-based organization representing and serving a given community or segment of a community. Often structured as nonprofit organizations, CBOs strive to improve community well-being.</p>
DEA	<p>The Digital Equity Act, established as part of the Infrastructure Investment and Jobs Act (IIJA), provides \$2.75 billion to establish grant programs that promote digital inclusion nationwide. Includes \$60 million for the State Digital Equity Planning Grant Program, which supports the process by which U.S. states and territories develop plans to advance digital opportunity.</p>

Also includes: \$1.44 billion for the State Digital Equity Capacity Grant Program, which will award funding to states, territories and tribal entities for the purpose of implementing their state plans; and \$1.25 billion for the Digital Equity Competitive Grant Program, which makes grant awards for private sector, public sector and nonprofit entities to advance digital opportunity-related activities.

Digital Literacy

This document uses the NOFO that the NTIA issued for the State Digital Equity Planning Grant (SDEPG) to define digital literacy: the skills associated with using technology to enable users to find, evaluate, organize, create and communicate information.

DRMTS

The Digital Resources Mapping Tool Survey is an online inventory of organizations and entities that currently provide or may be interested in providing digital opportunity-related programs, plans and services within Texas. The DRMTS was widely disseminated over a four-month period, from April to August 2023, and leveraged the BDO public engagement model to reach state, county and local agencies, councils of governments (COGs), CBOs, nonprofits, faith-based groups, CAIs and private sector companies. The BDO conducted desktop research to supplement survey responses with publicly available information on organizations.

Digital Divide

According to the National Digital Inclusion Alliance, “The digital divide is the gap between those who have affordable access, skills, and

	support to effectively engage online and those who do not.” ⁶
Digital Opportunity	Digital opportunity is the full set of conditions required to achieve digital access for all Texans, including widespread affordable and reliable broadband internet, high-quality device access, digital skills training and cybersecurity awareness.
FCC	The Federal Communications Commission, administrator of the ACP and developer of the National Broadband Map.
IIJA	The 2021 Infrastructure Investment and Jobs Act. The IIJA included the BEAD program and the DEA.
ISP	Internet service provider.
KPI	Key performance indicator.
NOFO	Notice of Funding Opportunity: specifically, NTIA’s Notices of Funding Opportunity for the BEAD program and State Digital Equity Planning Grant Program.
NTIA	The National Telecommunications and Information Administration, administrator of the BEAD program, the State Digital Equity Planning Grant Program, State Digital Equity Capacity Grant Program and the Digital Equity Competitive Grant Program.
Public Engagement Model	The model established by the BDO to develop a plan that represents all regions and covered populations from across the state. The model

⁶ National Digital Inclusion Alliance. (n.d.). Definitions. Retrieved [Feb. 2024], from <https://www.digitalinclusion.org/definitions/>.

enabled extensive public input through online and paper surveys and regional meetings with communities in all 12 regions of the state, and by engaging state agencies, nonprofit entities and industry leaders in meetings of the Statewide Working Group and Outcome Area Task Forces.

Texas Digital Opportunity Survey

Texas Digital Opportunity Survey is a tool to identify the digital opportunity barriers affecting Texas households, such as the lack of infrastructure, digital literacy, affordable service and access to devices. Open to all Texas residents over the age of 18 and available from April to August 2023, the survey was accessible in English, Spanish, Vietnamese and Mandarin. Paper PDF versions in English and Spanish also were available. The Digital Opportunity Survey received valid responses from residents of 250 Texas counties, representing individuals from all covered populations.

TWC

The Texas Workforce Commission is the state agency that oversees and provides workforce development services to employers and jobseekers in Texas. As part of the digital opportunity planning process, the BDO partnered closely with TWC on research that informs this plan.

Unserved/Underserved Locations

The BEAD Program⁷ defines an “unserved” location as a residence, business, community anchor institution or other place without any internet service at all, or with internet service

⁷ BroadbandUSA, Broadband Equity Access and Deployment Program (November 2021), <https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equity-access-and-deployment-bead-program>.

offering speeds below 25 megabits per second (Mbps) for download and 3 Mbps for upload, also written as 25/3 Mbps.

The BEAD Program defines an “underserved” location as one with internet service offering speeds below 100/20 Mbps.

NTIA Covered Populations⁸

As defined by the SDEPG NOFO, covered populations are groups of individuals who historically have been negatively impacted by the digital divide. The NOFO identifies the following covered populations:

NTIA Term	Alternate Term	Texas Digital Opportunity Plan Definition
Persons who are 60 years of age or older	Aging individuals	Survey respondents who selected “60 years of age or older” in the Preliminary Demographic Information section of the Digital Opportunity Survey.
Incarcerated individuals		Incarcerated individuals, other than individuals who are incarcerated in a federal correction facility.
Individuals with disabilities		<p>Survey respondents who selected “Living with a disability” in the Preliminary Demographic Information section.</p> <p>Outside the context of survey respondents, this document refers to “disability” as defined in the SDEPG NOFO:</p> <p>“Disability—The term “disability” means, with respect to an individual— 1. A physical or mental impairment that substantially limits one or more major life activities of such individual; 2. A record of such an impairment; or 3. Being regarded as having such an impairment.”</p>
Individuals with a language	Individuals with limited	The SDEPG NOFO merges two potentially overlapping but distinct groups in this

⁸ Comments 254, 284, and 295 received during the public comment period informed changes to this section of the plan.

NTIA Term	Alternate Term	Texas Digital Opportunity Plan Definition
<p>barrier, including those who are English learners or have low literacy levels</p>	<p>English proficiency</p>	<p>covered population: English language learners and individuals with low levels of literacy. In this plan, the term “individuals with limited English proficiency” refers to both groups combined. Survey data concerning this covered population come from respondents who selected “English language learner and/or have difficulty understanding English” in the Preliminary Demographic Information section.</p>
<p>Individuals in households below 150% poverty</p>	<p>Low-income households</p>	<p>Survey respondents who selected that their total annual household income before taxes is “Less” than the 150 percent federal poverty threshold in the Preliminary Demographic Information section. The 150 percent poverty line threshold shown to each survey respondent was based on their self-reported household size.</p> <p>The SDEPG NOFO refers to this population as “Covered Household:”</p> <p>“Covered Household—The term “covered household” means a household, the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census.”</p>
<p>Members of a racial or ethnic</p>	<p>Racial or ethnic minorities</p>	<p>Survey respondents who selected one or more race categories other than “White” in</p>

NTIA Term	Alternate Term	Texas Digital Opportunity Plan Definition
minority group		the Preliminary Demographic Information section.
Individuals residing in rural areas	Rural residents	<p>Survey respondents who selected “Rural area resident” in the Preliminary Demographic Information section.</p> <p>Outside the context of survey respondents, this document refers to “rural” or “rural areas” as defined in the NTIA NOFO:</p> <p>“Rural Area—The term “rural area” means any area <i>other than</i> – 1. A city or town that has a population of greater than 50,000 inhabitants; 2. Any urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants; and 3. In the case of a grant or direct loan, a city, town, or incorporated area that has a population of greater than 20,000 inhabitants.”</p>
Veterans		<p>Survey respondents who selected “U.S. veteran” in the Preliminary Demographic Information section.</p> <p>Outside the context of survey respondents, this document refers to “veteran” as defined in the NTIA NOFO:</p> <p>“Veteran—The term “veteran” means a person who served in the active military, naval, air or space service and who was discharged or released therefrom under conditions other than dishonorable.”</p>

Additional Covered Populations

Additional Covered Populations are communities in Texas that the NTIA does not include among the covered populations in the SDEPG NOFO but have historically faced barriers to digital opportunity. Within this plan, the term “covered populations” is inclusive of the communities listed below.

NTIA Term	Alternate Term	Texas Digital Opportunity Plan Definition
Immigrants		Survey respondents who selected “U.S. immigrant” in the Preliminary Demographic Information section.
Members of Tribal Communities	Tribal communities	<p>Survey respondents who selected “Member of a Tribe or Tribal Community” in the Preliminary Demographic Information section.</p> <p>Outside the context of survey respondents, this document refers to “tribal communities” as defined in the SDEPG NOFO, unless specified otherwise:</p> <p>“The term “Indian Tribe” means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act, 43 U.S.C. § 1601 et seq., which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.”</p>
Unhoused individuals		Survey respondents who selected “Unhoused or experiencing homelessness” in the Preliminary Demographic Information section.

2. Introduction & Vision for Digital Opportunity

2.a Vision

The BDO established this vision for digital opportunity in the state:

Improve quality of life and promote economic growth by enabling fast, reliable and affordable broadband connectivity for all residents and businesses of Texas, promoting universal broadband adoption and providing access to digital skills development.

To achieve this vision, the plan articulates the BDO's strategy for improving broadband access and affordability, expanding access to devices and digital skills to reach these goals and, importantly, achieving the vision of improved quality of life and economic growth through widespread broadband adoption. This is the first plan of its kind in the state.

In 2022, the BDO established quantifiable broadband goals in the [Texas Broadband Plan](#)⁹ (Broadband Plan): (1) connecting more than 1 million households to high-speed broadband; (2) improving connectivity for more than 5.6 million households; (3) improving affordability of broadband for 3.6 million households; and (4) assisting 3.8 million Texans with digital literacy challenges. This plan builds upon these goals.

The BDO built this vision for digital opportunity on statewide engagement, aligned the vision with the NTIA's Measurable Objectives, with the purpose of driving toward key state priorities and efforts in six outcome areas:

- **Accessibility of Essential Services**

⁹ Texas Broadband Development Office, *Texas Broadband Plan 2022* (June 15, 2022), <https://comptroller.texas.gov/programs/broadband/about/what/docs/broadband-plan-22.pdf>.

- **Business and Telecommunications Growth**
- **Civic and Social Engagement**
- **Economic and Workforce Development**
- **Education Access and Advancement**
- **Health Improvement**

Aligning the plan with these outcome areas ensures the BDO’s ability to achieve the vision of improved quality of life and economic growth through digital opportunity. As articulated in *Chapter 4, Collaboration and Stakeholder Engagement*, the BDO consulted heavily with experts not only in the fields of telecom and broadband access, but also in health, education, civic life, emergency management and other domains that rely on ubiquitous, reliable broadband access and digital tools to achieve goals and positively impact Texas communities.

2.b Texas Context

2.b.i Creation of the Broadband Development Office

The BDO was established by House Bill 5 (HB 5), 87th Legislature.¹⁰ Codified as Chapter 490I, Texas Government Code, the legislation charges the BDO with the following:

- Creating an accurate state broadband map.
- Establishing a long-term, statewide plan that addresses strategies and goals for expanding access to and further adoption of broadband service – See the [Broadband Plan](#).¹¹

¹⁰ Texas HB 5, 87th Leg. (2021). <https://capitol.texas.gov/billlookup/text.aspx?LegSess=87R&Bill=HB5>

¹¹ Texas Broadband Development Office, *Texas Broadband Plan 2022* (June 15, 2022), <https://comptroller.texas.gov/programs/broadband/about/what/docs/broadband-plan-22.pdf>.

- Awarding grants or other financial instruments to meet the goals of the Broadband Plan.
- Engaging in outreach to communities regarding the expansion.
- Addressing barriers for future expansion efforts.

The Texas Comptroller of Public Accounts has oversight of the BDO. To satisfy the state legislature's statutory directives as set forth in Government Code Sec. 490I.0101, the BDO has been established as a cross-functional division to advance processes, programs and tools, as well as procure services, for the purposes of ensuring universal high-speed internet access and digital opportunity for all Texans.

The BDO operates under the guidance of a director responsible for two teams: the Broadband Infrastructure team and the Digital Opportunity team. Each team is led by a supervisor who ensures that team members achieve organizational goals and meet predetermined performance measures for accomplishing the office's mission. The teams collaborate and meet regularly to understand developments in each respective scope area, coordinate funding regardless of source and provide subject matter expertise to grant programs and systems. Each team is in the process of building capacity to better address the needs of the state.

The Broadband Infrastructure team administers state and federal grants and other funds associated with broadband infrastructure buildouts, including the BOOT program, the recently approved Broadband Infrastructure Fund (discussed in section 2.b.iii) and funding from the BEAD program. The Digital Opportunity team administers funding obligated to advancing digital opportunity programs, including those created by the Digital Equity Act. Each team will consist of program coordinators responsible for specific grant programs, data analysts responsible for assisting with performance management and outreach coordinators responsible for ensuring transparent and inclusive processes. Team members will also manage vendor contracts, develop and maintain relationships with stakeholders, and collaborate with staff within the

Comptroller's office to assist with budgeting, procurement, legal matters and monitoring and compliance.

HB 5 also established the Broadband Development Office Board of Advisors (board) to provide guidance to the BDO regarding the expansion, adoption, affordability and use of broadband service and BDO's related programs and initiatives.

Initially formed in 2021, the board is composed of 10 members, with the Texas Comptroller serving as chair. A staff representative of the BDO serves as a non-voting member. The remaining members represent various stakeholder and interest groups and are appointed by the offices of the Texas Governor, Texas Lieutenant Governor and the Texas Speaker of the House.

2.b.ii Creation and Implementation of the Texas Broadband Plan

The BDO is responsible for executing the work laid out in HB 5 and subsequent legislation, in service of its vision of improved quality of life and economic development through digital opportunity. The BDO created the Broadband Plan to serve as a "foundation upon which the Texas Legislature, the BDO and other stakeholders can build actionable programs."

As part of the planning process, the BDO conducted listening sessions across the state's 12 economic regions and established baseline data on connectivity and adoption across the state. The BDO intends to use this baseline data and the data gathered as part of the digital opportunity planning process to measure progress toward reaching the goals articulated in this plan.

The Broadband Plan established guiding principles for programs deploying future state and federal funding to expand broadband in Texas and close the digital divide:

- Use both existing and emerging funding sources and investments toward areas unserved or underserved by broadband service.

- Encourage connectivity for CAIs, including schools, libraries, hospitals and other medical providers, public safety entities, institutions of higher education, community/region support organizations and local governments.
- Promote coordination, cooperation and communication among private and public infrastructure owners; communities; schools; nonprofits; project partners; and local, regional, state, tribal and federal governments.
- Remain technology-agnostic – or neutral about the type of technology used – while embracing all avenues to quality broadband service for Texas residents, businesses, institutions and communities.
- Remove barriers to residential, business and institutional broadband adoption in coordination with infrastructure investments.¹²

The BDO has launched programs and initiatives to address the immediate next steps identified in the Broadband Plan:

1. **Establish a broadband-focused, federally compliant grant program.** The BDO was awarded \$363 million in Capital Projects Fund (CPF) funding by the U.S. Treasury to support a last mile connectivity program in January 2023.¹³ The BDO made \$120 million of these funds available for broadband infrastructure grants through the BOOT program in March 2023. As of November 2023, the BDO is evaluating accepted applications and anticipates making award decisions by early 2024.

¹² Texas Broadband Development Office, *Texas Broadband Plan 2022* (June 15, 2022), <https://comptroller.texas.gov/programs/broadband/about/what/docs/broadband-plan-22.pdf>.

¹³ Texas Comptroller of Public Accounts, *Texas Comptroller's Office Awarded \$363 Million in Federal Grants to Increase Access to Affordable, High-Speed Internet* (January 27, 2023), <https://comptroller.texas.gov/about/media-center/news/20230127-texas-comptrollers-office-awarded-363-million-in-federal-grant-money-to-increase-access-to-affordable-high-speed-internet-1674761318664>.

2. **Publish a broadband availability map.** The BDO released the initial **Texas Broadband Development Map** in January 2023.¹⁴
3. **Manage recurring coordination and communication opportunities across stakeholder groups.** The public engagement model described in *Chapter 4* addresses this Broadband Plan priority, while gathering valuable input and insight from stakeholder groups to inform this Digital Opportunity Plan.

2.b.iii Texas Legislation Relevant to Digital Opportunity¹⁵

On June 2, 2023, following approval by the 88th Legislature, Gov. Greg Abbott signed bipartisan legislation concerning broadband access and adoption across the state. The legislation enacts notable changes affecting the BDO, including changing the focus of the Texas Broadband Development Map from displaying program eligibility toward serving as a multi-purpose analysis tool that will enable the BDO to direct funds where they are most needed. Critically, instead of simply identifying eligible areas, the map pivots to displaying each broadband serviceable location as served, unserved or underserved based on minimum achievable speeds and mandates that the map display additional information to reflect the availability of broadband service throughout the state. At the same time, the legislation updated state definitions and program requirements to more closely align with federal guidelines.

These changes will enable the BDO's broadband infrastructure and digital opportunity programs to target all unserved and underserved locations, not just certain areas, throughout the state. The legislation also includes direction to prioritize fiber technology while still supporting the deployment of other technologies in appropriate circumstances.

¹⁴ Texas Comptroller of Public Accounts, *Comptroller Glenn Hegar Releases Texas Broadband Development Map Identifying Areas Eligible for Funding* (Jan. 12, 2023), <https://comptroller.texas.gov/about/media-center/news/20230112-comptroller-glenn-hegar-releases-texas-broadband-availability-map-identifying-areas-eligible-for-funding-1672261638679>.

¹⁵ Comment 271 received during the public comment period informed changes to this section of the plan.

In November 2023, Texas voters approved a state constitutional amendment to create the \$1.5 billion Broadband Infrastructure Fund within the Comptroller's office.

The Comptroller's office estimates that deploying broadband throughout the state and closing remaining coverage gaps will cost close to \$10 billion.¹⁶ The voter-approved constitutional amendment unlocked funding to augment the \$3.3 billion NTIA has awarded to Texas under the BEAD Program.¹⁷ This historic investment, provided by IIJA, will finance critical infrastructure projects across the state to increase access to reliable, high-speed internet and help close the broadband availability gap in Texas. Texas received the largest BEAD funding allocation in the nation because Texas has the most unserved addresses in need of reliable connectivity. Additional state funds will further enable the work required to bring connectivity to these locations. The BDO recognizes that even with this additional funding, coverage gaps will remain. The BDO is committed to continuing the work to close those gaps.

2.c Alignment with Existing Efforts to Improve Outcomes

2.c.i Existing and Future Plans

While the 2022 Broadband Plan sets forth existing digital opportunity conditions and needs as well as suggestions for how the state may use IIJA funds, this Digital Opportunity Plan references and incorporates the Broadband Plan's findings and areas of focus.

Chapter 4: Collaboration and Stakeholder Engagement outlines the strategy and methodology used to ensure widespread engagement in the digital opportunity

¹⁶ Carver, J. L., Final approval given to bill allocating \$1.5 billion to broadband expansion in Texas, *The Texas Tribune* (May 28, 2023).

¹⁷ Texas Comptroller of Public Accounts, *Texas Comptroller Glenn Hegar announces commitment of federal funding to address digital divide* (June 29, 2023), <https://comptroller.texas.gov/about/media-center/news/20230629-texas-comptroller-glenn-hegar-announces-receipt-of-federal-funding-to-address-digital-divide-1687964343943>.

planning process. The engagement strategies described in that chapter, including the DRMTS, helped to identify existing plans related to digital opportunity. The BDO has cataloged and tracked these existing plans in *Appendix A: Local Digital Opportunity Plan Tracker*.

The engagement methodology served to deepen relationships with statewide organizations driving digital opportunity work, including TSLAC. Its March 2023 report, [Texas Public Libraries: Serving Communities to Enhance Digital Literacy](#)¹⁸, informs this plan, in particular its implementation recommendations around improving digital literacy and technical skills and improving cybersecurity and online privacy awareness for all Texans.

Further, the BDO examined current digital equity plans at a local level to help shape the state’s strategy. This plan aims to complement existing initiatives and is not intended to contradict or supersede them. As an example, the plan harmonizes with established implementation strategies such as those outlined in the SA Digital Connects Digital Equity Plan, which addresses digital inclusion in San Antonio and Greater Bexar County. The SA Digital Connects Digital Equity Plan from June 2021 calls for leveraging broadband availability data to build private LTE networks for in-home connection in targeted areas, distributing low-cost devices through schools and nonprofit partners, and delivering digital literacy training opportunities across Bexar County.¹⁹ Texas Goals 1, 2, and 3 complement and augment these and other local strategies.

The BDO intends for this plan to accelerate existing state and local digital opportunity plans. *Chapter 5: Implementation* presents strategies to work with existing statewide and local efforts so that the plan and subsequent funding may build the capacity of and enable organizations to advance digital opportunity throughout the state. The BDO also envisions a “living plan” that will incorporate ongoing stakeholder feedback, update data and allow for changes in state

¹⁸ Texas Public Libraries, *Serving Communities to Enhance Digital Literacy* (March 28, 2023), <https://www.tsl.texas.gov/digitalliteracy>.

¹⁹ SA Digital Connects, *Digital Equity Community Plan* (June 2021), https://www.sadigitalconnects.com/files/ugd/46d543_b76cd52eec904e08991991b16e4ddaf1.pdf.

priorities for the economy, workforce, education, health, civic and social engagement and essential services.

2.c.ii Measurable Objectives and Goals

The NTIA establishes five measurable objective categories:

- 1. Improve availability and affordability of fixed and wireless broadband technology.**
- 2. Ensure access to affordable consumer devices and technical support.**
- 3. Improve digital literacy and technical skills.**
- 4. Improve cybersecurity and online privacy awareness.**
- 5. Improve access to public resources and essential services online.**

In this plan, the NTIA's measurable objective categories provide a framework for BDO's digital opportunity strategy and desired outcomes. While the state has existing plans and strategies for broadband as well as the six outcome areas (health, education, etc.), the BDO applies the NTIA's measurable objective categories across all efforts as guidelines for improving digital opportunity in the state and among all covered populations.

Chapter 3: Current State of Digital Opportunity provides baseline data to describe existing conditions for each measurable objective category, identifying assets and needs to drive progress toward each goal.

Specifically, it provides information on current progress on these objectives in Texas, both as related to covered populations and by region.

Under each of NTIA's measurable objective categories, the BDO sets forth goals to advance digital opportunity. These goals are for the entire state and are intended to advance digital opportunity for all covered populations.

NTIA Measurable Objective Category 1: Broadband Availability and Affordability

- **Texas Goal 1:** Expand adoption of reliable, affordable broadband internet service at home for all Texans, including individuals belonging to covered populations.

NTIA Measurable Objective Category 2: Device Availability and Affordability and Technical Support

- **Texas Goal 2:** All Texans, including those belonging to covered population groups, have access to affordable computers and other internet-enabled devices in their home, with corresponding technical support services.

NTIA Measurable Objective Category 3: Digital Literacy

- **Texas Goal 3:** All Texans, including those belonging to covered population groups, have a broad foundation of digital literacy skills and access to a continuum of digital skills development programs.

NTIA Measurable Objective Category 4: Online Privacy and Cybersecurity

- **Texas Goal 4:** All Texans, including those belonging to covered population groups, feel safe online and are familiar with cybersecurity and online privacy measures.

NTIA Measurable Objective Category 5: Online Accessibility and Inclusivity of Public Resources

- **Texas Goal 5:** Improve access to online public resources and services for all Texans, including those belonging to covered population groups.

2.c.iii Covered Populations²⁰

In total, 24.8 million Texans – 86 percent of the state’s population – belong to one or more covered populations.²¹

Table 1: Covered Populations in Texas

Covered Population Group	Share of Texas Population
Members of a racial or ethnic minority group (racial or ethnic minorities) ²²	58%
Individuals in households below 150% poverty (low-income households) ²²	23%
Individuals residing in rural areas (rural residents) ²³	22%
Persons who are 60 years of age or older (aging individuals) ²²	18%
Individuals with disabilities ²²	11%
Individuals with limited English proficiency (Individuals who speak English less than "very well" or have low levels of literacy) ²³	27%
Veterans ²²	5%
Incarcerated individuals ²³	1%

This plan also considers the digital opportunity experiences of immigrants, members of tribal communities and unhoused individuals as population groups uniquely impacted by the digital divide.

²⁰ Comment 255 from the public comment period informed changes to this section of the plan.

²¹ U.S. Census Bureau, Digital Equity Act Population Viewer(n.d.), <https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42>.

²² U.S. Census Bureau, American Community Survey 5-year data (2017-2021), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

²³ U.S. Census Bureau, Digital Equity Act Population Viewer (n.d.), <https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42>;

2.c.iv Alignment with State Outcome Areas

As part of the digital opportunity planning process, the state formed six task forces aligned with the six outcome areas listed below. Each task force included representation from individuals belonging to or organizations serving at least one covered population. *Chapter 4: Collaboration and Stakeholder Engagement* details group structure and participants. The following sections explore findings from the task forces and how digital opportunity goals under the measurable objective categories will impact and interact with the broader efforts and goals of the state's six outcome areas:

- 1. Economic and Workforce Development**
- 2. Education Access and Advancement**
- 3. Health Improvement**
- 4. Accessibility of Essential Services**
- 5. Civic and Social Engagement**
- 6. Business and Telecommunications Growth**

2.c.iv.1 Economic and Workforce Development²⁴

The BDO's vision for this outcome area is: **The economy will grow stronger and more resilient by having a more skilled workforce from farms to factories, offices to CAIs, with talent staying and growing in communities to support economic development.**

Economic and workforce development is one area in which the intersection between digital opportunity and broadband infrastructure is particularly clear. As detailed in Section 4.b.vi, *State Agency Partnerships*, the BDO acknowledged the interconnected nature of digital opportunity and workforce development through a deep partnership with TWC as part of the digital opportunity planning process. The BDO's attention to workforce development as integral to both its infrastructure and digital opportunity goals is clear in the detailed findings and recommendations that emerged from the partnership with TWC. Further, in February 2024, the BDO announced plans to hire a Broadband Workforce Coordinator as a direct commitment to strengthening connections between workforce development, broadband infrastructure and digital opportunity.

The BDO will ensure that the state of Texas and its subgrantees advance workforce development efforts that support inclusive job opportunities for all Texans. The BDO's workforce development approach will be regionally focused in consideration of the unique talent needs of each region, as well as the state's size, economic diversity across industries, large rural population and changing demographics. While the needs of industry will drive the approach, it will also address persistent disparities in who has access to quality jobs across the state, ensuring a more diverse talent pipeline.

Broadband infrastructure investment will impact job needs across industries, including those involved in the physical buildout of broadband infrastructure, operations and maintenance of that infrastructure, and those industries involved in the facilitation of broadband access and digital inclusion. Texas has not been

²⁴ Comments 15, 104, 262, 297 and 311 from the public comment period informed changes to this section of the plan.

as severely impacted by the broadband labor shortage as other parts of the country – though several buildout and operations-related broadband jobs experienced labor shortages (i.e., surveyors and drafters, master and stage electricians, trenches, and software engineers).²⁵ Over 91 percent of Texas job postings across all industries include a need for digital skills. This is especially important for advancement: as digital skills requirements increase, so do wages.²⁶ There is also a clear connection between digital skills and jobs required for the physical buildout of broadband infrastructure. For example, construction workers now use “wearable tech” to take measurements and photos, and drones to collect surveying data on building sites – demonstrating the necessity of digital skills to growing a strong and resilient economy.²⁷

“Increased access to broadband would really help our agricultural community – whether it’s keeping a family farm in business or larger agriculture being able to innovate with the rest of Texas and the world.”

– Public Meeting Attendee, Lubbock, Texas

To better understand how broadband expansion will drive current and future workforce needs in Texas, the BDO supported a range of planning activities, including convening the Economic and Workforce Development Task Force, which included representatives from the TWC, the Federal Reserve Bank of Dallas, Goodwill, Texas Farm Bureau and other organizations. Task force discussions revealed broadband reliability, broadband affordability and access to digital skills training as primary concerns for the development of Texas’ workforce. Digital skills are central to the long-term economic development and

²⁵ Appendix K, *Building the Broadband Industry Workforce and Supporting Digital Skills for Texans*.

²⁶ “New Report: 92% of Jobs Require Digital Skills, One-Third of Workers Have Low or No Digital Skills Due to Historic Underinvestment, Structural Inequities”, *National Skills Coalition* (Feb. 6, 2023), <https://nationalskillscoalition.org/news/press-releases/new-report-92-of-jobs-require-digital-skills-one-third-of-workers-have-low-or-no-digital-skills-due-to-historic-underinvestment-structural-inequities>.

²⁷ “Construction and transportation workers need investment in their digital skills”, *National Skills Coalition* (March 20, 2020), <https://nationalskillscoalition.org/wp-content/uploads/2020/12/Digital-Skills-Const-and-trans-final.pdf>.

competitiveness of Texas, as employers increasingly seek digitally competent talent.²⁸ This phenomenon crosses sectors: from small businesses to the agricultural industry, stakeholders confirmed the need for further digital skills resources to remain competitive and grow or retain their workforce, highlighting specific needs in rural regions of Texas.

In addition to task force discussions, 26 entities self-identifying as workforce development organizations responded to the DRMTS, out of a total of 368 valid responses. Other DRMTS respondents concerned with workforce issues include libraries, community colleges, economic development agencies, city/county/state governments, COGs, nonprofit organizations and labor organizations.

The BDO furthered its planning activities by collaborating directly with TWC – the state agency charged with overseeing and providing workforce development services to employers and jobseekers in Texas. The objective of this

“Internet access could support education advancement and access to more jobs that you can either work remotely or people can stay in their community. [We have a] more locally attractive workforce and more of a locally attractive place to do business if the internet is in place.”

– Public Meeting Attendee, Bryan, Texas

collaboration was to research the needs of Texas’ broadband workforce as well as ensure the inclusion of individuals from covered populations in the digital opportunity planning process. In partnership with the BDO, TWC conducted landscape analysis and desktop research, and interviews with job seekers, employers, training providers and other Texas residents which

culminated in a final report and supported the development of this plan. The final report is included in this plan as *Appendix K*.

²⁸ BDO Economic and Workforce Task Force Meetings (2023).

As stated in Texas Goal 3, the BDO is committed to ensuring access to a broad foundation of digital literacy skills for all Texans. The expansion of broadband infrastructure will have an impact on both job needs and job access: Texas' vibrant economy, booming and diverse population, and investments in job training put the state in a strong position to address these challenges. The BDO has elevated its commitment to workforce development as a critical component of its broadband expansion by committing to hiring a staff person that will focus on advancing its workforce development efforts.

Given the essential nature of digital skills for employment across industries, the BDO will support Texas' workforce development ecosystem through the following approaches:

- 1. The BDO will collaborate across state government, leveraging existing workforce initiatives, sectoral-based partnerships and Texas' history of working with industry to meet talent needs.**

The BDO will collaborate with partner agencies to support workforce development goals for all Texans, including expanding its current partnership with TWC to build on learnings and research, such as those described in section 5.c. The BDO will seek to identify and expand successful workforce training models. For example, the Texas Reskilling and Upskilling Education Program (TRUE), a \$50 million investment in Texas community colleges to train workforce in industry-aligned, high-demand occupations. Texas community colleges currently provide more than 90 percent of credit-bearing career technical education,²⁹ a critical component in broadband related jobs and digital skills development, especially given standardization challenges across credentials and industries. This could be a critical area to engage more closely with Texas' Historically Black Colleges and Universities (HBCUs) as well in diversifying talent pipelines in key digital and tech industries. Finally, two Texas programs that have received funding from the U.S. Department of Labor's Investment in America workforce training programs may provide critical case

²⁹ "Rebuilding community college momentum by meeting student needs", *Texas Tribune* (Jan. 14, 2022), <https://www.texastribune.org/paid-post/rebuilding-community-college-momentum-meeting-student-needs/>.

studies to scale: Workforce Solutions Cameron in Brownsville and Houston's Capital Investment in Development and Employment of Adults, Inc.

2. The BDO will directly support industry-specific digital training programs for covered populations.

The BDO will support industry-specific digital skills training for diverse adult populations. This will include broadly expanding the availability of programming that links digital skills directly to job training, funding programs with clear success metrics and those that leverage employer partnerships, earn and learn models, and wraparound services. Wraparound services – the broad range of supports such as childcare, transportation services, stipends or food security – can assist trainees in completing programs and are essential to the success of all training programs. Examples of programs offering industry-specific digital skills training for diverse adult populations include Goodwill Houston's Career Pathways Program and its Reentry Services for justice-involved individuals, TWC's Apprenticeship and Veteran Service Programs, and the Windham School District that serves incarcerated individuals.

Ecosystem partners have also cited the need for flexibility in workforce development funding, specifically to support wraparound services for trainees. Wraparound services are critical to supporting retention for a diverse pipeline of talent who face unique barriers to completing training. This is especially important for this plan's regional approach: programs that serve rural populations may need to provide transportation; women may need improved access to childcare services; certain regions may have a higher need for translation services for English language learners.

3. Build partnerships to align and support the digital skills workforce development ecosystem.

The BDO will solicit innovative proposals that support research in aligning the digital skills training sector. Through TWC's research in partnership with the BDO, workforce ecosystem stakeholders highlighted the lack of alignment across digital skills training success metrics and certifications. Consistent

curriculum and training standards that align with industry standards are essential to ensuring all Texans have the skills needed for good jobs. Improved research could align the state's digital skills training goals with industry needs and allow for improved outcomes in line with the state's existing workforce strategies. The BDO is also interested in innovative approaches that provide industry-aligned and transferable skills and credentials to support talent in building their career pathways, including in-house upskilling within companies (upskilling, reskilling, train the trainer models). Additional research in this space could help identify such approaches.

The BDO will seek opportunities to partner with anchor and mid-sized companies in key regions to sponsor digital skills training to upskill workers, to address a need cited by many broadband-related industry employers. Effective collaboration with regional chambers of commerce can help connect employers to public resources and foster partnerships with one another. BDO will explore additional ways to act as a matchmaker amongst training programs, digital skills trainers and employers. Through the BDO's partnership with TWC, employers spoke of the challenges of finding and retaining talent. Within the broadband industry specifically, employers articulated the desire to hire more diverse staff and find pathways to recruit those without four-year degrees. Interviews with employers also revealed that they were unaware of existing training programs: publicizing this information could help support improved connections in the system. This may be especially useful in rural communities, where trainers expressed challenges due to the lack of employer connections. Building on the existing asset inventory, the BDO will explore working with an intermediary to create a comprehensive, public platform to serve as a resource to industry, CBOs and trainers.

The expansion of broadband infrastructure will have an impact on both job needs and job access. Together with state agency partners and the workforce development ecosystem at large, the BDO will execute these approaches to grow a stronger and more resilient economy for the state of Texas.

Alignment with existing statewide priorities/goals:

Texas Broadband Plan 2022

Better connecting Texans to employment opportunities and digital skills education and attracting more businesses to Texas are important considerations in the Broadband Plan. The Broadband Plan also explores the supply chain and organizational capacity concerns related to broadband deployment. As the BDO fosters further inter-agency and public-private partnerships toward the implementation of the Digital Opportunity Plan, it will advance the Broadband Plan's goal to close the digital divide.

In alignment with economic and workforce development, the Broadband Plan calls for these goals:

- Close the digital divide as it “prevents Texans from accessing services necessary to health, education, employment and safety.” (Relates to Texas Goal 5 and supports all covered populations, especially aging individuals, individuals with disabilities and low-income households.)
- Foster coordination across community colleges, technical schools, universities and organizations to develop workforce development programs. (Relates to Texas Goal 3 and supports all covered populations, especially low-income households.)
- Assess supply chain challenges and make mitigation recommendations. (Relates to Texas Goal 1 and supports all covered populations, especially rural residents.)

Texas Workforce Commission Strategic Plan 2023-2027³⁰:

TWC outlines the following goals for 2023-2027:

- **TWC Goal 1: Ensure the Texas workforce system supports employers and allows business and industry to thrive.**

³⁰ Texas Workforce Commission, Strategic Plan 2023-2027 (n.d.), strategic-plan-fiscal-years-2023-to-2027-twc.pdf (texas.gov).

- Provide timely, relevant workforce solutions that enable employers to find and retain the qualified workers needed to be successful and globally competitive. (Relates to Texas Goals 3 and 5 and supports all covered populations.)
- Engage with industry to address current and future workforce development needs. (Relates to Texas Goals 3 and 5 and supports all covered populations.)
- **TWC Goal 2: Ensure a skilled workforce is prepared and equipped to fill critical in-demand jobs, both now and in the future.**
 - Assist workers in obtaining the skills necessary to fill critical occupations, as identified by industry. (Relates to Texas Goal 3 and supports all covered populations, especially low-income households.)
 - Connect a qualified workforce with employers. (Relates to Texas Goal 5 and supports all covered populations, especially low-income households.)
 - Prepare a skilled workforce to fill critical jobs in the future. (Relates to Texas Goal 3 and supports all covered populations, especially low-income households.)
- **TWC Goal 3: Provide exceptional customer service and support to all workforce system stakeholders.** (Relates to Texas Goals 1, 2 and 5 and supports all covered populations, especially low-income households.)
 - Deliver quality customer service to every customer who interacts with the workforce system.
 - Seamlessly integrate programs and coordinate services and make them easy for all workforce system stakeholders to access and navigate.

- Maintain the highest levels of integrity, accountability and efficiency across the workforce system and TWC programs.

Texas Workforce Commission Adult Education and Literacy Strategic Plan Fiscal Years 2021-2026³¹:

TWC’s vision for adult education and literacy (AEL) is “To deliver education, workforce, and postsecondary education and training outcomes for students through innovative service delivery and partnerships that result in statewide alignments, efficiencies, and accountability.”

The AEL Strategic Plan outlines the following goals for fiscal years 2021-2026:

- **AEL Goal 1: Increase outcomes**
 - **Objective 3:** Enhance AEL curriculum, standards and skill assessment options to boost employability and college readiness of AEL students. (Relates to Texas Goal 3 and supports individuals with a language barrier.)
- **AEL Goal 2: Address demand with increased access**
 - **Objective 4:** Increase student access to digital technology, including broadband connections and distance learning applications. (Relates to Texas Goals 1, 2, 3 and 5 and supports individuals with a language barrier.)
- **AEL Goal 3: Enhance customer experience with increased coordination**
 - **Objective 2:** Support development of career pathway ladders with AEL and its workforce system partners. (Relates to Texas Goal 3 and supports all covered populations.)

The Digital Opportunity Plan will support the first two goals of the AEL Strategic Plan by connecting more people to online job searching and application

³¹ Texas Workforce Commission, Consolidated 2021-2025 Strategic Plan (n.d.), [strategic-plan-fiscal-years-2021-to-2025-twc.pdf \(texas.gov\)](#).

websites and ensuring that the workforce receives the digital skills training needed to prepare for an increasingly digital employment landscape. In addition, increased access to technology, internet, training and support as a result of this plan will support these first two goals and directly advance objective four in goal two. The Economic and Workforce Development Task Force successfully convened TWC, other nonprofits and higher-education institutions, one step toward fostering smoother collaboration between Texas' workforce system stakeholders as outlined in the third goal of the AEL Strategic Plan.

Internet affordability is one of the main barriers to accessing reliable internet, and this is ultimately a quality-of-life issue for the Texas workforce. Better internet can connect Texans to better jobs and, in turn, better housing, health care, community and other benefits. (Relates to Texas Goal 1 and supports all covered populations.) Providing more affordable internet options, fostering trust in the government and providing quality jobs in the broadband industry (e.g. fiber technicians) will be critical to achieving broadband expansion in Texas.

2.c.iv.2 Education Access and Advancement

The BDO's vision for this outcome area is: **Texans will have access to a higher quality education no matter where they live, with the opportunity for educational advancement no matter their stage of life, as a product of the learning opportunities that the internet has to offer and that schools can deliver online.**

The mission of the Texas Education Agency (TEA), the state agency charged with overseeing primary and secondary public education, is that every Texas child is prepared for success in college, career or military.³² Broadband access and adoption play an essential role in this effort, ensuring that students can

³² Texas Education Agency, Agency Strategic Plan 2023-2027, https://tea.texas.gov/system/files/2023-2027-TEA-Strategic-Plan_0.pdf.

participate fully in virtual learning environments, find and apply for jobs, and gain new career skills.

In addition, efforts to advance Texas Goal 3 – ensuring all Texans have a broad foundation of digital literacy skills and access to a continuum of digital skills development programs – will support Texans’ educational advancement no matter their stage of life (Supports all covered populations).

The BDO convened the Education Task Force to discuss how internet availability, device availability and digital skills impact Texas students, educators and school communities. These discussions revealed that while many educational institutions provide access to digital devices to students at little to no cost, they often struggle to bear the high expense of replacing outdated devices. Task force members suggested that educational device deployments be paired with technical support, helping students and families adopt basic device skills, cybersecurity awareness and the necessary software for virtual learning. The Education Task Force also discussed the need for digital navigators in schools, barriers to ACP enrollment among adult students, internet security concerns on campus and the lack of capacity in smaller schools to apply to grants and provide ongoing support.

Out of 368 valid responses in the DRMTS, 94 entities self-identified as K-12 schools, community colleges or public/private universities.

Alignment with existing statewide priorities/goals:

Operation Connectivity:

Operation Connectivity is a partnership that includes Gov. Greg Abbott, the Dallas Independent School District and TEA to connect all of Texas' 5.5 million public school students with both a device and reliable internet connection. (Relates to Texas Goals 1 and 2 and supports immigrants, low-income households, racial or ethnic minorities and rural residents.) This three-phase program was launched in May 2020.

Between May and December 2020, Operation Connectivity supported the acquisition of more than 4.5 million devices for students, resulting in a 1:1 ratio of device access per student. Texas leveraged almost \$1 billion of funding to support this initiative, including federal, state and local sources.³³



Image credit: Compare Fibre via Unsplash

³³ Texas Education Agency, What is Operation Connectivity? (n.d.), <https://tea.texas.gov/texas-schools/health-safety-discipline/covid/operationconnectivityplaybook.pdf>.

Texas Education Agency Long Range Plan for Technology:

The TEA Long Range Plan for Technology states: “An effective education system is key to equipping students with the knowledge, skills, and integrity to contribute to our state in positive ways. Technology is a driving force for transforming education as we know it, creating stronger, better-educated students, and ultimately building a stronger Texas.”

The TEA Long Range Plan for Technology’s has six strategic goals, five of which directly relate to Digital Opportunity:³⁴

- **TEA Goal 1:** Personalized Flexible, Empowered Learning: Adaptive and individualized learning based on student needs and abilities. (Relates to Texas Goals 3 and 5 and supports individuals with disabilities and individuals with limited English proficiency.)
- **TEA Goal 2:** Equitable Access: Fair and equal opportunities for all students to take full advantage of their education. (Relates to Texas Goals 2 and 3 and supports immigrants, individuals with disabilities, individuals with limited English proficiency, low-income households, racial or ethnic minorities and rural residents.)
- **TEA Goal 3:** Digital Citizenship: Responsible, safe, respectful and legal use of technology. (Relates to Texas Goal 4 and supports the covered populations listed in point 2 above.)
- **TEA Goal 4:** Safety and Security: Environment free of physical, emotional and digital harm or risk. (Relates to Texas Goal 4 and supports the covered populations listed in point 2 above.)
- **TEA Goal 6:** Reliable Infrastructure: Available, trusted technology components to support organizational goals. (Relates to Texas Goals 1 and 2 and supports the covered populations listed in point 2 above).

³⁴ Texas Education Agency, Long Range Plan for Technology Resource Center, <https://tea.texas.gov/academics/learning-support-and-programs/technology-planning/long-range-plan-for-technology>.

2.c.iv.3 Health Improvement ³⁵

The BDO's vision for this outcome area is: **Texans' personal and community health will improve as a result of easier access to health services and a recognition that broadband adoption is a "super determinant" of health.**

"The area has disparities in health care, particularly telehealth, with limited broadband access. It's already difficult to see specialist doctors. There's a big gap that just stays and gets worse without access to the internet."

– Public Meeting Attendee, Lubbock, Texas

The health and wellbeing of Texans is an important state priority that is closely linked to the ability to access broadband and digital opportunity. Telemedicine, for instance, is key to delivering health care services to aging individuals, individuals with disabilities, rural residents and other Texans who may have difficulty accessing in-person health care. Research conducted by Texas A&M AgriLife Extension Service in partnership with BDO reveals that 64 of Texas' 254 counties do not have a hospital; 25 counties do not have a primary care physician. Dozier, Bauer, Baze et. al shared, "These counties can benefit from reliable high-speed internet access that allows them to connect to experts in neighboring counties."³⁶ Telemedicine can also facilitate online disease management services, electronic health records, home monitoring and other vital health care services.

To discuss the intersection of digital opportunity and the health and well-being of all Texans, the BDO convened the Health Task Force. Task force discussions immediately identified the lack of affordable, reliable internet and digital skills as common barriers to accessing telehealth services in Texas. While community

³⁵ Comments 59 and 278 received during the public comment period informed changes to this section of the plan.

³⁶ Appendix L: Dozier, M., Bauer, R., Baze, J., Thomas-Wilson, C., & Klose, S. L. (2024). Broadband Adoption for Rural Communities. Disaster, Assessment, and Recovery Department, Texas A&M AgriLife Extension Service.

centers and health care centers provide some space and devices needed for telehealth, technical support helping patients set up devices and/or troubleshoot remains an unresolved gap. Additionally, awareness of the availability and importance of telemedicine options and digital training for how to access them will be a critical component for success.

“We live in a rural area that has poor internet service. My husband has a heart defibrillator that is monitored by Wi-Fi. For health reasons we need a better system than what we have.”

– Public comment on the draft plan

While Texans – especially those belonging to covered populations – face significant gaps and barriers when accessing telehealth services, the Health Task Force identified several existing assets and successful models for leveraging technology to improve health outcomes. One example is the Pottsboro Library. Located in rural Grayson County, Pottsboro Library’s private “telehub,” equipped with blood pressure cuffs and other medical equipment, enables patients to access health care appointments remotely. To facilitate telehealth and other digital opportunity initiatives, Pottsboro Library employs digital navigators, partially funded through the support of the TSLAC. Another example is the newly established Texas Tech University Health Sciences Center (TTUHSC) Institute of Telehealth and Digital Innovation. The Institute aims to establish health care hubs at the TTUHSC’s campuses and create a “hub-and-spoke” model to continue to serve surrounding rural communities via telehealth and existing local health care resources. Their programs provide health care to 108 counties in West Texas.³⁷

³⁷ Cisneros, Suzanna, “Digital Health Takes Center Stage TTUHSC Announces New Institute of Telehealth and Digital Innovation”, *TTUHSC Daily Dose* (Sept. 26, 2023), <https://dailydose.ttuhscc.edu/2023/september/telehealth-institute-ribbon-cutting.aspx>.

Alignment with existing statewide priorities/goals for health:

Department of State Health Services Strategic Plan for 2023-2027

In June 2022, the Texas Department of State Health Services (DSHS) published part 1 of their strategic plan for 2023-2027. The goals and objectives of the Strategic Plan that relate to Digital Opportunity are:³⁸

- **DSHS Goal 2:** Ensure efficient access to appropriate services.
 - **Objective 2.1:** Empower Texans to identify and apply for services. (Relates to Texas Goal 5 and supports all covered populations.)
 - **Objective 2.3:** Ensure people receive services and support in the most appropriate, least restrictive settings based on individual needs and preferences. (Relates to Texas Goal 5 and supports all covered populations.)
 - **Objective 2.4:** Strengthen consumers' access to information, education and support. (Relates to Texas Goal 5 and supports all covered populations.)

All Texas Access Report

In December 2022, the Texas Health and Human Services Commission (HHSC) published the All Texas Access Report,³⁹ in collaboration with local mental health authorities and local behavioral health authorities. The report articulates regional and statewide goals and strategies that leverage internet-enabled technologies such as developing strategies to strengthen mental health care access and crisis care while reducing costs to local governments providing services to people experiencing a mental health care crisis (including costs associated with transportation, incarceration and emergency room visits of people with mental illness). For example, equipping rural law enforcement with technology for remote mental health evaluation can allow for expedient

³⁸ Texas Health and Human Services, Department of State Health Services Strategic Plan for 2023-2027 Part I, (June 2022), <https://www.dshs.texas.gov/sites/default/files/legislative/2022-Reports/DSHS-Strategic-Plan-2023-2027-Part-I.pdf#page=16&zoom=100,0,0>.

³⁹ Texas Health and Human Services, All Texas Access Report (December 2022), [all-texas-access-report-dec-2022.pdf](#).

resolution of a case, sparing all involved of unnecessary costs and hardship.
(Relates to Texas Goal 2 and supports rural residents.)

While the All Texas Access Report does not articulate a plan for technology or digital opportunity, a successfully executed Digital Opportunity Plan will support HHSC in advancing its goals.



Image credit: National Cancer Institute via Unsplash

2.c.iv.4 Accessibility of Essential Services⁴⁰

The BDO’s vision for this outcome area is: **Texans will have access to the resources and tools they need to ensure that public resources are used most effectively and that our communities are safer and more resilient, especially in extreme weather events.**

“For the organization’s agencies, it’s a lack of digital skills... [Employees] are social workers, not IT people. My job at the state level is to make them effective and bring resources to them. They need to be more reachable to the populations they are serving. A person will bring an application in person – they will be missing a document and need to drive home to get it and bring it back. Online would be an easy fix for this, but they don’t have the literacy.”

– Essential Services Task Force Member

Texans need internet access, devices and skills to complete essential daily tasks and to ensure their safety, security and quality of life. The BDO convened the Essential Services Task Force to contribute the perspectives of public safety and poverty relief organizations, including state and municipal agencies, nonprofit organizations and emergency management entities, to the digital opportunity planning process.

The Essential Services Task Force found:

Texans need strong, reliable internet, access to appropriate devices, digital literacy and technical assistance. Access to the internet and devices that Texans know how to use are critical for residents to access essential services such as

⁴⁰Comment 271 received during the public comment period informed changes to this section of the plan.

emergency announcements and 9-1-1, in addition to other public resources aimed at low-income individuals, seniors, veterans and incarcerated individuals.

While statewide goals and plans focused specifically on increasing access to essential services are limited, existing programs like the [Texas Technology Access Program \(TTAP\)](#) at the University of Texas' Texas Center for Disability Studies, increase access for people with disabilities and aging individuals through assistive technology tools and services. (Relates to Texas Goal 2 and supports people with disabilities and aging individuals.) The [Inmate Tablet Program](#) enables the Texas Department of Criminal Justice to deliver information and services to incarcerated populations. (Relates to Texas Goal 2 and supports incarcerated individuals.) Further, 93 organizations reported to the DRMTS that they provide publicly accessible online services.



Image credit: Stock Images, Microsoft

Alignment with existing statewide priorities/goals for Essential Services:

Texas Homeland Security Strategic Plan 2021-2025

The **Texas Homeland Security Strategic Plan**, published by the Texas Governor's Office, includes an objective and several priority actions that relate to Digital Opportunity:⁴¹

- **Homeland Security Goal 2 Protect: Objective 2.6:** Enhance statewide cybersecurity efforts to protect information assets. (Relates to Texas Goal 4 and supports all covered populations.) **Priority actions:**
 - **2.6.1:** Continue to expand and strengthen the Texas Information Sharing and Analysis Organization as a trusted hub for the collection and sharing of cybersecurity risk information among state, local, higher education and private sector stakeholders.
 - **2.6.2:** Maintain the Texas Cybersecurity Framework to mitigate risks and improve the resiliency of state information systems and encourage adoption of the Framework's standards by local jurisdictions.
 - **2.6.3:** Create a culture of security among all government agencies through development and implementation of training programs and outreach efforts focused on threat awareness and good cyber hygiene practices.
 - **2.6.4:** Develop and implement cybersecurity exercise programs to encourage preparedness at all levels of government and ensure sharing of best practices and lessons learned.
 - **2.6.5:** Enhance collaboration with higher education institutions to build the future cyber workforce for Texas.

⁴¹State of Texas, Texas Homeland Security Strategic Plan 2021-2025 (n.d.), https://gov.texas.gov/uploads/files/press/HSSP_2021-2025.pdf.

- **2.6.6:** Ensure the integrity of Texas elections by protecting electoral systems against compromise or interference.

2.c.iv.5 Civic and Social Engagement

The BDO's vision for this outcome is: **Texans will be more connected to one another, their communities and their government, with improved tools to participate in civic processes.**

The BDO put together the Civic and Social Engagement Task Force, including representatives from libraries, state agencies, government associations, CBOs, faith-based organizations, local governments, COGs and other entities concerned with the overall well-being and quality of life of all Texans. These organizations play a critical role in broadband expansion and adoption across Texas, given their deep community roots and awareness of community needs.

Task force discussions revealed that internet affordability is a significant barrier for low-income households, aging individuals and rural residents in Texas. Additionally, the task force highlighted the need for digital skills training programs that consider the specific needs of people with disabilities or language barriers. Overall, the task force expressed a desire for more support and facilitation from local governments as well as funding for CAIs – schools and libraries in rural areas, in particular – to expand broadband access across the state.

Civic and social engagement organizations made significant contributions to the DRMTS, with 75 responses from libraries, 70 from community support or community-based organizations, and 55 from K-12 schools. From the public sector, city (63), county (45) and state (39) government respondents were the most common respondents to the DRMTS.

Alignment with existing statewide priorities and goals for civic and social engagement:

Texas State Library and Archives Commission Strategic Plan⁴²

The TSLAC published its five-year Strategic Plan with goals that directly address digital opportunity, assistance for CAIs that support digital opportunity goals and specific covered populations.

- **TSLAC Goal 2:** Support affordable access and training to advance digital connectivity and broadband for libraries and communities to bolster statewide digital opportunity and literacy. (Relates to Texas Goals 1 and 3 and all covered populations.)
- **TSLAC Goal 6:** Provide all types of libraries with the tools, training and resources needed to meet the evolving information, educational and economic needs of Texans and the communities libraries serve. (Relates to Texas Goals 3 and 4 and all covered populations.)
- **TSLAC Goal 8:** Enhance quality of life and well-being for all Texans who are unable to read standard print by providing high-quality, accessible reading materials and library services. (Relates to Texas Goal 5 and supports aging individuals and individuals with disabilities.)

Texas Broadband Plan 2022:

The guiding principles of the Broadband Plan focus on connecting CAIs to one another and promoting coordination, cooperation and communication among public, private and nonprofit entities in Texas. These efforts are aligned with the plan's goal to better serve the covered populations with critical digital access. (Relates to Texas Goals 1, 2, 3, 4 and 5 and supports all covered populations.)

By better understanding the needs of organizations that work directly with

⁴² Texas State Library, Agency Strategic Plan 2023-2027 (June 1, 2022), <https://www.tsl.texas.gov/sites/default/files/public/tslac/agency/exec/TSLAC-strategic-plan-2023-2027.pdf>.

communities in Texas, the BDO can provide efficient and targeted solutions to the digital divide in Texas.

2.c.iv.6 Business and Telecommunications Growth

The BDO's vision for this outcome is: **The telecom industry and business community will grow stronger through the implementation of this plan as more Texans adopt internet services and become more productive in their work.**

The Business and Telecom Task Force engages representatives from satellite operators, national carriers, local and rural ISPs and others. To gather additional input, the BDO conducted a Texas Internet Service Provider Survey (ISP Survey) between March and June 2023. The ISP Survey received responses from 79 unique broadband providers.

Results from the ISP Survey showed that while 55 percent of participating ISPs in Texas serve all covered populations, the majority of ISPs do not provide programs promoting access to digital devices, digital skills training or digital opportunity funding such as subsidies to improve broadband affordability.

Almost two-thirds of respondents to the ISP Survey participate in ACP, and 64 percent advertise it. Only 33 percent of respondents have discounted plans targeted specifically at low-income households, other than ACP and Lifeline.

Almost a quarter of ISP Survey respondents offer programs that support or provide access to computing devices. Of those offering such programs, 38 percent offer discounted or free computing devices for public computing centers; 38 percent offer grants, gifts or other financial contributions to other entities to reduce the cost of devices; 29 percent offer free or reduced cost devices to eligible broadband subscribers; and 24 percent refurbish old devices for sale at a reduced cost.

Almost half of ISP Survey respondents reported offering programs that support or promote digital skills and technical support. Of those that have programs, 60 percent offer in-person support for individuals, 23 percent offer in-person support for groups, 20 percent offer digital navigators and 17 percent offer in-person online classes.

A quarter of ISP Survey respondents provide digital opportunity funding to other organizations such as grants, loans or other assistance for programs operated by other organizations that promote digital inclusion in Texas. Of those who provide support, 82 percent provide funding for broadband access and affordability; 53 percent provide funding for digital skills and technical support; 35 percent provide funding for device access; and 24 percent provide funding for digital navigators.

Discussion in the Business and Telecom Task Force meetings revealed that ISPs face barriers to participating in and/or achieving results in broadband expansion and adoption initiatives, including the high cost of installing fiber in rural areas and lack of internal organizational capacity. Nonetheless, 85 percent of ISP Survey respondents are definitely or probably interested in receiving BEAD grants to expand their coverage footprint, showing promise in leveraging ISPs to start closing the digital divide.

23%

of ISP respondents offer programs that support or provide access to computing devices.

48%

of ISP respondents have programs that support or promote digital skills and technical support.

25%

of ISP respondents provide digital opportunity funding to other organizations.

Alignment with statewide priorities and goals:

Texas Broadband Plan 2022

The Broadband Plan suggests that low competition among ISPs – particularly in rural areas – creates a barrier to internet affordability across the state. At the time of the Broadband Plan’s publication, in one Texas area there was only one provider providing service to 4.4 million households.⁴³ As part of the Digital Opportunity Plan, the BDO will continue to work with ISPs to identify and address broadband deployment and other affordability barriers, and foster public-private partnerships to expand broadband coverage and affordable internet options. (Relates to Texas Goal 1 and supports all covered populations.)

BOOT Program

The BOOT program is Texas’ first competitive broadband grant program aimed at funding infrastructure projects that bring broadband access to end users in eligible areas of the state. Funded broadband projects must be capable of minimum speeds of 100 megabits per second (Mbps) for downloads and 20 Mbps for uploads and can scale to 100/100 Mbps. The program is funded by CPF funds through the U.S. Treasury. The first round of funding made \$120 million available, and the BDO accepted more than 190 applications totaling more than \$180 million in funding requests through May 2023. At the time of developing this plan, the BDO continues to evaluate applications and plans to announce awards for the first round of BOOT funding in early 2024. (Relates to Texas Goal 1 and supports all covered populations, especially rural residents.)

BEAD Grants

BEAD grants will fund eligible broadband infrastructure projects that help expand high-speed internet access and use. (Relates to Texas Goal 1 and supports all covered populations, especially rural residents.) BEAD grants will support various functions and stages of broadband access and adoption projects,

⁴³Texas Broadband Development Office, Texas Broadband Plan 2022 (June 15, 2022), <https://comptroller.texas.gov/programs/broadband/about/what/docs/broadband-plan-22.pdf>.

including infrastructure deployment, outreach, capacity building and planning. The grants will concentrate on initiatives in priority areas, including both unserved locations (areas with no internet access or access to internet speeds lower than 25/3 Mbps) and underserved locations (areas with access to internet speeds greater than 25/3 Mbps but lower than 100/20 Mbps).

ACP

Under ACP, eligible households can receive a monthly discount of up to \$30 for internet service or up to \$75 per month for households on tribal lands. (Relates to Texas Goal 1 and supports low-income households.) Eligible households looking to purchase a digital device, such as laptop, desktop computer or tablet, can also benefit from a one-time discount of up to \$100 when purchasing from participating providers. (Relates to Texas Goal 2 and supports low-income households.) To qualify for the one-time device purchase discount, households must contribute an amount between \$10 and \$50 toward the purchase price.

As of December 2023, approximately 1.7 million households in Texas are enrolled in ACP, about 40 percent of all ACP-eligible households in Texas,⁴⁴ which is slightly lower than the national ACP enrollment rate of 42 percent. The South Texas region has the highest ACP enrollment rate with 42 percent of all households participating in the program, followed by the Upper Rio Grande (31 percent) and Southeast (20 percent) regions. Over the last 12 months, Texas ACP enrollment has increased steadily.⁴⁵

Sixty-five percent of respondents to the ISP Survey participate in ACP, and 64 percent advertise it. Only 33 percent of ISP Survey respondents offer discounted plans targeted specifically at low-income households, other than ACP and Lifeline.

⁴⁴ Universal Service Administrative Co., ACP enrollment and claims tracker (n.d.), <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/>.

⁴⁵ EducationSuperHighway, Affordable Connectivity Program Enrollment Dashboard (n.d.), <https://www.educationsuperhighway.org/no-home-left-offline/acp-data/#dashboard>.

In January 2024, the FCC announced that ACP would likely end in April 2024. Without additional funding from Congress, the FCC stopped accepting new program enrollments and began steps to wind down the program. Many Texas organizations, including several that provided public comment on this plan, are advocating for the continuation of the ACP as a successful program that has positively impacted broadband adoption in the state. The Texas Legislature could choose to establish a program that addresses broadband affordability. A statewide subsidy program, similar to the ACP, could assist with NTIA Strategy 3: Promote internet adoption.

Lifeline/Tribal Lifeline Program

Lifeline is an FCC program that aims to make communications services more affordable for low-income households. It provides discounts on eligible monthly phone, broadband internet service or bundled voice-broadband packages from participating providers. (Relates to Texas Goals 1 and 2 and supports low-income households and/or tribal communities.) As of April 2023, 276,500 Texas households are enrolled in the Lifeline program – just 9 percent of the 3 million Lifeline-eligible households in the state,⁴⁶ lower than the national enrollment rate of 17-25 percent as of 2021.⁴⁷

Forty-four percent of respondents to the ISP Survey participate in the Lifeline Program or the Tribal Lifeline Program.

While several federal and statewide programs address the barrier of internet affordability for lower-income, tribal and/or rural households, under the Digital Opportunity Plan, the BDO's further engagement with business and telecom stakeholders can ensure further promotion of and participation in these programs.

⁴⁶ Universal Service Administrative Co., Program Data, Lifeline Participation (n.d.), <https://www.usac.org/lifeline/resources/program-data/#Participation>.

⁴⁷ EducationSuperHighway, No home left offline (n.d.), <https://www.educationsuperhighway.org/no-home-left-offline/>.

2.d Strategy and Objectives

The Digital Opportunity Plan is the first of its kind. Until now, the state of Texas has never led a coordinated effort to gather and analyze data related not only to broadband availability, but also to digital opportunity barriers and assets across the state, including metrics of affordability, digital skills, device access and cybersecurity awareness. This section presents the overarching strategies and KPIs for advancing the state’s vision of digital opportunity for all Texans, including individuals belonging to all covered populations. The BDO will measure the progress of this plan against the baseline data established here, noting limitations to the baseline data sets. Online tools such as digital surveys offer the fastest and most cost-effective way to gather baseline data. This is a core limitation to the baseline data set, as this plan is most concerned with individuals with limited or no access to broadband and/or internet-enabled devices and tools. It is hardest to capture the experiences of these populations with online tools, and their underrepresentation in data sets such as Census surveys can lead to a cycle of under resourcing and continued undercounting. As an Alamo Region meeting attendee shared, “The Census and other vital services increasingly rely on the internet, making it crucial to ensure widespread access to improve responses and outcomes.” While the U.S. Census Bureau's ACS, the Digital Opportunity Survey and other tools serve to establish baselines and KPIs, part of the plan includes improving upon the data as part of its implementation. KPIs and targets may change as the BDO gathers and analyzes more robust data over time. *Chapter 5: Implementation* includes definitions and descriptions of the plan’s four implementation strategies.

Appendix B: Strategies, Objectives and Baselines provides key performance indicators for each Goal of this plan, along with baseline data and related targets per covered population.

3. Current State of Digital Opportunity

3.a Needs Assessment⁴⁸

3.a.i Methodology

As part of the digital opportunity planning process, the BDO created an inventory of the current assets promoting digital opportunity in communities across the state and assessed digital opportunity needs as uniquely experienced within covered populations and within economic regions. This chapter presents an analysis of the gaps between the assets and needs identified.

Key data sets included quantitative data derived from the ACS and the Digital Equity Act Population Viewer, a tool created in partnership with the Census Bureau and NTIA, to understand statewide baseline conditions, supplemented with data gathered from the Digital Opportunity Survey and the DRMTS.

Qualitative input from the public engagement model (detailed in *Chapter 4: Collaboration and Stakeholder Engagement*) as well as the individual interviews conducted in partnership with TWC further contributed to the needs assessment.

- The BDO developed the **Texas Digital Opportunity Survey** to identify the digital opportunity barriers affecting Texas households, such as the lack of access to broadband infrastructure, reliable and affordable internet service and the devices necessary to use the internet. The BDO also utilized the survey to examine challenges to broadband adoption, including digital literacy, awareness of cybersecurity and online privacy, and publicly accessible online resources. The Digital Opportunity Survey was open to any Texas resident over the age of 18.

⁴⁸Comment 303 received during the public comment period informed changes to this section of the plan.

- The BDO developed the **DRMTS** to inventory organizations that provide digital opportunity-related resources within Texas. The DRMTS captures and depicts where resource gaps may exist within Texas and identifies the digital opportunity programs and services currently available to Texans. The DRMTS is an online survey of organizations that currently or potentially work in the digital opportunity space, over a four-month period, from April to August 2023.

Where statistically significant, data gathered from each survey help to provide a baseline for the statewide goals under each measurable objective category, and by covered population and economic region. In identifying the needs of covered populations within each measurable objective category, the BDO can assess how it will interact with and impact the state's six outcome areas as part of the needs assessment.

The result is an evidence-based assessment of needs and barriers to full broadband adoption for those most impacted by gaps in digital opportunity.

The Digital Opportunity Survey received a total of 13,296 responses: 11,048 from the online survey and 2,248 from paper surveys disseminated during regional meetings and by libraries and other stakeholders. Paper surveys included a subset of the questions in the online survey and reached respondents using different methods than online (e.g., paper distribution vs. email and social media promotion). These differences in methodology call for separate analysis for the online and paper survey responses. After the data validation and cleaning process, the online survey received 9,440 valid responses, and the paper survey received 1,945 valid responses, resulting in a total of 11,385 valid survey responses that form the basis of the Digital Opportunity Survey's needs assessment analysis. Full survey methodology and limitations are in *Appendix C: Needs Assessment and Asset Inventory Report, Methodology and Limitations*, alongside a comparison of the demography of survey respondents to that of the full state of Texas according to the ACS.

While these data provide an initial assessment of digital opportunity in the state, it is a snapshot, with several limitations: Surveys reflect respondents' self-assessments; the sample size of over 11,000 adults (18 years or older) respondents is not fully representative of Texas' 30.5 million residents; the survey data underrepresent the experiences of certain covered populations while overrepresenting others; finally, the online survey collected more robust data than the print version, but the print version may better reflect the experiences of those who do not have access to broadband or devices. The BDO acknowledges these and other limitations of the Digital Opportunity Survey data, while also recognizing the utility of a snapshot to provide a baseline understanding of the digital opportunity experiences of many Texans. *Chapter 5: Implementation* presents a plan to continue to gather, measure and improve upon the baseline data.

Similarly, while the BDO acknowledges that the DRMTS did not generate an exhaustive catalogue of every digital opportunity offering across the state, it provides a useful snapshot of programs and assets that enable digital opportunity.

3.a.ii Statewide Needs and Barriers

Texas is home to more than 30 million people⁴⁹ of whom 4.2 percent lack fixed broadband availability, 31 percent lack broadband subscriptions, 23 percent are not using the internet and 40 percent are not using a PC or tablet computer.⁵⁰ Texas is a diverse state with the majority of the population belonging to one or more covered populations that have been identified as needing better access to digital resources. Racial or ethnic minorities are the most prominent covered

⁴⁹ U.S. Census Bureau, "QuickFacts: Texas" (November 6, 2023), <https://www.census.gov/quickfacts/fact/table/TX/PST045222>.

⁵⁰ U.S. Census Bureau, Digital Equity Act Population Viewer (n.d.), <https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42> and U.S. Census Bureau, American Community Survey five-year data (2017-2021), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

population in the state (58 percent),⁵¹ followed by individuals with limited English proficiency (27 percent),⁵² low-income individuals (23 percent),⁵¹ rural residents (22 percent),⁵² aging individuals (18 percent),⁵¹ immigrants (17 percent),⁵¹ individuals with disabilities (11 percent),⁵¹ veterans (5 percent),⁵¹ incarcerated individuals (1 percent),⁵² tribal communities (1 percent)⁵¹ and unhoused individuals (<1 percent).⁵³

The BDO’s public engagement process revealed that for many Texans, utilizing publicly accessible digital resources can be challenging due to transportation constraints or limitations.

“Public transportation is needed. Once you're outside Lufkin, you're dead in the water. Transportation is an issue to access public resources, but if you have internet, it's like having a car.”

– Public Meeting Participant, Lufkin, Texas

Texans do not have internet because it is too expensive or not available to them.

- Among the 5 percent of online Digital Opportunity Survey respondents who do not access the internet from home, 60 percent selected lack of available or adequate internet services and 59 percent selected cost as the reason for not having a home internet connection.
- Among the 20 percent of paper survey respondents who do not have internet service available in their home, 59 percent reported cost as the reason.

⁵¹ U.S. Census Bureau, American Community Survey 5-year data (2017-2021), <https://www.census.gov/data/developers/data-sets/acs-5year.html>

⁵² U.S. Census Bureau, Digital Equity Act Population Viewer (n.d.), <https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42>

⁵³ The U.S. Department of Housing and Urban Development, Office of Community Planning and Development, The 2022 Annual Homelessness Assessment Report (AHAR) to Congress (2022), <https://www.huduser.gov/portal/sites/default/files/pdf/2022-ahar-part-1.pdf>.

- Figure 1 shows where Texans use public internet resources based on whether they can access the internet from home.

Texans lack information about programs that could assist them with overcoming cost barriers.

- Only 40 percent of Digital Opportunity Survey respondents have heard of the ACP, and 21 percent have heard of discounted internet services by ISPs.
- Thirty-eight percent of households in Texas that are eligible to participate are enrolled in the ACP.⁵⁴

Most Texans have access to a device to get online.

- In a question that allowed respondents to select multiple answers, most respondents use a smartphone (94 percent) to connect to the internet, in addition to other devices such as laptops (79 percent) and tablets (56 percent).
- Some residents selected only a smartphone as the device they use to get online (7 percent).

Some Texans do not have access to technical or cybersecurity support.

- Eighteen percent of survey respondents cannot access technical support nearby.
- Thirty percent of survey respondents who don't have cybersecurity measures installed on their devices, or are not sure about it, also cannot access technical support from nearby sources.

⁵⁴ Universal Service Administrative Co., ACP enrollment and claims tracker (n.d.), <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/>.

Some Texans are not comfortable with digital literacy skills.

- Eighty-eight percent of survey respondents are comfortable with connecting a computer or smartphone to a Wi-Fi network—a basic digital literacy skill.
- Survey respondent confidence declines with more complex digital skills: 77 percent of respondents are comfortable deleting cookies on a web browser; 69 percent of survey respondents are comfortable with setting up parental controls.

Some Texans are interested in internet or computer training classes.

- Twenty-eight percent of online survey respondents are interested in internet or computer training classes.
- Survey respondents belonging to covered populations such as individuals with limited English proficiency (54 percent) and unhoused individuals (54 percent) are more likely to be interested in internet or computer training classes.

Many Texans are familiar with cybersecurity and online privacy measures.

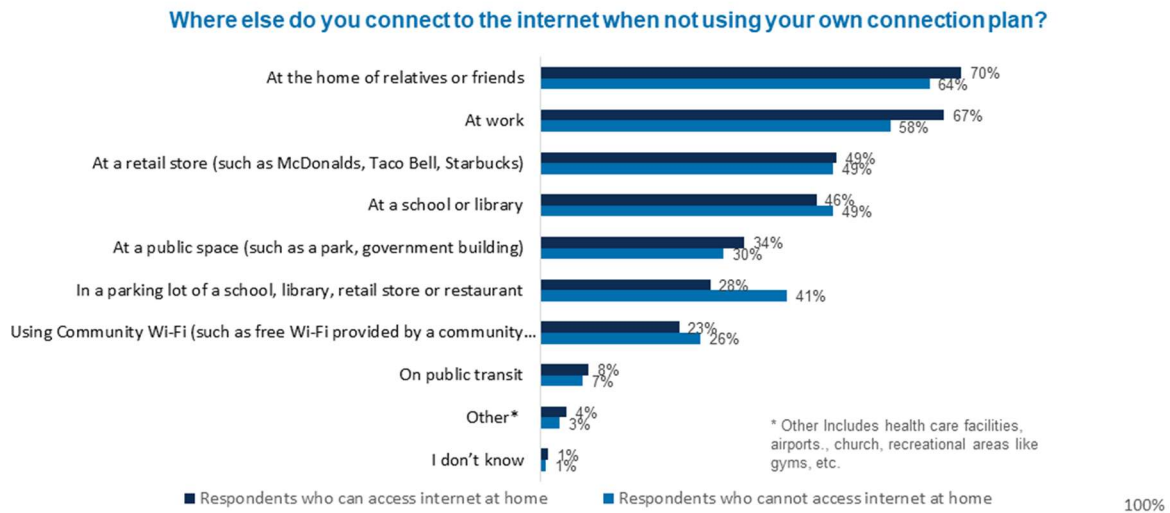
- Ninety percent of respondents are familiar with cybersecurity measures, and 86 percent have cybersecurity measures set up on their devices.

Texans use the internet to access essential services.

- More than half of survey respondents use the internet for accessing public resources and services such as news and current events (89 percent), accessing health care (82 percent), searching for educational resources (75 percent), improving work skills (68 percent) and finding information about government services (58 percent).

Texans who do not have internet at home must use the internet at schools or libraries, parking lots and community organizations.⁵⁵

Figure 1: Internet Connection Outside of the Home



3.a.iii Covered Population Needs Assessment

3.a.iii.1 Aging Individuals⁵⁶

Aging individuals represent 18 percent of the state’s population and 42 percent of Digital Opportunity Survey respondents. Of the respondents to the Digital Opportunity Survey who self-identified as aging individuals, 40 percent also identified as

“For the elderly, the sense of isolation is real. If you can keep people in their own homes, it’s less expensive. You live longer, you do better. The next group of elders will be tech-savvy. The internet can help elders be independent.”

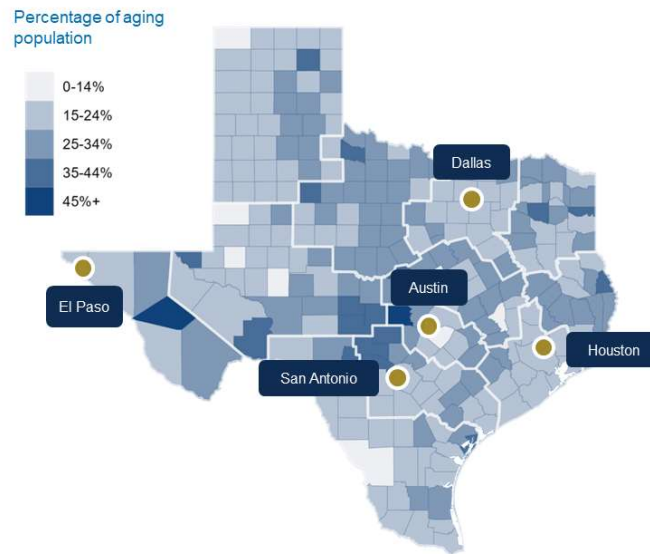
– Public Meeting Attendee, Belton, Texas

⁵⁵ Texas Digital Opportunity Public Survey (2023).

⁵⁶ Comment 282 received during the public comment period informed changes to this section of the plan.

residing in a rural area. Sixteen percent of attendees of public digital opportunity meetings across the state identify as or represent organizations serving aging individuals. Organizations serving aging individuals participated in and provided guidance throughout the public engagement process. For more on these engagements, see *Chapter 4*.

Figure 2: Aging Individuals in Texas by County⁵⁷



The Upper East Region (25 percent), Northwest (23 percent) and Southeast (23 percent) regions have the highest percentage of aging individuals.

According to the Digital Opportunity Survey data, internet availability and adequacy and digital literacy are the primary barriers to full digital opportunity that aging individuals face. The qualitative data gathered in the public engagement process revealed transportation, affordability, digital literacy, online safety, language barriers and understanding the benefits of internet and device types (such as mobile touch screen devices) as barriers for aging populations. Perpetrators of elder fraud, or financial crime that targets aging individuals, often

⁵⁷ U.S. Census Bureau, “*American Community Survey Five-Year Data (2009-2022)*,” Table B01001: Sex by Age (2017-2021), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

carry out their crimes over the internet, telephone or text message. Texas has experienced more than \$159 million in elder fraud losses; as of 2021, Texas was the state with the third highest number of elder fraud victims in the nation.⁵⁸ As aging individuals increase their access to internet and devices, the need for cybersecurity awareness becomes more acute.

Addressing these barriers will impact aging individuals' adoption of internet services; ability to access health services, essential services and civic processes; and provide opportunities for increased engagement in educational advancement and/or continued engagement in the workforce.

Findings:

Internet availability and adequacy are the primary barriers preventing aging individuals from connecting to the internet at home. Aging individuals have some of the greatest share of inadequate internet speeds among covered and underrepresented populations. They are about as aware of ACP and discounted internet by ISPs as all survey respondents.

Aging individuals have about the same support if they have trouble with the computer or internet, and about the same or more awareness and implementation of cybersecurity measures on their devices, as all survey respondents. Aging individuals have less comfort with basic digital literacy skills such as connecting a computer or smartphone to a Wi-Fi network and similar interest in internet or computer training classes as all survey respondents. Aging individuals use desktops to connect to the internet at home at higher rates than all respondents.

⁵⁸ Federal Bureau of Investigation. (2021). 2021 Elder Fraud Report.

“[A] mobile device is most logical, and agencies work to get people to use mobile devices. However, people’s dexterity [and knowledge] can be an issue in using them. Kids can do a million things on their phones, but as you get to aging populations, there are challenges. ‘Take a picture of document on your phone’ or ‘upload a picture of your passport’ can be a difficult ask. Some people can do this, others don’t know where their camera is, or don’t have a smartphone. There is a population of people where smartphones aren’t a tool for them.”

– Essential Services Task Force Member

Aging individuals often use the internet to access health care information or services, the second highest among covered or underrepresented populations. Among survey respondents belonging to covered and underrepresented populations, aging individuals use the internet to improve skills for work and to access educational resources the least.

The table below shows aging individuals’ responses to the Digital Opportunity Survey as compared to all survey responses.

Table 2: Digital Opportunity Survey Responses: Respondents who Self-identified as Aging Individuals

	Higher than all respondents	Lower than all respondents	Equal to all respondents
Survey Response	Aging Individuals	All Respondents	
If no home internet subscription, reason for not subscribing is that services are not available or adequate	67%	60%	
Report that speed and reliability of internet service at home is inadequate	40%	36%	
Download speeds below 25 Mbps	32%	28%	
Upload speeds below 3 Mbps	21%	17%	
If no home internet subscription, reason for not subscribing is that services are too expensive	55%	59%	
Pay more than \$100 for monthly internet	43%	41%	
Have heard of ACP	41%	40%	
Have heard of discounted internet by ISPs	19%	21%	
Do not have someone in their household or community to help them if they have trouble with the internet	20%	18%	
Are not familiar with cybersecurity measures	9%	10%	
Do not have or don't know if they have cybersecurity measures on the devices they use	11%	14%	
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	16%	12%	
Would be interested in internet or computer training classes	30%	28%	
Use a desktop computer	48%	43%	
Use a laptop	75%	79%	

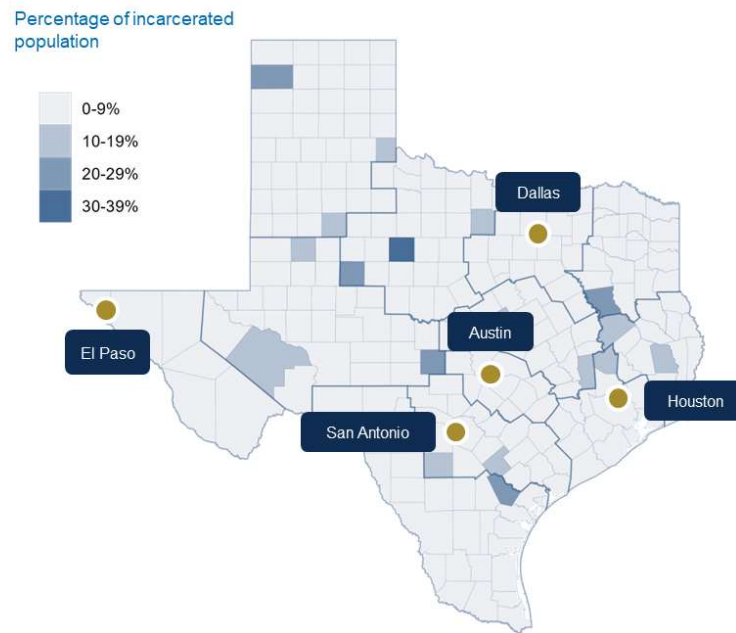
Survey Response	Aging Individuals	All Respondents
Use a tablet	55%	56%
Use a smartphone	92%	94%
Only use a smartphone	6%	7%
Sometimes or often use the internet for accessing health care information or services	86%	82%
Sometimes or often use the internet to apply for public benefits	44%	33%
Sometimes or often use the internet to improve skills for work	56%	68%
Sometimes or often use internet to search for available housing	20%	27%
Sometimes or often use the internet for accessing educational resources	69%	75%

3.a.iii.2 Incarcerated Individuals

According to the Digital Equity Act Population Viewer, incarcerated individuals in non-federal facilities make up 0.8 percent of the state’s population. Due to limitations of human subject research protocols, incarcerated individuals did not participate in the online or paper Digital Opportunity Survey. Rather, key agencies like the Texas Department of Criminal Justice (TDCJ) and Windham School District represented the experiences of incarcerated individuals and the institutions that serve them, serving on the Essential Services and Education Task Forces, respectively. Four percent of public meeting attendees represent organizations serving incarcerated individuals. In an effort to better understand the needs of incarcerated individuals, TWC has included organizations serving incarcerated individuals in their individual interviews as part of their partnership with the BDO. More on this partnership can be found in Chapters 2 and 4 of this plan. The BDO also extended invitations to discuss the digital opportunity needs

of incarcerated individuals with the TDCJ, a variety of organizations that advocate for incarcerated individuals and organizations that directly serve incarcerated individuals in the state. The BDO met with TDCJ, the Windham School District, the Texas State Law Library (TSL) and the Prison and Jail Innovation Lab (PJIL) at the University of Texas' LBJ School of Public Affairs.

Figure 3: Incarcerated Individuals in Texas by County⁵⁹



The Northwest (3 percent), Upper East (3 percent) and Southeast (2 percent) regions have the highest percentage of incarcerated individuals.

As of Feb. 28, 2022, TDCJ has oversight of 118,277 incarcerated individuals located in 98 facilities throughout Texas. TDCJ's facilities include prison facilities, pre-release facilities, psychiatric facilities, one developmental disabilities program facility, two medical facilities, state jail facilities, one geriatric facility and substance abuse felony punishment facilities. In addition, TDCJ

⁵⁹ U.S. Census Bureau and National Telecommunications and Information Administration, Digital Equity Population Viewer, Incarcerated individuals, other than individuals who are incarcerated in a federal correction facility.

oversees 67 district parole offices and supervises 79,418 people released from prison to parole supervision.⁶⁰

“Providing experiences to participate in career and job fairs, and teaching how to apply for and attain a job before leaving prison, have become important things to know how to do.”

– Essential Services Task Force Member

TDCJ operates [Inmate Technology Services](#)⁶¹ and works with a vendor to provide an outbound email messaging service for incarcerated individuals called JPay. Each email requires a "stamp" that users must purchase online or at a JPay kiosk, located in

certain correctional facilities. Individuals incarcerated at certain TDCJ facilities may participate in remote video visitations at a cost of \$10 for 60 minutes. TDCJ partners with a vendor, [Securus Technologies](#), to deploy a free loaner tablet program to ensure that eligible incarcerated individuals will have access to a device for the duration of their incarceration, to participate in educational, vocational, religious and other relevant programming. The program is currently active at most TDCJ sites, and TDCJ has distributed tablets to about 99 percent of individuals eligible for the program.

Through interviews and meetings with organizations, the BDO found that some incarcerated individuals have little to no digital skills, as they were incarcerated before the digital age. For example, the TSSL received a letter referring to the availability of tablets in TDCJ facilities: “I’ve been incarcerated 30+ years; I don’t know how to use this tablet that was given to me.” While some incarcerated individuals have digital familiarity from their time prior to incarceration, the TWC interviews found that this population often has limited proficiency on devices

⁶⁰ Texas Department of Criminal Justice, “Agency Strategic Plan Fiscal Years 2023-2027”, Schedule F1. Agency Workforce Plan (2022), [Agency Strategic Plan FY2023-2027.pdf \(texas.gov\)](#).

⁶¹ Texas Department of Criminal Justice, Inmate Technology Services (2023), https://www.tdcj.texas.gov/offender_tele/index.html#e-messaging.

other than smartphones and challenges with some digital literacy skills, like composing emails.

While TDCJ facilities are equipped with Wi-Fi, as a matter of policy, individuals incarcerated within the TDCJ system have limited internet access. According to TDCJ, about 0.12% of the incarcerated population has monitored access to the internet and cybersecurity training through specific education programs provided by Windham School District. Because most TDCJ facilities are in rural areas, TDCJ shared that facilities struggle with the speed and reliability of service within its facilities for both incarcerated individuals and staff. Individual interviews TWC conducted in partnership with the BDO revealed that limited access to the full functionality of the internet has led to lower digital literacy, familiarity and comfort with accessing the internet among incarcerated individuals.

Due to the scale of device distribution, TDCJ relies on peer-to-peer support for incarcerated individuals to learn how to use the free tablets. Because the TDCJ program providing access to tablets has been in operation for less than a year, neither TDCJ nor any other entity has published a report on its impact. Publicly available data on this program – such as how many incarcerated individuals have access to tablets, information on the training and technical support provided and high-level app usage data – would help inform future investments in digital opportunity for incarcerated individuals.

TSSL, an organization that provides legal information to incarcerated individuals, expressed interest in greater collaboration with the TDCJ on providing their resources via the tablets. TSSL's primary mode of communication with incarcerated individuals is via traditional mail, which often takes weeks. TDCJ collaboration with TSSL and other state agencies serving incarcerated individuals could afford opportunities to distribute resources more quickly and efficiently and impact adoption of digital literacy skills among incarcerated individuals. According to TDCJ, several apps are offered on the tablets, allowing incarcerated individuals some access to essential services like re-entry/job search apps, educational apps, AP headline news, agency information and a law library.

According to both PJIL and TDCJ, the families of incarcerated individuals predominately bear the costs for incarcerated individuals to communicate via tablets. The cost of making a phone call is \$0.06 a minute in TDCJ facilities.⁶² Support for families to enable their incarcerated loved ones to use devices for communication could facilitate technology adoption for incarcerated individuals and their communities and improve access to public services and information for incarcerated individuals. (Relates to Texas Goal 5.) Further, decades of research have established that maintaining connections with family and community while incarcerated reduces recidivism.⁶³

For individuals exiting incarceration, the nonprofit organization [Texas Center for Justice and Equity](#) and [TDCJ](#) have resource databases that include employment services offering computer classes, facilities that offer access to computers and other digital opportunity resources. Service providers often tie such resources to opportunities for job seekers. Providing incarcerated individuals access to devices, internet, digital skills, cybersecurity and essential online services while incarcerated could provide opportunities for educational advancement and access to health services, and, upon exiting, could improve their access to and engagement with educational resources, essential services, health care, civic processes and job training or career development resources.

While digital resources in prisons can help with speed and efficiency of receiving information, communications, training and other resources, organizations emphasized that incarcerated individuals still need and benefit from in-person and tangible forms of communication like physical letters.⁶⁴ When considering resources for incarcerated individuals, the BDO will ensure digital resources supplement and advance in-person support and connection, rather than replace it.

⁶² Securus Technologies, TDCJ CALLING ACCOUNTS AND RATES (n.d.), <https://securustech.net/tdcj/index.html#tdcj-accounts-and-rates>.

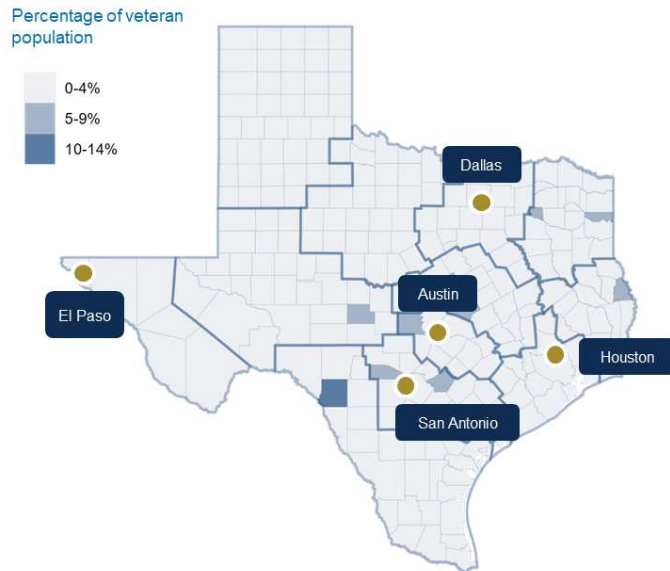
⁶³ Friedmann, Alex, "Lowering Recidivism Through Family Communication", *Prison Legal News* (April 14, 2014), <https://www.prisonlegalnews.org/news/2014/apr/15/lowering-recidivism-through-family-communication/>.

⁶⁴ Mansoor, Sanya, "As Texas Prisons Move to Digitize Mail, Advocates Say Family Bonds Grow Weaker", *Time* (July 20, 2023), <https://time.com/6296247/texas-prisons-mail-digital/>.

3.a.iii.3 Veterans

Veterans represent about 5 percent of the state’s population and 17 percent of Digital Opportunity Survey respondents. Of the respondents to the Digital Opportunity Survey who self-identify as veterans, 61 percent also self-identify as aging individuals. Ten percent of public meeting attendees identify as a veteran or represent organizations serving veterans. The Texas Veterans Commission (TVC), a state agency that provides advocacy and services to Texas veterans, their families and survivors, participated in and provided guidance to the Statewide Working Group (SWG), Essential Services Task Force and Health Task Force.

Figure 4: Veterans in Texas by County⁶⁵



The Central Texas (8 percent), Alamo (7 percent) and Northwest (7 percent) regions have the highest percentage of veterans.

⁶⁵ U.S. Census Bureau, “American Community Survey Five-Year Data (2009-2022)”, Table B21001: Sex by Age by Veteran Status for the Civilian Population 18 Years and Over (2017-2021), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

Findings:

“Unless they have access to the internet, [veterans] have to confirm their identity with papers that people commonly lose.”

– Essential Services Task Force Member

Digital Opportunity Survey respondents who self-identified as veterans and indicated that they cannot connect to the internet at home provided internet availability and adequacy as the primary barriers to in-home internet access. Across the board, veterans have similar rates to all survey respondents in other adoption areas. They're as aware or more aware of ACP, discounted internet and cybersecurity as all survey respondents, and implement cybersecurity measures at higher rates. Veterans have about the same comfort with basic digital literacy skills such as connecting a computer or smartphone to a Wi-Fi network, interest in internet or computer training classes, and support if they have trouble with the computer or internet as all respondents. The intersection of health care and veterans' services came up frequently in public engagements. Veteran Digital Opportunity Survey respondents indicated that they use the internet to access health care information at high rates (the second highest among covered populations). Veteran survey respondents use the internet to improve skills for work and to access educational resources at the lowest rates among covered populations. Continued support for veterans could improve their access to and adoption of internet services, use of the internet to improve skills for work and engagement in the workforce and access to educational resources, and further veterans' access to health care, essential services and civic engagement using the internet.

The table below shows veterans' responses to the Digital Opportunity Survey as compared to all survey responses.

Table 3: Digital Opportunity Survey Responses: Respondents who Self-identified as Veterans

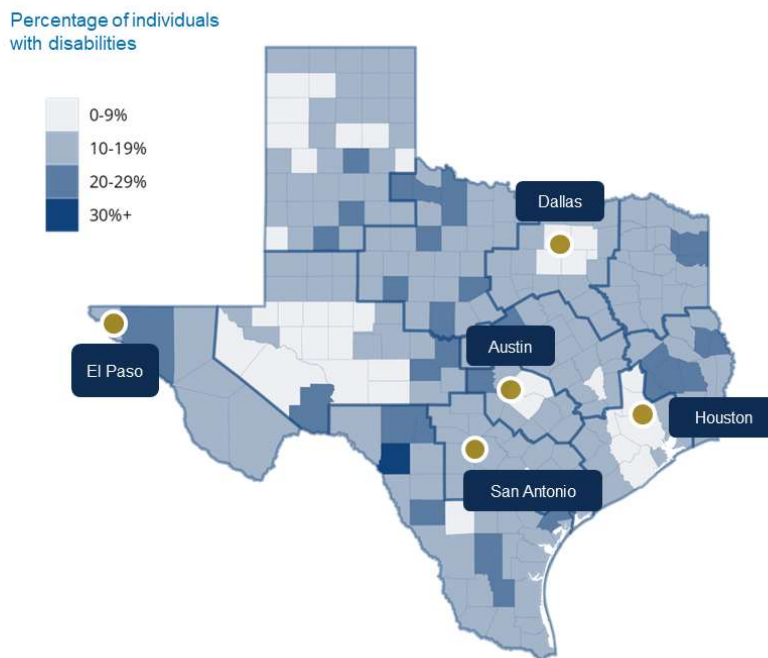
	Higher than all respondents	Lower than all respondents	Equal to all respondents
Survey Response	Veterans	All Respondents	
Do not subscribe because services are not available or adequate	77%	60%	
Report that speed and reliability of internet service at home is inadequate	41%	36%	
Download speeds below 25 Mbps	29%	28%	
Upload speeds below 3 Mbps	18%	17%	
Do not subscribe because services are too expensive	41%	59%	
Pay more than \$100 for monthly internet	47%	41%	
Have heard of ACP	40%	40%	
Have heard of discounted internet by ISPs	21%	21%	
Use a desktop computer	53%	43%	
Use a laptop	80%	79%	
Use a tablet	62%	56%	
Use a smartphone	94%	94%	
Only use a smartphone	5%	7%	
Do not have someone in their household or community to help them if they have trouble with the internet	18%	18%	
Are not familiar with cybersecurity measures	7%	10%	
Do not have or don't know if they have cybersecurity measures on the devices they use	11%	14%	

Survey Response	Veterans	All Respondents
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	13%	12%
Would be interested in internet or computer training classes	30%	28%
Sometimes or often use the internet for accessing health care information or services	86%	82%
Sometimes or often use the internet to apply for public benefits	37%	33%
Sometimes or often use the internet to improve skills for work	62%	68%
Sometimes or often use the internet to search for available housing	25%	27%
Sometimes or often use the internet for accessing educational resources	72%	75%

3.b.iii.4 Individuals with Disabilities

Individuals with disabilities represent 11 percent of the state’s population and 18 percent of Digital Opportunity Survey respondents. Of the respondents to the Digital Opportunity Survey who self-identified as individuals with disabilities, 57 percent also identified as aging individuals. Ten percent of public meeting attendees identify as or represent organizations serving individuals with disabilities. The nonprofit Disability Rights Texas, which advocates for Texans with disabilities, serves on the SWG and Civic and Social Engagement Task Force, while TTAP and Texas ABLE serve on the Essential Services Task Force, all advising the BDO on the digital experiences of people with disabilities.

Figure 5: Individuals with Disabilities in Texas by County⁶⁶



The Southeast (17 percent), Northwest (16 percent) and Upper East (15 percent) regions have the highest percentage of individuals with disabilities.

Findings:

The Digital Opportunity Survey identified cost and digital literacy as primary barriers for individuals with disabilities. Individuals with disabilities and the organizations that serve them shared their perspectives in the SWG, task forces and public meetings. These conversations highlighted the importance of access to adaptive technologies such as screen readers, adaptive keyboards, software with voice-to-text functionality and many other tools created using accessible design best practices, by and for users with disabilities. In interviews that TWC conducted as part of the partnership with the BDO, individuals living with disabilities also noted that they often use the internet to access special

⁶⁶ U.S. Department of Commerce, U.S. Census Bureau, "American Community Survey Five-Year Data", Table C18130: Age by Disability Status by Poverty Status (2017-2021), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

applications and services for people with blindness or low vision, such as Google TalkBack and Be My Eyes, as well as virtual resources that are accessible to individuals with limited mobility.

Stakeholder groups also identified technology relevance and digital literacy as key to adoption of resources by individuals with disabilities. A member of the Essential Services Task Force shared that as communities become more dependent on devices and internet, internet reliability becomes an issue, especially in rural areas: “When dealing with individuals with disabilities, [rural 9-1-1 outages] could be detrimental.” Survey respondents with disabilities focus more on cost and less on reliability and availability of internet as barriers. The highest concentration of individuals with disabilities is in the Southeast, Upper East and Northwest regions of the state, the same regions with the highest concentration of rural residents. Internet availability and adequacy disproportionately impact rural residents, and the Southeast, Upper East and Northwest regions have some of the lowest internet speeds in the state.

“What happens with the internet as it works with screen readers? I can think of a million ways that the internet is not accessible. As you dig into subsets of different accessibility needs, there can be challenges when ensuring inclusivity.”

– Statewide Working Group Member

In the Digital Opportunity Survey, individuals with disabilities cited cost as the primary reason they do not connect to the internet at home. Individuals with disabilities are more aware of ACP and discounted internet than all survey respondents and are some of the most aware among covered and underrepresented populations. TWC’s individual interviews also supported this finding, as most participants with disabilities had heard of ACP and over half had

heard of Lifeline; however, they also expressed frustration with needing to frequently reapply. While individuals with disabilities use devices at about the

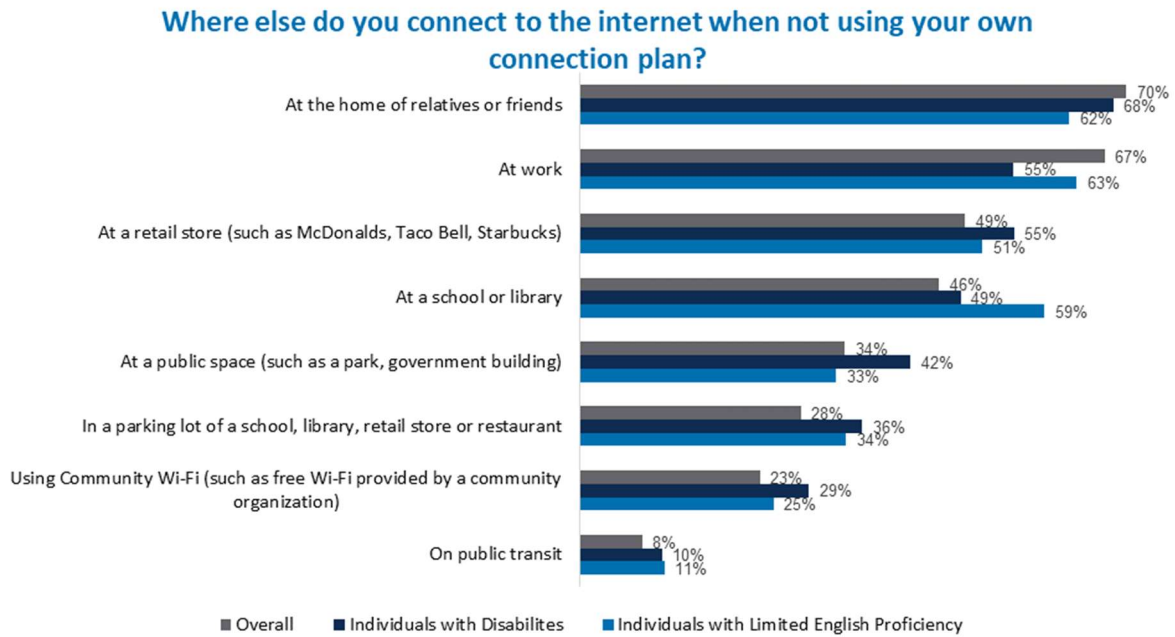
same rate as all survey respondents, the quality of those devices matters. An Essential Services Task Force Member pointed out, “Assistive technologies for [people who are] deaf/hard of hearing are antiquated pieces of equipment. [I’m] looking to support more up-to-date technology... people need devices, to know how to use them, and to know that they exist.”

The Digital Opportunity Survey revealed that individuals with disabilities have less comfort with basic digital literacy skills, such as connecting a computer or smartphone to a Wi-Fi network, compared to all survey respondents. Individuals with disabilities have similar access to support as other covered populations if they have trouble with technology, and about the same awareness and implementation of cybersecurity measures on their devices. They are more interested in internet or computer training classes than all respondents. A member of the Essential Services Task Force shared that barriers are higher for aging individuals with disabilities: “People with disabilities or who are aging aren’t as connected as they could be because they don’t have devices, access or digital literacy.”

Individuals with disabilities use the internet to access health care information, the most among covered and underrepresented populations. They are among the highest covered and underrepresented populations using the internet to apply for public benefits and the lowest using the internet to improve skills for work.

The survey also found that individuals with disabilities and individuals with limited English proficiency use public internet at higher rates than the overall survey population.

Figure 6: Internet Connection Outside of the Home for Individuals with Disabilities and Individuals with Limited English Proficiency⁶⁷



Addressing barriers to digital literacy, costs of internet access and access to devices could further individuals with disabilities’ access and adoption of internet, use of the internet for health care and essential services, and provide opportunities for increased engagement in educational advancement, engagement in the workforce and participation in civic processes using the internet.

⁶⁷ Texas Digital Opportunity Survey (2023).

Table 4: Digital Opportunity Survey Responses: Respondents who Self-Identified as Individuals with Disabilities

Higher than all respondents	Lower than all respondents	Equal to all respondents
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Survey Response	Individuals with Disabilities	All Respondents
Do not subscribe because services are not available or adequate	59%	60%
Report that speed and reliability of internet service at home is inadequate	44%	36%
Download speeds below 25 Mbps	26%	28%
Upload speeds below 3 Mbps	15%	17%
Do not subscribe because services are too expensive	64%	59%
Pay more than \$100 for monthly internet	45%	41%
Have heard of ACP	46%	40%
Have heard of discounted internet by ISPs	23%	21%
Use a desktop computer	48%	43%
Use a laptop	74%	79%
Use a tablet	57%	56%
Use a smartphone	93%	94%
Only use a smartphone	8%	7%
Do not have someone in their household or community to help them if they have trouble with the internet	20%	18%
Are not familiar with cybersecurity measures	10%	10%
Do not have or don't know if they have cybersecurity measures on the devices they use	14%	14%

Survey Response	Individuals with Disabilities	All Respondents
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	16%	12%
Would be interested in internet or computer training classes	35%	28%
Sometimes or often use the internet for accessing health care information or services	86%	82%
Sometimes or often use the internet to apply for public benefits	49%	33%
Sometimes or often use the internet to improve skills for work	65%	68%
Sometimes or often use the internet to search for available housing	32%	27%
Sometimes or often use the internet for accessing educational resources	75%	75%

3.a.iii.5 Individuals with Limited English Proficiency⁶⁸

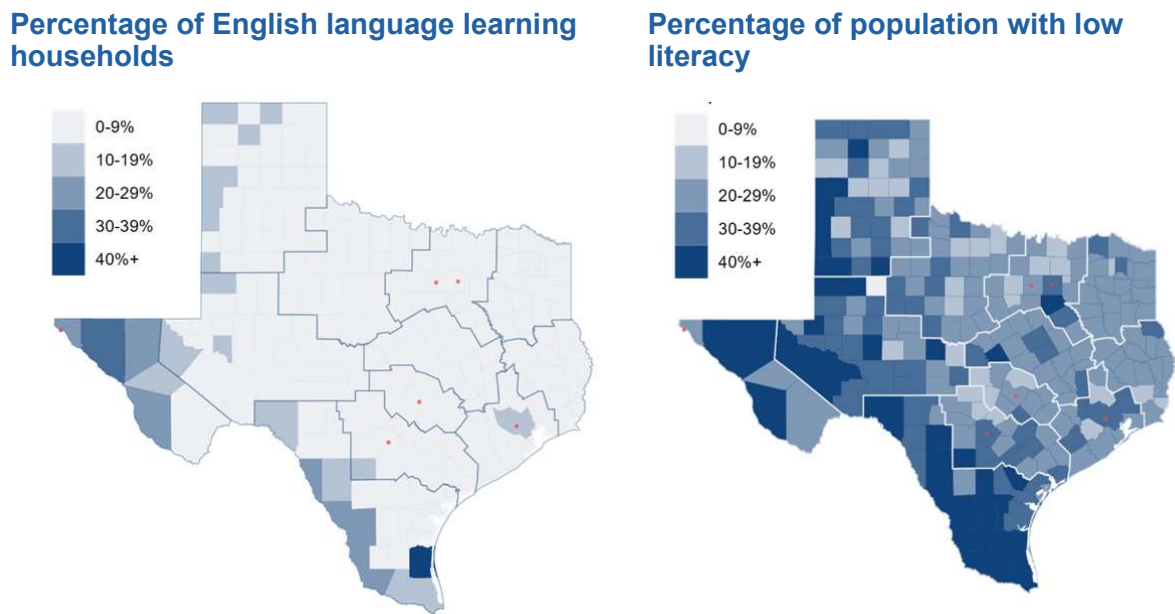
In the SDEP NOFO, the NTIA describes one covered population that has historically experienced lower rates of computer and internet use as: “Individuals with a language barrier, including individuals who are English learners and have low levels of literacy.” The NTIA groups English learners and those with low literacy in any language into one covered population: individuals with a language barrier. This plan refers to this group as “individuals with limited English proficiency.” Where available and appropriate, this plan presents separate data on English learners and those with low literacy.

In both online and paper formats, the Digital Opportunity Survey asked respondents to self-identify as an English language learner and/or someone who has difficulty understanding English. Households with limited English proficiency

⁶⁸ Comments 254, 284 and 295 received during the public comment period informed changes to this section of the plan.

represent 5 percent of Digital Opportunity Survey respondents and 7 percent of the state’s households.⁶⁹ Of survey respondents who self-identified as individuals with limited English proficiency, 91 percent also identified as belonging to a racial or ethnic minority group. Federal data indicate that more than 28 percent of Texans are considered to have low levels of literacy.⁷⁰ Ten percent of attendees of the Digital Opportunity public meetings identify as or represent organizations serving individuals with limited English proficiency. The Texas A&M Distance Education Professional Development Center, which oversees the Digital Access and Resilience in Texas (DART) curriculum that integrates beginning English language learning with foundational digital skills, serves on the Education Task Force, providing guidance on the needs and barriers of individuals with limited English proficiency.

Figure 7: Households with English Language Learners and Low Literacy in Texas by County⁷¹



⁶⁹ Digital Equity Act Population Viewer, National Center for Education Statistics, 2012/2014/2017 Program for the International Assessment of Adult Competencies State Small Area Estimates of Adult Skills on Literacy and Numeracy and U.S. Census Bureau, “*American Community Survey Five-Year Data (2009-2022)*”, Table C16002: Household Language by Household Limited English-Speaking Status, (2017-2021).

⁷⁰ Ibid.

⁷¹ Digital Equity Act Population Viewer, National Center for Education Statistics, 2012/2014/2017 Program for the International Assessment of Adult Competencies State Small Area Estimates of Adult Skills on Literacy and Numeracy and U.S. Census Bureau, “*American Community Survey Five-Year Data (2017-2021)*”, Table C16002: Household Language by Household Limited English-Speaking Status.

The South Texas region has the highest percentage of households with limited English proficiency.

Findings:

According to the Digital Opportunity Survey, individuals with limited English proficiency are among the covered populations most affected by the digital divide. Cost of internet, access to technical support and devices, awareness of discounted programs, digital literacy and cybersecurity are all barriers for individuals with limited English proficiency. Digital Opportunity Survey respondents with limited English proficiency cite cost as the primary reason they do not connect to the internet at home. They have among the lowest awareness of ACP and discounted internet services among covered populations. They are the covered population the most likely to cite not knowing how to apply as the reason for not enrolling in internet subsidy or discount programs. They use devices at lower rates overall than all survey respondents. After low-income and unhoused individuals, people with limited English proficiency are most likely to use only a smartphone to connect to the internet, as opposed to a computer or tablet.

“A lot of older adults don’t speak English. Training and devices need to be accessible for them. Think about someone’s education level and literacy level – they may not be able to comprehend or navigate the websites. Help people with low literacy break down websites.”

– Civic and Social Taskforce Member

Individuals with limited English proficiency have some of the lowest rates of cybersecurity awareness among all survey respondents and covered/underrepresented populations. They also have the lowest access to technical support among covered and underrepresented populations. Individuals with limited English proficiency have less comfort with basic digital literacy skills, such as connecting a computer or smartphone to a Wi-Fi network, compared to all survey

respondents. They are the most interested in internet or computer training classes, and they use the internet to access educational resources and to improve skills for work among the highest rates of all covered and underrepresented populations.

In partnership with the BDO, TWC conducted individual interviews with Hispanic Texans who use Spanish as their dominant language; these interviews supported many of the findings outlined above. For instance, many Spanish-dominant Hispanic Texans had not heard of ACP or Lifeline but were most interested in these programs out of all interview participants. They exhibited strong concerns over internet security, particularly related to credit card usage. While they were familiar with basic internet terms, such as “broadband” and “cookies,” they were less familiar with digital device terms like “router” and “modem.” They were also more likely to use the internet for telehealth visits and less likely to use the internet for educational classes, job training, scheduling appointments and applying for government benefits compared to other interviewees. While Spanish speakers are most prominent among individuals

with limited English proficiency in Texas (nearly 30 percent of all Texans speak Spanish at home⁷²), nearly 2 million Texans over five years of age speak languages other than Spanish and English.⁷³ Thus, the individual interviews emphasize the importance of considering the different needs and barriers of each language group when implementing digital literacy and accessibility initiatives in Texas.

Table 5: Top five languages spoken at home in Texas, other than English (2021):⁷⁴

Language spoken at home	Number	Share of total household population (age 5 and older)
Spanish	7,824,091	81%
Vietnamese	232,666	2.4%
Chinese (Mandarin, Cantonese)	184,592	1.9%
Arabic	114,424	1.2%
Hindi	88,054	1%

Task forces identified examples of digital literacy training for individuals with limited English proficiency. For example, the Education Task Force shared that Tyson Foods partnered with Texas Adult Education Literacy to develop a digital skills curriculum for English language learners, teaching digital skills integrated into English as a Second Language (ESL) curriculum.⁷⁵ This program helped to inform the Digital Access and Resilience in Texas’ 2023 Foundational Digital

⁷² U.S. Census Bureau, “American Community Survey Five-Year Data (2009-2022)”, Table S1601: Language Spoken at Home (Dec. 7, 2023), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

⁷³ Migration Policy Institute, State Immigration Data Profiles: Texas (2021), <https://www.migrationpolicy.org/data/state-profiles/state/language/TX>.

⁷⁴ Migration Policy Institute, State Immigration Data Profiles: Texas (2021), <https://www.migrationpolicy.org/data/state-profiles/state/language/TX>.

⁷⁵ Grayson College, “Grayson College Adult Education & Literacy Wins \$10,000 for Work with Tyson Foods”, *Grayson College News* (Jan. 15, 2020), <https://www.grayson.edu/news/2020/01/article1.html>.

Literacy ESL Curriculum.⁷⁶ Given the high digital disparities among this population, strengthening and expanding such programs is a key recommendation in the second implementation strategy discussed in *Chapter 5: Implementation*.

The Digital Opportunity Survey found that individuals with limited English proficiency and individuals with disabilities use public internet at higher rates than the overall survey population. (See Table 6.)

Addressing barriers could improve health, educational and workforce outcomes for individuals with limited English proficiency; increase access to and adoption of internet services; and provide opportunities for increased usage of the internet to access essential services and civic and social processes.

The table below shows responses to the Digital Opportunity Survey from individuals with limited English proficiency as compared to all survey respondents.

Table 6: Digital Opportunity Survey Responses: Respondents who Self-Identified as Having Limited English Proficiency

	Higher than all respondents	Lower than all respondents	Equal to all respondents
Survey Response	Individuals with Limited English Proficiency	All Respondents	
Do not subscribe because services are too expensive	74%	59%	
Do not subscribe because services are not available or adequate	32%	60%	
Pay more than \$100 for monthly internet	32%	41%	

⁷⁶ Texas Center for the Advancement of Literacy and Learning Digital Access and Resilience in Texas, A Foundational Digital Literacy ESL Curriculum (2023), https://tcall.tamu.edu/docs/dart/lessons/0-0_IntroductionAndAppendices.pdf.

Survey Response	Individuals with Limited English Proficiency	All Respondents
Only use a mobile data plan to connect to the internet	14%	10%
Report that speed and reliability of internet service at home is inadequate	34%	36%
Download speeds below 25 Mbps	19%	28%
Upload speeds below 3 Mbps	13%	17%
Have heard of ACP	34%	40%
Have heard of discounted internet by ISPs	18%	21%
Are not enrolled in discount programs because they don't know how to apply	29%	9%
Use a desktop computer	28%	43%
Use a laptop	67%	79%
Use a tablet	44%	56%
Use a smartphone	92%	94%
Only use a smartphone	18%	7%
Do not have someone in their household or community to help them if they have trouble with the internet	27%	18%
Are not familiar with cybersecurity measures	37%	10%
Do not have or don't know if they have cybersecurity measures on the devices they use	29%	14%
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	15%	12%
Would be interested in internet or computer training classes	54%	28%
Sometimes or often use the internet for accessing health care information or services	78%	82%

Survey Response	Individuals with Limited English Proficiency	All Respondents
Sometimes or often use the internet to apply for public benefits	45%	33%
Sometimes or often use the internet to improve skills for work	79%	68%
Sometimes or often use the internet to search for available housing	39%	27%
Sometimes or often use the internet for accessing educational resources	87%	75%

3.a.iii.6 Individuals Who Belong to a Racial or Ethnic Minority Group⁷⁷

Texas is a majority minority state.⁷⁸ Individuals who belong to a racial or ethnic minority group represent 58 percent of the state’s population and 40 percent of Digital Opportunity Survey respondents. Latinos/Hispanics are the second largest racial or ethnic group in Texas at 39 percent of the population – more than double the national share of Latinos (18 percent). Since 2000, the overall population of Texas has grown by 41 percent, whereas the Latino population has grown by 76 percent.⁷⁹ With regard to internet services in Texas, 16 percent of foreign-born people in rural communities lack access to broadband internet, and 31 percent of racial and ethnic minorities do not have high-speed internet at home.⁸⁰

Of survey respondents who self-identified as members of a racial or ethnic minority group, 32 percent also identified as aging individuals. Twelve percent of public meeting attendees identify as or represent organizations serving racial

⁷⁷ Comment 270 received during the public comment period informed changes to this section of the plan.

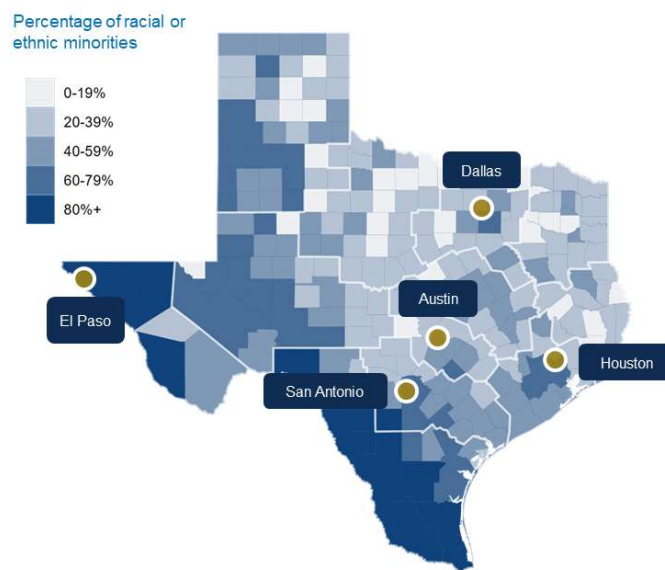
⁷⁸ U.S. Department of Commerce, “U.S. Census Bureau American Community Survey Five-Year Data (2009-2022)”. (Dec. 7, 2023), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

⁷⁹ Latino Policy & Politics Institute, “15 Facts About Latino Well-Being in Texas” (Feb. 22, 2023), <https://latino.ucla.edu/wp-content/uploads/2023/02/TX-15-facts.pdf>.

⁸⁰ American Immigration Council, “Examining Gaps in Digital Inclusion in Texas” (December 2022), https://www.americanimmigrationcouncil.org/sites/default/files/examining_gaps_in_digital_inclusion_in_texas.pdf.

and ethnic minorities. The nonprofit Texas Black Caucus Foundation, which provides research and policy analysis on issues ranging from criminal justice to health care, served on the SWG; several other related organizations serving on the SWG or task forces spoke to the digital experiences of the racial or ethnic minority groups they serve.

Figure 8: Members of a Racial or Ethnic Minority Group in Texas by County⁸¹



The Upper Rio Grande (87 percent), South Texas (87 percent) and Alamo (64 percent) regions have the highest percentage of residents belonging to racial or ethnic minority groups.

Findings:

According to the Digital Opportunity Survey, cost of internet, digital skills and cybersecurity awareness are barriers for racial and ethnic minorities to access the internet. At the same time, racial and ethnic minorities utilize the internet at

⁸¹ U.S. Department of Commerce, “U.S. Census Bureau American Community Survey Five-Year Data 2009-2022”, Tables B02001: Race and B03002: Hispanic or Latino Origin by Race.(Dec. 7, 2023), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

higher rates than all survey respondents to access public and essential services online.

Responses to the Digital Opportunity Survey cite cost as the primary reason racial or ethnic minorities do not subscribe to internet at home; however, they have the about same awareness of ACP and discounted internet services by ISPs as all survey respondents. Respondents from this population use devices and access online public services and essential services at about the same or higher rates as all survey respondents.

Individuals belonging to racial and ethnic minority groups have access to technical support at around the same rates as all survey respondents. While they have the same support, they are less familiar with and use cybersecurity measures at lower rates than all respondents. Their levels of confidence with basic digital skills such as connecting a computer or smartphone to a Wi-Fi network are slightly lower than all survey respondents.

TWC's individual interviews with Black and English-dominant Hispanic Texans unveiled nuanced variations in digital literacy and access among different subgroups within the racial and ethnic minority population in Texas. While Black participants had a better understanding of "broadband," Hispanic participants were more likely to know the specifics of their current internet plan. Preferred internet activities also varied among participants. Black participants were more likely to use the internet for educational classes, job training, scheduling appointments, telehealth visits and applying for government benefits, while Hispanic participants mostly used the internet for online shopping and downloading applications/software. Black participants were more hesitant to use public areas to access high-speed internet compared to Hispanic participants, highlighting important differences in internet accessibility as it relates to public safety. Given the growing non-white population in Texas (26 percent of the state

population in 2012 to 41 percent in 2022⁸²), it is critical to consider the varying needs and barriers among racial and ethnic minorities.

Despite these differences, addressing cost, digital skills and cybersecurity awareness could provide opportunities to improve health, educational and workforce outcomes; increase access to and adoption of internet services; and increase engagement in using the internet to access essential services and civic and social processes across racial and ethnic minority groups.

The table below shows Digital Opportunity Survey responses from individuals who are members of racial or ethnic minority groups, as compared to all survey respondents.

Table 7: Digital Opportunity Survey Responses: Respondents Who Self-Identified as Belonging to Racial or Ethnic Minority Groups

	Higher than all respondents	Lower than all respondents	Equal to all respondents
Survey Response	Racial or Ethnic Minorities	All Respondents	
Do not subscribe because services are not available or adequate	49%	60%	
Report that speed and reliability of internet service at home is inadequate	30%	36%	
Download speeds below 25 Mbps	20%	28%	
Upload speeds below 3 Mbps	11%	17%	
Do not subscribe because services are too expensive	69%	59%	
Pay more than \$100 for monthly internet	37%	41%	
Have heard of ACP	40%	40%	

⁸² U.S. Census Bureau, “American Community Survey Five-Year Data (2009-2022)”, Table B02001: Race (2008-2012, 2018-2022), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

Survey Response	Racial or Ethnic Minorities	All Respondents
Have heard of discounted internet by ISPs	22%	21%
Use a desktop computer	38%	43%
Use a laptop	77%	79%
Use a tablet	54%	56%
Use a smartphone	93%	94%
Only use a smartphone	10%	7%
Do not have someone in their household or community to help them if they have trouble with the internet	20%	18%
Are not familiar with cybersecurity measures	15%	10%
Do not have or don't know if they have cybersecurity measures on the devices they use	19%	14%
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	14%	12%
Would be interested in internet or computer training classes	39%	28%
Sometimes or often use the internet for accessing health care information or services	81%	82%
Sometimes or often use the internet to apply for public benefits	38%	33%
Sometimes or often use the internet to improve skills for work	75%	68%
Sometimes or often use the internet to search for available housing	35%	27%
Sometimes or often use the internet for accessing educational resources	82%	75%

3.a.iii.7 Rural Residents

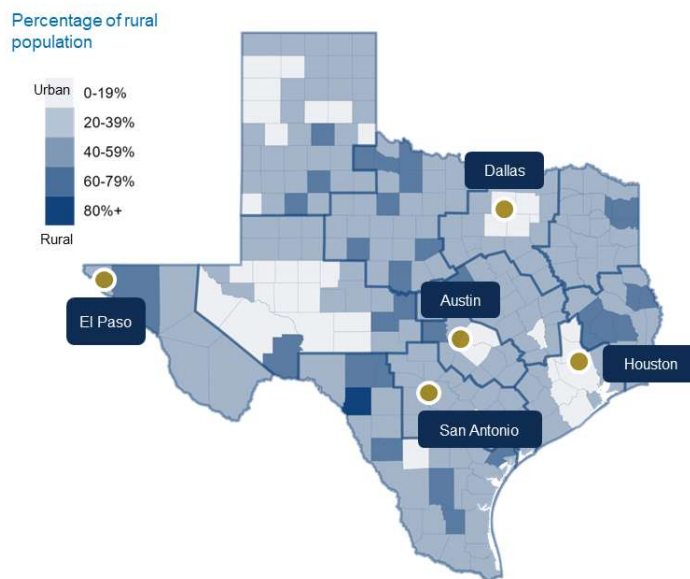
"You have to solve the problem of access first. It's like trying to put on your seatbelt before you have a car."

– Public Meeting Participant, Longview, Texas

Rural residents represent 35 percent of the state's population.⁸³ Thirty-two percent of Digital Opportunity Survey respondents self-identify as rural residents. Fifty-two percent of respondents identifying as rural residents also identify as aging individuals. Nineteen percent of public meeting attendees identify as a rural resident or represent organizations serving rural residents. The nonprofit Texas Rural Funders, which focuses on rural philanthropy, serves on the SWG and Civic and Social Engagement Task Force. [Texas Organization of Rural and Community Hospitals](#) and [Texas Rural Health Association](#) serve on the Health Task Force. Several other rurally based and rural-serving organizations participated in the public engagement process, including rural libraries and school districts, which helped advise the BDO on the digital experiences for rural communities. The BDO's partnership with AgriLife, outlined in *Chapter 4: Stakeholder Engagement*, also helped to reach rural populations.

⁸³ U.S. Census Bureau, Digital Equity Act Population Viewer (n.d.), <https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42>.

Figure 9: Rural Residents in Texas by County⁸⁴



The Upper East (75 percent), Northwest (58 percent) and Southeast (52 percent) regions have the highest percentage of rural residents.

Findings:

Internet availability, adequacy and speed are the primary barriers rural residents face to in-home internet adoption. The Digital Opportunity Survey and public engagement process revealed that rural Texans have limited internet availability and face high costs for internet. If they can afford internet, available service is not always adequate for their needs.

According to the Digital Opportunity Survey, rural residents pay the most for home internet service among covered populations. While rural residents pay the most for internet service, they cite availability and/or adequacy of the internet as the primary reason they do not subscribe to the internet at home, as opposed to cost. Rural residents use devices to connect to the internet at home at about the

⁸⁴ U.S. Census Bureau, Digital Equity Act Population Viewer (n.d.), <https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42>.

same rates as all respondents. While rural residents use devices at the same rates, having the ability to connect to the internet with the device is key to digital opportunity. Mobile data have limitations, especially in rural areas. Public meeting participants expressed frustrations with the reliability of mobile data plans, with a participant in the Jasper Public Meeting (located in the Southeast Region) sharing, “The school district gives away Chromebooks and hot spots, but with mobile dead zones, you might as well send [kids] home with a rock.” According to Dozier, Bauer, Baze et. al, Texas has more schools in rural areas than any other state in the U.S. Without reliable access to internet, rural students are often unable to finish their homework.⁸⁵ Similarly, SWG and task force participants emphasized that rural areas have a lot to offer, but without adequate internet, they miss out on key benefits like telehealth, the ability to sign up for essential services like veteran resources, Supplemental Nutrition Assistance Program (SNAP) and Medicaid online, and keeping long-term residents in place—avoiding the rural “brain drain.”

“[Without connection], it’s like the world is leaving you behind.”

– Public meeting participant, Wichita Falls, Texas

Awareness of cybersecurity measures, ability to access technology support and confidence with basic digital skills such as connecting a computer or smartphone to a Wi-Fi network are about the same for rural residents as all respondents. They express the lowest

levels of interest in internet or computer training classes, among all covered or underrepresented populations and all respondents. While rural residents access online public services and essential services at about the same rates as all respondents, the SWG and task forces note that internet speeds make virtual resources challenging, due to poor connectivity.

Rural Texans that participated in individual interviews as part of BDO’s partnership with TWC also noted that “bad service” was a major challenge, and

⁸⁵ Appendix L: Dozier, M., Bauer, R., Baze, J., Thomas-Wilson, C., & Klose, S. L. (2024). Broadband Adoption for Rural Communities. Disaster, Assessment, and Recovery Department, Texas A&M AgriLife Extension Service.

they regularly accessed the internet outside of their homes for this reason. When participants did have access to high-speed internet services at home, they were dissatisfied with the cost and quality of these services, often resulting from the limited number of providers in remote areas. They also emphasized that internet availability is especially important for rural residents in Texas as it increases opportunities to participate in job training and/or employment that would otherwise be difficult to access due to geographic distance. Addressing availability, adequacy and speed could provide opportunities to improve health, educational and workforce outcomes; increase access to and adoption of internet services; and increase engagement in using the internet to access essential services and civic and social processes.

The table below shows rural residents’ responses to the Digital Opportunity Survey as compared to all survey responses.

Table 8: Digital Opportunity Survey Responses: Respondents Who Self-Identified as Rural Residents

	Higher than all respondents	Lower than all respondents	Equal to all respondents
Survey Response	Rural Residents	All Respondents	
Do not subscribe because services are not available or adequate	77%	60%	
Report that speed and reliability of internet service at home is inadequate	60%	36%	
Download speeds below 25 Mbps	48%	28%	
Upload speeds below 3 Mbps	34%	17%	
Do not subscribe because services are too expensive	51%	59%	
Pay more than \$100 for monthly internet	51%	41%	

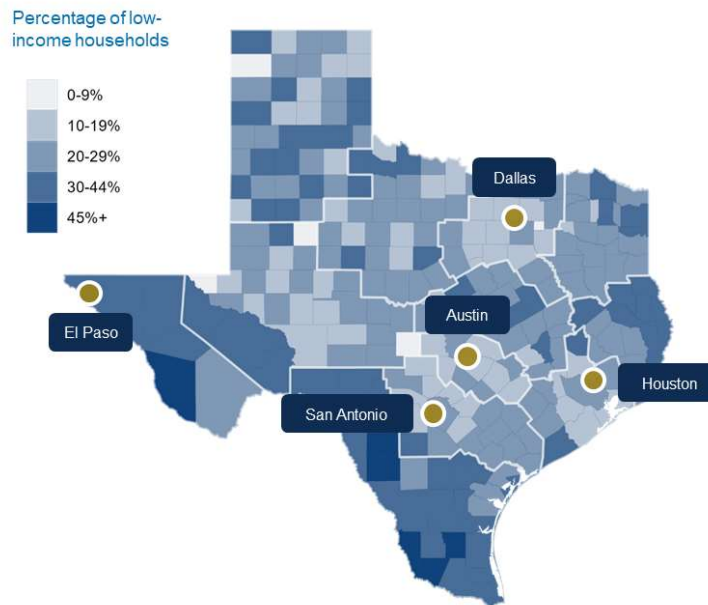
Survey Response	Rural Residents	All Respondents
Have heard of ACP	39%	40%
Have heard of discounted internet by ISPs	19%	21%
Only use a mobile data plan for internet access at home	18%	10%
Use a desktop computer	43%	43%
Use a laptop	78%	79%
Use a tablet	55%	56%
Use a smartphone	95%	94%
Only use a smartphone	8%	7%
Do not have someone in their household or community to help them if they have trouble with the internet	18%	18%
Are not familiar with cybersecurity measures	8%	10%
Do not have or don't know if they have cybersecurity measures on the devices they use	13%	14%
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	12%	12%
Would be interested in internet or computer training classes	25%	28%
Sometimes or often use the internet for accessing health care information or services	83%	82%
Sometimes or often use the internet to apply for public benefits	35%	33%
Sometimes or often use the internet to improve skills for work	66%	68%

Survey Response	Rural Residents	All Respondents
Sometimes or often use the internet to search for available housing	21%	27%
Sometimes or often use the internet for accessing educational resources	74%	75%

3.a.iii.8 Low-Income Households

Low-income households represent 23 percent of the state’s population and 16 percent of Digital Opportunity Survey respondents. Of respondents who identified as residing in low-income households, 65 percent also identified as belonging to a racial or ethnic minority group. Fifteen percent of public meeting attendees identify as or represent organizations serving low-income households. Several organizations serving low-income households participated in the public engagement model described in *Chapter 4*, including libraries, school districts, philanthropic organizations and others. For a full list of organizations, see *Appendix D: Stakeholder Engagements and Participants*.

Figure 10: Low-Income Households in Texas by County⁸⁶



The South Texas (37 percent), Upper Rio Grande (32 percent) and Southeast (28 percent) regions have the highest percentage of low-income households.

Findings:

Cost of internet service, access to devices, digital literacy and cybersecurity awareness are all barriers to broadband adoption facing low-income households. Survey respondents belonging to low-income households report using the internet to apply for public benefits and to search for available housing at some of the highest rates compared to other covered populations. According to the results of the Digital Opportunity Survey, cost is the primary barrier to connecting to the internet at home for low-income individuals, as opposed to internet availability or adequacy. These findings were echoed in the interviews TWC conducted as part of their partnership with the BDO: Texans from low-income households who also reported that they use the internet to apply for

⁸⁶ U.S. Department of Commerce, “U.S. Census Bureau American Community Survey Five-Year Data (2009-2022)”, Table C17002 Ratio of Income to poverty level (2017-2021), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

government benefits mentioned cost as the biggest barrier to accessing high-speed internet. Low-income households rely on mobile data plans and smartphones only to connect to the internet at among the highest rates of covered populations.

Low-income households are the most aware of broadband affordability programs and ACP among covered populations, yet they are among the highest covered or underrepresented populations not enrolled in discount programs, stating that they don't know how to apply. Similarly, most individuals from low-income households that participated in interviews with TWC had heard of ACP and half of them were enrolled. Interviewees primarily used their ACP benefit to reduce the cost of current internet service, rather than upgrading to faster service. However, these interviewees also voiced complaints about perceived inconsistencies in program eligibility and the inconvenience of needing to regularly reapply. One participant mentioned that ACP "never got back to her" after being waitlisted. Half of the interview participants identifying as low-income had heard of Lifeline, but none were enrolled, with no consistent reasoning behind the decision.

Strategy 3: Promote Internet Adoption, as detailed in *Chapter 5: Implementation*, will support activities to encourage and support Texans in signing up for and using the internet. Further research to understand ACP eligibility and enrollment for low-income households would shed light on this discrepancy. A participant in the Kingsville Public Meeting in the South Texas Region expressed, "ACP has a gap for families that don't meet the current financial requirements for enrollment, but still don't have the means to subscribe to internet due to lack of financial resources."

**“Something’s wrong – low-income families
with kids aren’t subscribing to ACP.”**
– Civic and Social Engagement Task Force Member

Low-income households expressed the lowest degree of confidence among covered populations with basic digital skills such as connecting a computer or smartphone to a Wi-Fi network. If they have trouble with computers or the internet, they have some of the lowest rates of access to technical support among covered populations. They also have some of the lowest rates of adoption of cybersecurity measures of covered populations.

Addressing cost, access to devices, digital literacy and cybersecurity awareness could provide opportunities to improve health, educational and workforce outcomes; increase access to and adoption of internet services; and increase engagement in using the internet to access essential services and civic and social processes.

The table below shows low-income households' responses to the Digital Opportunity Survey as compared to all survey responses.

Table 9: Digital Opportunity Survey Responses: Respondents Who Self-Identified as Belonging to Low-Income Households

	Higher than all respondents	Lower than all respondents	Equal to all respondents
Survey Response	Low-Income Households	All Respondents	
Do not subscribe because services are not available or adequate	43%	60%	
Report that speed and reliability of internet service at home is inadequate	38%	36%	
Download speeds below 25 Mbps	31%	28%	
Upload speeds below 3 Mbps	17%	17%	
Do not subscribe because services are too expensive	75%	59%	
Pay more than \$100 for monthly internet	35%	41%	

Survey Response	Low-Income Households	All Respondents
Have heard of ACP	47%	40%
Have heard of discounted internet by ISPs	21%	21%
Are not enrolled in discount programs because they don't know how to apply	28%	9%
Only use a mobile data plan for internet access at home	18%	10%
Use a desktop computer	30%	43%
Use a laptop	60%	79%
Use a tablet	44%	56%
Use a smartphone	90%	94%
Only use a smartphone	20%	7%
Do not have someone in their household or community to help them if they have trouble with the internet	25%	18%
Are not familiar with cybersecurity measures	25%	10%
Do not have or don't know if they have cybersecurity measures on the devices they use	27%	14%
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	19%	12%
Would be interested in internet or computer training classes	44%	28%
Sometimes or often use the internet for accessing health care information or services	77%	82%
Sometimes or often use the internet to apply for public benefits	61%	33%
Sometimes or often use the internet to improve skills for work	68%	68%
Sometimes or often use the internet to search for available housing	41%	27%
Sometimes or often use the internet for accessing educational resources	78%	75%

3.a.iv Additional Covered Populations

The BDO gathered additional information about communities in Texas that the NTIA does not include among the covered populations in the State Digital Equity Planning Grant Program’s NOFO but have historically faced barriers to digital opportunity. These segments include immigrants, tribal communities and unhoused individuals.

3.a.iv.1 Immigrants

Immigrants represent 17 percent of the state’s population and 5 percent of the Digital Opportunity Survey respondents. Of survey respondents who self-identified as immigrants, 82 percent also identified as belonging to a racial or ethnic minority group and 33 percent also identified as an individual with limited English proficiency. Several organizations that participated in the public engagement process described in *Chapter 4* also serve immigrant communities, including health care organizations, libraries, school districts and nonprofit organizations. For a full list of organizations, see *Appendix D: Stakeholder Engagements and Participants*.

Findings:

Survey respondents identifying as immigrants cited cost as the primary barrier to connecting to the internet at home. Immigrants are less aware of ACP and discounted internet programs than all survey respondents and are among the highest covered populations not enrolled because they do not know how to apply. They use devices at about the same or lower rates than all survey respondents and rely on a smartphone only at a higher rate than all survey respondents. Immigrants have less technical support and cybersecurity familiarity than all survey respondents but are among the most interested in internet or computer training classes. Immigrants are among the top covered populations that use the internet to improve skills for work, access educational resources and search for available housing.

The table below shows the Digital Opportunity Survey responses of individuals who self-identified as immigrants, as compared to all survey respondents.

Table 10: Digital Opportunity Survey Responses: Respondents Who Self-Identified as Immigrants

Higher than all respondents	Lower than all respondents	Equal to all respondents
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Survey Response	Immigrants	All Respondents
Do not subscribe because services are not available or adequate	35%	60%
Report that speed and reliability of internet service at home is inadequate	32%	36%
Download speeds below 25 Mbps	17%	28%
Upload speeds below 3 Mbps	8%	17%
Do not subscribe because services are too expensive	78%	59%
Pay more than \$100 for monthly internet	33%	41%
Have heard of ACP	35%	40%
Have heard of discounted internet by ISPs	17%	21%
Are not enrolled in discount programs because they don't know how to apply	19%	9%
Only use a mobile data plan for internet access at home	8%	10%
Use a desktop computer	38%	43%
Use a laptop	80%	79%
Use a tablet	51%	56%
Use a smartphone	94%	94%
Only use a smartphone	11%	7%

Survey Response	Immigrants	All Respondents
Do not have someone in their household or community to help them if they have trouble with the internet	21%	18%
Are not familiar with cybersecurity measures	17%	10%
Do not have or don't know if they have cybersecurity measures on the devices they use	18%	14%
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	10%	12%
Would be interested in internet or computer training classes	48%	28%
Sometimes or often use the internet for accessing health care information or services	81%	82%
Sometimes or often use the internet to apply for public benefits	36%	33%
Sometimes or often use the internet to improve skills for work	83%	68%
Sometimes or often use the internet to search for available housing	43%	27%
Sometimes or often use the internet for accessing educational resources	84%	74%

3.a.iv.2 Tribal Communities

Members of tribal communities represent 1 percent of the state's population⁸⁷ and 1 percent of respondents to the Digital Opportunity Survey. Among survey respondents who self-identified as belonging to tribal communities, 76 percent also identified as belonging to a racial or ethnic minority group and 42 percent

⁸⁷ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau, <https://www.census.gov/data/developers/data-sets/acs-5year.html>. "B02001_004", American Indian or Alaska Native alone

also identified as residing in a rural community. To align the Digital Opportunity Plan with the plans of tribal governments and gain perspective on the digital opportunity experiences of Texas' tribal communities, the BDO conducted tribal consultations outlined in *Chapter 4*. At the BDO's public meetings, 3 percent of attendees identified as or represented organizations serving tribal communities.

Findings:

Availability and reliability of internet and lack of technical support are all barriers to in-home broadband adoption tribal communities face. Tribal consultations revealed that lack of reliable internet and affordable internet options are primary concerns for tribal governments in Texas. Tribal communities expressed concerns about providing quality education for students and workforce opportunities for their members as more resources transition to online platforms. Tribal consultations further identified the need for information sharing between the BDO and tribal governments to better capture and address broadband gaps on tribal lands.

According to the results of the Digital Opportunity Survey, tribal communities lack access to available or adequate internet and are among the top covered populations that feel their internet is not adequate for their needs. While survey respondents do not cite cost as a primary barrier to internet access, in the tribal consultations, leaders identified cost as a barrier for some tribal members to subscribe to internet service at home.⁸⁸ Tribal communities have some awareness of ACP and discounted internet programs and use devices at about the same or higher rates than all survey respondents.

The Digital Opportunity Survey responses show that tribal community members have lower rates of access to technical support than other covered and underrepresented populations. They report higher awareness of cybersecurity measures, but self-report lower use of cybersecurity measures on their devices than all survey respondents. The survey sample size was too small to assess

⁸⁸ Alabama Coushatta and Kickapoo Tribal Consultation Meeting Minutes.

tribal communities' comfort with digital literacy skills and interest in internet or computer training classes.

Tribal community members use the internet at about the same rate as all survey respondents to access health care and education information, and to improve skills for work. Among covered populations, they use the internet the least to search for available housing and apply for public benefits.

The table below shows tribal community members' responses to the Digital Opportunity Survey as compared to all survey responses.

Table 11: Digital Opportunity Survey Responses: Respondents Who Self-Identified as Belonging to Tribal Communities

	Higher than all respondents	Lower than all respondents	Equal to all respondents
Survey Response	Tribal Communities	All Respondents	
Do not subscribe because services are not available or adequate	82%	60%	
Report that speed and reliability of internet service at home is inadequate	47%	36%	
Download speeds below 25 Mbps	Sample size was too small	28%	
Upload speeds below 3 Mbps	Sample size was too small	17%	
Do not subscribe because services are too expensive	55%	59%	
Pay more than \$100 for monthly internet	45%	41%	
Have heard of ACP	43%	40%	
Have heard of discounted internet by ISPs	23%	21%	
Only use a mobile data plan for internet access at home	14%	10%	
Use a desktop computer	55%	43%	

Survey Response	Tribal Communities	All Respondents
Use a laptop	81%	79%
Use a tablet	59%	56%
Use a smartphone	96%	94%
Only use a smartphone	8%	7%
Do not have someone in their household or community to help them if they have trouble with the internet	28%	18%
Are not familiar with cybersecurity measures	4%	10%
Do not have or don't know if they have cybersecurity measures on the devices they use	15%	14%
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	Sample size was too small	12%
Would be interested in internet or computer training classes	Sample size was too small	28%
Sometimes or often use the internet for accessing health care information or services	84%	82%
Sometimes or often use the internet to apply for public benefits	34%	33%
Sometimes or often use the internet to improve skills for work	69%	68%
Sometimes or often use the internet to search for available housing	25%	27%
Sometimes or often use the internet for accessing educational resources	76%	75%

3.a.iv.3 Unhoused Individuals

Unhoused individuals represent 1 percent of the state’s population⁸⁹ and 1 percent of respondents to the Digital Opportunity Survey. Of survey respondents who self-identify as unhoused, 65 percent also identify as belonging to a racial or ethnic minority group.

While unhoused individuals responded to questions about why they may not subscribe to the internet and other indicators of digital opportunity, the survey did not ask additional questions that may shed light on the unique circumstances behind why an unhoused individual may not subscribe to the internet or access devices, training, cybersecurity and online public resources. Survey limitations include the use of the word “home” in survey questions, for example. Therefore, the conclusions regarding this population drawn from the survey data alone are limited.

Findings:

The Digital Opportunity Survey data show that unhoused individuals rely on only smartphones and mobile plans at some of the highest rates of covered populations. A recent study, *Smartphone Technology to Empower People Experiencing Homelessness*, conducted in Austin, Texas, concluded that “access to smartphones with unlimited text, calling, data and transportation allowed participants to navigate homelessness and facilitated self-management [of health conditions].”⁹⁰ Survey responses reveal that unhoused individuals are most reliant on the internet to search for available housing, to improve skills for work and to apply for public benefits. Among covered populations, they are least reliant on the internet for accessing health care. The study found that access to smartphone technology could enable unhoused individuals to set and keep appointments with health and social services providers, more easily access

⁸⁹ U.S. Department of Housing and Urban Development Office of Community Planning and Development, The 2022 Annual Homelessness Assessment Report (AHAR) to Congress (2022), <https://www.huduser.gov/portal/datasets/ahar.html>.

⁹⁰ Thurman, W., Semwal, M., Moczygemba, L. R., & Hilbelink, M., “Smartphone Technology to Empower People Experiencing Homelessness: Secondary Analysis”, *Journal of Medical Internet Research* (2021), <https://doi.org/10.2196/27787>.

basic resources like food and better meet social needs like gaining employment. Participants in the study cited their ability to charge and protect smartphone devices from the elements as barriers to continued use of their smartphones. The study suggests providing space for unhoused individuals to safely charge their devices.⁹¹ More data on the digital opportunity experiences of unhoused individuals will enable better understanding of the barriers they face to accessing internet-enabled resources.

According to the Digital Opportunity Survey, unhoused individuals have the least support in their communities to help them if they have trouble with the internet and some of the highest rates of device use without cybersecurity measures in place among covered and underrepresented populations. The survey sample size was too small to assess unhoused individuals' comfort with foundational digital literacy skills. However, among covered populations, unhoused individuals expressed the highest rates of interest in internet or computer training classes. Strategies 1 and 2 in *Chapter 5: Implementation* consider support for such programs.

The table below shows unhoused individuals' responses to the Digital Opportunity Survey as compared to all survey responses.

⁹¹ Thurman, W., Semwal, M., Moczygemba, L. R., & Hilbelink, M., "Smartphone Technology to Empower People Experiencing Homelessness: Secondary Analysis", *Journal of Medical Internet Research* (2021), <https://doi.org/10.2196/27787>.

Table 12: Digital Opportunity Survey Responses: Respondents Who Self-Identified as Unhoused Individuals

Higher than all respondents	Lower than all respondents	Equal to all respondents
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Survey Response	Unhoused Individuals	All Respondents
Do not subscribe because services are not available or adequate	27%	60%
Report that speed and reliability of internet service at home is inadequate	42%	36%
Download speeds below 25 Mbps	Sample size was too small	28%
Upload speeds below 3 Mbps	Sample size was too small	17%
Do not subscribe because services are too expensive	73%	59%
Pay more than \$100 for monthly internet	54%	41%
Have heard of ACP	58%	40%
Have heard of discounted internet by ISPs	25%	21%
Only use a mobile data plan for internet access at home	28%	10%
Are not enrolled in discount programs because they don't know how to apply	15%	9%
Use a desktop computer	Sample size was too small	43%
Use a laptop	62%	79%
Use a tablet	Sample size was too small	56%
Use a smartphone	95%	94%
Only use a smartphone	27%	7%
Do not have someone in their household or community to help them if they have trouble with the internet	40%	18%

Survey Response	Unhoused Individuals	All Respondents
Are not familiar with cybersecurity measures	18%	10%
Do not have or don't know if they have cybersecurity measures on the devices they use	24%	14%
Are less than comfortable with connecting a computer or smartphone to a Wi-Fi network, a basic digital literacy skill	Sample size was too small	28%
Would be interested in internet or computer training classes	54%	28%
Sometimes or often use the internet for accessing health care information or services	72%	82%
Sometimes or often use the internet to apply for public benefits	62%	33%
Sometimes or often use the internet to improve skills for work	75%	68%
Sometimes or often use the internet to search for available housing	76%	27%
Sometimes or often use the internet for accessing educational resources	81%	74%

3.a.v Economic Regions of Texas

The state's unique size, diversity and geography call for a regional approach to any digital opportunity work. The following regional assessments reflect the unique barriers, opportunities, assets and needs of local Texas communities. The analysis is framed using Texas' 12 economic regions.

3.a.v.1 Alamo Region

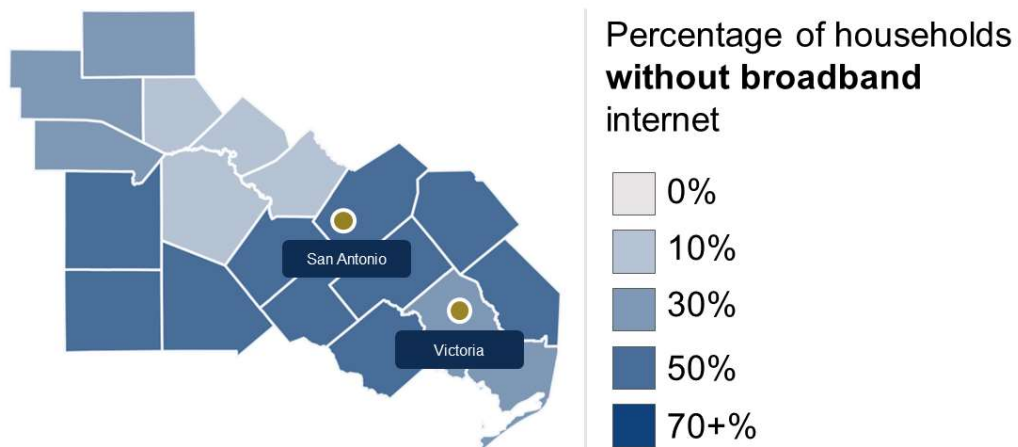
The Alamo Region in the central part of the state includes the city of San Antonio. It has the second largest veteran population and third largest population of individuals belonging to racial and ethnic minority groups out of all 12 Texas regions. The Alamo Region has the third highest ACP enrollment rate. According to ACS estimates, 31 percent of the region does not subscribe to broadband. For more regional demographics, see *Table 13*.



“You need internet first to talk about any of these resources. Reliability is an issue here. Internet is not consistent throughout the day. Lots of businesses with multiple subscriptions. It's expensive. Everything relies on internet, including the public transportation agency.”

– Public Meeting Attendee, Cuero, Texas

Figure 11: Households Without Broadband Access in the Alamo Region⁹²



Findings:

According to the Digital Opportunity Survey, the Alamo region is one of the best-supported regions for digital opportunity, with most survey respondents reporting higher satisfaction with internet speed and reliability, better than average download and upload speeds and fewer households paying more than \$100/month for internet (see *Table 14*). Nevertheless, counties across the region face their own unique challenges and disparities. As a participant in the Cuero, Texas, public meeting described, “We’re uniquely on the outskirts of four metro areas. Jobs go to them. We want to keep those jobs and those younger people here. Need enough of a cultural anchor to keep people here. Broadband is key to that.” Similarly, an organization responding to the DRMTS providing Alamo region residents with critical services shared, “Victoria Public Library is the sole public library serving the citizens of Victoria County. Victoria is centrally located in its region and as such often services citizens from surrounding counties in meeting their digital needs, as well.”

Regarding implementing strategies in the Alamo region, a participant in the San Antonio public meeting shared, “It’s not a one-size-fits-all solution. The approach needs to consider the human side of things. You have to adapt based on who

⁹² U.S. Department of Commerce. (n.d.). U.S. Census Bureau American Community Survey five-year data (2017-2021), <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

you're working with and where you're working. Use people they trust, in a language they understand, during a time of day they can make."

3.a.v.2 Capital Region

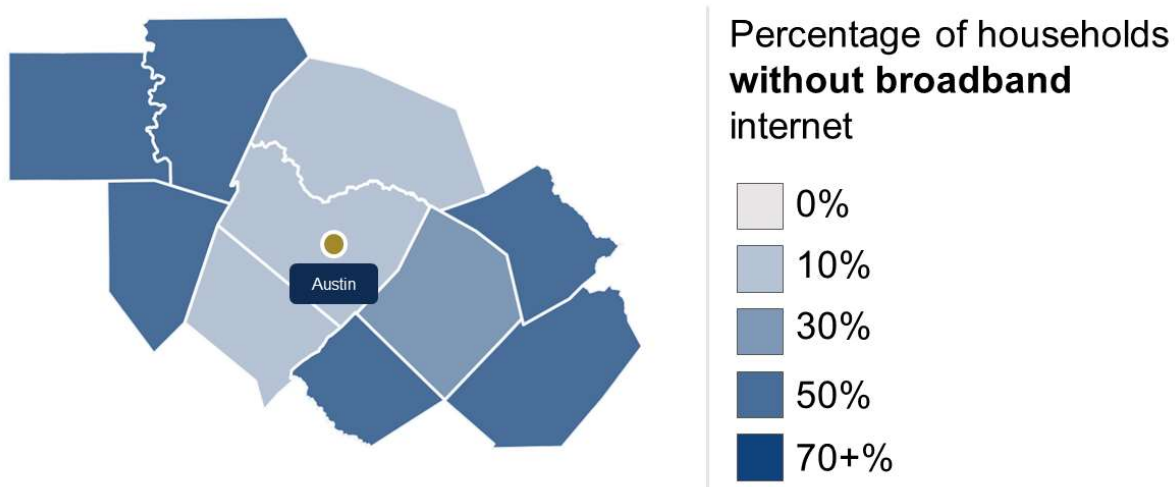
The Capital Region in the central part of the state includes the city of Austin. It has the highest median household income of all the economic regions in the state, according to ACS estimates. For more regional demographics, see *Table 13*. According to ACS estimates, the region has the lowest percentage of residents who do not subscribe to broadband, yet residents report that the speed and reliability of their internet service at home is inadequate at higher rates than all survey respondents. While this region has the highest enrollment rate in broadband service, the further away from Austin, fewer households enrolled.



"There are transportation and language barriers to accessing resources. Even if there are resources, people can't get to them!"

– Public Meeting Attendee, Burnet, Texas

Figure 12: Households Without Broadband Subscriptions in the Capital Region⁹³



Because the state capital is located in this region, many organizations offering statewide services are based in the region. The highest number of responses to the DRMTS came from Travis County, where Austin is located.

Findings:

Public meeting attendees in Burnet emphasized that, “the area is not the same as Austin.” Public meeting attendees in Bastrop noted that, “affordability is a concern in both rural and urban areas.”

Organizations serving residents outside the central part of the Capital Region shared difficulties with internet reliability. A library in Burnet County shared in their response to the DRMTS, “Our area is very rural and lacks quality internet and, in some areas, internet in general. Our library, even being in the middle of the town, has times where internet is slow, especially with multiple devices using it.”

⁹³ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau, <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

"Limited options and high prices contribute to feeling left out of the region's development."

– Public Meeting Attendee, Burnet, Texas

When addressing the needs of the Capital Region, Bastrop public meeting attendees shared, "Trust, consistency and community partnerships are essential."

3.a.v.3 Central Texas Region

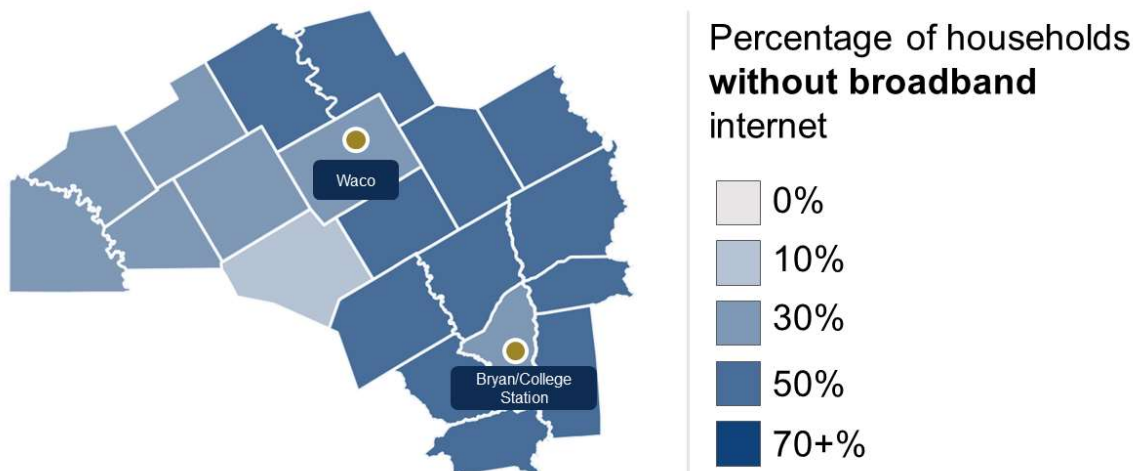
The Central Texas Region in the central part of the state includes the cities of College Station and Waco. It has the largest veteran population of all the economic regions in the state, according to ACS estimates. For more regional demographics see *Table 13*. According to ACS estimates, the region has a higher percentage of residents who do not subscribe to broadband than the rest of the state.



"Waller County has no access to internet or cell phone. Life is completely disconnected. No access to emergency preparedness. Can't work from home. Going to Tractor Supply parking lot to pay bills. No access to 911."

– Public Meeting Attendee, Bryan, Texas

Figure 13: Households Without Broadband Subscriptions in the Central Texas Region⁹⁴



Findings:

According to the results of the Digital Opportunity Survey, the Central Texas Region is one of the top three regions with households paying more than \$100 for monthly internet service and reporting that the speed and reliability of their internet service is inadequate. They report the third highest concentration of respondents (28 percent) with upload speeds under three Mbps out of all 12 regions. Paper survey respondents reported using only a smartphone to connect to the internet (15 percent) at higher rates than online respondents (5 percent).

The need for education, outreach and devices were key themes to the discussions at the public meeting held in Belton. Attendees shared, “What good are resources if people don’t know about them?” and, “If you don’t have devices, it’s hard to access services.”

For example, a food pantry responding to the DRMTS located in the Central Texas Region shared, “This organization is paired with the East Texas Food Bank. ETFB is on a computer system. We cannot connect to the system

⁹⁴ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>

because we have no Wi-Fi and no computers. We all use our computers from home.”

On the implementation of digital opportunity programs, public meeting attendees in Bryan emphasized, “Training needs to be tailored to the target populations. Think through what the difference means for literacy and cybersecurity for the intergenerational ways that the internet is used.” And a public meeting attendee in Belton shared, “We want something that grows with the population into the future.”

3.a.v.4 Gulf Coast Region

The Gulf Coast Region on the eastern gulf coast includes the city of Houston. It is the second most populous region in the state and has some of the largest populations of immigrants and individuals with limited English proficiency, according to ACS estimates. For more demographics see *Table 13*.



Findings:

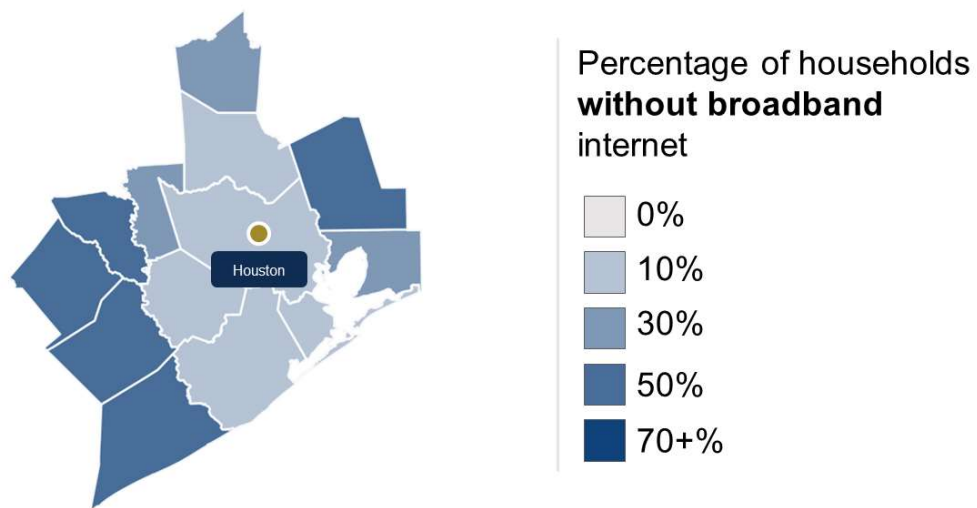
According to ACS estimates, the region has a lower percentage of households that do not subscribe to broadband than the statewide average. Results of the Digital Opportunity Survey suggest that the Gulf Coast region is one of the better-supported regions for broadband access, with most respondents reporting higher satisfaction with internet speed and reliability, and about the same average download and upload speeds as all survey respondents (see *Table 14*).

Even with some of the greatest numbers of households subscribing to broadband, the Gulf Coast Region has areas with fewer households subscribing, as well as unique geographic challenges. A participant in the public meeting in Sugar Land shared, “[There are] disparities in internet access and affordability between different areas.” In addition, an attendee of the public meeting in Bay

City stated, “There are discrepancies between perceived service coverage and actual availability in rural areas. There is a desire to update the map to accurately assess internet coverage.”

Organizations serving the area face similar challenges, with a school district responding to the DRMTS sharing, “COVID has moved our instructional delivery to full digital immersions. Many of our economically challenged students and rural families do not have access to broadband access ... With the current budget challenges, our school district could not afford to increase our internet bandwidth to accommodate the vast increase in bandwidth demands.”

Figure 14: Households Without Broadband Subscriptions in the Gulf Coast Region⁹⁵



In this hurricane-prone region, the need for reliable communication infrastructure is a safety concern. When implementing digital opportunity programming in the Gulf Coast Region, Sugar Land public meeting attendees expressed the “need for education, information sharing and collaboration among stakeholders.”

⁹⁵ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>

3.a.v.5 High Plains Region

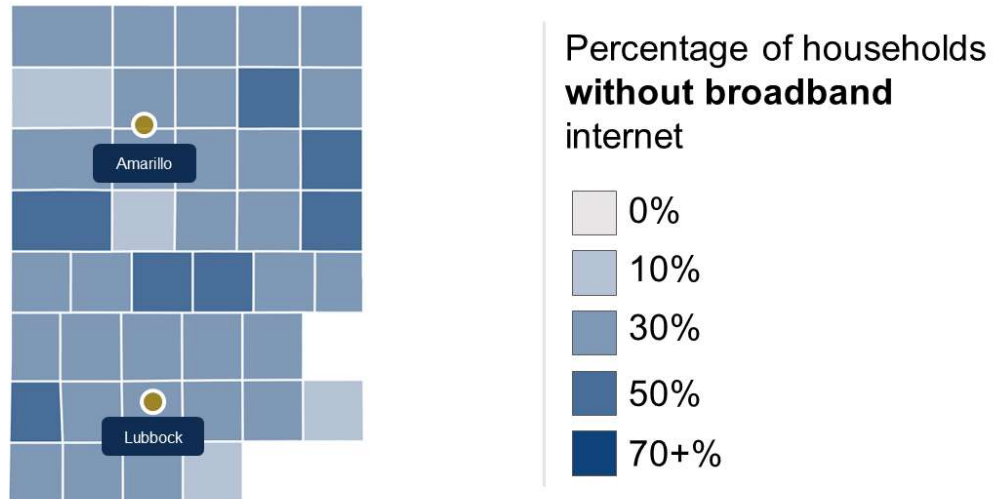
The High Plains Region occupies the northern “panhandle” of the state and includes the cities of Amarillo and Lubbock. It is one of the least populous regions in the state. For more demographics see *Table 13*. A public meeting attendee in Borger shared this snapshot: “This region is the top of the state and the bottom of the list for a lot of these programs... Even though we do not have the highest population in the state, with I-40 and I-27 there’s a lot of folks coming through our region. The same with rail. It’s important to have broadband from that perspective, too.”



Findings:

According to ACS estimates, the region has a higher percentage of households that do not subscribe to broadband than the statewide average. Yet Digital Opportunity Survey respondents report higher satisfaction with internet speed and reliability as compared to all respondents, and about the same average download and upload speeds as all survey respondents (see *Table 14*).

Figure 15: Households Without Broadband Subscriptions in the High Plains Region⁹⁶



“In our rural areas we have some good build-out, but the cost to keep that service running will look different than in urban areas. How will we keep those services ongoing long-term? How do we help our providers stay in those rural communities? In the long term, how do we make sure that affordability stays a top priority?”

– Public Meeting Attendee, Lubbock, Texas

While survey and ACS data show the region as relatively well serviced, in the Borger public meeting, participants expressed a need for redundancy. They note that there are differences in advertised speed vs. actual speed and businesses can't afford to lose connectivity because customers can't pay without a connection. Many businesses pay for multiple services in case one internet provider goes down, noting, "When the internet goes down, these communities

⁹⁶ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

are sitting ducks.” A county judge in the region responding to the DRMTS shared, “Lack of digital access affects our law enforcement, fire departments, EMS as well as residents being able to communicate via cellphones in numerous locations within the county.”

Lubbock public meeting attendees shared a need for physical spaces and resources to expand collective digital literacy: “There is a lack of knowledge and lack of trust of resources available. We need to build a community of trusted physical spaces where people can come together and learn.” Similarly, a Borger public meeting attendee shared, “There’s a need for broad digital education. For example, how do you know if the service is too expensive? There is a digital skills gap. People are proficient on tablets and phones but then they get in front of a desktop and they freeze. Amarillo College has cybersecurity classes and certificates. Libraries have trainings.”

3.a.v.6 Metroplex Region

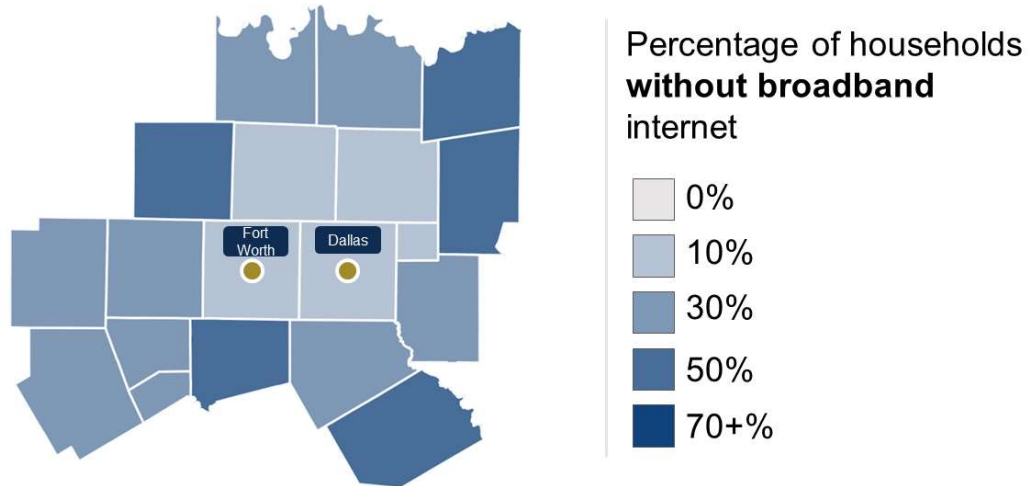
Located in the north-central part of the state, the Metroplex Region is the most populous in Texas, as home to the Dallas-Fort Worth Metropolitan Area. The Metroplex Region has among the highest median incomes in the state. For more demographics see *Table 13*.



Findings:

According to ACS estimates, the region has a higher percentage of households that subscribe to broadband than the statewide average. Metroplex Region residents responding to the Digital Opportunity Survey reported higher satisfaction with their internet service and relatively faster speeds than all respondents on average. However, as in other regions, rates of broadband adoption and satisfaction with service decline as one moves away from urban centers.

Figure 16: Households Without Broadband Subscriptions in the Metroplex Region⁹⁷



A participant in the Sherman public meeting described the experiences of residents with less reliable internet: “Residents are piecing together their internet access with multiple points of access, mostly via hotspots. Line of sight is an issue once you leave town.” Even with hotspots to connect, a Lewisville public meeting attendee shared that people also need devices: “Hotspots are basically a paperweight if the community doesn’t have devices.” The Metroplex Region is one of the top two regions with survey respondents who only use a smartphone to connect to the internet.

"We are so close to areas with faster speeds, but they won't come."

– Public Meeting Attendee, Sherman, Texas

According to the Comptroller’s 2022 economic report, the Metroplex Region’s population grew about 20 percent from 2010 to 2020.⁹⁸ An attendee of the Metroplex Region’s virtual public meeting shared the challenges of infrastructure keeping up

⁹⁷ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

⁹⁸ Texas Comptroller of Public Accounts. (2022). The Metroplex Region: 2022 Regional Report. <https://comptroller.texas.gov/economy/economic-data/regions/2022/metroplex.php>

with the growth: “So much work is being done in building out in their community, but the area is growing so quickly that they’re behind. Playing catch-up is a challenge and providers make promises then don’t follow through. [There is a] need for oversight.”

Lewisville public meeting attendees suggested that organizations that typically offer resources, like libraries, “lack the same resources and capacity that urban ones have – digital navigation is overlooked.” They also acknowledged the need for education along with devices and resources: “For example, in Wise County, once they had hotspots available, there were still digital literacy issues.”

Still, there are organizations in the region working to overcome these challenges. For example, Goodwill of North Central Texas shared in their response to the DRMTS, “We have mobile crews that do digital literacy classes across multiple cities. We partner with TWC to provide services on a mobile bus in rural areas.”

3.a.v.7 Northwest Region

The Northwest Region in the central plains includes the cities of Abilene and Wichita Falls. It is among the least populous regions in the state, with relatively large populations of aging individuals, incarcerated individuals, individuals with disabilities, rural residents and veterans. For more demographics see *Table 13*.

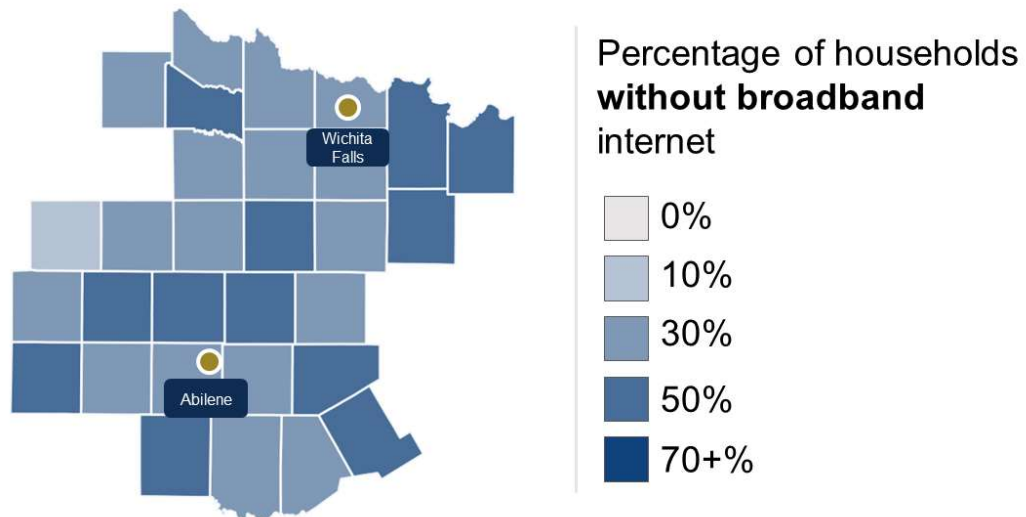


Findings:

According to ACS estimates, the Northwest Region has a higher percentage of households that do not subscribe to broadband than the statewide average. Digital Opportunity Survey respondents reported lower satisfaction with their internet service and some of the slowest internet speeds in the state. A participant in the Wichita Falls meeting expressed the challenges rural residents

face: “In town, affordability is an issue, but they have options. In rural areas, they're challenged by both availability and affordability.”

Figure 17: Households Without Broadband Subscriptions in the Northwest Region⁹⁹



“Starlink is the only option. It’s expensive but I’d pay whatever because I need it. Almost the whole town is on satellite.”

– Public Meeting Attendee, Wichita Falls, Texas

Reliability is also an issue. Participants in the Clyde public meeting shared that insufficient broadband is impacting their essential services: “Fire doesn't have service... EMS has unreliable service. Doctors don't want to stay.” Similarly, a hospital district in the region shared in the DRMTS, “Without high-speed broadband, it limits access to telehealth medicine in rural areas.”

⁹⁹ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

Clyde public meeting participants shared the benefits to the economy that universal digital opportunity would bring: “Technology plays a central role in agriculture. The new equipment is all technology driven. They need the infrastructure to support it.” They also shared their challenges and considerations for supporting educational institutions: “All school safety measures require a connection. Not all rural schools have the necessary speeds. Schools can't share services because of security. Students receive devices and hotspots in rural communities, but they're limited.”

3.a.v.8 South Texas Region

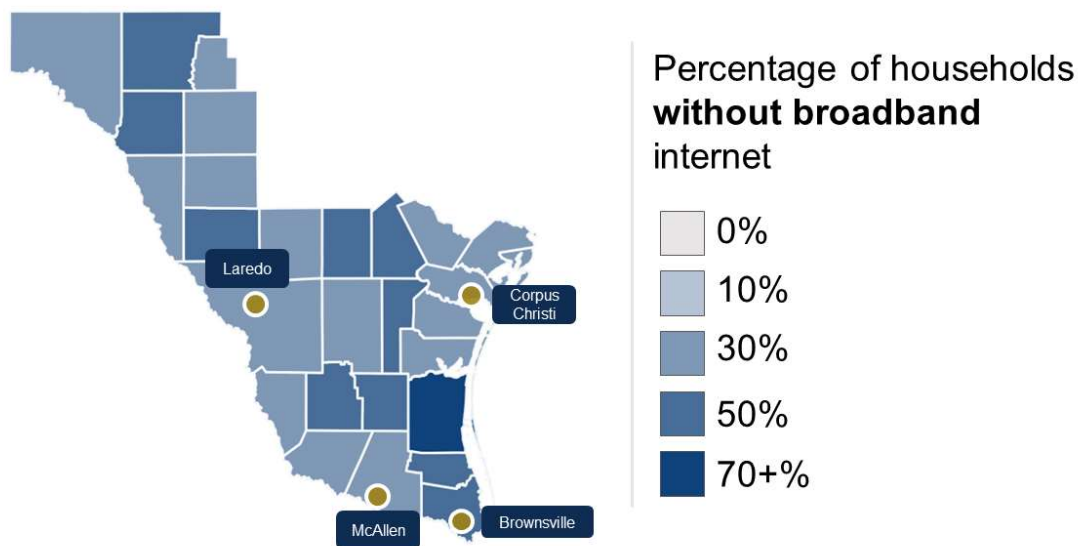
The South Texas Region includes the cities of Brownsville, Corpus Christi, Laredo and McAllen. It has the largest population of low-income households, racial or ethnic minorities, individuals with limited English proficiency and some of the largest populations of immigrants. For more demographics see *Table 13*.



Findings:

According to ACS estimates, the region has a relatively high share of households that do not subscribe to broadband as well as a high share of households dependent on smartphones for accessing the internet. While this region has the lowest median income and the highest percentage of eligible households enrolled in ACP, a Kingsville public meeting attendee shared that more households could benefit from discounted internet: “ACP has a gap for families that don’t meet the current financial requirements for enrollment but still don’t have the means to subscribe to internet due to lack of financial resources.”

Figure 18: Households Without Broadband Subscriptions in the South Texas Region¹⁰⁰



According to Digital Opportunity Survey data, the NTIA Digital Equity Population Viewer and ACS data, this region has some of the highest digital opportunity needs, explored further in Section 3.4.

A Kingsville public meeting attendee shared, “[There is] a lack of knowledge on how to sign up for the internet. The area has a lot of fear and doesn’t necessarily know why they need it or don’t want to use computers. They prefer face-to-face interaction.” Additionally, a Weslaco public meeting attendee suggested, “The ACP gap needs to be addressed. The state could fund affordability programs through the Digital Opportunity Plan.”

While this region has some of the highest needs for digital opportunity, resources like public libraries offer a range of tools to support residents. The McAllen Public Library shared in the DRMTS, “The library loans ‘Job Fair in a Bag’ kits. These consist of a laptop, hotspot device and other resources intended to help the individual gain employment. The organization also offers computer literacy courses to assist those in learning and development of how to

¹⁰⁰ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

use the computer to its fullest potential.” A further description of existing resources in the South Texas Region is in Section 3.4.

3.a.v.9 Southeast Texas Region

The Southeast Texas Region is in the easternmost part of the state and includes the city of Beaumont. According to ACS estimates, it has the largest population of individuals with disabilities and some of the largest populations of aging individuals, low-income households and rural residents. For more demographics see *Table 13*.



“Rural America has taken a step backward. Our landline telephone was sufficient up until a few years ago to communicate with others. Since new connections have stopped, our infrastructure communications have been abandoned for economic reasons. But now, we’re left without any sort of connection. No landline. No internet. No cell phone service.”

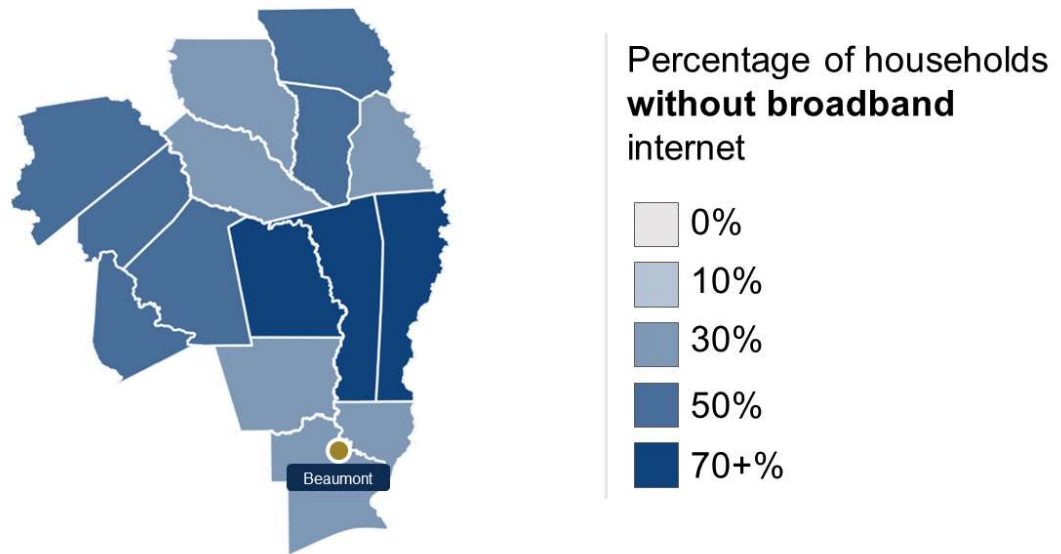
– Public Meeting Attendee, Lufkin, Texas

Findings:

According to ACS estimates, the region has one of the highest percentages of households that do not subscribe to broadband. Respondents to the Digital Opportunity Survey from this region have some of the slowest internet speeds in the state, and highest dissatisfaction with the reliability and adequacy of internet service. On reliability, a Jasper public meeting attendee shared, “Trees are an issue! We’re behind the timber curtain.” A public meeting attendee in Lufkin also stated, “The weather is such an issue, but we need redundancy for other factors

too, since nearby construction can wipe fiber out unexpectedly. It shuts the city down.”

Figure 19: Households Without Broadband Subscriptions in the Southeast Texas Region¹⁰¹



The region has among the highest percentage of residents paying more than \$100 a month for service and using only a mobile plan to connect to the internet at home. Jasper public meeting attendees described, “It’s too expensive or we don’t have access. Rural does not have the same access as urban. Density in a rural area is different than in an urban area. It’s not just a simple numerator over denominator.”

When it comes to implementation, a Lufkin public meeting resident shared, “Give us the gold standard here in East Texas. We don’t want to be behind. We want to be the best in industry, the same as the metro areas, so that we lead, rather than continue to catch up.” A Jasper public meeting attendee shared additional barriers: “Digital resources/opportunities are lacking here. We talked about libraries, but there isn’t a lot beyond libraries. Mental health and telehealth could

¹⁰¹ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

be huge for the region. All the service in the world won't help you if you don't have access to transportation to get you there.”

While libraries already offer resources, they could use additional support for their programs. A library in the region shared in the DRMTS, “Even though we offer computer classes, when someone needs assistance, they need it immediately. They might be in crisis mode at that time. Not all libraries have the ability to provide one-on-one assistance. We are fortunate that we have several Spanish-speaking staff members, but we are limited in our ability to help our Somali and Burmese population ... For libraries, the best support we can get is funding for hotspots and internet-accessible devices and personnel to provide one-on-one assistance.”

3.a.v.10 Upper East Region

The Upper East Region in the northeast corner of the state includes the cities of Longview, Texarkana and Tyler. It has the largest population of aging individuals and rural residents, and some of the largest populations of incarcerated individuals and individuals with disabilities. For more demographics see *Table 13*.



“The first thing the county gets asked when people move is, ‘What is the internet like?’”

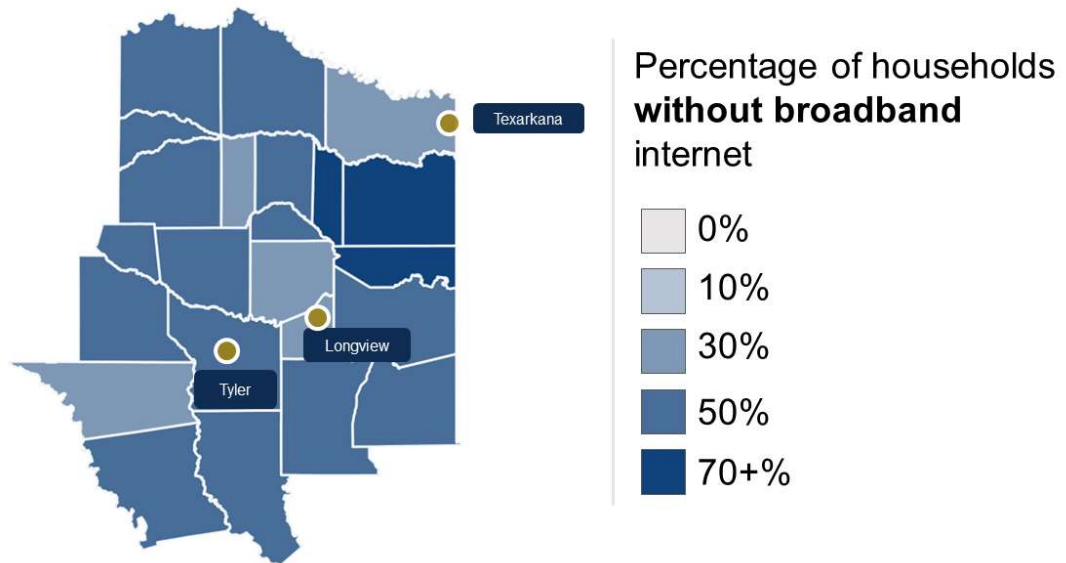
– Public Meeting Attendee, Longview, Texas

Findings:

According to ACS estimates, the region has the highest percentage of households that do not subscribe to broadband. In the Digital Opportunity Survey, this region has the slowest speeds in the state and highest

dissatisfaction with the reliability and adequacy of internet service. The region has the highest percentage of residents paying more than \$100 a month for service and using only a mobile plan to connect to the internet at home.

Figure 20: Households Without Broadband Subscriptions in the Upper East Region¹⁰²



As a participant in the Longview public meeting said, “The service is not reliable, but residents have to pay for what is there because they need it to work. One resident pays \$500 per month for Starlink business because Starlink residential is not available and nothing else works.”

Texarkana public meeting participants shared that internet is critical for accessing essential services in the region: “Health care is important for connectivity. For example, two counties in the area do not have primary care providers. There is a lack of access.”

When it comes to implementation, Longview residents called for more options: “There are not many options for digital inclusion – schools have free Wi-Fi. One resident parks in the airport parking lot to get service.”

¹⁰² U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

Similarly, a library in the region shared in the DRMTS: “We are desperately looking for grants to cover the cost of our hot spots.” Responses to the DRMTS revealed collaboration among organizations in the region. One organization shared that they’re working “as part of the Deep East Texas Cohort to bridge the digital divide for extremely rural areas of the state. We are working with the Maud Public Library towards sustainability for small communities, which involves utilizing the Public Library as a hub for many services.”

3.a.v.11 Upper Rio Grande Region

The Upper Rio Grande Region in westernmost Texas includes El Paso. It has the largest population of immigrants and racial or ethnic minorities. It has among the lowest median incomes in the state and among the highest percentage of eligible households enrolled in ACP. For more demographics see *Table 13*.



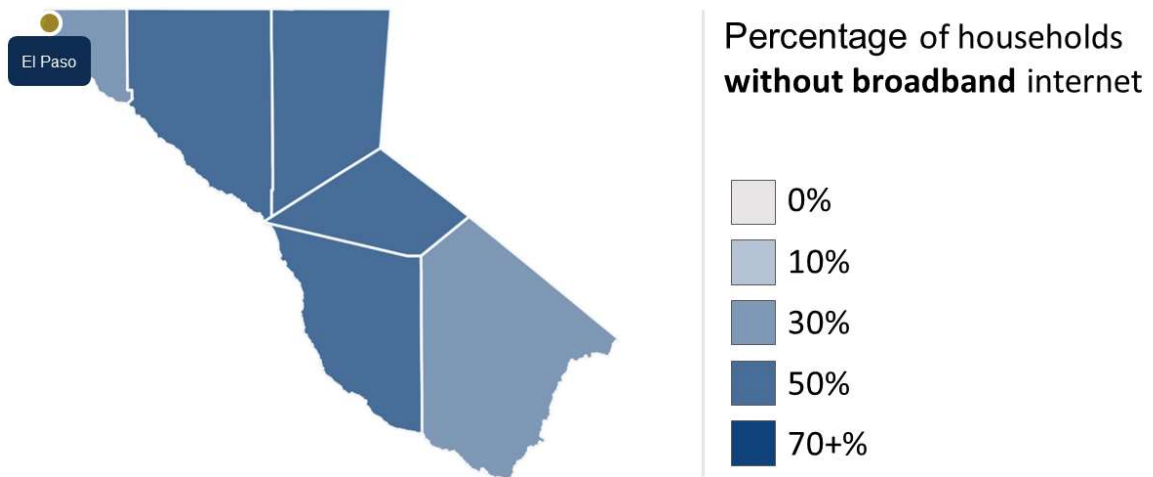
“Living out here can be isolating, and lacking connection can reinforce and exacerbate that isolation. Broadband can lower barriers to communication and interaction. It's a public safety issue. There are cell phone dead zones everywhere. You need to be able to make contact.”

– Public Meeting Attendee, Alpine, Texas

Findings:

According to ACS estimates, the region has about the same percentage of households that do not subscribe to broadband, though connection is not equal across counties in the region.

Figure 21: Households Without Broadband Subscriptions in the Upper Rio Grande Region¹⁰³



In this analysis, the BDO considers both online and paper survey responses. This region had the highest percentage of paper survey respondents (51 percent) as compared to online survey responses. In the paper Digital Opportunity Survey, this region has about the same dissatisfaction with the reliability and adequacy of internet service as all paper survey respondents. The region has the highest percentage of paper survey respondents that rely on cellphones as their only device with which to access the internet.

An El Paso public meeting attendee expanded on the barriers to access, “Internet in the community is very expensive and there is often not any other option. Mountainous terrain makes it hard to put in technology. The distance between homes and low-density population makes it expensive to build.”

¹⁰³ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

When it comes to implementation, El Paso public meeting attendees shared, “Schools and libraries end up picking up the ball when funding runs out. The community has become dependent on it.” A school district in this region responding to the DRMTS emphasized how much their community relies on them, “We are the hub of this small, rural, isolated community. We employ or teach about half of the town’s population.”

On adoption, an Alpine public meeting attendee said, “People want to connect but don’t know how they can get it. People need to feel confident and to have the education to begin their digital literacy journey.”

3.a.v.12 West Texas Region¹⁰⁴

The West Texas Region is in the western part of the state and includes the cities of Midland, Odessa and San Angelo. It is among the least populous regions in the state and has the lowest number of eligible households enrolled in ACP. For more demographics see *Table 13*.

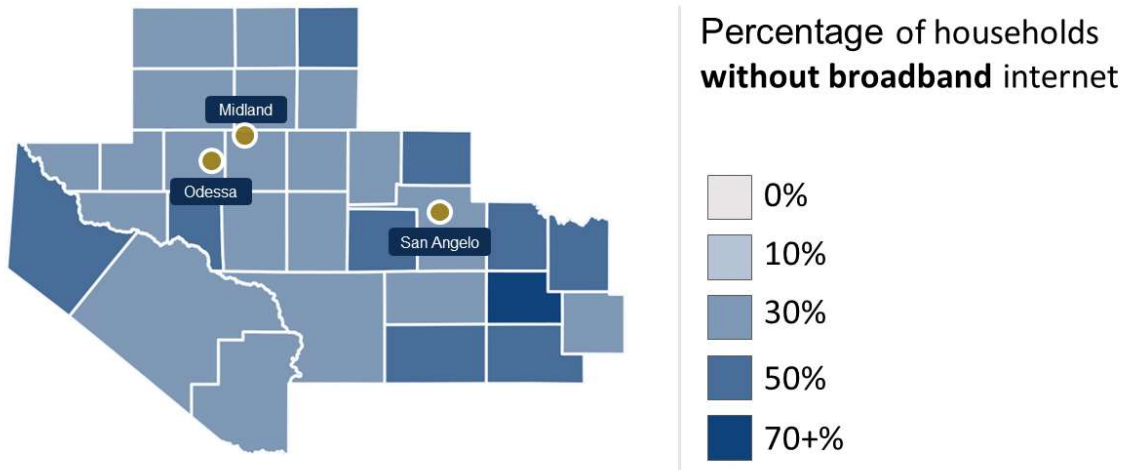


Findings:

According to ACS estimates, this region has a higher percentage of households that do not subscribe to broadband as compared to statewide averages. In the Digital Opportunity Survey, respondents reported lower satisfaction with their internet service and some of the slowest internet speeds in the state. A participant in the Mertzon public meeting emphasized that the region needs internet first, then they can approach adoption: “Until we have a better connection, we can’t focus on digital literacy. Some barriers include low density, cost ... workforce development, map issues and difficulties trenching in the geography.”

¹⁰⁴ Comment 99 received during the public comment period informed changes to this section of the plan.

Figure 22: Households Without Broadband Subscriptions in the West Texas Region¹⁰⁵



While Digital Opportunity Survey respondents reported better satisfaction with the reliability and adequacy of internet than statewide respondents, participants in the Midland public meeting shared, “Internet is unreliable. People may have internet, but it is not always dependable. Affordability is an issue and so is mapping. There is a need for good, quality data. Low density needs it the most, particularly south of I-20.”

When it comes to implementation, a Midland public meeting participant shared, “You don’t know what you don’t know – need an understanding of what would be provided with increased access.” Similarly, a Mertzon public meeting attendee shared, “[We] need to educate people on what the internet can do for them; communities will thrive once there is a better understanding.” Participants suggested that trusted community voices, like school districts and health care providers, may provide good ways to reach people.

A school district in the region shared in the DRMTS some resources that they currently provide to residents: “We help families enroll in ACP. We also provide

¹⁰⁵ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>.

a list of ISPs for families based on the addresses. We also provide a device for our students and MIFI [hotspot device] if needed.”

Table 13: Demographics in Texas by Region¹⁰⁶

Yellow highlighting indicates high metrics in a category relative to other regions.

Region	Population	Households	Median Household Income	Aging Individuals	Immigrants	Incarcerated Individuals	Individuals with Disabilities	Individuals with Limited English Proficiency
Alamo	2.9 M	1.0 M	\$65,000	19%	11%	1%	14%	27%
Capital	2.4 M	0.9 M	\$84,000	17%	15%	0%	10%	20%
Central Texas	1.3 M	0.5 M	\$55,000	19%	8%	2%	13%	21%
Gulf Coast	7.3 M	2.5 M	\$76,000	17%	23%	1%	10%	29%
High Plains	0.9 M	0.3 M	\$56,000	19%	10%	2%	12%	25%
Metroplex	8.1 M	2.9 M	\$79,000	17%	18%	0%	10%	27%
Northwest	0.6 M	0.2 M	\$52,000	23%	6%	3%	16%	21%
South Texas	2.4 M	0.8 M	\$45,000	17%	20%	1%	13%	43%
Southeast	0.8 M	0.3 M	\$51,000	23%	7%	2%	17%	22%
Upper East	1.2 M	0.4 M	\$52,000	25%	7%	3%	15%	22%
Upper Rio Grande	0.9 M	0.3 M	\$49,000	17%	24%	0%	13%	22%
West Texas	0.7 M	0.2 M	\$66,000	17%	12%	1%	11%	27%
State of Texas	29.0 M	11.1 M	\$72,000	18%	17%	1%	11%	27%

¹⁰⁶ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>. Individuals with Limited English Proficiency refers to individuals who speak English less than "very well" or have low levels of literacy according to the Digital Equity Population Viewer.

Region	Population	Households	Median Household Income	Low-Income Households	Racial or Ethnic Minorities	Rural Residents	Tribal Communities	Veterans	Eligible Households Enrolled in ACP
Alamo	2.9 M	1.0 M	\$65,000	23%	64%	21%	2%	7%	46%
Capital	2.4 M	0.9 M	\$84,000	16%	46%	21%	2%	5%	30%
Central Texas	1.3 M	0.5 M	\$55,000	26%	44%	24%	2%	8%	33%
Gulf Coast	7.3 M	2.5 M	\$76,000	22%	63%	11%	1%	4%	30%
High Plains	0.9 M	0.3 M	\$56,000	26%	48%	44%	2%	5%	23%
Metroplex	8.1 M	2.9 M	\$79,000	19%	52%	12%	2%	5%	41%
Northwest	0.6 M	0.2 M	\$52,000	23%	31%	58%	2%	7%	32%
South Texas	2.4 M	0.8 M	\$45,000	37%	87%	24%	1%	3%	74%
Southeast	0.8 M	0.3 M	\$51,000	28%	38%	52%	2%	6%	41%
Upper East	1.2 M	0.4 M	\$52,000	25%	32%	75%	2%	6%	26%
Upper Rio Grande	0.9 M	0.3 M	\$49,000	32%	87%	10%	2%	6%	56%
West Texas	0.7 M	0.2 M	\$66,000	21%	58%	34%	1%	5%	21%
State of Texas	29.0 M	11.1 M	\$72,000	23%	58%	25%	1%	5%	40%

Table 14: Texas Digital Opportunity Survey Results by Region

Region	In-Person Public Meeting Attendees	Online Survey Responses	Paper Survey Responses	% households that do not subscribe to broadband (ACS)	Report that speed and reliability of internet service at home is inadequate	Download speeds below 25 Mbps	Upload speeds below 3 Mbps
Alamo	9%	16%	Sample size was too small	31%	25%	20%	9%
Capital	14%	11%	Sample size was too small	22%	43%	27%	14%
Central Texas	5%	9%	25%	38%	51%	37%	28%
Gulf Coast	5%	12%	Sample size was too small	27%	40%	26%	16%
High Plains	8%	9%	Sample size was too small	36%	25%	26%	13%
Metroplex	11%	13%	16%	27%	32%	22%	11%
Northwest	4%	5%	5%	42%	43%	41%	25%
South Texas	9%	8%	Sample size was too small	44%	28%	18%	Sample size was too small
Southeast	10%	4%	Sample size was too small	46%	52%	45%	45%
Upper East	9%	5%	Sample size was too small	52%	67%	50%	43%
Upper Rio Grande	8%	3%	51%	35%	32%	Sample size was too small	Sample size was too small
West Texas	8%	6%	0.4%	38%	27%	23%	Sample size was too small
All Responses				31%	36%	28%	17%

Region	In-Person Public Meeting Attendees	Online Survey Responses	Paper Survey Responses	Pay more than \$100 for monthly internet	Have heard of ACP	Only use a mobile data plan for internet access at home	Only use a smartphone
Alamo	9%	16%	Sample size was too small	33%	44%	7%	7%
Capital	14%	11%	Sample size was too small	41%	42%	8%	4%
Central Texas	5%	9%	25%	48%	36%	12%	5%
Gulf Coast	5%	12%	Sample size was too small	43%	33%	12%	7%
High Plains	8%	9%	Sample size was too small	38%	18%	6%	6%
Metroplex	11%	13%	16%	38%	44%	9%	9%
Northwest	4%	5%	5%	43%	34%	12%	Sample size was too small
South Texas	9%	8%	Sample size was too small	36%	38%	7%	7%
Southeast	10%	4%	Sample size was too small	58%	40%	18%	Sample size was too small
Upper East	9%	5%	Sample size was too small	60%	38%	23%	10%
Upper Rio Grande	8%	3%	51%	36%	48%	Sample size was too small	Sample size was too small
West Texas	8%	6%	0.4%	43%	39%	Sample size was too small	Sample size was too small
All Responses				41%	40%	10%	7%

3.b Asset Inventory

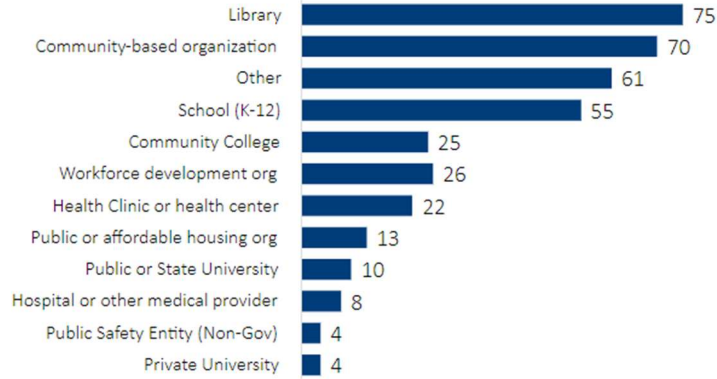
3.b.i Description

The BDO launched a statewide promotion of the DRMTS to gather input from organizations about existing digital opportunity programs throughout Texas and develop a comprehensive understanding of how organizations are supporting broadband accessibility, affordability and adoption. The DRMTS identified current digital opportunity programs and services as well as resource gaps across the state. In total, the DRMTS received 368 valid responses from organizations based in 118 counties. This section provides an overview of those responses. For more information, see *Appendix E: Detailed Asset Inventory*.

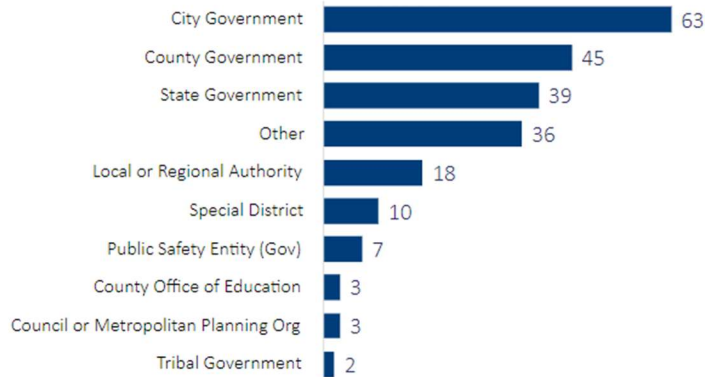
To read more about BDO public engagements and methodology, see *Chapter 4: Collaboration and Stakeholder Engagement*.

Figure 23: DRMTS Responses by Type of Organization

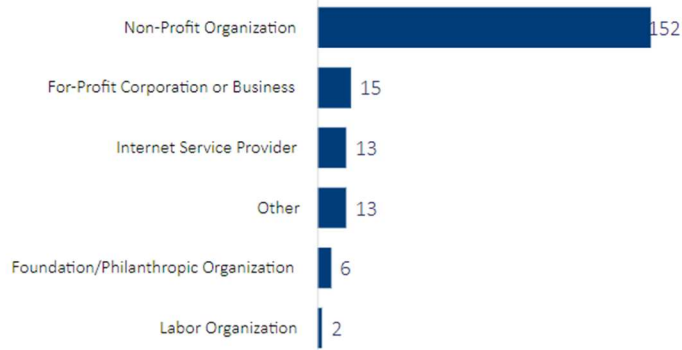
Community Anchor Institutions by Subcategory*



Government Sector by Subcategory*



Private Sector & NGOs by Subcategory*



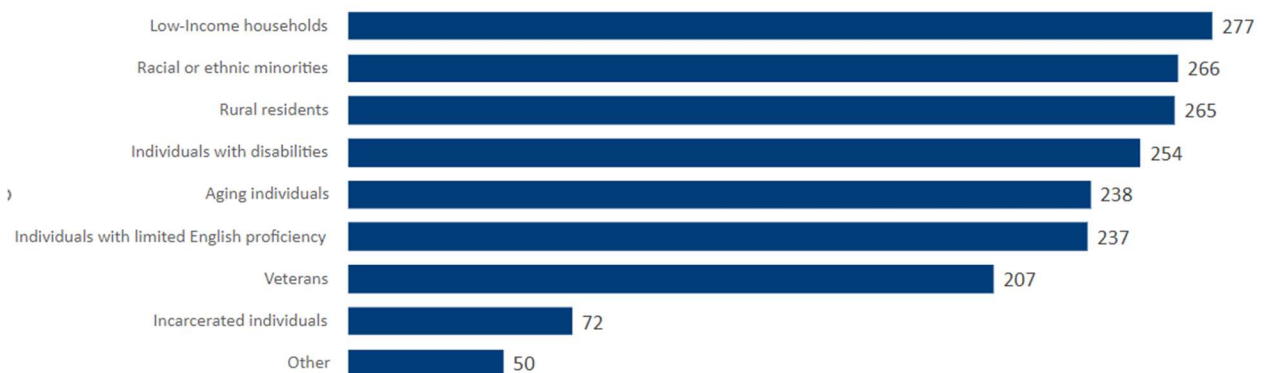
*Multiple choice question, respondents can choose more than one answer choice to this question in the survey.

3.b.ii Covered Populations Served

All surveyed organizations serve at least one covered population. More than 230 respondents report that they serve at least six of the eight identified covered populations. For the purposes of this asset inventory, when a report is created on DRMTS respondents, the BDO considers the sample as serving all covered populations. Among respondents, low-income households are the most served covered population, with approximately four times the number of organizations offering services to this specific demographic than to incarcerated individuals.

The following chart shows a breakdown of the covered populations served by existing digital opportunity programs.

Figure 24: Covered Populations Served by Existing Digital Opportunity Programs



3.b.iii Existing Digital Opportunity Plans

The BDO gathered a list of digital opportunity plans from counties, municipalities and other entities. Found in *Appendix A: Local Digital Opportunity Plan Tracker*, the list demonstrates that many government, CAIs and private entities are far along in thinking through the impact of digital opportunity in their communities and potential solutions to addressing broadband access, affordability and adoption. For example, Austin, Dallas and San Antonio have plans for digital

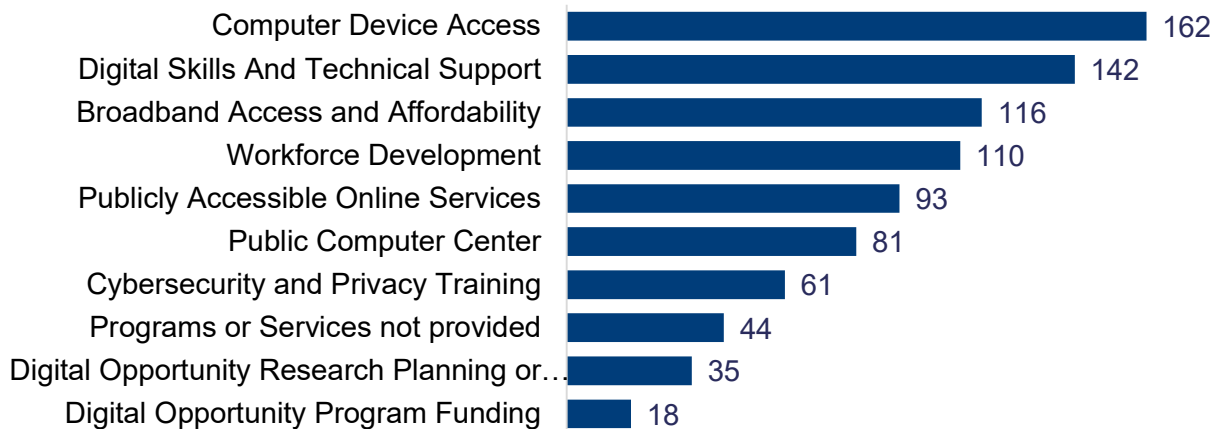
inclusion. All three include inventories of existing efforts and plans for advancing digital inclusion in their cities.

While some localities have developed digital opportunity plans, more communities have plans for broadband infrastructure. The implementation strategies in *Chapter 5: Implementation* consider how to support and advance these existing plans, while providing capacity for organizations and localities that may not yet have plans in place.

3.b.iv Existing Digital Opportunity Programs

The organizations surveyed provide a broad array of digital opportunity programs, with most programs focused on device access, followed by digital literacy and technical support, broadband access and affordability.

Figure 25: DRMTS Responses by Program Offerings



More than 110 libraries, government organizations and nonprofits surveyed say they provide free wireless local area networks (WLAN) or Wi-Fi services for public use. Libraries comprise more than half of these organizations and offer connectivity onsite at their facilities and via mobile hotspots. This is essential for

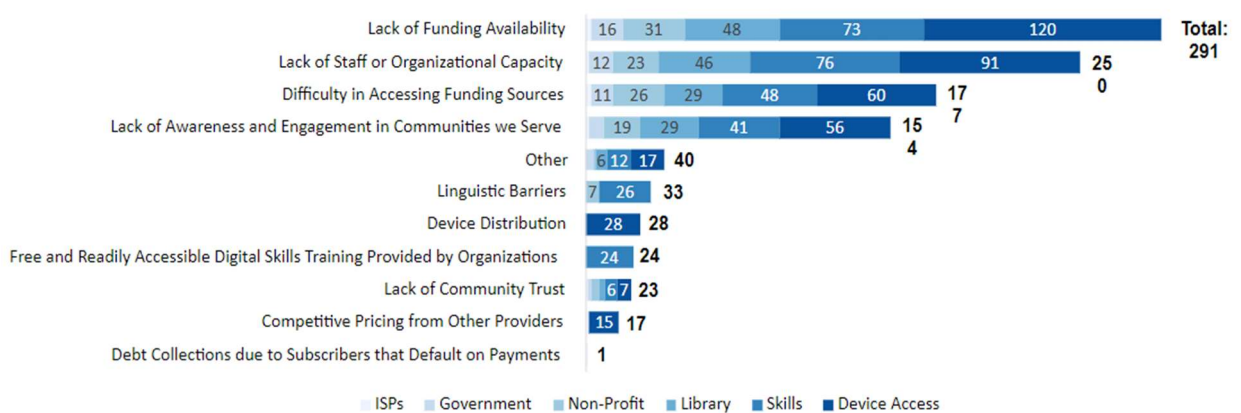
rural residents who lack access to available broadband infrastructure and rely on these organizations for connectivity.

A variety of organizations reported offering workforce development programs focused on digital skills training, career development and job placement programming. These include government and public agencies, such as the TWC, libraries, economic development associations, higher education institutions, school districts and CBOs. These entities provide important digital programs aimed at upskilling and breaking cycles of generational poverty.

A total of 162 organizations surveyed provide computer device access programs, and 142 offer digital skills and technical support programs. Organizations offering these programs reported the highest frequency of encountering barriers such as lack of funding availability, followed by lack of staff or organizational capacity, and cited these as major deterrents to continuing their digital opportunity programming in communities.

3.b.v Barriers Impacting Organizations Offering Digital Opportunity Programs

Figure 26: Barriers to Implementing Digital Opportunity Programs



“We work with over 36 different language groups. We do have access to translation services but lack funding to translate the resources available into the various languages we serve.”

- Community Development Nonprofit in Potter County

Many organizations also expressed challenges implementing programs in areas lacking broadband availability, particularly in rural areas. Other cited barriers include lack of place-based digital navigation and technical support for accessing services, increased program costs with little to no associated increase in funding, and difficulty engaging participation in existing programs due to lack of trust, skepticism or general lack of awareness or interest.

Many of the organizations surveyed reported receiving some form of public or private funding for their programs, with more than 20 percent reporting difficulty accessing funding sources. Some of the factors cited include lack of eligibility for funding programs, high level of need relative to the amount of funding available and complexity of layering in multiple funding sources.

3.b.vi Broadband Adoption

Broadband adoption in Texas is a work in progress and requires a strong commitment from a variety of organizations to continue important broadband

“There is a lack of trust in internet service providers and pricing that makes some residents reluctant to adopt digital tools.”

-Housing Authority in Travis County

affordability, device access and skills training programs at a grassroots level, neighborhood by neighborhood. Access to affordable, reliable broadband is the first step to adoption. The plan is focused on adoption, while federal funding, like the BEAD program, is focused on building the

infrastructure to connect unserved and underserved locations to the internet. Once Texans can access the internet, adoption means ensuring people have the skills to use the internet on secure personal devices. Organizations need access to funding programs that are simple to apply to and help build on existing and effective programs. Without these programs, especially in rural parts of the state, many Texans will remain unaware of the broadband options available to them and continue to be reluctant to adopt digital tools to fully participate in the digital economy.

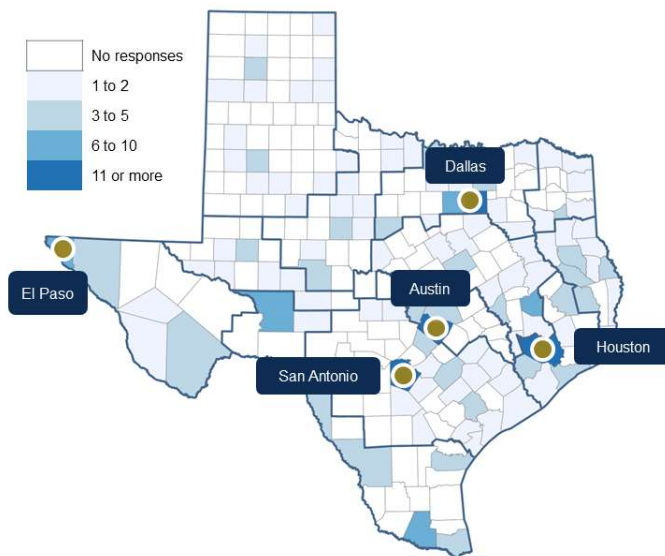
3.b.vii Broadband Affordability

Sixty libraries, nonprofits and government agencies and three ISPs surveyed reported they actively promote or provide enrollment assistance for the ACP, with government agencies and libraries or schools doing the largest share of promotion and enrollment. Libraries and nonprofits reported that they conduct ACP awareness campaigns by incorporating this information into their existing programming (for example, during parent-teacher conferences).

3.b.viii Conclusion: Gap Analysis

Organizations in Texas grapple with a multitude of challenges in their efforts to address digital opportunity. The first significant challenge is an uneven distribution of digital opportunity assets in Texas, which is composed of both urban and remote rural regions. Most organizations surveyed in the DRMTS are concentrated primarily in urban population centers that are more favorable to their operations, creating a significant disparity in access to digital resources and services between urban and rural areas.

Figure 27: DRMTS Respondents by County



This concentration has left a noticeable gap in programming and the availability of services in the High Plains, Upper Rio Grande and South Texas regions of the state. Many counties in these areas, which often grapple with economic challenges and lower population density, face a dearth of digital inclusion initiatives. This regional imbalance highlights the need for a greater distribution of digital opportunity resources and services throughout the state.

The socioeconomic challenges prevalent in specific areas of Texas also pose significant hurdles for organizations that have limited capacity, staffing and funding. Many areas, particularly rural and economically disadvantaged communities, have higher needs for services and support. For example, the Upper Rio Grande and South Texas regions experience the highest rates of digital disparity, based on [Microsoft's Digital Equity Data Dashboard](#), and limited organizational resources, according to the DRMTS. These regions have the highest percentage of low-income households, racial or ethnic minorities and limited English proficiency households. Respondent organizations are the least likely to offer services in these regions.

Table 15: Demographics of the South Texas and Upper Rio Grande Regions

Demographics	South Texas Region	Upper Rio Grande Region
Population ¹⁰⁷	2.4 million	0.9 million
Households ¹⁰⁸	0.8 million	0.3 million
Median household income ¹⁰⁸	\$45,000	\$49,000
Aging individuals ¹⁰⁸	17%	17%
Immigrants ¹⁰⁷	20%	24%
Incarcerated individuals ¹⁰⁷	1%	0%
Individuals with disabilities ¹⁰⁷	13%	13%
Individuals with limited English proficiency (speaks English less than "very well" or has low levels of literacy) ¹⁰⁷	43% (2nd highest)	22% (Hudspeth County has the highest percent at 66%)
Low-income households ¹⁰⁷	37% (Highest)	32% (2nd highest)
Racial or ethnic minorities ¹⁰⁷	87% (Among the highest)	87% (Among the highest)
Rural residents ¹⁰⁷	24%	10%
Tribal communities ¹⁰⁷	1%	2%
Veterans ¹⁰⁷	3%	6%
Percentage of eligible households enrolled in ACP ¹⁰⁹	74% (Highest)	56% (2nd highest)

According to Digital Opportunity Survey data, 36 percent of survey respondents in the Upper Rio Grande and South Texas pay more than \$100 per month for

¹⁰⁷ Texas Broadband Development Office. (June 15, 2022). Texas Broadband Plan 2022.

¹⁰⁸ U.S. Department of Commerce. (n.d.). American Community survey five-year data (2017-2021). U.S. Census Bureau. <https://www.census.gov/data/developers/data-sets/acs-5year.html>

¹⁰⁹ Universal Service Administrative Co. (n.d.). ACP enrollment and claims tracker. <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/>

their internet service. In a region where median household income is \$50,000 per year, more than \$100 per month for internet can be cost prohibitive, driving down broadband adoption rates. Due to these factors, these regions will require focus by the state and partner organizations, such as CAIs, CBOs and nonprofits, to prioritize investments in broadband access, low-cost internet service and device options, as well as digital literacy programs.

One notable organization that is investing in broadband and digital opportunity expansion in South Texas is [Methodist Healthcare Ministries of South Texas, Inc.](#) (MHM). As essential services move increasingly online – including health care, education and workforce development – MHM released a Request for Proposals to further advance digital opportunity in the region. The goal for proposals is to increase the capacity of CBOs and CAIs in South Texas to provide critical digital resources, services and support through device access, digital skills and public benefit adoption including deploying digital connectors in the region. As a result, MHM hopes to achieve its goal of increasing broadband adoption for residents and families living in South Texas.

In San Antonio, located in the Alamo Region, organizations collaborate to drive digital opportunity. Within the city, one in six households lack access to a computer and one in four lack access to the internet.¹¹⁰ Goodwill San Antonio partners with the San Antonio Housing Authority to increase access to technology and empower community members. Goodwill's Technology Access Program provides devices to low-income families and individuals with disabilities. Goodwill San Antonio is also registered with the Microsoft Authorized Refurbisher program, which is a partnership tailored to meet the needs of some of the largest device refurbishers in the world and takes donations of computers and other electronic devices to safely and responsibly refurbish equipment for reuse directly in the community at a discount. In 2020, Goodwill partnered with the San Antonio Chamber of Commerce and garnered 1,900 donations.

¹¹⁰ Census American Community Survey (ACS), 2021.

Another broad challenge that organizations face relates to enrollment and participation in benefits programs like the ACP. According to surveyed organizations, the Texas residents they serve have low trust in programs offered by ISPs, organizations and the government. The perceived complexity and bureaucracy of programs, past negative experiences, changes in eligibility criteria and trust issues with program providers have fostered hesitancy among residents. Similarly, while certain residents may be eligible for coverage, they face a range of enrollment barriers including fear, confusion about eligibility rules, and language and literacy challenges. According to Universal Service Administrative Company data on ACP enrollment and the Benton Institute Affordable Connectivity Program enrollment tool for household eligibility, 40 percent of eligible households in Texas are enrolled in ACP. Digital Opportunity Survey data showed that 40 percent are aware of ACP, and individuals with limited English proficiency and low-income households most frequently responded that they are not enrolled in ACP or discounted internet services because they do not know how to apply.

To mitigate participation challenges in benefits programs like ACP or discounted internet services, organizations will need to undertake several key strategies. Advocating for more user-friendly application procedures, in-person enrollment support and language accessibility, especially in culturally diverse areas like the South Texas and Upper Rio Grande regions, can further enhance program accessibility. Moreover, addressing privacy and security concerns by explaining data protection measures, forming partnerships with community organizations and offering continued support will be crucial in increasing enrollment and sustaining participation. Additional measures to ensure that those in need can confidently access the benefits they require include public awareness campaigns and coaching residents on how to adopt digital tools.

Chapter 5: Implementation explores how to address these gaps.

4. Collaboration and Stakeholder Engagement

4.a Strategy for Collaboration and Stakeholder Engagement

Collaboration and stakeholder engagement are uniquely challenging in Texas, the second-largest U.S. state by area and population. At 30 million people, Texas continues to grow rapidly, with several of the nation's fastest-growing counties. Texas is also increasingly diverse. Individuals belonging to covered populations live across the state's 254 counties, in some of the country's largest cities, and in vast rural and remote areas that may be composed of deserts, prairies, swamps or woodlands. The BDO is leading a strategy for collaboration and stakeholder engagement that confronts these challenges and capitalizes on one of the state's premier assets: its diversity.

Through the engagement strategy described in this chapter, thousands of Texans, including individuals from all covered populations and the diverse organizations that serve them, have shared their experiences and informed this plan.

Table 16: Summary of Public Engagement Impact

Digital Opportunity Survey responses received	13,296 total responses 11,385 valid responses 9,440 valid online responses 1,945 valid paper responses
Organizations represented in Digital Resources Mapping Tool Survey	368 valid responses
Members of Statewide Working Group, Task Forces, Regional Working Groups	555
Participants in Regional Public Meetings	1,274

The BDO designed the process to build on, coordinate and accelerate longstanding and emerging digital opportunity work serving covered populations across Texas. The engagement model recognizes and benefits from the perspective and expertise of digital opportunity practitioners from across sectors – including various agencies, organizations and individuals.

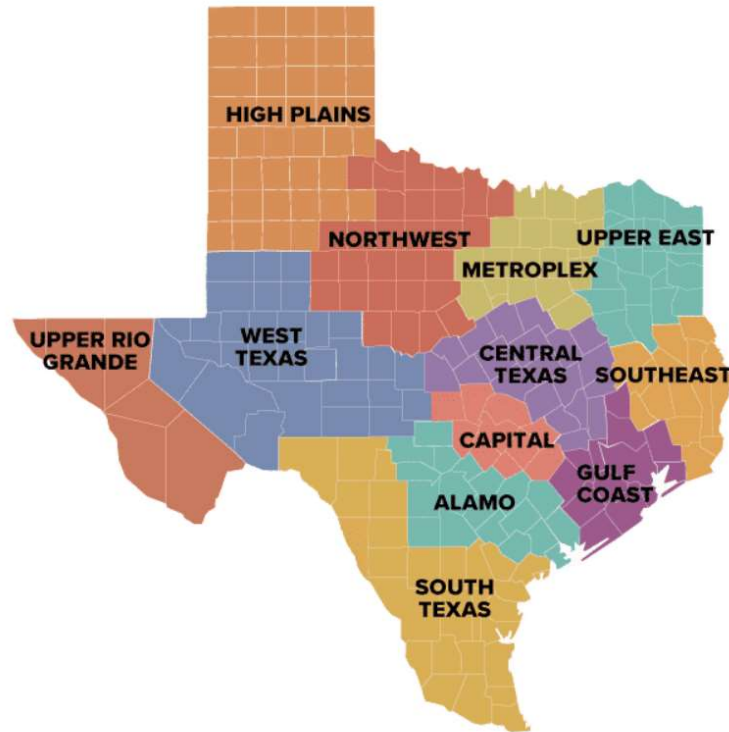
One example of the interagency coordination central to the engagement model is the participation of the regional COGs in the digital opportunity planning process. COGs are political subdivisions of the state that coordinate programs and services to address unique needs within 24 regions of the state. COG representatives from each of the 12 economic regions of Texas actively participated in the planning process, including serving on the SWG and outcome area task forces, chairing RWGs and hosting public meetings in their regions.

CAIs, government and public organizations, as well as private sector and non-governmental organizations, advance digital opportunity throughout Texas by providing access to free or low-cost connectivity or devices, assistance with affordability programs and/or digital skills training resources. As shown in the Asset Inventory, umbrella organizations, networks and associations such as the Texas Digital Equity Network, TSLAC, the Texas Association of Community Colleges, United Ways of Texas, multiple community-based organizations, faith-

based groups and many others serve to coordinate this work across the state. These organizations, and the individuals and programs they represent, make up the state's robust digital opportunity ecosystem. Through the stakeholder engagement model, the BDO sought guidance and insights from this network of subject matter experts, while noting that the BDO itself is part of this digital opportunity ecosystem. The BDO's BOOT program has begun to address the broadband availability side of digital opportunity. Initiatives under the BEAD program will continue to address the infrastructure issues behind the digital divide.

While these statewide agencies and regional and local organizations play a key role in the Texas digital opportunity ecosystem, the state's unique size, diversity and geography call for a regional approach to any digital opportunity work. The engagement model adopted the Comptroller's 12 economic regions as a geographic framework for organizing this work regionally. As described below, the RWGs and public meetings helped to identify the unique assets and barriers in each region, as well as the local practitioners and community members who best understand the lived experience of regional residents.

Figure 28: Economic Regions of the State of Texas



A Note on Engaging Covered Populations¹¹¹:

The engagement model was designed for maximum participation with individuals from covered populations and the organizations that serve or represent them.

The BDO ensured participation from organizations and individuals representing covered populations in each set of working groups and task forces. In the RWGs, the BDO worked with regional co-chairs to ensure engagement from organizations serving covered populations, including food banks, libraries, senior centers, school districts, public housing authorities, civil rights organizations and other entities. The BDO created outreach and educational materials in multiple languages to enable working group and task force representatives to promote community participation in the planning process.

¹¹¹ Comments 104 and 262 received during the public comment period informed changes to this section of the plan.

The BDO will continue to explore participation from other organizations that are uniquely positioned to support outreach activities in specific regions. For example, deepening partnerships with CBOs like HBCUs would consider the nuances of surrounding communities where internet adoption and device access are some of the lowest in the state.

These additional outreach efforts ensured covered populations were aware of and participated in stakeholder engagement activities:

- Public meetings hosted in spaces accessible to covered populations, including American Legion, public library, senior center, local school, community center and in rural area facilities.
- American Sign Language and Spanish-language interpreters available for in-person public meetings by request.
- Direct engagement with COGs, many of which operate Area agencies on aging, Area Disability Resource Centers, 211 Information and Referral Centers.
- Partnership with Texas A&M AgriLife Extension Service, for outreach via County Agricultural Agents based in 250 of 254 Texas counties.
- Presentations at stakeholder coalition meetings, including 10-County Central Texas Broadband meeting, Borderplex Connect board meeting, Texas Digital Equity Network meeting and the Texas Library Association Annual Conference.
- Direct emails and phone calls to local organizations serving covered populations about the Digital Opportunity Survey, DRMTS and public meetings.
- RWG members distributing online survey links and paper surveys at local workforce offices, food banks, community events, libraries and schools.

- Regional and statewide press releases and media efforts in local papers and news stations to promote public meetings and surveys.
- English and Spanish outreach toolkits for community-based organizations and other entities serving covered populations to share the Digital Opportunity Survey and public meeting opportunities.
- BDO outreach webpage with contact form enabling direct interaction with Texans interested in participating in the planning process.
- Outreach materials and engagement strategies provided to state agencies serving covered populations, including HHSC, Texas Department of Housing and Community Affairs (TDHCA), TEA, Texas Higher Education Coordinating Board, TSLAC, TVC and TWC.

The BDO also met individually with an array of organizations and individuals to learn more about the covered populations they serve, digital opportunity barriers they face and possible strategies for increased access. A full list of organizations and stakeholders is included in *Appendix D: Stakeholder Engagements and Participants*.

4.b Engagement Methodology

Figure 29: Overview of Public Engagement Supporting the Texas Digital Opportunity Plan

<p>Statewide Working Group Interagency Group, Task Force Co-Chairs, Regional Working Group Leaders, Tribal Government Leaders</p>		
<p>Regional Working Groups Local facilitators across Comptroller’s 12 economic regions Representatives from Covered Populations</p> <p>In-person public meetings 2 meetings in each of the Comptroller’s 12 economic regions + 1 virtual statewide meeting</p>	<p>Task Forces Outcome-area expertise from across the state</p>	<p>Economic and Workforce Development</p> <p>Education</p> <p>Health</p> <p>Essential Services</p> <p>Civic & Social</p> <p>Business and Telecom</p>
<p>Surveys</p>		
<p>Public Survey</p>	<p>Open to all Texas residents and designed to identify household-level experience and barriers to broadband.</p>	
<p>Digital Resources Mapping Tool</p>	<p>Collected data from organizations providing programs, services and tools that enable access to the internet, devices and digital skills training.</p>	

The BDO established a public engagement model to develop the plan that represents all regions and covered populations from across the state. The model enabled extensive public input through online and paper surveys and regional meetings with communities in all 12 regions of the state, and by engaging state agencies, nonprofit entities and industry leaders in meetings of the SWG and outcome area task forces.

The state convened several groups to gather information for the plan from April to August 2023. The public engagement model facilitated the flow of communication, coordination and collaboration between the BDO and its advisory bodies, including the SWG, six outcome area task forces and 12 RWGs, representatives of covered populations, and local and regional stakeholders. This model is responsive to NTIA requirements for a unified vision, including an assessment of how the programs may affect or be affected by other state and local plans and goals across Texas.

4.b.i Statewide Working Group

The SWG was formed to advise the BDO, task forces and RWGs on the digital opportunity planning and public engagement process. The SWG also assisted with gathering data for the Digital Opportunity Plan and promoting the Digital Opportunity Survey and DRMTS. SWG members include representatives from state agencies, task force chairs, RWG leaders and tribal government officials. The BDO also sought participation from entities representing and/or serving all covered populations.

Agencies and Organizations Represented on the Statewide Working Group:

- AARP Texas
- Connect Humanity
- Disability Rights Texas
- Guadalupe Valley Electric Cooperative
- Kickapoo Traditional Tribe of Texas
- Operation Connectivity Lead
- Texas 2036
- Texas Association of Business

- Texas Association of Goodwills
- Texas Association of Regional Councils
- Texas Black Caucus Foundation
- Texas Department of Agriculture
- Texas Department of Emergency Management
- Texas Department of Housing and Community Affairs
- Texas Department of Information Resources
- Texas Department of Transportation
- Texas Education Agency
- Texas Health and Human Services Commission
- Texas Municipal League
- Texas Office of the Governor
- Texas Rural Funders
- Texas State Library and Archives Commission
- Texas Veterans Council
- Texas Workforce Commission

For the full list of SWG members, go to *Appendix D: Stakeholder Engagements and Participants*.

4.b.ii Outcome Area Task Forces

Task forces convened subject matter experts in the state’s key priority areas to identify and address barriers to broadband access, affordability and adoption. They provided recommendations on best practices and strategies that would advance digital opportunity within the framework of each outcome area. Each task force consisted of about two dozen total members representing groups and subject matter experts in the given outcome area, as well as organizations serving covered populations.

4.b.ii.1 Business and Telecommunications Task Force

The Business and Telecommunications Task Force examines the best way for Texas to implement the Digital Opportunity Plan. Its members addressed all issues of concern to the telecommunications industry, with a focus on running digital opportunity programs in a manner that achieves high industry participation and enables a rich variety of proposed projects.

Agencies and Organizations Represented on the Business and Telecommunications Task Force:

- AMA Communications
- AMA TechTel
- AT&T
- AW Broadband
- Bluebonnet Fiber
- Cobb Fendley
- Comcast
- Congruex
- Crown Castle
- Electronic Corporate Pages, Inc. (Western Broadband)
- Fiberlight
- Graybar
- HC Wireless, LLC
- Highline
- Internet2 Technology Evaluation Center (ITEC) at Texas A&M
- The Lower Colorado River Authority
- Lit Communities
- Mears Broadband
- MSEC Communications, LLC
- Net Ops Communications, LLC
- Nexstream
- Nextlink Internet
- Rock Solid Internet a Vtx1 Company
- Signalnet Broadband, Inc.
- Space Exploration Technologies
- TekWav
- Texas Area Telecom
- Texas Association of Manufacturers
- Texas Cable Association
- Texas Department of Transportation
- Texas Electric Cooperatives
- Texas Statewide Telephone Cooperative, Inc.
- Texas Telephone Association
- TWC
- Victoria Electric Cooperative/Infinium
- Wireless Internet Service Providers Association (WISPA) – Texas

4.b.ii.2 Civic and Social Engagement Task Force

The Civic and Social Engagement Task Force represents the concerns and interests of local governments and community-based nonprofits.

Agencies and Organizations Represented on the Civic and Social Engagement Task Force:

- Abilene Library Consortium
- Community Tech Network
- Dallas Innovation Alliance
- Disability Rights Texas
- Harris County Public Library
- OneStar Foundation
- Senior Access (Capital Region)
- Texas AARP
- Texas Association of Counties
- Texas Association of Regional Councils
- Texas Demographic Center
- Texas Department of Information Resources
- Texas Library Association
- Texas Municipal League
- Texas Network of Youth Services
- Texas Rural Funders
- TSLAC
- TLL Temple
- United Way Denton Count

4.b.ii.3 Economic and Workforce Development Task Force

The Economic and Workforce Development Task Force considers how broadband expansion and digital opportunity programs can best impact the Texas economy, the upskilling of Texans through online resources, and the enhancement of job creation and job search through better access to and use of the internet.

Agencies and Organizations Represented on the Economic and Workforce Development Task Force:

- Austin Urban Technology Movement
- Communications Workers of America
- Federal Reserve Bank of Dallas
- Texas Association of Goodwills
- Greater Houston Partnership
- South Dallas Employment Project
- TechNet
- Technology and Policy Information Institute
- Texas A&M AgriLife Extension Service

- Texas Farm Bureau
- Texas Midwest Community Network
- TWC
- The High Ground of Texas
- University of Texas – Rio Grande Valley

4.b.ii.4 Education Task Force

The Education Task Force ensures that digital opportunity programs address the unique needs of educators, students and school communities.

Agencies and Organizations Represented on the Education Task Force:

- Changing Expectations
- Dallas Foundation
- Distance Education Professional Development Center at Texas A&M
- Operation Connectivity
- Paul Quinn College
- Education Service Center (ESC) Region 1
- Texas Association of Community Colleges
- Texas Association of Community Schools
- Texas Association of School Administrators
- TEA
- Texas Higher Education Coordinating Board
- Texas Public Charter Schools Association
- Texas School Alliance
- Texas State Technical College
- Tyler Independent School District
- Windham School District

4.b.ii.5 Essential Services Task Force

The Essential Services Task Force represents the digital opportunity perspectives of public safety and poverty relief organizations, including state and municipal agencies, nonprofit organizations and emergency management entities.

Agencies and Organizations Represented on the Essential Services Task Force:

- Combined Arms
- Commission on State Emergency Communications
- Feeding Texas
- Texans Veterans Commission
- Texas Achieving a Better Life Experience
- TDCJ
- Texas Division of Emergency Management
- TDHCA
- Texas Technology Access Program at the University of Texas
- United Ways of Texas

4.b.ii.6 Health Task Force

The Health Task Force discusses digital opportunity as a social determinant of health. This includes a particular emphasis on enabling access to telehealth, which many argue promises to improve health outcomes by increasing the competitiveness, productivity and accessibility of health care, as well as serving as a critical component of the state’s pandemic resilience.

Agencies and Organizations Represented on the Health Task Force:

- Meadows Mental Health Policy Institute
- National Alliance on Mental Illness Texas
- Texas A&M College of Medicine
- Texas Academy of Family Physicians
- Texas Association of Community Health Centers
- DSHS
- Texas e-Health Alliance
- HHSC
- Texas Organization of Rural and Community Hospitals
- Texas Rural Health Association
- TVC
- The University of Texas Medical Branch

For the full list of task force participants, go to *Appendix D: Stakeholder Engagements and Participants*.

4.b.iii Regional Working Groups

RWGs function as “boots on the ground” entities to coordinate events, meetings, listening sessions and roundtables with local communities across Texas’ 12 economic regions, in coordination with the BDO. RWG chairs and co-chairs are volunteers who include representatives from regional COGs, typically trusted and passionate community leaders deeply familiar with the unique conditions in their local area.

Members: Each RWG group consists of roughly 20 representatives from local organizations, whose mix varied according to local priorities, including:

- Aging and disability resource centers
- Area agencies on aging
- Chambers of commerce
- Community-based organizations
- Community and technical colleges
- County judges
- Digital opportunity practitioners
- Faith-based organizations
- Mayors and city council members
- Local government broadband office staff
- Local hospital, clinic or health care providers and staff
- Local library directors
- Local public safety officials
- Minority-serving community organizations
- Regional broadband coalitions
- Regional COGs
- Regional digital opportunity groups
- School district superintendents and school board members
- Texas A&M AgriLife Extension Agent
- Tribal governments

For the full list of RWG participants, go to *Appendix D: Stakeholder Engagements and Participants*.

4.b.iv Tribal Engagements

There are three federally recognized tribes in the state of Texas: the Alabama-Coushatta Tribe of Texas, the Kickapoo Traditional Tribe of Texas and the Ysleta del Sur Pueblo in El Paso. On March 10, 2023, the BDO initiated engagement with the tribes through letters requesting formal tribal consultation. The purpose of the consultations was to better understand the unique barriers faced by the tribes, the current broadband-related projects within each tribal land boundary, their current states of digital opportunity and if/how the state can work collaboratively to advance the digital opportunity goals of each tribe. Both the Kickapoo Traditional Tribe of Texas and the Alabama-Coushatta Tribe of Texas accepted the consultation, which led to the establishment of formal working relationships and dialog between governments. At the time the BDO conducted these consultations, neither tribe shared local digital opportunity plans.

The Ysleta del Sur Pueblo in El Paso declined the request to establish a formal relationship for broadband planning, but the BDO has indicated openness and eagerness to begin that partnership should the tribe reconsider. The BDO respects the tribe's unilateral approach to broadband planning and looks forward to any potential future relationship with the Ysleta del Sur Pueblo in El Paso.

The BDO also invited leaders from these three federally recognized tribes of Texas to participate in and contribute to the SWG; the invitation was accepted by the Kickapoo Traditional Tribe of Texas and the Alabama-Coushatta Tribe of Texas.

For a full list of stakeholder meeting dates, go to *Appendix D: Stakeholder Engagements and Participants*.

4.b.v In-Person and Virtual Public Meetings

In March 2022, Comptroller Glenn Hegar launched the Texas Broadband Listening Tour, conducting regional town halls in 12 Texas communities with the purpose of hearing directly from Texans about their experiences with broadband.

Additionally, the BDO issued an open invitation to all Texans to participate in a public broadband survey — available online, in print and via phone in both English and Spanish. At the time of publication, more than 16,000 Texans used the survey to share their broadband experiences.

Through the tour and the survey, the sentiment was consistent: slow data speeds, unreliable access, affordability and coordination are critical areas of concern for Texas families, businesses, educators and farmers. An important, recurring theme had been the reminder that though high-speed internet may once have been a luxury, it is now a necessity. It was very apparent that Texans need reliable, high-speed connectivity for public health, safety, education and modern agriculture.

The BDO compiled lessons learned from the Texas Broadband Listening Tour, survey responses, analysis of results and staff recommendations to create the state's initial Texas Broadband Plan, which was published in June 2022.

In the summer of 2023, the BDO kicked off a second public engagement tour throughout the state. The BDO worked with RWGs to identify two locations in each of the Comptroller's 12 economic regions to ensure widespread public participation. When selecting locations for these engagements, the BDO ensured visits to new locations considering the 2022 tour.

The RWGs, in conjunction with their COGs, promoted the public meetings in their regions. The BDO sent out communications via its mailing and stakeholder lists and engaged in additional outreach with key institutions within each region.

The result was public meetings in 24 cities and two virtual meetings across the 12 economic regions of Texas over seven weeks, from July to August 2023. During these meetings, the BDO heard from Texans about their broadband access, affordability and adoption challenges and needs. Participants provided critical insights into regional barriers and priorities and important input toward the development of this plan. The BDO held one statewide, virtual public meeting for those who were unable to attend in person and an additional virtual meeting for residents of the Metroplex Region.

A total of 1,274 participants engaged in the public meetings, representing 127 counties across Texas.

The BDO planned a virtual Spanish language public meeting. However, just one participant registered for the meeting. In order to better engage Spanish speakers, the BDO is working with the TWC – this work is further detailed in Section 4.3, *Looking Ahead*.

For a full list of the 2023 public meeting dates and locations, go to *Appendix D: Stakeholder Engagements and Participants*.

4.b.vi State Agency Partnerships

As part of the planning process, the BDO developed partnerships with two state agencies – Texas A&M AgriLife (AgriLife) and TWC – to expand outreach efforts and engage more communities, including documenting the experiences of harder-to-reach communities. AgriLife connects agriculture and life sciences programs at Texas A&M University and the Texas A&M University System. AgriLife assisted the BDO in outreach through engaging the rural communities of Texas. This included a survey focused on understanding barriers to internet access, affordability and adoption and targeted outreach to gather additional digital opportunity assets through the DRMTS. As part of these outreach efforts, AgriLife helped add 100 entries to the Detailed Asset Inventory in Appendix E.

As part of the partnership with the BDO, TWC conducted focus groups with job seekers, employers and individuals from covered populations to ensure substantial qualitative input on digital opportunity barriers and assets from across the state. Their efforts included focus groups for predominantly Spanish speakers.

AgriLife conducted focus groups and one-on-one interviews in counties with both low response rates to the Digital Opportunity Survey and DRMTS and a proportionally high number of locations with no broadband service. As part of a strategy to facilitate participation in the digital opportunity planning process for

people with low or no internet access, AgriLife targeted outreach to 67 counties with low survey response rates through email, phone, in-person efforts and social media. AgriLife opened its own survey, replicating the Digital Opportunity Survey's questions, as part of this effort to encourage responses from areas with low response rates to the initial public survey. AgriLife survey participants belong to covered populations including aging individuals, individuals with disabilities, individuals with limited English proficiency, rural residents, veterans, immigrants, unhoused individuals and tribal communities. Of the 991 respondents, 43 indicated that they cannot connect to the internet from home.

TWC and AgriLife also conducted research as part of this planning process that helped to identify partnerships for further exploration and key actions the BDO could take in the implementation phase. These recommendations are in *Chapter 5: Implementation*. TWC conducted qualitative and landscape research to produce the *Building the Broadband Industry Workforce and Supporting Digital Skills for Texans* included in Appendix K. AgriLife also conducted research on broadband adoption and digital opportunity programs in rural communities to produce the "*Broadband Adoption for Rural Communities*" report included in Appendix L. In addition, Agrilife incorporated broadband in its Local Needs Assessments to further the initiative of closing the digital divide across Texas. The AgriLife Local Needs Assessments identify and align the agency's programming and service delivery to the stated goals and objectives of the counties and communities their agents represent. From February through May 2024, AgriLife Extension agents in all Texas counties will convene meetings of community stakeholders, programmatic volunteers and elected officials to identify and rank priority needs for that county in topical areas. Including broadband in this year's needs assessment enables AgriLife to align its agency's work to support closing the digital divide across Texas and among the rural and agricultural stakeholders it serves.

Finally, as part of implementation, the BDO is also considering coordination with TSLAC, TDHCA and other agencies or organizations to more rapidly advance digital opportunity.

4.c Public Comment

4.c.i Public Comment Process

The BDO published the draft Digital Opportunity Plan for public comment on Tuesday, Nov. 28, 2023. The public comment period ended 38 days later, on Friday, Jan. 5, 2024. The BDO chose to extend the public comment period beyond the 30 days required by the NTIA in part to account for holiday and end-of-year activities that could make it more difficult for individuals and organizations to submit comments during that timeframe. The BDO published the full plan and all appendices on a website alongside an electronic form for submitting comments, with the form and the executive summary available in Spanish. The form included voice-to-text functionality to facilitate utilization by individuals with blindness, low vision, low literacy or difficulty typing. Users could download the plan and all appendices in PDF format to enable electronic translation into other languages. In response to their comments, commenters received an email confirming that the BDO received it.

To ensure widespread participation in the public comment period, the BDO engaged with the SWG, RWG and task forces to encourage participation and the promotion of the opportunity for public comment via their networks. In addition, the BDO shared the opportunity for public comment with its email distribution list, including those that participated in the various public meetings and shared their contact information.

In addition to the activities with TWC to ensure further representation of the experiences of individuals from covered populations in the plan, the BDO partnered with TWC to drive participation in the public comment period. TWC leveraged its statewide networks of job seekers, employers, employment offices and others to ensure widespread awareness of and participation in public comment, especially among individuals from covered populations and the organizations that serve them, including Spanish speakers.

Throughout the public comment period, TWC conducted outreach to statewide media outlets to raise awareness of and drive participation in the public

comment opportunity. Press outreach focused on encouraging individuals belonging to covered populations to give their feedback. Outreach materials were in English and Spanish and reached 62 Spanish media outlets and 26 ethnic media outlets (non-Spanish language). The outreach efforts resulted in more than 299 total stories statewide. In addition to media outreach, TWC contacted 1,118 organizations that serve covered populations across the state.

During the public comment period, the BDO also conducted a series of webinars titled, “Texas, Get Ready for Digital Opportunity,” in partnership with the Institute for Local Self-Reliance (ILSR). The BDO worked with the Connect Texas Team and ILSR to design this series to help local governments, nonprofits and community advocates understand and demystify the complex landscape of digital opportunity. The webinar series also provided an opportunity to promote the public comment period to organizations serving covered populations, and to answer any questions about the public comment opportunity.

Through its digital opportunity stakeholder network and partnerships with organizations like TWC and ILSR, the public comment period saw tremendous participation. This plan reflects the impact of the thoughtful input the BDO received from Texans through the public comment period. The BDO received 317 total comments over the 38-day public comment period, with significant participation from individuals belonging to covered populations and/or organizations serving covered populations, as shown in Table 18.

Table 17: Public comments submitted by individuals belonging to covered populations or organizations serving covered populations.

Covered Population Group	Comments submitted
Rural residents	148
Veterans	74
Individuals with disabilities	73
Low-income households	73
Racial or ethnic minorities	54
Aging individuals	52
Individuals with limited English proficiency	48
Immigrants	33
Unhoused individuals	26
Tribal communities	23
Incarcerated individuals	14

4.c.ii Changes to the Plan in Response to Public Comments

The BDO reviewed every comment received during the public comment period and considered which comments would result in changes to the plan. This final version of the plan contains edits to each section informed by public comment. Broadly, the BDO made changes to improve upon alignment with state outcome areas, address the needs of covered populations and speak to the sustainability of the digital opportunity in Texas beyond the implementation of this plan. Input received via public comment also resulted in modified strategies and an expanded list of organizations included in *Appendix E: Asset Inventory*. For details on all changes resulting from public comment, see *Appendix J: Record of*

Public Comments and Actions Taken and the footnotes to the updated sections of the plan.

4.d Looking Ahead¹¹²

The engagement model for the plan ensured widespread participation from stakeholders and communities across Texas, including all covered populations, to ensure an inclusive planning process. The BDO intends to continue engagement with these stakeholders, who represent and serve all covered populations, as the plan moves from planning to implementation, through funding; collaboration; opportunities to shape programming and regular engagements to provide updates on the plan; new measurement data; and requests for feedback. The engagement model will evolve over time to include key partners that may not have participated in the original public engagement process. For example, one public commenter shared that representatives of housing authorities could be good partners as they serve most, if not all, covered populations. *Chapter 5: Implementation* details this ongoing engagement and collaboration.

As the BDO transitions from planning to implementation, it will rely on interagency and interorganizational relationships established during this planning process and encourage new relationships to engage even more Texans and covered populations in addressing digital opportunity for all Texas residents.

¹¹² Comments 196, 217 and 239 received during the public comment period informed changes to this section of the plan.

5. Implementation

5.a Introduction

This chapter identifies the strategies and activities that the BDO will implement alongside stakeholders and partner agencies to achieve its overarching goals and measurable objectives. While the goals and measurable objectives encapsulate where the state wants to be, the strategies and activities describe what the BDO will do to get there. The strategies are broad approaches to achieving measurable objectives. They do not correspond to measurable objectives in a 1:1 manner but cut across multiple objectives, as this work is inherently interconnected. Because covered populations and regions face unique barriers, the strategies are intentionally broad, with implementation directions targeting the specific needs of covered populations and regions.

While the DRMTS gathered data on robust existing efforts to support digital opportunity for all covered populations in the state, the BDO found gaps in implementing programs in areas impacted by a lack of broadband availability, low place-based digital and technical support for accessing services, limited funding and challenges getting communities to engage in existing programs. In addition, most organizations are based in urban areas. Non-urban parts of the state need additional resources to serve their populations. Strategies one to three address these gaps.

The implementation strategies are designed to work alongside existing statewide and local efforts and federal funding for broadband infrastructure like BEAD. The needs assessment and asset inventory reveal that along with reliable broadband service in all communities, Texans need programs that will assist with broadband adoption, as well as digital literacy training to enable full and safe use of broadband-enabled technologies. Thus, the BDO developed these strategies to advance adoption of the internet.

Including data collection and measurement as part of the implementation for each strategy enables the BDO to measure progress toward KPIs, in addition to the ongoing measurements presented in *Strategy 4: Maintain a Living Digital Opportunity Plan*. Woven into each strategy is a plan for continued engagement with key stakeholders (including established and new) to advise on the plan’s implementation, gather feedback and continue to build and make connections across the state’s digital opportunity ecosystem, so that the work of digital opportunity may continue long after this plan’s implementation, ensuring sustainability of the work.

5.b Summary of Strategies

The BDO will advance the following four primary strategies to address these and other barriers identified in this plan and to realize its vision:



Strategy 1: Partner With and Fund Statewide Organizations.

The BDO will work with a range of state agencies and other statewide partners already actively involved in advancing digital opportunity across the state, ensuring that work is supportive of realizing the goals of this plan. The BDO will partner and collaboratively plan with agencies such as TWC and TSLAC, with the goal of enhancing and expanding those agencies’ programs through funding available from the state’s forthcoming State Capacity Grant Program administered by NTIA.



Strategy 2: Fund Local Partners. Broadband adoption, digital literacy, device access and many other aspects of digital opportunity require locally based, culturally appropriate efforts. Leadership should come from the same communities that these efforts aim to serve; trust, safety and confidence are essential components of digital opportunity. The BDO will allocate a portion of its Capacity Grant to create a digital opportunity grant program to fund local

initiatives addressing the gaps in digital opportunity for covered populations and regions most impacted by the digital divide.



Strategy 3: Promote Internet Adoption. The BDO recognizes that building the physical infrastructure to connect unserved and underserved Texans to broadband is only one component of expanding broadband adoption. Therefore, the BDO will support activities to encourage and support Texans to sign up for and use broadband service as it is made available across the state – benefiting Texans, multiple statewide priorities and the telecom industry through an expanded customer base.



Strategy 4: Maintain a Living Digital Opportunity Plan. The BDO envisions this plan as a living document, to be updated through continued research. The BDO has gathered extensive baseline data, established relationships with stakeholders and residents and gained a firm understanding of the current needs and barriers of Texans statewide – regionally and among covered populations. The BDO aims to build on this foundation and make this plan a sustainable resource to promote digital opportunity statewide by measuring progress while continuing to collect critical data to enable the state and its local partners to advance and iterate impactful programs.

Table 18: Summary of Implementation Strategies

Strategy	Activities
Strategy 1: Partner with and fund statewide organizations	<p>1.1: Allocate a portion of the state’s capacity grant program to expand existing state programs as detailed in this chapter.</p> <p>1.2: Provide funding to partners to implement recommended or planned digital opportunity programs.</p> <p>1.3: Provide funding to partners to develop programs or activities.</p>
Strategy 2: Fund local partners	<p>2.1: Stand up a state-led local digital opportunity fund to directly fund organizations offering digital opportunity resources to covered populations and geographies with the highest needs.</p> <p>2.2: Expand the state-led local digital opportunity fund criteria to build capacity and staffing of organizations offering services to geographies and covered populations after funding those with the highest needs.</p> <p>2.3: Consider distributing funding to local organizations and governmental entities that can administer digital opportunity funds.</p>
Strategy 3: Promote internet adoption	<p>3.1: Continue programs utilizing BEAD, BOOT and other infrastructure funding.</p> <p>3.2: Develop partnerships to promote internet enrollment.</p> <p>3.3: Establish a grant readiness training program.</p> <p>3.4: Develop state-granted programs to promote internet enrollment.</p>
Strategy 4: Maintain a living digital opportunity plan	<p>4.1: Conduct ongoing engagement and collaboration with stakeholders.</p> <p>4.2: Maintain a statewide asset inventory; conduct ongoing data measurement with grantees and additional research to improve upon baseline data.</p> <p>4.3: Evaluate progress against KPIs; adjust approach as needed.</p> <p>4.4: Conduct public and organizational surveys to measure progress.</p>

5.c Strategy Details and Timeline¹¹³

5.c.i Strategy 1: Partner With and Fund Statewide Organizations¹¹⁴

Many statewide organizations and state agencies are currently undertaking work to advance digital opportunity across the state – in some cases with significant experience and measurable success. The BDO will seek to partner with these agencies, such as TWC and TSLAC, to efficiently and effectively achieve the goals of this plan.

The list of state agencies and organizations provided here is not comprehensive. The BDO is open to exploring partnerships that advance universal broadband adoption and access to digital skills training.

Examples of statewide agency and organization partnerships could include:

- Partnering with TSLAC to implement and fund the recommendations outlined in the *Texas Public Libraries: Serving Communities to Enhance Digital Literacy Report*.¹¹⁵ These recommendations include the following (reprinted verbatim):
 - Initiate new state grant programs to support digital literacy that could focus on one or more of the following areas: sharing best practices; adding capacity for assistance; a facilitated peer-to-peer program between small and large libraries; assistance for small libraries; effective communication between branch managers via networking and professional development; and encouraging innovation through piloting new approaches and sustaining effective programming.

¹¹³ Comments 87 and 100 received during the public comment period informed changes to this section of the plan.

¹¹⁴ Comments 10, 106, 195, 231, 268 and 282 received during the public comment period informed changes to this section of the plan.

¹¹⁵ Texas State Library and Archives Commission. (March 2023). *Texas Public Libraries: Serving Communities to Enhance Digital Literacy*.

- Increase outreach and awareness of existing tools and curriculums for teaching digital literacy, such as promoting the TSLAC Digital Literacy Toolkit, evaluating pre-existing digital literacy curriculums and promoting best practices from Texas libraries.
- Develop new programming or expand activities that focus on older adults and seniors.
- Identify, procure or develop advanced digital literacy training modules.
- Partnering with TWC to leverage existing workforce initiatives, sectoral-based partnerships and Texas' history of working with industry to meet talent needs. This will leverage the collaboration the BDO initiated with TWC during the digital opportunity planning process to specifically address Texas Goal 3. This collaboration focused on researching the broadband workforce in Texas through landscape analysis, desktop research and interviews with job seekers, employers, training providers and other Texas residents to identify approaches that could support inclusive job opportunities for all Texans. Future partnership with TWC could include activities that would expand existing successful workforce training models that TWC operates (such as apprenticeship models) to focus on industries in the facilitation of broadband access and digital inclusion or provide additional flexible funding for wraparound services for trainees to support the retention of a diverse pipeline of talent.
- Partnering with AgriLife to support outcomes for rural residents. As part of the digital opportunity planning process, the BDO successfully partnered with AgriLife to achieve the objectives listed below. A continued partnership could extend and build on this existing work:
 - Identify any AgriLife programs and assets relevant to digital opportunity such as workforce training programs, digital literacy

programs, online learning, network infrastructure or internet adoption programs.

- Propose ideas for how the BDO and its grantees or program participants may leverage those assets.
- Identify and share data and studies on rural life and impact of broadband on rural health, education, economy and other important community outcomes.
- Conduct studies on rural capital projects and investments.
- Set baselines for rural indicators and track how deployment and digital opportunity programs may impact the state's six outcome areas. The BDO envisions continuing this partnership with AgriLife to implement the recommendations in their research that advance digital opportunity outcomes for rural residents and businesses, including agriculture.
- Partnering with the Texas Department of Information Resources to advance their work in cybersecurity in Texas. This could include support for:
 - The Texas Cybersecurity Council, which provides leadership on cybersecurity matters in accordance with Texas Government Code.
 - Oversight of cybersecurity training for state agencies and local governments, including selection of certified training courses and providing a portal for entities to certify completion.
 - Campaigns to increase awareness about cybersecurity during the month of October, Cybersecurity Awareness Month.
 - Resources for the public to help protect their information.

- Support of the CyberPatriot Program to provide skills and training to youth as a means of increasing the cybersecurity workforce.
- Establishing Regional Operations Security Centers, the first of which was established at Angelo State University.
- Developing, supporting and implementing a Cybersecurity Plan with the Cybersecurity Planning Committee, and identifying projects to fund in line with the Plan as part of the State and Local Cybersecurity Grant Program.
- Other state agency partnerships could include those that continue, expand and improve upon existing programs supporting digital opportunity. The BDO will evaluate potential partnerships when funds become available and may not necessarily include funding for the programs provided in this section; examples of potential partners include:
 - TTAP, which increases digital access for people with disabilities and those who are aging with Assistive Technology tools and services.¹¹⁶
 - The University of Houston-Downtown bilingual (Spanish and English) e-library, which seeks to address issues in low-income Hispanic communities related to connectivity, literacy and the preparation of the labor force to meet the challenge of economic growth in Houston.
 - TDCJ's Inmate Tablet Program, through which the department delivers information and services to incarcerated populations.¹¹⁷

¹¹⁶ Texas Center for Disability Studies. (n.d.). Texas Technology Access Program. <https://ttap.disabilitystudies.utexas.edu/>

¹¹⁷ Texas Department of Criminal Justice. (n.d.). Tablet Program Coming Soon to the Inmate Population. Inmate Tablet Program. https://www.tdcj.texas.gov/news/tablet_program.html

- Texas A&M Distance Education Professional Development Center’s Digital Access and Resilience in Texas (DART) curriculum, which integrates beginning English language learning with digital literacy skills.
- TDHCA, which can reach and support local/regional housing authorities in providing digital opportunity programming to their residents.
- Texas agencies that contribute to the state’s economic prosperity and further promote a robust workforce by leveraging existing workforce programs and strong connections to specific covered populations. Examples include the Public Utility Commission of Texas, Texas Department of Transportation, DIR (leveraging their experience in cybersecurity and working with colleges and universities) and TDCJ.

Measurable Objectives Addressed: All

KPIs: 1.1, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1 and 5.1

Covered Populations Served: All

State Outcome Areas Addressed: All

Stakeholders: State Agencies, CAIs, CBOs

Timeline: Start Date: September 2024 **End Date:** December 2029

Major Implementation Milestones, Measurements and Timeframes:

- Within the first year of the State Digital Equity Capacity Grant NOFO:
 - Establish partnerships with statewide organizations.
 - Allocate a portion of the state’s capacity grant programs to expand existing programs.
- Within the second year of the State Digital Equity Capacity Grant NOFO:

- Data collection via grant requirements on program impact of expanding existing state programs in alignment with this plan’s KPIs and continued needs.
- Within the third year of the State Digital Equity Capacity Grant NOFO:
 - Allocate a portion of the state’s capacity grant programs to implement recommended or planned digital opportunity programs.
- Within the fourth year of the State Digital Equity Capacity Grant NOFO:
 - Data collection via grant requirements on program impact in alignment with this plan’s KPIs and continued needs of expanding existing state programs and implementing planned state programs.
 - If funds remain, consider providing funding to state partners to develop programs or activities.
- Within the fifth year of the State Digital Equity Capacity Grant NOFO:
 - Collect final data from grantees.
 - Begin the process of wrapping grant programs and discuss partner needs for sustaining the work. Consider what resources or connections exist within the BDO to support the sustainability of funded programs.

5.c.ii Strategy 2: Fund Local Partners¹¹⁸

Broadband adoption, digital literacy, device access and many other aspects of digital opportunity require locally based, culturally appropriate efforts. Leadership should come from the same communities that these efforts aim to serve; trust, safety, and confidence are essential components of digital opportunity. The BDO will create a digital opportunity grant program, similar to the BOOT program for broadband infrastructure, to fund local initiatives addressing the gaps in digital opportunity for covered populations and regions (pending the release of the State Digital Equity Capacity Grant NOFO).

¹¹⁸ Comments 47, 83, 105, 256, 270, 280, 290, 313 and 314 from the public comment period informed changes to this section of the plan.

Addressing the gaps identified in *Chapter 3* requires specific focus by the state and partner organizations such as CAIs, CBOs, labor organizations and nonprofits. The success of grantmaking programs like that of the CBO, Methodist Healthcare Ministries, discussed in *Chapter 3* illustrates how locally targeted funding can address gaps in digital opportunity.

According to the results of the DRMTS, funding is the primary barrier impacting organizations offering digital opportunity programming and resources. The second barrier is also related to funding: a lack of staff or organizational capacity. For further detail see *Chapter 3, Figure 26: Barriers to Implementing Digital Opportunity Programs*. In creating a fund for local digital opportunity, the BDO aims to reduce the barriers for organizations offering digital opportunity programs (like CAIs, CBOs, institutions of higher learning, labor organizations, nonprofits and workforce agencies) and to support the implementation of existing municipal, regional and/or tribal digital opportunity plans. In addition, dependent upon the NTIA's NOFO requirements, the BDO may consider simple approaches to funding and scaling organizations already doing the work, reducing the barrier of organizational capacity.

While Texas boasts many proven programs, organizations and models, the BDO will also allow space for new and innovative strategies. Diversifying the types of organizations responsible for carrying out implementation strategies will support the growth of a robust digital opportunity ecosystem. Community-based organizations and anchor institutions are woven into the fiber of certain communities, and thus, understand local needs and culture. These organizations are important digital opportunity stakeholders that can serve as ambassadors for conducting outreach, delivering trainings, and offering digital navigation and technical assistance to expand access to digital opportunity for all covered populations.

This fund will also address significant disparities among all covered populations. The grant program may place higher priority on applications that address these disparities:

- Access to devices other than smartphones tied to digital literacy training for unhoused individuals, low-income households and individuals with limited English proficiency.
- Support for individuals with limited English proficiency in digital literacy training and cybersecurity.
- Support for immigrants in awareness of and applying for discounted internet programs.

The BDO has yet to determine final granting criteria but may consider the following when establishing a fund for local digital opportunity:

- Does the proposal address a discrete regional need, or need of covered populations?
- Does the proposal provide in-person support in addition to online resources, along with strategies to get in-person support to covered populations?
- Does the proposal address multiple Texas goals, like providing technical support and cybersecurity tools with discounted devices? Or does an organization offer access to a digital navigator when distributing devices and affordable internet?
- Does the proposal consider building capacity and training for smaller or newer organizations?
- Do device proposals support personal internet-enabled devices within the context of the intended use of the device?
- Are program qualifications inclusive to meet the needs of covered populations?
- Does the proposal support the implementation of an existing local or regional digital opportunity plan?

- Does the proposal advance research into solutions to the digital divide that could improve policy or investment impact?
- Does the proposal include opportunities to engage or partner with workforce agencies, labor organizations, CBOs and institutions of higher learning?

As part of establishing this fund, BDO stakeholders (including CAIs, CBOs, institutions of higher learning, labor organizations, nonprofits and workforce agencies) will have an opportunity to shape the program. In addition, the BDO plans to engage the private and philanthropic sectors in opportunities to expand the funding and impact potential of these grant programs.

Measurable Objectives Addressed: All

KPIs: 1.1, 2.1, 2.2, 3.2, 4.1, and 5.1.

Covered Populations Served: All, with certain grants likely to be tailored to specific populations

State Outcome Areas Addressed: All

Stakeholders: CAIs, CBOs, nonprofits, etc.

Timeline: Start Date: January 2025 **End Date:** December 2029

Major Implementation Milestones, Measurements and Timeframes:

- Within the first year of the State Digital Equity Capacity Grant NOFO:
 - Establish and deploy a two-year, state-led digital opportunity fund to fund direct services.
 - As a grant requirement, collect data on program impact in alignment with this plan’s KPIs.
- Within the second year of the State Digital Equity Capacity Grant NOFO:

- Assess and adjust program based on data collection and progress towards this plan's KPIs.
- Within the third year of the State Digital Equity Capacity Grant NOFO:
 - Deploy phase two.
 - Continue to collect grantee data on program impact in alignment with this plan's KPIs; use data to assess continued needs.
- Within the fourth year of the State Digital Equity Capacity Grant NOFO:
 - If funds remain, consider distributing funding to local organizations and governmental entities that can administer digital opportunity funds.
 - Continue to collect grantee and any subgrantee data on impact of phase two in alignment with this plan's KPIs; use data to assess continued needs.
- Within the fifth year of the State Digital Equity Capacity Grant NOFO:
 - Collect final grantee data on program impact in alignment with this plan's KPIs.
 - Begin the process of wrapping grant programs and discuss grantee needs for sustaining the work. Consider what resources or connections exist within the BDO to support the sustainability of funded programs.

5.c.iii Strategy 3: Promote Internet Adoption¹¹⁹

In addition to building the physical infrastructure to connect unserved and underserved Texans to broadband, the BDO will support activities to encourage and support Texans in signing up for and using internet as it's available across the state – a benefit to Texans, multiple statewide priorities and to the telecom industry that stands to benefit from an expanded customer base.

The BEAD program was created to “expand high-speed internet access by funding planning, infrastructure deployment and adoption programs in all 50 states.” According to Texas’ BEAD Five-Year Action Plan (FYAP), “the state will need to prioritize broadband service deployment first to unserved locations followed by underserved locations and deploy infrastructure buildouts based on efficient use of subsidies and a mixed-use of technologies in areas where fiber deployments may be economically impractical.”

In conjunction with the recommendations outlined in the FYAP, the BDO also recommends defining a low-cost service option to encourage the development of sustainable broadband service offerings suitable for low-income consumers, especially those within additional covered populations and historically marginalized communities, and to prioritize proposals that improve affordability. At the time of developing this plan, the BDO’s low-cost service option can be found in the state’s Volume II of the Initial Proposal, pending approval.

As physical infrastructure improves the availability and adequacy of internet across the state, and affordable options become more widely available to end users, the BDO will implement strategies to encourage and support households to sign up for internet services. This could include partnerships with ISPs, digital navigation programs or other programs to support individuals in signing up for internet service.

¹¹⁹ Comments 102 and 317 from the public comment period informed changes to this section of the plan.

For example, Link Health is an organization conducting a pilot program in Houston that supports patients in signing up for ACP in the waiting rooms of their doctors' appointments. Their mission is "to bridge the gap in health care

"Lack of knowledge on how to sign up for the internet. The area has a lot of fear and doesn't necessarily know why they need it or don't want to use computers. They prefer face-to-face interaction."

- Kingsville Public Meeting
Attendee, South Texas Region

services and provide a platform that fosters collaboration, education and empowerment for all Houstonians."

They partner with health care clinics to allow their representatives to "directly enroll patients in ACP during their time in waiting rooms." This initiative started in part to ensure more people have access to telehealth services. Through their work in Texas and other states, Link Health has helped more than 2,000 people receive ACP benefits.¹²⁰

In promoting internet adoption as a strategy, the BDO would like to support Texans in signing up for internet service, finding broadband services that meet their budget, and enrolling in ACP and other existing or future subsidy programs. This example is used to capture the strategy of meeting people where they go, providing resources to directly subscribe Texans to home internet service, and enabling them to utilize the internet for public and essential services.

Support could include funding for navigators to enable direct enrollment in internet service, with a focus on reaching individuals in places where they may have the option to use the internet to access public and essential services such as banks, health centers, grocery stores, libraries, municipal facilities, pharmacies, schools, state facilities, workforce centers, etc.

The ACP is not a permanent program and could discontinue if federal action is not taken. For this reason, the BDO understands the necessity of exploring all options that enable covered populations in Texas to gain access to the internet

¹²⁰ Link Health Initiative. (n.d.). About Houston Initiative. Link Health. <https://link-health.org/about-houston-initiative/>

and devices, rather than relying on existing programs as a means for closing the digital divide.

In addition to supporting direct enrollment, the BDO will also partner with state agencies, CBOs and CAIs to promote ACP awareness through joint promotional activities. For example, leveraging Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)/SNAP mailings to include information about ACP enrollment. The BDO will collaborate with CBOs and nonprofits to have digital connectors available to promote ACP or other programs addressing broadband affordability at their community events.

Finally, the BDO will consider building on existing grant readiness training to organizations and local governments that may seek capacity grant funding to promote internet adoption across the state. Since Dec. 6, 2023, Texans have begun preparing for future grant opportunities emerging from this plan by attending the BDO's "Texas, Get Ready For Digital Opportunity" webinar series. The series hosts conversations around digital opportunity needs, such as creating accessible digital skills programming for English learners, expanding broadband access and how to reach covered populations. This strategy could be implemented alongside strategies one and two.

Measurable Objectives Addressed: Texas Goal 1: Expand adoption of reliable, affordable broadband internet service at home for all Texans, including individuals belonging to covered populations; Texas Goal 5: Improve access to online public resources and services for all Texans, including those belonging to covered population groups.

KPIs: 1.1, 1.2, 1.3, and 5.1

Covered Populations Served: All

State Outcome Areas Addressed: All

Stakeholders: ISPs, CBOs, CAIs

Timeline: Start Date: September 2024 **End Date:** December 2029

Major Implementation Milestones, Measurements and Timeframes:

- Within the first year of the State Digital Equity Capacity Grant NOFO:
 - BEAD, BOOT and other broadband infrastructure programs under development.
 - Establish partnerships with ISPs, CBOs and CAIs to promote internet enrollment.
 - Establish partnerships with state agencies and organizations to promote ACP and other existing or future affordability programs.
 - Establish and deploy a grant readiness program.
- Within the second year of the State Digital Equity Capacity Grant NOFO:
 - Establish and deploy a two-year, state-led grant program for direct enrollment in low-cost internet.
 - Collect data via grant requirements on both programs' impacts, and assessment and adjustment of the two programs in alignment with this plan's KPIs.
- Within the third year of the State Digital Equity Capacity Grant NOFO:
 - Continue to collect data via grant requirements on both programs' impacts, and assessment and adjustment of the two programs in alignment with this plan's KPIs.
 - Design and deploy phase two, adjusting strategies based on data collected in phase one.
- Within the fourth year of the State Digital Equity Capacity Grant NOFO:

- Collect data on phase two via grant requirements on both programs' impacts; assess and adjust programs in alignment with this plan's KPIs.
 - Consider deploying a program as a follow-up to the grant readiness program designed to prepare organizations to sustain their work on digital opportunity beyond this plan's implementation.
- Within the fifth year of the State Digital Equity Capacity Grant NOFO:
 - Collect final data from grantees via granting requirements on program impact in alignment with this plan's KPIs.
 - Begin the process of wrapping grant programs and discuss grantee needs for sustaining the work. Consider what resources or connections exist within the BDO to support the sustainability of funded programs.

5.c.iv Strategy 4: Maintain a Living Digital Opportunity Plan¹²¹

The BDO envisions this plan as a living document, to be updated through continued research and measurement of progress towards KPIs. The work the BDO conducted to generate this plan – including gathering extensive baseline data, establishing relationships with key stakeholders and residents, and developing a firm understanding of the needs and barriers of Texans statewide, regionally and among covered populations – is only the beginning. The BDO will continue to measure and improve upon this document to advance digital opportunity in the state, including the continual evaluation of new policies, programs and funding opportunities until the completion of the vision of digital opportunity for all Texans. Based on data and measurements, the BDO could

¹²¹ Comments 110, 115, 236, 237, 238, 264, 272, 276 and 292 from the public comment period informed changes to this section of the plan.

update the plan via new publications of the executive summary and KPIs, or updates to the Digital Opportunity Program website.

A living Digital Opportunity Plan will continue to research, gather, measure and analyze data to evaluate progress against KPIs. The BDO will continue to gather these data via online, paper and in-person methods, partnering with statewide agencies and local CBOs where possible. Evolving and more robust data-gathering methods may require the BDO to revisit or revise baseline metrics against which to measure progress.

For example, the BDO is considering how the state could measure the digital skills of its residents. There is no existing data set that enables the state to assess the levels of digital skills of Texans across programs, populations and geographies. The Digital Opportunity Survey provides a snapshot, utilizing respondent self-assessments. As part of maintaining a living plan, the BDO may consider convening state partners to establish standards and processes for data collection on the range of digital literacy skills among Texas residents. With recent advancements in artificial intelligence (AI), the BDO may consider including AI literacy programs that provide education to ensure individuals who belong to covered populations can access and safely use AI-based technologies crucial for 21st-century education and the workforce.

Additionally, the BDO recognizes that the actual connectivity experienced by individuals belonging to covered populations might deviate significantly from what the data suggest. Therefore, the BDO will regard baseline data as reference points rather than precise measurements. The BDO will explore additional data collection processes to continually measure the impact of the plan using approaches more targeted to covered populations. The BDO may conduct or support research to gain a deeper understanding of ACP and other affordability program participation by geography, age, race and other attributes, to the extent feasible, and report out on a more granular level.

In the short term, the BDO will collect and measure key data points from grantees or partners funded by Digital Equity Act and BEAD, or other state-

administered broadband-related funds. The BDO will also develop a searchable, statewide asset inventory. While the results from the DRMTS included in this plan provide a start, the BDO recognizes the value of promoting the considerable, diverse digital opportunity resources in communities across the state, making them more accessible to both residents and organizations. In fact, the process of developing the state's initial proposal for BEAD identified 25,385 entities meeting the state's definition of CAIs. In the short term, the BDO will better capture and document the digital opportunity resources these CAIs offer, as resources for implementing the vision and goals of this plan.

In the medium term, the BDO will conduct another statewide evaluation, likely via a survey, to measure changes to the baseline data established in this document.

The BDO will continue to regularly engage with the SWG and task forces and their members and convene the RWGs on an as-needed basis. The BDO sees the participants in the SWG and task forces as collaborators and partners in implementing the plan, achieving the vision for digital opportunity in the state and ensuring the work of digital opportunity is sustained beyond the lifetime of this plan. While the groups may not convene under the same structure as outlined in *Chapter 4*, the BDO will regularly engage with and build on the membership of those groups, which includes representatives of CAIs, CBOs, institutions of higher learning, labor organizations, nonprofits and workforce agencies. During regular conversations, the BDO will provide updates on the plan and new measurement data and request feedback from members of the groups, which include community-based organizations and representatives of covered populations. The BDO will adjust programming and implementation based on their feedback. In this way, the BDO sees the membership of these groups as an advising body to achieve the vision for digital opportunity in Texas.

In part, the purpose of continuing to gather key digital opportunity stakeholders is to build the network of community of practitioners in digital opportunity across the state. In connecting organizations, growing organizational capacity through funding and building relationships between digital opportunity practitioners,

Texans will sustain the work of digital opportunity long after this plan is complete.

The work of a living plan is already underway as part of the planning process. To accompany the publication of the final Digital Opportunity Plan, the BDO will also release a publicly accessible online dashboard enabling further analysis of the data referenced in this document, as well as an interactive online version of this plan that the BDO will maintain as the plan evolves, reflecting updated data and metrics.

Measurable Objectives Addressed: All

KPIs: 2.2, 3.1, and 5.1

Covered Populations Served: All

State Outcome Areas Addressed: All

Stakeholders: SWG, all task force members, grantees or beneficiaries of statewide administered funds

Timeline: Start Date: January 2024 **End Date:** January 2030

Major Implementation Milestones, Measurements and Timeframes:

- Within the first year of the State Digital Equity Capacity Grant NOFO:
 - Continue to meet with stakeholders in the engagement model, expand the engagement model as the work evolves and invite stakeholders to BDO meetings that discuss digital opportunity.
 - Develop a statewide asset inventory.
- Within the second year of the State Digital Equity Capacity Grant NOFO:
 - Collect additional research to improve upon baseline data to better evaluate the impact of the plan.

- Within the third year of the State Digital Equity Capacity Grant NOFO:
 - Conduct additional public and organizational surveys to measure progress on the plan and modify approaches to strategies 1-3.
 - Recommend changes to the approach to ensure the plan advances its KPIs.

- Within the fourth year of the State Digital Equity Capacity Grant NOFO:
 - Implement recommended changes to data collection requirements from grantees and partners to improve upon progress toward KPIs based on outcomes from new surveys.
 - Adjust approach to grants as needed.

- Within the fifth year of the State Digital Equity Capacity Grant NOFO:
 - Conduct final public and organizational surveys.
 - Analyze progress toward KPIs based on updated survey data information and data collected from grantees over the five-year program.
 - Look back on progress over the five-year grant period, assess what went well and identify how the BDO can continue to support digital opportunity across the state.

6. Conclusion

6.a Conclusion

The Texas Digital Opportunity Plan is designed to improve quality of life and promote economic growth by enabling fast, reliable and affordable broadband connectivity for all residents and businesses and by promoting universal broadband adoption and access to digital skills training.

The plan presents a set of strategies and funding priorities that address specific digital needs of communities in the areas of affordable broadband access, internet-enabled devices, skills, safety and accessibility of online services. With reliable, robust access to these digital capacity-building supports and resources, all residents will be able to fully participate in the 21st century economy and social and civil society.

The BDO's work in the planning process has been guided by extensive engagement with the SWG on digital opportunity, 12 RWGs spanning the state and six diverse task forces to determine strategic approaches to advancing targeted strategies to reach all Texans.

To build an evidence base shaping these investments, the BDO also conducted a Digital Opportunity Survey and a 24-stop public meeting tour collecting information about needs and barriers to full adoption and use of broadband and digital resources for Texans. The survey had over 13,000 responses, and the public tour had over 1,200 attendees participate. These insightful data can be leveraged to establish customized programs that best suit the unique needs of the state.

The BDO also developed and utilized the DRMTS to gather information about how existing digital opportunity-focused organizations and programs are already supporting broadband accessibility, affordability, adoption and meaningful use. This information allows the BDO to better understand and leverage existing pathways to have the best use of finite resources.

This plan charts a course to shore up and increase the capacity of existing organizations and institutions already providing critical digital inclusion support to Texas residents. This asset-based approach to closing digital opportunity gaps will allow Texas, through the BDO, to invest in working with and funding statewide partners and local organizations that are advancing the state's priorities for economic and workforce development, education, health, civic and social engagement, accessibility of essential services, and affordable access to and adoption of business and residential internet services.

Throughout the planning process, and in consultation with diverse groups of stakeholders, the BDO has developed strategies to ensure every Texan has opportunities to safely access the benefits of the digital world. The Texas Digital Opportunity Plan is a first step to ensure that IIJA funding, or even additional funding that may be available, creates a meaningful and sustainable impact across all the state's populations and geographies. As further IIJA grant funding for capacity building becomes available in 2024, the BDO will continue to work with partners across the state to maintain this plan as a living document to measure, improve and advance digital opportunity in the state.

7. Appendices

Appendix A: Local Digital Opportunity Plan Tracker¹²²

Appendix B: Strategies, Objectives and Baselines¹²³

Appendix C: Needs Assessment and Asset Inventory Report, Methodology and Limitations

Appendix D: Stakeholder Engagements and Participants

Appendix E: Detailed Asset Inventory¹²⁴

Appendix F: NTIA Requirements Checklist

Appendix G: Online Digital Opportunity Survey

Appendix H: Paper Digital Opportunity Survey

Appendix I: Digital Resources Mapping Tool Survey

Appendix J: Record of Public Comments and Actions Taken

Appendix J.1: Attachments to Public Comments

Appendix K: Building the Broadband Industry Workforce and Supporting Digital Skills for Texans

Appendix L: Broadband Adoption for Rural Communities

¹²² Comment 315 received during the public comment period informed changes to this section of the plan.

¹²³ Comments 283 and 284 received during the public comment period informed changes to this section of the plan.

¹²⁴ Comments 234, 258, 259 and 278 received during the public comment period informed changes to this section of the plan.

Appendix A: Local Digital Opportunity Plan Tracker

Table 1: Local Digital Opportunity Plan Tracker

Plan Title	Geography	Stakeholder	Description
Anderson County Technology Action Plan	Anderson County	Anderson County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Archer County Technology Action Plan	Archer County	Archer County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Bastrop County Community Technology Assessment	Bastrop County	Bastrop County	Bastrop County conducted a comprehensive survey of broadband technology access and adoption to identify issues and opportunities to close the digital divide, including recommendations to build local capacity, considering public-private partnerships to expand broadband access and work to ensure the county is a digitally ready community.

Baylor County Technology Action Plan	Baylor County	Baylor County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Broadband & Digital Equity Strategic Plan	City of Dallas	City of Dallas	Develop strategic approach to addressing digital equity issues in Dallas.
Broadband Strategic Plan	El Paso County	El Paso County	El Paso County contracted HR Green and its partners in spring 2018 to provide a comprehensive broadband assessment and provide a strategic plan to address underserved residents in the county.
Caldwell County Technology Action Plan	Caldwell County	Caldwell County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Castro County Technology Action Plan	Castro County	Castro County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Childress County	Childress County	Childress County	County broadband teams conducted a nine-sector survey

Technology Action Plan			covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
City of Austin Digital Inclusion Strategic Plan	City of Austin	City of Austin	A dynamic plan that uses community assets to overcome barriers and to increase resident participation in our digital society. A periodic assessment of residential technology use is also conducted to measure the progress of inclusion activities.
Clay County Technology Action Plan	Clay County	Clay County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Cottle County Technology Action Plan	Cottle County	Cottle County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Dewitt and Lavaca Technology Action Plan	Dewitt and Lavaca counties	Dewitt and Lavaca counties	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the

			community, and an interactive map of the counties.
Digital Equity Community Plan	San Antonio and Bexar County	San Antonio and Bexar County	Implementing the Digital Equity Plan by addressing secure funding for access/infrastructure, affordability and adoption/digital skills.
Donley and Wheeler Technology Action Plan	Donley and Wheeler counties	Donley and Wheeler counties	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the counties.
Ellis County Technology Action Plan	Ellis County	Ellis County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Fisher County Technology Action Plan	Fisher County	Fisher County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Foard County Technology Action Plan	Foard County	Foard County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action

			plan, tailored to the needs of the community, and an interactive map of the county.
Hall County Technology Action Plan	Hall County	Hall County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Hardeman County Technology Action Plan	Hardeman County	Hardeman County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Hardin County Technology Action Plan	Hardin County	Hardin County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Harrison County Technology County Plan	Harrison County	Harrison County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.

Haskell County Technology Action	Haskell County	Haskell County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Hays County Technology Action Plan	Hays County	Hays County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Hill Country Technology Action Plan	Blanco, Burnet and Llano counties	Blanco, Burnet and Llano counties	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the counties.
Houston County Technology Action Plan	Houston County	Houston County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Jack County Technology Action Plan	Jack County	Jack County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data

			informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Jasper County Technology Action Plan	Jasper County	Jasper County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Jefferson County Technology Action Plan	Jefferson County	Jefferson County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Jones County Technology Action Plan	Jones County	Jones County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Karnes County Technology Action Plan	Karnes County	Karnes County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.

Kaufman County Technology Action Plan	Kaufman County	Kaufman County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
King County Technology Action Plan	King County	King County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Knox County Technology Action Plan	Knox County	Knox County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Lampasas and San Saba Technology Action Plan	Lampasas and San Saba counties	Lampasas and San Saba counties	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the counties.
Liberty County Technology Action Plan	Liberty County	Liberty County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data

			informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Maverick County Technology Action Plan	Maverick County	Maverick County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Milam County Technology Action Plan	Milam County	Milam County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Montague County Technology Action Plan	Montague County	Montague County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Morris County Technology Action Plan	Morris County	Morris County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.

Nacogdoches County Technology Action Plan	Nacogdoches County	Nacogdoches County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Newton County Technology Action Plan	Newton County	Newton County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Orange County Technology Action Plan	Orange County	Orange County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Rains County Technology Action Plan	Rains County	Rains County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Red River County Technology Action Plan	Red River County	Red River County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data

			informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Refugio County Technology Action Plan	Refugio County	Refugio County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Rio Grande Valley Digital Opportunity Plan	Rio Grande Valley	Connect Humanity	According to its comments on the draft TDOP, Connect Humanity “[is] finalizing [its] Rio Grande Valley Digital Opportunity Plan and will provide it to the BDO by early February 2024. During the Spring of 2024 [it] will also be finalizing the MOUs between the local governments and anchor institutions and ISPs.”
Rural Broadband Funding Solutions	East Texas	East Texas Council of Governments (ETCOG)	ETCOG is taking a grassroots approach, going county by county to identify critical broadband needs. ETCOG staff has been working with each county to rank and prioritize projects that business leaders and broadband providers have proposed to address the identified needs.
San Antonio and Bexar County Digital Inclusion Road Map	Bexar County	Bexar County	Plan proposes key initiatives to address all barriers to access. The county has developed a roadmap to implement and activate against its strategy, with a focus on near-term priorities.

San Augustine County Technology Action Plan	San Augustine County	San Augustine County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Shelby County Technology Action Plan	Shelby County	Shelby County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Texas Broadband Plan 2022	State of Texas	State of Texas	Provides a road map to close the digital gap in Texas by expanding broadband availability across the state. Presents an initial scan of broadband availability and needs across the state, results from listening tours/engagement and background on broadband terminology.
Throckmorton and Shackelford County Technology Action Plan	Shackelford and Throckmorton counties	Shackelford and Throckmorton counties	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the counties.
Tom Green County	Tom Green County	Tom Green County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor

Executive Report			institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Tri-County Technology Action Plan	Brewster, Jeff Davis and Presidio counties	Brewster, Jeff Davis and Presidio counties	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the counties.
Tyler County Technology Action Plan	Tyler County	Tyler County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Walker County Technology Action Plan	Walker County	Walker County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Wharton County Technology Action Plan	Wharton County	Wharton County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the

			community, and an interactive map of the county.
Wichita County Technology Action Plan	Wichita County	Wichita County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.
Young County Technology Action Plan	Young County	Young County	County broadband teams conducted a nine-sector survey covering residents, businesses and community anchor institutions. Survey data informed a technology action plan, tailored to the needs of the community, and an interactive map of the county.

Appendix B: Strategies, Objectives and Baselines

Table 1: Strategies and Objectives

VISION				
<i>Improve quality of life and promote economic growth by enabling fast, reliable and affordable broadband connectivity for all residents and businesses of Texas, and by promoting universal broadband adoption and access to digital skills development.</i>				
NTIA Measurable Objective Category 1: Broadband Availability and Affordability				
Texas Goal 1:				
Expand adoption of reliable, affordable broadband internet service at home for all Texans, including individuals belonging to covered populations.				
Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
1.1 Increase the percentage of Texans with reliable broadband subscriptions, including Texans belonging to all covered population groups.	ACS 5-year estimates (2017-2021) 68% of Texas households subscribe to broadband internet.	ACS 5-year estimates (2017-2021) Covered populations who connect to the internet at home: Aging individuals: 61% (over 59) Incarcerated individuals: implementation Strategy 4, the BDO will establish baseline data	80% of Texas households subscribe to broadband internet by 2030. Increase the rate at which individuals belonging to covered population groups connect to the internet at home by at least 10% by 2030:	Strategy 1: Partner with and fund statewide organizations Strategy 2: Fund local partners Strategy 3: Promote internet adoption

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
		<p>on KPI 1.1 for this covered population.¹</p> <p>Individuals with disabilities: 57%</p> <p>Individuals with limited English proficiency: 49%</p> <p>Low-income households: 77%</p> <p>Racial or ethnic minorities: 67%</p> <p>Rural residents: 47%</p> <p>Veterans: 72%</p> <p>2023 Digital Opportunity Survey</p> <p>Rural residents: 92%</p>	<p>Aging individuals: 71%</p> <p>Incarcerated individuals: The BDO will set an appropriate target after establishing a baseline during implementation.¹</p> <p>Individuals with disabilities: 67%</p> <p>Individuals with limited English proficiency: 59%</p> <p>Low-income households: 87%</p> <p>Racial or ethnic minorities: 77%</p> <p>Veterans: 82%</p> <p>Rural residents: 58%</p>	
<p>1.2 Decrease the percentage of Texans who cite cost as a barrier to home internet service, including Texans belonging to all covered population groups.</p>	<p>2023 Digital Opportunity Survey</p> <p>59% of respondents who are not connected state that</p>	<p>2023 Digital Opportunity Survey</p> <p>Covered populations that do not have internet at home stating that the cost of internet service is too expensive:</p>	<p>Reduce the rate of Texans who do not connect to the internet at home due to cost to less than 50%.</p> <p>By 2030, among covered populations,</p>	<p>Strategy 2: Fund local partners</p> <p>Strategy 3: Promote internet adoption</p>

¹ As a matter of departmental policy, individuals incarcerated within the Texas Department of Criminal Justice (TDCJ) system have limited access to the internet.

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
	home internet services are too expensive.	<p>Aging individuals: 55%</p> <p>Incarcerated individuals: As part of implementation Strategy 4, the BDO will establish baseline data on KPI 1.2 for this covered population. ¹</p> <p>Individuals with disabilities: 64%</p> <p>Individuals with limited English proficiency: 74%</p> <p>Low-income households: 75%</p> <p>Racial or ethnic minorities: 69%</p> <p>Rural residents: 51%</p> <p>Veterans: 41%</p>	<p>reduce the rate of those who do not connect to the internet at home due to cost of service by at least 15% each:</p> <p>Aging individuals: 40%</p> <p>Incarcerated individuals: The BDO will set an appropriate target for after establishing a baseline during implementation. ¹</p> <p>Individuals with disabilities: 49%</p> <p>Individuals with limited English proficiency: 59%</p> <p>Low-income households: 60%</p> <p>Racial or ethnic minorities: 54%</p> <p>Rural residents: 36%</p> <p>Veterans: 26%</p>	
1.3 Increase the percentage of Texans who are aware of Affordable Connectivity Plan (ACP)	2023 Digital Opportunity Survey	2023 Digital Opportunity Survey	50% are aware of discounted services like ACP by 2030 (using ACP)	Strategy 3: Promote internet adoption

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
and/or other low-cost or subsidized internet service options, including Texans belonging to all covered population groups.).	40% of respondents have heard of ACP.	<p>Awareness of ACP among covered populations:</p> <p>Aging individuals: 41%</p> <p>Incarcerated individuals: 41%</p> <p>As part of implementation Strategy 4, the BDO will establish baseline data on KPI 1.3 for this covered population. ¹</p> <p>Individuals with disabilities: 46%</p> <p>Individuals with limited English proficiency: 34%</p> <p>Low-income households: 47%</p> <p>Racial or ethnic minorities: 40%</p> <p>Rural residents: 39%</p> <p>Veterans: 40%</p>	<p>awareness as a baseline).</p> <p>Increase awareness of discounted services like ACP by at least 10% for each covered population (using ACP awareness as a baseline) by 2030:</p> <p>Aging individuals: 51%</p> <p>Incarcerated individuals: The BDO will set an appropriate target after establishing a baseline during implementation. ¹</p> <p>Individuals with disabilities: 56%</p> <p>Individuals with limited English proficiency: 44%</p> <p>Low-income households: 57%</p> <p>Racial or ethnic minorities: 50%</p> <p>Rural residents: 49%</p>	

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
			Veterans: 50%	

NTIA Measurable Objective Category 2: Device Availability and Affordability and Technical Support

Texas Goal 2:

All Texans, including those belonging to covered population groups, have access to affordable computers and other internet-enabled devices in the home, with corresponding technical support services.

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
<p>2.1 Increase the percentage of Texans who have home access to affordable, internet-enabled devices other than a smartphone, including Texans belonging to all covered population groups.</p>	<p>ACS 5-year estimates (2017-2021) 89% of households have a computing device other than a smartphone.</p>	<p>2023 Digital Opportunity Survey Covered populations who have access to internet-enabled devices other than a smartphone: Aging individuals: 94% Individuals with disabilities: 92% Individuals with limited English proficiency: 82% Low-income households: 80% Racial or ethnic minorities: 90% Rural residents: 92% Veterans: 95% Incarcerated individuals: TDCJ offers a tablet to all eligible incarcerated</p>	<p>90% of all Texans have an internet-enabled device other than a smartphone by 2030. Ensure at least 90% of all covered populations have access to an internet-enabled device other than a smartphone, and for those with above 90% access, increase access to internet-enabled devices by at least 1% by 2030: Aging individuals: 95% Individuals with disabilities: 93% Individuals with limited English proficiency: 90%</p>	<p>Strategy 1: Partner with and fund statewide organizations Strategy 2: Fund local partners Strategy 4: Maintain a living Digital Opportunity Plan</p>

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
		<p>individuals at participating facilities.² As part of implementation Strategy 4, the BDO will establish baseline data on incarcerated individuals eligible for tablets.</p>	<p>Low-income households: 90% Racial or ethnic minorities: 91% Rural residents: 93% Veterans: 96% Incarcerated individuals: The BDO will set an appropriate target that measures an increase in the number of incarcerated individuals using tablets after establishing a baseline during implementation.</p>	
<p>2.2 Increase access to low to no cost technical support for internet-enabled devices for more Texans, including Texans belonging to all covered population groups.</p>	<p>2023 Digital Resources Mapping Tool Survey 39% of organizations surveyed offer digital skills and</p>	<p>2023 Digital Resources Mapping Tool Survey Organizations offering digital skills and technical support to covered populations: Aging individuals: 68%</p>	<p>50% of organizations offer digital skills and technical support by 2030. Increase organizations offering digital skills and technical support to covered populations</p>	<p>Strategy 1: Partner with and fund statewide organizations Strategy 2: Fund local partners Strategy 4: Maintain a living Digital Opportunity Plan</p>

² Securus Technologies. Nd. TDCJ UNITY JP6S FREE LOANER TABLET PROGRAM. <https://securustech.net/tdcj/index.html#tdcj-unity-jp6s>

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
	technical support.	Incarcerated individuals: 26% Individuals with disabilities: 80% Individuals with limited English proficiency: 75% Low-income households: 82% Racial or ethnic minorities: 82% Rural residents: 67% Veterans: 65%	by at least 10% by 2030. Aging individuals: 78% Incarcerated individuals: 36% Individuals with disabilities: 90% Individuals with limited English proficiency: 85% Low-income households: 92% Racial or ethnic minorities: 92% Rural residents: 77% Veterans: 75%	

NTIA Measurable Objective Category 3: Digital Literacy

Texas Goal 3:

All Texans, including those belonging to covered population groups, have a broad foundation of digital literacy skills and access to a continuum of digital skills development programs.

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
<p>3.1 Increase the percentage of Texans who have basic digital literacy skills, including Texans belonging to all covered population groups.</p>	<p>2023 Digital Opportunity Survey 88% of Digital Opportunity Survey respondents are comfortable with connecting a computer or smartphone to a Wi-Fi network — a basic digital literacy skill.</p>	<p>2023 Digital Opportunity Survey Covered populations responding that they are comfortable with connecting to a Wi-Fi network — a basic digital literacy skill: Aging individuals: 84% Individuals with disabilities: 84% Individuals with limited English proficiency: 85% Low-income households: 81% Racial or ethnic minorities: 86% Rural residents: 88% Veterans: 87% Incarcerated individuals: 87% As part of Strategy 4,</p>	<p>95% of Texans are comfortable with basic digital literacy skills by 2030. Increase the rate of comfort with basic digital literacy skills by at least 10% for each covered population by 2030: Aging individuals: 94% Individuals with disabilities: 94% Individuals with limited English proficiency: 95% Low-income households: 91% Racial or ethnic minorities: 96% Rural residents: 98%</p>	<p>Strategy 1: Partner with and fund statewide organizations Strategy 4: Maintain a living Digital Opportunity Plan</p>

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
		<p>establish improved baseline data on this metric. Anecdotally, individuals may not have the basic skills needed to operate provided devices: “I’ve been incarcerated 30+ years, I don’t know how to use this tablet that was given to me.”³</p>	<p>Veterans: 97%</p> <p>Incarcerated individuals: As part of Strategy 4, establish KPIs for incarcerated individuals based on improved baseline. If feasible, facilitate access to basic digital literacy training on TDCJ tablets.</p>	

³ A note on devices from an incarcerated individual corresponding with Texas State Law Library.

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
<p>3.2 Increase the availability of digital literacy programs and services, including those serving all covered population groups.</p>	<p>2023 Digital Resources Mapping Tool Survey</p> <p>39% of organizations surveyed offer digital skills and technical support.</p>	<p>2023 Digital Resources Mapping Tool Survey</p> <p>Percentage of organizations surveyed offering digital skills and technical support to covered populations:</p> <p>Aging individuals: 68%</p> <p>Incarcerated individuals: 26%</p> <p>Individuals with disabilities: 80%</p> <p>Individuals with limited English proficiency: 75%</p> <p>Low-income households: 82%</p> <p>Racial or ethnic minorities: 82%</p> <p>Rural residents: 67%</p> <p>Veterans: 65%</p>	<p>50% of organizations offer digital literacy skills and support by 2030.</p> <p>Increase organizations offering digital skills and technical support to covered populations by at least 10% by 2030.</p> <p>Aging individuals: 78%</p> <p>Incarcerated individuals: 36%</p> <p>Individuals with disabilities: 90%</p> <p>Individuals with limited English proficiency: 85%</p> <p>Low-income households: 92%</p> <p>Racial or ethnic minorities: 92%</p> <p>Rural residents: 77%</p> <p>Veterans: 75%</p>	<p>Strategy 1: Partner with and fund statewide organizations</p> <p>Strategy 2: Fund local partners</p>
<p>3.3 Increase the percentage of Texas workers, including those in</p>	<p>National Skills</p>	<p>As part of Strategy 4, collect covered</p>	<p>55% of Texas workers, including those in all covered</p>	<p>Strategy 1: Partner with and fund</p>

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
all covered population groups, who have the level of skills training jobs require, by supporting a continuum of digital literacy skills beyond basic digital literacy.	Coalition (2018) 45% of Texas workers have skills beyond those received in high school or equivalent level of education – skills that are required in the majority of Texas jobs.	population baseline data for this KPI.	population groups, have the skills Texas jobs require by 2030.	statewide organizations Strategy 2: Fund local partners Strategy 4: Maintain a living Digital Opportunity Plan

NTIA Measurable Objective Category 4: Online Privacy and Cybersecurity

Texas Goal 4:

All Texans, including those belonging to covered population groups, feel safe online and are familiar with cybersecurity and online privacy measures.

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
<p>4.1 Increase the percentage of Texans who have cybersecurity and online privacy measures set up on their devices, including Texans belonging to covered population groups.</p>	<p>2023 Digital Opportunity Survey 86% of respondents have cybersecurity measures set up on their devices.</p>	<p>2023 Digital Opportunity Survey Covered populations who have cybersecurity measures set up on their devices: Aging individuals: 89% Individuals with disabilities: 86% Individuals with limited English proficiency: 71% Low-income households: 73% Racial or ethnic minorities: 81% Rural residents: 87% Veterans: 89% Incarcerated individuals: TDCJ provides “secure, corrections-grade, multi-purpose</p>	<p>At least 90% of all Texans have cybersecurity measures set up on their devices by 2030. At least 90% of Texans belonging to all covered populations have cybersecurity measures set up on their devices by 2030. Incarcerated individuals: No change. Devices provided are already secure.</p>	<p>Strategy 1: Partner with and fund statewide organizations Strategy 2: Fund local partners</p>

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
		communications devices specifically designed for incarcerated individuals within a jail or prison.” ⁴		

⁴ Securus Technologies. Nd. TDCJ UNITY JP6S FREE LOANER TABLET BENEFITS. <https://securustech.net/tdcj/index.html#tdcj-unity-jp6s-benefits>

NTIA Measurable Objective Category 5: Online Accessibility and Inclusivity of Public Resources

Texas Goal 5:

Improve access to online public resources and services for all Texans, including those belonging to covered population groups.

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
<p>5.1 Increase the percentage of Texans, including those in all covered population groups, who utilize the internet to access public resources and services (using health care access as a baseline).</p>	<p>2023 Digital Opportunity Survey 89% of survey respondents use the internet for accessing health care information and services.</p>	<p>2023 Digital Opportunity Survey Covered populations using the internet to access health care information or services: Aging individuals: 86% Individuals with disabilities: 86% Individuals with limited English proficiency: 78% Low-income households: 77% Racial or ethnic minorities: 81% Rural residents: 83% Veterans: 86% Incarcerated individuals: TDCJ tablets include apps providing access to job search, law</p>	<p>95% of Texans use the internet to access health care information and services by 2030. By 2023, increase covered populations using the internet to access health care information or services by at least 5%: Aging individuals: 91% Individuals with disabilities: 91% Individuals with limited English proficiency: 85% Low-income households: 85% Racial or ethnic minorities: 90%</p>	<p>Strategy 1: Partner with and fund statewide organizations Strategy 2: Fund local partners Strategy 3: Promote internet adoption Strategy 4: Maintain a living Digital Opportunity Plan</p>

Key Performance Indicators (KPIs)	Statewide Baseline	Covered Population Baseline	Targets	Implementation Strategies (activity details in Ch. 5)
		library, education and facility news. ⁵ As part of implementation Strategy 4, the BDO will collect baseline data on usage of resources provided on tablets.	Rural residents: 90% Veterans: 91% Incarcerated individuals: The BDO will set an appropriate target that measures an increase in accessing essential services on TDCJ tablets after establishing a baseline during implementation.	

⁵ Securus Technologies. Nd. TDCJ TABLET APPLICATIONS. <https://securustech.net/tdcj/index.html#tdcj-unity-jp6s-applications>

Texas Digital Opportunity Plan

Appendix C: Needs Assessment and Asset Inventory Report, Methodology and Limitations

October 23, 2023



TEXAS BROADBAND
DEVELOPMENT OFFICE

HR&A

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4. Appendix: Survey Analysis Methodology, ACS & Other Data

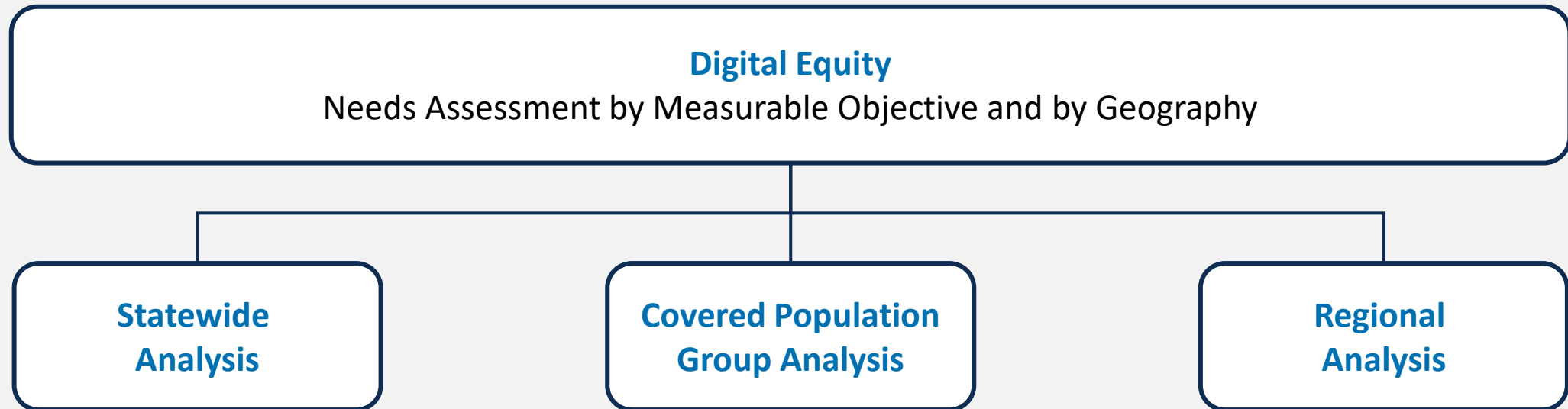


1. Overview

Overview

The Texas Broadband Development Office (BDO) convened the Connect Texas Team, composed of staff from Connected Nation, HR&A Advisors and Accenture, to conduct a needs assessment and asset inventory, analyzing the current state of digital opportunity across Texas.

This report includes analysis of responses to the Digital Opportunity Survey, administered both online and on paper to Texas residents over the age of 18, as well as responses to the Digital Resources Mapping Tool Survey (DRMTS), administered online to Texas organizations, agencies and other entities. Variables in the analysis include statewide and county-level data, and the five measurable objectives and eight covered populations as defined by the NTIA. The surveys opened on April 20, 2023, and closed on August 31, 2023.



Definitions: Survey Responses

TERM	DEFINITION
Total Reach	Number of people who accessed the survey through various distribution means.
Invalid Responses	Online survey responses meeting one or more of the following conditions: <ul style="list-style-type: none">• The survey response is blank• The survey respondent self-identified as under the age of 18 or a non-Texas resident• The survey respondent provided a ZIP code that is located outside of Texas• The survey respondent answered only the demographic questions and did not answer any survey questions
Valid Responses	Online survey responses after eliminating all Invalid Responses. Valid Responses are used for survey analysis.
Complete Responses	Valid Responses to online surveys where the respondent went through the entire survey, from the beginning to the end. For paper surveys, all responses are considered Complete Responses.

Definitions: Covered Populations

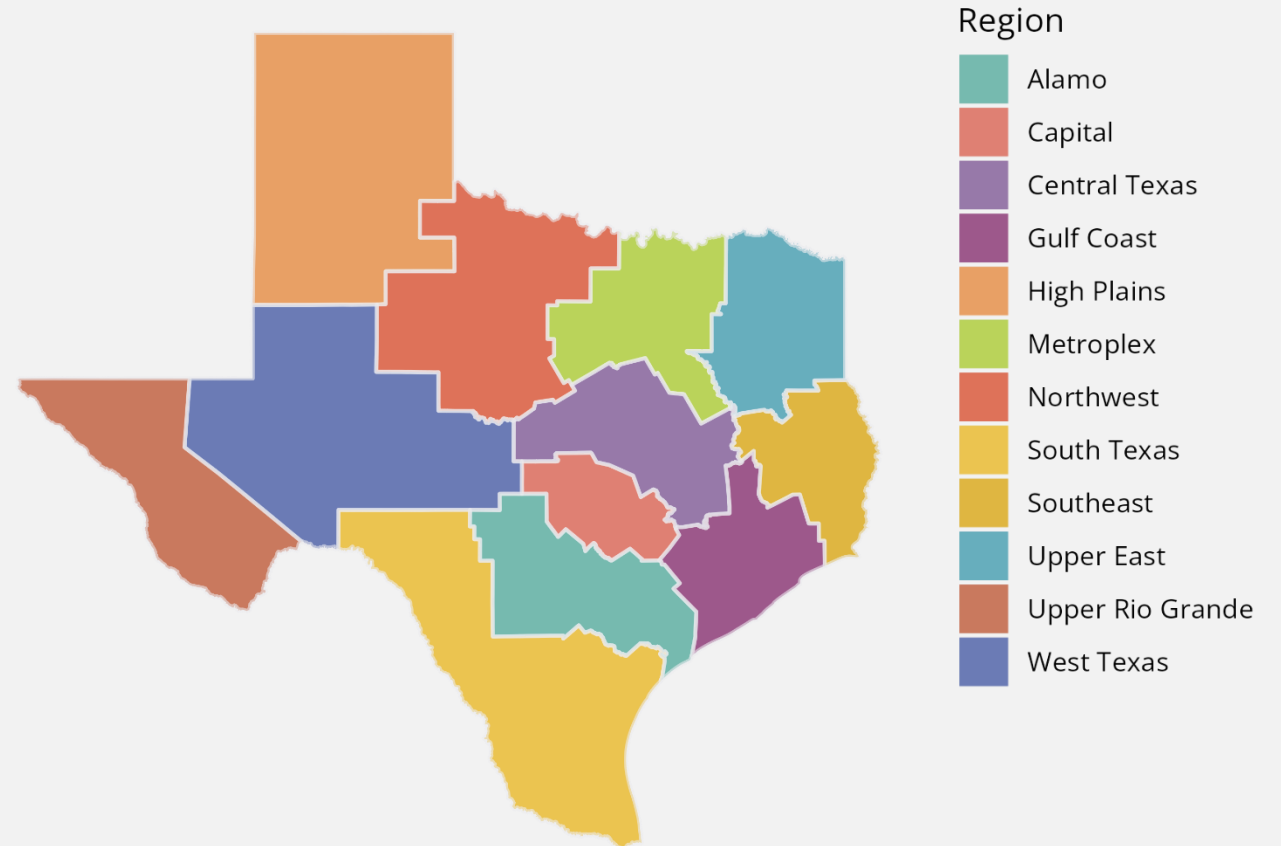
TERM	ALTERNATE TERM	DEFINITION
Persons who are 60 years of age or older	Aging individuals	Survey respondents who selected “60 years of age or older” in the Preliminary Demographic Information section.
Immigrants		Survey respondents who selected “U.S. immigrant” in the Preliminary Demographic Information section.
Individuals with disabilities		Survey respondents who selected “Living with a disability” in the Preliminary Demographic Information section.
Individuals with a language barrier, including those who are English learners or have low literacy levels	Individuals with limited English proficiency	Survey respondents who selected “English language learner and/or have difficulty understanding English” in the Preliminary Demographic Information section.
Individuals in households below 150% poverty	Low-income households	Survey respondents who selected that their total annual household income before taxes is “Less” than the 150% federal poverty line threshold in the Preliminary Demographic Information section. The 150% poverty line threshold shown to each survey respondent was based on their self-reported household size.
Members of a racial or ethnic minority group	Racial or ethnic minorities	Survey respondents who selected one or more race categories other than “White” in the Preliminary Demographic Information section.
Individuals residing in rural areas	Rural residents	Survey respondents who selected “Rural area resident” in the Preliminary Demographic Information section.
Members of tribal communities	Tribal communities	Survey respondents who selected “Member of a Tribe or Tribal community” in the Preliminary Demographic Information section.
Unhoused individuals		Survey respondents who selected “Unhoused or experiencing homelessness” in the Preliminary Demographic Information section.
Veterans		Survey respondents who selected “U.S. veteran” in the Preliminary Demographic Information section.

Methodology: 12 Economic Regions of Texas

In addition to survey data, this report reflects analysis of data from the Census Bureau, the Universal Service Administrative Company (USAC), and the Federal Communications Commission (FCC).

This report utilizes the [12 economic regions of Texas](#) as defined by the Texas Comptroller of Public Accounts as a regional framework for analysis of demographic, internet access, and device access patterns geographically.

This approach enables an assessment of the unique digital opportunity assets and gaps within and across Texas regions.



Of approximately 29 million Texans...

16.6 million Texans (58%) belong to **racial or ethnic minority groups**.

10.2 million Texans (35%) live in **rural areas**.

6.6 million Texans (23%) are **low-income**.

5.2 million Texans (18%) are **60 years of age or older**.

4.9 million Texans (17%) are **immigrants**.

3.2 million households (11%) are **individuals with disabilities**.

730K households (7%) have **limited English proficiency**.

1.4 million Texans (5%) are **US military veterans**.

230K Texans (1%) are **incarcerated**.

428K Texans (1%) are **members of tribal communities**.

24K Texans are **unhoused**.¹

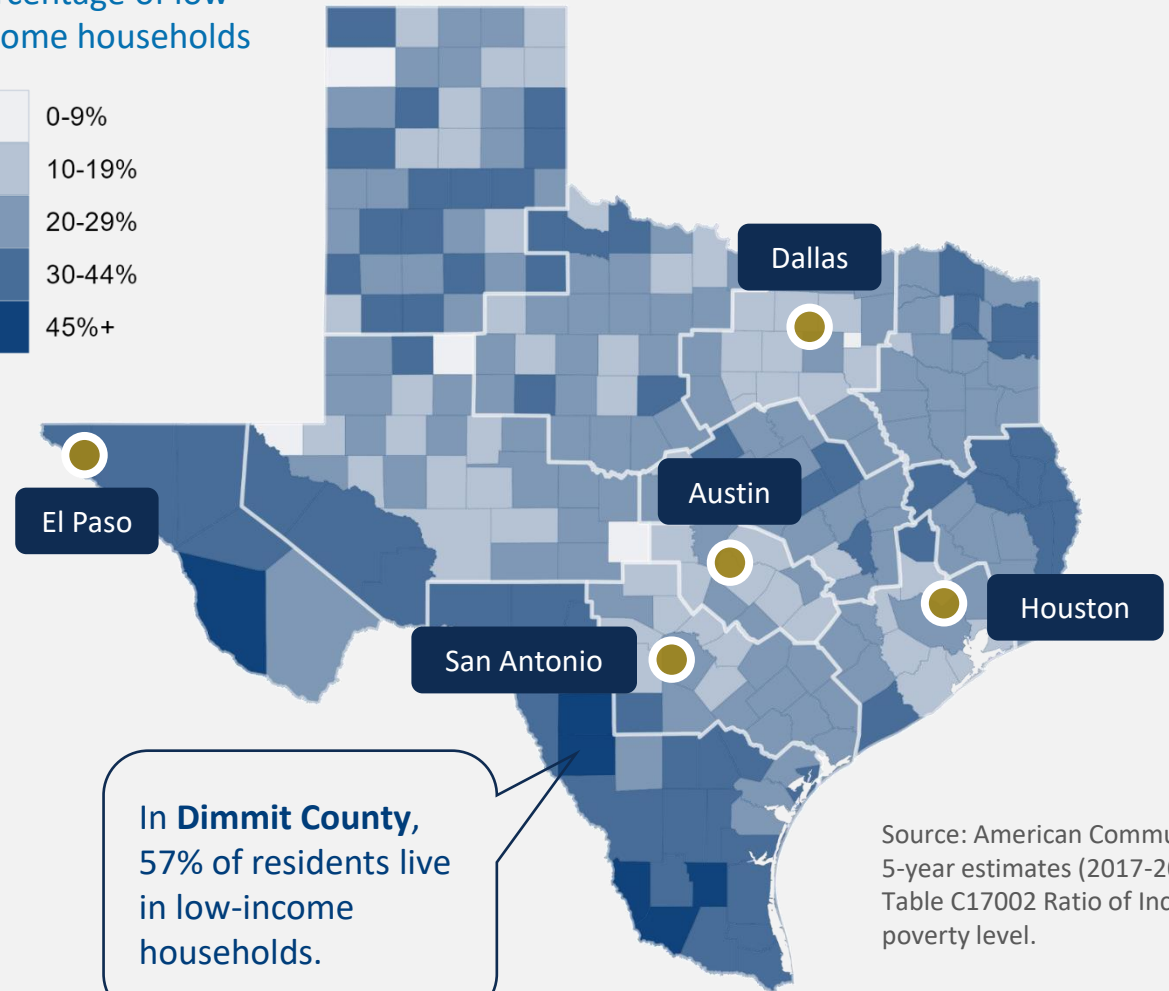
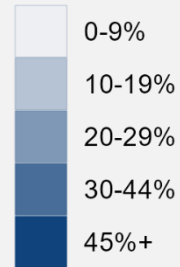
¹HUD 2022 [Annual Homelessness Assessment Report](#)

Approximately **23% (6.6 million)** of Texans live in **low-income households**.

Low-income populations are concentrated in:

- **South Texas (37%),**
- **Upper Rio Grande (32%),**
- and the **Southeast Region (28%)**

Percentage of low-income households

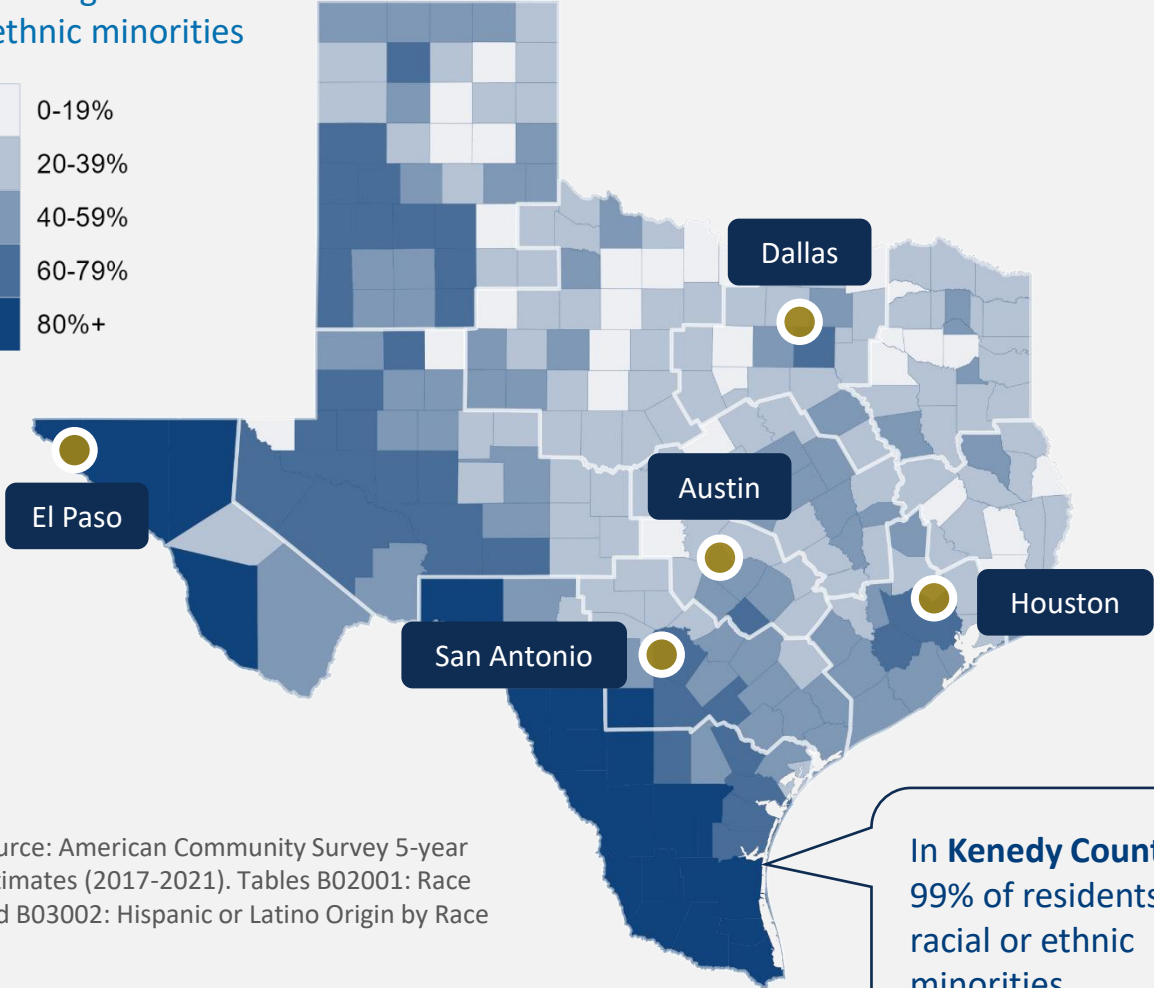
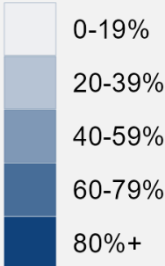


Source: American Community Survey 5-year estimates (2017-2021). Table C17002 Ratio of Income to poverty level.

Approximately **58% (16.6 million)** of Texans belong to **racial or ethnic minority groups**.

The **Upper Rio Grande (87%), South Texas (87%), and Alamo (64%)** regions have the highest percentage of residents belonging to racial or ethnic minority groups.

Percentage of racial or ethnic minorities

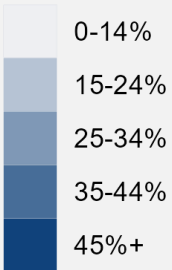


Source: American Community Survey 5-year estimates (2017-2021). Tables B02001: Race and B03002: Hispanic or Latino Origin by Race

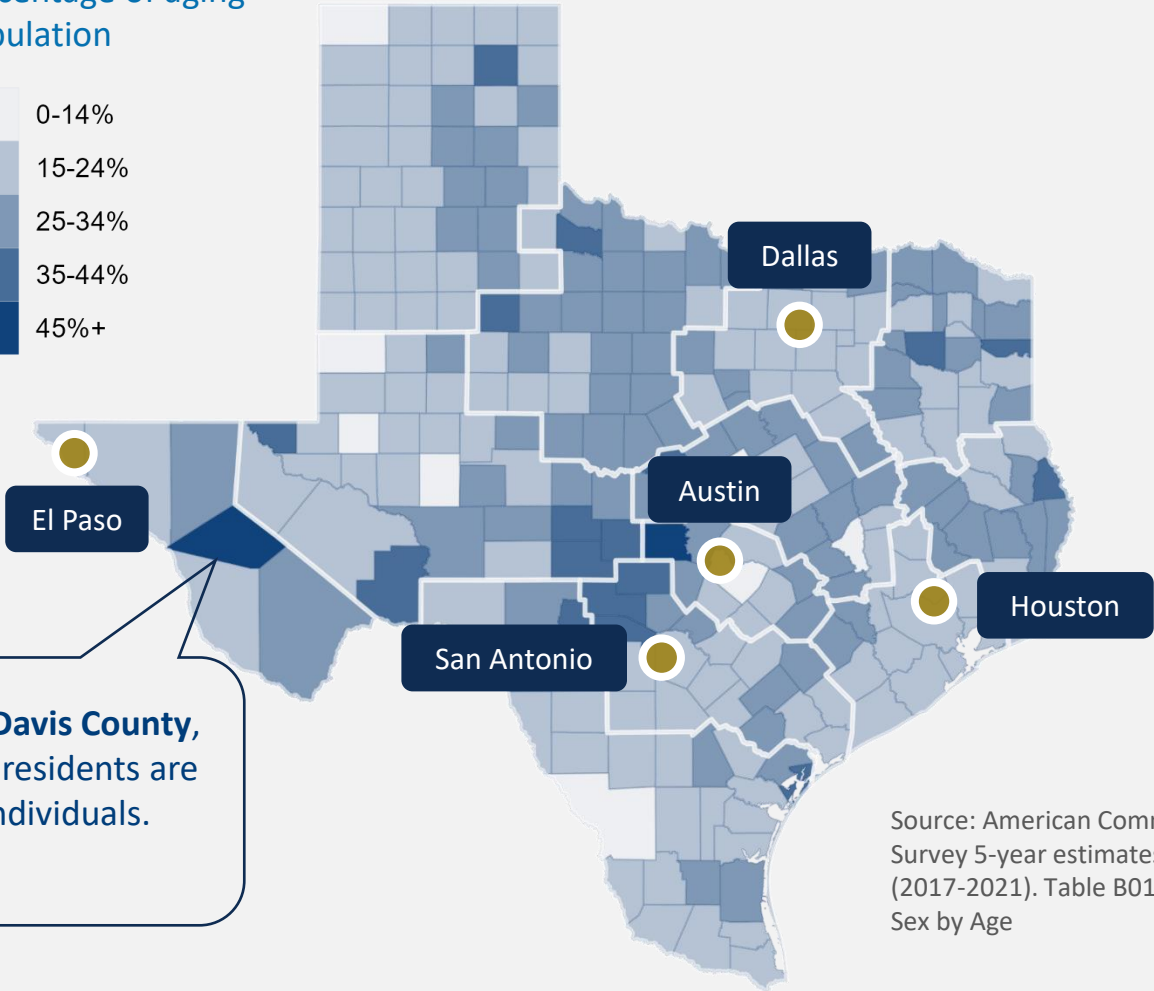
Approximately **18%** (5.2 million) of Texans are **aging individuals**.

The **Upper East (25%)**, **Southeast (23%)** and **Northwest (23%)** regions have the highest percentage of aging individuals.

Percentage of aging population



In **Jeff Davis County**, 51% of residents are aging individuals.

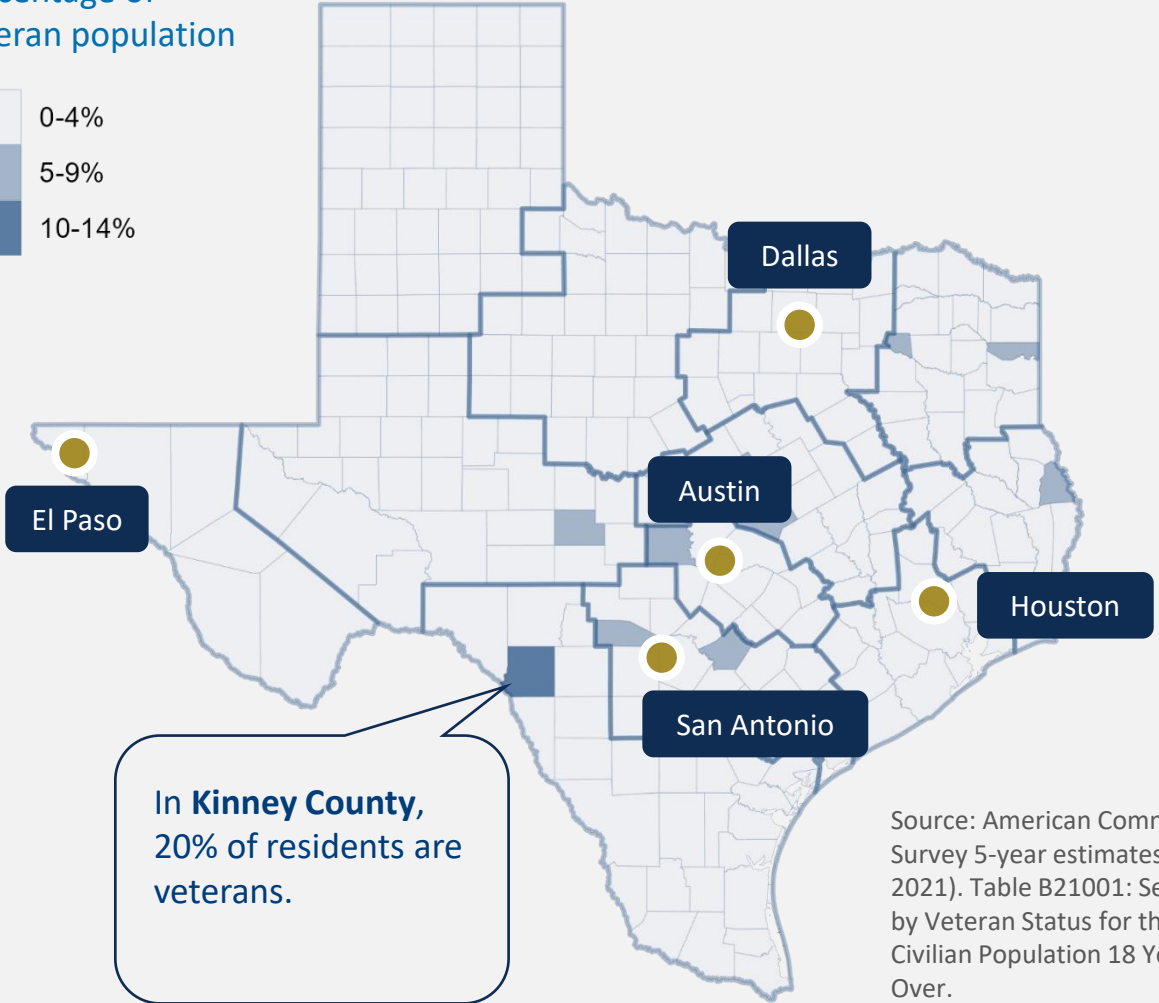
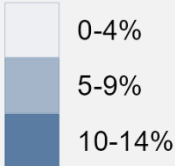


Source: American Community Survey 5-year estimates (2017-2021). Table B01001: Sex by Age

Approximately **5% (1.4 million)** of Texans are **veterans**.

The **Central Texas (8%), Alamo (7%), and Northwest (7%)** regions have the highest percentage of veterans.

Percentage of veteran population



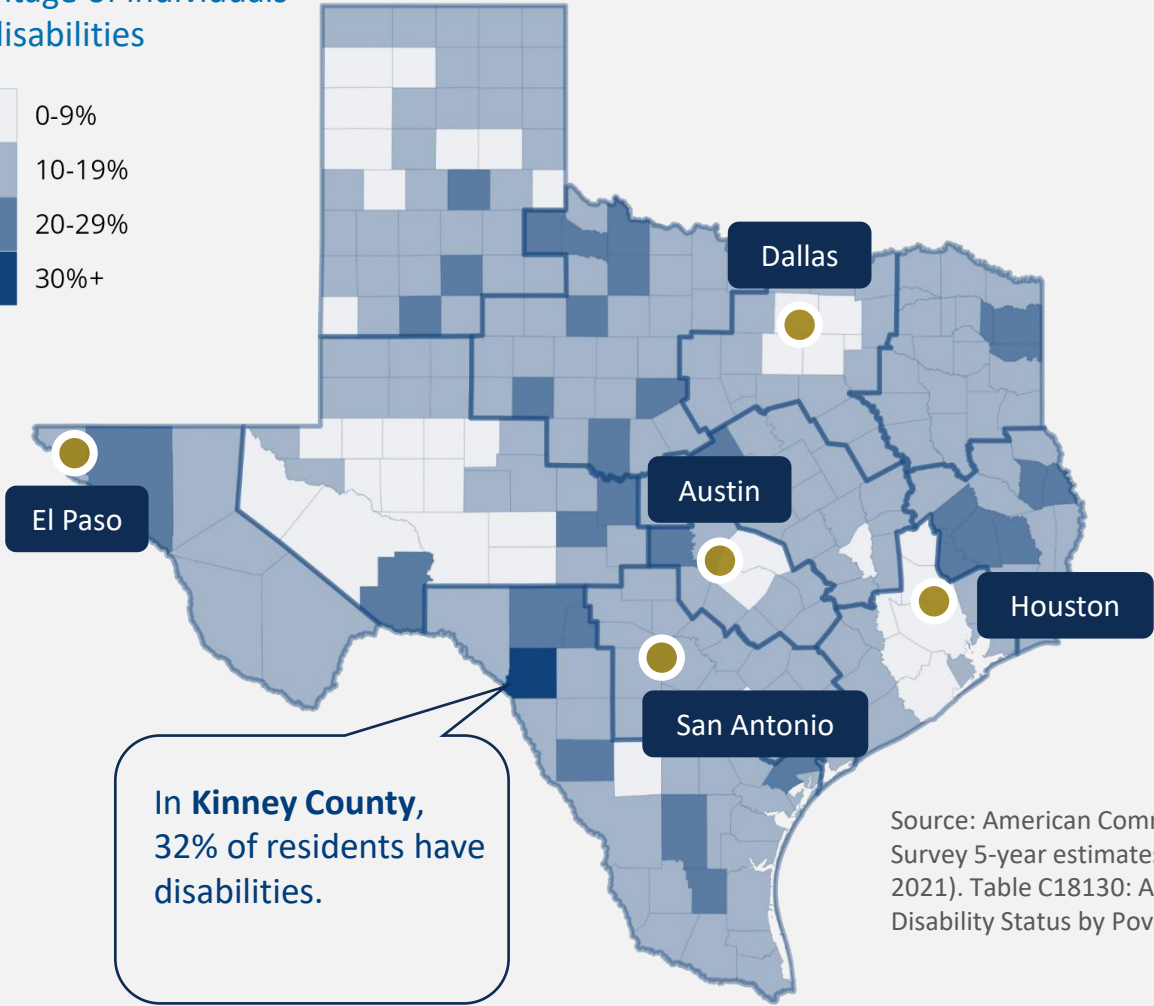
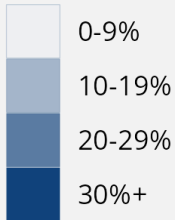
In **Kinney County**, 20% of residents are veterans.

Source: American Community Survey 5-year estimates (2017-2021). Table B21001: Sex by Age by Veteran Status for the Civilian Population 18 Years and Over.

Approximately **11%** (**3.2 million**) of Texans are **individuals with disabilities**.

The **Southeast (17%), Northwest (16%), and Upper East (15%)** Regions have the highest percentage of individuals with disabilities.

Percentage of individuals with disabilities



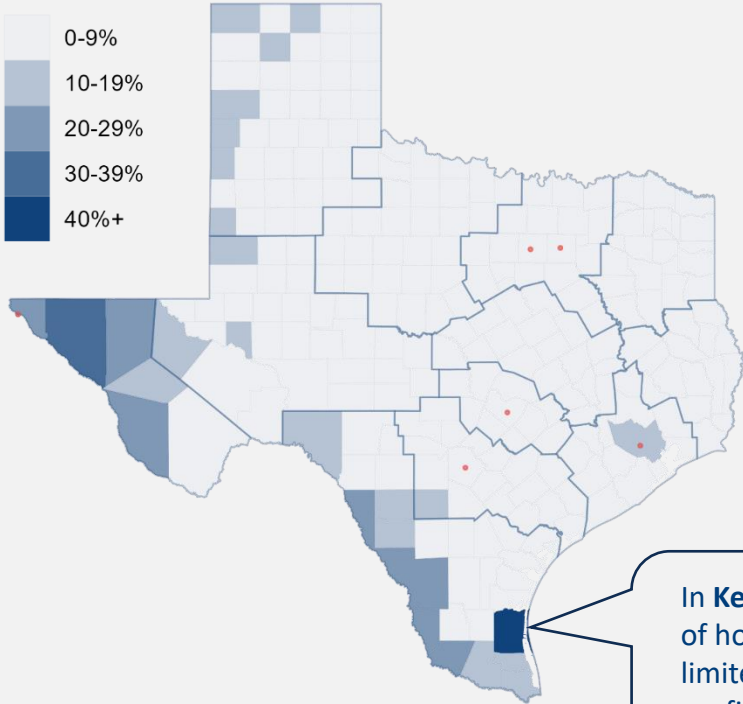
Source: American Community Survey 5-year estimates (2017-2021). Table C18130: Age by Disability Status by Poverty Status

Approximately **7% (730K)** of households in Texas have **limited English proficiency** and **28% (8.1 million)** of Texans have **low literacy levels**.

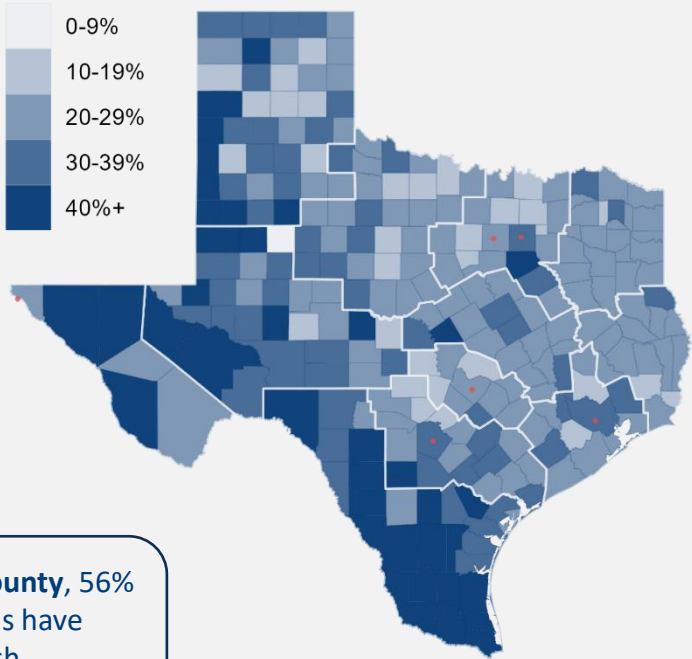
The **Upper Rio Grande (22%)**, **South Texas (15%)**, and **Gulf Coast (9%)** regions have the highest percentage of households with limited English proficiency.

The **South Texas (49%)**, **Upper Rio Grande (41%)**, and **West Texas (32%)** regions have the highest percentage of residents with low literacy levels.

Percentage of limited English proficiency households



Percentage of population with low literacy



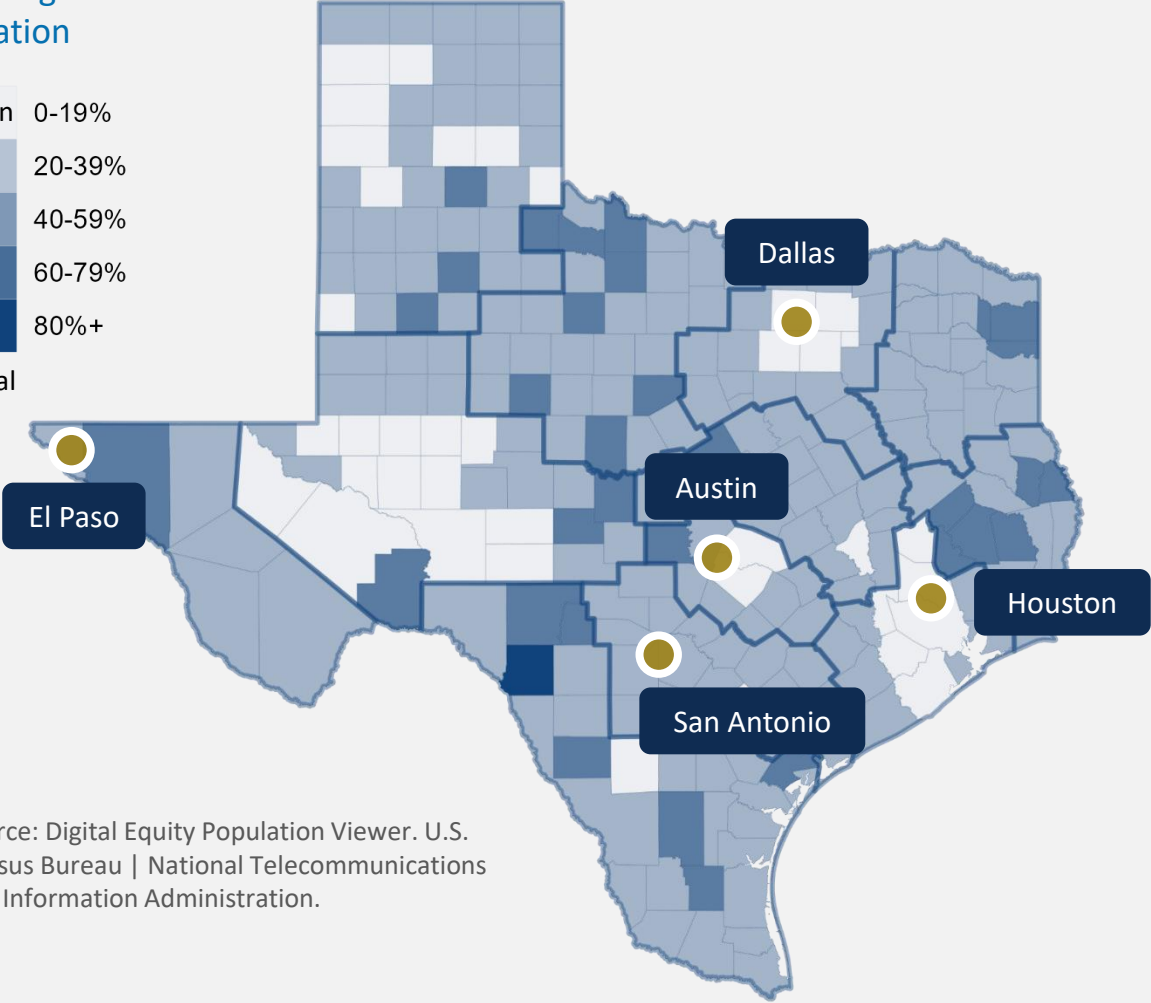
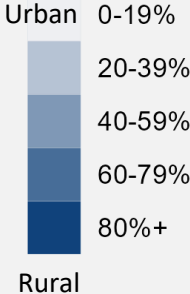
Source: Digital Equity Act Population Viewer. National Center for Education Statistics, 2012/2014/2017 Program for the International Assessment of Adult Competencies State Small Area Estimates of Adult Skills on Literacy and Numeracy. American Community Survey 5-year estimates (2017-2021). Table C16002: Household Language by Household Limited English-Speaking Status

Approximately **21% (6.1 million)** of Texans are **rural residents**.

The **Upper East (75%)**, **Northwest (58%)**, and **Southeast (52%)** regions have the highest percentage of rural residents.

Roughly 76% of counties in Texas are over 80% rural.

Percentage of rural population

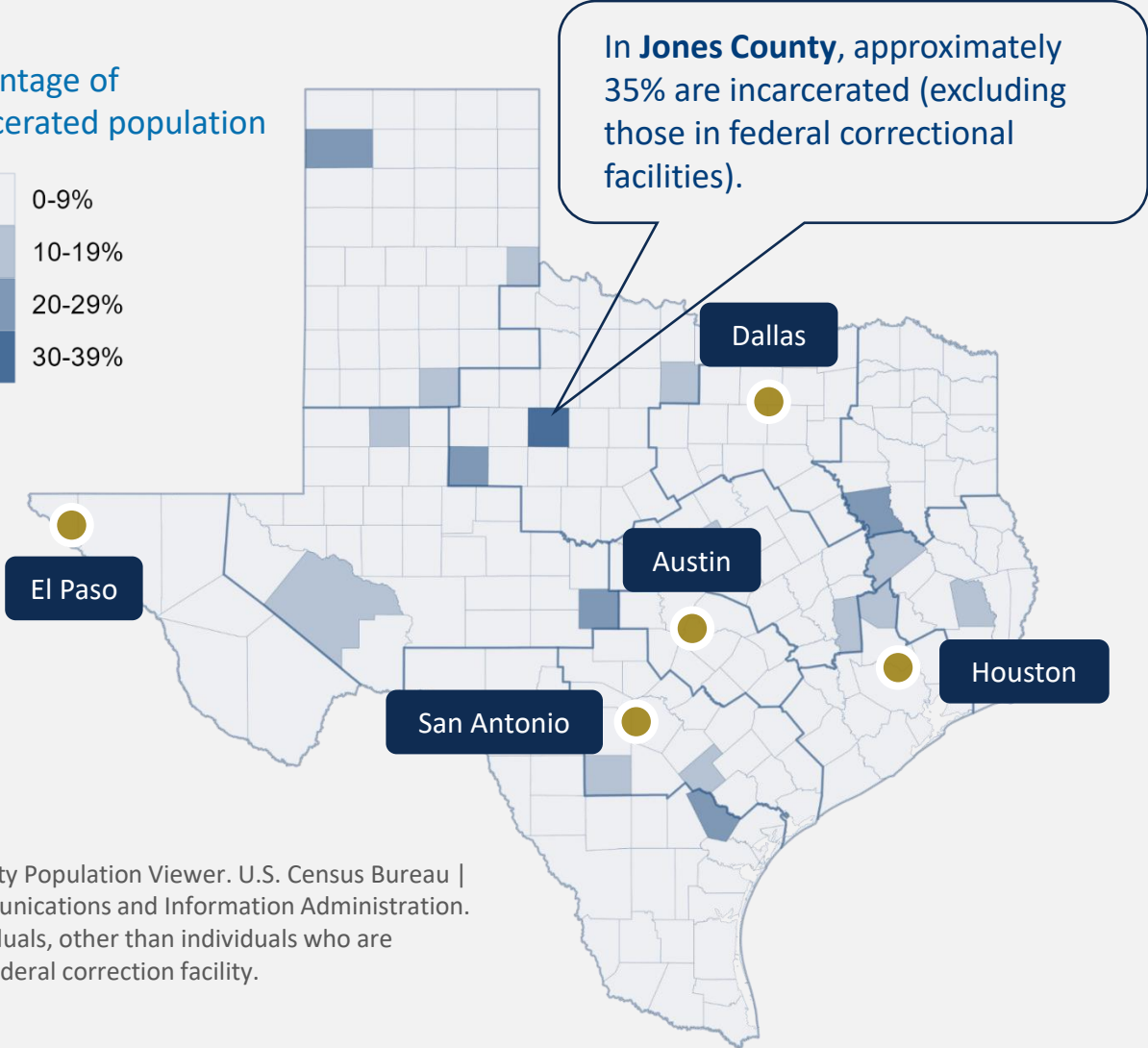
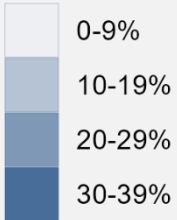


Source: Digital Equity Population Viewer. U.S. Census Bureau | National Telecommunications and Information Administration.

Approximately **1% (230K)** of Texans are **incarcerated**.

The largest concentrations of incarcerated individuals are in the **Northwest (3%), Upper East (3%),** and **Southeast (2%)** regions.

Percentage of incarcerated population

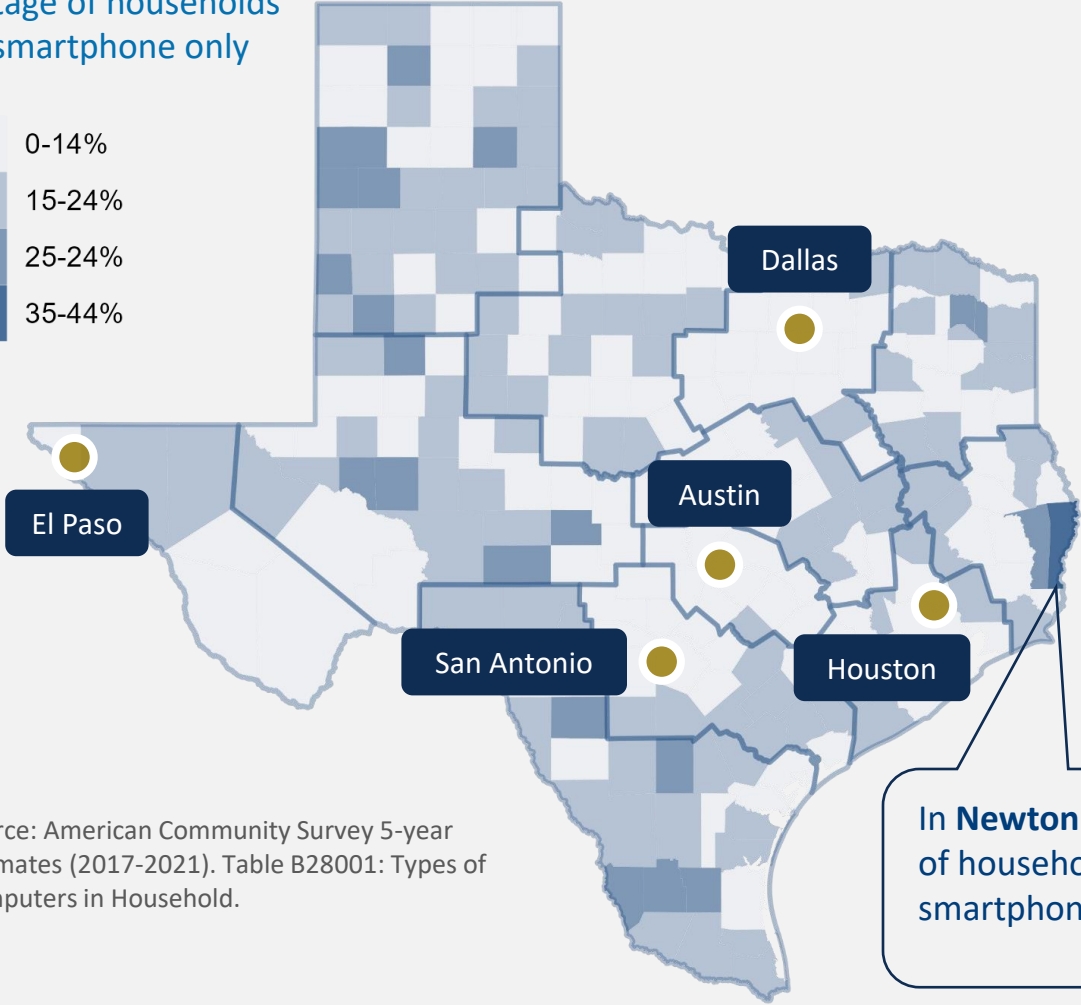
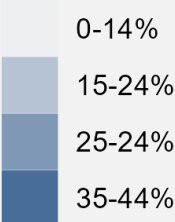


Source: Digital Equity Population Viewer. U.S. Census Bureau | National Telecommunications and Information Administration. Incarcerated individuals, other than individuals who are incarcerated in a Federal correction facility.

Approximately **11% (1.2 million)** households in Texas have a smartphone only and no other computing device.

The largest concentration of households that rely on a smartphone as their only device for accessing the internet are in the **South Texas (18%), Southeast (17%), and High Plains (16%)** regions.

Percentage of households with a smartphone only



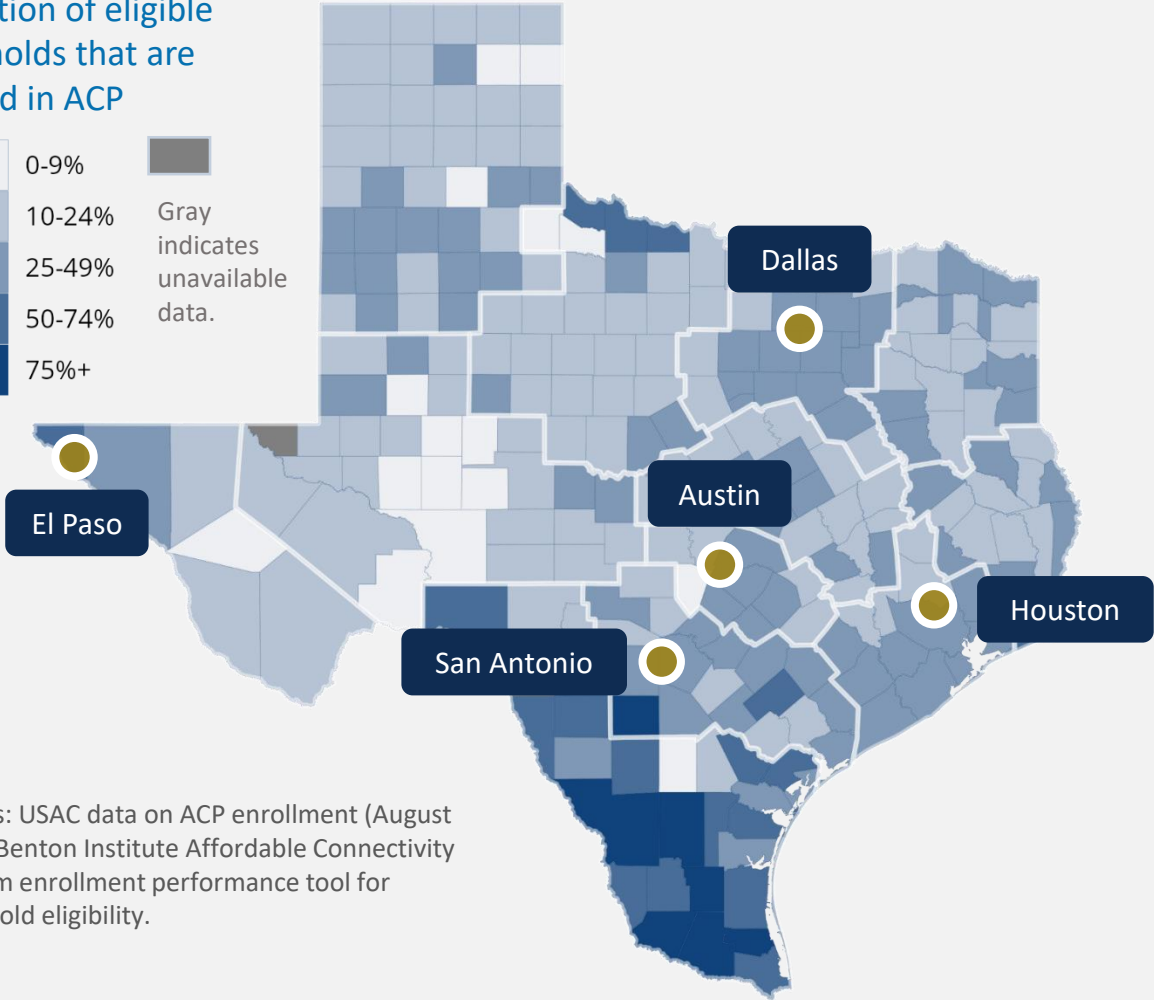
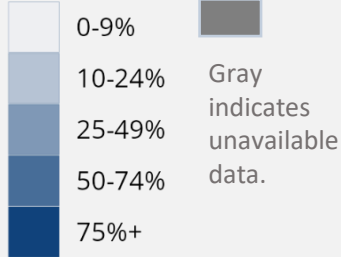
Source: American Community Survey 5-year estimates (2017-2021). Table B28001: Types of Computers in Household.

In **Newton County**, 39% of households have a smartphone only.

Approximately **38% of eligible households (1.59 million households)** in Texas are enrolled in the Affordable Connectivity Program (ACP).

The largest concentrations of eligible households enrolled in ACP are in the **South Texas (73%)**, **Upper Rio Grande (54%)**, and **Alamo (44%)** regions.

Proportion of eligible households that are enrolled in ACP

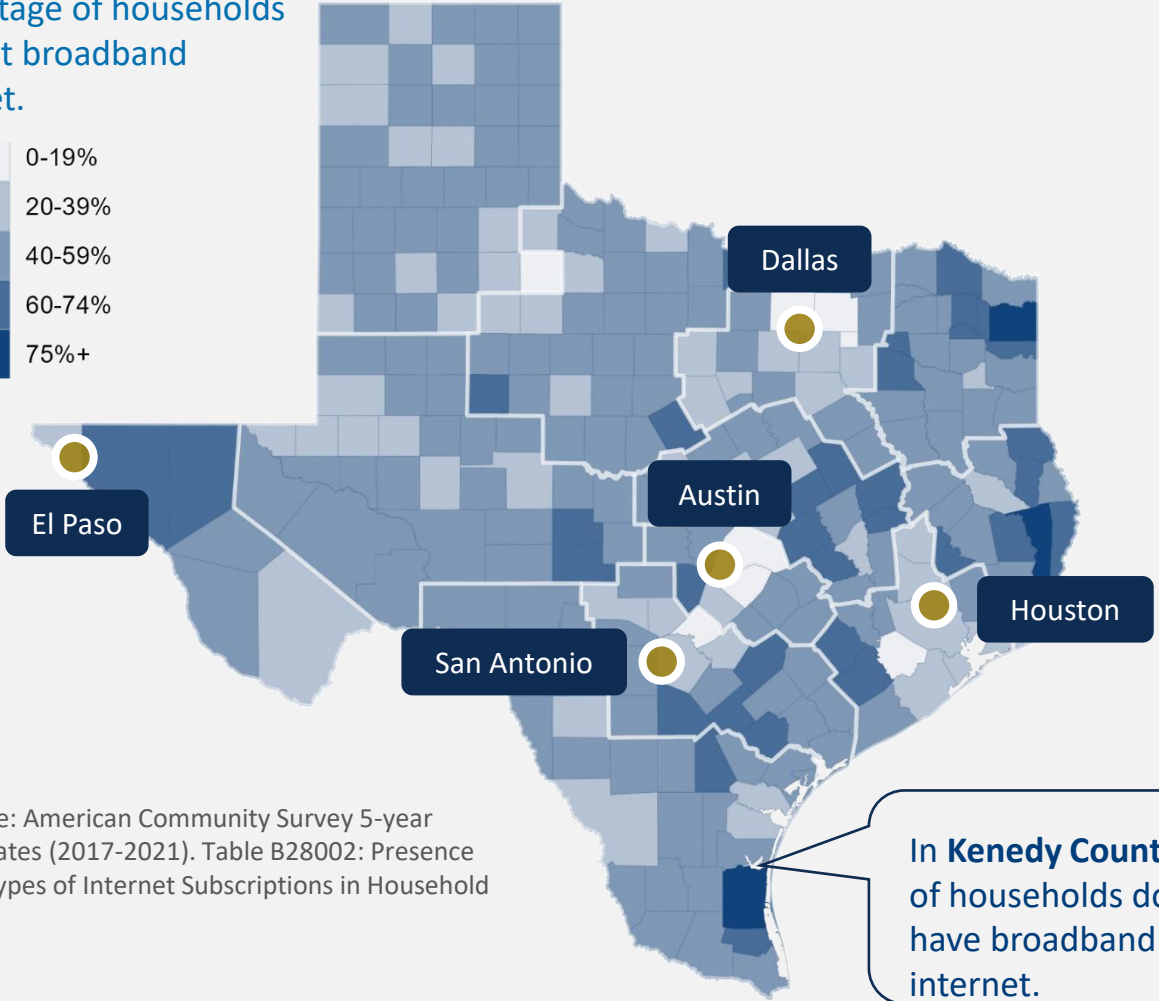
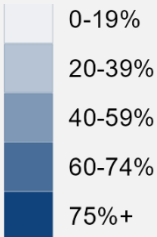


Sources: USAC data on ACP enrollment (August 2023). Benton Institute Affordable Connectivity Program enrollment performance tool for household eligibility.

Approximately **31% (3.2 million)** Texas households do not subscribe to broadband internet.

The largest concentrations of households that do not subscribe to broadband are in the **Upper East (52%)**, **Southeast (46%)**, and **South Texas (44%)** regions.

Percentage of households without broadband internet.



Source: American Community Survey 5-year estimates (2017-2021). Table B28002: Presence and Types of Internet Subscriptions in Household



2 • Public Survey Results

Texas Digital Opportunity Survey Analysis

The Texas Broadband Development Office (BDO) developed the Texas Digital Opportunity Survey to identify the digital opportunity barriers affecting Texas households, such as the lack of access to broadband infrastructure, reliable and affordable internet service, and the devices necessary to use the internet. The BDO also utilized the survey to examine challenges to broadband adoption, including digital literacy, awareness of cybersecurity and online privacy, and publicly accessible online resources.

The survey was available online in English, Spanish, Vietnamese and Mandarin, and included features to accommodate individuals with limited literacy, limited English proficiency and blindness/low vision.

The Digital Opportunity Survey reached a total of **13,296** Texans via online and paper formats. Of those reached, the survey received a total of **11,385** valid responses, with **9,440** completing the survey online and **1,945** completing paper surveys. **80%** of Texans accessing the survey online reached the last page of the survey.

This report organizes survey findings according to the five measurable objective categories as defined in the Digital Equity Act (DEA) and presents analysis with statewide views and views for each of the covered populations identified by the DEA.

Pathways to Adoption

Measurable Objective Categories



The **availability** and **affordability** of quality broadband **internet service**



Access to **affordable computing devices** and technical support



Digital literacy and technical skills



Cybersecurity and **online privacy** awareness

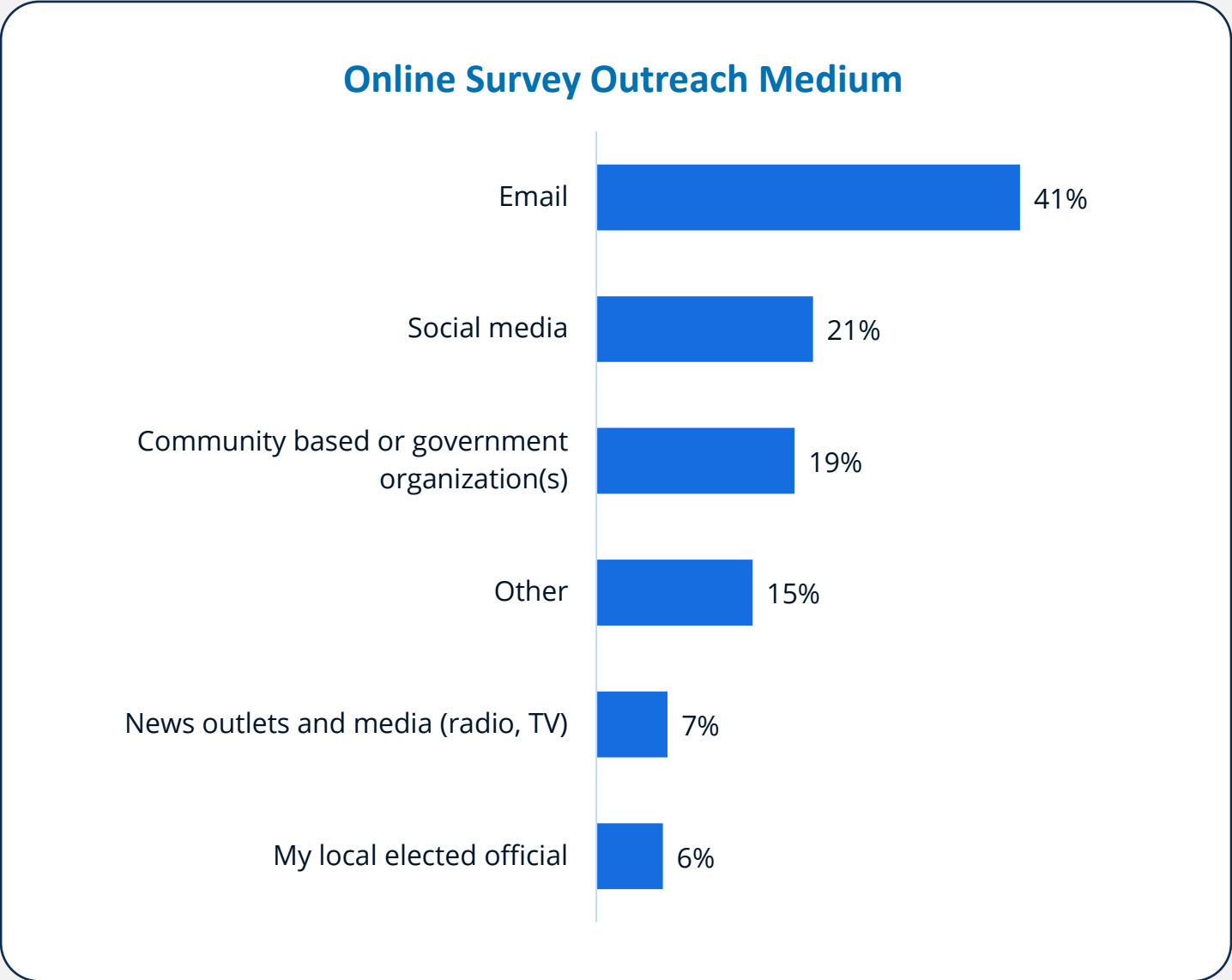


Access to **public resources** and **essential services** online

41% of online survey respondents learned about the survey via email.

Regional Councils of Government (COGs), community-based organizations (CBOs), libraries and other stakeholders conducted outreach campaigns within regions and certain covered population groups, resulting in high levels of Digital Opportunity Survey responses within those areas/groups.

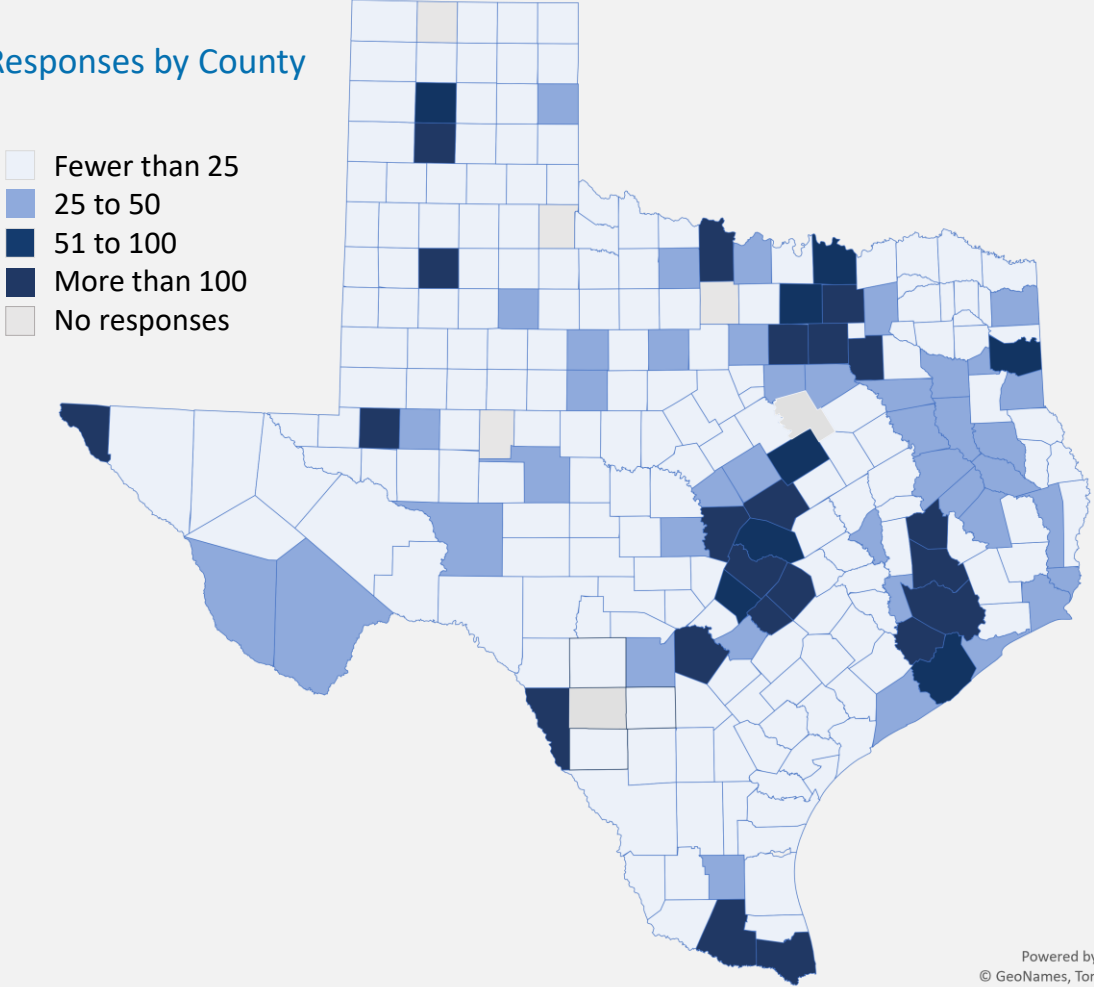
Multiple choice question, respondents can choose more than one answer choice to this question in the survey.



The online Digital Opportunity Survey received 9,440 valid responses.

The online Digital Opportunity Survey received valid responses from 250 of the 254 counties in Texas.

Responses by County



Powered by Bing
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Top 10 Texas counties with most responses	
Bexar	1,229
Ector	420
Bell	412
Lubbock	401
Travis	400
Dallas	393
Harris	308
Hidalgo	305
Montgomery	272
Tarrant	236

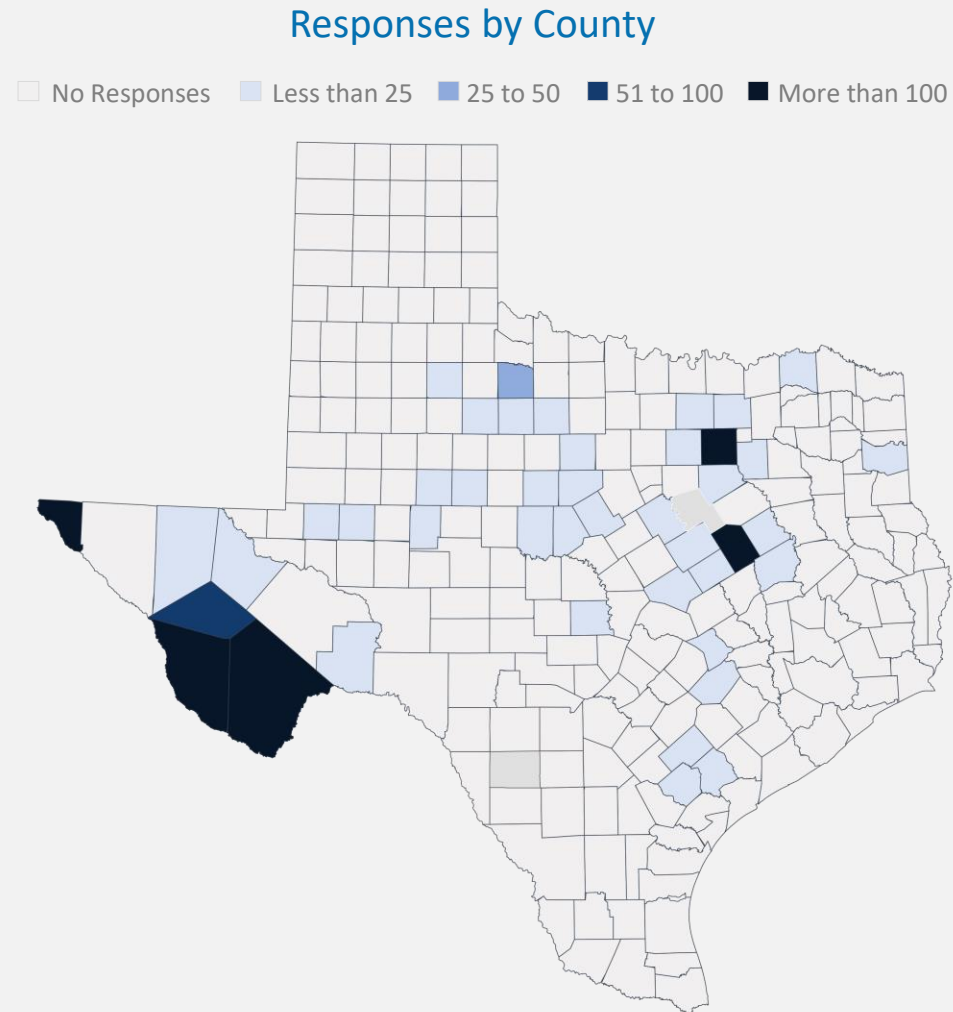
Responses by region	
Alamo Region	1,495
Metroplex Region	1,252
Gulf Coast Region	1,154
Capital Region	1,016
High Plains Region	828
Central Texas Region	810
South Texas Region	773
West Texas Region	571
Upper East Region	443
Northwest Region	436
Southeast Region	338
Upper Rio Grande Region	322

The paper Digital Opportunity Survey received 1,945 responses from 45 Texas counties.

The paper Digital Opportunity Survey received responses from 45 of the 254 counties in Texas.

Sterling County is the only county with *only* paper survey responses (no online survey responses).

Presidio, Limestone, El Paso, Dallas, and Brewster counties were the top five participating counties in the paper survey, with 100 or more responses each.



More than 86% of online survey respondents identify as belonging to one or more covered populations.

Aging individuals, racial or ethnic minorities, and rural residents had the highest rates of response in both survey modes. As compared to the American Community Survey, aging individuals are significantly overrepresented in the survey data, while racial or ethnic minorities are significantly underrepresented.

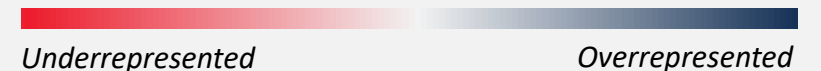
Rural residents are the most overrepresented covered population among paper survey respondents.

The paper survey did not request household income status or race/ethnicity information from respondents.

Percent of Covered Population Distribution			
	Statewide (ACS Data)	Online Survey	Paper Survey
Racial or ethnic minorities	58%	40%	N/A
Low-income households	23%	16%	N/A
Rural residents	21%	32%	54%
Aging individuals	18%	42%	2%
Individuals with disabilities	11%	18%	10%
Immigrants	17%	5%	5%
Individuals with limited English proficiency	7%	5%	17%
Veterans	5%	17%	6%
Tribal communities	1%	1%	1%
Unhoused individuals	<1%	1%	1%

Chart Legend

Percent in Survey Sample



The Public Survey received responses in four languages.

The BDO released the online Public Survey in four languages: English, Spanish, Mandarin and Vietnamese. The BDO made a shorter, print-ready version of the survey available in English, Spanish, and large print. Through the Statewide Working Group, Outcome Area Task Forces and Regional Public Meetings, the BDO worked with diverse community leaders and stakeholders to ensure the surveys reached diverse audiences, particularly covered populations.

While BDO received valid survey responses in each of the four languages available, English was the most widely accessed language by a significant margin.

Survey Responses by Language			
Language of Survey Submission	Number of Online Responses	Number of Paper Responses	Percentage of Total Responses
English	9,181	1,642	95%
Spanish	252	303	5%
Mandarin	4	N/A	-
Vietnamese	3	N/A	-
Total Valid Responses	9,440	1,945	100%

Online Digital Opportunity Survey Results: Two Covered Population Groups

Many respondents self-identified as belonging to more than one covered population. The table below shows the number of online survey respondents for each intersection of two covered population groups.*

	Aging individuals	Veterans	Individuals with disabilities	Individuals with limited English proficiency	Racial or ethnic minorities	Tribal communities	Rural residents	Low-income households	Immigrants	Unhoused individuals
Aging individuals	100%	61%	58%	33%	32%	48%	52%	34%	35%	38%
Veterans	24%	100%	36%	7%	15%	21%	19%	10%	14%	11%
Individuals with disabilities	25%	39%	100%	20%	19%	30%	20%	31%	16%	48%
Individuals with limited English proficiency	4%	2%	5%	100%	11%	2%	3%	13%	39%	14%
Racial or ethnic minorities	30%	35%	42%	91%	100%	76%	23%	65%	82%	65%
Tribal communities	1%	1%	2%	0.4%	2%	100%	1%	1%	0.4%	5%
Rural residents	40%	37%	36%	19%	19%	42%	100%	26%	17%	26%
Low-income households	13%	9%	27%	41%	25%	17%	12%	100%	22%	57%
Immigrants	4%	4%	4%	37%	10%	2%	3%	7%	100%	10%
Unhoused individuals	1%	1%	3%	3%	2%	5%	1%	4%	2%	100%

*Reading the table vertically, by column. 24% of online survey respondents who self-identified as aging individuals also self-identified as veterans; 25% of respondents who self-identified as aging individuals also self-identified as individuals with disabilities, and so on. Covered populations appear in this table in the same order as they did in the online survey, and in the Digital Equity Act Notice of Funding Opportunity (NOFO).

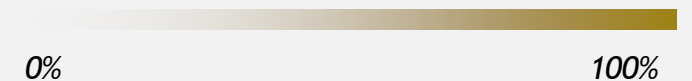


Paper Survey Results: Two Covered Population Groups

Many respondents self-identified as belonging to more than one covered population. The table below shows the number of paper survey respondents for each intersection of two covered population groups.*

	Aging individuals	Veterans	Individuals with disabilities	Individuals with limited English proficiency	Tribal communities	Rural residents	Immigrants	Unhoused individuals
Aging individuals	100%	50%	56%	39%	50%	25%	30%	32%
Veterans	12%	100%	17%	3%	28%	6%	5%	9%
Individuals with disabilities	22%	29%	100%	13%	44%	9%	7%	27%
Individuals with limited English proficiency	27%	8%	21%	100%	44%	19%	56%	18%
Tribal communities	2%	4%	4%	2%	100%	1%	5%	9%
Rural residents	53%	53%	51%	60%	56%	100%	53%	32%
Immigrants	6%	4%	4%	18%	28%	5%	100%	23%
Unhoused individuals	1%	2%	3%	1%	11%	1%	5%	100%

*Reading the table vertically, by column. 12% of paper survey respondents who self-identified as aging individuals also self-identified as veterans; 22% of respondents who self-identified as aging individuals also self-identified as individuals with disabilities, and so on. Covered populations appear in this table in the same order as they did in the online survey, and in the Digital Equity Act Notice of Funding Opportunity (NOFO).



A city skyline at dusk with a blue overlay and white text. The text reads "2.1 Survey Results by Measurable Objective".

2.1 Survey Results by Measurable Objective



Summary of Survey Findings

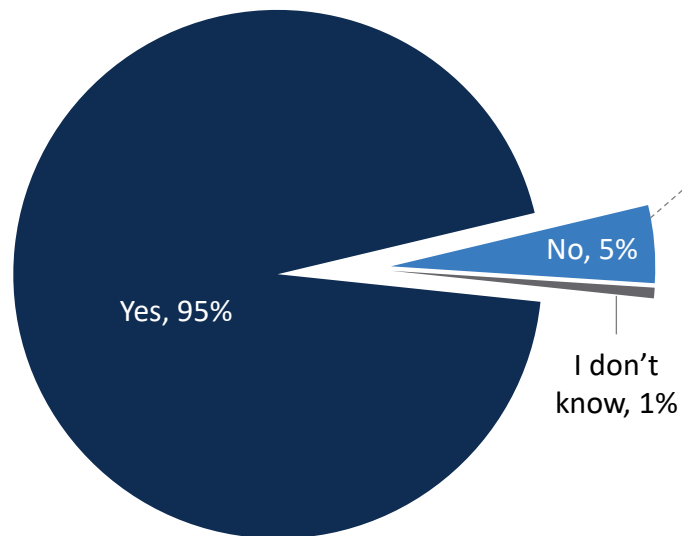
- Survey respondents cite lack of availability or adequate internet services (60%) and cost (59%) as the primary reasons for not having a home internet connection.
- Rural residents pay some of the highest rates for monthly internet with 51% paying over \$100/month, while reporting the slowest internet speeds among covered populations. Unsurprisingly, 60% report that their home internet service is inadequate for their needs - the highest rate of dissatisfaction among covered populations.
- The Upper East and Southeast regions are particularly impacted by internet availability and cost. They have the greatest share of respondents (close to 50%) with download and upload speeds below 25/3 Mbps, and on average, pay \$111 or more for their monthly internet.
- Cost of service is a particular barrier to in-home broadband subscriptions for low-income households (75%) and individuals with limited English proficiency (74%).
- Respondents who cannot access the internet at home are generally more reliant on public resources, such as schools/libraries, parking lots, and community Wi-Fi, compared to those who can access the internet at home.
 - Individuals with disabilities and those with limited English proficiency are more likely to access the internet via public resources such as schools, libraries and community Wi-Fi, compared to overall online survey respondents.
- About 10% of respondents rely only on a mobile data plan to connect to the internet at home. Reliance on mobile data plans is higher among unhoused individuals (28%), low-income households (18%) and rural residents (18%).

Online survey respondents who cannot connect to the internet at home cited **lack of adequate home internet services and costs** as the main barriers.

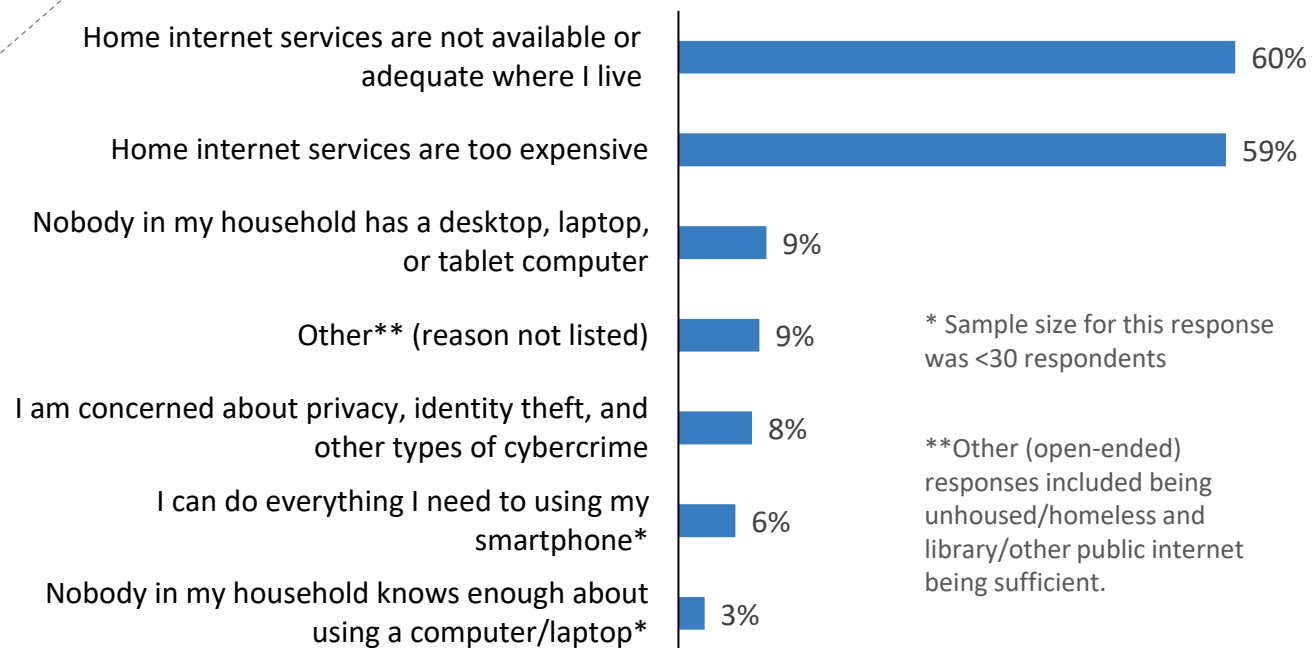


Among the **5%** of **online survey** respondents who reported that they don't have internet service in their home, **60%** reported lack of available or adequate internet service in their area and **59%** reported cost as the barriers.

Can you connect to the internet from home? (*Online Survey*)



Which of the following explains why you do not currently subscribe to home internet?

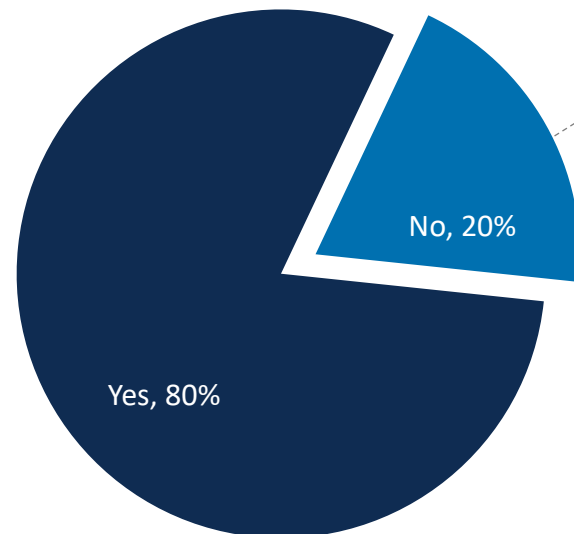


59% of **paper survey respondents** who cannot connect to the internet at home indicate **cost** as the main barrier.

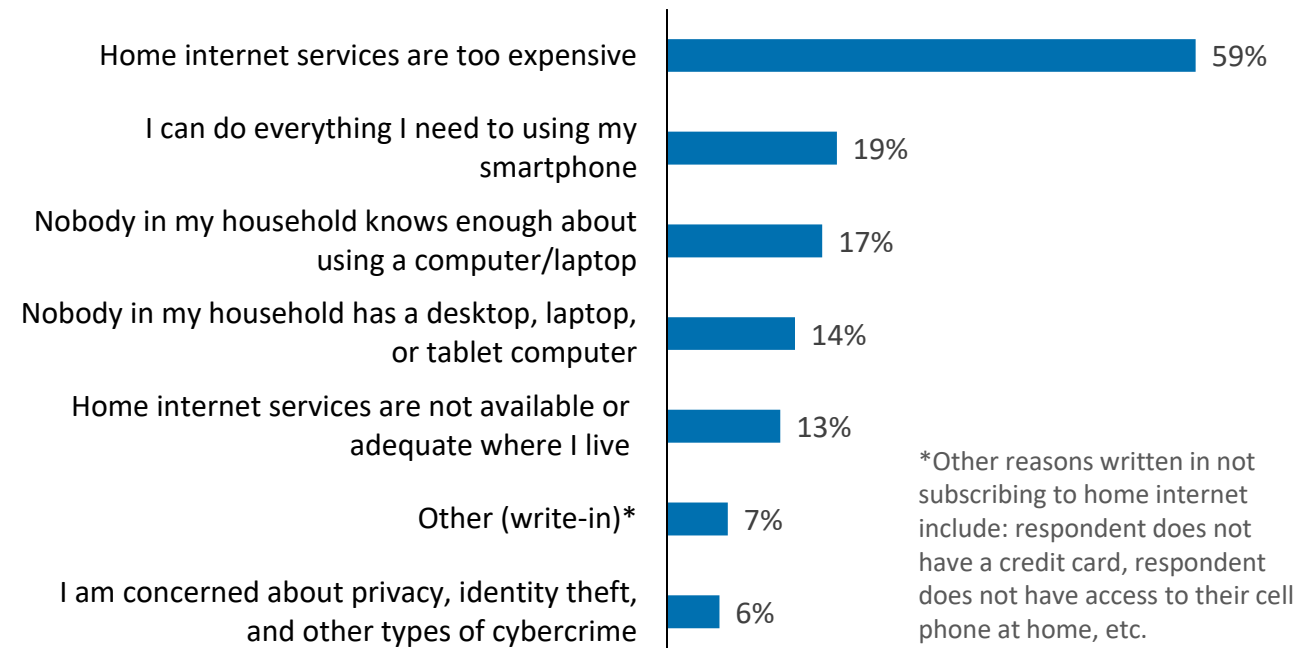


Compared to the online survey, a greater share of **paper survey respondents (20%)** cannot connect to the internet at home. While cost is a significant barrier for both survey respondents, unavailable or inadequate home internet services are much more prominent among online survey respondents.

Can you connect to the internet from home? (*Paper Survey*)



Which of the following explains why you do not currently subscribe to home internet?

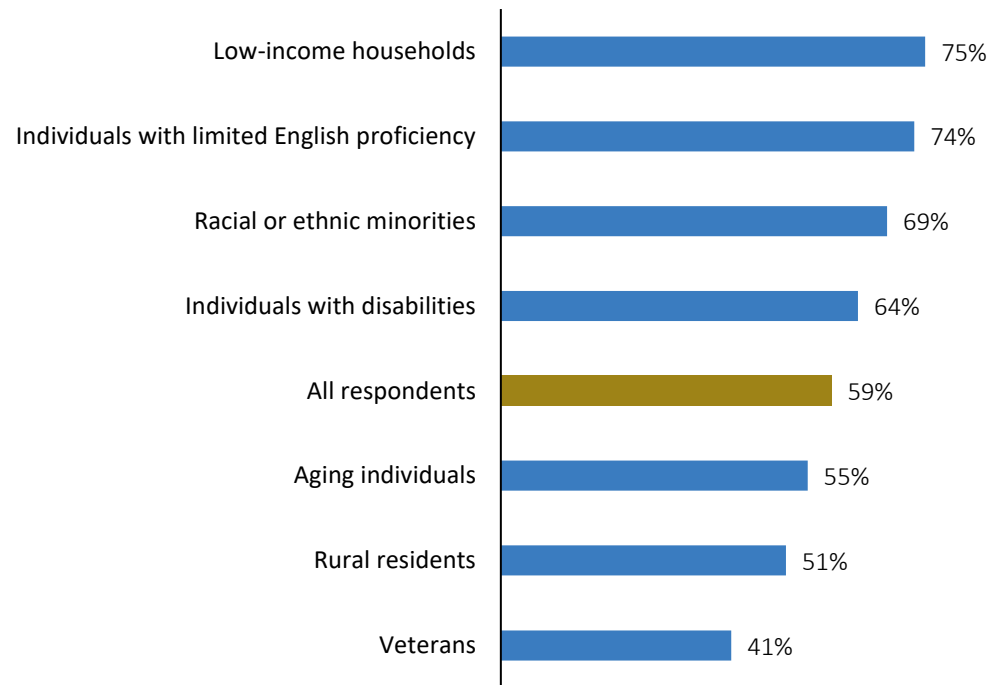




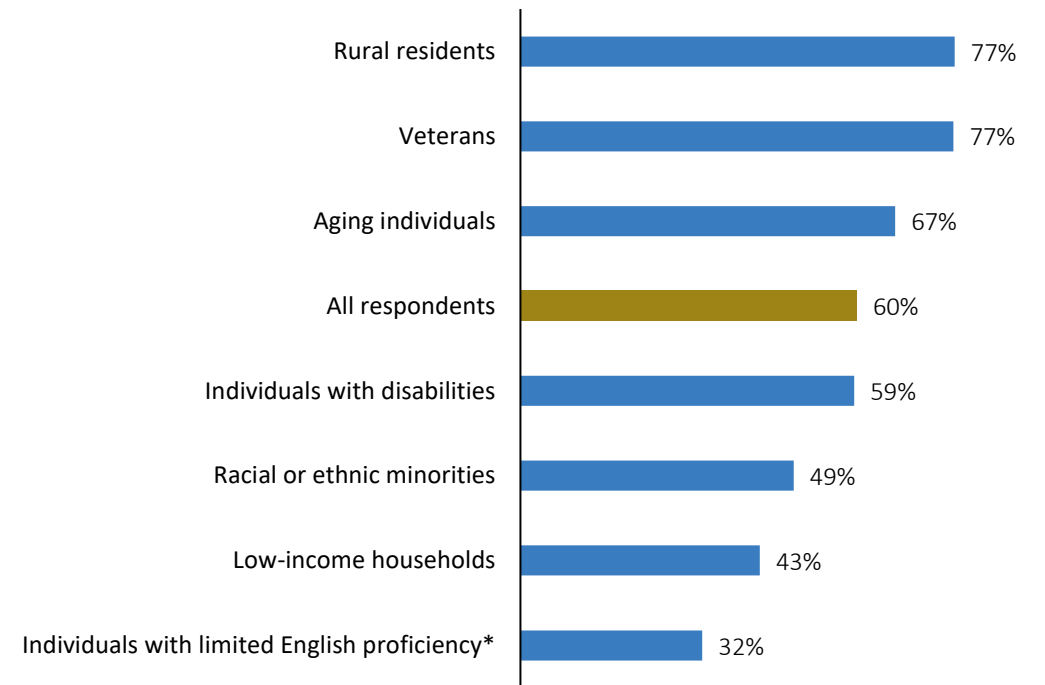
Rural residents, veterans and aging individuals are more likely than all respondents to identify service availability/adequacy as a barrier to in-home internet adoption.

Respondents belonging to these same covered population groups were more likely to identify internet availability as a barrier.

Internet is too Expensive
by Covered Population



Internet is not Available or Inadequate
by Covered Population

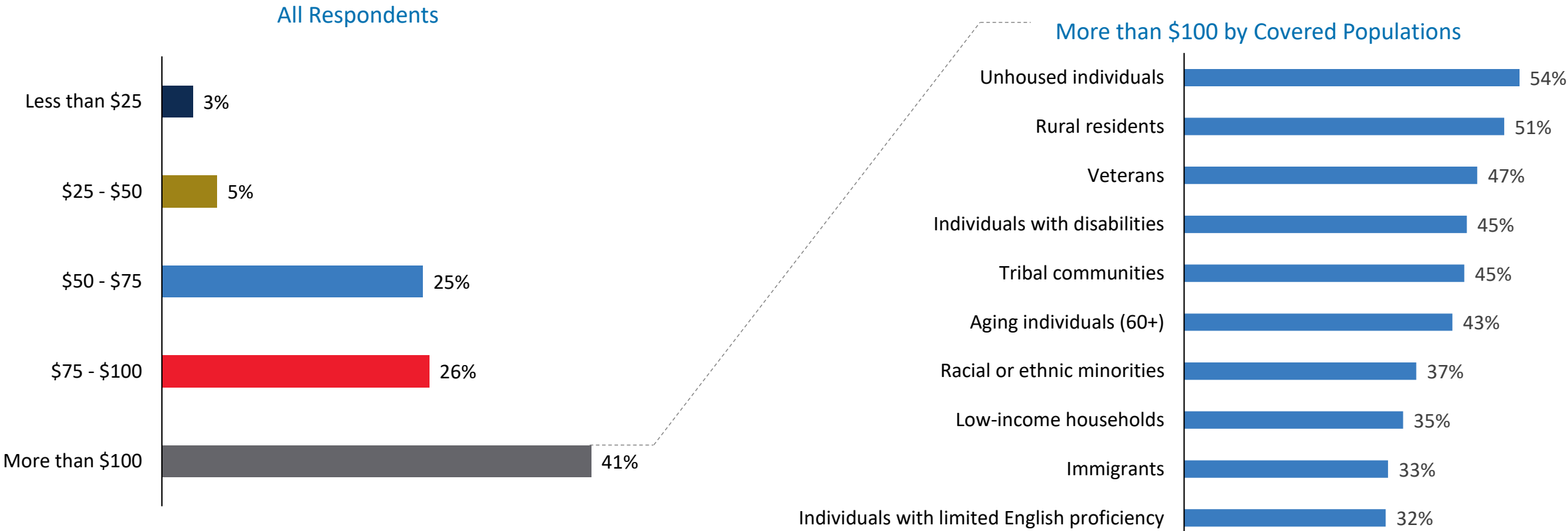


Responses from immigrants, tribal communities, and unhoused individuals excluded due to low response rates to this question.

41% of online survey respondents pay more than \$100 per month for home internet service, of which **unhoused individuals (54%)**, **rural residents (51%)**, and **veterans (47%)** make up the greatest share.



Approximately how much is your total monthly bill for home internet?

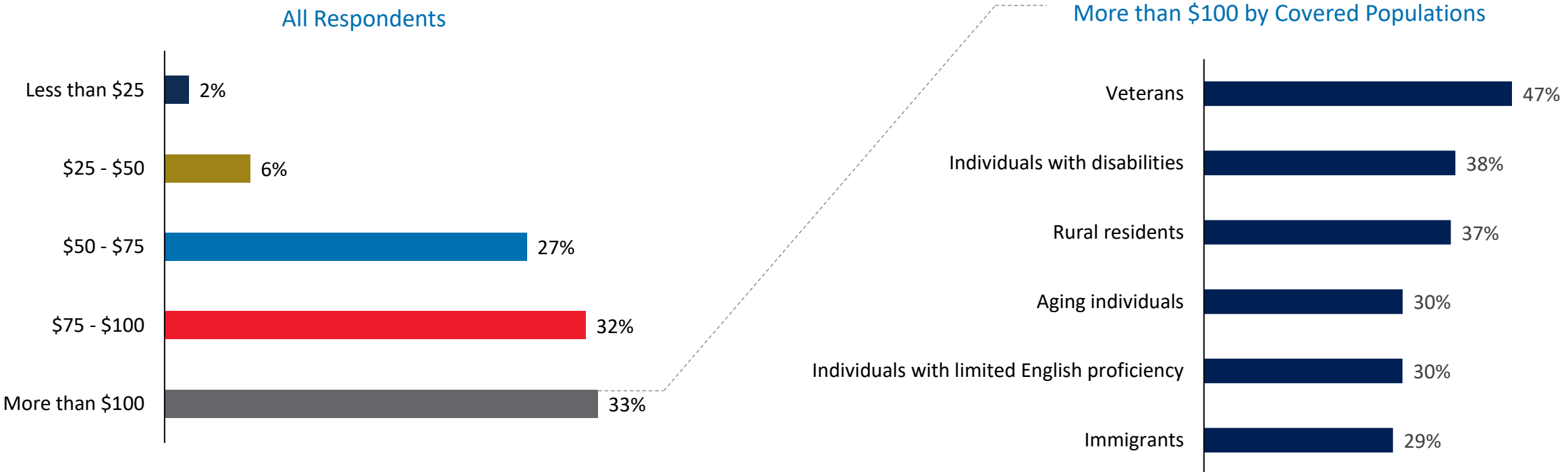




33% of paper survey respondents pay more than \$100 per month for home internet service, of which **veterans (47%)**, **individuals with disabilities (38%)**, and **rural residents (37%)** make up the greatest share.

Compared to the online survey, a smaller share of paper survey respondents pay more than \$100 for home internet.

Approximately how much is your total monthly bill for home internet?



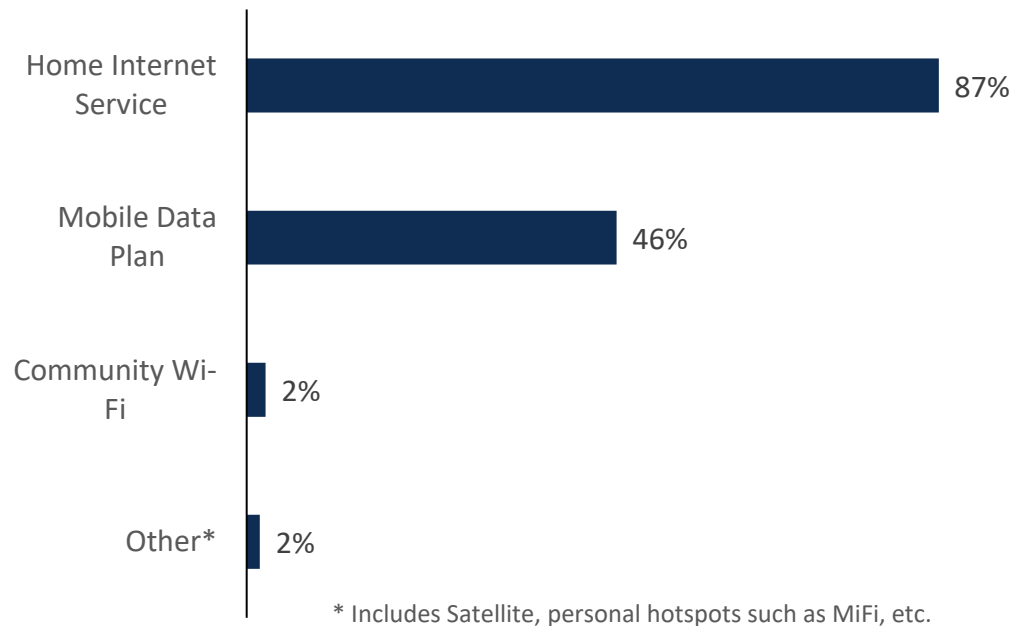
46% of **online survey** respondents indicate that they may connect to the internet at home via a **mobile data plan**.



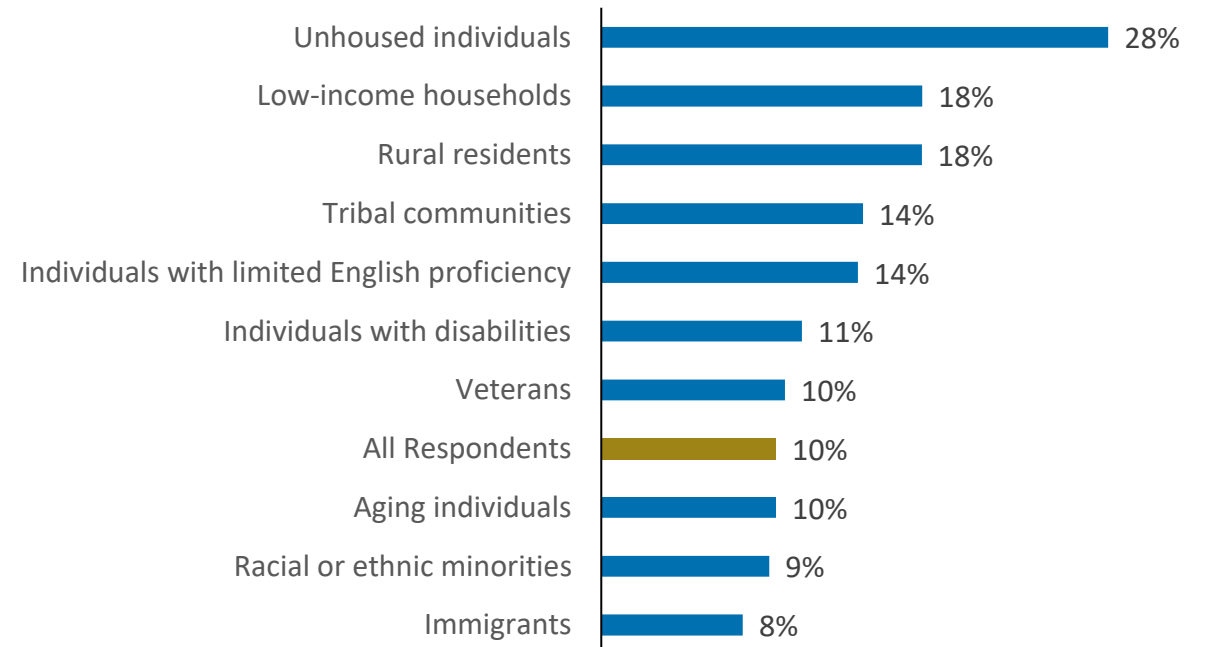
However, 10% of survey respondents indicate that they rely on *only* a mobile data plan to access the internet. Certain covered populations are even more likely to access the internet at home using a mobile data plan only, including respondents who are unhoused, living in low-income households, residing in rural areas, and from tribal communities.

How do you connect to the internet at home?

All Respondents



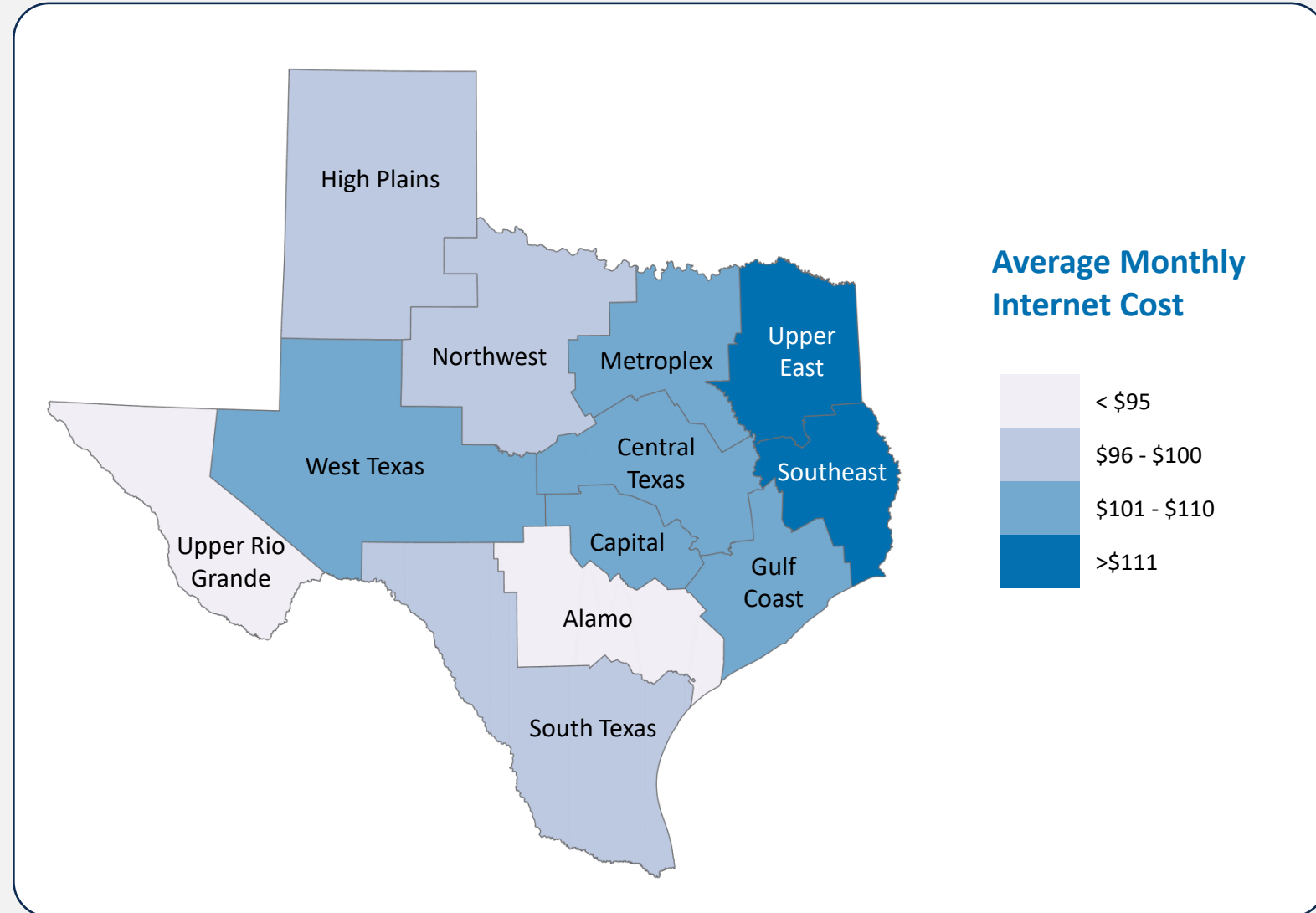
More than \$100 by Covered Populations





On average, survey respondents residing in the **Upper East** and **Southeast** regions pay **\$111 or more per month** for internet.

On average, survey respondents residing in the Capital, Central Texas, Gulf Coast, Metroplex and West Texas regions also pay more than \$100 per month for internet.

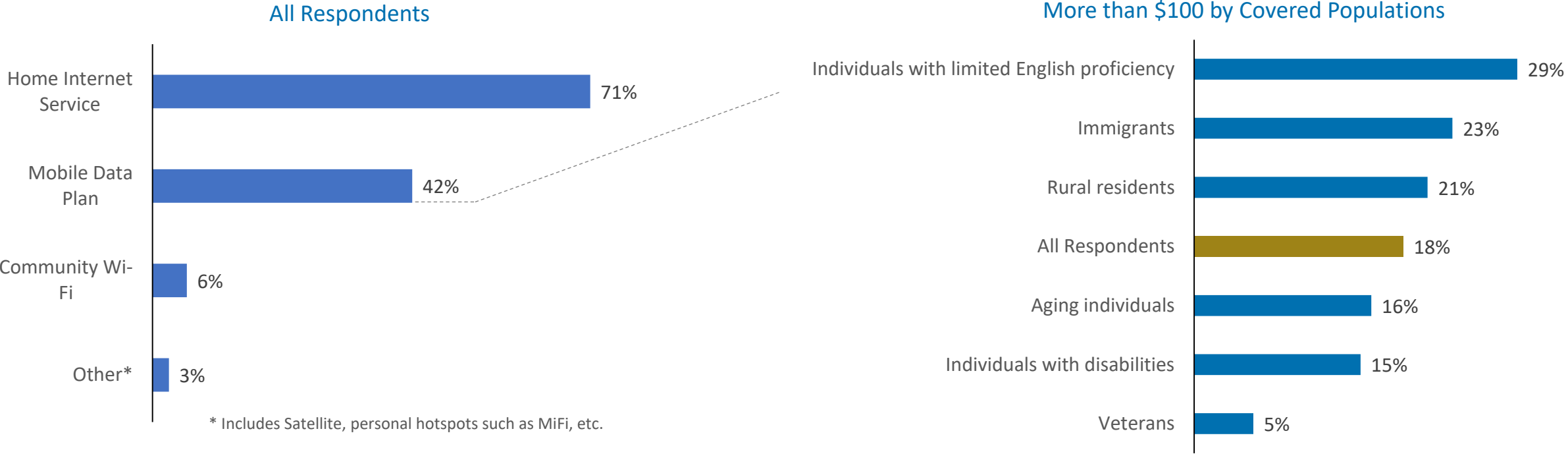




42% of **paper survey** respondents indicate that they may connect to the internet at home via a **mobile data plan**.

However, compared to online survey respondents, a greater share (18%) of **paper survey** respondents indicate that they use *only* a mobile data plan to access the internet. Unlike the online survey, the paper survey showed that respondents with limited English proficiency and immigrants are particularly limited to the mobile data plan when connecting to the internet at home.

How do you connect to the internet at home?

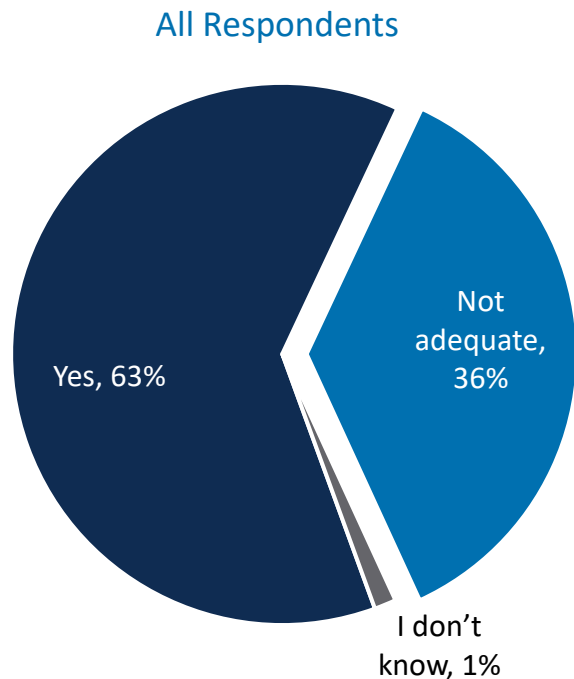


36% of **online survey** respondents indicate that their internet service at home is not adequate or good enough for their and/or their family's needs.

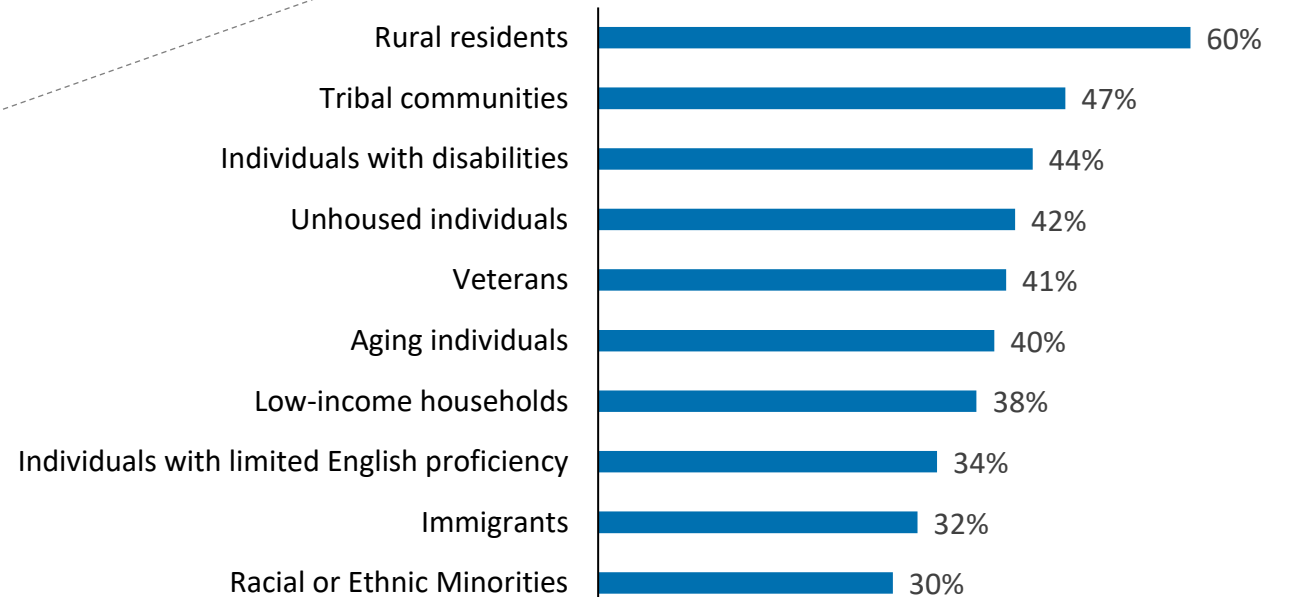


Individuals from covered populations experience inadequate home internet service at higher rates, ranging as high as **60%** for rural residents and **47%** for tribal communities.

Which of these options best describes your internet service at home in terms of speed and reliability?



Not adequate by Covered Population



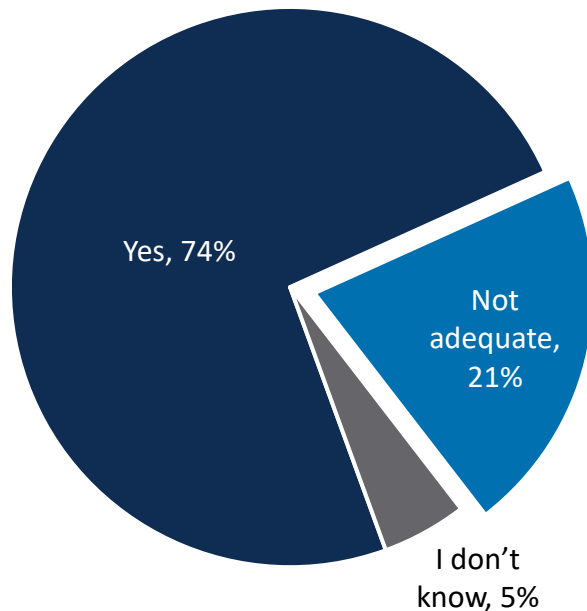
21% of **paper survey** respondents indicate that their internet service at home is not adequate or good enough for their and/or their family's needs.



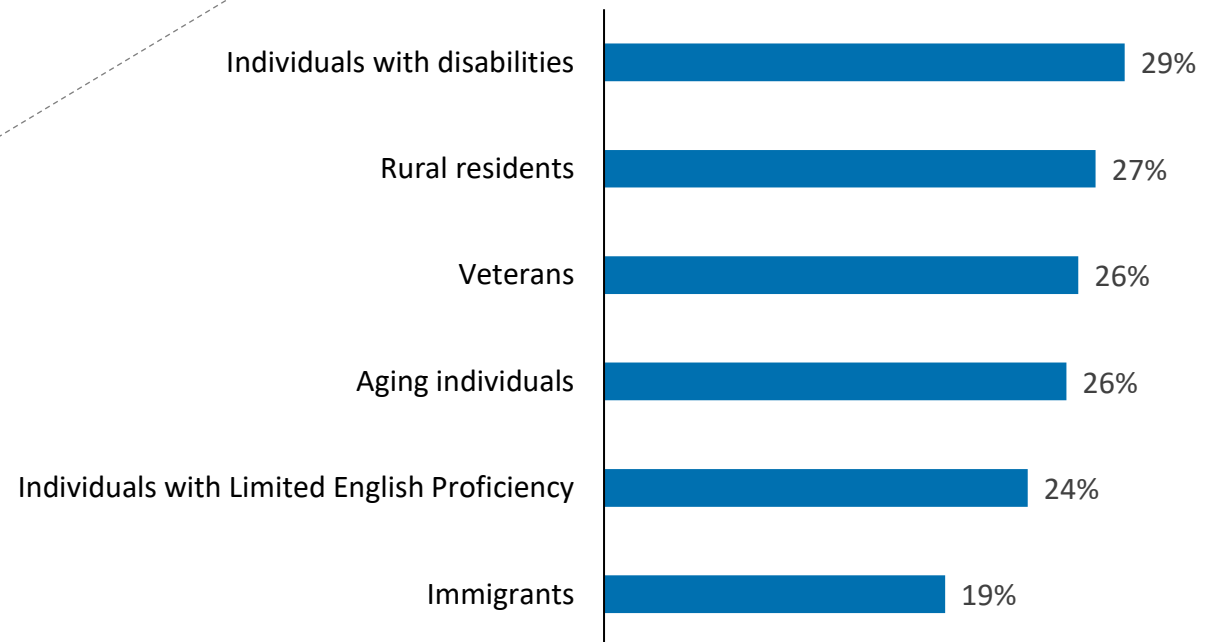
Individuals from covered populations experience inadequate home internet service at higher rates, ranging as high as **29%** for individuals with disabilities and **27%** for rural residents.

Which of these options best describes your internet service at home in terms of speed and reliability?

All Respondents



Not adequate
by Covered Population

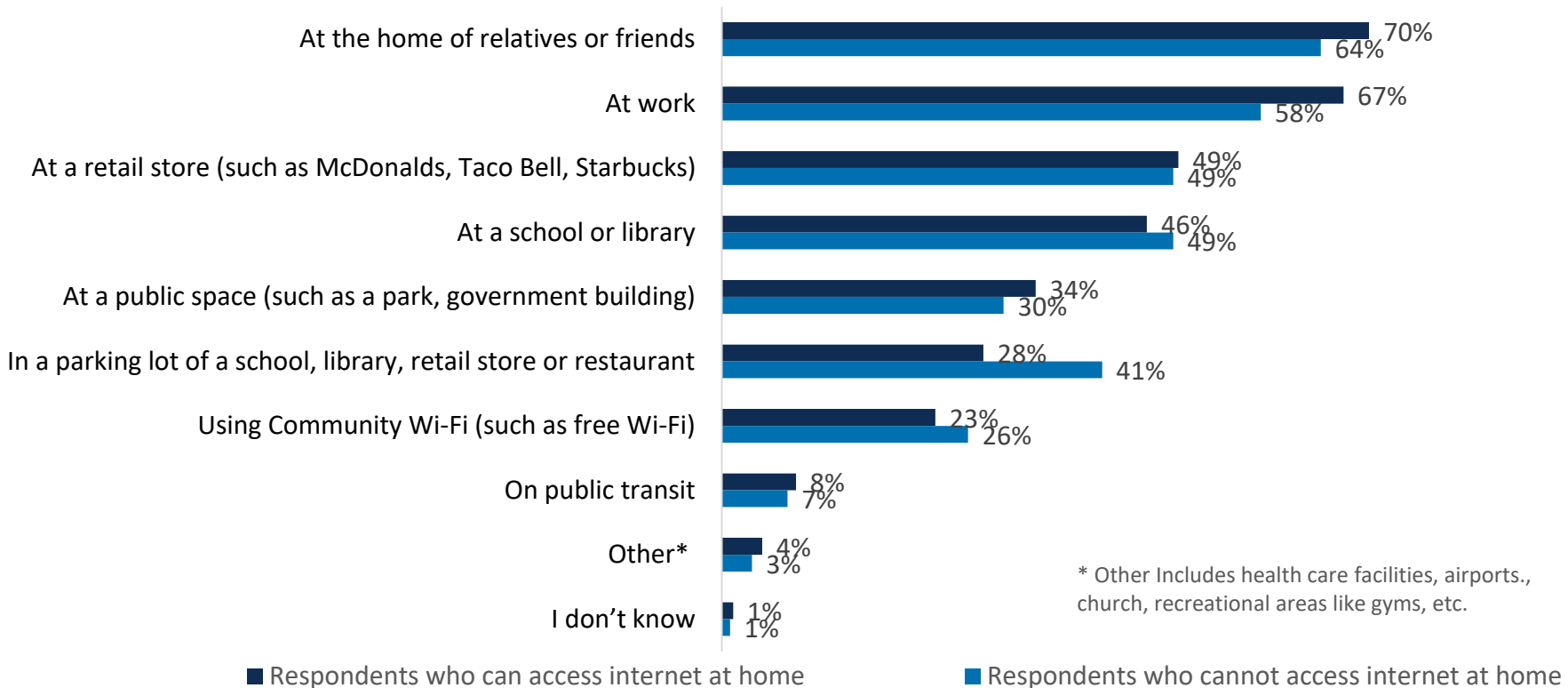


Online survey respondents, irrespective of their internet availability at home, most commonly rely on the **home of relatives/friends, workplace, and retail settings** to access the internet outside of their homes.



However, respondents who cannot access the internet at home are generally more reliant on public resources, such as schools/libraries, parking lots, and community Wi-Fi, compared to those who can access the internet at home.

Where else do you connect to the internet when not using your own connection plan?

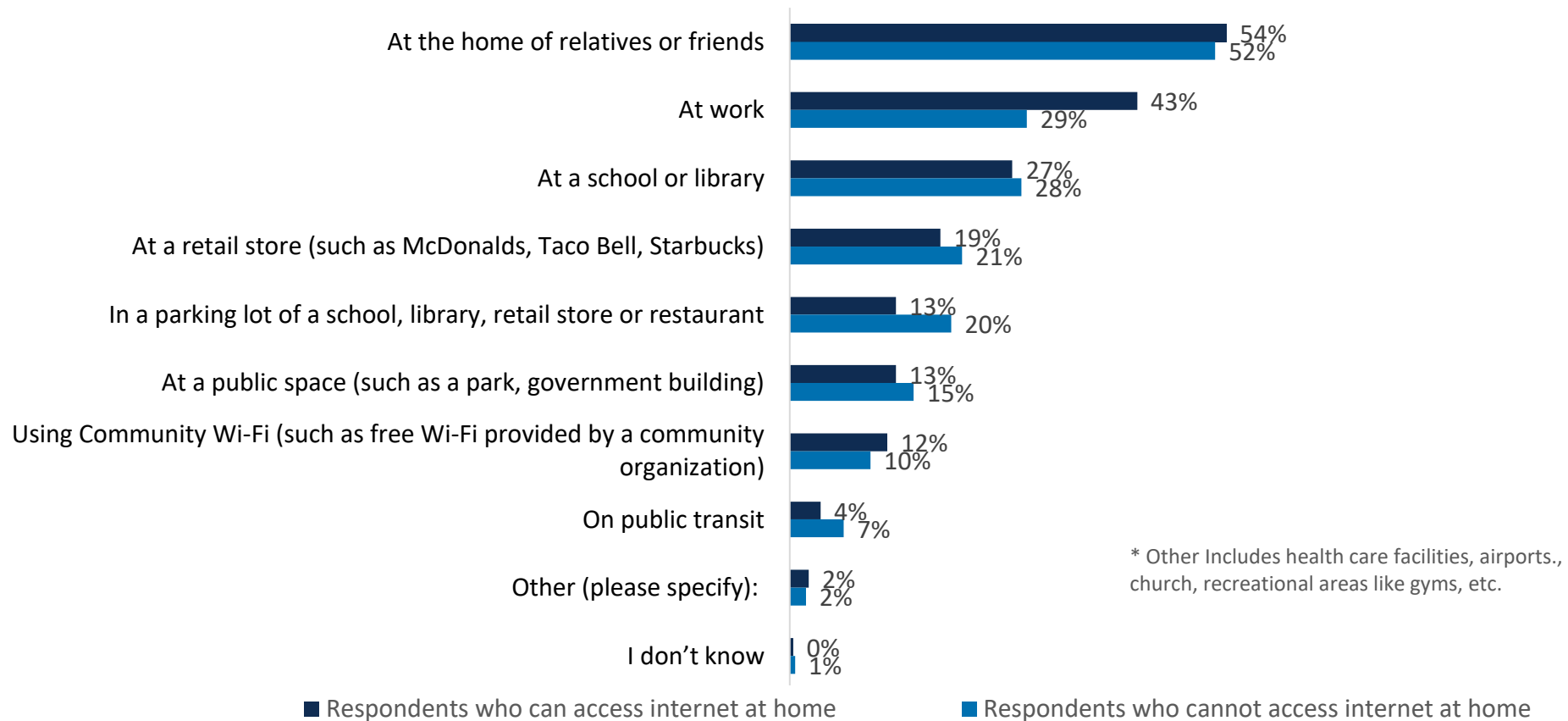


Paper survey respondents most commonly rely on the **home of relatives/friends** and **the workplace** to access the internet outside of their homes.



Paper survey respondents who cannot access the internet at home commonly use parking lots for internet access.

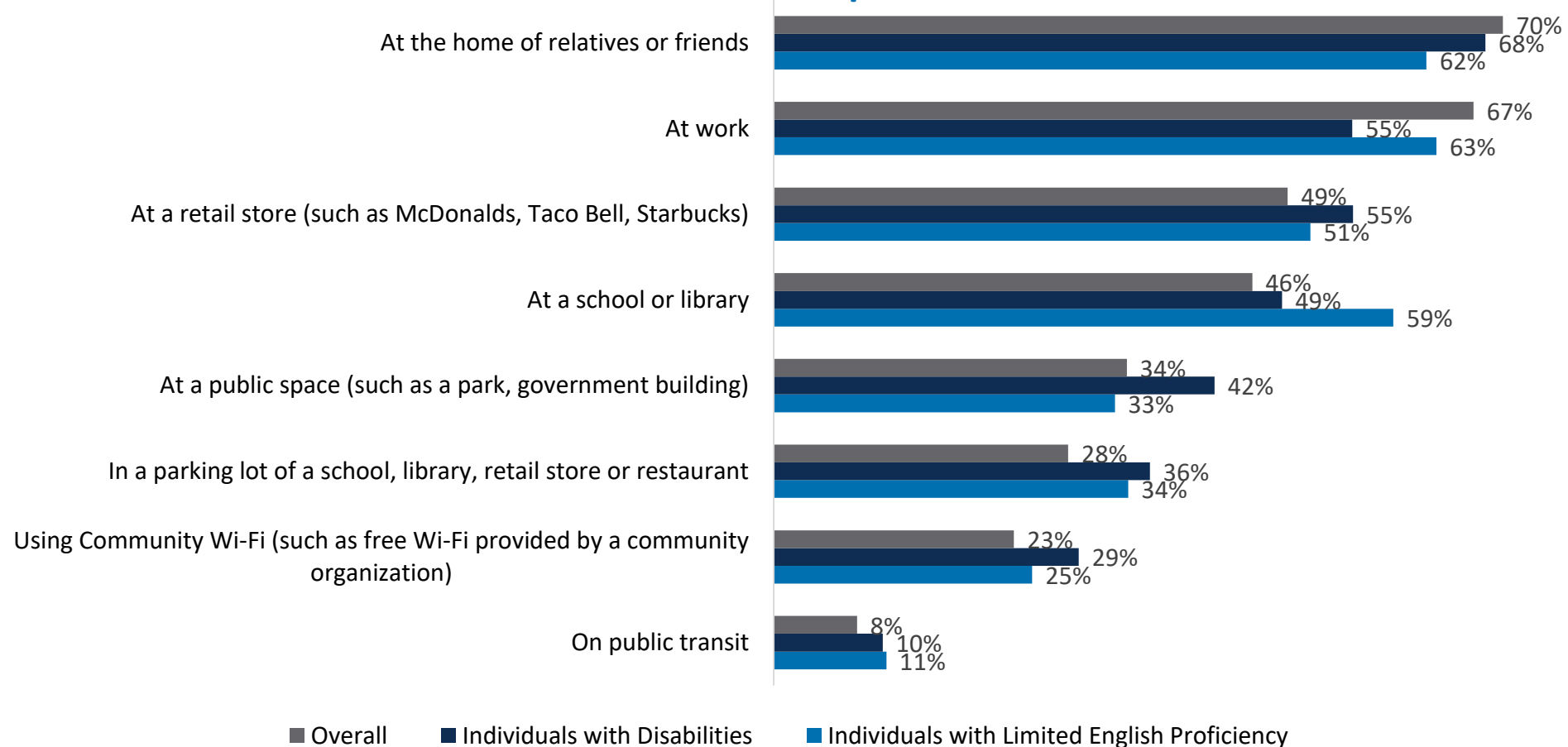
Where else do you connect to the internet when not using your own connection plan?



Individuals with disabilities and those with limited English proficiency are more likely to access the internet via public resources such as schools, libraries and community Wi-Fi, compared to overall **online** survey respondents.



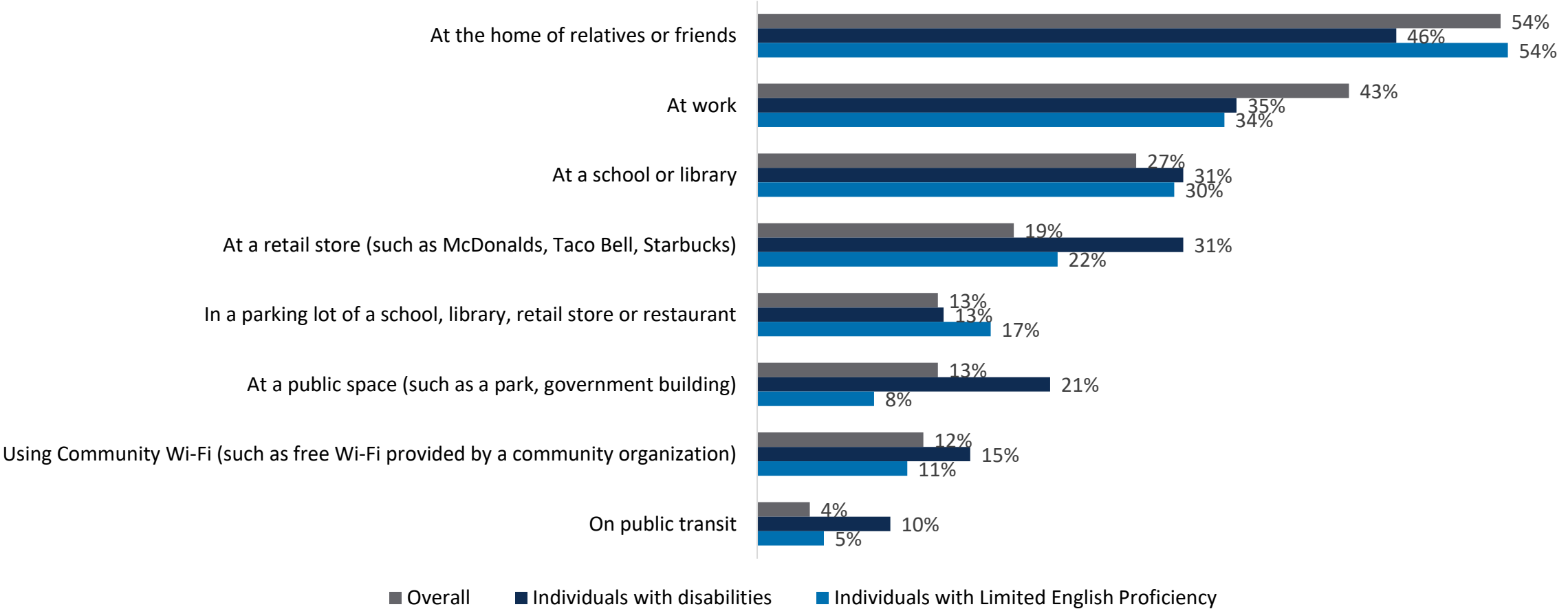
Where else do you connect to the internet when not using your own connection plan?





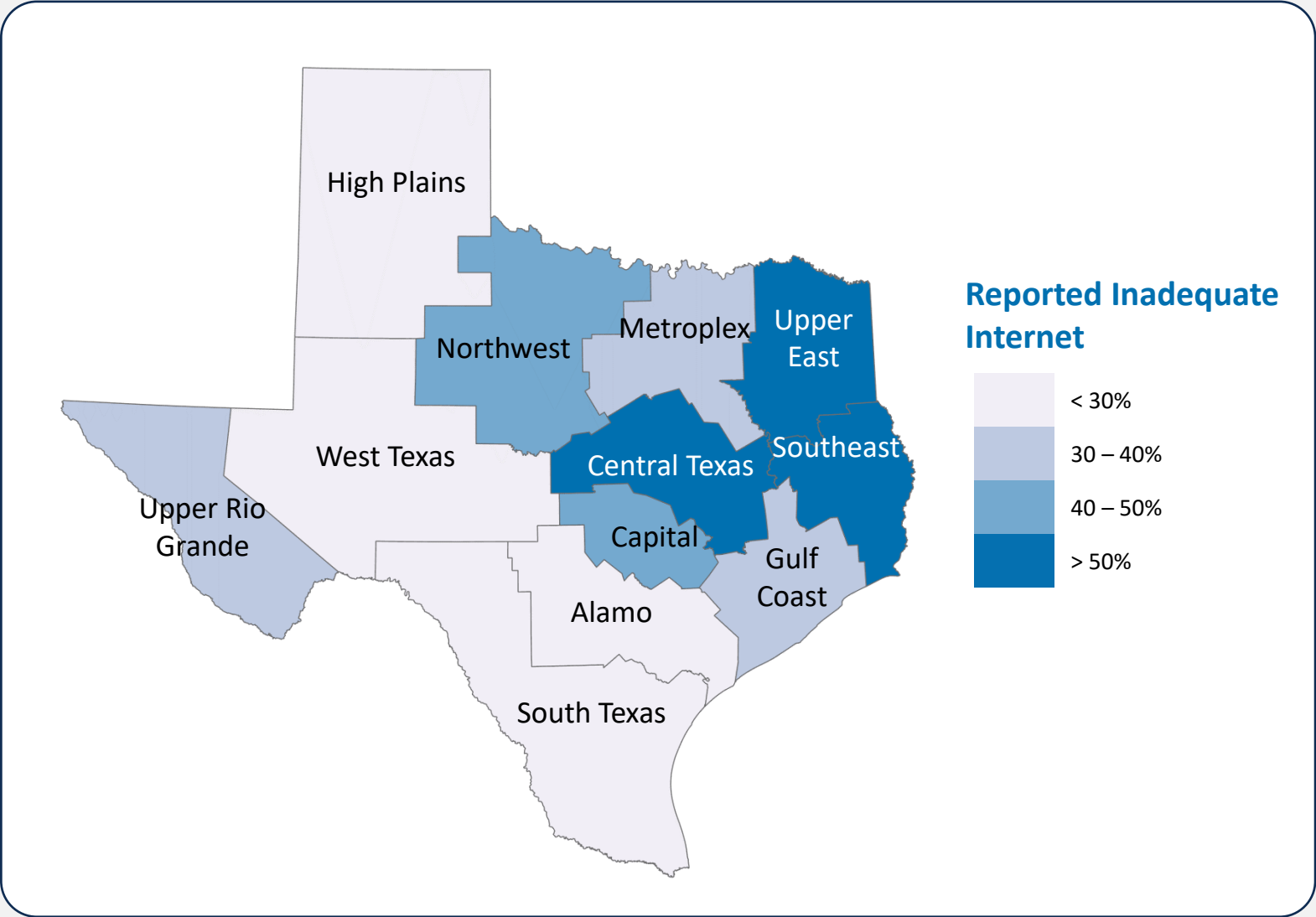
Individuals with disabilities and those with limited English proficiency are more likely to access the internet via public resources such as schools, libraries and community Wi-Fi, compared to overall **paper** survey respondents.

**Where else do you connect to the internet when not using your own connection plan?
Please check all that apply.**



In the **Upper East, Central Texas,** and **Southeast** regions, **over 50% of online survey** respondents indicate that their internet service is inadequate.

The High Plains, West Texas, Alamo, and South Texas regions had the lowest shares (under 30%) of respondents with inadequate internet.



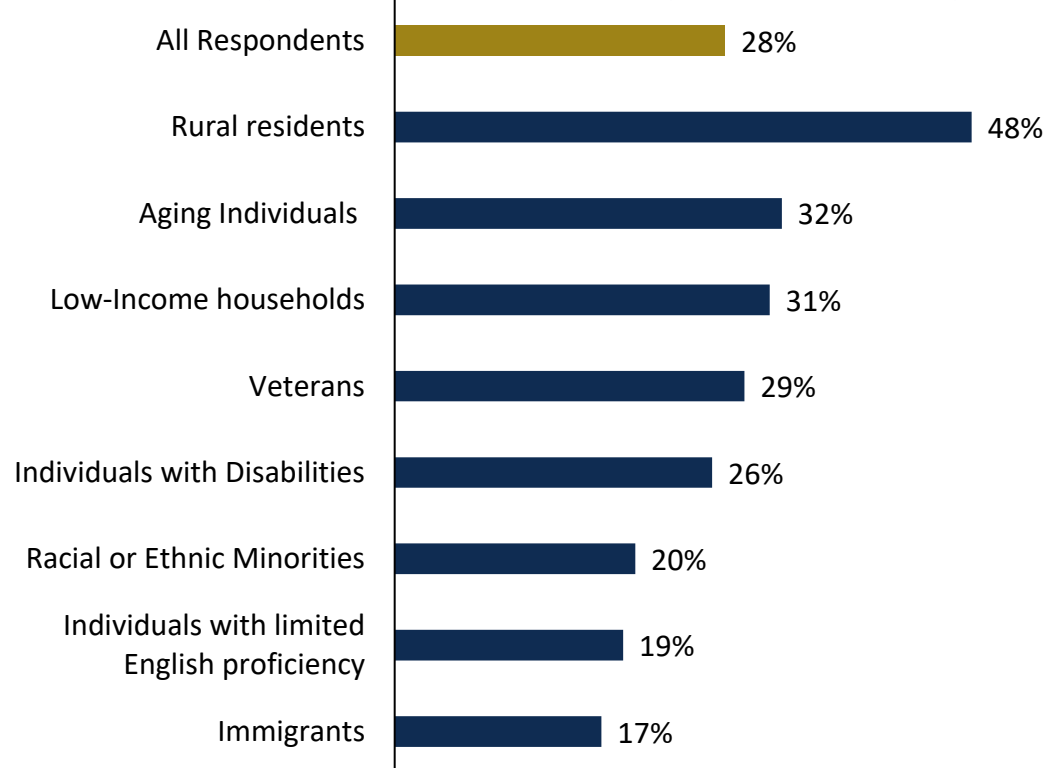
For the **online survey** respondents who completed the internet speed test, **28%** measured download speeds below 25 Megabits per second (Mbps). **17%** measured upload speeds below 3 Mbps.



Rural residents and aging individuals had the greatest share of respondents with inadequate speeds.

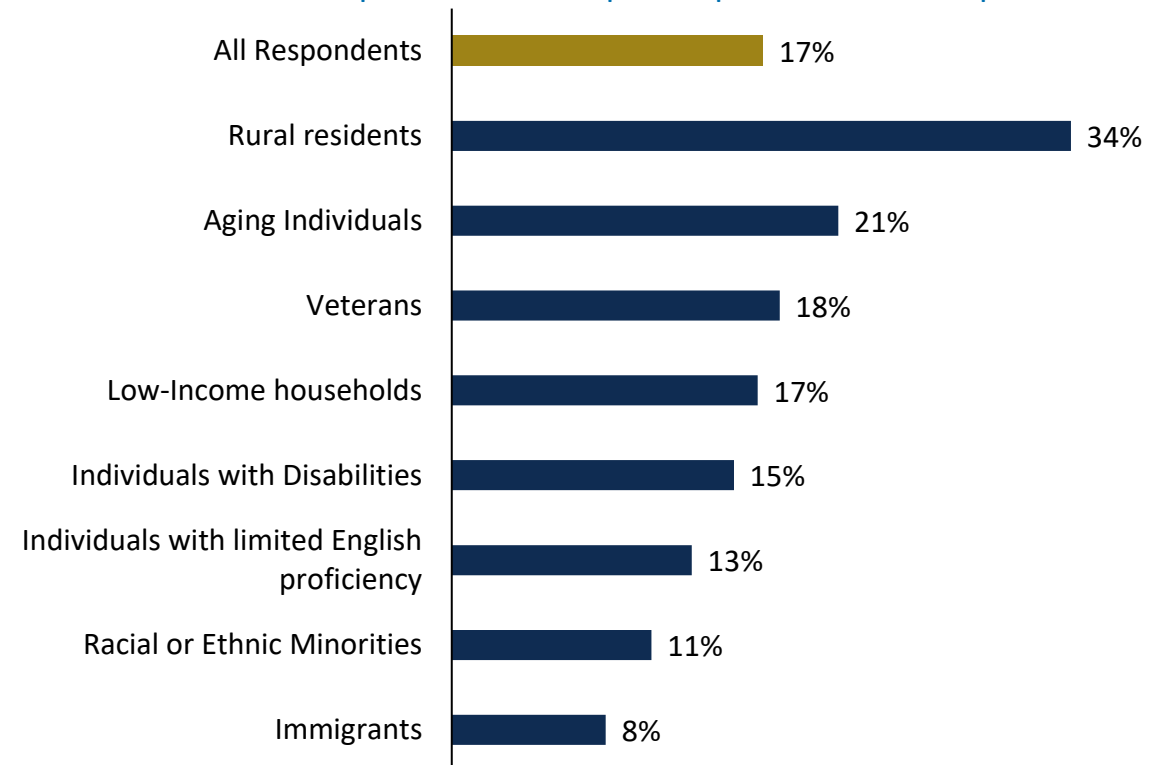
Download Speed

Respondents with download speed below 25 Mbps



Upload Speed

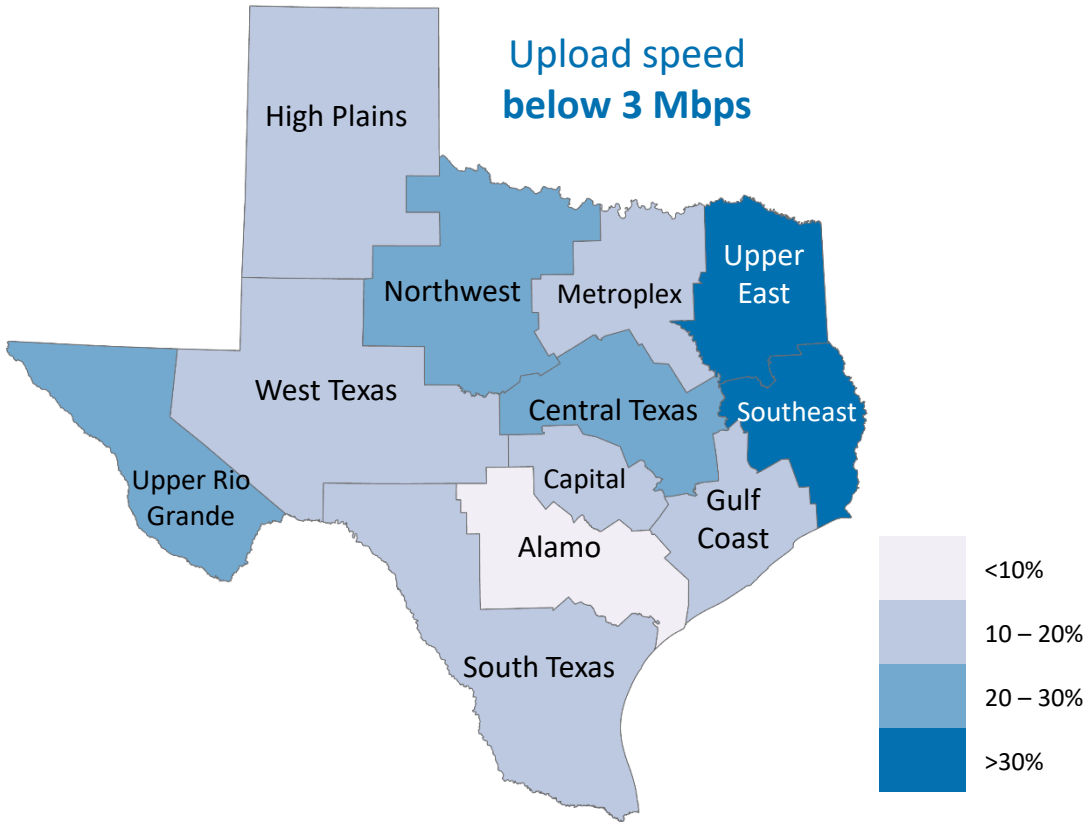
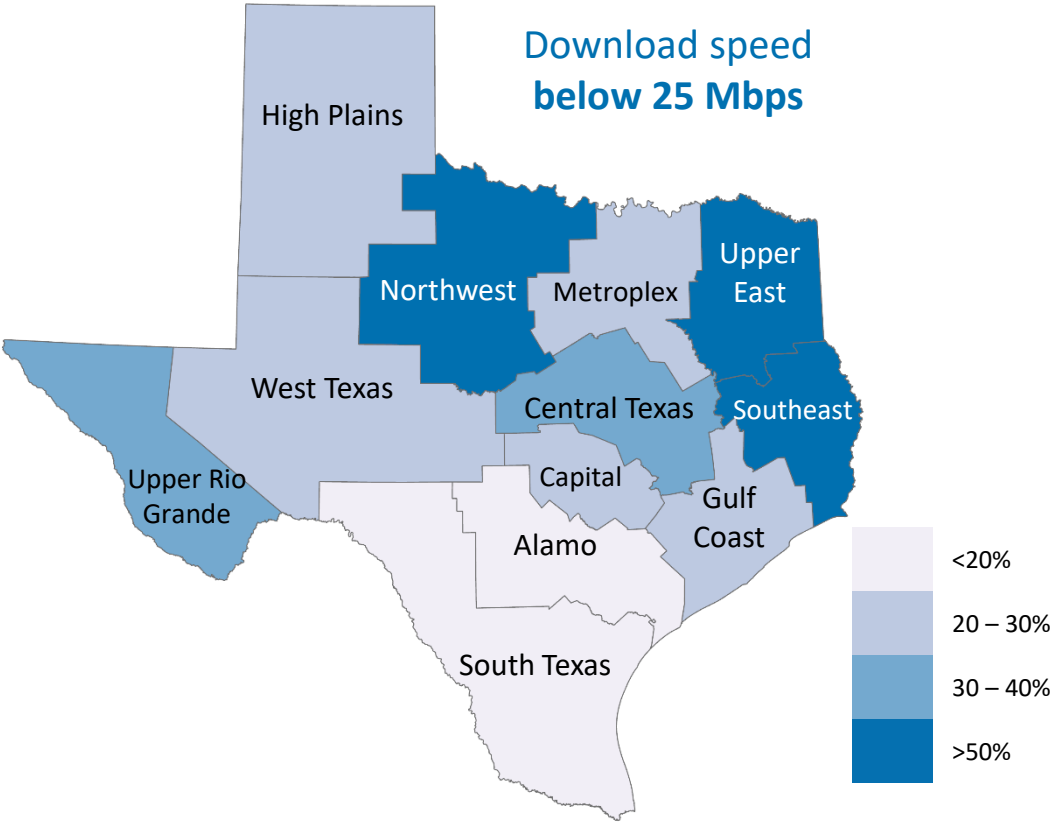
Respondents with upload speed below 3 Mbps



Over 50% of online survey respondents in Upper East and Southeast regions reported download and upload speeds below 25 Mbps and 3 Mbps, respectively.



Significant shares of respondents in the Northwest, Central Texas, and Upper Rio Grande regions also reported inadequate download and upload speeds.



Digital Opportunity Survey Results: Availability and Affordability of Consumer Devices and Technical Support



Summary of Survey Findings

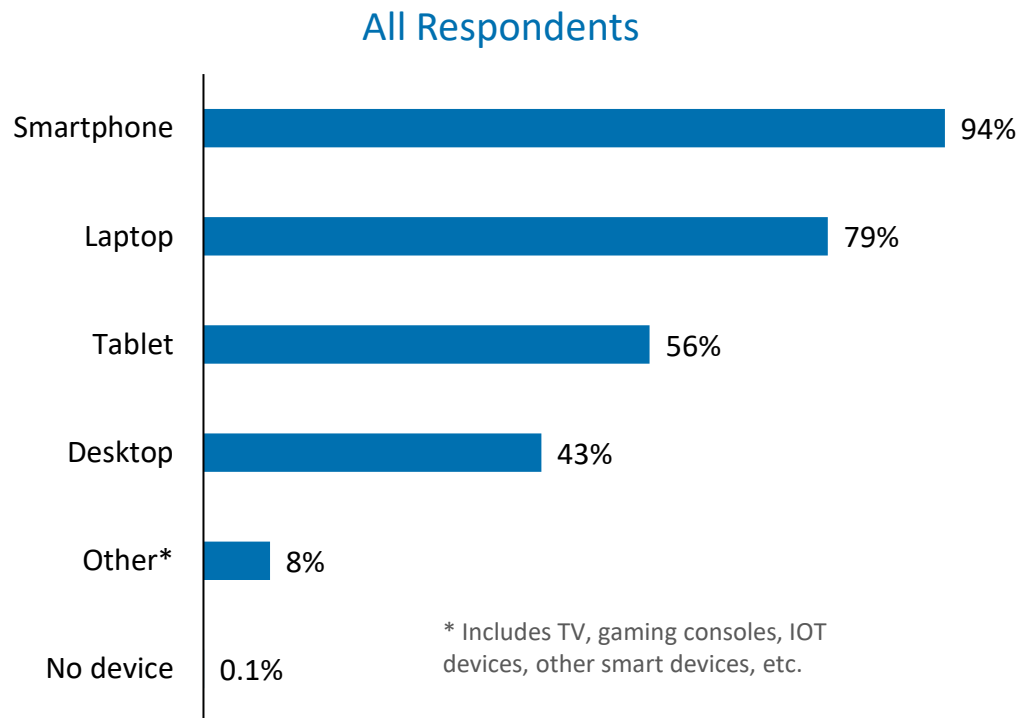
- Most Texans have access to a smartphone (**94%**), and over half of respondents have access to tablets and laptops.
- Individuals belonging to covered populations are more likely to rely on *only* a smartphone to connect to the internet than all survey respondents (**7%**). This share is much larger for unhoused individuals (**27%**), low-income households (**20%**) and individuals with limited English proficiency (**18%**).
- Texans need access to technical support. **18%** of respondents who have trouble with technology have no one in their household or community who can help them. This share is larger for unhoused respondents (**40%**), respondents belonging to tribal communities (**28%**), and respondents with limited English proficiency (**27%**).

7% of **online survey** respondents have *only* a smartphone to connect to the internet.

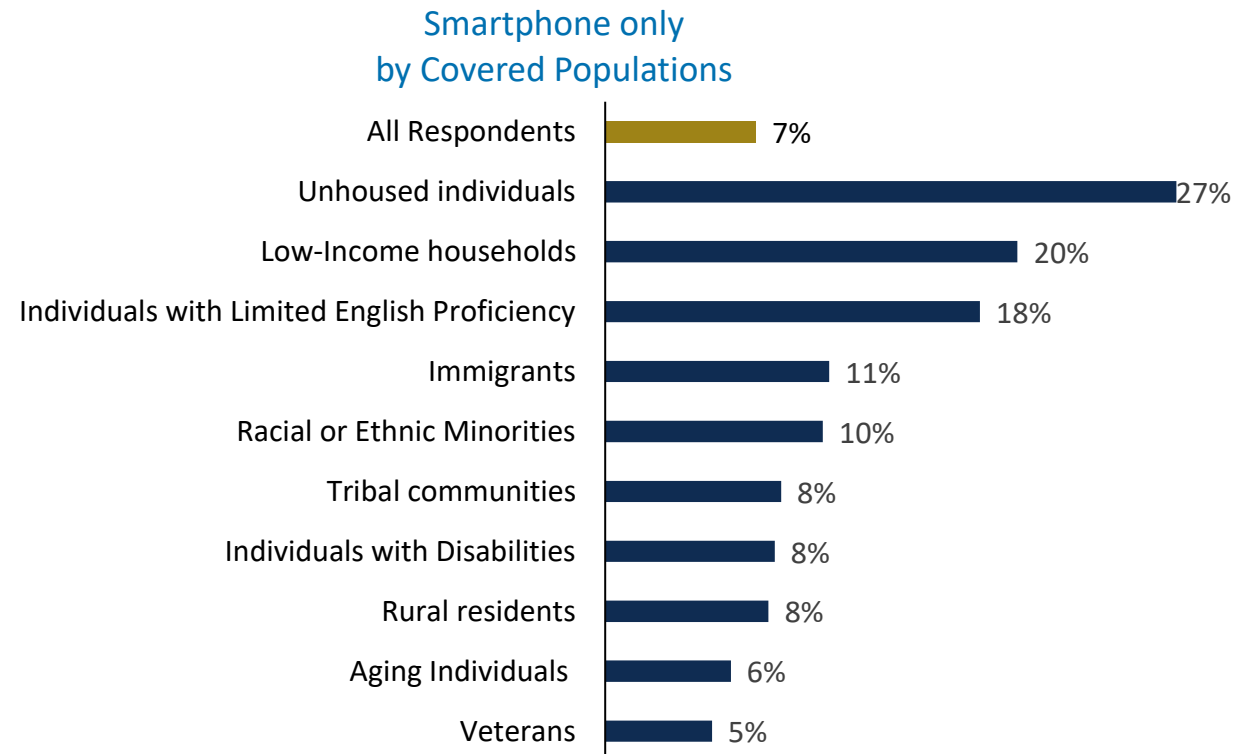


While 94% of online survey respondents have a smartphone with which to access the internet, 7% of respondents *only* have a smartphone. The share of respondents that only use a smartphone and no other device is much larger for unhoused individuals and low-income households.

Which of the following devices do you use to connect to the internet at home?



* Includes TV, gaming consoles, IOT devices, other smart devices, etc.



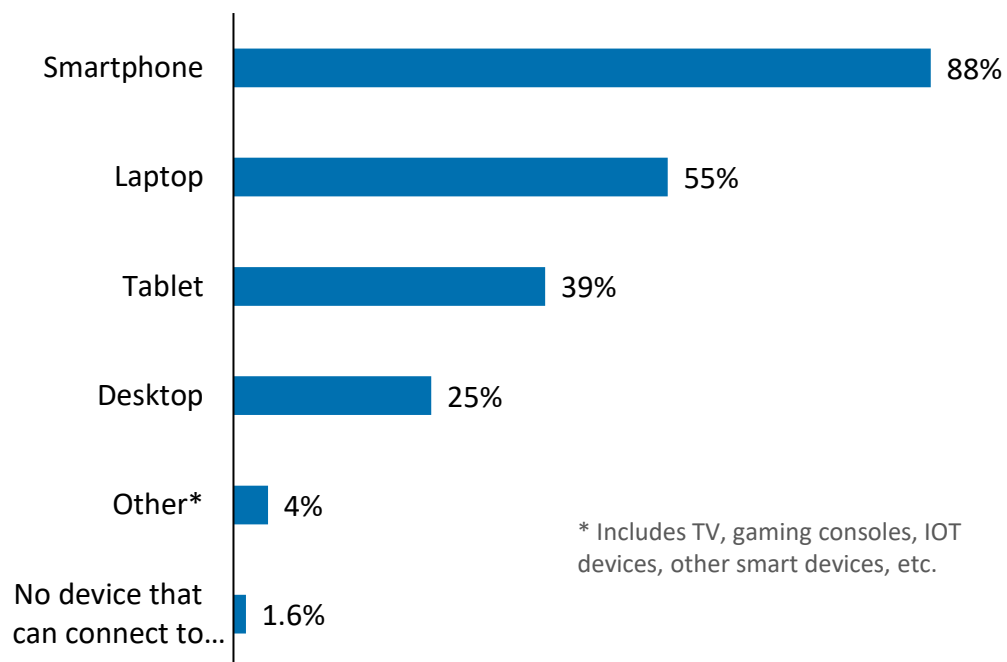


26% of **paper survey** respondents have *only* a smartphone to connect to the internet.

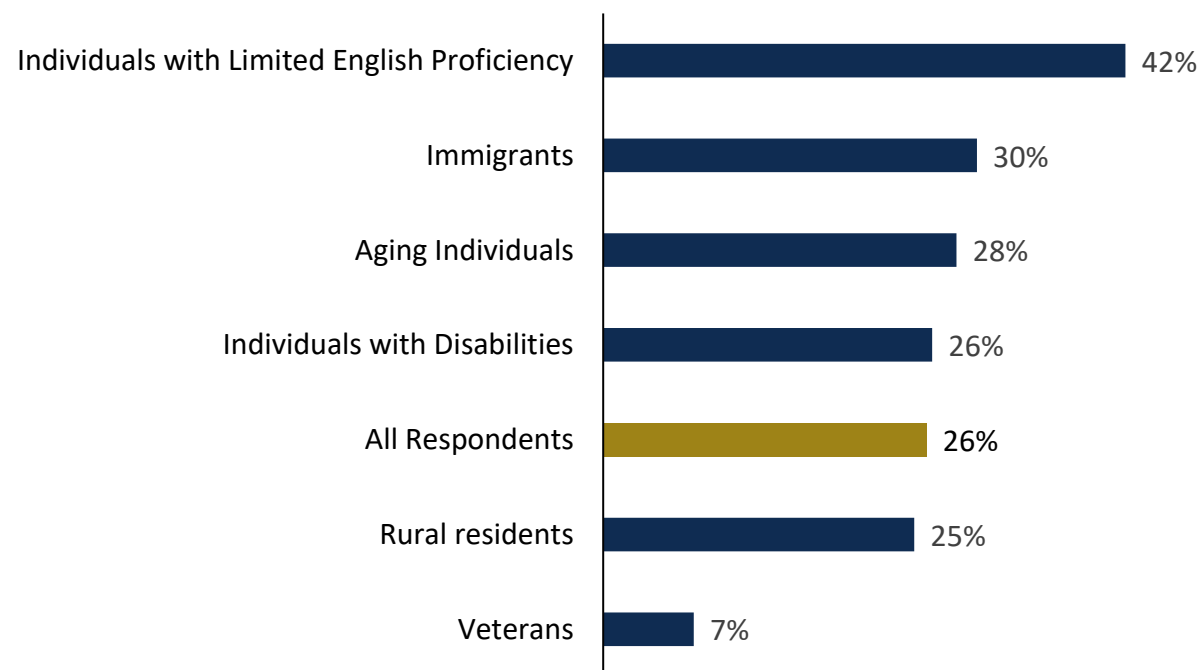
26% of paper survey respondents have only a smartphone and no other device with which to access the internet, compared to 7% of online respondents. Among paper survey respondents with only a smartphone, **individuals with limited English proficiency, immigrants** and **aging individuals** are the most prevalent covered populations.

Which of the following devices do you use to connect to the internet at home?

All Respondents

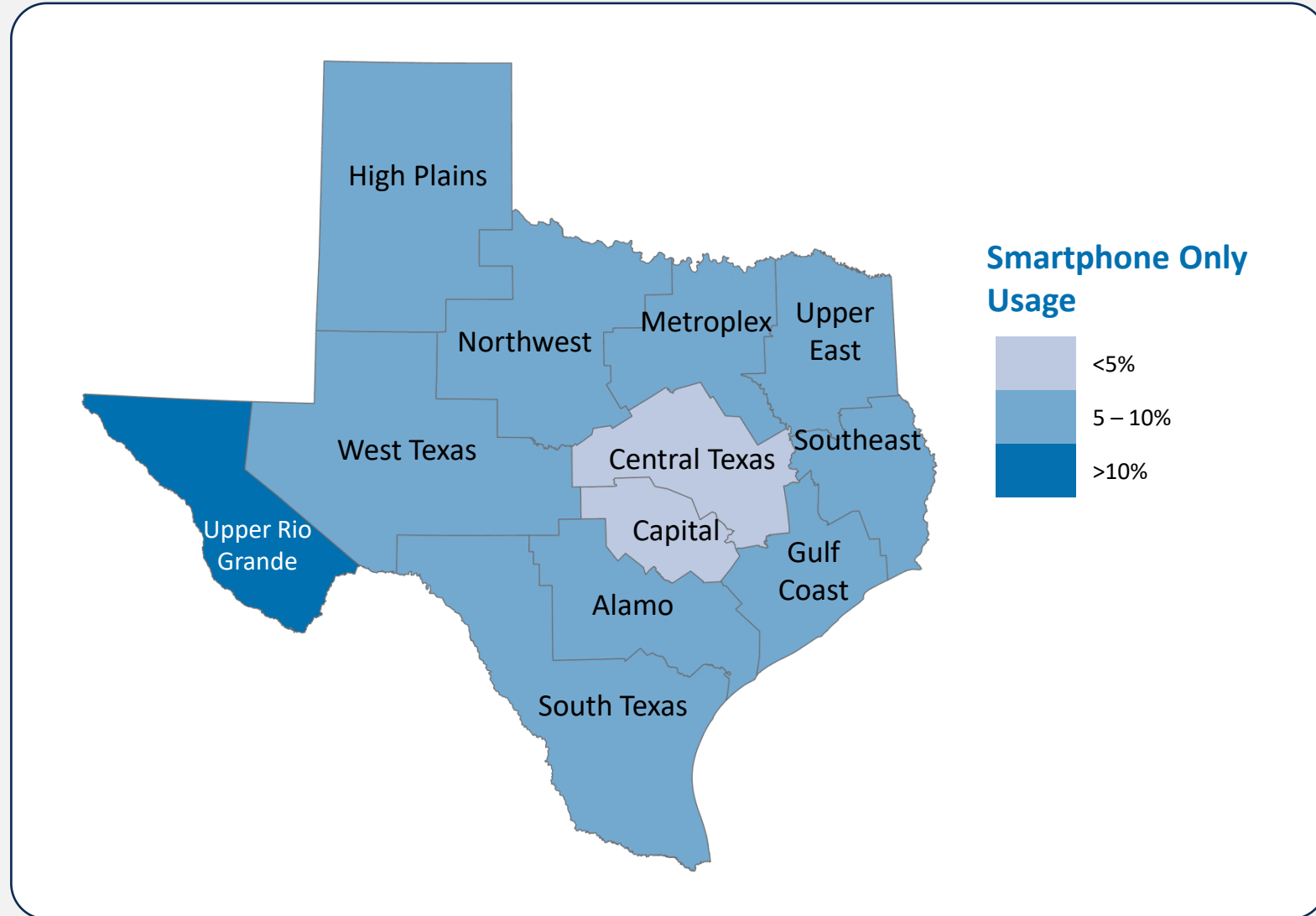


Smartphone only
by Covered Populations



Over 10% of **online survey** respondents residing in the **Upper Rio Grande Region** have **only a smartphone** to connect to the internet in the home.

The Upper Rio Grande Region has the highest rate (**over 10%**) of smartphone-only households among online survey respondents. The Central Texas and Capital regions have the lowest shares (**under 5%**) of respondents that have only a smartphone.

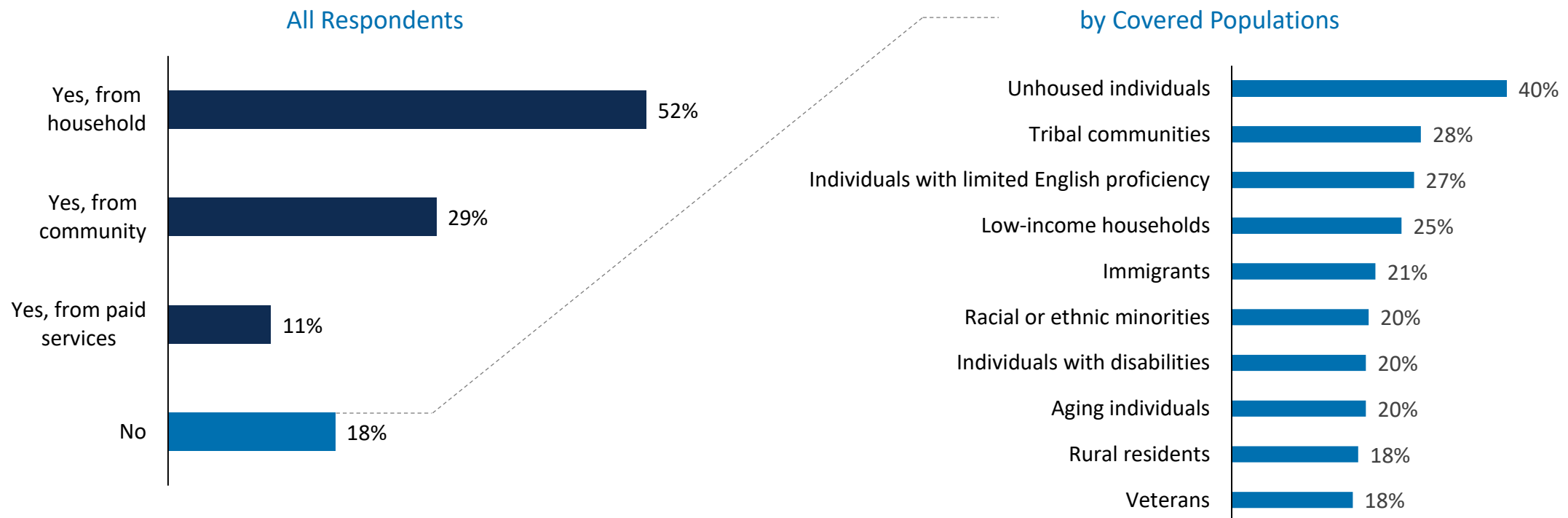


18% of **online survey** respondents do not have nearby access to technical support.



Among covered populations, **unhoused individuals, tribal communities, and individuals with limited English proficiency** have the greatest share of online survey respondents with no access to technical support in their community.

If you have trouble with computers or the internet, is there someone in your household or community who can help you?





Summary of Survey Findings

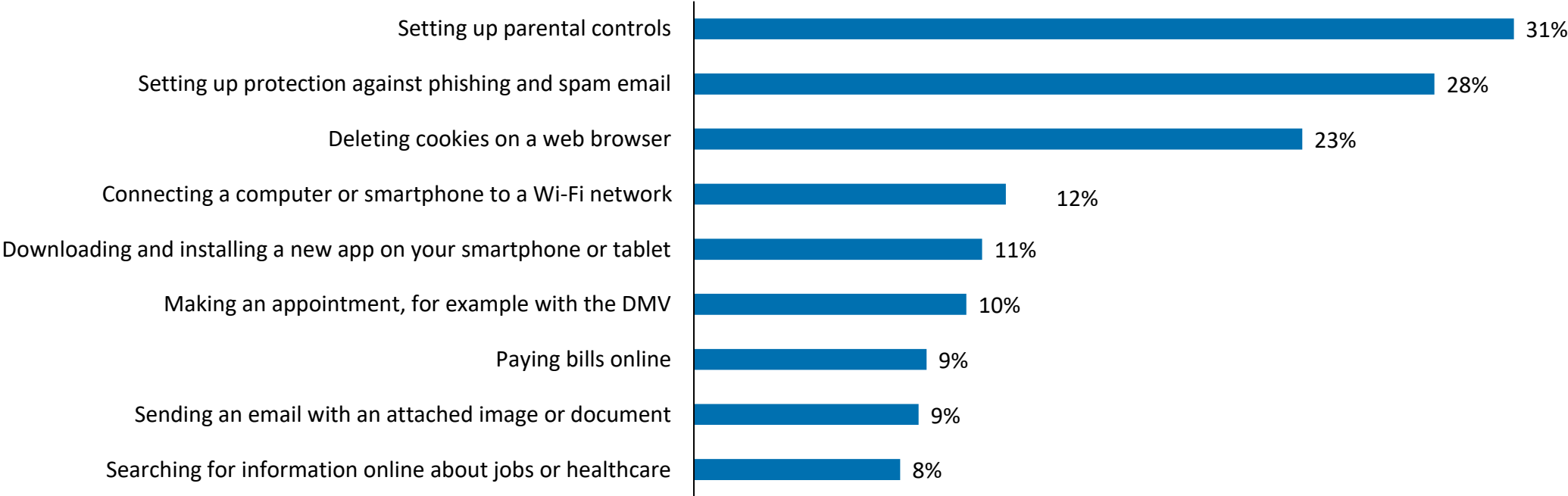
- Individuals belonging to covered populations have the lowest comfort level with connecting to a Wi-Fi network – a basic digital literacy skill.
- Individuals belonging to covered populations are also interested in taking computer or internet training classes.
- Among covered populations, individuals with limited English proficiency have lower degrees of comfort with basic digital literacy skills and the highest interest in taking computer or internet training classes.



Among tasks requiring digital skills, **online survey** respondents had the lowest confidence with digital skills related to **controlling privacy settings** and **managing online content**.

31% of respondents rate themselves as less than comfortable with setting up parental controls; **28%** are less than comfortable setting up protection against phishing/spam emails; **23%** are less than comfortable deleting cookies on web browsers.

Less than Comfortable when...

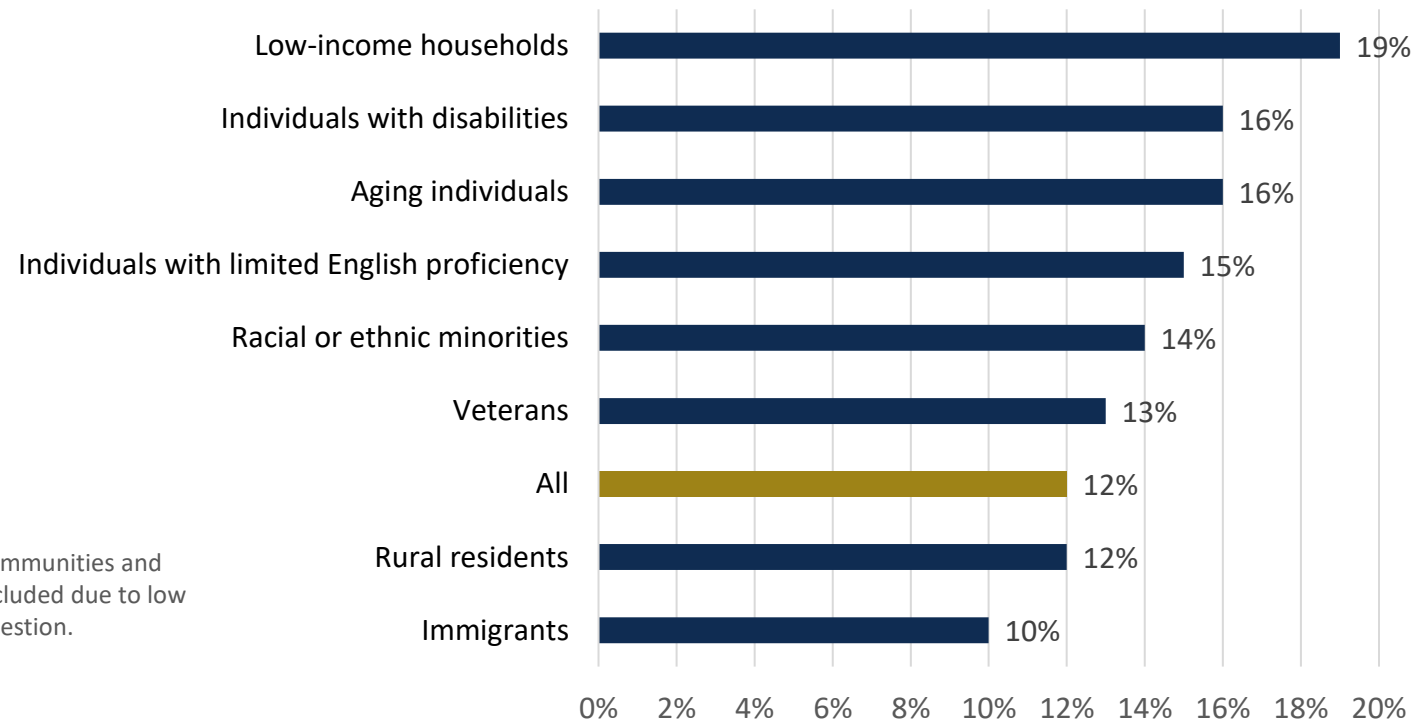


Online survey respondents self-identifying as **low-income individuals** are least comfortable with connecting to a Wi-Fi network – a basic digital literacy skill.



19% of online survey respondents from low-income households reported low levels of comfort with the skills required to connect to a Wi-Fi network.

Less than comfortable with connecting a computer or smartphone to a Wi-Fi network



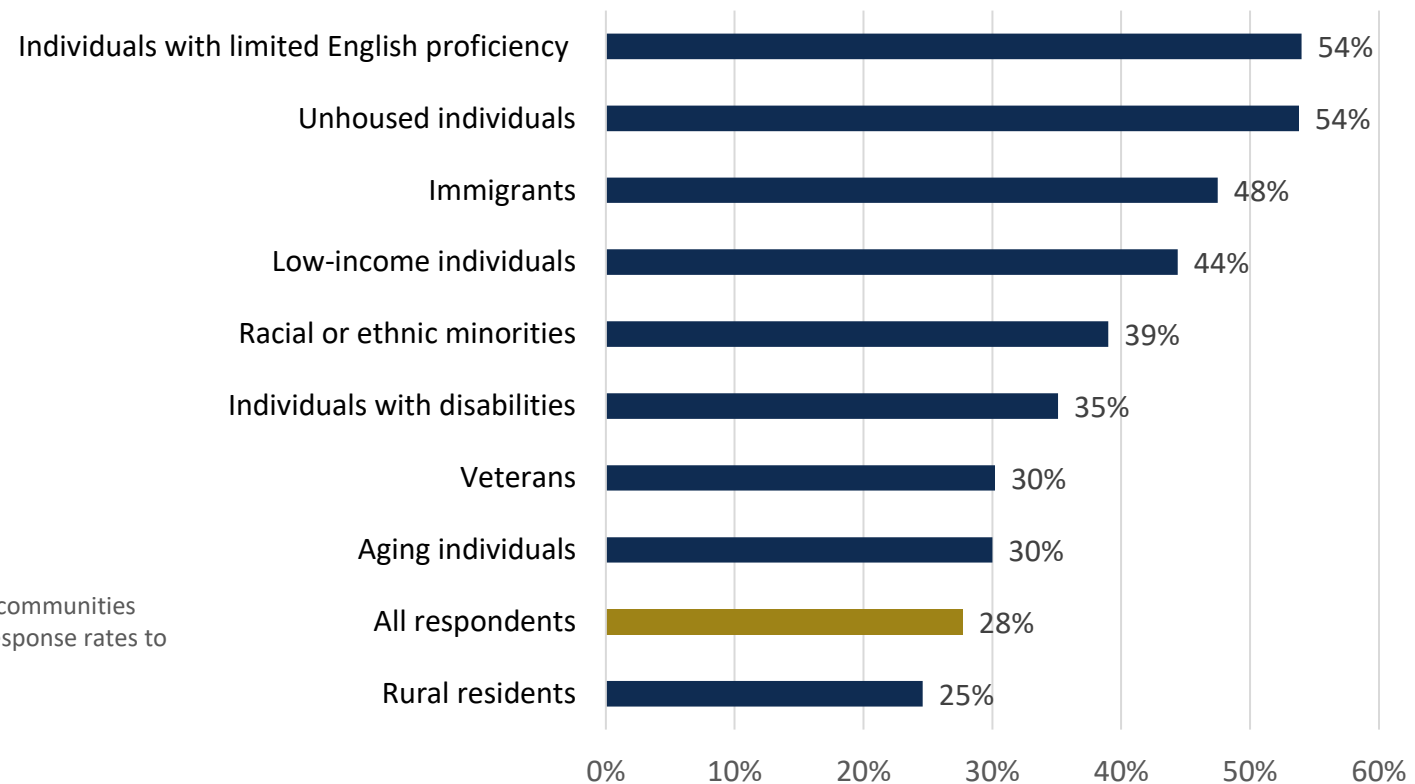
Responses from tribal communities and unhoused individuals excluded due to low response rates to this question.

28% of **online survey** respondents are interested in internet or computer training classes.



Individuals belonging to all covered populations except for rural residents expressed greater interest in internet or computer training classes as compared to all respondents.

Interested in Internet or Computer Training Classes



Responses from tribal communities excluded due to low response rates to this question.



Summary of Survey Findings

- Most Texans are familiar with cybersecurity measures.
- Individuals with limited English proficiency are the least familiar with cybersecurity and online privacy measures.
- **30%** of survey respondents who don't have cybersecurity measures installed on their devices or are not sure about it also cannot access technology support easily from nearby sources.

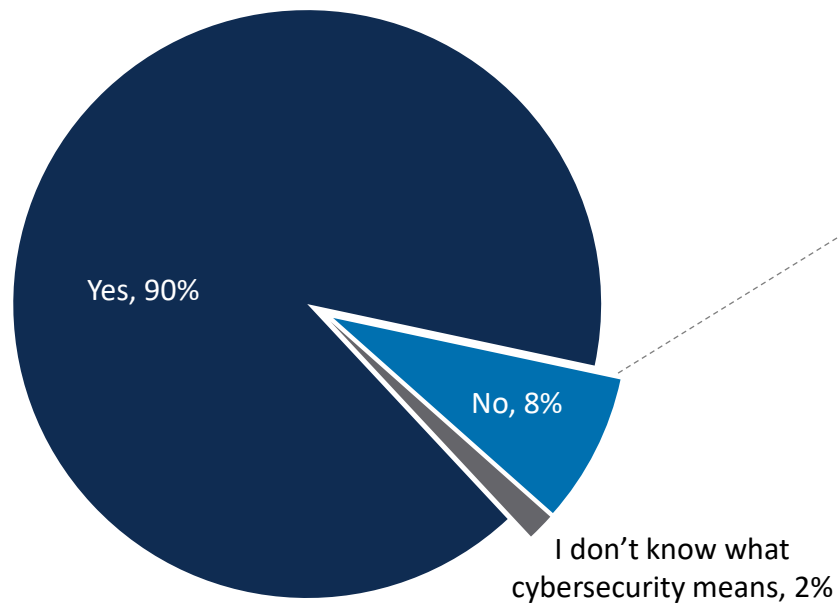
10% of **online survey** respondents who use a desktop, laptop or tablet are not familiar with cybersecurity measures.



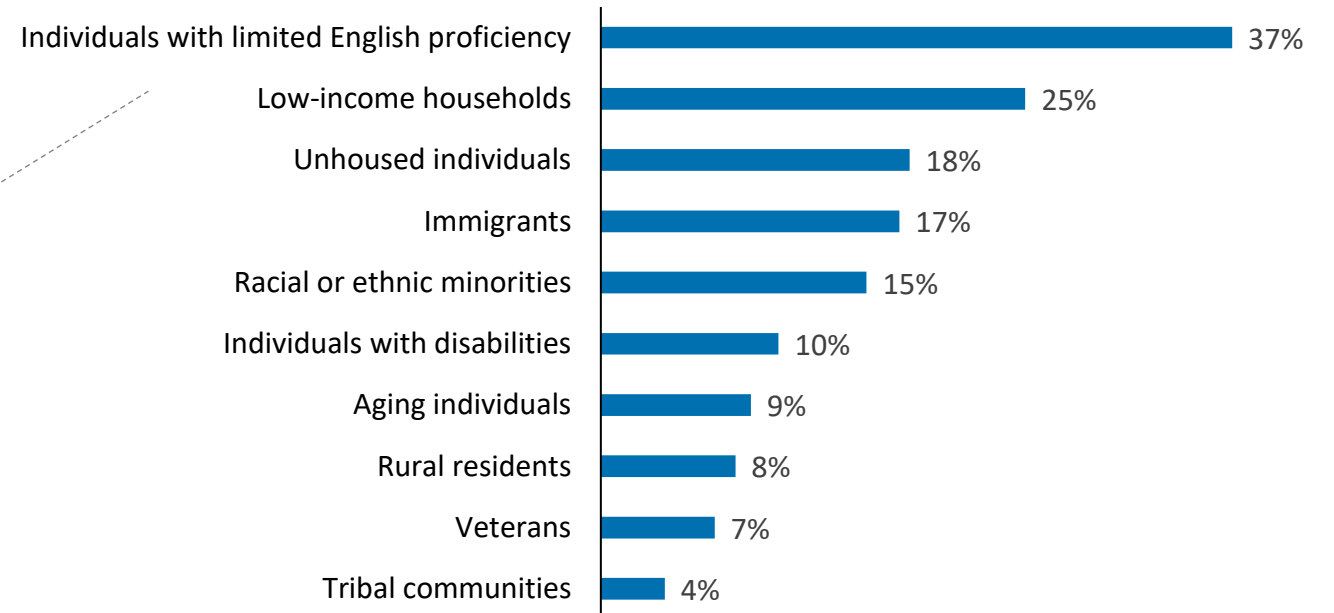
Individuals with limited English proficiency have the lowest rates of cybersecurity familiarity, followed by **low-income households** and **unhoused** respondents.

Are you familiar with cybersecurity measures to prevent unauthorized access and damage to your devices?

All Respondents



Not familiar
by Covered Population



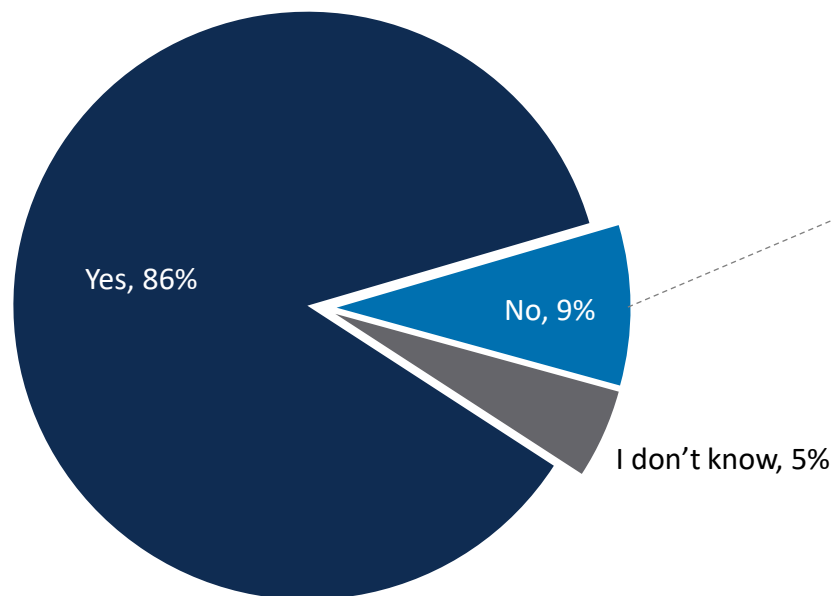


14% of **online survey** respondents who are familiar with cybersecurity measures either don't have cybersecurity measures installed on their devices or are not sure about it.

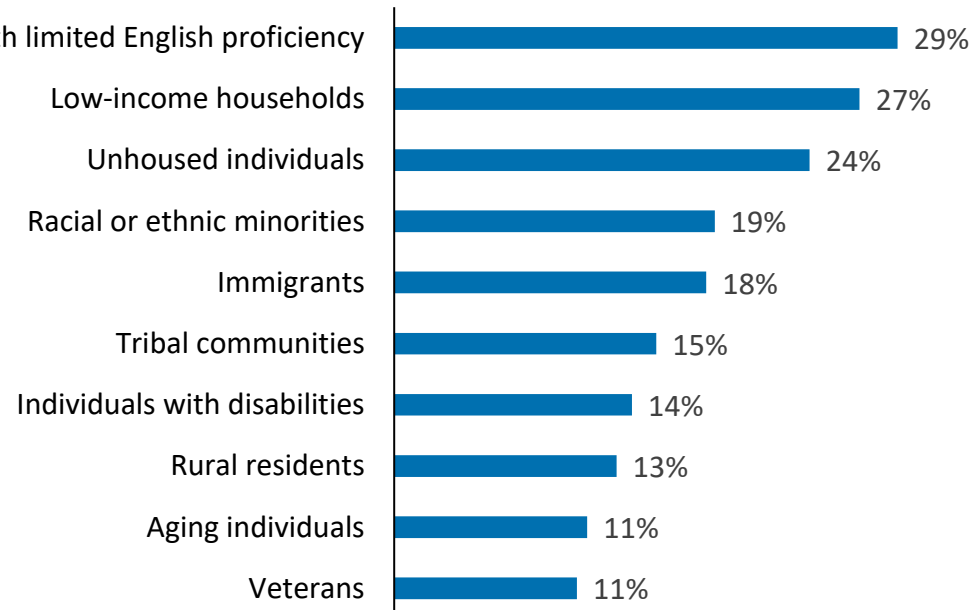
Respondents with **limited English proficiency**, respondents from **low-income households** and **unhoused** respondents have the lowest rates of cybersecurity measure adoption or awareness.

Do you have any cybersecurity measures set up on the desktop, laptop, or tablet computer you use?

All Respondents



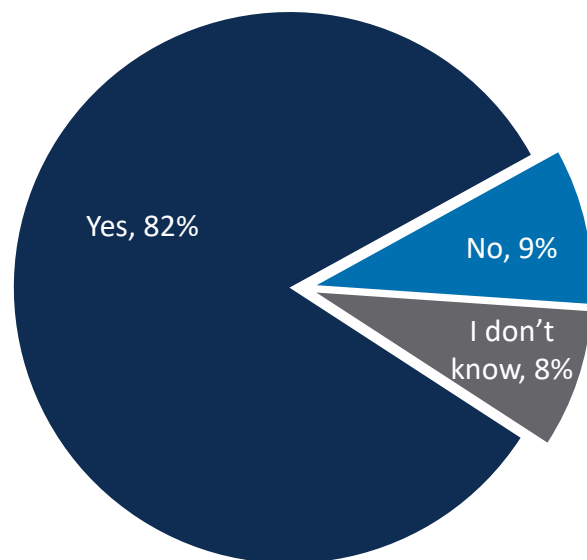
No or Don't Know
by Covered Population



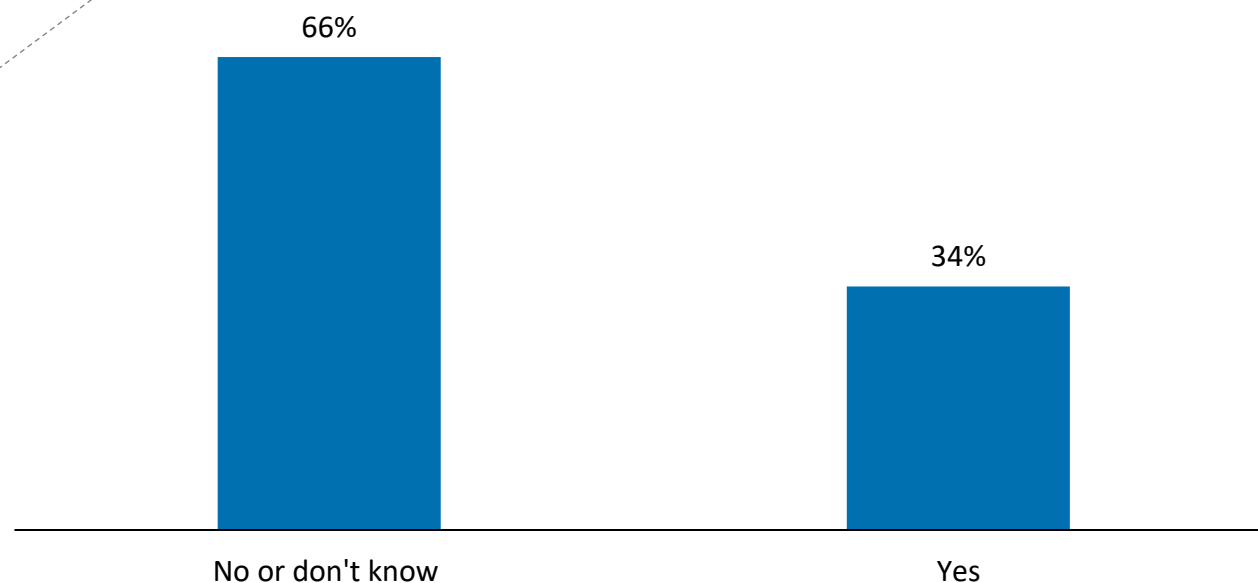


34% of online survey respondents who do not have cybersecurity measures installed on their devices, or are not sure if they do, are interested in computer training classes for themselves and their family members.

Do you have any cybersecurity measures set up on the desktop, laptop, or tablet computer you use?



Would you be interested in internet or computer training classes for you or your family? (Respondents who do not have cybersecurity measures set up)





Summary of Survey Findings

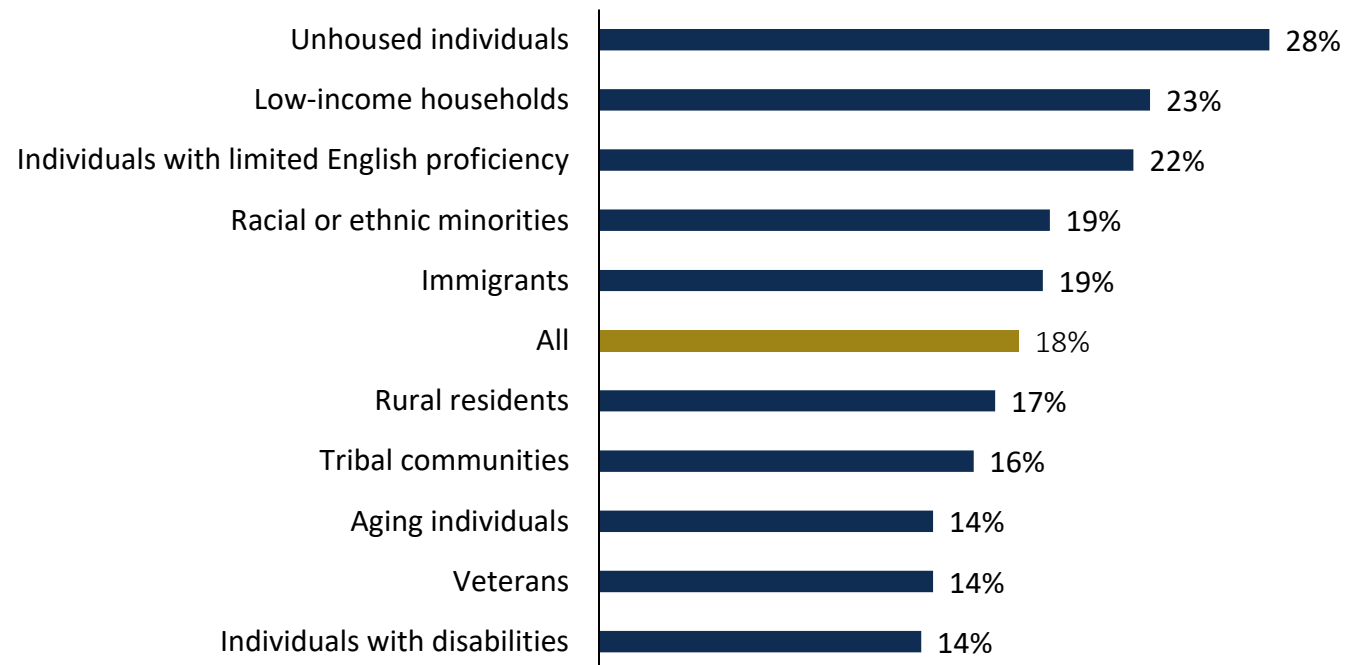
- ACP awareness is lowest among individuals with limited English proficiency and immigrants. These covered populations also have some of the highest share of respondents that don't know how to apply for internet affordability offerings.
- The Upper Rio Grande Valley region has the most awareness of and enrollment in ACP compared to other regions across the state.

18% of online survey respondents rarely or never access healthcare online.



Compared to all respondents, a higher share of **unhoused** respondents, **low-income** households and respondents with **limited English proficiency** indicate that they rarely or never use internet for accessing healthcare. **Individuals with disabilities, veterans** and **aging individuals** are comparatively more reliant on internet for healthcare access.

Rarely or Never use Internet for... Accessing Healthcare Information or Services

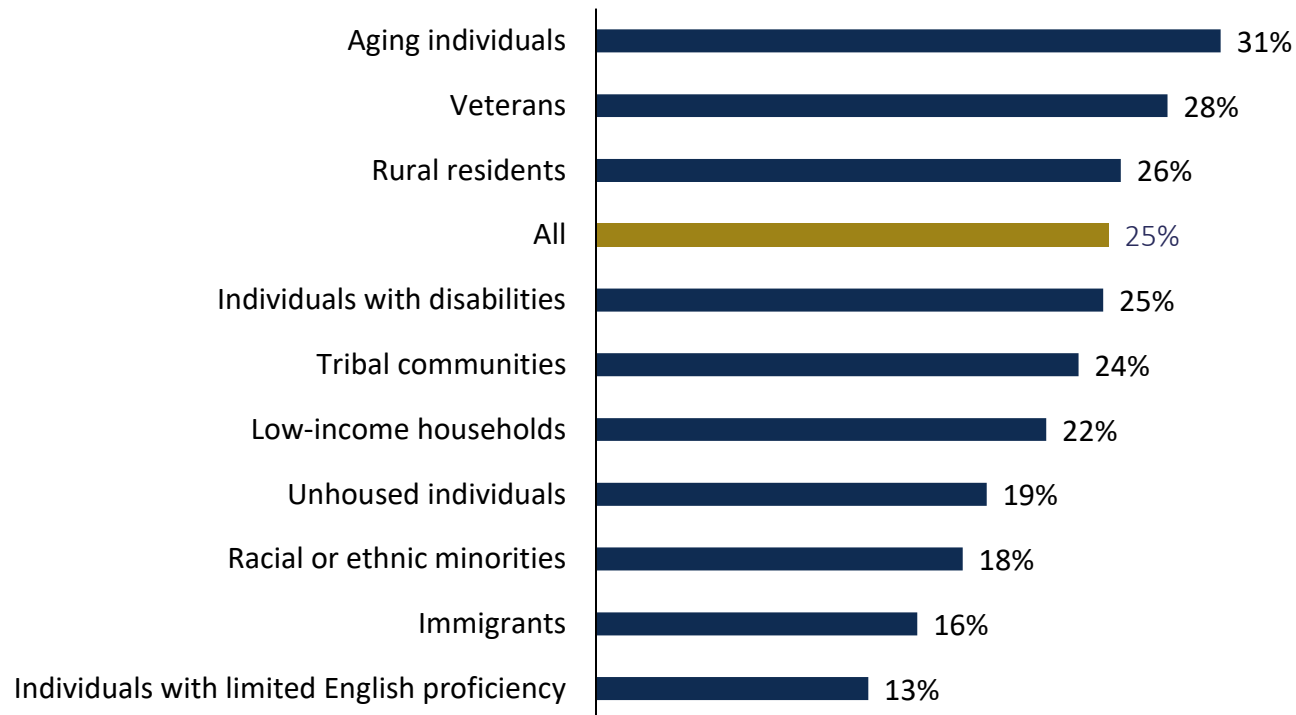


25% of online survey respondents rarely or never use the internet for accessing educational resources.



Compared to all respondents, a higher share of **aging** and **veteran** respondents indicate that they rarely or never use internet for accessing educational resources. Respondents with **limited English proficiency**, **immigrant** respondents, and respondents identifying as **racial or ethnic minorities** access classes online with greater frequency.

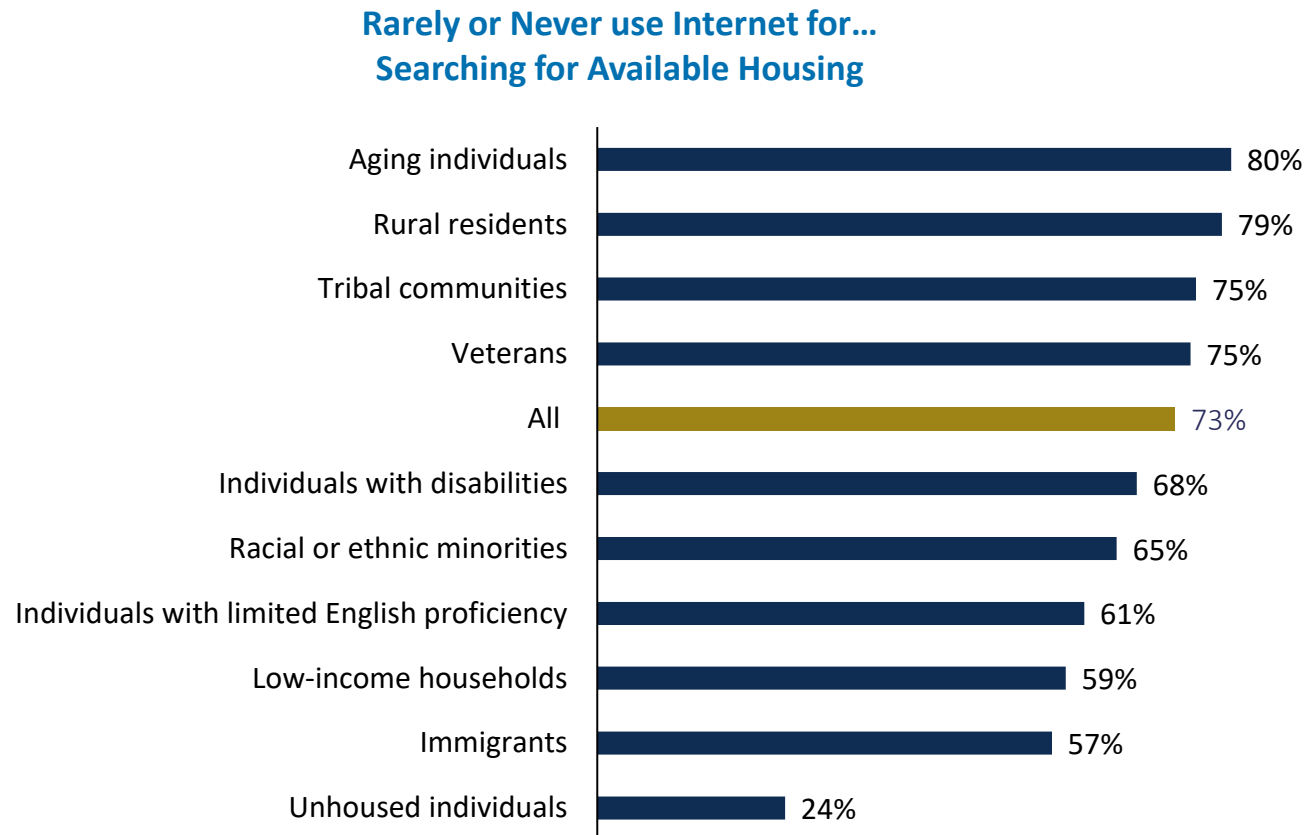
Rarely or Never use Internet for...
Accessing Educational Information or Resources



73% of online survey respondents rarely or never use the internet to search for available housing.



This share is higher for **aging individuals** and **rural residents**.

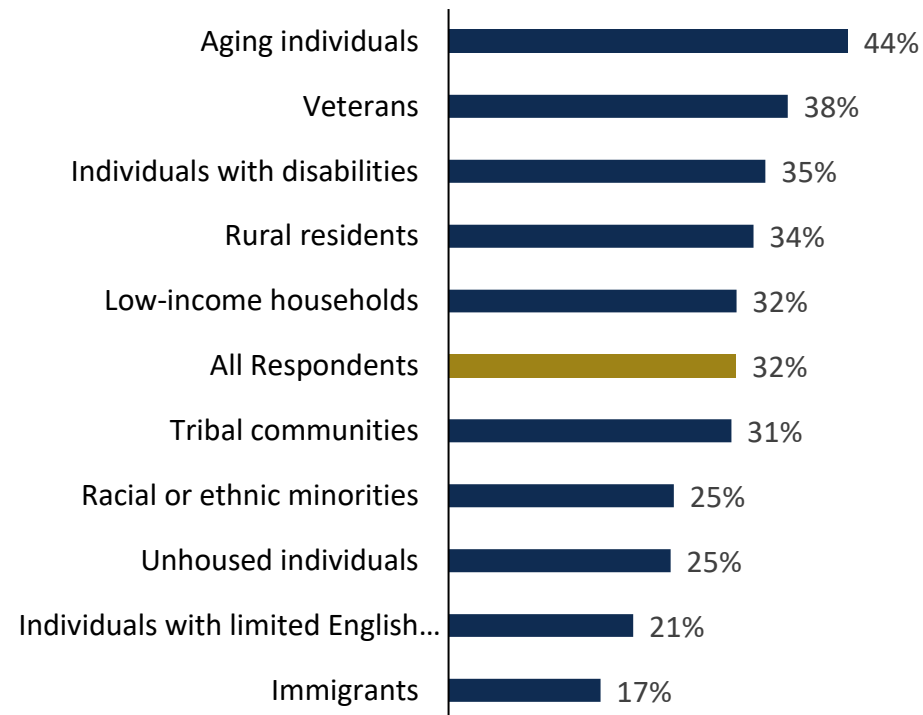


32% of online survey respondents rarely or never use the internet to improve skills for work.



Aging individuals, veterans and individuals with disabilities are less likely to use the internet to improve their skills for work compared to all survey respondents.

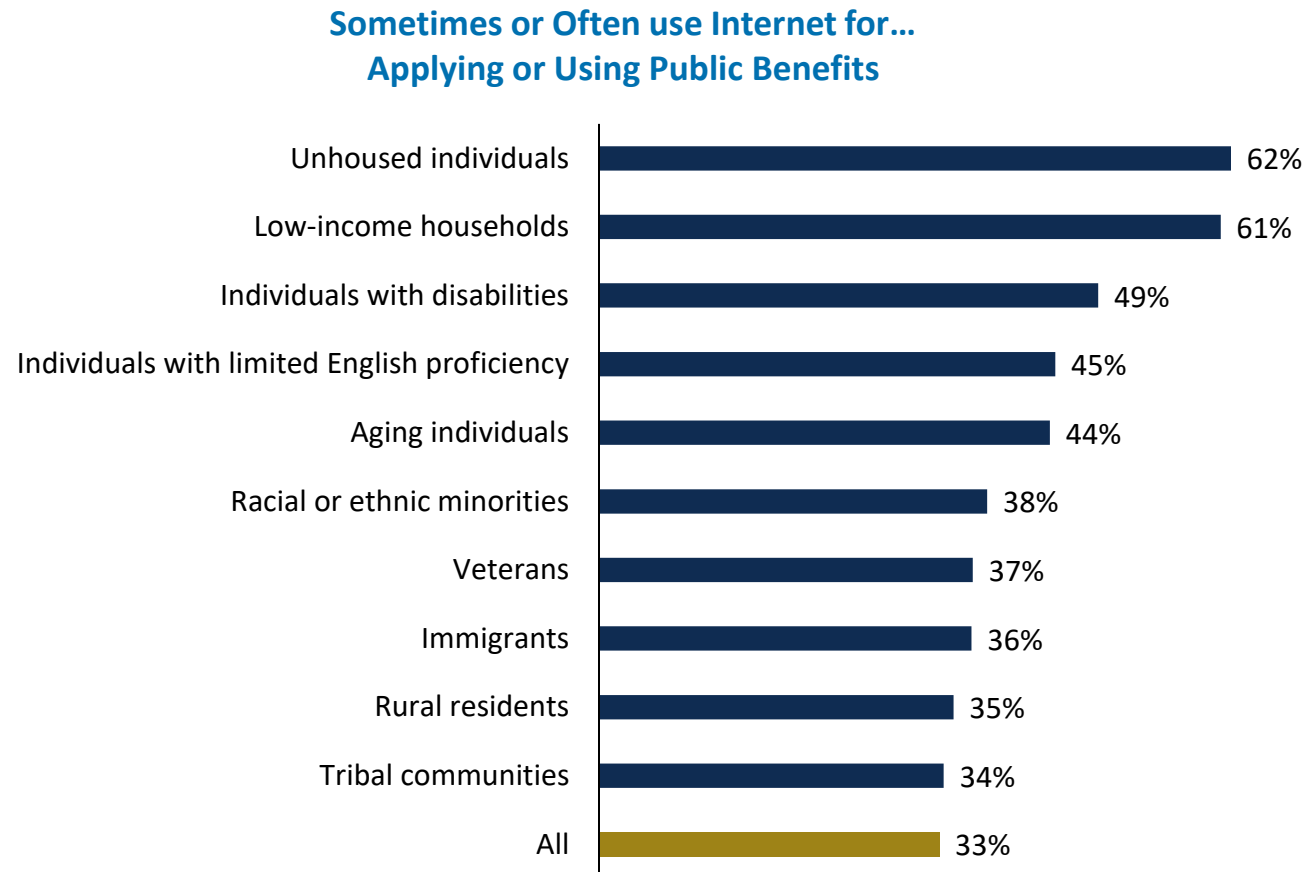
**Rarely or Never use Internet for...
Improving Skills for Work**



While 33% of online survey respondents sometimes or often use the internet to apply for or utilize public benefits, respondents belonging to all covered populations rely on the internet for these services at a higher rate.



This share is highest for **unhoused** individuals, **low-income** households and **individuals with disabilities**.

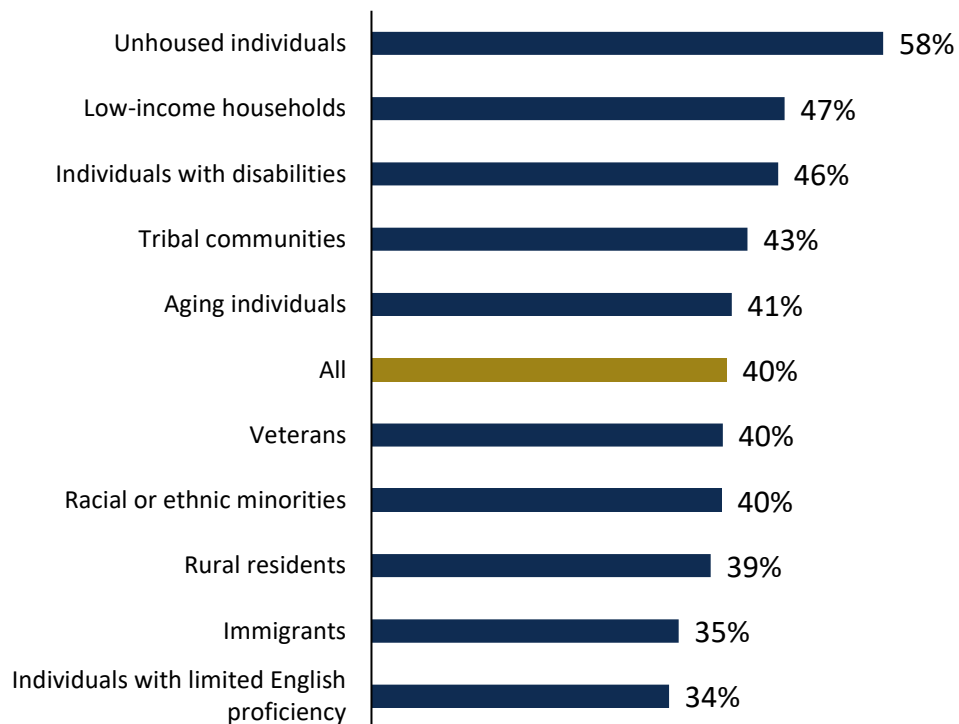


40% of online survey respondents have heard about the ACP and **21%** have heard about discounted internet services by ISPs.

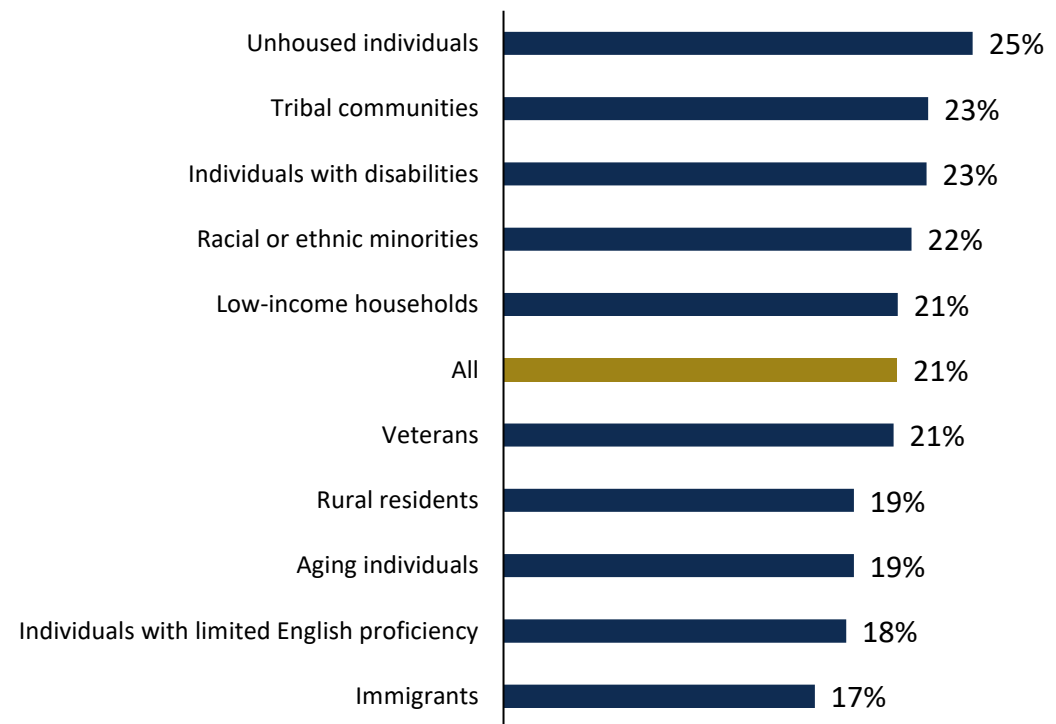


ACP awareness is lowest among individuals with limited English proficiency and immigrants.

ACP Awareness
Respondents who have heard about ACP



Discounted Internet Awareness
Respondents who have heard about discounted internet services by ISPs

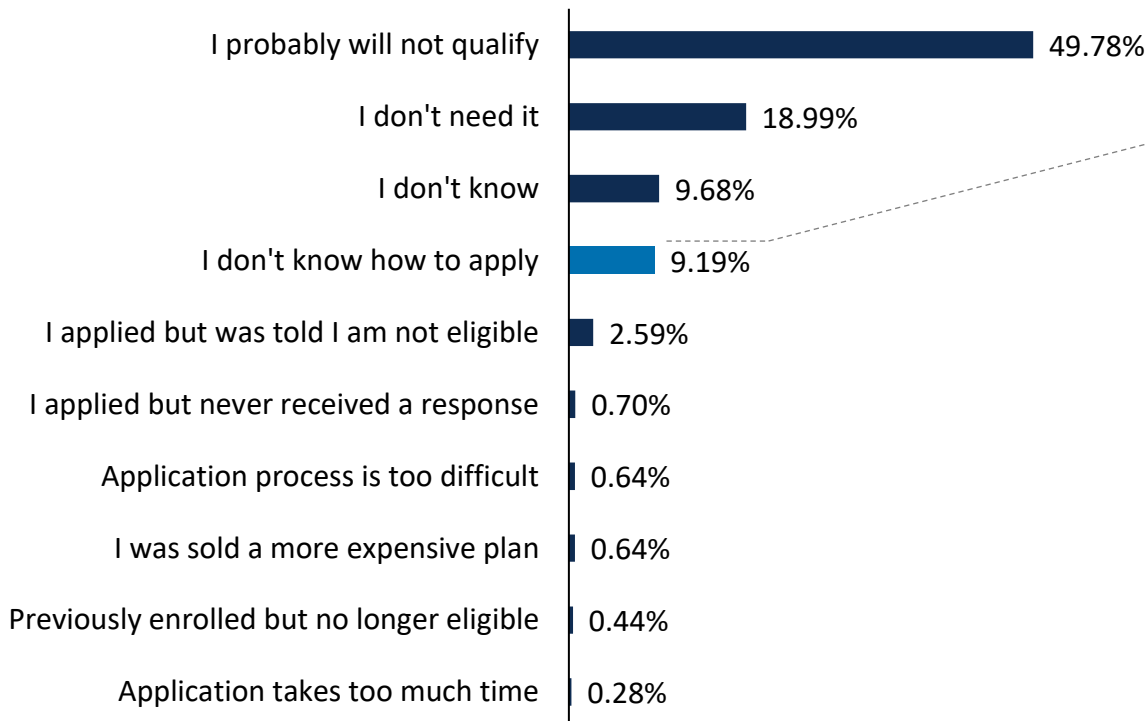


Among **online survey** respondents who are aware of ACP but are not enrolled in discounted internet programs, **50%** believe that they will probably not qualify, **19%** feel that they don't need it, and **9%** don't know how to apply.

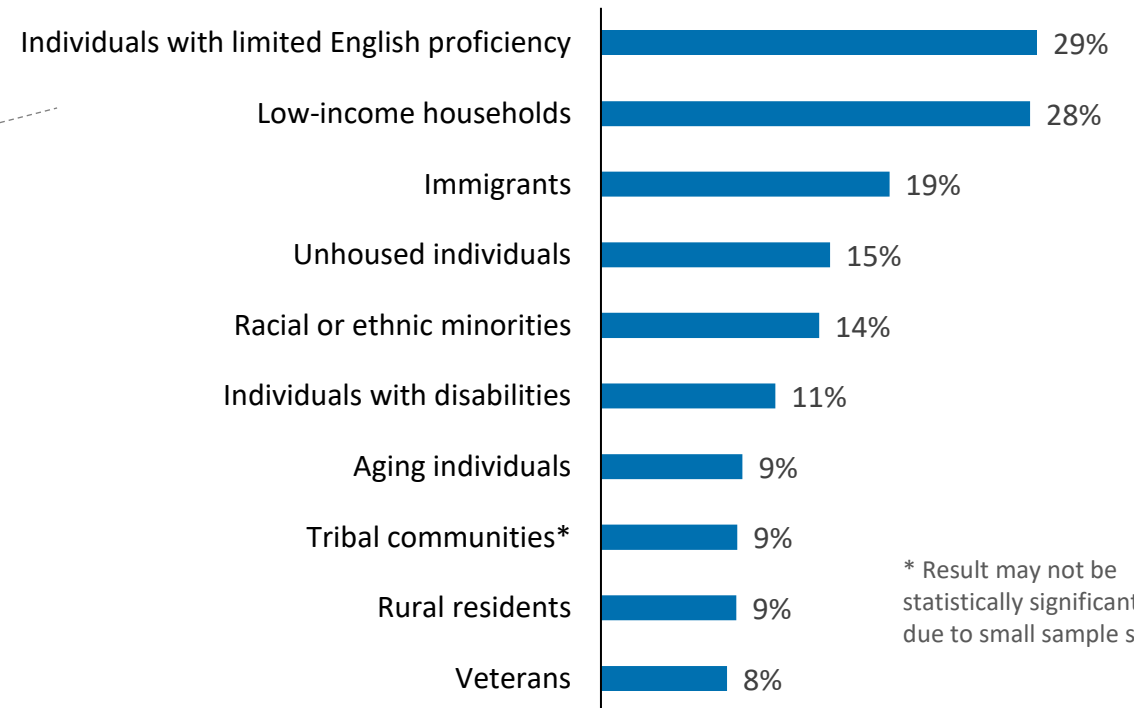


Individuals with limited English proficiency, low-income households and immigrants have the highest share of respondents who don't know how to apply.

Why are you not enrolled in discounted internet programs? (All respondents)



I don't know how to apply by Covered Population



* Result may not be statistically significant due to small sample size

A man wearing a dark cap and a plaid shirt stands with his arms crossed in a field. In the background, a combine harvester is visible, and the scene is set against a clear sky. The entire image has a dark blue overlay.

2.2 Survey Results by Region

Alamo Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 16% of respondents live in the Alamo Region.
 - Paper survey: Not statistically significant.
- 4% of survey respondents from the Alamo Region can't connect to the internet at home.
- 7% of respondents access the internet via mobile data plans only.
- 7% of respondents rely on smartphones as their only in-home device.
- 25% of respondents report internet speed and reliability are not adequate or good enough for their own needs or their family's needs.
- 33% of respondents pay over \$100 per month for internet.
- 44% of respondents have heard of ACP.

“You need internet first to talk about any of these resources. Reliability is an issue here. Internet is not consistent throughout the day. Lots of businesses with multiple subscriptions. It's expensive. Everything relies on internet, including the public transportation agency.” – [Public Meeting Attendee, Cuero, Texas](#)



Demographics	Total
Population ¹	2.9 million
Households ¹	1.0 million
Median household income ¹	\$65,000
Aging individuals ²	19%
Immigrants ²	11%
Incarcerated individuals ²	1%
Individuals with disabilities ²	14%
Individuals with limited English proficiency ²	5%
Low-income households ²	23%
Racial or ethnic minorities ²	64% (3 rd highest)
Rural residents ²	21%
Tribal communities ²	2%
Veterans ²	7% (2 nd highest)
Percentage of eligible households enrolled in ACP ⁴	44% (3 rd highest)

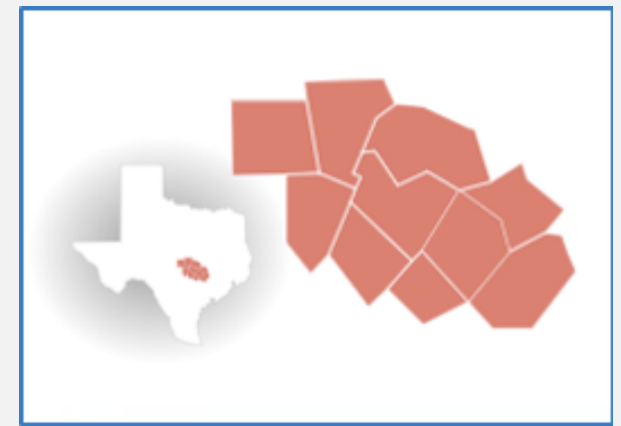
Capital Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 11% of respondents live in the Capital Region.
 - Paper survey: Not statistically significant.
- 4% of survey respondents from the Capital Region can't connect to the internet at home.
- 8% of respondents access the internet via mobile data plans only.
- 4% of respondents rely on smartphones as their only in-home device.
- 43% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family's needs.
- 41% of respondents pay over \$100 per month for internet.
- 42% of respondents have heard of ACP.

“ Limited options and high prices contribute to feeling left out of the region's development.”
– Public Meeting Attendee, Burnet, Texas

"There are transportation and language barriers to accessing resources. Even if there are resources, people can't get to them!" – Public Meeting Attendee, Burnet, Texas



Demographics	Total
Population ¹	2.4 million
Households ¹	0.9 million
Median household income ¹	\$84,000
Aging individuals ²	17%
Immigrants ²	15%
Incarcerated individuals ²	0%
Individuals with disabilities ²	10%
Individuals with limited English proficiency ²	4%
Low-income households ²	16%
Racial or ethnic minorities ²	46%
Rural residents ²	21%
Tribal communities ²	2%
Veterans ²	5%
Percentage of eligible households enrolled in ACP ⁴	29%

Central Texas Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 9% of respondents live in the Central Texas Region.
 - Paper survey: 25% of respondents live in the Central Texas Region.
- 5% of survey respondents from the Central Texas Region can't connect to the internet at home.
- 12% of respondents access the internet via mobile data plans only.
- 5% of respondents rely on smartphones as their only in-home device.
- 51% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family's needs.
- 48% of respondents pay over \$100 per month for internet.
- 36% of respondents have heard of ACP.
- Third highest concentration of respondents (28%) with upload speeds under 3 Mbps out of all 12 regions.

“Waller County has no access to internet or cell phone. Life is completely disconnected. NO access to emergency preparedness. Can't work from home. Going to Tractor Supply Parking lot to pay bills. No access to 911.”
– Public Meeting Attendee, Bryan, Texas



Demographics	Total
Population ¹	1.3 million
Households ¹	0.5 million
Median household income ¹	\$55,000
Aging individuals ²	19%
Immigrants ²	8%
Incarcerated individuals ²	2%
Individuals with disabilities ²	13%
Individuals with limited English proficiency ²	4%
Low-income households ²	26%
Racial or ethnic minorities ²	44%
Rural residents ²	34%
Tribal communities ²	2%
Veterans ²	8% (Highest)
Percentage of eligible households enrolled in ACP ⁴	31%

Gulf Coast Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 12% of respondents live in the Gulf Coast Region.
 - Paper survey: No responses.
- 5% of survey respondents from the Gulf Coast Region can't connect to the internet at home.
- 12% of respondents access the internet via mobile data plans only.
- 7% of respondents rely on smartphones as their only in-home device.
- 40% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family's needs.
- 43% of respondents pay over \$100 per month for internet.
- 33% of respondents have heard of ACP.

“There are discrepancies between perceived service coverage and actual availability in rural areas. There is a desire to update the map to accurately assess internet coverage.”

– Public Meeting Attendee, Bay City, Texas



Demographics	Total
Population ¹	7.3 million
Households ¹	2.5 million
Median household income ¹	\$76,000
Aging individuals ²	17%
Immigrants ²	23%
Incarcerated individuals ²	1%
Individuals with disabilities ²	10%
Individuals with limited English proficiency ²	9% (3 rd highest)
Low-income households ²	22%
Racial or ethnic minorities ²	63%
Rural residents ²	11%
Tribal communities ²	1%
Veterans ²	4%
Percentage of eligible households enrolled in ACP ⁴	29%

High Plains Region: Summary

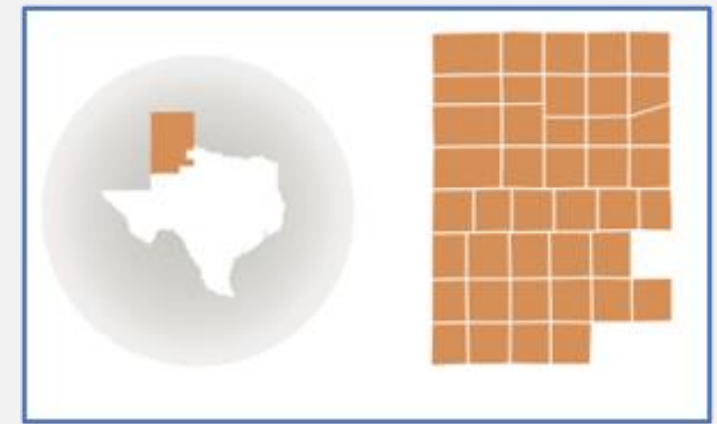
Public Survey Key Takeaways

- Valid responses:
 - Online survey: 9% of respondents live in the High Plains Region.
 - Paper survey: Not statistically significant.
- 3% of survey respondents from the High Plains Region can't connect to the internet at home.
- 6% of respondents access the internet via mobile data plans only.
- 6% of respondents rely on smartphones as their only in-home device.
- 25% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family's needs.
- 38% of respondents pay over \$100 per month for internet.
- 18% of respondents have heard of ACP.



“In our rural areas we have some good build out but the cost to keep that service running will look different than in urban areas. How will we keep those services ongoing long term? How do we help our providers stay in those rural communities? In the long term, how do we make sure that affordability stays a top priority?”

– Public Meeting Attendee, Lubbock, Texas



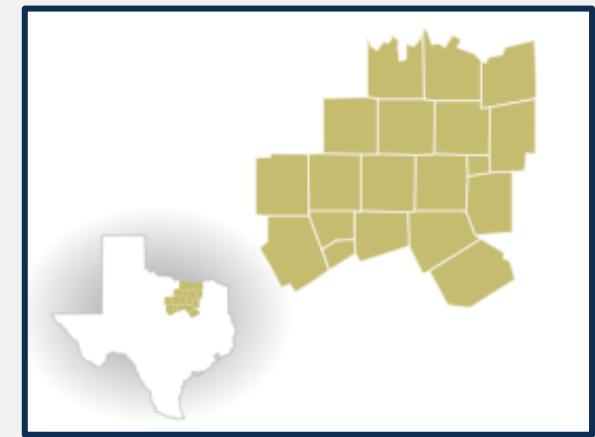
Demographics	Total
Population ¹	0.9 million
Households ¹	0.3 million
Median household income ¹	\$56,000
Aging individuals ²	19%
Immigrants ²	10%
Incarcerated individuals ²	2%
Individuals with disabilities ²	12%
Individuals with limited English proficiency ²	4%
Low-income households ²	26%
Racial or ethnic minorities ²	48%
Rural residents ²	44%
Tribal communities ²	2%
Veterans ²	5%
Percentage of eligible households enrolled in ACP ⁴	23%

Metroplex Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 13% of respondents live in the Metroplex Region.
 - Paper survey: 16% of respondents live in the Metroplex Region.
- 4% of survey respondents from the Metroplex Region can't connect to the internet at home.
- 9% of respondents access the internet via mobile data plans only.
- 9% of respondents rely on smartphones as their only in-home device.
- 32% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family's needs.
- 38% of respondents pay over \$100 per month for internet.
- 44% of respondents have heard of ACP.

“So much work is being done in building out in their community, but the area is growing so quickly that they're behind. Playing catch up is a challenge and providers make promises then don't follow through. [There is a] need for oversight.”
– Metroplex Virtual Public Meeting Attendee



Demographics	Total
Population ¹	8.1 million
Households ¹	2.9 million
Median household income ¹	\$79,000
Aging individuals ²	17%
Immigrants ²	18%
Incarcerated individuals ²	0%
Individuals with disabilities ²	10%
Individuals with limited English proficiency ²	6%
Low-income households ²	19%
Racial or ethnic minorities ²	52%
Rural residents ²	12%
Tribal communities ²	2%
Veterans ²	5%
Percentage of eligible households enrolled in ACP ⁴	39%

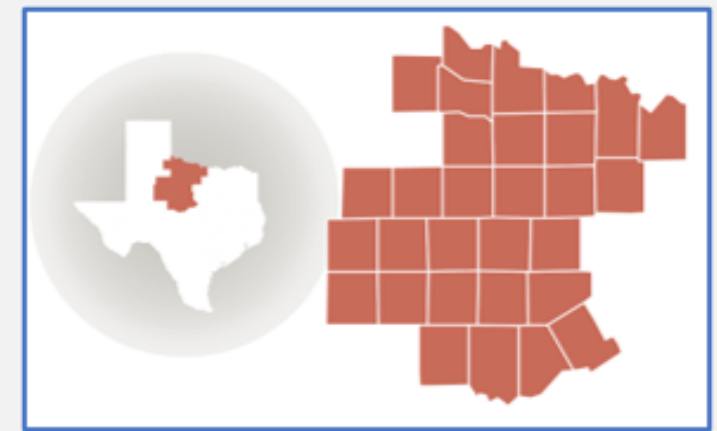
Northwest Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 5% of respondents live in the Northwest Region.
 - Paper survey: 4% of respondents live in the Northwest Region.
- 43% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family's needs.
- 43% of respondents pay over \$100 per month for internet.
- 34% of respondents have heard of ACP.
- Third highest concentration (40.8%) of respondents with download speed below 25 Mbps out of all regions.

“Starlink is the only option. It's expensive but I'd pay whatever because I need it. Almost the whole town is on satellite.”

– Public Meeting Attendee, Wichita Falls, Texas



Demographics	Total
Population ¹	0.6 million
Households ¹	0.2 million
Median household income ¹	\$52,000
Aging individuals ²	23% (3 rd highest)
Immigrants ²	6%
Incarcerated individuals ²	3% (Highest)
Individuals with disabilities ²	16% (2 nd highest)
Individuals with limited English proficiency ²	3%
Low-income households ²	23%
Racial or ethnic minorities ²	31%
Rural residents ²	58% (2 nd highest)
Tribal communities ²	2%
Veterans ²	7% (3 rd highest)
Percentage of eligible households enrolled in ACP ⁴	31%

South Texas Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 8% of respondents live in the South Texas Region.
 - Paper survey: No responses.
- 7% of survey respondents from the South Texas Region can't connect to the internet at home.
- 7% of respondents access the internet via mobile data plans only.
- 7% of respondents rely on smartphones as their only in-home device.
- 28% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family's needs.
- 36% of respondents pay over \$100 per month for internet.
- 38% of respondents have heard of ACP.

“ACP has a gap for families that don't meet the current financial requirements for enrollment, but still don't have the means to subscribe to internet due to lack of financial resources.”

– Public Meeting Attendee, Kingsville, Texas



Demographics	Total
Population ¹	2.4 million
Households ¹	0.8 million
Median household income ¹	\$45,000
Aging individuals ²	17%
Immigrants ²	20%
Incarcerated individuals ²	1%
Individuals with disabilities ²	13%
Individuals with limited English proficiency ²	15% (2 nd highest)
Low-income households ²	37% (Highest)
Racial or ethnic minorities ²	87% (2 nd highest)
Rural residents ²	24%
Tribal communities ²	1%
Veterans ²	3%
Percentage of eligible households enrolled in ACP ⁴	73% (Highest)

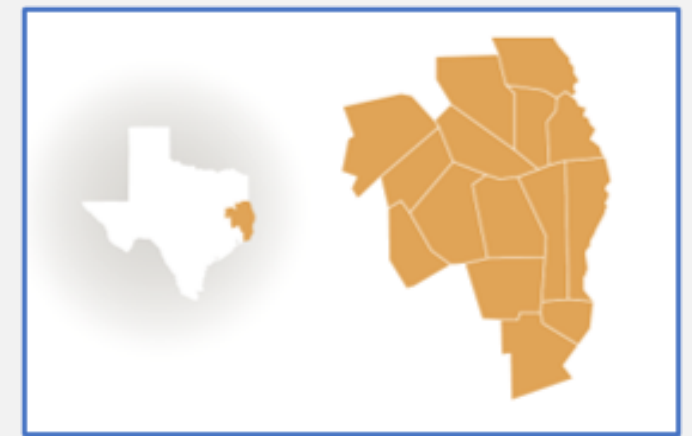
Southeast Texas Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 4% of respondents live in the Southeast Region.
 - Paper survey: No responses.
- 52% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family's needs.
- 58% of respondents pay over \$100 per month for internet.
- 40% of respondents have heard of ACP.
- Second highest concentration (45%) of respondents with download speed below 25 Mbps out of all regions.
- Highest concentration (45%) of respondents with upload speed below 3 Mbps out of all regions.



“Rural America has taken a step backward. Our landline telephone was sufficient up until a few years ago to communicate with others. Since new connections have stopped, our infrastructure communications have been abandoned for economic reasons. But now, we’re left without any sort of connection. No landline. No internet. No cell phone service.” – [Public Meeting Attendee, Lufkin, Texas](#)



Demographics	Total
Population ¹	0.8 million
Households ¹	0.3 million
Median household income ¹	\$51,000
Aging individuals ²	23% (2 nd highest)
Immigrants ²	7%
Incarcerated individuals ²	2% (3 rd highest)
Individuals with disabilities ²	17% (Highest)
Individuals with limited English proficiency ²	3%
Low-income households ²	28% (3 rd highest)
Racial or ethnic minorities ²	38%
Rural residents ²	52% (3 rd highest)
Tribal communities ²	2%
Veterans ²	6%
Percentage of eligible households enrolled in ACP ⁴	39%

Upper East Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 5% of respondents live in the Upper East Region.
 - Paper survey: Not statistically significant.
- 7% of survey respondents from the Upper East Region can't connect to the internet at home.
- 23% of respondents access the internet via mobile data plans only.
- 10% of respondents rely on smartphones as their only in-home device.
- 67% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family's needs.
- 60% of respondents pay over \$100 per month for internet.
- On average, residents of the Upper East Region pay the most for internet service as compared to other regions (\$120/month).
- 38% of respondents have heard of ACP.
- The Upper East Region has the highest concentration (50%) of respondents with download speed below 25 Mbps out of all regions.
- The Upper East Region has the second highest concentration (43%) of respondents with upload speed below 3 Mbps out of all regions.



“The first thing the county gets asked when people move is, ‘What is the internet like?’”

– Public Meeting Attendee, Longview, Texas



Demographics	Total
Population ¹	1.2 million
Households ¹	0.4 million
Median household income ¹	\$52,000
Aging individuals ²	25% (Highest)
Immigrants ²	7%
Incarcerated individuals ²	3% (2 nd highest)
Individuals with disabilities ²	15% (3 rd highest)
Individuals with limited English proficiency ²	2%
Low-income households ²	25%
Racial or ethnic minorities ²	32%
Rural residents ²	75% (Highest)
Tribal communities ²	2%
Veterans ²	6%
Percentage of eligible households enrolled in ACP ⁴	24%

Upper Rio Grande Region: Summary

Public Survey Key Takeaways

- Valid responses:
 - Online survey: 3% of respondents live in the Upper Rio Grande Region.
 - Paper survey: 51% of respondents live in the Upper Rio Grande Region.
- 32% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family’s needs.
- 36% of respondents pay over \$100 per month for internet.
- 48% of respondents have heard of ACP.

“Living out here can be isolating and lacking connection can reinforce and exacerbate that isolation. Broadband can lower barriers to communication and interaction. It's a public safety issue. There are cell phone dead zones everywhere. You need to be able to make contact.” – [Public Meeting Attendee, Alpine, Texas](#)



Demographics	Total
Population ¹	0.9 million
Households ¹	0.3 million
Median household income ¹	\$49,000
Aging individuals ²	17%
Immigrants ²	24%
Incarcerated individuals ²	0%
Individuals with disabilities ²	13%
Individuals with limited English proficiency ²	22% (Highest)
Low-income households ²	32% (2 nd highest)
Racial or ethnic minorities ²	87% (Highest)
Rural residents ²	10%
Tribal communities ²	2%
Veterans ²	6%
Percentage of eligible households enrolled in ACP ⁴	54% (2 nd highest)

West Texas Region: Summary

Public Survey Key Takeaways


- Valid responses
 - Online survey: 6% of respondents live in the West Texas Region.
 - Paper survey: 0.4% of respondents live in the West Texas Region.
- 27% of respondents report internet speeds and reliability are not adequate or good enough for their own needs or their family’s needs.
- 43% of respondents pay over \$100 per month for internet.
- 39% of respondents have heard of ACP.

“Internet is unreliable. People may have internet, but it is not always dependable. Affordability is an issue and so is mapping. There is a need for good, quality data. Low density needs it the most, particularly south of I-20.”

– Public Meeting Attendee, Midland, Texas



Demographics	Total
Population ¹	0.7 million
Households ¹	0.2 million
Median household income ¹	\$66,000
Aging individuals ²	17%
Immigrants ²	12%
Incarcerated individuals ²	1%
Individuals with disabilities ²	11%
Individuals with limited English proficiency ²	6%
Low-income households ²	21%
Racial or ethnic minorities ²	58%
Rural residents ²	34%
Tribal communities ²	1%
Veterans ²	5%
Percentage of eligible households enrolled in ACP ⁴	20%

A photograph of a group of people at a social gathering, overlaid with a semi-transparent blue filter. In the foreground, a woman with curly hair and sunglasses is smiling and looking upwards. Other people are visible in the background, some also wearing sunglasses. The overall mood is positive and social.

3. DRMTS Results & Analysis

DRMTS Overview

The Digital Resources Mapping Tool Survey (DRMTS) is an inventory of organizations that provide digital opportunity-related resources within Texas. The DRMTS is an online survey of organizations that currently or potentially work in the digital opportunity space, over a 4-month period, from April to August 2023.

The DRMTS captures and depicts where resource gaps may exist within Texas and identifies the digital opportunity programs and services currently available to Texans.

The DRMTS can help to generate a snapshot of where Texas is today in addressing digital opportunity, catalogue available digital opportunity programs and services, and highlight model programs that may be replicated throughout the state.



368 organizations responded to the DRMTS, with a **71% completion rate**.

A total of 980 individuals representing organizations across Texas opened the DRMTS.

368 respondents provided detail on their organization and/or their programmatic offerings.

261 respondents fully completed the survey from start to finish.



980
Survey Reach



368
Respondents



261
Completed Surveys



71%
Completion Rate

DRMTS Respondents: Organization Categories



282

Community Anchor
Institution (CAI) Entities
with 373 CAI programs*



192

Government and Public
Agency Entities
with 226 public programs*



184

Private Sector and
Non-Governmental Entities
with 201 private programs*

**Reflects the organizations that identified themselves under at least one entity subcategory. An individual organization may identify within one or multiple of the three entity types.*

DRMTS Respondents: Organization Types

Community Anchor Institution

School (K-12)

Library

Health clinic or health center

Hospital or other medical provider

Public safety entity (non-government)

Private university

Public housing or affordable housing organization

Community-support or community-based organization

Workforce development organization

Government or Public Organization

Tribal Government

State Government

County Government

Local or Regional Authority

Council or Metropolitan Planning Organization

Public Safety Entity (Government)

County Office of Education

Special District

Private Sector and Non-Governmental Organizations

Internet Service Provider

Labor Organization

Foundation/Philanthropic Organization

Non-Profit Organization

For-Profit Corporation or Business

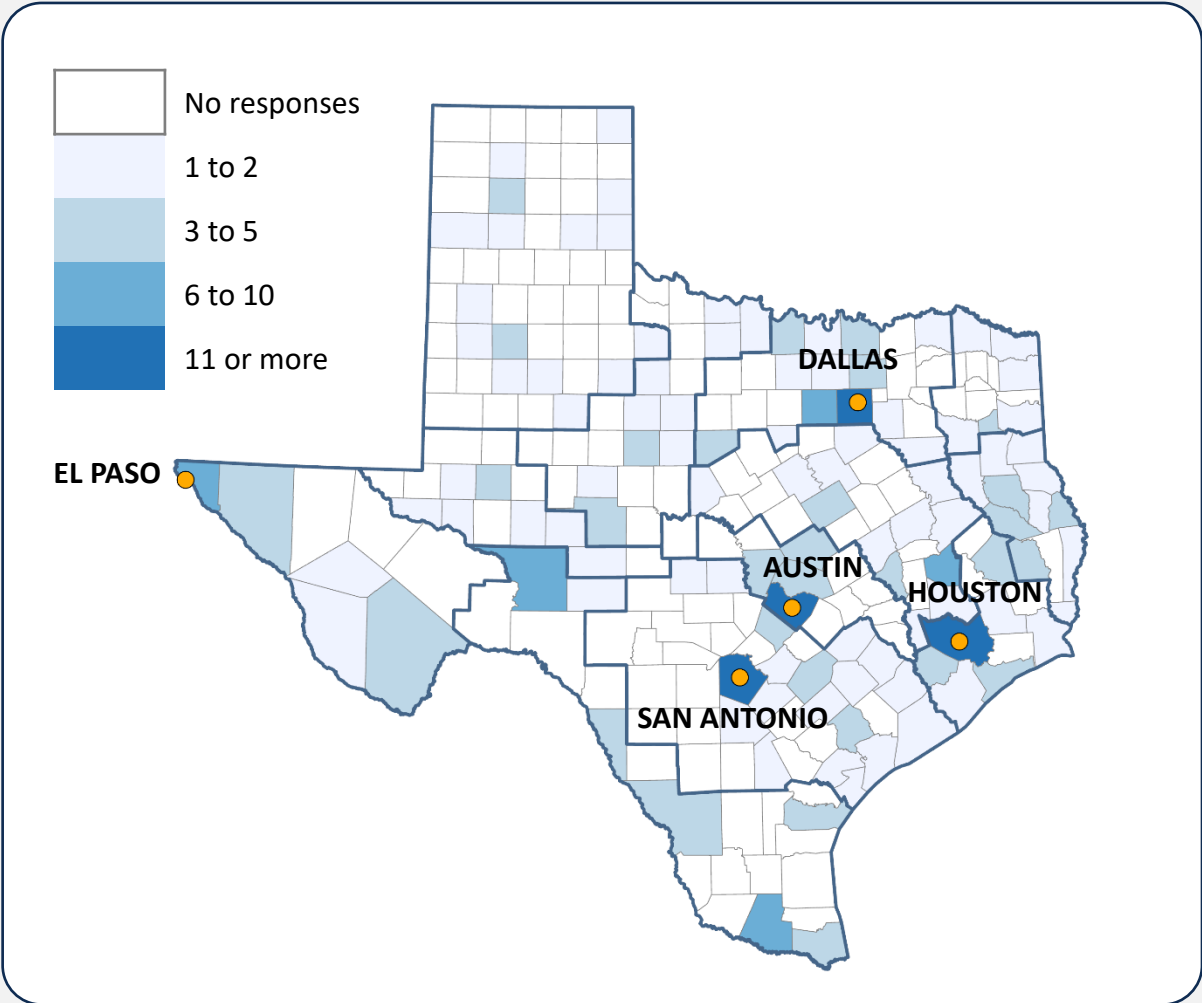
**Organizations may belong to more than one listed organization type*

Definitions: DRMTS Responses

Term	Definition
Total Reach	Number of people who accessed the online survey through various distribution means. Each person starting the survey is given a unique ID on the survey platform.
Invalid Responses	Survey responses where one or more of the following conditions is met: <ul style="list-style-type: none">• The entire survey response is blank.• Some of the response columns indicate that the respondent was testing the survey or did not put in any relevant or useful information (such as organization name, contact, program info, etc.).• The survey respondent is an internal tester.
Valid Responses	Survey responses after eliminating all the Invalid Responses. Valid Responses are used for survey analysis.
Complete Responses	Valid Responses where the respondent went through the entire survey, from the beginning to the end. A Complete Response does not mean that the respondent answered every survey question.

The DRMTS received responses from organizations based in **118 Texas counties**.

The greatest number of responses came from organizations based in Travis County (46). The survey received no responses from organizations in 136 counties.



Top Counties by Responses	
Travis	46
Harris	27
Bexar	22
Dallas	11

Respondent organizations cover varying service areas beyond the county in which they are based:

Respondent Service Areas	
Citywide or Across Multiple Cities	24%
Regional or Across Multiple Counties	24%
Countywide	22%
Statewide	15%
Specific to a Tribal Nation	1%



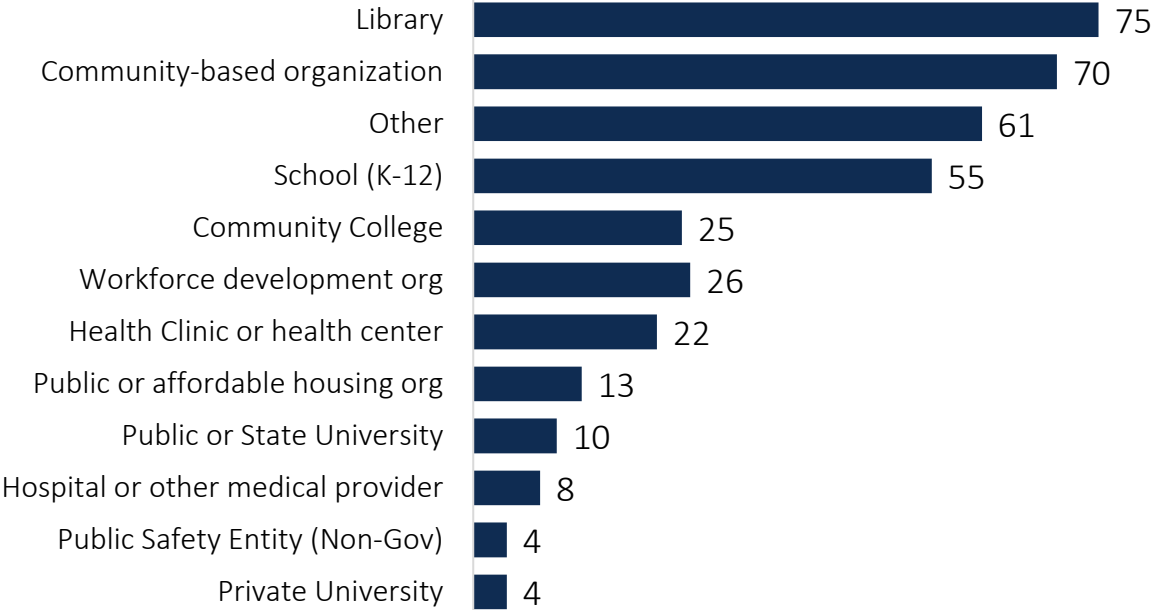
Survey Findings

- More than 230 organizations serve **6 of the 8 identified covered populations**. Low-income households are the most served covered population, with approximately four times the number of organizations offering services to this population than to incarcerated individuals.
- Surveyed organizations provide a broad array of Digital Opportunity programs, with **most programs focused on device access**, digital literacy and technical support, and broadband access and affordability.
- Many responding organizations, and over **85% of libraries** that responded to the survey, offer free WLAN or Wi-Fi for public use.
- **Lack of funding** emerged as the most significant barrier to organizations' ability to deliver digital opportunity programming, followed by lack of staff and organizational capacity. **Over 20% of DRMTS respondents reported difficulty in accessing funding sources.**
- A variety of organizations and organization types promote broadband subsidy programs such as the Affordable Connectivity Program (ACP) and provide/promote home internet subsidies.

Libraries and Community-Based Organizations represent over half of Community Anchor Institutions (CAIs) surveyed.

Libraries were the most represented organization group among CAIs, and non-governmental public safety entities and private universities the least.

Community Anchor Institutions by Subcategory*



Community Anchor Institutions in “Other” Category

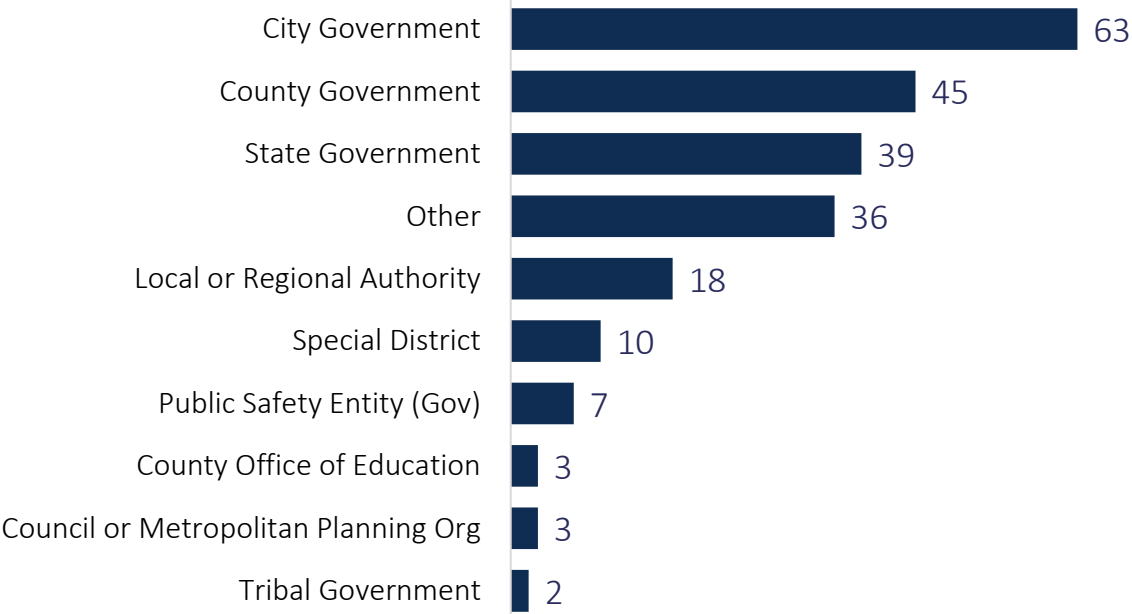
Adult Education
Art and creative industry related organizations
Economic Development Agencies
Correctional Education or Rehabilitative Centers
Advocacy Groups

**Respondents can choose more than one answer choice to this question in the survey.*

County government, city government and state government-related organizations represent over **75%** of the public organizations surveyed.

Within the government sector, city governments have the greatest share of survey responses.

Government Sector by Subcategory*



Government Sector in "Other" Category

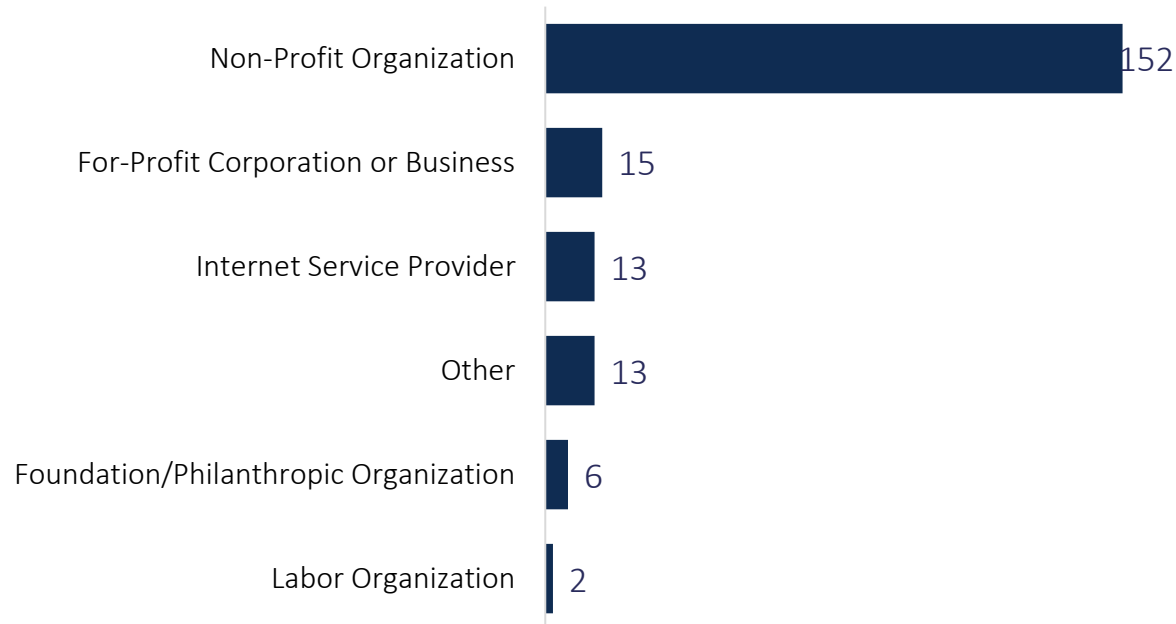
School Districts
Council of Governments
Political Subdivisions

**Respondents can choose more than one answer choice to this question in the survey.*

Non-profit organizations represent over **80%** of the private sector entities surveyed.

Responding non-profit organizations reflect a wide range of missions and activities, including but not limited to directly advancing digital opportunity.

Private Sector & NGOs by Subcategory*



Private Sector & NGOS in "Other" Category

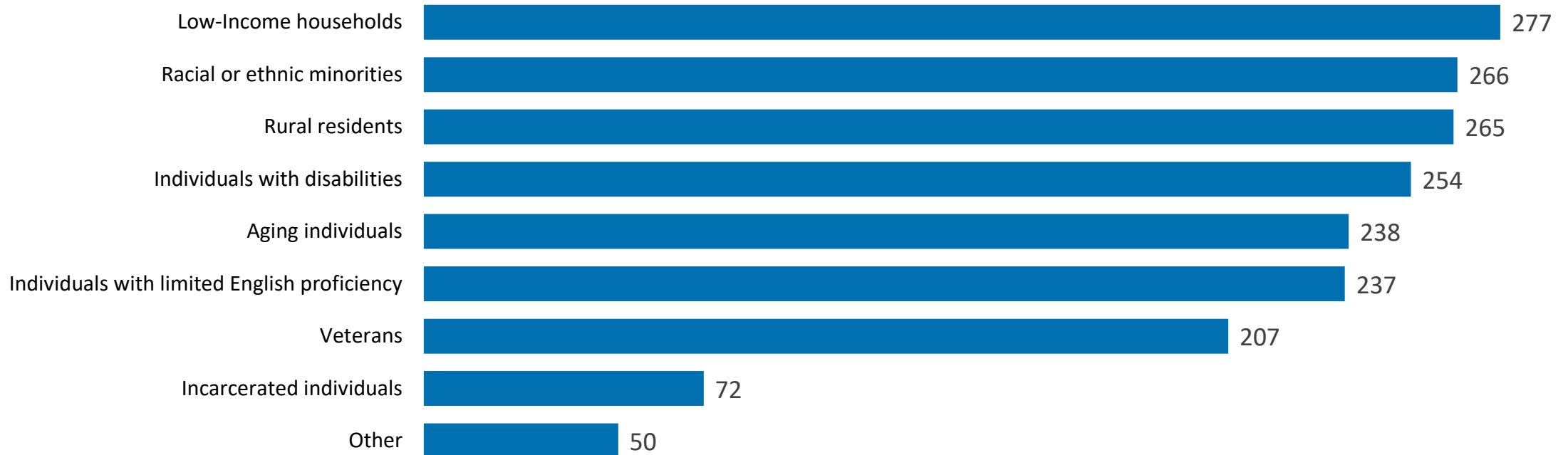
Digital literacy, fluency and upskilling
Workforce development
Senior care
Food banks
Lifeline and ACP enrollment assistance
Religious institutions
Hospitals
Museums

*Respondents can choose more than one answer choice to this question in the survey.

More than **230 responding organizations** serve **6 of the 8 covered populations**.

Low-income households are the covered population most served by DRMTS respondents; incarcerated individuals are the least served.

Covered Populations*

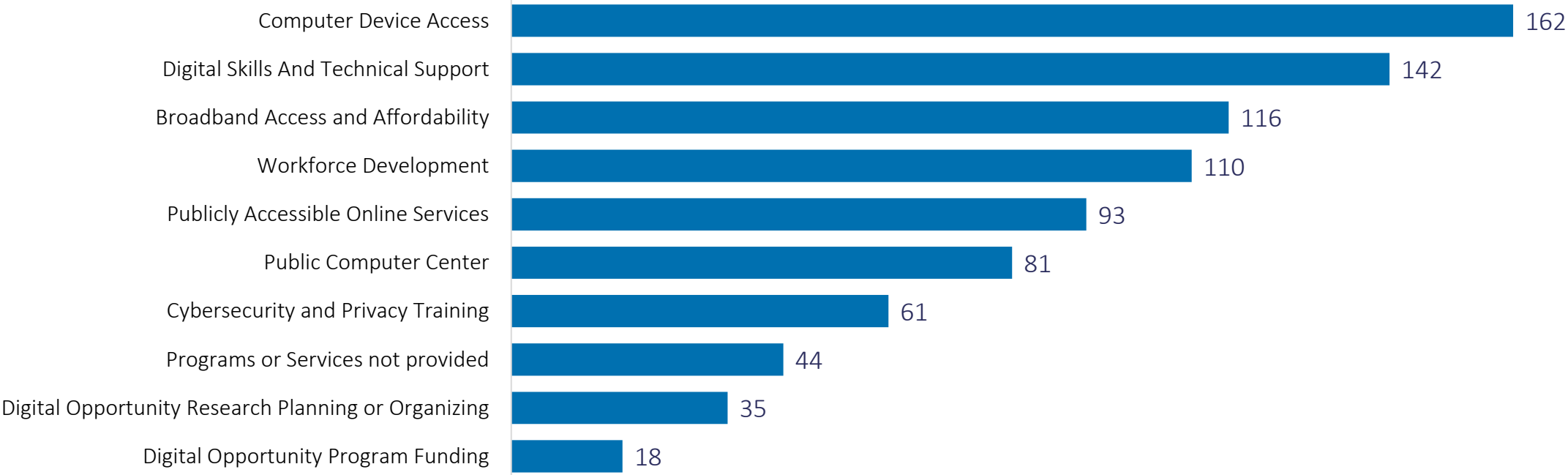


**Respondents can choose more than one answer choice to this question in the survey.*

Computer device access programs are the digital opportunity services most widely offered by survey respondents.

Surveyed organizations provide a broad array of digital opportunity programs, with most programs focused on device access, digital literacy and technical support, and broadband access and affordability.

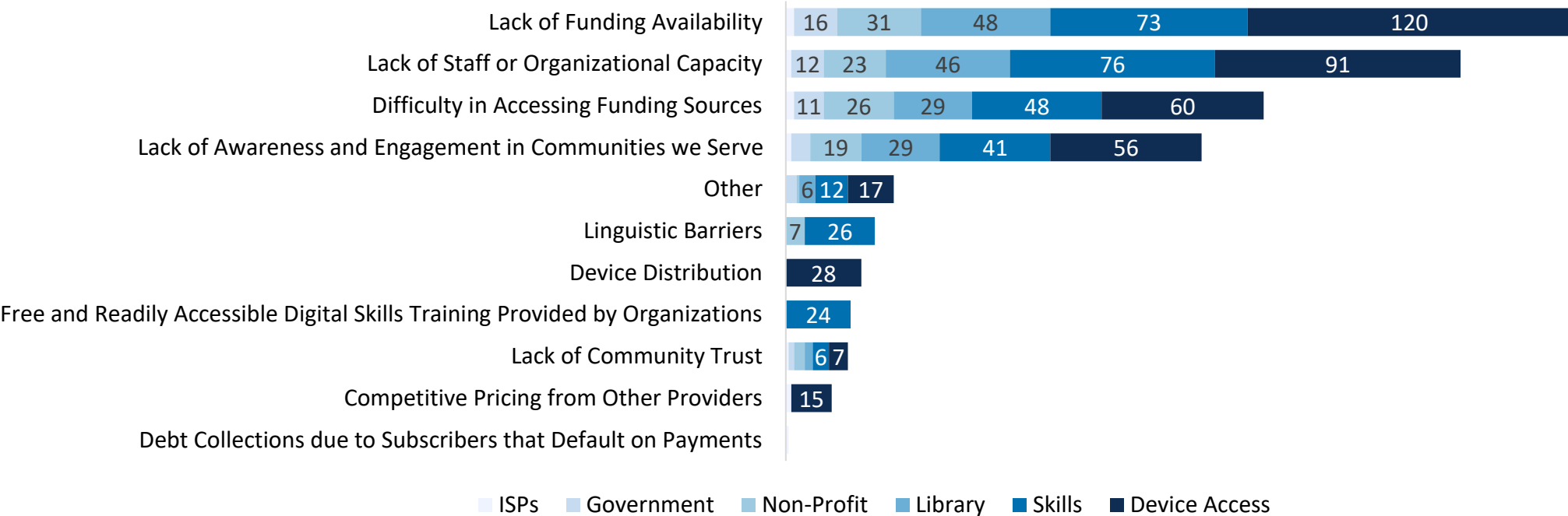
Programs and Services Offered by Respondent Organizations*



**Respondents can choose more than one answer choice to this question in the survey.*

Responding organizations identified the **lack of funding availability** as a significant barrier to the expansion of digital opportunity programming.

Barriers Impacting Organizations



*Respondents can choose more than one answer choice to this question in the survey.

Trust and programmatic stability emerged as themes in open-ended discussions of barriers impacting expansion and impact of digital opportunity programs.

Key themes that emerged in open-ended survey responses include: a general lack of broadband availability (particularly in rural or less dense areas with higher infrastructure costs); lack of staff training and organizational capacity; difficulty engaging participants for existing programs; lack of place-based digital navigation and technical support for accessing services; and increased program costs with little to no accompanying increase in funding.

One notable theme from respondents relates to the hesitancy or reluctance to enroll or participate in offered programs, either due to lack of trust, skepticism or general lack of interest or awareness.



“We would help provide information and/or support for people to register. So far, not have come here for that purpose.”

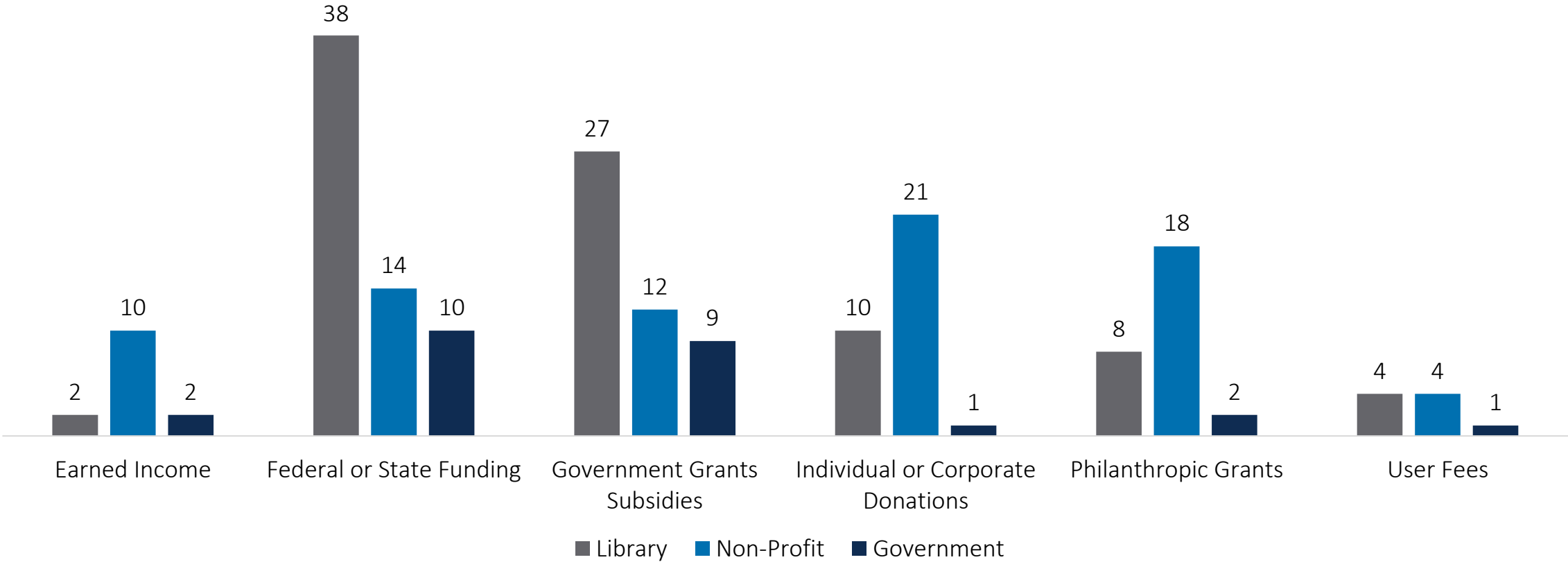
“Name brand recognition for ACP is poor; residents need to be convinced that the federal government will notify them if/when the program expires.”

“A lack of perceived need for internet service has become rare. There is a lack of trust in internet service providers and pricing that makes some residents reluctant to adopt digital tools. Many residents have experience with ‘promotional rates’ that expire without notice, resulting in overdrawn accounts and charges that are difficult to negotiate.”

“The local Community College just dropped their computer tech program for an associates degree. They said things are changing too rapidly to teach effectively. Jobs have to offer specific training for their employees.”

Federal or state funding and **government grants and subsidies** are the most common funding sources for respondent organizations.

Private funding (such as earned income and user fees) is the least common source of funding for organizations.



Over **20%** of DRMTS respondents reported difficulty in accessing funding sources.

Many organizations surveyed reported receiving public and private funding for their programs. Organizations such as schools and libraries regularly apply to various funding sources and receive public and private funding for their digital opportunity programs. But respondents reported challenges with these funding sources.

Contributing factors include lack of eligibility, complexity involved in layering multiple funding sources, and high need relative to available funding.

While funding for programs like device access programs may be available to many organizations, the common sentiment is that the amounts available are not sufficient to meet demand.



“We work with over 36 different language groups. We do have access to translation services but lack funding to translate the resources available into the various languages we serve.”

“Digital skills and technical support are funded by the basic student allotment. Inflation has increased costs to the District, but the basic allotment has not increased.”

“[The main issue is the] lack of training and support; it is too costly.”

“If the state employed digital navigators to help with education, that would be huge! We are currently applying for grant dollars to provide navigators at our facilities, but there is no guarantee of sustainability with many of these temporary programs.”

Public Wi-Fi hotspots hold an important place in the delivery of broadband to end users.

Wi-Fi networks offer affordable, scalable and versatile technologies that can facilitate the spread of internet access in rural and urban areas alike. Free high-speed internet ranks among the most popular services in local libraries.

Over 110 DRMTS respondents (including libraries, governments, and non-profits) reported that they provide free WLAN or Wi-Fi for public use. **Over half of respondent organizations that offer free connectivity are libraries**, which facilitate in-home access through mobile hotspot lending programs.



“One of the things we set out to do was really break down the school walls and just extend the education to the homes. Provide access where maybe there was none.”

- Myrna Martinez, Program Director at Harlandale Independent School District (ISD)

16% of all DRMTS respondents promote the Affordable Connectivity Program (ACP).

Respondents from all organization types promote the ACP and other home internet affordability programs.

	Promotes ACP Enrollment	Provides or Promotes Home Internet Subsidies
Internet Service Provider	3 (38% of ISP respondents)	3 (38% of ISP respondents)
Government Agency	24 (35% of govt. respondents)	8 (22% of govt. respondents)
Non-Profit or Community-Based Org	21 (58% of non-profit respondents)	12 (33% of non-profit/CBO respondents)
Library or School/Higher Ed	24 (35% of library/higher ed respondents)	10 (14% of library/higher ed respondents)

ISPs, community groups and local institutions are working to ensure that the ACP helps as many people as possible.

60 libraries, non-profits, government agencies and ISPs reported that they promote or provide enrollment to the ACP. 65% of ISPs that responded to the BDO's Texas ISP Survey reported that they participate in the ACP.

Respondent ISPs reported that they generally promote the ACP through advertisements and bill inserts. Online and print advertisements were the most reported form of outreach.

Other organizations, such as libraries and local non-profits, conduct awareness campaigns through existing programming. For example, the Corpus Christi Independent School District promotes the ACP during parent teacher conferences.



Community Tech Network (CTN) promotes and supports enrollment in the Affordable Connectivity Program.

4

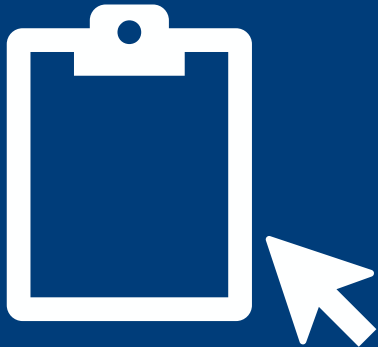
Appendix: Survey
Analysis
Methodology, ACS &
Other Data



4.1 Public Survey Data Cleaning

Data Cleaning: Total Reach

The survey reached a total of 13,296 people. A total of 11,048 people accessed the online survey through various distribution means. Another 2,248 respondents filled in the paper survey. Combined, the Total Reach of the survey is 13,296.



Data Cleaning: Blank Responses

However, 602 of the online survey respondents and 20 of the paper survey respondents did not attempt to answer the questions in the survey. These blank responses are not considered in the survey analysis.



13,296 TOTAL REACH

SURVEY CLEANING

ONLINE

PAPER

BLANK RESPONSES

602

20

Data Cleaning: Non-TX Residents / Residents Under 18

Of the respondents who did not leave the survey blank, 82 in the online survey and 262 in the paper survey stated that they are not a resident of Texas or are under the age of 18. These responses are not considered in the survey analysis.



13,296 TOTAL REACH

SURVEY CLEANING		ONLINE	PAPER
■ BLANK RESPONSES		602	20
■ NON-RESIDENTS/UNDER 18		82	262

Data Cleaning: Non-TX Zip Codes

Of the respondents who indicated that they are Texas Residents over the age of 18, 135 in the online survey and 17 in the paper survey entered a non-Texas ZIP code. These responses are not considered in the survey analysis.

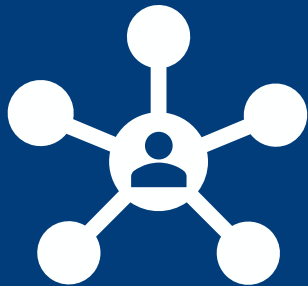


13,296 TOTAL REACH

SURVEY CLEANING	ONLINE	PAPER
BLANK RESPONSES	602	20
NON-RESIDENTS/UNDER 18	82	262
NON-TX ZIP CODES	135	17

Data Cleaning: Demographics Only

Of the remaining survey respondents, 789 in the online survey and 4 in the paper survey answered no questions other than the demographic questions. Since these responses do not provide any valuable information for the purpose of the survey, they were also removed.



13,296 TOTAL REACH

SURVEY CLEANING	ONLINE	PAPER
BLANK RESPONSES	602	20
NON-RESIDENTS/UNDER 18	82	262
NON-TX ZIP CODES	135	17
DEMOGRAPHICS ONLY	789	4

Data Cleaning: Valid Responses

After removing all the invalid responses from the surveys, we are left with a total of 11,385 Valid Responses for the public survey in Texas. We use these responses for survey analysis.



13,296

 TOTAL REACH

SURVEY CLEANING	ONLINE	PAPER
BLANK RESPONSES	602	20
NON-RESIDENTS/UNDER 18	82	262
NON-TX ZIP CODES	135	17
DEMOGRAPHICS ONLY	789	4

= 11,385
VALID RESPONSES

9,440
ONLINE SURVEY

1,945
PAPER SURVEY

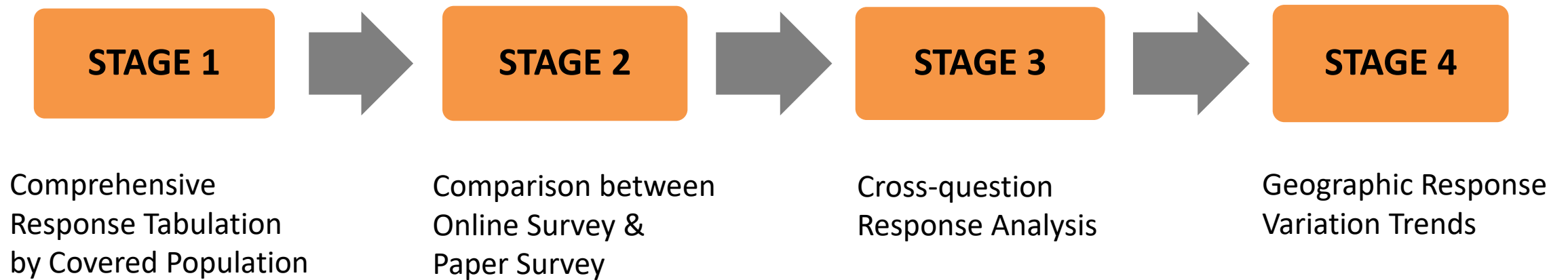
Data Cleaning: Complete Responses

Of the Valid Responses, 9,471 respondents made it all the way to the end of the survey. These are the Complete Responses. The Completion Rate is the share of Complete Responses from Valid Responses.



Analysis Framework

The survey analysis will take place through four consecutive stages.



4.2 DRMTS Data Cleaning

DRMTS Data Cleaning:

Total Reach

A total of 980 entities accessed the DRMTS survey through various distribution means.



980

TOTAL REACH

DRMTS Data Cleaning: Valid Responses

After removing all the invalid responses from the surveys, we are left with a total of 368 Valid Responses for the DRMTS in Texas. We use these responses for survey analysis.



DRMITS Data Cleaning: Complete Responses

Of the Valid Responses, 262 respondents made it all the way to the end of the survey. These are the Complete Responses. The Completion Rate is the share of Complete Responses from Valid Responses.



262

COMPLETE
RESPONSES



368

VALID RESPONSES



70%

COMPLETION RATE

4.3 Select Data Tables

Appendix: Regional Data

REGION	AGING	ETHNIC OR RACIAL MINORITIES	INCARCERATED	INDIVIDUALS WITH DISABILITIES	IMMIGRANTS	LIMITED ENGLISH HOUSEHOLDS
Alamo Region	19%	64%	1%	14%	11%	5%
Capital Region	17%	46%	0%	10%	15%	4%
Central Texas Region	19%	44%	2%	13%	8%	4%
Gulf Coast Region	17%	63%	1%	10%	23%	9%
High Plains Region	19%	48%	2%	12%	10%	4%
Metroplex Region	17%	52%	0%	10%	18%	6%
Northwest Region	23%	31%	3%	16%	6%	3%
South Texas Region	17%	87%	1%	13%	20%	15%
Southeast Region	23%	38%	2%	17%	7%	3%
Upper East Region	25%	32%	3%	15%	7%	2%
Upper Rio Grande Region	17%	87%	0%	13%	24%	22%
West Texas Region	17%	58%	1%	11%	12%	6%

Appendix: Regional Data

REGION	LOW-INCOME	LOW LITERACY	RURAL	TRIBAL	VETERANS	TOTAL ELIGIBLE HOUSEHOLDS ENROLLED IN ACP
Alamo Region	23%	29%	21%	2%	7%	44%
Capital Region	16%	20%	21%	2%	5%	29%
Central Texas Region	26%	24%	34%	2%	8%	31%
Gulf Coast Region	22%	28%	11%	1%	4%	29%
High Plains Region	26%	28%	44%	2%	5%	23%
Metroplex Region	19%	24%	12%	2%	5%	39%
Northwest Region	23%	24%	58%	2%	7%	31%
South Texas Region	37%	49%	24%	1%	3%	73%
Southeast Region	28%	26%	52%	2%	6%	39%
Upper East Region	25%	25%	75%	2%	6%	24%
Upper Rio Grande Region	32%	41%	10%	2%	6%	54%
West Texas Region	21%	32%	34%	1%	5%	20%

Sources: American Community Survey 5-year estimates (2017-2021). Digital Equity Population Viewer. U.S. Census Bureau | National Telecommunications and Information Administration. USAC data on ACP enrollment (August 2023). Benton Institute Affordable Connectivity Program enrollment performance tool for household eligibility.

Appendix: Regional Data

REGION	NO BROADBAND SUBSCRIPTION	SMARTPHONE ONLY
Alamo Region	31%	12%
Capital Region	22%	6%
Central Texas Region	38%	11%
Gulf Coast Region	27%	11%
High Plains Region	36%	16%
Metroplex Region	27%	9%
Northwest Region	42%	15%
South Texas Region	44%	18%
Southeast Region	46%	17%
Upper East Region	52%	15%
Upper Rio Grande Region	35%	13%
West Texas Region	38%	15%

Source: American Community Survey 5-year estimates (2017-2021).

Appendix D: Stakeholder Engagements and Participants

Table 1: Statewide Working Group Members

Name	Organization
Barbara Witte-Howell	American Association of Retired Persons (AARP) Texas
Jordana Barton-García	Connect Humanity
Sean Jackson	Disability Rights Texas
Darren Schauer	Guadalupe Valley Electric Cooperative (GVEC)
Sonny Snyder	Kickapoo Traditional Tribe of Texas
Gaby Rowe, Lead	Operation Connectivity
Mitrah Avini	Texas 2036
Megan Mauro	Texas Association of Business
Lori Henning	Texas Association of Goodwills
Ginny Lewis Ford	Texas Association of Regional Councils
Rudy Metayer	Texas Black Caucus Foundation
Greg Conte, Chair	Texas Broadband Development Office
Karen Reichek	Texas Department of Agriculture
Chief Nim Kidd	Texas Division of Emergency Management
Michael DeYoung	Texas Department of Housing and Community Affairs
John Hoffman	Texas Department of Information Resources
Cat Milner	Texas Department of Transportation
Julia Schacherl	Texas Education Agency
Robert Dole	Texas Health and Human Services

Bennett Sandlin	Texas Municipal League
Jarred Shaffer	Texas Office of the Governor
Kelty Garbee	Texas Rural Funders
Sarah Jacobson	Texas State Library and Archives Commission
Shawn Deabay	Texas Veterans Commission
Dawn Cronin	Texas Workforce Commission

Table 2: Business and Telecom Task Force Members

Name	Organization
James Bellina	AMA Communications
Dell Purdy	AMA TechTel
Leslie Ward	AT&T
Matt Carpenter	AW Broadband
Wyatt Ciomperlik	Bluebonnet Fiber
Jarod Branstetter	Cobb Fendley
Velma Cruz	Comcast
Tim Detwiler	Congruex
Scott Dalrymple	Crown Castle
Tushar Patel	Electronic Corporate Pages, Inc. (Western Broadband)
Matt Leach	Fiberlight
Eddie Shamp	Graybar
Ginger McCullough	HC Wireless, LLC
Cindy Sovine	Highline
Dr. Walt Magnussen	Internet2 Technology Evaluation Center (Texas A&M)
Erik Andersen	Lower Colorado River Authority (LCRA)
Travis Ralls, Chair	LCRA
Rene Gonzalez	Lit Communities
Heather Gold	Mears Broadband

Thomas Barnett	MSEC Communications, LLC
Mitchell Block	Net Ops Communications, LLC
Hilory Parker	Nexstream
Ebony Cooksey	Nextlink Internet
Lori Andrade	Rock Solid Internet – A Vtx1 Company
Stephen Lash	Signalnet Broadband, Inc.
Erica Myers	Space Exploration Technologies
Paul Narro	TekWav
Michael Tuck	Texas Area Telecom
Tony Bennett	Texas Association of Manufacturers
Walt Baum	Texas Cable Association
Cristy Burch	Texas Department of Transportation
Cat Milner	Texas Department of Transportation
Julia Harvey	Texas Electric Cooperative Association
Daniel Gibson	Texas Statewide Telephone Cooperative, Inc.
Wes Robinson	Texas Telephone Association
Heidi Shook	Victoria Electric Coop/Infinium Broadband
JJ McGrath	Wireless Internet Service Providers Association – Texas

Table 3: Civic and Social Task Force Members

Name	Organization
Eddy Smith	Abilene Library Consortium
Skye Downing	Community Tech Network
Jennifer Sanders	Dallas Innovation Alliance
Sean Jackson	Disability Rights Texas
Edward Melton	Harris County Public Library
Chris Bugbee	OneStar Foundation
Serita Lacasse	Senior Access (Capital Region)

Tim Morstad	AARP Texas
Susan Redford, Chair	Texas Association of Counties
Ginny Lewis Ford, Secondary chair	Texas Association of Regional Councils
Dr. Monica Cruz	Texas Demographic Center
John Hoffman	Texas Department of Information Resources
Wendy Woodland	Texas Library Association
Michael Martin	Texas Municipal League
Fedora Galasso	Texas Network of Youth Services
Kelty Garbee	Texas Rural Funders
Sarah Jacobson	Texas State Library and Archives Commission
Wynn Rosser	T.L.L. Temple Foundation
Gary Henderson	United Way Denton County

Table 4: Economic and Workforce Development Task Force Members

Name	Organization
Michael Ward, Jr.	Austin Urban Technology Movement AUTMHQ
Harrison Hiner	Communication Workers of America (CWA)
Britni Cuington	CWA
Kseniya Benderskaya	Federal Reserve Bank of Dallas
Lori Henning	Goodwill
Laura Alexander	Greater Houston Partnership
Servando Esparza	TechNet
Dr. Sharon Strover	Technology and Policy Information Institute
Dr. Rick Avery	Texas A&M AgriLife Extension Service
Warren Cude	Texas Farm Bureau
Lori Dodd	Texas Midwest Community Network

Courtney Arbour, Chair	Texas Workforce Commission
Kasey Coker	The High Ground of Texas
Ron Garza	University of Texas Rio Grande Valley

Table 5: Education Task Force Members

Name	Organization
Drex Owusu	Dallas Foundation
Michele Vick	Distance Education Professional Development Center (at Texas A&M)
Gaby Rowe	Operation Connectivity
Dr. Kizuwanda Grant	Paul Quinn College
Dr. Daniel King	Region 1 Education Service Center (ESC)
Jacob Cottingham	Texas Association of Community Colleges
Dr. Crystal White	Texas Association of Community Schools
Kevin Brown	Texas Association of School Administrators
Julia Schacherl, Chair	Texas Education Agency
Dr. Tina Jackson	Texas Higher Education Coordinating Board
Laurel Garcia	Texas Public Charter Schools Association
Dee Carney	Texas School Alliance
Dale Bundy	Texas State Technical College
Kristina Hartman	Windham School District

Table 6: Essential Services Task Force Members

Name	Organization
Mike Hutchings	Combined Arms

Kelli Merriweather, Chair	Commission on State Emergency Communications
Ryan Brown	Feeding Texas
Greg Shigemasa	Texans Veterans Commission
Anna Mallett	Texas ABLE
Tina Clark	Texas Department of Criminal Justice
Nim Kidd	Texas Department of Emergency Management
Michael DeYoung	Texas Department of Housing and Community Affairs
Angela Standridge	Texas Technology Access Program at University of Texas at Austin
Ashley Harris	United Ways of Texas

Table 7: Essential Services Task Force Members

Name	Organization
Sean Hanna	Meadows Mental Health Policy Institute
Greg Hansch	National Alliance on Mental Illness Texas
Tom Banning	Texas Academy of Family Physicians
Shelby Tracy	Texas Association of Community Health Centers
David Gruber	Texas Department of State Health Services
Nora Belcher	Texas e-Health Alliance
Robert Dole, Chair	Texas Health and Human Services
John Henderson	Texas Organization of Rural and Community Hospitals
Kelly Cheek	Texas Rural Health Association
Shawn Deabay	Texas Veterans Commission
Mari Robinson	University of Texas Medical Branch

Table 8: Alamo Region Working Group Members

Name	Organization
Claudia Mora, Co-chair	Alamo Area Council of Governments
Gary Broz	City of Edna
Eric Whiting	City of Fredericksburg
Susan Sankey	City of Gonzales
Tim Crow	City of Gonzales
Maria Hernandez	City of Saint Hedwig
Rhia Pape	City of San Antonio
Darrek Farrell	City of Victoria
Mark Bethune	Community Action Committee of Victoria
Angie Cuellar	Cuero Chamber of Commerce
Patti Holub	Education Service Center (ESC) Region 20
Laura Deiss	ESC Region 3
Roger Castillo	FiberLight
Michael Ada, Co-chair	Golden Crescent Regional Planning Commission
Louis Morales	Golden Crescent Area Agency on Aging
Catherine Franklin	Goliad County Rural Transit
Chelsea Steffek	Hallettsville Economic Development Corporation
Craig Cook	Hill Country Telephone Cooperative
Nina Campos	Infinium Broadband
Brian Cunningham	Jackson Electric Cooperative
Commissioner Shelby Dupnik	Karnes County
Terri Parker	La Ward Telephone Exchange
Dan Williams-Capone	Meals on Wheels Victoria

Marcie Trevino Ripper	SA Digital Connects
Cristina Martinez	San Antonio Food Bank
Jessica Strom	San Antonio Housing Authority
Tonya McDill	Sparklight
Shannon Longoria	Texas General Land Office
Mike Bennett	The Arc of San Antonio
Bethany Castro	United Way of the Crossroads
Donald Jirkovsky	University of Houston – Victoria
Jason Hassay	University of Texas at San Antonio
Robin Knipling	Victoria County
William Blanchard, President	Victoria Sales Tax Development Corporation (VSTDC)
Nicki Stohr	Wilson County Public Libraries
Michael Milson	Workforce Solutions Golden Crescent

Table 9: Capital Region Working Group Members

Name	Organization
Adena Lewis	Bastrop County Tourism & Economic Development
Debbie Bresette	Bastrop County Cares
Carsi Mitzner	Brightspeed
Charles Simon, Chair	Capital Area Council of Governments
Dr. Phillip Eaglin	Changing Expectations
Chloe Mun	City of Austin
Nehemiah Pitts	City of Austin
Khotan Harmon	City of Austin
Karen Gunkel	Colorado Valley Communications
Harrison Hiner	CWA
Jennifer Carter	Goodwill Central Texas

Robert Hunt	Guadalupe Valley Telephone Cooperative
Catherine Crago	Housing Authority of the City of Austin
Tom Chapman	Heritage Broadband
Emily Steinberg	Lead for America – American Connection Corps
Rene Gonzalez	Lit Communities Broadband, Inc.
Peter Jones	Llano County
Hilory Parker	Nexstream
Susie Cannon	Smithville Chamber of Commerce
Ann Graham	Texans for the Arts
Matthew Russell	Texas Computer Education Association

Table 10: Central Texas Region Working Group Members

Name	Organization
Matt Wolfe	Brazos County
Jim Bouse	Brazos WiFi
Carsi Mitzner	Brightspeed
Michael Parks, Co-chair	Central Texas Council of Governments
Uryan Nelson, Co-chair	Central Texas Council of Governments
Anna Barge	Central Texas Council of Governments
Rene Ochoa	City of Gatesville
Dorothy Jackson	Heart of Texas Council of Governments
Judge Byron Ryder	Leon County
Jennifer Prather	Nortex Communications
Peggi Goss	United Way of Brazos Valley

Table 11: Gulf Coast Region Working Group Members

Name	Organization
Stephanie Loving	Comcast
Andrew Van Chau	Fort Bend County
Jahan Tolliver	Fort Bend County
Laura Alexander	Greater Houston Partnership
John Speirs	Harris County Broadband Office
Trevor Moore	Horrocks
Nathan Chapman	Horrocks
Onyinye Akujuo, Chair	Houston-Galveston Area Council
Omar Fortune	Houston-Galveston Area Council
Charlene Stubblefield	Prairie View A&M University
Mike Price	Vaquero River Estates
Brooke Bacuetes	Waller County

Table 12: High Plains Region Working Group Members

Name	Organization
Riley Abbott	Cap Rock Telephone Cooperative, Inc
Mark Washington	Five Area Telephone Cooperative, Inc
Patrick Sherrill	Poka Lambro Telephone Cooperative, Inc.
Keralee Clay	Amarillo Area Foundation
Rich Gagnon	City of Amarillo
James Brown	City of Lubbock
Michael Keough	ESC Region 16
Matt Leach	FiberLight
Kay McDowell	Lubbock Chamber of Commerce
Marie Rieger	Lubbock Chamber of Commerce

Brooke Witcher	Lubbock Public Library
Alex Guerrero, Co-chair	Panhandle Regional Planning Commission
Andrew Monroe	Plains Internet, LLC
Kelly Davila	South Plains Association of Governments
Wade Maner	South Plains Telephone Cooperative, Inc.
Smiley Garcia	Texas Tech University Health Sciences Center
Dr. John Gachago	Texas Tech University Health Sciences Center
Dr. Cynthia Jumper	Texas Tech University Health Sciences Center
Rich Kendrick	West Texas Rural Telephone Cooperative
Allen Hyer	XIT Rural Telephone Cooperative, Inc.

Table 13: Metroplex Region Working Groups Members

Name	Organization
Carsi Mitzner	Brightspeed
Armando Cantu	CARDBoard Project
Genesis Gavino	City of Dallas
Stephanie Ramirez	City of Dallas
Kelly Baggett	City of Fort Worth Economic Development
Michael Joy	City of Grand Prairie
Trevor Minyard	City of McKinney
Nicole Brown	City Of Terrell
Warren Ketterman	City of Waxahachie
Britni Cuington	CWA
Ben Magill	Dallas College
Judge Todd Little	Ellis County
Liz Harling	Family Literacy Coalition
Nathan Chapman	Horrocks
Trevor Moore	Horrocks

Donna Simmons	Kaufman County
Prit Patel, Co-chair	North Central Texas Council of Governments
Connor Sandro	North Central Texas Council of Governments
Jesse Borries	Oso Electric
Dianne Connery	Pottsboro Area Public Library
Debi Darter	Quinlan Economic Development Corp
Ken Smith	Revitalize South Dallas Coalition
Wes Jurey	South Dallas Employment Project
Eric M. Bridges, Co-chair	Texoma Council of Governments
Stephanie Chandler	United Way Grayson County
Cathy Lee	United Way Metro Dallas
Stephanie Mace	United Way of Metropolitan Dallas

Table 14: Northwest Region Working Group Members

Name	Organization
Brandon Wright	Cable One
Kim Little	City of Coleman, EDC
Judge Mike Campbell	Clay County
Judge Dale Spurgin	Jones County
Will Carroll, Mayor	City of Throckmorton
Adam Steed	Nortex Regional Planning Commission
Judge Dan Hicks	Scurry County
Robyn Wertheim	State Representative Stan Lambert's Office
Ricky Martinez	Taylor Telephone Cooperative, Inc.
Terra New, Chair	West Central Texas Council of Governments
Ron Kitchens, CEO	Wichita Falls Chamber

Table 15: South Texas Region Working Group Members

Name	Organization
Wyatt Ciomperlik	Bluebonnet Fiber
Lillie Blanchard	Cameron County
Sandra Barba	City of Brownsville
Olga Moya	City of Brownsville
Jorge Cardenas	City of Brownsville
Helen Ramirez	City of Brownsville
Daniel Vera	City of Edinburg
Lonnie Hunt, Co-chair	Deep East Texas Council of Governments
Roberto Haddad	DHR Health
Jaime Diez	Gigabit Fiber
Ron Hall	RGV 911
Dennis Moreno	RGV 911
Shanna Burke, Co-chair	South East Texas Regional Planning Commission
Veronica Gonzales	UTRGV
Judy Quisenberry	Valley Baptist Legacy Foundation
Patrick McDonnell	Valley Telephone Cooperative, Inc.

Table 16: Southeast Region Working Group Members

Name	Organization
Sherry Brecheen	City of Onalaska Public Library
Thurman Bartie	City of Port Arthur
Mickey Slimp	Deep East Texas Council of Governments
Wayne McDaniel	Hardin County
Eddie Hopkins	Jasper Economic Development Corporation
Mercedes Franks	Judy B. McDonald Public Library

Erin Windham	Nacogdoches ISD
Wynn Rosser	T.L.L. Temple Foundation
Nancy Windham	Texas Forest Country Partnership

Table 17: Upper East Region Working Group Members

Name	Organization
Chris Brown, Co-chair	Ark-Tex Council of Governments
Brandon Prince	Atlanta ISD
Judge Bobby Howell	Bowie County
Lance Hall	Bowie County
Carsi Mitzner	Brightspeed
Lee Sleeper	Bullard ISD
Judge Travis Ransom	Cass County
Robbin Bass	Congressman Nathaniel Moran's Office
Keith Lloyd	Conterra Networks
Judge Tanner Crutcher	Delta County
Rebecca Gage	East Texas Council of Governments
Lynda David	East Texas Council of Governments
Daniel Patterson	East Texas Council of Governments
Chuck Vanderbilt, Co-chair	East Texas Council of Governments
Wes Robinson	Eastex Telephone Cooperative, Inc.
Rusty Dorman	Eastex Telephone Cooperative, Inc.
Dr. Todd Schneider	ESC Region 7
Larry Montgomery	ETEX Fiber
Charlie Cano	ETEX Fiber
Kent Burgess	GrantWorks
Dr. Evan Dolive	Greater Longview United Way
Judge Brandon Bell	Lamar County

Brock McCorcle	State Bank of DeKalb
Scott Norton	TexAmericas Center

Table 18: Upper Rio Grande Region Working Group Members

Name	Organization
Don Wetterauer	Alpine Public Library
Lynette Brehm	Big Bend Regional Hospital District
Rusty Moore	Big Bend Telecom
KC Huhn	Borderplex Connect
Alma Aranda	Borderplex Jobs
Mary Cruz DeLeon	Federal Reserve Bank of Dallas
Joel Muniz	Dell Telephone Cooperative
Andrea Hutchins	El Paso Chamber President
Laura Ponce	El Paso Community Action Program Project BRAVO
Marco Fernandez	El Paso Community College
Stephanie Acosta	El Paso Community Foundation
Roberto Ransom	El Paso County
Cristian Martinez	El Paso County
Angie Haro	ESC Region 19
Gilda Gil	Hudspeth Community Resource Coordination Group (Region 10)
Judge Mackenzie	Hudspeth County
Todd Jagger	Jeff Davis County & Rio Grande Council of Governments
Bill Schlesinger	Project Vida
Peggy O'Brien, Chair	Rio Grande Council of Governments
Andrea Tirres	Sacred Heart
Horacio Hernandez	San Elizario ISD
Pema Garcia	Texas A&M University

Luis Hernandez	University of Texas at El Paso
Ken Baugh	Van Horn Education Foundation
Kelly Boydston	West Texas Food Bank
Odette Flores-Ruiz	Workforce Solutions Borderplex

Table 19: West Texas Region Working Group Members

Name	Organization
Clifton Jones	Angelo State University
Laura Sanders	Big Bend Telephone Company
John Austin Stokes, Co-chair	Concho Valley Council of Governments
Jonathan Cutrer	Concho Valley Electric Cooperative
Keith Lloyd	Conterra
Kellie Wilks	Ector County ISD
Randon Lance	ESC Region 15
Casey Ritchie	ESC Region 18
Kent Burgess	GrantWorks
Debbie Dodds	Greenwood ISD
Brandon Corbin	Menard County
Teresa Burnett	Monahans Chamber of Commerce
Mitchell Block	Net Ops Communications LLC
Miranda Boler	Permian Basin Regional Planning Commission
Paul Donovan	PMD RE Consulting Services, LLC
Matt Snowden	Poka Lambro Telephone Cooperative, Inc.
Patrick Sherrill	Poka Lambro Telephone Cooperative, Inc.
A. Feliz. Abalos	Richard C. Abalos Law Office
Kathy Keane	Rural Consultant
Dr. Timothy Benton	Texas Tech University Health Sciences Center

Rick Bacon, Co-chair	Tom Green County Commissioner
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Table 20: Stakeholder Meeting Dates

Date	Meeting Name
4/17/2023	Statewide Working Group Kickoff
5/9/2023	Civic and Social Engagement Task Force Kickoff
5/9/2023	Education Task Force Kickoff
5/10/2023	Economic & Workforce Development Kickoff
5/10/2023	Essential Services Task Force Kickoff
5/11/2023	Business and Telecommunications Task Force Kickoff
5/11/2023	Health Task Force Kickoff
5/12/2023	Regional Working Group Kickoff
5/15/2023	Statewide Working Group Meeting 2
6/5/2023	Upper Rio Grande Regional Working Group Meeting
6/5/2023	Alamo Area Regional Working Group Kickoff
6/6/2023	Civic and Social Engagement Task Force Meeting 2
6/6/2023	Education Task Force Meeting 2
6/6/2023	High Plains Regional Working Group Kickoff
6/7/2023	Economic & Workforce Development Task Force Meeting 2
6/7/2023	Essential Services Task Force Meeting 2
6/7/2023	South Texas Regional Working Group
6/8/2023	Business and Telecommunications Task Force Meeting 2
6/8/2023	Health Task Force Meeting 2
6/8/2023	Southeast Regional Working Group Meeting
6/8/2023	Metroplex Regional Working Group Meeting
6/8/2023	West Texas Regional Working Group
6/9/2023	Upper East Regional Working Group

6/9/2023	Capital Area Regional Working Group Meeting
6/9/2023	Gulf Coast Regional Working Group Meeting
6/12/2023	Northwest Regional Working Group Meeting
6/12/2023	Central Texas Regional Working Group Meeting
6/20/2023	Statewide Working Group Meeting 3
6/26/2023	Kickapoo Tribal Consultation
6/29/2023	Alabama Coushatta Tribal Consultation
7/11/2023	Civic and Social Engagement Task Force Meeting 3
7/11/2023	Education Task Force Meeting 3
7/12/2023	Economic & Workforce Development Task Force Meeting 3
7/12/2023	Essential Services Task Force Meeting 3
7/13/2023	Business and Telecommunications Task Force Meeting 3
7/13/2023	Health Task Force Meeting 3
7/17/2023	Statewide Working Group Meeting 4

Table 21: Public Meeting Dates and Locations

Date	Meeting name
7/10/2023	Metroplex Region Public Meeting, Sherman, TX
7/11/2023	Capital Area Region Public Meeting, Bastrop, TX
7/12/2023	Gulf Coast Region Public Meeting, Sugar Land, TX
7/13/2023	Gulf Coast Region Public Meeting, Bay City, TX
7/17/2023	South Texas Region Public Meeting, Kingsville, TX
7/18/2023	South Texas Region Public Meeting, Weslaco, TX
7/19/2023	Alamo Area Region Public Meeting, San Antonio, TX
7/21/2023	Capital Area Region Public Meeting, Burnet, TX
7/24/2023	Central Region Public Meeting, Bryan, TX

7/25/2023	Southeast Region Public Meeting, Lufkin, TX
7/26/2023	Southeast Region Public Meeting, Jasper, TX
7/28/2023	Central Region Public Meeting, Belton, TX
7/31/2023	Upper East Region Public Meeting, Texarkana, TX
8/1/2023	Upper East Region Public Meeting, Longview, TX
8/2/2023	Metroplex Region Public Meeting, Lewisville, TX
8/3/2023	Northwest Region Public Meeting, Wichita Falls, TX
8/4/2023	Northwest Region Public Meeting, Clyde, TX
8/7/2023	Upper Rio Grande Region Public Meeting, El Paso, TX
8/8/2023	Upper Rio Grande Region Public Meeting, Alpine, TX
8/9/2023	High Plains Region Public Meeting, Lubbock, TX
8/10/2023	High Plains Region Public Meeting, Borger, TX
8/14/2023	Alamo Area Region Public Meeting, Cuero, TX
8/15/2023	West Texas Region Public Meeting, Mertzon, TX
8/16/2023	West Texas Region Public Meeting, Midland, TX
8/22/2023	Virtual Statewide Public Meeting
8/23/2023	Virtual Metroplex Region Public Meeting

Appendix E: Detailed Asset Inventory

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Programs Offered											Date Recorded												
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8						
AgrLife Extension		Planning or Organizing, Workforce Development, Digital Opportunity Research	Government or Public Organization	County Government, Non Profit Organization, Public or State University, County Office of Education	X	X		X	X	X	X	X		County Wide	Karnes																						
Alamo Colleges		Computer Device Access; Digital Skills and Technical Support; Workforce Development; Public Computer Center	Community Anchor Institution; Government or Public Organization	College; State Government; City Government	X			X	X	X	X			City Wide or Across Multiple Cities	Bexar	www.alamo.edu/spc																				6/7/2023	
Allan Shivers Library	We are a public library that works to provide a variety of services. We teach people on their own devices, on ours (computer stations, laptops, tablets), and we have access to North Star digital services for training and testing via a current grant. We work with Workforce Solutions and other businesses to provide meeting space and internet access. We also have hotspots for loan to library patrons.	Computer Device Access; Digital Skills and Technical Support; Digital Opportunity Research, Planning or Organizing; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution	Library	X	X		X	X		X		County Wide	Tyler	allanshiverslibrary.com																					6/16/2023	
Alpine Independent School District	We are an anchor institution in our area and would love to support digital access in any way that we can.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support	Community Anchor Institution; Government or Public Organization	School K-12; Local or Regional Authority	X				X	X	X	X		City Wide or Across Multiple Cities; Neighborhood Based or Across Multiple Neighborhoods	Brewster	https://alpine.esc18.net	Yes	Yes																		7/12/2023	
Alpine Public Library		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Private Sector or Governmental Organization	Library; Non Profit Organization	X	X		X	X	X	X	X		County Wide	Brewster	alpinepubliclibrary.org	Yes	Yes																		6/15/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered								Date Recorded												
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding		Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8				
AMA TechTel	The fact that they cover such a wide area and coverage is rarely disrupted is a plus.	Broadband Access	Private Sector or Non-Governmental Organization	Internet Service Provider									X		Regional or Across Multiple Counties	Potter																			
Amarillo Independent School District		Broadband Access, Affordability and Adoption;Computer Device Access	Community Anchor Institution;Government or Public Organization	School K-12;State Government									All students in amarillo school district		Potter	https://www.amaisd.org/																			6/14/2023
Amy Zybach, Certified Public Accountant			Private Sector or Non-Governmental Organization	For Profit Corporation or Business	X	X																												5/3/2023	
Angelo State University	ASU is working with local K12 schools to promote awareness of cybersecurity for school children.	Digital Opportunity Research, Planning or Organizing;Cybersecurity and Privacy Training;Workforce Development	Community Anchor Institution	Public or State University	X			X	X		X				Regional or Across Multiple Counties	Tom Green	angelo.edu																	6/8/2023	
Angelo State University	Angelo State University is a higher education institution and we are expanding our online program offerings to better serve the state of Texas as well as expanding nationally.	Computer Device Access;Digital Skills and Technical Support;Cybersecurity and Privacy Training;Publicly Accessible Online Services;Workforce Development;Public Computer Center	Community Anchor Institution;Government or Public Organization	Public or State University;State Government				X	X	X	X	X			Statewide;Regional or Across Multiple Counties	Tom Green	www.angelo.edu																	8/18/2023	
Angelo State University	Our organization creates original programming for our YouTube channel which now has over 25,000 subscribers and over a million views. Viewership can be demonstrated across the state of Texas. The channel is accessible to anyone who has access to the internet via a phone, laptop, or desktop. Digital opportunity will further help create access to cultural programming that is otherwise not accessible.	Publicly Accessible Online Services	Community Anchor Institution;Private Sector or Non-Governmental Organization	School K-12;Library;Public or State University;Private Sector or Non-Governmental Organization;Community Based Organization; Non Profit Organization	X						X				Statewide;Regional or Across Multiple Counties;County Wide;City Wide or Across Multiple Cities;Neighborhood Based or Across Multiple Neighborhoods	Harris	archaeologynow.org																	6/6/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Programs Offered										Date Recorded										
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1		Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8			
Area Agency on Aging of the Coastal Bend	The Area Agency on Aging of the Coastal Bend just completed a pilot project with funding through the Aetna Foundation for its first pilot project in computer literacy in two rural areas of the Coastal Bend. The AAA has written addressing social isolation through computer literacy into its Area Plan for 2024-2026 Fiscal years. The AAA Director presented its program at the annual conference on aging.	Broadband Access, Affordability and Adoption; Digital Skills and Technical Support	Community Anchor Institution; Private Sector or Non-Governmental Organization	Community Support or Based Organization; Non Profit	X	X		X	X	X	X	X		City Wide or Across Multiple Cities	Nueces	aaacoastalben.d.org			Yes	Lack of Funding Availability; Difficulty in Accessing Funding Sources	Individual or Corporate Donations	The Aetna Pilot Project : The pilot project was tasked with piloting a computer literacy project in two rural areas in Coastal Bend. Two staff were provided with training and a program curriculum which would aid in delivering program expectations and requirements. Although deciding where to conduct the classes proved										8/25/2023		
Arlington Independent School District		Broadband Access, Affordability and Adoption; Computer Device Access	Community Anchor Institution	School K-12	X				X	X	X		City Wide or Across Multiple Cities	Tarrant	https://www.isd.net/	Yes	Yes	Yes	Lack of Staff or Capacity; Lack of Availability	Federal or State Funding; Government Grants Subsidies	no formal name. We work with our school administrators to target the families most in need for hotspots and devices	we work with campus administrators to target those students most in need for devices										6/15/2023		
Art Museum of South Texas		Publicly Accessible Online Services; Public Computer Center	Community Anchor Institution; Private Sector or Non-Governmental Organization	Public or State University; Non Profit Organization	X	X		X	X	X	X	X	school groups, college students	Specific to an individual Location	Nueces	www.artmuseumofsouthtexas.org																		6/7/2023
AT&T	Not very reliable service	Computer Device Access	Private Sector or Non-Governmental Organization	Internet Service Provider										Specific to an individual Location	Marion																			
Atlanta Independent School District			Community Anchor Institution; Private Sector or Non-Governmental Organization	School K-12; Non Profit Organization	X			X	X	X	X	X			Cass	atlisd.net						0.042361111: We provide devices for students grades 6-12 to take home and use for various reasons. Teachers employed by the district take home laptops as well.												5/16/2023
ATTna		Computer Device Access	Private Sector or Non-Governmental Organization	For Profit Corporation or Business										Statewide	Orange																			
Austin Chamber Music Center			Private Sector or Non-Governmental Organization	Non Profit Organization										Regional or Across Multiple Counties	Travis	www.austinchambermusic.org																		6/5/2023
Austin County Fair Association	We have over 450 exhibitor families we need to communicate with. Our annual fair brings in over 24,000 people & we need to be able to scan them in & sell tickets to them quickly.	Publicly Accessible Online Services	Private Sector or Non-Governmental Organization	Non Profit Organization										County Wide	Austin																			

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered										Date Recorded								
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Austin Independent School District	We have been able to support digital opportunities through our bond funds and previous ECF funding. The ECF funding is sunseting, and we will no longer have the budget to support the needs related to digital access.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training	Community Anchor Institution	School K-12	X						X	X			Neighborhood Based or Across Multiple Neighborhoods	Travis	austinsd.org	Yes	Yes	Yes	Lack of Staff or Organizational Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability	Federal or State Funding	Everyone:1. https://www.austinsd.org/technology/ever	Digit								7/14/2023	
Austin Urban Technology Movement			Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Workforce Development Organization; Non Profit Organization	X	X	X	X	X	X	X	X			Travis	https://www.austinhq.org	Yes	Yes	Yes	Lack of Staff or Organizational Capacity;Lack of Funding Availability;Difficulty in Accessing Funding Sources	Federal or State Funding;Government Grants;Philanthropic Grants;Individual or Corporate Donations;Earned Income	Austin Urban Technology Movement's Awareness-to-Workforce Development Program: AUTMHQ bridges the gap between the Black and Hispanic communities and the tech industry through job placement, career development, and networking opportunities. Regardless of your current situation, AUTMHQ provides									5/8/2023		
Austin Women in Technology		Workforce Development	Private Sector or Non-Governmental Organization	Non Profit Organization										City Wide or Across Multiple Cities	Travis	https://awtaustin.org/																	9/13/2023
Ballinger ISD	Public school	Other	Government or Public Organization	School K-12	X					X	X	X	X	Specific to an Individual Location	Runnels							Education											
Bastrop County 4-H	At club, county, and state levels, the 4-H program utilizes digital services to promote learning opportunities for youth, who need these services for required on-line training, scheduling events, holding meetings, and participating in other learning opportunities.	Other	Government or Public Organization	Non Profit Organization										Statewide	Bastrop																		
Bertram Library	Our area is very rural and lacks quality internet and in some areas internet in general. Our library even being in the middle of the town, has times where internet is slow especially with multiple devices using it.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;Workforce Development; Public Computer Center	Community Anchor Institution;Government or Non-Profit Organization	Library;County Government;Non Profit Organization	X					X			X	County Wide	Burnet	bertramlibrary.org	Yes	Yes		Lack of Staff or Organizational Capacity;Difficulty in Accessing Funding Sources	Government Grants;Individual or Corporate Donations											6/5/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered										Date Recorded									
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8			
Bexar County	We are an all digital public library, meaning that all of our content is in digital format. Our three foundational pillars are resources, access and education. To support access, we externally circulate 1400 wi-fi hotspots from our 4 library branches to patrons across Bexar County.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Government or Public Organization	Library; County Government	X	X		X	X	X	X				County Wide	Bexar	bexarbibliothc.org	Yes	Yes	Yes	Lack of Staff or Organizational Capacity; Lack of Funding Availability	Federal or State Funding	BiblioTechh: As a public library - we do not permanently distribute any devices. We circulate hotspots, tablets and chromebooks as a regular part of our program.										5/18/2023	
Big Bend Telephone			Community Anchor Institution	Health Clinic or Health Center	X	X		X	X	X	X			City Wide or Across Multiple Cities	Brewster	MarathonHealthCenter.org																		5/30/2023
Big Country Electric Cooperative	Electric Cooperative that has a marketing partnership with a third-party internet provider.	Broadband Access	Private Sector or Non-Governmental Organization	Non Profit Organization										Regional or Across Multiple Counties	Fisher, Borden, Garza, Haskell, Jones, Kent, Nolan, Scurry, Shackelford, Stone wall, Throckmorton, Mitchell							Big Country Electric Cooperative (not-for profit) has a partnership with TransWorld Network (for profit, third party) to market their broadband and VOIP services.												
Black Churches 4 Digital Equity		Broadband Access, Affordability and Adoption	Other	Non Profit Organization							X			City Wide or Across Multiple Cities	Dallas	https://www.blackchurches4digitalequity.com/	Yes		Yes			ACP Planning Program												9/13/2023
Blessings of Grace Food Pantry for Marion County	We make our pantry dates available through Facebook.	Other	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X					X			County Wide	Marion							We provide food to those in need.												
Bogota Texas City Hall			Community Anchor Institution; Government or Public Organization; Private Sector or Non-Governmental Organization	School K-12; Library; Health Clinic or Health Center; Public Organization; Affordable Housing or Non-Governmental Organization; City Government; Non Profit Organization; For Profit Corporation or Business	X	X		X	X	X	X				Red River	cityofbogota.com																		5/2/2023
Borden county 4H		Planning or Organizing	Government or Public Organization	Community Support or Community Based Organization										County Wide	Borden, Scurry, Garza, Dawson																			
Brazoria County, Village of Surfside Beach			Government or Public Organization	City Government		X			X					Barrier Island community	Brazoria	www.surfsidex.org																		6/7/2023

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Brazos Valley Council of Governments	We have a not for profit existing network that that could do so much more than is being accomplished now if not for the existing debt structure. Paying off or significantly reducing that through long term debt refinance would allow the network to grow as a point of presence for private ISP's to have extended range into the even more rural portions of our region.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Work force Development; Public Computer Center	Community Anchor Institution;Government or Public Organization	Public Housing or Affordable Housing Organization; Workforce Development Organization;Local or Regional Authority	X	X		X	X			X		X	Regional or Across Multiple Counties;County Wide;City Wide or Across Multiple Cities	Brazos	www.bvco.org													6/12/2023					
Brazos WiFi			Private Sector or Non-Governmental Organization	Internet Service Provider	X	X			X	X	X		X		Brazos	www.brazoswifi.com													4/27/2023						
Bridging the Digital Divide Houston		Computer Device Access;Public Computer Center	Private Sector or Non-Governmental Organization	Non Profit Organization					X	X	X		X	City Wide or Across Multiple Cities	Harris	http://www.bddhouston.org/											BDD Recycles		9/13/2023						
Broken O Net	Been providing service for nearly twenty years in Grayson County.	Digital Opportunity Research, Planning or Organizing;We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Private Sector or Non-Governmental Organization	Internet Service Provider;For Profit Corporation or Business	X	X		X	X	X	X		X	County Wide;City Wide or Across Multiple Cities	Grayson	https://brokeno.net/													8/22/2023						
Brownwood Library		Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;Public Computer Center	Community Anchor Institution;Private Sector or Non-Governmental Organization	Library;Non Profit Organization	X	X		X	X	X	X		X	County Wide	Brown	brownwoodlibrary.com	Yes										Lack of Staff or Organizational Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability;Difficulty in Accessing Funding Sources	Government Grants Subsidies;Individual or Corporate Donations							6/5/2023
Burke	Our clients need access to high speed internet to support telehealth calls.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Government or Public Organization	Health Clinic or Health Center;State Government;Non Profit Organization	X	X		X	X	X	X		X	Regional or Across Multiple Counties	Angelina	myburke.org													5/22/2023						
Burleson County	County Govt. works to secure grant funding to assure affordable internet access throughout the county	Planning or Organizing	Government or Public Organization	County Government	X									County Wide	Burleson												Participate in the Brazos 2020 Cognet Fiber loop throughout the BVCOG Case management, transportation, LCDC counseling, anger management,								
Burleson County	County government supports two community resource centers that assists county residents to access needed services. Some telehealth access has already been installed at these centers, but other areas of county could use support, such as libraries	Other	Government or Public Organization	County Government	X	X	X		X	X			X	County Wide	Burleson																				

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Program 1										Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8								
Caldwell County	We are a rural community and county. We do have some funding we have already used on implementation of broadband. Have complete phase I of mapping areas. Now we are at the phase where we need to connect with service providers to partner with to implement rural broadband. We have many families that are unable to receive internet service due to rural coverage being unavailable. Making it difficult for school aged children to complete assignments.	Broadband Access,Workforce Development	Government or Public Organization	County Government	X	X			X	X	X			County Wide	Caldwell																							
Caldwell County Agri Life	To help area ranchers and farmers, to be more productive in agriculture and management and production to help urban folks in their needs of yard and garden, and understand the importance of our culture. To support 4H and their involvement of teaching youth, and help them be better leaders for tomorrow.	Computer Device Access	Community Anchor Institution	Internet Service Provider,School K-12,Community Support or Community Based Organization	X						X	X		County Wide	Caldwell																				4H, education, outreach for agriculture. research on crops and livestock... helping any local producer, with whatever problem he are shemight have.			
Calhoun County Senior Citizens Association	N/A	We Do Not Provide Digital Programs or Services, but our Organization May Be Interested Planning or Organizing_Other	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Non Profit Organization	X	X		X	X	X	X	X		County Wide	Calhoun	http://calhounseniors.org																			Meals on Wheels: Provide hot meals to individuals with disabilities 60+	Rural Transit : Provide public transportation	Outpost Resale Shop: We resale clothing and household items to the community.	6/13/2023
Cameron Chamber of Commerce	The Cameron Chamber of Commerce is a voluntary organization of citizens, businesses and industries who are investing their time and money in community development. Members work together to improve the economic, civic and cultural well-being of the area. Any citizen who is interested in helping to develop the area (which means more money - more business - more jobs and better living for everyone) is eligible to be a member of the Chamber of Commerce. The dues structure is designed to permit even the smallest business to be a member. The Chamber of Commerce functions through working committees of the organization. Money, planning, inspirations and guidance are useless unless the members work vigorously on committees of their choice. The goal of the Chamber is always to create more dollars for more people and to improve the economic welfare of the area. It helps the school fundraiser to meet the needs of teachers and students	her	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X		X			X			City Wide or Across Multiple Cities	Milam																							
Cameron Elementary School PTO	It helps the school fundraiser to meet the needs of teachers and students	Digital Opportunity Program Funding,Planning or Organizing	Government or Public Organization	School K-12,Community Support or Community Based Organization,Foundation Philanthropic Organization	X						X	X		City Wide or Across Multiple Cities	Milam																				Fundraisers			
Cameron Housing Authority	Housing assistance program	Public Computer Center	Government or Public Organization	Public Housing or Affordable Housing Organization	X									City Wide or Across Multiple Cities	Milam																				Rental assistance			

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Central Texas College	Central Texas College serves a diverse population in Central Texas (Killeen, Copperas Cove, Ft. Cavazos) and in the Texas Hill Country (Fredericksburg, Marble Falls, Lampasas, Gatesville). Additionally, we have a presence on approx. 20 military installations and in Europe. We have been dedicated to serving military members and their families over many years, wherever they might be located, with a broad range of face-to-face and online courses.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Digital Opportunity Research, Planning or Organizing; Cybersecurity and Privacy Training; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution	Community College	X	X	X	X	X	X	X	X			Bell	www.ctcd.edu	Yes	Yes															6/12/2023
Central Texas Telephone Coop	Community based, member owned	Broadband Access, Digital Skills and Technical Support	Private Sector or Non-Governmental Organization	Internet Service Provider	X	X			X		X	X			Neighborhood Based or Across Multiple Neighborhoods	Tom Green, Concho, McCulloch, Saba, Mills																	
Changing Expectations	Changing Expectations provides STEM, tech, digital skills, and workforce development programs to prepare Black and Hispanic youth and adults to pursue digital careers (including artificial intelligence digital skills training) and tech entrepreneurship and to support teachers in underserved schools and at HBCUs. Our programs are designed to close the STEM and digital skills divide by creating racial equity through tech workforce development for Black and Hispanic communities. In support of our mission to broaden participation of communities unserved and underserved in the STEM and digital workforce, our programs include providing IT telecom broadband consulting and sales work-based learning opportunities in a paid pre-apprenticeship for Black and Hispanic high school students and adults. We focus our work on reaching out to Black and Hispanic communities, low-income, aging individuals, LEP, rural, individuals with disabilities, and veterans who might otherwise not have access to quality STEM, tech, and digital skills preparation programs to close the opportunity gaps	Digital Skills and Technical Support; Digital Opportunity Research, Planning or Organizing; Cybersecurity and Privacy Training; Workforce Development	Community Anchor Institution; Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Workforce Development; Non Profit Organization	X	X		X	X	X	X	X			Statewide; Regional or Across Multiple Counties; County Wide; City Wide or Across Multiple Cities; Neighborhood Based or Across Multiple Neighborhoods	Williamson	https://www.changeexpectations.org/			Lack of Funding Availability													6/5/2023
ChanneView Independent School District		Computer Device Access; Digital Skills and Technical Support; Cybersecurity and Privacy Training; Publicly Accessible Online Services	Community Anchor Institution	School K-12	X				X	X	X	X			Neighborhood Based or Across Multiple Neighborhoods	Harris	cvids.org																7/11/2023
Cherokee County Electric Cooperative	There are plans to provide high speed internet to our area	Broadband Access	Private Sector or Non-Governmental Organization	Special District											Regional or Across Multiple Counties	Cherokee																	

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City of Bowie	Poverty level is fairly high.	Broadband Access, Affordability and Adoption; Computer Device Access; Public Computer Center	Community Anchor Institution; Government or Public Organization	Community Support or Based Organization; Private Sector or Non-Governmental Organization											X		City Wide or Across Multiple Cities	Montague	www.cityofbowietx.com	Yes																6/7/2023		
City of Brownsville	The City of Brownsville created a public-private partnership with Lit Communities to build a middle mile broadband network and fiber access to homes and businesses on the last mile.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Digital Opportunity Research, Planning or Organizing; Cybersecurity and Privacy Training; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Government or Public Organization	Library; City Government	X	X	X	X	X	X	X	X					City Wide or Across Multiple Cities	Cameron	www.brownsville.gov	Yes		Yes	Yes	Lack of Staff or Organizational Capacity; Lack of Funding Availability; Difficulty in Accessing Funding Sources	Federal or State Funding; Government Grants	device check-out: library offers devices to check out for personal use, including iPads and MIFI hotspots, in addition to public computer lab	American Connectivity Program broadband rate structure: Through the public-private partnership with Lit, the City negotiated a rate for 100/100mps at the American Connectivity reimbursement rate.	library-facilitated device loan program	library hosted public computer lab									5/25/2023
City of Bruceville-Eddy	We are a rural community but like all cities in Texas we are slowly growing. We are working on getting a sewer system to attract more businesses and developments. With growth we will need to be able to keep up with the digital accessibility for our community.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Government or Public Organization	City Government; Public Safety Entity Government	X	X		X	X	X	X	X					City Wide or Across Multiple Cities	McLennan	WWW.BRUCEVILLE-EDDY.US																	6/14/2023		
City of Caldwell	The City of Caldwell allows community members to utilize computers and internet through library. The city also hosts digital literacy classes for those interested in learning. We are looking into workforce development as well. We have been hosting GED and ESL programs.	Planning or Organizing; Computer Device Access; Public Computer Center	Government or Public Organization	City Government	X	X				X	X	X					County Wide	Burleson																				
City of Cameron	Economic Development and Right of ways.	Planning or Organizing; Computer Device Access; Digital Opportunity Program Funding	Government or Public Organization	City Government; Library	X												City Wide or Across Multiple Cities	Milam																				
City of Centerville			Government or Public Organization	State Government								X						Leon	City of Centerville																	6/14/2023		
City of Chireno			Government or Public Organization	City Government	X	X		X	X	X	X	X						Nacogdoches	Chireno.com																	5/3/2023		
City of Cleveland		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution; Government or Public Organization	Community Support or Based Organization; City Government	X	X					X	X					Regional or Across Multiple Counties; County Wide; Neighborhood Based or Across Multiple Neighborhoods	Liberty	City of Cleveland Public Work Department																		6/7/2023	
City of Clifton		Computer Device Access	Government or Public Organization	City Government	X	X		X	X	X	X	X					City Wide or Across Multiple Cities	Bosque	Clifton																	6/12/2023		

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City of Grapeland		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Gov ernment or Public Organization	School K-12;Library;Health Clinic or Health Center;Hospital or Other Medical Provider;Public Housing or Affordable Housing Organization;State Government;County Government;City Government;Public Safety Entity Government;Special District	X	X		X	X	X	X	X			Neighborhood Based or Across Multiple Neighborhoods	Houston																		6/20/2023
City of Hemphill			Government or Public Organization	City Government	X	X							X			Sabine	www.cityofhemphill.com																5/2/2023	
City of Horseshoe Bay	The City	Broadband Access, Affordability and Adoption;Digital Opportunity Program Funding;Digital Opportunity Research, Planning or Organizing;Publicly Accessible Online Services	Community Anchor Institution;Gov ernment or Public Organization	Community Support or Community Based Organization;City Government;Local or Regional Authority;Public Safety Entity Government	X	X		X	X	X	X	X			Regional or Across Multiple Counties;City Wide or Across Multiple Cities;Neighborhood Based or Across Multiple Neighborhoods	Llano	www.horseshoebay-tx.gov	Yes			Lack of Funding;Availability;Difficulty in Accessing Funding Sources	Federal or State Funding;Government Grants Subsidies	City Broadband Expansion Project: The applies for infrastructure grants to incentivize private entities to expand broadband internet expansion for all community citizens. Cost of construction in the very hard ground is cost prohibitive for entities for an effective return on investment for private providers. The don't really have one: n/a										8/10/2023	
City of Huntington			Government or Public Organization	City Government	X	X		X	X	X	X	X				Angelina	www.cityofhuntington																5/2/2023	
City of Ivanhoe			Government or Public Organization	City Government										X	Small city government serves everyone in the community	Tyler	cityofivanhoe.texas.gov																5/2/2023	
City of Ivanhoe			Community Anchor Institution;Gov ernment or Public Organization	Community Support or Community Based Organization;Private Sector or Non-Profit Governmental Organization;For Profit Corporation or Business	X	X		X	X	X	X	X				Tyler	www.cityofivanhoe.gov																5/11/2023	
City of Kenefick		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Government or Public Organization	City Government	X	X		X	X	X			X			Liberty	Cityofkenefick.com																6/8/2023	

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City Of Pineland - Public Library		Broadband Access, Affordability and Adoption; Computer Device Access; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Government or Public Organization; Private Sector or Non-Governmental Organization	Library; City Government; Non Profit	X	X		X	X			X	X			Sabine																6/7/2023
City of Presidio	The city has one of the lowest per capita income levels in the nation. Our constituents have very limited access to internet services and having broadband service available a great enhancement to our citizens lives and opportunities.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Government or Public Organization; Private Sector or Non-Governmental Organization	Local or Regional Authority; Non Profit Organization	X	X		X	X	X	X	X			City Wide or Across Multiple Cities	Presidio	presidiotx.us															6/15/2023
City of San Antonio	We are working to create a comprehensive city-wide digital equity vision that brings together and aligns across city departments and external stakeholders.	Broadband Access, Affordability and Adoption; Digital Opportunity Research, Planning or Organizing	Government or Public Organization	City Government	X	X		X	X	X	X				City Wide or Across Multiple Cities	Bexar	https://www.sanantonio.gov/innovation/Organizational-Capacity	Yes														6/15/2023
City of Slaton			Community Anchor Institution; Government or Public Organization	Library; Public Housing or Affordable Housing Organization; City Government	X	X		X	X	X	X	X			Lubbock		cityofslaton.com															4/24/2023
City of Smiley	The city could send out more information.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Government or Public Organization	City Government		X		X	X	X	X	X			Gonzales		www.smileytx.com															6/15/2023
City of Terrell/Ritter C. Hulsey Public Library		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills, and Technical Support; Digital Opportunity Program Funding; Digital Opportunity Research, Planning or Organizing	Community Anchor Institution; Government or Public Organization	Library; City Government	X	X	X	X	X	X	X	X			Kaufman		www.hulseypubliclibrary.org	Yes	Yes	Yes												4/21/2023
City of Three Rivers		Publicly Accessible Online Services	Government or Public Organization	City Government											City Wide or Across Multiple Cities	Live Oak	City of Three Rivers															6/20/2023
City of Valentine		Publicly Accessible Online Services	Community Anchor Institution; Government or Public Organization	Community Support or Community Based Organization; City Government											City Wide or Across Multiple Cities	Jeff Davis																6/19/2023

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City of Waxahachie Economic Development Department		Broadband Access, Affordability and Adoption	Government or Public Organization	City Government										As City government, we serve ALL the citizens of the city of Waxahachie	Ellis	www.waxahachie.com	Yes																4/21/2023
Clarendon College		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution	Community College	X		X	X	X			X	X	Community College Students	Regional or Across Multiple Counties	Donley	Clarendon College	Yes	Yes														5/25/2023
Clay County	The Edwards Public Library of Clay County has always tried to keep up on new trends, especially the digital and technology. The library offers computers with internet for the public to use. WIFI is also offered.	Broadband Access, Affordability and Adoption; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Government or Public Organization; Private Sector or Non-Governmental Organization	Library; County Government; Non Profit Organization									X	County Wide	Clay	www.edwardspl.org	Yes	Yes														5/19/2023	
CobbFendley			Private Sector or Non-Governmental Organization	For Profit Corporation or Business											Statewide	Harris	cobbfendley.com																6/19/2023
Coke County		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Government or Public Organization	County Government	X	X									County Wide	Coke	Coke County															6/13/2023	
Collin County History Museum			Private Sector or Non-Governmental Organization	Non Profit Organization	X	X		X	X						Specific to an Individual Location	Collin	Collincountyhistorymuseum.org																6/6/2023
Collingsworth Public Library			Community Anchor Institution; Government or Public Organization	Library; County Government	X	X			X	X	X	X				Collingsworth	WWW.COLLINGSWORTHPUBLICLIBRARY.INFO																5/16/2023
Comanche County Leadership Advisory Board	County Planning	Planning or Organizing	Government or Public Organization	Community Support or Community Based Organization	X	X	X	X	X	X					County Wide	Comanche																	None in place, just planning for the future.
Comanche County Leadership Advisory Board	County Planning	Planning or Organizing	Government or Public Organization	Local or Regional Authority											County Wide	Comanche																study	

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8						
Combined Arms	Combined Arms (CAX) has solved for the fragmented social service ecosystem by building a secure, scalable, and user-friendly technology platform for resource connection, and bi-lateral inter-agency referrals, with enforced, network-wide accountability. We have partnered with veteran non-profit hubs, states, and federal entities, deploying our platform to efficiently and expeditiously connect and serve nonprofits, government agencies, and military and veteran families. CAX was awarded support from the Texas Workforce Commission to build a network that would make Texas the first interconnected state for veterans and their families. Launched in April 2020, Combined Arms has grown the Texas Veterans Network (TVN) to include more than 250 best-in-class, vetted veteran-serving organizations, and state agencies that collectively offer more than 1,030 resources for transitioning service members, veterans, and their families. In just 36 months, the Texas Veterans Network team has connected more than 40,013 unique veterans to 68, 239 social	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support	Community Anchor Institution;Private Sector or Non-Profit Organization	Community Support or Based Organization; Non Profit Organization	X	X		X	X			X						City Wide or Across Multiple Cities	Harris	https://www.combinedarms.us/	Yes	Yes	Yes	Lack of Funding Availability;Difficulty in Accessing Funding Sources	Individual or Corporate Donations	Lift Zone: Combined Arms and Comcast partnered together to make Combined Arms Headquarters a WiFi-connected Lift Zone at the veteran serving organization. The Comcast Lift Zone, funded by the media and technology company, will allow veterans free access to high-speed, reliable WiFi along with 50	Lift Zone: Comcast employees delighted in the launch of a WiFi-connected Lift Zone, funded by the media and technology company, will allow veterans free access to high-speed, reliable WiFi + the ability to access WiFi with 50 laptops on site.	Texas Veterans Network: For those with issues accessing or navigating tech, we have an intake team that teaches them how to use the computer to connect to free resources									5/30/2023
Comcast			Private Sector or Non-Governmental Organization	Internet Service Provider;For Profit Corporation or Business	X	X		X	X	X	X							Travis		https://corporate.comcast.com/																5/4/2023	
Comcast			Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Digital Opportunity Program Funding;Digital Opportunity Research, Planning or Organizing;Cybersecurity and Privacy Training;Publicly Accessible Online Services;Workforce Development	Private Sector or Non-Governmental Organization	Internet Service Provider	X	X		X	X	X							Regional or Across Multiple Counties	Harris	https://protect-us.mimecast.com/s/uHCC73eONSAN77P1M4f3;7donain-corporate.comcast.com/														5/30/2023			

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served								Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Programs Offered								Date Recorded				
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities										Other	Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7		Org Program 8			
Comcast		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Digital Opportunity Program Funding; Digital Opportunity Research, Planning or Organizing; Cybersecurity and Privacy Training; Publicly Accessible Online Services	Private Sector or Non-Governmental Organization	Internet Service Provider	X	X		X	X	X	X	X		Regional or Across Multiple Counties	Harris	https://corporate.comcast.com/																		5/30/2023
Community Action, Inc. of Central Texas	With the state rolling out Digital Literacy Standards for adult education providers, we will be redoubling efforts to include digital literacy in all of our classes as well as provide stand-alone digital literacy classes and certification classes as part of our Integrated Education and Training options (Microsoft Word, Excel, and QuickBooks Online certified user).	Digital Skills and Technical Support; Workforce Development	Community Anchor Institution; Private Sector or Non-Governmental Organization	Community Support or Non Profit Organization	X	X	X	X	X	X	X	X		Regional or Across Multiple Counties	Hays	www.communityaction.com																		6/15/2023
Community Action, Inc. of Central Texas	Our primary grants are Head Start and Adult Education (through TWC). We focus on helping people develop economic self-sufficiency and stability. We consider digital literacy a key component to achieving that. All classes are expected to include digital literacy and we have stand-alone digital literacy classes for adult education, including certification classes.	Computer Device Access; Digital Skills and Technical Support; Workforce Development	Community Anchor Institution; Private Sector or Non-Governmental Organization	Community Support or Non Profit Organization	X	X	X	X	X	X	X	X	"Skills deficient" (under WIOA) individuals who need upskilling for employment	Regional or Across Multiple Counties	Hays	www.communityaction.com																		8/17/2023
Community Connections of Lavaca County	It would be advantageous to be able to help our elderly clients with their digital devices and have devices for them to use.	Computer Device Access	Community Anchor Institution; Government or Public Organization; Private Sector or Non-Governmental Organization	Community Support or Non Profit Organization	X	X		X	X	X				Regional or Across Multiple Counties; County Wide	Lavaca																		6/12/2023	

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8													
Community Foundation of Abilene	CFA is interested in learning ways we can partner with organizations, internet service providers, and others to support digital opportunities in this region.	We Do Not Provide Digital Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Governmental Organization	Community Support or Community Based Organization; Non Profit Organization										X	Through our grantmaking we serve organizations that serve the "covered populations."	Regional or Across Multiple Counties	Taylor	www.cfabilene.org														8/17/2023												
Community Tech Network		Digital Skills and Technical Support;Workforce Development	Community Anchor Institution;Private Sector or Governmental Organization	Community Support or Community Based Organization; Non Profit Organization		X										Statewide	Travis	https://communitytechnetwork.org/								digitalLIFT						9/13/2023												
Compudopt	Compudopt was founded in Houston in 2007 and since that time, we have expanded our services and programs nationally. While we started as a nonprofit computer refurbisher, we have since expanded our offerings to offer after-school tech-enrichment classes to underserved youth; build our own connectivity networks to areas that have been historically underserved; provide in-person and virtual digital literacy classes; and have our own Compudopt Support Center that acts as a call-in Digital Navigation center for our clientele. These programs run at scale across the state (and nationally) and are always 100% free to the end user.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Digital Opportunity Research, Planning or Organizing;Workforce Development	Private Sector or Non-Governmental Organization	Non Profit Organization	X					X	X	X			Underserved student populations	Statewide	Harris	www.compudopt.org	Yes		Yes	Yes	Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability;Lack of Community Trust	Philanthropic Grants;Individual or Corporate Donations;Earned Income	Compudopt Connectivity: We are offering a free 5G fixed wireless solution throughout Dallas. We have a partnership with Walmart to build towers on their rooftops in order to broadcast directly into low-income/underserved communities. We also provide MDU wiring into apartment complexes as well.	No formal name. We offer computer donations (through private funding) to communities across the state. Through our lottery and drive-up system, we can provide over 200-300 within a 2-hour window to recipients who drive up in their own vehicles.	Tech Programs: Compudopt offers a variety of digital skills and technical support programs. For students in grades 1 through 12, we offer several afterschool programs that maximize their potential through programs which strengthen their computer and technology literacy. For older youth and adults, we offer several afterschool programs that maximize their potential through programs which strengthen their computer and technology literacy. For older youth and adults, we offer several afterschool programs that maximize their potential through programs which strengthen their computer and technology literacy. For older youth and adults, we offer several afterschool programs that maximize their potential through programs which strengthen their computer and technology literacy.																	6/1/2023
Compudopt	Our programs serve to eliminate limited access to computers, facilitate growth in technical and digital literacy skills, help provide no or low cost high-speed internet options and support the future of youth and their communities.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Workforce Development	Private Sector or Non-Governmental Organization	Non Profit Organization	X						X					Regional or Across Multiple Counties;City Wide or Across Multiple Cities	Harris	www.compudopt.org		Yes	Yes	Yes	Lack of Awareness and Engagement in Communities We Serve;Difficulty in Accessing Funding Sources	Federal or State Funding;Government Grants;Philanthropic Grants;Individual or Corporate Donations	Compudopt Connect: At Compudopt, our goal is finding nationwide internet solutions that help provide digital equity to all people regardless of income. You are likely eligible for a drastically reduced or free internet solution if your household's income is below 200% of the Federal Poverty Line, or if you or someone you live with	Computer Giveaway: Compudopt's goal is to make sure all families have the access they need to thrive in today's digital world. That's why we are a non-profit organization dedicated to providing computers, internet access and tech education to those who do not have a computer, wifi or are in need of tech skills.	Tech Programs: We help children, and young adults maximize their potential through programs which strengthen their computer and technology literacy.															8/31/2023		

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8
Concho Valley Workforce Development Board			Community Anchor Institution	Workforce Development Organization	X	X		X	X	X	X	X		Tom Green	www.cvworkforce.org	Yes	Yes			Lack of Staff or Organizational Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding;Availability;Difficulty in Accessing Funding Sources	Federal or State Funding										5/2/2023
Connected Burnet County		Broadband Access, Affordability and Adoption;Digital Opportunity Research, Planning or Organizing			X	X	X	X	X	X	X	X	anyone who lives in Burnet County	Burnet	none			Yes		Lack of Staff or Organizational Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding;Availability;Difficulty in Accessing Funding Sources;Lack of Community Trust;Linguistic Barriers										4/24/2023	
Connected Nation Texas and ETCOG	https://connectednation.org/statewide-impacts/connected-nation-texas and https://www.etcog.org/broadband-planning	Broadband Access,Digital Skills and Technical Support,Workforce Development	Government or Public Organization,Community Support or Anchor Institution,Private Sector or Non-Governmental Organization,Workforce Development Organization,County Library,County Government	County Government,Community Support or Community Based Organization,Workforce Development Organization,County Government	X	X						X	County Wide,Regional or Across Multiple Counties	Travis	Connectednation.org						Most of the above counties have a study and action plan developed but not necessarily implemented									4/30/2023	
Cooke County Library	Public library that serves the whole county of Cooke. They offer public access computers and lend out mobile hotspots for patron use. They teach computer classes and offer assistance with computer questions and devices - such as smartphones, tablets, iPads, etc.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;Workforce Development;Public Computer Center	Community Anchor Institution;Government or Public Organization	County Library;County Government	X	X		X	X	X	X	X	County Wide	Cooke	Cooke County Library	Yes	Yes			Lack of Staff or Organizational Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding;Availability;Difficulty in Accessing Funding Sources	Federal or State Funding									6/14/2023	

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Program 1										Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Corpus Christi Independent School District	These programs are student-oriented and do affect guardians of those students that belong to our District.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training; Workforce Development	Community Anchor Institution	School K-12	X		X		X	X	X				City Wide or Across Multiple Cities	Nueces	www.ccisd.us	Yes	Yes	Yes	Lack of Funding Availability; Difficulty in Accessing Funding Sources	Federal or State Funding	ACP: We promote this federal program at all our schools during open house events.	ECF: The district would like to look at offering area hot spots around schools to enhance the educational process for community and students after school hours. That would require funding to allow this service to run multiple years.							6/15/2023	
Coryell County 4-H	This is an invaluable organization that offers so many opportunities for children to find activities that may not be available in other places. These children are offered opportunities to be responsible and become leaders by choice and they have a chance to step outside their comfort zones with programs designed to enhance engagement. One barrier to this is that our great state is larger than most and our children are more spread out than others. Community volunteers can be hard to come by for each program so providing more digital resources would enhance current and future access to programs and allow more children to enter into 4H.	Other	Private Sector or Non-Governmental Organization	Non Profit Organization	X				X	X	X	X		County Wide	Coryell								Photography - Purpose: The Texas 4-H Photography Contest encourages self-expression and allows youth to demonstrate skills learned in the area of photography, including the use of photographic equipment and process of photographs. Objectives: To develop life skills in composition, light, story line, posing, and awareness. To Currently our district offers a 1 to 1 accessibility, dual credit classes via distance learning, various courses related to technology.	4-H Fashion Show Description/Objectives: Fashion Show: To recognize 4-H members who have excelled in fashion and interior design projects and exhibit skills in the application of knowledge of fibers and fabrics to wardrobe selection, clothing construction, or comparison shopping, fashion interpretation and understanding								
Cotulla ISD	Our school offers students accessibility to internet	Computer Device Access, Broadband Access, Digital Skills and Technical Support, Workforce Development, Cybersecurity and Privacy Training	Government or Public Organization	School K-12	X				X	X	X	X		County Wide	La Salle																	
Cotulla ISD	It is the local school district	Digital Skills and Technical Support, Cyber security and Privacy Training, Computer Device Access	Government or Public Organization	School K-12	X				X	X	X	X		County Wide	La Salle																	
Cotulla ISD	Public School System	Computer Device Access	Government or Public Organization	School K-12	X	X			X	X		X		Regional or Across Multiple Counties, City Wide or Across Multiple Cities, Neighborhood Based or Across Multiple Neighborhoods, County Wide	La Salle																	

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Crockett County Tax Collector			Community Anchor Institution;Gov ernment or Public Organization;P rivate Sector or Non-Governmental Organization	Public Safety Entity Non Government;C ounty Government;F or Profit Corporation or Business											X		Crockett	CROCKETTCO UNTYTAX.ORG																5/2/2023
Cross Plains Public Library	We offer one-one computer classes using DigitalLearn.org	Broadband Access, Affordability and Adoption;Com puter Device Access;Digital Skills and Technical Support;Public ly Accessible Online Services;Workf orce Development; Public Computer Center	Community Anchor Institution;Priv ate Sector or Non-Governmental Organization	Library;Non Profit Organization		X		X							X		Regional or Across Multiple Counties	Callahan	www.crossplai nslibrary.com	Yes														6/14/2023
Dallas Center for Photography		Digital Skills and Technical Support;Workf orce Development	Community Anchor Institution;Priv ate Sector or Non-Governmental Organization	Community Support or Community Based Non Profit Organization	X	X											Individuals of all ages, ethnicities, and backgrounds	Regional or Across Multiple Counties	Dallas	https://dallasc enterforphoto graphy.org														6/6/2023
Dallas Innovation Alliance		Broadband Access, Affordability and Adoption;Com puter Device Access;Digital Skills and Technical Support;Workf orce Development	Private Sector or Non-Governmental Organization	Non Profit Organization													County Wide	Dallas	https://www.d allasinnovatio nalliance.com/	Yes														9/13/2023
Deaf Smith County		Computer Device Access;Digital Skills and Technical Support;Public ly Accessible Online Services;Public Computer Center	Government or Public Organization	County Government	X	X	X	X	X	X	X						Specific to an Individual Location	Deaf Smith																6/8/2023
Decatur Public Library			Community Anchor Institution;Gov ernment or Public Organization	Library;City Government													X	Wise	DecaturPublic Library.com															5/10/2023

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Del Mar College	Del Mar College provides an array of academic, continuing education, and workforce education services to new and returning students across Nueces, Kenedy, Aranas, and San Patricio counties. Traditional classroom-based learning is augmented with digital tools like student learning management systems, digital assessment and analytics platforms, and degree and pathway planning systems. The College also provides learning opportunities to students across the state of Texas with an online degree program and online course sections in high-demand subject areas.	Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Publicly Accessible Online Services;Workforce Development;Public Computer Center	Community Anchor Institution	Community College	X	X		X	X	X	X	X		Regional or Across Multiple Counties;County Wide;City Wide or Across Multiple Cities	Nueces	https://protect-us.mimecast.com/s/UdLBC9rBORkq44OCEyPaHS?domain=delmar.edu															6/16/2023
Del Valle Libraries	The Del Valle Libraries serve a growing area southeast of Austin in an unincorporated part of Travis County. There are few services in the area which had a 2020 census count of around 30,000 people. Many of our library users complain of having insufficient internet access at their homes.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Public Computer Center	Community Anchor Institution	Library	X	X		X	X	X	X	X		County Wide	Travis	Del Valle Libraries - ETGLD	Yes		Yes	Yes										6/8/2023	
Del Valle Libraries (East Travis Gateway Library District)			Community Anchor Institution	Library	X	X		X	X	X	X	X		Travis		delvalibraries.org	Yes		Yes											5/2/2023	
Dell City Independent School District		Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Workforce Development	Community Anchor Institution;Government or Profit Organization	School K-12;Special District;Non Profit Organization				X	X	X	X	X		Specific to an Individual Location	Hudspeth	dellcity.schoolwires.com	Yes	Yes		Yes										6/15/2023	
Dell City Independent School District	We are the hub of this small, rural, isolated community. We employ or teach about half of the town's population.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Public Computer Center	Community Anchor Institution	School K-12;Library	X	X		X	X	X	X	X		Neighborhood Based or Across Multiple Neighborhoods	Hudspeth	https://dellcity.schoolwires.com/domain/29	Yes	Yes	Yes											6/23/2023	
Dell City Independent School District		Computer Device Access	Community Anchor Institution	School K-12	X				X	X	X	X		Specific to an Individual Location	Hudspeth	dellcityisd.com														8/31/2023	

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Disability Rights Texas	A large portion of the people we serve are either in need of low cost or no cost online access OR need online services/materials to be accessible (screen reader friendly, other languages, plain language, ASL, video captioning, etc.). We also have a strong accessible digital outreach following on social, email and web and can help with any public outreach efforts.	Publicly Accessible Online Services	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X	X	X	X	X	X	X		Statewide	Travis	www.DRTx.org														6/15/2023
Dobie West Performing Arts Theatre	We could make this spot available for community access to broad band	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Non Profit Organization	X	X			X	X	X	X		City Wide or Across Multiple Cities	Live Oak	www.dobie-westtheatre.com													6/9/2023	
Dripping Springs Community Library	Because there are still many people in our district who live on ranches and farms, there are still some who do not have any or very poor internet access, including some of our staff; we do have people who come to our library just to use our computers, because they do not have adequate access	Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;Workforce Development; Public Computer Center	Community Anchor Institution;Government or Public Organization	Library;Local or Regional Authority;Non Profit Organization	X	X	X	X	X	X	X	X		County Wide	Hays	www.dscl.org													6/5/2023	
Dublin Public Library	We are in a rural community with a high population low income household. This year we provided the community with 125 hotspots with free service and as of Dec 24 we are down to 5. We have computers here at the library for patrons to use, we have laptops, chromebooks, and ipads for the community to checkout and use as well. We also provide one on one tech help to community members.	Computer Device Access;Digital Skills and Technical Support;Public Computer Center;Workforce Development, Publicly Accessible Online Services	Community Anchor Institution;Government or Public Organization	Library	X	X		X	X	X	X	X		City Wide or Across Multiple Cities	Erath,Comanche														Lending free hotspots, chromebooks, laptops, ipads. Free access to internet. We provide free one on one tech help. We also assist the public with faxing, scanning and emailing. We have completed the Digital Navigator Program through the Texas State Library and Archives Commission and would love to begin it again if funding	
E4 Youth	Our programs are very centered around digital literacy and creative media. Program participants and public school students are given and are taught how to use digital resources that help advance their creative media. This includes access to digital portfolios, mind-mapping tools, software for various art practices, digital meeting platforms like zoom, and access to digital file space.	Computer Device Access;Digital Skills and Technical Support;Workforce Development	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Non Profit Organization	X				X	X	X			City Wide or Across Multiple Cities;Neighborhood Based or Across Multiple Neighborhoods	Travis	https://e4youth.org/													7/1/2023	
Each One Teach One, Inc.		Computer Device Access;Digital Skills and Technical Support;Workforce Development	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Non Profit Organization	X	X		X			X			County Wide	Bexar	eotosa.org													8/25/2023	

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Eagle Pass Independent School District	Eagle Pass ISD provides Chromebooks to each of its 14500 students enrolled for year round use at home and school. This includes internet content filtering and netiquette awareness for all students.	Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training	Community Anchor Institution	School K-12	X							X	X		City Wide or Across Multiple Cities	Maverick	www.eaglepassisd.net													6/9/2023
Eagle Pass Public Library	We need funding in order to provide technical assistance to our patrons and the general public.	Computer Device Access;Digital Skills and Technical Support;Public Computer Center	Community Anchor Institution;Government or Public Organization	Library;City Government	X	X		X	X	X	X	X		County Wide	Maverick	eaglepasspubliclibrary.org														6/8/2023
East Texas Council of Governments	ETCOG, through the East Texas Economic Development District, received a broadband planning grant from the U.S. Economic Development Administration and is currently in the final stages of the planning effort. Each of the participating counties will receive a detailed report with projects identified, mapped, and budgeted. These plans will be used by ETCOG and its member communities to pursue the implementation funds that become available on both a state and federal level.	Digital Opportunity Research, Planning or Organizing;Workforce Development	Government or Public Organization	Council or Metropolitan Planning Organization	X	X	X	X	X	X	X	X		Regional or Across Multiple Counties	Gregg	https://www.etcog.org/														6/12/2023
East Texas Disability Advocates	Access to government websites to provide needed services. Hardware and training would be needed.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Private Sector or Non-Governmental Organization	For Profit Corporation or Business	X	X			X		X	X		Regional or Across Multiple Counties	Gregg												Advocacy : Referral	Na: Help homeless access SSA. To sole problems, continue benefits	7/29/2023	
East Texas Fiber Holdings	We are a private company . 1 owner . We are 2 years old and started with 0 fiber customers. We now have 900 and growing. We 51 miles of fiber in the ground for rural and city . We offer up to 10 gigs inside the house. We have 0 debt. Charles Cox has personally funded this business. We could use grant money to extend into more rural areas where it is not feasible to spend money and get a return . We are locally owned and operated. We employ Anderson county residents. We buy our trucks, insurance and supplies in Anderson County . Thank you	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Digital Opportunity Program Funding;Publicly Accessible Online Services;Public Computer Center	Community Anchor Institution;Government or Public Organization;Private Sector or Non-Governmental Organization	Public Safety Entity Non Government;Community College;Public or State University;Public Housing or Affordable Housing Organization; Workforce Development Organization;State Government;County Government;Local or Regional Authority;County Office of Education;Internet Service Provider;Labor Organization;	X	X		X	X	X	X	X		County Wide;City Wide or Across Multiple Cities;Neighborhood Based or Across Multiple Neighborhoods	Anderson	Etbroadband.net														5/31/2023
East Texas Lighthouse	We are currently aggressively providing programs locally, state and nation-wide, and are always looking for new ways to utilize digital means to reach out clients. A vast part of East Texas has poor access to digital connectivity due to the rural nature of most of the areas in East Texas. It is either unavailable or cost prohibitive.	Computer Device Access;Workforce Development	Community Anchor Institution;Private Sector or Non-Governmental Organization		X	X		X	X	X	X	X		Statewide;Regional or Across Multiple Counties;County Wide;City Wide or Across Multiple Cities	Smith	www.easttexalighthouse.org														5/22/2023

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Programs Offered										Date Recorded								
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1		Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8	
Easter Seals of Greater Houston	Easter Seals Greater Houston's BridgingApps program employs a growing team of Digital Navigators and Digital Learning Trainers. Their principal goal is to improve digital equity by providing education, training, and one-on-one support to increase digital skills and access, especially among Veterans and people with disabilities. Several staff are bilingual, and one is based in the Brazos Valley.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;Workforce Development	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Based Organization;Non Profit Organization	X	X		X	X	X	X	X	Many of our clients are in multiple categories (e.g., Veterans in rural counties of the Brazos Valley, people with disabilities who are low income and ethnic minorities, etc.).	Regional or Across Multiple Counties	Harris	www.eastersealsalshouston.org / www.bridgingapps.org	Yes	Yes	Yes	Lack of Funding Availability	Philanthropic Grants;Individual or Corporate Donations	Digital Navigator Services										6/16/2023
Eastex telephone	There is only a couple to choose from not everyone can afford them. They are just about the only internet provider available in some areas	Computer Device Access	Private Sector or Non-Governmental Organization	Internet Service Provider	X			X	X		X		City Wide or Across Multiple Cities	Polk																		
Eastland Memorial Hospital District	Without Hightspeed broadband, it limits access to Telehealth medicine in rural areas		Community Anchor Institution	Health Clinic or Health Center;Hospital or Other Medical Provider	X	X		X	X				Statewide;Regional or Across Multiple Counties;County Wide;City Wide or Across Multiple Cities	Eastland	emhd.org															5/25/2023		
Ector County Independent School District and Ector County Community Connection	We help families enroll in Affordable Connectivity Program (ACP). We also provide a list of ISPs for families based on the addresses. We also provide a device for our students and MIFI if needed.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Digital Opportunity Program Funding;Digital Opportunity Research, Planning or Organizing;Cybersecurity and Privacy Training;Publicly Accessible Online Services;Workforce Development;Public Computer Center	Community Anchor Institution;Government or Public Organization	School K-12;County Office of Education	X	X	X	X	X	X	X		Regional or Across Multiple Counties;County Wide;City Wide or Across Multiple Cities	Ector	https://www.ectorcountysd.org/Page/1	Yes	Yes	Yes	Lack of Staff or Organizational Capacity	Federal or State Funding;Government Grants Subsidies	Ector County Community Connection: The Affordable Connectivity Program is an FCC program that provides monthly discounts for internet service & purchase of devices.									6/20/2023		
El Paso County	El Paso County is in the process of negotiating an agreement with a provider to deploy a wireless broadband solution to serve the census-designated places of Fabens and Tornillos. Both communities are ones that have been historically underserved and exhibit persistent poverty.	Broadband Access, Affordability and Adoption;Digital Skills and Technical Support;Digital Opportunity Research, Planning or Organizing;Publicly Accessible Online Services;Workforce Development;Public Computer Center	Government or Public Organization	County Government	X	X	X	X	X	X	X		County Wide	El Paso	https://www.elpocounty.com/	Yes		Yes	Lack of Staff or Organizational Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability;Difficulty in Accessing Funding Sources	Federal or State Funding									8/28/2023			

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Programs Offered										Date Recorded									
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1		Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
El Paso County	El Paso County is currently developing a program using American Rescue Plan Act funds to to support digital opportunity in the County.	Broadband Access, Affordability and Adoption; Digital Opportunity Program Funding; Digital Opportunity Research, Planning or Organizing; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Government or Public Organization	County Government	X	X	X	X	X	X	X	X		County Wide; City Wide or Across Multiple Cities; Neighborhood Based or Across Multiple Neighborhoods	El Paso	https://www.eppcounty.com/	Yes				Lack of Staff or Organizational Capacity; Lack of Awareness and Engagement in Communities We Serve; Lack of Funding Availability	Federal or State Funding; Government Grants and Subsidies										6/14/2023	
Electra Public Library		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Institution; Government or Non-Profit Organization	Library; City Government; Non Profit Organization			X	X	X	X	X	X		Wichita	electrapubliclibrary.org	Yes				Lack of Awareness and Engagement in Communities We Serve; Lack of Funding Availability; Difficulty in Accessing Funding Sources	Federal or State Funding										5/31/2023		
ETEX Telephone	Local telephone Company that wired internet service which is not reliable.	Computer Device Access	Private Sector or Non-Governmental Organization	Internet Service Provider									X	Regional or Across Multiple Counties Specific to an Individual Location	Upshur																		
Eustace Independent School District	Title I School with high enough low income to provide free food to all students through govt funds	Computer Device Access; Digital Skills and Technical Support	Community Anchor Institution	School K-12	X					X	X		X		Henderson	Eustaceisd.net																8/1/2023	
Extension Service and the State Comptroller's Broadband Development Office.	Rancher	Broadband Access	Private Sector or Non-Governmental Organization	Internet Service Provider									X	Statewide	Kimble, Menard																		
Family Support Services/Veterance Resource Center	Homeless Veterans are given the opportunity to job search without limitation. The digital opportunity provides job search and online job interviews and job training and pre-job testing.	Computer Device Access; Workforce Development	Community Anchor Institution; Government or Public Organization; Private Sector or Non-Profit Governmental Organization	Community Support or Community Based Organization; State Government; Non Profit Governmental Organization	X	X					X	X		County Wide; City Wide or Across Multiple Cities	Randall	https://fss-ama.org/																	6/12/2023
Fannie Brown Booth Memorial Library	Plan to upgrade from 25Mbps to 100 Mbps service this summer.	Broadband Access, Affordability and Adoption; Computer Device Access; Publicly Accessible Online Services; Public Computer Center	Community Anchor Institution; Private Sector or Non-Profit Governmental Organization	Library; Non Profit Organization	X	X		X	X	X	X	X		County Wide; City Wide or Across Multiple Cities	Shelby	Fannie Brown Booth Library	Yes	Yes		Lack of Awareness and Engagement in Communities We Serve; Lack of Funding Availability	Government Grants Subsidies; Philanthropic Grants; Individual or Corporate Donations	Hotspot: Library patrons can checkout a hotspot with a library card and signed agreement that they need the hotspot. They can keep for two weeks and must renew.										6/7/2023	

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8				
Fannie Brown Booth Memorial Library		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services	Community Anchor Institution	Library	X	X		X	X	X	X	X			City Wide or Across Multiple Cities	Shelby	https://protect-us.mimecast.com/s/cGCKRKD9COB22wSQP180s?domain=centelibrary.org	Yes	Yes		Lack of Staff or Organizational Capacity; Lack of Funding Availability	Federal or State Funding; Philanthropic Grants	Adult Computer literacy skills classes; We provided free classes for adults to get better at using the computer and providing instruction to computer non-users.										6/14/2023		
First Texas National Bank	We are a locally owned community bank that provides financial services to our customers who live in rural areas. Our customers look to us to be able to help plan their financial goals and we support many of the local schools and community programs in our county and surrounding counties.	Computer Device Access	Private Sector or Non-Governmental Organization	For Profit Corporation or Business											County Wide	Floyd																			
FirstCare Health Plans			Government or Public Organization; Private Sector or Non-Governmental Organization	State Government; Non Profit Organization	X					X	X					Lubbock	www.FirstCare.com																	5/11/2023	
Floyd County 4 H	This organization provides needed services to the whole community. Our students participate in educational activities and the adults rely on the resources provided by the employees of the organization. Access to reliable internet at affordable prices enables the staff to provide needed information to families, farmers and business, such as emails and websites.	Computer Device Access; Digital Skills and Technical Support; Digital Opportunity Research; Publicly Accessible Online Services	Government or Public Organization	County Government; Non Profit Organization; Community Support or Community Based Organization	X	X		X	X	X	X				County Wide, City Wide or Across Multiple Cities	Floyd						4-H, Ag (farm & Ranch) programs, FCS programs, school research learning partner													
Floyd County Family Community Health Steering Committee	Program are to reach low income residents in a rural community, health and safety tips and wellness training.	Computer Device Access	Government or Public Organization	Non Profit Organization	X										County Wide	Floyd						Eating healthy on a budget													
Fort Bend Independent School District	We are a school district. COVID has moved our instructional delivery to full digital immersions. Many of our economically challenged students and rural families do not have access to broadband access. Some areas such as Fresno do not have Internet carriers available. Even the current discount from Comcast is a challenge for our families to pay. With the current budget challenges, our school district could not afford to increase our Internet bandwidth to accommodate the vast increase in bandwidth demands. Even though, we recently got a grant from the federal government to provide 1:1 laptops to our student in secondary schools, we do not have support staff to support these additional laptops. Bottom line, we need our state to increase the allotment for each student with the large state budget surplus.	Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training	Community Anchor Institution	School K-12	X				X	X	X		Displaced students	County Wide; City Wide or Across Multiple Cities; Neighborhood Based or Across Multiple Neighborhoods	Fort Bend	https://protect-us.mimecast.com/s/AwQhC73zONSANY7PiBOQzpw?domain=fortbendis.d.com						Classroom Tool Set: Each classroom is equipped with 2:1 (two students to one laptop) from grades 2nd-12th and 2:1 (one iPad to two students pre-K to 1st). Additionally, at five of our Title 1 Secondary Schools, we have 1:1 device:student program. Each teacher has a dedicated laptop assigned to him/her. Each campus library									6/20/2023				
Fort Hancock Independent School District	PreK through 12 public school district, Adult Education, Parental Involvement	Computer Device Access; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Government	School K-12; State Government	X	X			X	X	X			Neighborhood Based or Across Multiple Neighborhoods	Hudspeth	www.fhisd.net																			8/23/2023

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7
Fort Worth Public Library			Community Anchor Institution;Gov	ernment or Public Organization	X	X		X	X	X	X				Tarrant	www.fortworthlibrary.org														5/11/2023
Foundation Communities	We are committed to our residents and program participants having digital access and literacy opportunities.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Workforce Development	Community Anchor Institution	Public Housing or Affordable Housing Organization	X	X		X	X	X	X	X	Residents of Affordable Housing (30-60%MFJ)	Regional or Across Multiple Counties	Travis	www.foundco m.org	Yes	Yes	Yes	Yes	Lack of Staff or Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability;Difficulty in Accessing Funding Sources	Federal or State Funding;Government Grants;Philanthropic Grants;Individual or Corporate Donations								5/31/2023
Foundation Communities	We could enhance the digital access for our residents and children through their housing and through after school and adult programs in our learning centers.	Broadband Access, Affordability and Adoption;Computer Device Access	Community Anchor Institution;Private Sector or Non-Profit Governmental Organization	Public Housing or Affordable Housing Organization	X			X	X	X	X			City Wide or Across Multiple Cities	Travis	www.foundco m.org	Yes	Yes	Yes	Yes	Lack of Funding Availability;Difficulty in Accessing Funding Sources								5/31/2023	
Foundation Communities		Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Workforce Development;Public Computer Center	Community Anchor Institution;Private Sector or Non-Governmental Organization	School K-12;Health Clinic or Health Center;Public Housing or Affordable Housing Organization;Community Support or Community Based Organization;Workforce Development Organization; Non Profit Organization	X	X				X	X			City Wide or Across Multiple Cities	Travis	www.foundco m.org	Yes	Yes	Yes	Yes	Lack of Staff or Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability;Difficulty in Accessing Funding Sources;Linguistic Barriers	Government Grants;Philanthropic Grants;Individual or Corporate Donations;Earned Income								5/31/2023
Friends of I.M. Terrell Foundation			Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Non Profit Organization	X					X	X				Tarrant	friendsofinterrell.com	Yes	Yes			Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability	Individual or Corporate Donations							5/17/2023	
Friends of the Maud Public Library	We are extremely rural and need ds, satellite, or fiber optic internet ASAP! The ACP program does not support many of the options in our area. Mobile devices with hotspots only work sometimes, as cell service is very unreliable for our area across all carriers.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Library;Non Profit Organization	X	X		X	X			X	Underserved kids, teens, and young adults with special needs, though not necessarily disabled.	County Wide;City Wide or Across Multiple Cities	Bowie		Yes	Yes	Yes	Yes	Lack of Staff or Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability;Difficulty in Accessing Funding Sources	Philanthropic Grants;Individual or Corporate Donations	Lendable laptops and hotspots: New program	Computer classes: Free classes for the community-3 per month					6/8/2023	

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Friends of the Texas Historical Commission		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Private Sector or Non-Governmental Organization	Non Profit Organization										The Friends of the THC is a statewide organization and served the population of the state, specifically K-12 students, historic preservation professionals, students, avocational historians and archeologists, history buffs, heritage travelers, etc.	Statewide	Travis	www.thcfriens.org																5/30/2023
Garza County	Garza County courthouse and buildings are served by fiber and provide access for any needs required within the courthouse. This includes all offices and courts and support personnel. All internet service in the county are spotty and the speed is very limited. Some areas of Garza County have no access.	Broadband Access, Affordability and Adoption;Cybersecurity and Privacy Training;Publicly Accessible Online Services;Workforce Development	Community Anchor Institution;Government or Public Organization;Private Sector or Non-Governmental Organization	School K-12;Library;Health Clinic or Health Center;Public Safety Entity Non Government;Public Housing or Affordable Housing Organization;Community Support or Community Based Organization;Workforce Development Organization;State Government;County Government;City Government;Public Safety Entity	X	X	X	X	X	X	X	X		Specific to an Individual Location	Garza	garzacounty.net	Yes																6/13/2023
Gatesville Independent School District	The school district provides free access to the internet within and around its schools. This is extremely helpful for those in the community without internet access. During the COVID pandemic the school provided internet access from the parking lot for people with out access. The school continues to provide this resource. This has been extremely helpful for people in the community. School leaders are doing all they can to provide 1 to 1 computers for all 2000+ students in K-12. The internet has been very unreliable and often goes down in the middle of the school day. Students and teachers are unable to complete lessons and learning is disrupted. Often internet service is disrupted for several days.	Broadband Access,Publicly Accessible Online Services,Digital Skills and Technical Support,Planning or Organizing,Workforce Development, Cybersecurity and Privacy Training	Community Anchor Institution, Government or Public Organization	School K-12	X	X		X	X	X	X	X		Specific to an Individual Location, City Wide or Across Multiple Cities	Coryell																		

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6
Glasscock County Extension	The Glasscock County Extension Program uses agricultural programming at local community buildings to provide opportunities for students to have digital access. Students can use the facilities provided to complete necessary work and learn more about how to correctly use technology.	Computer Device Access,Broadband and Access,Planning or Organizing,Workforce Development,Cybersecurity and Privacy Training,Digital Skills and Technical Support	Government or Public Organization	County Government,Public or State University,School K-12	X							X	X		County Wide,Statewide	Glasscock													
Gonzales County Senior Citizens Association	We Do Not Provide Digital Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Profit Organization	Community Support or Base Organization;		X	X		X	X		X	X		County Wide	Gonzales														6/9/2023
Gonzales Public Library	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;Workforce Development;Public Computer Center	Community Anchor Institution;Government or Public Organization	Library;City Government		X	X		X	X	X	X	X		County Wide	Gonzales	https://www.gonzales.texas.gov/p/departments/library	Yes												6/5/2023
Goodwill Central Texas	Workforce Development	Community Anchor Institution;Private Sector or Non-Profit Organization	Community Support or Base Organization;					X						Regional or Across Multiple Counties	Travis	https://www.goodwillcentraltexas.org/													9/13/2023
Goodwill Dallas	Community Anchor Institution;Private Sector or Non-Profit Organization	Workforce Development	Community Support or Base Organization;		X			X	X		X		emerging from crisis, homeless		Dallas	https://goodwilldallas.org/													5/2/2023
Goodwill Houston	Community Anchor Institution;Private Sector or Non-Profit Organization	Workforce Development	Community Support or Base Organization;		X	X	X	X	X		X	X			Harris	www.goodwillhouston.org													5/3/2023

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8	Date Recorded			
Goodwill of North Central Texas	The grant ended but we did do pc and hot spot giveaways through a grant and could have done more but were limited by the number we had under the grant. We have mobile crews that do digital literacy classes across multiple cities. We partner with TWC to provide services on a mobile bus in rural areas.	Digital Skills and Technical Support;Cyber security and Privacy Training;Publicly Accessible Online Services;Workforce Development; Public Computer Center	Community Anchor Institution	Community Support or Community Based Organization; Workforce Development Organization	X	X	X	X	X	X	X	X	X	Regional or Across Multiple Counties;City Wide or Across Multiple Cities;Neighborhood Based or Across Multiple Neighborhoods	Tarrant	Goodwillnorthcentraltexas.org						Three programs GDA, Leadership academy, and North Texas Institute: GDA has in person and mobile crews that go out into the community to serve rural areas as well as in person services. The Opportunity Accelerator encompasses several programs including digital skills through the Goodwill Digital Career Accelerator,	Leadership academy-Earn an industry recognized certification online in less than a year. This program is virtual based. Also, The North Texas Institute for Career Development is the technical and career school operated by Goodwill North Central Texas offering CDL, Professional Truck Driver Training, Certificate of Forklift instruction,								6/8/2023			
Goodwill South Texas			Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Workforce Development Organization; Non Profit Organization	X	X	X	X	X	X	X	X		Nueces	goodwillsouthtexas.com																			5/1/2023
Goodwill South Texas	GWSTX offers job training and readiness to the community. These job assistance functions are enhanced by digital skill training including the following certificate programs: Cybersecurity Professional Certificate Digital Marketing & E-Commerce Google Data Analytics Certificate Google IT Automation with Python Certificate Google IT Support Certificate Google Project Management Certificate Gooeal UX Design Certificate	Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Publicly Accessible Online Services;Workforce	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Workforce Development Organization; Non Profit Organization	X	X	X	X	X	X			Statewide;City Wide or Across Multiple Cities	Aransas	Goodwillindustriesofsouthtexas.com																		6/7/2023	
Goodwill West Texas		Digital Skills and Technical Support	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X	X	X	X	X	X	X		Taylor	goodwillwesttexas.org																		5/1/2023	
Gordon Community Library	Non profit public library that provides internet access to community members either using their own laptop or a library computer.	Computer Device Access,Broadband Access,Publicly Accessible Online Services	Private Sector or Non-Governmental Organization	Library,Non Profit Organization	X	X		X	X	X	X	X	City Wide or Across Multiple Cities	Erath,Palo Pinto																				

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Grand Prairie Independent School District		Broadband Access, Affordability and Adoption; Computer Device Access	Community Anchor Institution	School K-12	X					X		X				Dallas	www.gpisd.org	Yes	Yes														5/30/2023
Grand Prairie Independent School District	We support all enrolled students in our district. Approximately 30% of our students are mobile, living in multiple households within a single school year. When considering availability, we must look at opportunities for broadband to follow the families or be available in their next living situation. Additionally, these locations sometimes include families living in hotels. Another consideration is serving families where other family members care for students after school before their parents come home from work.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support	Community Anchor Institution	School K-12	X						X	X			City Wide or Across Multiple Cities	Dallas	www.gpisd.org	Yes	Yes	Yes												6/17/2023	
Grand Prairie Public Library System	As stated above, because we do not charge out of city residents for a library card, we do have the capability of supplying our on-line resources to all areas of the state. It's a small number of people who get a card outside of our counties, but our policy does not prohibit providing the services.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Government or Public Organization	Library; City Government	X	X	X	X	X	X	X	X			City Wide or Across Multiple Cities	Dallas	www.gpbs.org/library	Yes	Yes	Yes												5/23/2023	
GrantWorks		Broadband Access, Affordability and Adoption; Publicly Accessible Online Services	Community Anchor Institution; Government or Public Organization; Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; County Government; City Government; Non-Profit Organization	X					X	X	X			Statewide	Travis	www.grantworks.net	Yes														6/13/2023	
Greenwood Independent School District			Community Anchor Institution; Government or Public Organization	School K-12; State Government												Midland	www.greenwoodesc18.net															5/16/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Programs Offered														Date Recorded										
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5		Org Program 6	Org Program 7	Org Program 8							
Harris County Area Agency on Aging	We have a trained Digital Literacy Trainer to conduct the courses for select Seniors.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training	Government or Public Organization	City Government	X	X		X	X	X	X			County Wide	Harris	https://www.houstonhealth.org/services/aging	Yes		Yes	Yes	Lack of Funding Availability; Difficulty in Accessing Funding Sources	Government Grants Subsidies; Philanthropic Grants	Senior Tech Connect: The Senior Tech Connect program consists of a six-session course developed by Community Tech Network (CTN), a non-profit organization that aims to transform lives through digital equity. CTN's Learner Booklet and Trainer Guide assist a trained instructor in delivering a comprehensive course to seniors that	Senior Tech Connect: The Senior Tech Connect program consists of a six-session course developed by Community Tech Network (CTN), a non-profit organization that aims to transform lives through digital equity. CTN's Learner Booklet and Trainer Guide assist a trained instructor in delivering a comprehensive course to seniors that											8/31/2023			
Harris County Office of Broadband		Broadband Access, Affordability and Adoption; Publicly Accessible Online Services; Public Computer Center	Community Anchor Institution; Government or Public Organization	Library; Health Clinic or Health Center; Hospital or Other Medical Provider; Community Support or Community Based Organization; County Government	X	X		X		X	X			County Wide	Harris	https://broadband.harriscountytexas.gov/	Yes		Yes	Yes	Lack of Staff or Organizational Capacity; Lack of Funding Availability	Federal or State Funding; Government Grants Subsidies															8/3/2023	
Harrison County	Harrison County has used ConnectedNation Texas to assess our broadband needs in the county. Many of the rural parts of our county are without any broadband service. We developed a middle mile plan to bring fiber to most of the rural communities and have applied for grant funding through our COG, East Texas Council of Governments.	Cybersecurity and Privacy Training	Government or Public Organization	County Government	X	X					X	X		County Wide	Harrison	harrisoncountytexas.org																					6/13/2023	
Haskell Memorial Hospital			Community Anchor Institution; Government or Public Organization; Private Sector or Non-Governmental Organization	Health Clinic or Health Center; Hospital or Other Medical Provider; County Government; Special District; Non Profit Organization	X	X	X	X	X	X	X	X	It's a rural county hospital. We're here for everyone.	County Wide	Haskell	www.haskellmemorialhospital.com																						5/25/2023
Hidalgo Independent School District	The district has laptop lending program for students attending local community college and university. In addition we provide laptops and limited amount of hotspots to students in need of all grade levels.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training; Workforce Development	Community Anchor Institution	Community Anchor Institution	X	X		X	X	X	X	X		Specific to an Individual Location	Hidalgo	https://www.hidalgo-isd.org/	Yes		Yes	Yes	Lack of Awareness and Engagement in Communities We Serve; Lack of Funding Availability; Difficulty in Accessing Funding Sources	Federal or State Funding															6/20/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered								Date Recorded										
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding		Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Hill College	Hill College's mission is to provide high quality comprehensive educational programs and services. The college enhances the educational, cultural, and economic development of its service area and assists both individuals and the community to prepare for a more productive life. Hill College has a long-standing tradition of quality and comprehensive technical education programs. With twenty-eight school district partners, the college can promote cybersecurity awareness, course offerings, curriculum sharing, and professional development. Hill College is designated as a National Center of Academic Excellence in Cyber Defense Education for Associate of Applied Science in Computer Science, Networking Cybersecurity through 2024. The curriculum path includes the completion of stack-able certificates leading to the AAS. (60 hours). Computer Science, Technical Core Certificate of Completion (CC 18 hours) Computer Science, Networking	Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Work Development	Community Anchor Institution;Gov ernment or Public Organization	Community College;State Government	X	X	X	X	X	X																							6/7/2023
Hill Country Transit District	Hill Country Transit District, a political subdivision of the State of Texas, is a regional transit system whose mission is to build, refine, and operate a safe, dependable, and effective transportation network that provides mobility, improves the quality of life, and stimulates economic development through the provision of rural, urban fixed route, and ADA complementary paratransit service for citizens and visitors of the Central Texas area.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be interested	Government or Public Organization	State county Government;City Government	X	X		X	X	X																						7/31/2023	
Hillcountry Networks	They offer different plans accordingly to needs of the individual. They are able to reach remote places at a reasonable price.	Broadband Access	Private Sector or Non-Governmental Organization	Internet Service Provider																													
Holliday Public Library		Broadband Access, Affordability and Adoption;Computer Device Access;Publicly Accessible Online Services;Workforce Development; Public Computer Center	Community Anchor Institution;Private Sector or Non-Governmental Organization	Library;Non Profit Organization	X	X			X																							6/6/2023	
Hood County Museum	We are open to the public and assist anyone who contacts us regarding historical research, both family and property.				X	X		X	X	X																						6/6/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Programs Offered								Date Recorded
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Program 1										Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Hope of South Texas, Inc	Our plan is to increase the quality and access of forensic interview video evidence in cases of child abuse for investigative purposes	Computer Device Access;Digital Skills and Technical Support;We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Health Clinic or Health Center;Community Support or Community Based Organization; Non Profit Organization	X				X	X	X	X		Regional or Across Multiple Counties	Victoria	https://hopecenterstx.org/														6/16/2023		
HOPE, Inc	We are a non-profit organization that serves low income families in Erath County with food, clothing, household items and limited financial assistance. We also provide a free medical and dental clinic for low income uninsured residents of Erath County.	Other	Private Sector or Non-Governmental Organization	Non Profit Organization	X									County Wide	Erath										See above							
Housing Authority of the City of Austin and Austin Pathways	Housing is a platform for digital opportunity. Digital opportunity in public and affordable housing means very low-income residents can access education, workforce training and jobs, health and wellness options and greater quality-of-life. When housing residents adopt digital tools, public and affordable housers can use digital tools to improve service availability and decrease operating cost. Digitally-enabled services accessed by public and affordable housing residents across the services continuum could decrease system-wide service cost, duplication of effort and could increase the rate of service uptake and resident opportunity program completion.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Digital Opportunity Research, Planning or Organizing;Cybersecurity and Privacy Training;Publicly Accessible Online Services;Workforce Development	Community Anchor Institution;Government or Local or Regional Authority;Non Profit Organization	Public Housing or Affordable Housing Organization;Local or Regional Authority;Non Profit Organization	X	X		X	X	X	X			Travis		www.hacanet.org	Yes		Yes	Lack of Awareness and Engagement in Communities We Serve;Lack of Community Trust	Federal or State Funding;Philanthropic Grants;Individual or Corporate Donations	Unlocking the Connection (Broadband Access and Affordability): Unlocking the Connection aims to provide every resident in the subsidized housing properties with a free or very low-cost gigabit speed internet connection. To free in-unit high-speed	Your Home FCC Affordable Connectivity Program (ACP) Your Home Health is funded by the St. David's Foundation. Program details are described in other sections of this survey. One element of this program involves loaning 5G hotspots to	Digital Pulse: Connecting Communities to Better Health funded by St. David's Foundation (Broadband Access): Digital Pulse: enables residents in public and affordable housing to earn a donated refurbished desktop, laptop, tablet or smartphone upon completion of programs including education, workforce development, and health and	Unlocking the Connection Earn A Device Program: HACA's Unlocking the Connection Earn A Device Program provides basic digital skills and technical support aimed at family self-sufficiency and quality of life. Ultimately increasing trust in digital tools and the institutions that use them. Place-based digital skills training and technical support is supported by HACA	Unlocking the Connection (Digital Skills and Technical Support): Health (Digital Leadership for Digital Opportunity: Residents of HACA may apply to become Digital Ambassadors, helping their neighbors and the community navigate digital opportunity, including securing free and affordable internet service, devices and digital literacy	Digital Ambassador Programs: HACA Resident Leadership for Digital Opportunity: Residents of HACA may apply to become Digital Ambassadors, helping their neighbors and the community navigate digital opportunity, including securing free and affordable internet service, devices and digital literacy	8/30/2023				
Houston Community College		Computer Device Access;Digital Skills and Technical Support;Workforce Development;Public Computer Center	Community Anchor Institution	Community College	X	X	X	X	X	X	X			City Wide or Across Multiple Cities	Harris	hccs.edu														5/23/2023		
Houston Foodbank	The CAP department would like to be able to provide credible resources to individuals who express a need for internet connectivity, cell phones or other tech devices via our Referral Partner program. This program is designed to assist individuals with resources that will help stabilize and avoid having to make economic tradeoffs. We know that individuals who are food insecure often times have other social needs.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X		X	X	X	X			LGBTQ community	Regional or Across Multiple Counties	Harris	www.houstonfoodbank.org													6/14/2023		
Houston Independent School District	We provide chromebooks to students enrolled in school. Most students on my campus do not have reliable internet access from home.	Computer Device Access;Cybersecurity and Privacy Training	Community Anchor Institution;Government or Public Organization	School K-12;Library;State Government	X				X	X	X			Neighborhood Based or Across Multiple Neighborhoods	Harris															8/3/2023		
Howe Community Library			Community Anchor Institution	School K-12;Library	X	X		X	X	X	X			Grayson		https://www.howeisd.net/apps/pages/index.jsp?urREC_ID=438852&type=d															5/10/2023	

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers		Org Sources of Funding	Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7
Hubspot		Computer Device Access			X										City Wide or Across Multiple Cities	Floyd														
Hudspeth County		Broadband Access, Affordability and Adoption	Community Anchor Institution;Gov	Community Support or Community Based Organization;County Government	X	X		X	X	X	X	X			Hudspeth		https://www.co.hudspeth.tx.us/page/hudspeth.County.District.Clerk												8/23/2023	
Hudspeth County		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Government or Public Organization	County Government	X	X		X	X	X	X				Hudspeth														8/23/2023	
Hudspeth County		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Gov	Community Support or Community Based Organization;Workforce Development Organization;County Government	X	X	X	X	X	X	X	X		County Wide	Hudspeth														8/25/2023	
Human-I-T Human-I-T	Human-I-T is a non-profit Digital	Broadband	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization;Non Profit Organization	X	X	X	X	X	X	X	X			Travis Bexar	human-i-t.org human-i-t.org	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Lack of Staff or Organizational Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability;Difficulty in Accessing Funding Sources;Lack of Community Trust	Federal or State Funding;Government Grants;Philanthropic Grants;Individual or Corporate Donations;Earned Income;User Fees	Human-I-T	Case-Worker	Low-Cost	High-Speed	Digital Literacy	Digital	Technical	5/9/2023 5/9/2023
India Fine Arts, Inc.	Provide raga-based musical therapy for seniors and underrepresented communities.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization;Non Profit Organization	X	X			X	X	X			Statewide;Regional or Across Multiple Counties;City Wide or Across Multiple Cities	Travis	www.austinfinearts.org	Yes												6/6/2023	

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other										Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8						
International Museum of Art & Science	Our museum plans to continue offering digital content to serve a broader audience and extend our reach to the local, regional, state, and international community.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Based Community Non Profit Organization	X	X		X	X	X	X	X		Regional or Across Multiple Counties	Hidalgo	https://theimaonline.org						Workshop Wednesdays feature monthly videos on art techniques, artists, and art movements. Viewers will also have the option of picking up a free supply kit for the workshop at the museum beforehand. These instructional videos are also posted on the IMAS YouTube reference along with supply kits to	Young Adventurers is an early childhood program that fosters decision-making skills, fine motor function, literacy, and creative expression through artmaking. These exciting pre-K workshops run 30-40 minutes, including snack time. For ages 3-6 with accompanying adult.	Homeschool Days: Homeschool Days are in-person workshops that explore art and science concepts in depth through hands-on activities with an IMAS Educator.							6/13/2023					
Irion County		Public Computer Center	Government or Public Organization	County Government									X	City Wide or Across Multiple Cities Specific to an Individual Location	Irion																			6/22/2023		
Irving Independent School District		Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Digital Opportunity Program Funding;Digital Opportunity Research, Planning or Organizing;Cybersecurity and Privacy Training;Publicly Accessible Online Services;Workforce Development; Public Computer Center	Community Anchor Institution;Government or Public Organization	School K-12;Library;City Government	X				X	X	X			Multiple Cities Specific to an Individual Location	Dallas	www.IrvingISD.net	Yes	Yes		Yes	Lack of Funding Availability;Difficulty in Accessing Funding Sources														7/26/2023	
Italian Cultural & Community Center of Houston			Private Sector or Non-Governmental Organization	Non Profit Organization										All people who are interested in Italian culture, art, history, language, and heritage	Statewide;Regional or Across Multiple Counties;County Wide;City Wide or Across Multiple Cities;Specific to an Individual Location	Harris	www.icchouston.com																		6/6/2023	
Jackson County	Jackson County is seeking funding opportunities and partnerships to better serve our community with broadband services.	Public Computer Center	Government or Public Organization	County Government	X	X	X	X	X	X	X	X		County Wide	Jackson																					

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Jacksonville Public Library and City of Jacksonville		Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;Public Computer Center	Community Anchor Institution;Government or Public Organization	Library;City Government	X	X		X	X	X	X	X	All residents of our city	City Wide or Across Multiple Cities;Specific to an Individual Location	Cherokee	https://www.jacksonvilletx.org/																6/9/2023	
Jesus Cantu Medel, M.Ed.	Our target population--low-income Mexican Americans--need more access to free laptops.	Computer Device Access;Digital Skills and Technical Support;Digital Opportunity Research, Planning or Organizing;Workforce Development	Private Sector or Non-Governmental Organization	Non Profit Organization		X			X		X		Chicanos	Statewide	Harris	None									Chicano-Anahuac Digitizing Project: Our primary goal is to digitize rare printed materials of the 60s and 70s periods.	Chicano-Anahuac Digitizing Program: Focus on rare documents that are digitized						6/12/2023	
Joint Commission on Elderly Affairs		Publicly Accessible Online Services	Community Anchor Institution;Government or Public Organization	Community Support or Community Based Organization;County Government;City Government		X				X	X	X		City Wide or Across Multiple Cities	Bexar																	7/14/2023	
Katy Independent School District		Computer Device Access;Digital Skills and Technical Support	Community Anchor Institution;Government or Public Organization;Private Sector or Non-Governmental Organization	Community School K-12;State Government;Local or Regional Authority;Non Profit Organization	X	X					X	X		Regional or Across Multiple Counties	Harris	Katy ISD										digital divide : digital device checkout process through the library by students who need a device or internet access.	digital citizenship : online educational resources for parents and students.						6/14/2023
Kickapoo Traditional Tribe of Texas	The Kickapoo Traditional Tribe of Texas has been awarded for a Private LTE Network using the TBCP Funds. Our current goal is to complete the project by August 2023. Hoping to discuss this more during our Tribal Consultation with the TBDO.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Digital Opportunity Program Funding;Digital Opportunity Research, Planning or Organizing;Cybersecurity and Privacy Training;Publicly Accessible Online Services;Workforce Development;Public Computer Center	Government or Public Organization	Tribal Government	X	X			X	X	X	X		Specific to a Tribal Nation or Available to Multiple Tribal Nations	Maverick	kickapootexas.org	Yes			Yes	Lack of Funding Availability;Difficulty in Accessing Funding Sources	Federal or State Funding;Government Grants Subsidies				Devices for Tribal Education Students: This was a one-time distribution for all Tribal Education Students for virtual learning during the COVID pandemic.							6/1/2023
Klein Independent School District															Harris																	8/10/2023	
Knox County Hospital District			Community Anchor Institution;Government or Public Organization;Private Sector or Non-Governmental Organization	Health Clinic or Health Center;Hospital or Other Medical Provider;Special District;Non Profit Organization	X	X	X	X	X	X	X	X			Knox	www.knoxhospital.org																	4/28/2023

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2	Org Program 3		Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Leadership Advisory Board Leander Independent School District	Review and develop plans for each organization within county AgrLife programs	Digital Opportunity Research	Community Anchor Institution	County Government School K-12	X				X	X	X	X			County Wide	Caldwell														All organizations within county mUSD: The Leander Mobile Learning Initiative (mUSD) is the district's optional solution to providing students access to digital content, resources and devices to support anytime/anywhere learning. Students are provided the opportunity to borrow one of our laptops for a nominal non-refundable security deposit or	5/10/2023		
Lee College	Lee College is a caring community of teachers and learners focused on creating the ideal student experience, which includes using an equity lens to ensure that students have what they need to be successful; innovating to build holistic pathways that support student success; providing the highest quality instruction for transfer courses and workforce programs; and supporting the greater community and generations of Lee College graduates with professional development and community education opportunities. The digital opportunity grant would allow Lee College to expand and provide educational programs and services to under served communities that do not have internet access and the hardware needed to connect to online resources and services. Several communities in rural area or those with lower economic means lag in their ability to fully participate in the technology-driven world. Broadband access is needed for access to information and services for public safety, Telehealth services, research and job opportunities, housing and utilities, family connections,	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Government or Public Organization;Private Sector or Non-Governmental Organization	Community College;Local Authority;Foundation	X	X	X	X	X	X	X	X			Regional or Across Multiple Counties	Harris	lee.edu																6/10/2023
Lee College		Computer Device Access;Digital Skills and Technical Support	Community Anchor Institution	Community College	X	X	X	X	X	X	X	X			Specific to an Individual Location	Walker	https://www.lee.edu/lche/																8/14/2023
Lee County Fair Association, Inc.	LCFA is a non-profit scholarship organization that supports continuing education for Lee county youth	Planning or Organizing,Workforce Development	Community Anchor Institution	Non Profit Organization				X			X	X			County Wide	Lee																	
Lena Armstrong Public Library		Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support	Community Anchor Institution;Government or Public Organization	Library;City Government	X	X		X	X	X	X	X			Specific to an Individual Location	Bell	https://protect-us.mimecast.com/s/ra30CDkRppSAZG6U5Avajl?domain=beltonexas.gov	Yes												Lack of Staff or Organizational Capacity;Lack of Funding Availability	6/14/2023		

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Program 1										Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8						
Lions Club	We serve our community with food banks, diabetes awareness, sight programs for pre-school to 2nd grade to identify children who need glasses. Provide glasses for under privileged.	Computer Device Access,Digital Opportunity Program Funding,Public Computer Center,Publicly Accessible Online Services,Planning or Organizing,Workforce Development	Community Anchor Institution	Non Profit Organization	X				X	X	X	X		County Wide	Milam																			Diabetes awareness Food drive Walk across Texas Sight First		
Lipscomb County	Lack of digital access affects our law enforcement, fire departments, EMS as well as residents being able to communicate via cellphones in numerous locations within the county.	Computer Device Access;Publicly Accessible Online Services	Community Anchor Institution;Government or Public Organization;Private Sector or Non-Governmental Organization	School K-12;Library;Health Center;County Government;Non Profit Organization									X	Statewide;County Wide	Lipscomb County																				6/15/2023	
Literacy Texas			Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Health Center;County Government;Non Profit Organization	X	X			X	X	X	X		Tarrant		literacytexas.org																			5/9/2023	
Little River Basin Master Gardener Assoc.	This is a nonprofit volunteer organization that works with the community to provide horticultural and gardening education free of charge under the umbrella of Texas AgriLife Extension.	Publicly Accessible Online Services	Government or Public Organization	Non Profit Organization									X	Regional or Across Multiple Counties	Burleson, Milam, Lee, Roberts																			We train volunteers, with the assistance of Texas AgriLife Extension Service, to provide horticultural and gardening resources within our community and surrounding areas.		
Little River Basin Master Gardeners (Milam County)	It is a 591(c)(3) organization committed to helping educate, teach, train, and share. We are looking at use QR codes and guided tours using media and real life tours. Also use some AgriLife resources out of Texas A&M for virtual training.	Computer Device Access,Publicly Accessible Online Services,Planning or Organizing	Community Anchor Institution,Government or Public Organization	Non Profit Organization									X	County Wide	Milam																				Monthly programs on various types of gardening, including trees, flowers, vegetables, succulents, shrubs and their care, propagation, and treatment of diseases.	
Llano County	county government	Broadband Access	Government or Public Organization	County Government	X	X	X	X	X	X	X	X		County Wide	Llano																				None at this time but are working on establishing programs	
Llano County	County Government	Other	Government or Public Organization	County Government	X	X		X					X	County Wide	Llano																					

Org Name	Org Description	Org Broadband Focus Area	Org Category	Org Subcategory	Covered Populations Served									Programs Offered										Date Recorded									
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1		Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Longview Public Library		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training; Public Computer Center	Community Anchor Institution; Government or Non-Profit Organization; Private Sector or Non-Governmental Organization	Library; City Government; Non Profit Organization	X	X		X	X	X	X	X		Specific to an Individual Location	Gregg	www.longviewtexas.gov/library	Yes	Yes		Lack of Awareness and Engagement in Communities We Serve; Lack of Funding Availability	Federal or State Funding; Government Grants Subsidies											6/12/2023	
Lourdes Flores	We are a community based organizations working with low income families. We serve the whole family. Focusing in education issues.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution; Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Non Profit Organization	X					X				El Paso																		5/31/2023	
Lower Colorado River Authority			Government or Public Organization	Special District										Travis	www.lcra.org																	4/28/2023	
Lubbock Impact			Community Anchor Institution; Private Sector or Non-Governmental Organization	Health Clinic or Health Center; Community Support or Community Based Organization; Non Profit Organization	X	X			X		X			Lubbock	www.lubbockimpact.com																	5/10/2023	
Lynn County Healthcare System			Community Anchor Institution; Government or Public Organization	Health Clinic or Health Center; Hospital or Other Medical Provider; Special District	X	X	X	X	X	X	X	X		Lynn	lchdhealthcare.org	Yes				Lack of Staff or Organizational Capacity; Lack of Funding Availability; Difficulty in Accessing Funding Sources	Earned Income												5/10/2023
Mason Independent School District		Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training	Community Anchor Institution	School K-12	X									County Wide	Mason	masonisd.net																6/23/2023	
McAllen Public Library	We have done our very best to shrink the digital divide with our patrons. This most notably happened during the pandemic as we implemented our hotspot loaner program. This was designed to assist patrons, particularly those that were students, to help them connect with their respective campuses for virtual learning. We then introduced our "Job Fair in a Bag" program. This was implemented to help members of our community get the resources needed in acquiring a job post-pandemic. The kits come with a laptop, hotspot device and additional resources (resume writing, Texas Workforce Commission information, etc.) to make the job searching process a smooth and hopefully successful one.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Private Sector or Non-Governmental Organization	Library; Non Profit Organization		X		X	X		X			City Wide or Across Multiple Cities	Hidalgo	www.mcallenlibrary.net	Yes	Yes		Lack of Staff or Organizational Capacity; Lack of Awareness and Engagement in Communities We Serve	Government Grants Subsidies											6/6/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered										Date Recorded								
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Midland Independent School District		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training; Publicly Accessible Online Services	Community Anchor Institution; Government or Public Organization	School K-12; Local or Regional Authority	X					X	X	X					Yes	Yes	Yes	Lack of Staff or Organizational Capacity; Lack of Funding Availability; Difficulty in Accessing Funding Sources	Federal or State Funding; Government Grants Subsidies											6/15/2023	
Milam County 4-H	Organization is an educational opportunity that is located in Milam County under the direction of the Milam County Extension Agents that are also employed by Texas A&M AgriLife Extension that is based in College Station, Texas at Texas A&M University. The AgriLife Extension is part of the Land Grant Mission at Texas A&M which provides youth within rural and urban counties opportunities to learn about agriculture, family and life sciences, among many human science areas.	Computer Device Access; Digital Skills and Technical Support; Planning or Organizing; Publicly Accessible Online Services; Digital Opportunity Research; Affordability and Adoption; Workforce Development	Community Anchor Institution; Government or Public Organization; Private Sector or Non-Governmental Organization	School K-12; City Government; County Government; Non Profit Organization; Community Support or Governmental Organization	X	X		X	X	X	X	X					County Wide or Across Multiple Cities, Statewide, Regional or Across Multiple Counties, Neighborhood Based or Across Multiple Neighborhoods	Milam, Bell, Brazos															
Miles ISD	Educational	Computer Device Access; Workforce Development; Broadband Access	Government or Public Organization	School K-12													Specific to an Individual Location	Runnels															
Mission Carthage Inc.	We need internet to use Oasis Insight (record keeping) Quickbooks, and other programs.		Community Anchor Institution; Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Non Profit Organization	X	X		X	X	X	X	X					County Wide	Panola	www.missioncarthage.com														6/8/2023

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served								Programs Offered													Date Recorded											
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2	Org Program 3		Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8						
Mobile Comunidad	We provide connectivity via a satellite system on our van. We also provide laptops and tablets for residents to borrow	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Digital Opportunity Program Funding; Digital Opportunity Research, Planning or Organizing; Cybersecurity and Privacy Training; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Private Sector or Non-Governmental Organization	Community Support or Based Community Non Profit Organization	X	X		X	X	X	X	X		County Wide	Jeff Davis	mobilecommunitydad.org	Yes	Yes	Yes	Lack of Staff or Organizational Capacity; Lack of Awareness and Engagement in Communities	Philanthropic Grants; Individual or Corporate Donations	Mobile Comunidad: As a mobile provider of food pantry distributions, social services outreach, a bookmobile, and a Little Free Library, our van offers satellite internet in a range of 150 feet around it. We provide laptops, tablets, and other devices and assistance with connectivity.	Mobile Comunidad: With our van, we visit various communities within our county and make available loaner laptops, tablets, and other devices.	Mobile Comunidad: Our van offers assistance with digital skills during visits to various neighborhood s in our county											5/24/2023		
Monahans Chamber of Commerce	As a Chamber of Commerce we have members throughout the West Texas Area. We service all our members and provide information and workshops to help their businesses succeed. We have worked for over 7 years putting a broadband plan into our community and are nearing completion of Phase I and have hopes of getting funding in place to start and complete Phase II. It takes constant beating the bushes to put all of this in place. Funding, mapping, design, engineering, education and support just to name a few. Most times you feel as if you are out there all alone and struggle to know which direction to turn. Every community is different but we all have the same needs.	Broadband Access, Affordability and Adoption; Workforce Development	Private Sector or Non-Governmental Organization	For Profit or Corporation or Business	X	X	X	X	X	X	X	X		Regional or Across Multiple Counties	Ward	Monahans Chamber of Commerce monahans.org	Yes			Lack of Awareness and Engagement in Communities	Federal or State Funding; Government Grants; Philanthropic Grants; Individual or Corporate Donations															6/8/2023	
Montague County		Government or Public Organization	County Government		X	X	X	X	X	X	X	X		Montague		https://www.co.montague.tx.us/																				4/24/2023	
Montague County		Government or Public Organization	County Government		X	X	X	X	X	X	X	X		Montague		https://www.co.montague.tx.us/																					4/24/2023
Moore County Library System		Community Anchor Institution; Government or Public Organization	Library; County Government		X	X		X	X	X	X	X		Moore		www.mocoilib.net																					5/12/2023

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2	Org Program 3	Org Program 4		Org Program 5	Org Program 6	Org Program 7	Org Program 8			
Museum of the West Texas Frontier		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Based Community Non Profit Organization	X	X		X	X	X	X	X		Regional or Across Multiple Counties	Jones	https://museu mofthweste xasfrontier.co m/																		6/8/2023
NAMI Texas	free, statewide online mental health support groups, trainings, and classes 25 local NAMI Affiliates, many of which are offering their own online programs	Publicly Accessible Online Services	Private Sector or Non-Governmental Organization	Non Profit Organization					X					Statewide	Travis	NAMI Texas																	6/1/2023	
National Church Residences	National Church Residences is working hard to provide digital equity to all our residents by partnering with agencies and organizations can help us facilitate educational and informational sessions, can help provide technology equipment and can help secure volunteers or provide operational support so we may hire staff dedicated to equity among our residents. We have our own digital equity advisory committee and keep regions aware and informed of what we should be looking out for.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Publicly Accessible Online Services;Public Computer Center	Community Anchor Institution;Private Sector or Non-Governmental Organization	Public Housing or Affordable Housing Organization; Non Profit Organization	X	X		X	X	X	X	X		Statewide	Travis	www.national churchresidences.org			Yes	Yes	Lack of Staff or Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability;Difficulty in Accessing Funding Sources;Linguistic Barriers	Federal or State Funding;Government Grants Subsidies;Philanthropic Grants;Individual or Corporate Donations											8/28/2023	
Nesbitt Memorial Library	Public Library	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Publicly Accessible Online Services;Public Computer Center	Community Anchor Institution;Government or Public Organization	Library;City Government	X	X		X	X	X	X	X		City Wide or Across Multiple Cities	Colorado	http://www.columbustexaslibrary.net	Yes																6/5/2023	
Newton County History Center	We need to put a great deal of digitized material on the web but are not capable of doing so due to our internet service at this time. We also are developing a computer ap that will need more digital opportunity. We are limited at this time.	Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training	Community Anchor Institution;Government or Public Organization	Community Support or Based Community Non Profit Organization;County Government	X	X		X	X	X	X	X		County Wide	Newton	www.history-newtoncotx.com																	6/6/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Programs Offered								Date Recorded
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Program 1										Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
North American University			Community Anchor Institution;Private Sector or Non-Governmental Organization	Library;Private University;Non Profit Organization						X	X				Fort Bend	www.na.edu													5/11/2023			
Northside Independent School District	Northside ISD serves a portion of the city of San Antonio as well as the cities of Grey Forest, Leon Valley, Shavano Park, Helotes, and the unincorporated communities of Cross Mountain, Leon Springs, and Scenic Oaks.	Broadband Access, Affordability and Adoption;Computer Device Access;Cybersecurity and Privacy Training	Community Anchor Institution	School K-12	X					X	X	X	X		Regional or Across Multiple Counties	Bexar	www.nisd.net	Yes	Yes	Yes	Yes	Lack of Staff or Organizational Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability;Difficulty in Accessing Funding Sources	Federal or State Funding	A) TEA Connect Texas (TEACT) program and Emergency Connectivity Fund (ECF) Programs B) NISD Wireless Hotspot Program : TEACT is a coordinated initiative to leverage the buying power of the State to negotiate discounted highspeed broadband pricing (w/ISP-s) that the LEA covered the cost for underserved or unserved							6/16/2023	
Northstar NPower	NPower creates pathways to economic prosperity by launching digital careers for military veterans and young adults from underserved communities. We envision a future where our domestic technology workforce is diverse, and clear pathways exist for all people regardless of ethnicity, gender, or socio-economic background to succeed in our digital economy. Founded in 2000, NPower is a leader in metrics-driven tech training designed to build in-demand skills for the local job market through a community-based approach. We serve low-income young adults from under-resourced areas and military veterans in 7 regions across the United States & CA, MD, MI, MO, NJ, NY, and TX. Since launching in Texas in 2013, NPower's tuition-free IT workforce development program, Tech Fundamentals, has been provided to unemployed and low-income veterans, veteran spouses, and military reservists. With support from the City of Dallas and United Way in 2021, we have expanded this program to include young adults	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Cybersecurity and Privacy Training;Workforce Development	Community Anchor Institution;Private Sector or Non Profit Organization	Workforce Development Organization; Non Profit Organization	X			X			X	X		Regional or Across Multiple Counties;City Wide or Across Multiple Cities	Tarrant Bexar	https://www.npower.org/		Yes		Yes	Lack of Staff or Organizational Capacity;Lack of Awareness and Engagement in Communities We Serve;Lack of Funding Availability	Federal or State Funding;Government Grants Subsidies;Philanthropic Grants;Individual or Corporate Donations	NPower Tech Fundamentals Program : Working at the intersection of ending poverty, workforce development, and diversity in tech, NPower provides training and job placement in career track tech jobs for low-income, under-resourced young adults (ages 18-26) and veterans/veterans' spouses from underserved communities							5/23/2023 8/28/2023		
Oakwood Community Food Pantry	This organization is paired with the East Texas Food Bank. ETFB is on a computer system. We cannot connect to the system because we have no wifi and no computers. We all use our computers from home.		Private Sector or Non-Governmental Organization	Non Profit Organization	X	X		X					X	Neighborhood Based or Across Multiple Neighborhoods	Leon	NA													6/12/2023			

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8				
Odyssey Academy (Public Charter Schools)	We help provide at-risk and economically disadvantaged students with the education, knowledge, skills, and support to be prepared for their adult life and career.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support	Community Anchor Institution; Government or Non-Profit Organization	School K-12; State Government; Non Profit Organization	X				X	X	X				Regional or Across Multiple Counties	Galveston	www.odyssey-academy.com	Yes																6/29/2023	
Old Jail Art Center	Programs and access are free to the public.	Broadband Access, Affordability and Adoption; Public Computer Center	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X		X	X	X				X	Statewide; Regional or Across Multiple Counties; County Wide; City Wide or Across Multiple Cities	Shackelford	www.theojac.org	Yes	Yes															5/30/2023	
Older Adults Technology Services (OATS)	Senior Planet from AARP® is available to all Texans virtually, as well. On a national level, Senior Planet is also available to Texas residents, virtually via SeniorPlanet.org and via a National Tech Hotline: 888-713-3495 (monitored by Senior Planet Trainers from 9am – 5pm EDT, Monday through Friday.)	Publicly Accessible Online Services								X																									
Opportunity Home San Antonio Orangefield ISD		Workforce Development or Public Organization	Government or Public Organization	Local or Regional Authority											City Wide or Across Multiple Cities	Bexar	https://homas.org/																	9/13/2023	
		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support	Community Anchor Institution	School K-12	X					X	X	X	X		Orange		www.orangefieldisd.net	Yes	Yes	Yes														4/21/2023	
Palacios Library		Broadband Access, Affordability and Adoption; Computer Device Access; Publicly Accessible Online Services	Community Anchor Institution; Private Sector or Non-Governmental Organization	Library; Non Profit Organization	X	X				X	X	X	X	children	Statewide	Matagorda	palacioslibrary.net	Yes																6/5/2023	
Paris Junior College			Community Anchor Institution; Government or Non-Profit Organization	Community College; State Government; For Profit Corporation or Business	X	X		X	X	X	X	X			Lamar		www.parisjcd.edu																		5/5/2023

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered										Date Recorded							
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8	
Paris Junior College		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution	Community College	X	X	X	X	X	X	X	X		Regional or Across Multiple Counties	Lamar	www.parisjcc.edu	Yes	Yes		Lack of Staff or Organizational Capacity; Lack of Awareness and Engagement in Communities We Serve; Lack of Funding Availability	College loans or provides laptops and offers access to broadband on campus. ; College loans or provides laptops and offers access to broadband on campus.	Laptop Loan: Students request to borrow a laptop.									6/7/2023	
Partnership between T-Mobile and Amarillo College		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services	Community Anchor Institution	Community College	X	X		X	X	X	X	X	We provide access for registered students. They may fit into many of these categories.	Regional or Across Multiple Counties; City Wide or Across Multiple Cities	Potter	https://www.actedu.com	Yes	Yes	Lack of Staff or Organizational Capacity; Lack of Funding Availability	Federal or State Funding; Government Grants; Philanthropic Grants; Individual or Corporate Donations	T-Mobile Hotspots: Students that are registered for semester class can come to the Lynn Library on Amarillo College's Washington Street Campus to check out a device. It is a Samsung A32 device, which provides cellular service as well as internet through a hotspot application on the device. Students must present a picture ID, fill out a form									5/22/2023		
Permian Basin Area Foundation	The Foundation seeks to meet charitable needs in West Texas by providing a flexible vehicle for donors with varied philanthropic desires. The charitable impact of the Foundation in the Permian Basin has been profound. Thanks to the prudent stewardship of donors' gifts, Permian Basin Area Foundation has grown permanent assets to an estimated \$280 million through 2021. Since its inception, the Foundation has returned nearly \$100 million to West Texas communities through grants and scholarships.		Private Sector or Non-Governmental Organization	Foundation Philanthropic Organization									PBAF serves nonprofit organizations that serve many of the above populations.	Regional or Across Multiple Counties	Midland	www.pbaaf.org																5/30/2023
Plano Independent School District		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support	Community Anchor Institution	School K-12	X				X	X	X		City Wide or Across Multiple Cities	Collin	www.pisd.edu	Yes	Yes	Lack of Staff or Organizational Capacity; Lack of Awareness and Engagement in Communities We Serve	Federal or State Funding													6/20/2023

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered										Date Recorded				
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6
Plano Public Library	We engage with a variety of nonprofit and community-based organizations to inform our programming plans and to reach a broader audience. We take programs including some technology training into the community, instructing on-site at community organizations' facilities. Our libraries have expanded our wireless signal access in the last few years and have added software for 3D design, as well as Adobe suite access at all libraries. Staff continue to assist patrons with a variety of basic technology issues and to plan programs that may be of interest to patrons of differing capabilities.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Government or Public Organization	Library; City Government	X	X		X	X	X	X			City Wide or Across Multiple Cities	Collin														6/5/2023
Pleasanton Library & Information Center	The Library actively seeks ways to improve digital accessibility for all of its patrons.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Government or Public Organization	Library; City Government	X	X		X	X		X	X		County Wide or Across Multiple Cities	Atascosa	http://pleasanton.tx.gov/departments/library.php	Yes	Yes		Yes	Lack of Staff or Organizational Capacity; Lack of Awareness and Engagement in Communities We Serve; Lack of Funding Availability; Difficulty in Accessing Funding Sources								6/6/2023
Polk County			Government or Public Organization	County Government	X	X		X	X	X	X	X		Polk		POLK COUNTY.NET													5/3/2023
Polk County			Government or Public Organization	County Government	X	X	X	X	X	X	X	X		Polk		www.co.polk.tx.us		Yes	Yes	Lack of Staff or Organizational Capacity; Lack of Funding Availability; Difficulty in Accessing Funding Sources	Government Grants Subsidies								5/3/2023
Pottsboro Area Public Library	Digital equity is our primary mission. Our organization has been a digital inclusion leader in our community since 2012. We have a robust digital navigator program through the National Digital Navigator Corps, organized by NDIA. We offer one-on-one help as well as group training. The Pottsboro Library is a demonstration site for assistive technology. We distribute \$20,000 of new devices each year to the community. Through a variety of innovative models, we provide connectivity to people who live in Grayson County. We convened the stakeholders in our community to form the Grayson County Broadband Coalition. I work with broadband mapping consultants and researchers to gather digital inclusion data. I am a founding member of a Collaborative Institute of Rural Communities and Librarianship, recently convened at the University of Texas School of Information. Through this organization, we'll be gathering data and establishing best practices for libraries worldwide. I can't think of anything we don't do that is related to digital equity. It is our passion.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution	Library	X	X		X	X	X	X	X		County Wide	Grayson	PottsboroLibrary.com													8/18/2023

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Region One Education Service Center	This is an education service center supporting 8 counties in South Texas. Currently providing broadband to school districts and training for school district staff on online safety, digital citizenship, etc.	Digital Skills and Technical Support;Digital Opportunity Program Funding;Digital Opportunity Research, Planning or Organizing;Cybersecurity and Privacy Training	Government or Public Organization;Private Sector or Non-Governmental Organization	State Government;Non Profit Organization	X				X	X	X	X		Regional or Across Multiple Counties	Hidalgo	www.esc1.net													Megabyte: Digital skills consortium that allows educators to get training on new technologies that will help them in the classroom	Megabyte								5/31/2023								
Restore Education	We are working to integrate digital literacy training across all our adult education programs, but are limited by devices and funding. The majority of our students do not have technology at home nor the skills in order to be ready for postsecondary opportunities. With additional training, devices, and support we can help 5,000 students per year get the skills they need to be workforce ready.	Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;Workforce Development; Public Computer Center	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Workforce Development; Non Profit Organization	X	X		X	X	X	X	X		Regional or Across Multiple Counties	Bexar	www.restoreeducation.org													Train for Jobs: Students enrolled in training program during the pandemic and received a device for online learning and a \$15/hr for training.	Digital Skills training: Digital skills program for internet and job search use and email; second level employment and education related training and MOS training	MOS specialist certification: training for students to pass MOS in Word training										6/8/2023					
Rise Broadband		Digital Opportunity Research, Planning or Organizing	Community Anchor Institution;Government or Public Organization	Private University;City Government;Labor Organization		X			X		X			City Wide or Across Multiple Cities	Bexar																								9/10/2023							
Robert Lee Independent School District	PreK-12th Campus	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support	Community Anchor Institution	School K-12					X	X	X	X			Coke	rlisd.net	Yes	Yes																						7/24/2023						
Robertson County		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Government or Public Organization	County Government	X	X		X	X	X	X	X			Robertson																									6/13/2023						
Rosenberg Library			Community Anchor Institution;Private Sector or Non-Governmental Organization	Library;Non Profit Organization	X	X		X	X	X	X	X			Galveston	rosenberg-library.org	Yes	Yes		Yes	Lack of Staff or Organizational Capacity	Federal or State Funding;Government Grants;Philanthropic Grants;Individual or Corporate Donations	WiFi ToGo: Check-out of Internet hotspots for 2-week period.	Isle Connect: ECF funded program to provide chromebooks and internet hotspots to households without reliable computing or Internet access	Computer Lab: Publicly available computer lab - schedule of rotating classes, covering Basics of Computing to MS Office classes	Computer classes: Offer rotating schedule of computing classes, covering Basics of Computing to MS Office classes	Drop in service for device help: At scheduled times, customers can bring their personal devices and staff will help them get connected to library subscription resources																			5/12/2023

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Programs Offered													Date Recorded												
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2	Org Program 3	Org Program 4		Org Program 5	Org Program 6	Org Program 7	Org Program 8								
San Jacinto College District	The College has a laptop loaner & mobile internet program for students. The College also support internet affordability programs offered by carriers for students that qualify for such programs. We also provide technical and fluency support.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training; Publicly Accessible Online Services; Workforce Development	Community Anchor Institution	Community College	X			X	X	X	X										Specific to an Individual Location	Harris	sanjac.edu	Yes	Yes	Yes	Yes											6/15/2023	
Santa Fe Independent School District		Computer Device Access; Digital Skills and Technical Support; Workforce Development	Community Anchor Institution	School K-12	X				X	X	X	X									Galveston		www.sfsd.org															6/28/2023	
Schleicher County Public Library			Community Anchor Institution; Private Sector or Non-Governmental Organization	Library; Non Profit Organization	X	X					X	X									Schleicher		schleicherlibrary.com	Yes	Yes			Lack of Staff or Organizational Capacity; Lack of Funding Availability; Difficulty in Accessing Funding Sources	Government Grants Subsidies										5/12/2023
Schleicher County Public Library		Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Public Computer Center	Community Anchor Institution; Government or Non-Profit Organization	Library; County Government; Non Profit Organization	X	X					X	X									County Wide	Schleicher	schleicherlibrary.com															6/5/2023	
Senior Planet		Digital Skills and Technical Support; Cyber security and Privacy Training	Private Sector or Non-Governmental Organization	Non Profit Organization		X															Bexar																9/7/2023		
Senior Planet		Digital Skills and Technical Support; Cyber security and Privacy Training	Digital Skills and Technical Support; Cyber security and Privacy Training	Non Profit Organization		X															City Wide or Across Multiple Cities	Bexar	https://seniorplanet.org/locations/san-antonio/																9/13/2023

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2	Org Program 3	Org Program 4		Org Program 5	Org Program 6	Org Program 7	Org Program 8
SHAPE Community Center	SHAPE Community Center acts as a community resource center for youth academic and enrichment programs, adult workforce support, and copy/print/scan/fax/email services. Additionally, we support STEM advancement for youth ages 5-13 through on-site classes in CAD/3D printing and robotics.	Computer Device Access;Digital Skills and Technical Support;Workforce Development; Public Computer Center	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X		X	X			X			Specific to an Individual Location	Harris	www.shape.org													6/8/2023	
SmartCom Telephone	We will be partnering up with local school districts to provide digital opportunities training.	Broadband Access;Affordability and Adoption;Digital Skills and Technical Support;Publicly Accessible Online Services;Workforce Development	Private Sector or Non-Governmental Organization	Internet Service Provider	X	X		X	X	X	X	X	Schools and Libraries	Regional or Across Multiple Counties;County Wide or Across Multiple Cities;Neighborhood Based or Across Multiple Neighborhoods	Hidalgo	https://smartcomtelephone.com													6/13/2023		
Solid Foundation Association	Solid Foundation Association is a Faith Based Community Organization and a United Way Partner serving at-risk children grades 1-12.	Computer Device Access;Public Computer Center	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Non Profit Organization	X							X	X	Specific to an Individual Location	Nacogdoches	www.solidfoundationasn.com													6/14/2023		
South Dallas Employment Project	We are a coalition of 157 organizational partners, inclusive of government, education, workforce development, business and industry, and nonprofit/NGOs, integrating and aligning resources to serve opportunity populations.	Broadband Access;Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Workforce Development	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X	X	X	X	X	X			City Wide or Across Multiple Cities	Dallas	southdallasemploymentproject.org	Yes	Yes	Yes	Lack of Funding Availability;Difficulty in Accessing Funding Sources	Government Grants;Philanthropic Grants;Individual or Corporate Donations	It does not have a specific name, we provide both training and wraparound services through our 157 partners: Broadband assistance that come to us, are placed with one of our many partners who provide the specific support they are looking for, such as devices, training, etc.	No specific name, we refer all individuals approaches to the appropriate partner among our 157 partners: We refer people to our partners who provide digital access, computer labs, digital literacy training, industry recognized IT certifications	NA	N/A	N/A	N/A	N/A	N/A	N/A	8/22/2023
South East Texas Regional Planning Commission	SETRPC is a voluntary association of local governments that serves Hardin, Jefferson, Orange & Jasper Counties. Membership in SETRPC is open to all general and special purpose local governmental bodies in the four-county region: counties, cities, school districts and other special purpose districts such as water and sewer districts, municipal utility districts and port and drainage districts. The SETRPC has 9 divisions: 9-1-1 Emergency Network, Administration, Area Agency on Aging/2-1-1, Community Services, Criminal Justice & Homeland Security, Disaster Recovery, Foster Grandparent Program, Golden Triangle RSP, and Transportation & Environmental Resources.	Digital Opportunity Research, Planning or Organizing	Government or Public Organization	Council or Metropolitan Organization	X	X	X	X	X	X	X		The SETRPC serves the general public in Jasper, Jefferson, Orange, and Hardin Counties.	Regional or Across Multiple Counties	Jefferson	https://www.setrpc.org/												6/16/2023			

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South Plains College	South Plains College supports digital opportunity through workforce development in technical fields. We offer courses in networking, technology support, and cybersecurity as well as industrial technology solutions such as systems control, integration, and security for industrial equipment. SPC is continuously looking for opportunities to serve the communities and the state with workforce development programs to support future digital initiatives.	Digital Skills and Technical Support;Cyber security and Privacy Training;Workforce Development	Community Anchor Institution;Gov I District	Community College;Specia	X			X			X	X	X		Regional or Across Multiple Counties;Speci fic to an Individual Location	Hockley	https://www.southplainscollege.edu														Technology Center: The Technology Center open lounge area is located in the heart of SPC's campus and is a quiet place for students to have access to an academically stimulating environment in which to study, complete teamwork, or catch up with friends.	Computer Information Systems: The Computer Information Systems program at South Plains College emphasizes technology and information systems as they apply in any workplace.	6/29/2023
South Texas Food Bank	We provide food assistance to different vulnerable populations. We have also partnered with and are interested in partnering with other organizations to diversify our portfolio of services to better serve the communities in need under our organization.	We Do Not Provide Digital Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Profit Organization	Community Based Organization; Non Profit Organization	X	X		X	X	X	X	X		Regional or Across Multiple Counties	Webb	www.southtexasfoodbank.org																6/9/2023	
South Texas Physician Alliance	We have care transition program that is interested in adding telehealth services	We Do Not Provide Digital Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Profit Organization	Health Clinic or Health Center;Non Profit Organization	X	X			X					Specific to an Individual Location	Cameron	www.stpa-tpa.com															C2 HF / C2Health: 30 day Care Transitions program for patients with heart failure, sepsis, or other cardiovascular diagnosis.	6/9/2023	
Southwest Texas Communications	They are only one who is allow to provide internet service due, to service boundaries designated by the state. We need to allow open competition for service in rural areas in order to make it more (Affordable) to rural customers. I suggest that a survey of what these companies who already provide internet service charge for internet plans and how they justified their plans.	Broadband Access	Private Sector or Non-Governmental Organization	Internet Service Provider	X	X								Regional or Across Multiple Counties	Edwards,Menard,Real,Uvalde																		
SpaceX and various partner organizations		Broadband Access, Affordability and Adoption	Community Anchor Institution;Government or Public Organization;Private Sector or Non-Governmental Organization	School K-12;Library;Health Clinic or Health Center;Hospital or Other Medical Provider;Public or State University;Private University;Community Support or Community Based Organization;Tribal Government;State Government;County Government;Local or Regional Authority;Public Safety Entity Government;C	X	X		X	X	X	X	X		Regional or Across Multiple Counties;County Wide;Specific to an Individual Location;Specific to a Tribal Nation or Multiple Tribal Nations	District of Columbia	Space Exploration Technologies																6/9/2023	

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Spectrum	Rural services	Broadband Access	Private Sector or Non-Governmental Organization	Internet Service Provider								X			Neighborhood Based or Across Multiple Neighborhoods	Van Zandt																										
Spring Branch Independent School District	Hot spots, devices and instruction on how to use these tools (i.e. Digital Citizenship, student productivity tools, etc.) is part of the basic instructional instructional program offered by the district to students and their family.	Broadband Access, Affordability and Adoption; Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services			X				X	X	X		Pre-K, K-12 students		Harris	www.springbranchisd.com	Yes			Yes	Lack of Staff or Organizational Capacity; Lack of Funding; Availability	Federal or State Funding; Earned Income	Affordable Connectivity Program (ACP); We provide information on our district's website for how to access ACP. Because we only distribute information, we do not know how many individuals or households are served by this program.	Technology Hot Spot Loaner Program: All students in grades 5-12 are eligible to borrow a device from school for the academic year subject to parental permission, technology fee and completion of Digital Citizenship. The technology fee is waived as required by law (i.e. parental permission and an annual \$25 technology																		6/15/2023
Square Mile Community Development	Square Mile focuses on 5 key areas that allow struggling communities to succeed: Health, Education, Economic Development, Housing, and Spiritual Care. Our primary programs are centered around economic development, food insecurity, and refugee support services. Our model is based on community collaboration and partnerships with other nonprofit organizations, businesses, universities and colleges, and government entities.	Computer Device Access; Digital Skills and Technical Support; Publicly Accessible Online Services; Workforce Development; Public Computer Center	Community Anchor Institution; Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Non Profit Organization	X	X	X	X	X	X	X	X	International Refugees	Regional or Across Multiple Counties	Potter	www.square-mile.org							PATH Program: PATH is a program of Square Mile Community Development that facilitates small business development in neighborhood s challenged by poverty & unemployment. We provide access to an in-house computer bank, digital training in fundamental computer skills, digital arts, and to transform their businesses and their	The PLACE, Refugee Resource Center: The PLACE is a refugee community center started in 2022 by Square Mile and two partnering nonprofit organizations. We provide access to an in-house computer bank, digital training in fundamental computer skills, digital arts, and Word/Excel. Services provided include but																	6/12/2023	
Stages of Recovery, Inc.			Community Anchor Institution; Private Sector or Non-Governmental Organization	Health Clinic or Health Center; Public Housing or Affordable Housing Organization; Community Support or Community Based Organization; For Profit Corporation or Business	X	X		X	X	X	X	X			Lubbock	http://www.stagesrecoverycenters.com	Yes	Yes		Lack of Staff or Organizational Capacity; Lack of Awareness and Engagement in Communities We Serve; Lack of Funding Availability; Difficulty in Accessing Funding Sources	Earned Income																			5/10/2023		
Starlink	Satellite internet	Computer Device Access; Affordability and Adoption	Private Sector or Non-Governmental Organization	Internet Service Provider								X		Specific to an Individual Location	Edwards																											

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Tarrant County Black Historical and Genealogical Society, Inc.	The Tarrant County Black Historical and Genealogical Society is a non-profit organization whose mission is to locate, collect, analyze, organize and preserve African-American historical contributions that will be used to educate, empower and interpret African-American experience through art, history and culture; in the areas of education, science, business, politics, sports, art in all media, music, and performing arts in Tarrant County. This history is significant in the developmental heritage and growth of Tarrant County for a diverse community of learners.	Computer Device Access; Digital Skills and Technical Support	Community Anchor Institution; Private Sector or Non-Governmental Organization	Community Support or Based Organization; Non Profit Organization	X	X					X	X			County Wide; Neighborhood Based or Across Multiple Neighborhoods	Tarrant	www.tarrantcountyblackhistory.org													6/7/2023
TEEA (Caldwell County)	Support Food Banks, 4-H Clubs, SALT	Digital Skills and Technical Support	Private Sector or Non-Governmental Organization, Community Anchor Institution	Internet Service Provider, Non Profit Organization		X									County Wide	Caldwell														
Terlingua Common School District		Broadband Access, Affordability and Adoption; Computer Device Access; Cybersecurity and Privacy Training; Workforce Development	Community Anchor Institution	School K-12	X					X		X			Brewster		www.terlinguacsd.com		Yes										8/24/2023	
Terrell Independent School District		Computer Device Access	Community Anchor Institution	School K-12	X					X	X	X			Kaufman		www.terrellisd.org												4/21/2023	
Texas A&M AgriLife Extension	Extension utilizes digital resources to support training for programs and practices.	Digital Other	Government or Public Organization	County Office of Education	X	X		X		X				County Wide	Anderson, Braz Lee															
Texas A&M AgriLife Extension-Hopkins	education institution relying on internet support to deliver content	Other	Government or Public Organization	Public or State University	X									Specific to an Individual Location	Kaufman															
Texas A&M AgriLife Extension Service		Computer Device Access												County Wide	Midland															

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					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Program 1										Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8								
Texas A&M AgrLife Extension Service		Other, Computer Device Access, Cybers Security and Privacy Training	Community Anchor Institution or Government or Public Organization	School K-12, City Government, Internet Service Provider, Library, County Government, Public Housing or Affordable Housing Organization, Community Support or Community Based Organization, Non Profit Organization, Special District, Hospital or Other Medical Provider, Health Clinic or Health Center, Workforce	X	X	X	X	X	X	X	X		County Wide, Statewide, Regional or Across Multiple Counties	Grimes																							
Texas A&M AgrLife Extension Service Van Zandt Co.	Extension programs were designed to educate entire communities. Texas A&M AgrLife Extension Service delivers research-based educational programs and solutions for all Texans.	Computer Device Access, Cybers Security and Privacy Training, Digital Skills and Technical Support	Government or Public Organization	County Government	X									County Wide, Regional or Across Multiple Counties, State wide	Smith																					NA		
Texas A&M University	We have been and will continue to provide training and resources to TX Adult Education and Literacy programs on how to provide high quality digital navigation services to their clients/students. We also provide training on digital skills for instructors and on integrating digital skills instruction into the classroom. We purchased Northstar Digital Literacy curriculum (an online curriculum) for every program in the state.	Digital Skills and Technical Support	Government or Public Organization	State Government	X	X	X	X	X	X	X	X		Statewide	Brazos	https://tcall.tamu.edu/index.htm																					TX Distance Education Call Center- We operate a technical support call center for TX Adult Education and Literacy students AND instructors that is open 15 hours a day, 7 days a week. Clients can contact us via phone, chat, Zoom, Facebook. https://www.txdistanceedheilo.com/	5/19/2023
Texas A&M University	Our Program reaches the entire southern border of Texas as well as San Antonio and Corpus Christi. We have served as a "voice" for historically underserved communities and have also been a strong dissemination resource to many initiatives including the US Census and many state funded programs such as WIC, SNAP, HHSC and others.		Community Anchor Institution	Public or State University	X	X		X	X	X	X	X	Colonias and Economically Distressed communities	Regional or Across Multiple Counties	El Paso																						6/15/2023	
Texas A&M University		Computer Device Access, Public Computer Center	Community Anchor Institution	Public or State University	X	X		X	X	X	X	X	Colonias found on the Texas border between El Paso and Brownsville	Regional or Across Multiple Counties	Bexar																					6/16/2023		

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Texas Archive of the Moving Image		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Library;Non Profit Organization										TAMI serves Texans with free digitizations services as well as anyone with internet access; we have done work to engage Veterans, Ethnic and Minority Communities, rural Communities and Aging Individuals	Statewide	Travis	TexasArchive.org													6/6/2023
Texas Demographic Center	We are affiliated with the U.S. Census Bureau and interested in ensuring that hard-to-reach populations have access to broadband and internet services so that we can increase participation to Census Bureau surveys and the 2030 Census.	Publicly Accessible Online Services;We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Government or Public Organization	Public or State University;State Government										We are a data center and serve the general public regarding Census Bureau data research and analysis for the state, counties and local governments.	Statewide;Regional or Across Multiple Counties;County Wide;City	Bexar	https://www.demographics.texas.gov/												5/30/2023	
Texas Department of Criminal Justice		Interested Computer Device Access	Government or Public Organization	State Government;Public Safety Entity Government	X		X						X	Through our incarcerated population and/or our employees most of these groups are represented, but I have checked the highest representation.	Statewide	Walker	Texas Department of Criminal Justice										Inmate Tablets: Tablets were deployed to inmates for rehabilitative and behavior modification.		6/13/2023	
Texas Department of Criminal Justice	Our internet is unreliable and slow.		Government or Public Organization	State Government			X								Statewide	Walker	wsdx.org												6/15/2023	
Texas Department of Criminal Justice																Walker													8/1/2023	
Texas Department of State Health Services	Department of State Health Services Region 8 covers 28 counties in Texas. We provide public health services to 28 counties in Texas.	Cybersecurity and Privacy Training	Community Anchor Institution;Government or Public Organization	Health Clinic or Health Center;State Government	X	X	X	X	X	X	X	X			Statewide	Lavaca	https://www.dshs.texas.gov/													5/22/2023
Texas Digital Learning Association	Too many of the providers of online materials and websites are unaware of the legal, ethical, and moral need to make their digital resources fully accessible to people with disabilities. Our professional development program provides participants with the basic information about the Federal civil rights legislation, and the basics of making digital resources accessible to people with disabilities.	Digital Opportunity Research, Planning or Organizing	Private Sector or Non-Governmental Organization	Non Profit Organization										Education (K-12 and higher education) and non-profit and government agencies	Statewide	Travis	http://txdia.org													7/26/2023
Texas Distance Education Professional Development Center		Digital Skills and Technical Support													Statewide	Brazos	https://www.txdistanceedhelp.com/							Digital Skills Library; Building Digital Literacy	DART ESL Digital Literacy Curriculum	The Barbara Bush Foundation Digital Literacy				9/13/2023
Texas Education Agency Service Centers				State Government											Statewide	Travis	https://tea.texas.gov/about-tea/other-services/education-service-centers													9/13/2023
Texas extension service	Helps with many agricultural related topics	Publicly Accessible Online Services	Government or Public Organization	County Government									X		Regional or Across Multiple Counties	Blanco,Gillespie,Llano													Cattle management	

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Texas Forest Country Partnership			Private Sector or Non-Governmental Organization	Non Profit Organization	X	X		X	X	X	X	X			Angelina	www.texasfor estcountry.com																			5/9/2023
Texas Higher Education Coordinating Board		Workforce Development	Government or Public Organization	State Government	X			X		X	X	X			Statewide	Travis	https://www.h ighered.texas.gov/about/																		9/7/2023
Texas Incarcerated Families Association	We offer the Grow with Google digital skills training. Google has an unlimited database of digital training. We are a grant recipient .	Computer Device Access;Digital Skills and Technical Support;Workforce Development	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Non Profit Organization			X								Statewide	Travis	www.tifa.org																	8/18/2023	
Texas Juvenile Justice Department	The need for digital security has hindered us from offering online GED prep or testing, as well as other instructional programs. We need help to overcome these challenges.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Workforce Development	Government or Public Organization	State Government			X		X	X	X				Statewide	Travis	https://www.tj jd.texas.gov/																	8/1/2023	
Texas Library Association		Workforce Development	Private Sector or Non-Governmental Organization	Non Profit Organization											Statewide	Travis	https://tla.org/																		9/13/2023
Texas Medical Association	Texas Medical Association provides numerous resources to assist physicians who offer telemedicine to their patients. This includes advice on platform selection, state and federal compliance information, payment guidance, policy and procedure templates, and educational opportunities.	Digital Opportunity Research, Planning or Organizing	Private Sector or Non-Governmental Organization	Non Profit Organization										Physicians	Statewide	Travis	www.texmed.org																	7/25/2023	
Texas Midwest Community Network	Our organization hosts quarterly networking events that would be useful for this effort in that we could have a pretty large audience to get this information in to the hands of the stakeholders in these 55 member cities.	Cybersecurity and Privacy Training;Workforce Development; We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Non Profit Organization											Regional or Across Multiple Counties	Eastland	www.tmcn.org																	5/23/2023	
Texas Municipal League	TML's publications and communications are distributed to thousands of local government officials across the state. TML's Broadband Advisory Committee could also be a resource. The Committee consists of 26 elected officials, senior city management, city attorneys and IT staff across the state.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Private Sector or Non-Governmental Organization	Non Profit Organization	X										Statewide	Travis	tml.org																	6/1/2023	
Texas Nafas		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Government or Public Organization;Private Sector or Non-Governmental Organization	Local or Regional Authority;Non Profit Organization	X	X			X		X	X	Whoever that has cable TV	City Wide or Across Multiple Cities	Travis	texasnafas.org																		6/6/2023	

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Texas Organization of Rural and Community Hospitals			Community Anchor Institution;Government or Public Organization;Private Sector or Non-Governmental Organization	Hospital or Other Medical Provider;Special District;Non Profit Organization									X		Williamson	www.torchnet.org	Yes															4/26/2023
Texas Parks and Wildlife	State Parks	Planning or Organizing	Government or Public Organization	State Government									X		Statewide	Henderson, Van Zandt															State park's interpreter program	
Texas Public Charter School Association	We represent 80% of the charter holders in Texas which equals 90% of charter campuses and 90% of students enrolled in charter schools across the state.	Cybersecurity and Privacy Training	Private Sector or Non-Governmental Organization	Non Profit Organization										We serve charter schools across the state who then in turn serve households at or below 150% of the fed poverty level, individuals with disabilities, individuals with language barriers, ethnic or minority communities, and rural communities.	Statewide	Travis	https://txcharterschools.org/														5/25/2023	
Texas Rural Funders	we are focused on providing resources at the state and regional level to support broadband access	Digital Opportunity Research, Planning or Organizing	Private Sector or Non-Governmental Organization	Non Profit Organization									X		Statewide	Travis	www.texasruralfunders.org														5/30/2023	
Texas Rural Internet, LLC		Computer Device Access	Private Sector or Non-Governmental Organization	Internet Service Provider									X		San Augustine	www.texruralinternet.com																4/24/2023
Texas Southmost College	We have been an active participant with the city of Brownsville's efforts to close the digital divide.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Work force Development	Community Anchor Institution	Community College	X	X	X	X	X	X	X	X	X	We service the entire community	County Wide	Cameron	www.tsc.edu	Yes	Yes													6/12/2023
Texas State Library and Archives Commission		Workforce Development	Government or Public Organization	State Government											Statewide	Travis	https://www.tsl.texas.gov/															9/13/2023
Texas State Technical College		Cybersecurity and Privacy Training;Publicly Accessible Online Services;Workforce Development	Community Anchor Institution	Community College	X			X	X	X	X	X			Statewide;County Wide	McLennan	https://www.tstc.edu															6/6/2023
Texas State Technical College		Workforce Development	Community Anchor Institution	Community College	X			X		X	X	X			Statewide	McLennan	https://www.tstc.edu/															7/5/2023
Texas Technology Access Program		Computer Device Access;Digital Skills and Technical Support	Community Anchor Institution	Public or State University		X				X					Statewide	Travis	https://tap.digitallstudies.utexas.edu/								Device Loans	Viva LA Vida					9/13/2023	
Texas Veterans Commission		Workforce Development	Government or Public Organization	State Government	X	X	X	X	X	X	X	X			Statewide	Travis	https://www.tvc.texas.gov/															6/6/2023

Org Name	Org Description	Org Broadband Focus Area	Org Category	Org Subcategory	Covered Populations Served										Programs Offered										Date Recorded							
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8	
Texoma Council of Governments		Computer Device Access			X	X	X	X	X	X	X	X			Grayson	www.tcog.com																5/16/2023
Texoma Council of Governments	They need free internet	Computer Device Access;Digital Opportunity Program Funding;Digital Research, Planning or Organizing	Community Anchor Institution;Gov ernment or Public Organization	Community Support or Community Based Organization;Local or Regional Authority;Council or Metropolitan Planning Organization	X	X			X					Regional or Across Multiple Counties;County Wide;City Wide or Across Multiple Cities;Neighborhood Based or Across Multiple Neighborhoods	Grayson	https://www.tcog.com/															6/6/2023	
The Ecumenical Center	The Center has offices and personal in these under resourced communities.	Publicly Accessible Online Services	Community Anchor Institution;Private Sector or Non-Governmental Organization	Health Clinic or Health Center;Non Profit Organization	X	X		X	X		X			Regional or Across Multiple Counties	Becar	www.Ecrh.org															6/28/2023	
The Falls on the Colorado Museum	Our museum has archival collections that are available to members of the public who are doing local history or genealogical research. We are in the process of making our collections more easily accessible and have long-term plans to digitize our historical materials. We also hope to add a computer to our archival reading room that has a searchable database of our collections, which would be open to the public.	We Do Not Provide Digital Equity Programs or Services, but Organization May Be Interested	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X		X			X			City Wide or Across Multiple Cities	Burnet	fallsmuseum.org															6/7/2023	
The Grace Museum	The Grace Museum relies on digital technology to share and give access to its permanent art collection, provide online learning opportunities through educational videos and educator resources, digital marketing, and supply community information for free events and activities.	Publicly Accessible Online Services	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X		X	X	X	X				Taylor	www.thegracemuseum.org															6/1/2023	
The Heritage Society		Broadband Access, Affordability and Adoption	Private Sector or Non-Governmental Organization	Non Profit Organization		X		X			X			City Wide or Across Multiple Cities	Harris	https://www.heritagesociety.org/															6/6/2023	
The James Dick Foundation for the Performing Arts		Computer Device Access;Publicly Accessible Online Services	Community Anchor Institution;Private Sector or Non-Governmental Organization	Library;Non Profit Organization	X	X								Regional or Across Multiple Counties;County Wide;Specific to an Individual Location	Fayette	festivalhill.org															6/6/2023	
The Martin House Children's Advocacy Center		We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Private Sector or Non-Governmental Organization	Non Profit Organization	X					X	X			Children and families in crisis due to child abuse investigations	Regional or Across Multiple Counties	Gregg	www.themartinhousecac.org														6/16/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Programs Offered								Date Recorded								
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other										Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8									
The Texas Quilt Museum	We have the largest Quilt Research Library in the southwest. We would like to be able to allow public access to our collection for research purposes and possibly even to view each item electronically.	Digital Skills and Technical Support;Digital Opportunity Research, Planning or Organizing;We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Private Sector or Non-Governmental Organization	Non Profit Organization		X			X	X		X	X		Fayette	www.TexasQuiltMuseum.org													Pearce Memorial Library and Material Culture Study Center: At the Pearce Memorial Library and Material Culture Study Center research can take place in a quiet setting among more than 6,400 publications and the Koval Antique Textile Collection allows study of textile samples from 1775-1875. The Library and Study							6/8/2023			
T-Mobile		Computer Device Access											X		Regional or Across Multiple Counties	Jackson																							
T-Mobile	T-Mobile is the most cost effective in-home internet service that I am aware of for use in my rural area approximately 10 miles north of the City of Mt. Pleasant	Broadband Access	Private Sector or Non-Governmental Organization	Internet Service Provider									X		Regional or Across Multiple Counties	Camp, Titus																							
Tom Green County			Government or Public Organization	County Government	X	X	X	X	X	X	X	X	X		Tom Green	www.co.tom-green.tx.us																							5/1/2023
Tom Lea Institute	none		Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Non Profit Organization	X	X		X	X	X	X	X	X		Statewide	El Paso	TomLea.com																						6/6/2023
Town of Bayside			Government or Public Organization	City Government		X		X	X		X	X				Refugio																							6/15/2023
Town of Little Elm			Community Anchor Institution;Government or Public Organization	Library;City Government											City Wide or Across Multiple Cities	Denton	www.littleelm.org																						7/17/2023

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Programs Offered								Date Recorded									
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers		Org Sources of Funding	Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8
United Help of Waskom	We verify eligibility for East Texas Food Bank TEAP and we do not have internet to look up current applicants in the program. We could also monitor Freezer temperatures if we had wifi. We receive other donations thru Feeding America where we enter the items received, and we currently have to do that off site.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Non Profit Organization	X	X				X	X	X		Neighborhood Based or Across Multiple Neighborhoods	Harrison														6/13/2023		
United Independent School District	We would like to install private LTEs to some of our schools and communities	Computer Device Access;Digital Skills and Technical Support	Community Anchor Institution;Government or Public Organization	School K-12;State Government							X		Statewide	Webb	www.usid.net														6/26/2023		
United Way of Palo Pinto County Inc.	We will distribute information regarding any plans or programs to support digital opportunity.	Digital Opportunity Research	Private Sector or Non-Governmental Organization	Non Profit Organization									County Wide	Palo Pinto															We help provide funding for the nonprofit organizations in our county. No knowing the specifics		
Unknown name	No opinion due to lack of knowledge of the program	Broadband Access	Private Sector or Non-Governmental Organization	Internet Service Provider,Non Profit Organization									Regional or Across Multiple Counties	Edwards																	
Urban 15 Group			Private Sector or Non-Governmental Organization	Non Profit Organization	X	X				X	X		County Wide	Bezar	https://urban15.org/														6/7/2023		
Valley Telephone Cooperative	Not all VTCX customers have fiberoptic, some, like us in the southwestern part of McMullen County are still on cable, with an internet speed of 2.86, that's if it is even working.	Other			X	X		X	X	X	X		Regional or Across Multiple Counties	Cameron,Duval,Frio,Jim Hogg,Jim Wells,Brooks,Karnes,La Salle,McMullen	Van Zandt														None that I know of.		
Van Zandt County Library	Provides free internet access 24/7	Broadband Access	Government or Public Organization	Library									County Wide																Free public access to the internet through wifi, 24/7.		
Verizon	we collect the stories thru artifacts of glbtq population	Computer Device Access;Digital Opportunity Research, Planning or Organizing	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Community Based Organization; Non Profit Organization									gblt organization	Regional or Across Multiple Counties	Harris	gcam.org													6/7/2023		
Verizon	Not reliable	Broadband Access	Private Sector or Non-Governmental Organization	Internet Service Provider									Regional or Across Multiple Counties	Caldwell																	
Verizon smart phone	Presently I am using a hotspot on my Verizon smart phone, but when my local electrical Co-op is able to provide fiber optic internet I will use it.	Computer Device Access	Private Sector or Non-Governmental Organization	For Profit Corporation or Business									Statewide	Cherokee															hot spot on smart phone		
Victoria College	Victoria College provides a limited number of mobile hotspots and laptops for student use when they do not have resources at home.	Broadband Access, Affordability and Adoption;Computer Device Access;Workforce Development	Community Anchor Institution	Community College		X		X	X	X	X			Victoria	www.victoriacollege.edu	Yes	Yes			Lack of Staff or Organizational Capacity;Lack of Funding Availability	User Fees								no name: Students with need can checkout the following items for a semester: mobile hotspot, laptop (with web cam), or a separate web cam.	no name: provide students with a need access to the following items each semester via checkout: mobile laptop (with web cam), or web cam.	6/27/2023
Victoria Economic Development Corporation		Workforce Development	Community Anchor Institution;Government or Public Organization	Community Support or Community Based Organization;Local or Regional Authority									X	economic development	Regional or Across Multiple Counties;County Wide;City Wide or Across Multiple Cities	Victoria	www.victoriadc.com													6/19/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Programs Offered										Date Recorded						
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1		Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7
Victoria Public Library	Victoria Public Library is the sole public library serving the citizens of Victoria County. Victoria is centrally located in its region and as such often services citizens from surrounding counties in meeting their digital needs, as well.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Publicly Accessible Online Services;Public Computer Center	Community Anchor Institution;Government or Public Organization	Library;City Government	X	X		X	X	X	X	X		County Wide	Victoria	www.victoriapubliclibrary.org	Yes	Yes												6/8/2023
Virgil and Josephine Gordon Memorial Library	We have a lot of rural families that cannot afford internet.	Broadband Access, Affordability and Adoption;Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Publicly Accessible Online Services;Workforce Development;Public Computer Center	Community Anchor Institution;Private Sector or Non-Governmental Organization	Library;Non Profit Organization	X	X		X	X	X	X	X			Travis	www.gordonmemoriallibrary.org													6/13/2023	
Waller County		Workforce Development;Public Computer Center	Government or Public Organization	County Government	X	X	X	X	X	X	X	X		County Wide	Waller	https://www.co.waller.tx.us/													7/5/2023	
Waterloo Greenway Conservancy	Waterloo Greenway is a new public park and trail system that is created and activated to be in service to the entire Austin community. We do not provide digital resources but do have a broad network of partners and constituents.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Private Sector or Non-Governmental Organization	Non Profit Organization	X	X			X		X			Specific to an Individual Location	Travis	www.waterloogreenway.org												6/6/2023		
we dont have one	There should be an organization in south texas in our rural community to help us with this outreach. Often times we get passed over because of the area we are in.	Workforce Development, Digital Opportunity Program Funding,Planning or Organizing,Other	Government or Public Organization	County Government,Community Support or Community Based Organization				X			X	X		County Wide	Dimmit													To be quite honest we do not have an organization that specifically targets Dimmit County. The only funding we saw come through was during Covid and it was targeted to small businesses. The government issued it to Dimmit County. With that being said it was only a handful of business that were assisted. We are in need of a Community Services Block Grant		
West Texas Opportunities	The mission of West Texas Opportunities, Inc. is to ease the limitations of poverty by investing in families to improve their quality of life	Affordability and Adoption	Government or Public Organization	County Government	X	X		X	X	X	X	X		Statewide	Brewster,Jeff Davis,Pecos,Terrill															

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served									Programs Offered											Date Recorded							
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8	
Western Texas College	Western Texas College is located in a rural area of West Texas with a majority Hispanic service population. The college provides Associates degrees, CTE certificates, and workforce development and continuing education both in-person and online. It is extremely difficult to serve our population with the technical limitations of the existing ISPs in the region. Broadband would be an enormous benefit to our students, faculty, staff and employers.	Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Publicly Accessible Online Services;Workforce Development; Public Computer Center	Community Anchor Institution;Governor or Public Organization	Community College;Workforce Development;State Government	X	X	X	X	X	X	X	X	X	Statewide;Regional or Across Multiple Counties	Scurry	wtc.edu																6/8/2023
Wharton County Junior College	The College is in the process of revamping our entire IT infrastructure. This project could be expanded to include making broadband more readily accessible to all of Wharton County. This highly rural, majority-minority community would be dramatically and favorably impacted by having broadband services made available at a reduced cost.	Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Publicly Accessible Online Services;Workforce Development; Public Computer Center	Community Anchor Institution	Community College	X	X		X	X	X	X	X	Regional or Across Multiple Counties	Wharton	WCJC.edu																6/8/2023	
Wichita Falls Area Food Bank	It's very rural and in many cases high speed access is limited for the small rural communities.	We Do Not Provide Digital Equity Programs or Services, but our Organization May Be Interested	Community Anchor Institution;Private Sector or Non-Governmental Organization	Community Support or Based Non Profit Organization	X	X			X	X	X	X	Regional or Across Multiple Counties	Wichita	Wichita Falls Area Food Bank																6/9/2023	
Williamson County Children's Advocacy Center	Williamson county is diverse in that it is suburban and rural. We need support, digitally, in schools and homes. We could also use support in non-profits to assist families with needs in this area.		Community Anchor Institution;Private Sector or Non-Governmental Organization	Public Safety Entity Non Government;Non Profit Organization	X	X		X	X	X	X	X	Children County Wide	Williamson	wilcocac.org																6/20/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered								Date Recorded																			
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding		Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8											
Wilson County Public Library	We currently offer only six devices for service but need more. Currently our budget does not allow for the additional of more equipment. The large monthly service fee is what is eating into the county library's budget.	Broadband Access, Affordability and Adoption; Computer Device Access; Public Computer Center	Community Anchor Institution; Government or Public Organization	Library; County Government		X		X	X	X				X	County Wide	Wilson	Wilsoncountylibrary.org	Yes	Yes	Yes	Lack of Staff or Organizational Capacity; Lack of Awareness and Engagement in Communities We Serve; Lack of Funding Availability; Difficulty in Accessing Funding Sources	Government Grants Subsidies	Connectivity Kits: In the beginning we started with a backpack that contained (1) Chromebook, (1) hot spot with all the necessary cable that would be allowed to be taken home. We quickly learned that library patrons were just needing the hot spot. We still offer the full backpack if needed but currently it is the hot spot for connection that our patrons are embedded in academic and life skills classes: Module for career/resume building and classroom instruction	Connectivity Kits: Through a backpack style program we offer a combination of Chromebooks and hot spot for a week circulation. After the patron has had the hot spot for 7 days we refer the program for assistance											6/30/2023							
Windham School District	Preparing students who are incarcerated to rejoin the Texas workforce as productive community members. Windham School District provides training in fiber optics and over 40 career and technical education programs, dual enrollment with colleges, high school, high school equivalency and literacy programs.	Computer Device Access; Digital Skills and Technical Support; Cyber security and Privacy Training; Workforce Development	Community Anchor Institution	School K-12		X	X	X	X	X				Statewide	Walker	wstdx.org																									6/13/2023	
Windham School District	We provide educational services to those incarcerated in the TDCJ.	Workforce Development	Government or Public Organization	State Government; Public Safety Entity Government; Special District			X		X	X	X			Statewide	Walker	www.wstdx.org																									6/14/2023	
Windham School District	All of our campuses are within the Texas Department of Criminal Justice.	Digital Skills and Technical Support; Cyber security and Privacy Training; Workforce Development	Government or Public Organization	State Government			X							Statewide	Montgomery	www.wstdx.org																									6/14/2023	
Windham School District	We provide educational and workforce skills to incarcerated adults within the Texas Department of Criminal Justice.	Computer Device Access; Digital Skills and Technical Support; Workforce Development	Community Anchor Institution; Government or Public Organization	School K-12; Library; Workforce Development; State Government			X							Statewide	Walker	www.wstdx.org																										6/14/2023
Windham School District		Computer Device Access; Digital Skills and Technical Support; Digital Opportunity Program Funding; Workforce Development	Government or Public Organization	State Government			X	X	X	X	X	X		Statewide	Walker	Windham School District																										6/15/2023

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered										Date Recorded								
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Windham School District	Windham School District provides educational services to incarcerated individuals to assist them in earning a high school equivalency and vocational certifications to assist them in gaining employment. Students also complete resumes that are typed and printed for them to begin their job searches.	Computer Device Access;Digital Skills and Technical Support;Digital Opportunity Program Funding;Digital Opportunity Research, Planning or Organizing;Cybersecurity and Privacy Training;Workforce Development	Community Anchor Institution;Govt or Public Organization	School K-12;State Government			X	X	X	X	X				Statewide	Walker	wsdtx.org																6/20/2023
Windham School District		Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training	Government or Public Organization	State Government			X								Statewide	Walker	wsdtx.org															6/20/2023	
Winkler county	local govt	Planning or Organizing	Government or Public Organization	County Government											County Wide	Winkler																na	
Winters ISD	Public school that provides wifi in the district and close proximity district buildings	Computer Device Access;Digital Skills and Technical Support;Cyber security and Privacy Training;Workforce Development	Government or Public Organization	School K-12	X				X	X	X	X			Specific to an Individual Location	Runnels																Cyber security training for staff and students 1 to 1 devices for students in grades 2-12. Internet access in all buildings Workforce for training for all students	
Workforce Solutions			Community Anchor Institution	Workforce Development Organization	X			X		X	X	X			Statewide;Regl onal or Across Multiple Counties	Tarrant																9/7/2023	
Workforce Solutions Borderplex		Workforce Development	Private Sector or Non-Governmental Organization	Non Profit Organization											Regional or Across Multiple Counties	El Paso	https://www.borderplexjobs.com/															9/13/2023	
Workforce Solutions of Central Texas	As with all things, many of our programs and resources are moving more online and being able to utilize the internet quickly would be a significant help for our customers.	Publicly Accessible Online Services;Workforce Development;Public Computer Center	Community Anchor Institution;Govt or Public Organization;Private Sector or Non-Governmental Organization	Workforce Development Organization;Local or Regional Authority;Non Profit Organization	X	X	X	X	X	X	X	X			Regional or Across Multiple Counties	Bell	https://workforesolutionsctx.com															7/31/2023	
Workforce Solutions of Central Texas	Many of our programs and resources are moving more online and being able to utilize internet service quickly would be a significant help for our customers.	Publicly Accessible Online Services;Workforce Development;Public Computer Center	Community Anchor Institution;Govt or Public Organization;Private Sector or Non-Governmental Organization	Workforce Development Organization;Local or Regional Authority;Non Profit Organization	X	X	X	X	X	X	X	X			Regional or Across Multiple Counties	Bell	https://workforesolutionsctx.com															7/31/2023	
Workforce Solutions of West Central Texas			Community Anchor Institution	Workforce Development Organization	X	X		X	X	X	X	X			Residents seeking employment, training or labor market information; businesses	Taylor	wfsctx.org															4/28/2023	

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Covered Populations Served										Programs Offered										Date Recorded								
					Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other	Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding	Org Program 1	Org Program 2		Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8		
Wray-Todd Ranch, LLC	We need broadband for on-site work and communication. Current services are slow, spotty, and costly.	Broadband Access, Affordability and Adoption; Computer Device Access; Workforce Development	Private Sector or Non-Governmental Organization	For Profit Corporation or Business	X	X								X		Regional or Across Multiple Counties; County Wide; City Wide or Across Multiple Cities	Harris	www.wt.org		Yes	Yes												5/30/2023
YK Communications	YKC provides phone, internet and security systems for our area.	Broadband Access, Planning or Organizing, Affordability and Adoption, Computer Device Access, Digital Skills and Technical Support	Private Sector or Non-Governmental Organization	Internet Service Provider, For Profit Corporation or Business		X					X	X	X			City Wide or Across Multiple Cities, Regional or Across Multiple Counties	Jackson, Matagorda, Wharton																
YK Communications	Rural Broadband, Voice and Data provider	Broadband Access, Affordability and Adoption	Private Sector or Non-Governmental Organization	Internet Service Provider, For Profit Corporation or Business	X	X		X	X	X	X	X	X			Regional or Across Multiple Counties, City Wide or Across Multiple Cities	Jackson, Matagorda, Wharton															Fiber Optic broadband services. ACP Discounts.	
YK communications	Locally family owned	Broadband Access	Private Sector or Non-Governmental Organization	Internet Service Provider									X			Regional or Across Multiple Counties	Calhoun, Jackson, Matagorda, Wharton																
Ysleta Independent School District		Computer Device Access	Community Anchor Institution	School K-12	X					X	X	X		Children		EI Paso	www.yisd.net															6/15/2023	

Appendix F: NTIA Requirements Checklist

This table indicates the parts of the Texas Digital Opportunity Plan that fulfill each of the NTIA’s Notice of Funding Opportunity (NOFO) requirements.

Statutory Requirements	Section of the Plan that Fulfills the Requirement
Statutory Requirements	
<p>Requirement 1</p> <p>Identification of barriers to digital equity faced by Covered Populations in the State:</p> <p>Individuals who live in covered households (i.e., low-income households).</p> <p>Aging individuals.</p> <p>Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility.</p> <p>Veterans.</p> <p>Individuals with disabilities.</p> <p>Individuals with a language barrier, including individuals who: are English learners; and have low levels of literacy.</p> <p>Individuals who are members of a racial or ethnic minority group; and</p> <p>Individuals who primarily reside in a rural area.</p>	<p>Chapter 3: Current State of Digital Opportunity</p> <p>3.b.iii Covered Populations Needs Assessment</p>
<p>Requirement 2</p> <p>Measurable objectives for documenting and promoting among each Covered Population located in that State:</p> <p>The availability of, and affordability of access to, fixed and wireless broadband technology.</p>	<p>Chapter 2: Introduction & Vision for Digital Opportunity</p> <p>2.d Strategy and Objectives and Appendix B: Strategies,</p>

<p>The online accessibility and inclusivity of public resources and services.</p>	<p>Objectives and Baselines</p>
<p>Digital literacy.</p>	
<p>Awareness of, and the use of, measures to secure the online privacy of, and cybersecurity with respect to, an individual; and</p>	
<p>The availability and affordability of consumer devices and technical support for those devices.</p>	
<p>Requirement 3</p>	<p>Chapter 2: Introduction & Vision for Digital Opportunity 2.c.iv Alignment with State Outcome Areas</p>
<p>An assessment of how the measurable objectives identified in Statutory Requirement 2 above will impact and interact with the State’s:</p>	
<p>Economic and workforce development goals, plans and outcomes.</p>	
<p>Educational outcomes.</p>	
<p>Health outcomes.</p>	
<p>Civic and social engagement; and</p>	<p>Chapter 3: Current State of Digital Opportunity 3.b.iii Covered Populations Needs Assessment</p>
<p>Delivery of other essential services.</p>	
<p>Requirement 4</p>	<p>Chapter 4: Collaboration and Stakeholder Engagement</p>
<p>To achieve the measurable objectives identified in Statutory Requirement 2, a description of how the State plans to collaborate with key stakeholders in the State.</p>	
<p>Requirement 5</p>	<p>Chapter 4: Collaboration and Stakeholder Engagement 4.b Engagement Methodology Appendix D: Stakeholder Engagements and Participants</p>
<p>A list of organizations with which the Administering Entity for the State collaborated in developing the Plan.</p>	

<p>Requirement 6</p> <p>A stated vision for digital equity.</p>	<p>Chapter 2: Introduction & Vision for Digital Opportunity 2.a Vision</p>
<p>Programmatic Requirements</p>	
<p>Requirement 7</p> <p>A digital equity needs assessment, including a comprehensive assessment of the baseline from which the State is working and the State’s identification of the barriers to digital equity faced generally and by each of the Covered Populations in the State.</p>	<p>Chapter 2: Introduction & Vision for Digital Opportunity 2.d Strategy and Objectives</p> <p>Chapter 3: Current State of Digital Opportunity 3.a.ii Statewide Needs and Barriers 3.a.iii Covered Populations Needs Assessment</p>
<p>Requirement 8</p> <p>An asset inventory, including current resources, programs and strategies that promote digital equity for each of the Covered Populations, whether publicly or privately funded, as well as existing digital equity plans and programs already in place among municipal, regional and Tribal governments.</p>	<p>Chapter 3: Current State of Digital Opportunity 3.b Asset Inventory</p> <p>Appendix A: Local Digital Opportunity Plan Tracker</p> <p>Appendix E: Detailed Asset Inventory</p>

<p>Requirement 9</p> <p>To the extent not addressed in connection with Statutory Requirement 4 above, a coordination and outreach strategy, including opportunities for public comment by, collaboration with, and ongoing engagement with representatives of each category of Covered Populations within the State and with the full range of stakeholders within the State.</p>	<p>Chapter 4: Collaboration and Stakeholder Engagement</p> <p>4.c Public Comment</p> <p>4.d Looking Ahead</p> <p>Appendix D: Stakeholder Engagements and Participants</p>
<p>Requirement 10</p> <p>A description of how municipal, regional and/or Tribal digital equity plans will be incorporated into the State Digital Equity Plan</p>	<p>Chapter 2: Introduction and Vision for Digital Opportunity</p> <p>2.c.i Existing and Future Plans</p> <p>Chapter 5: Implementation</p> <p>5.c Strategy Details and Timeline</p>
<p>Requirement 11</p> <p>An implementation strategy that is holistic and addresses the barriers to participation in the digital world, including affordability, devices, digital skills, technical support and digital navigation. The strategy should:</p> <p>Establish measurable goals, objectives and proposed core activities to address the needs of Covered Populations.</p> <p>Set out measures ensuring the plan’s sustainability and effectiveness across State communities, and</p> <p>Adopt mechanisms to ensure that the plan is regularly evaluated and updated.</p>	<p>Chapter 5: Implementation</p> <p>5.b Summary of Strategies</p> <p>5.c Strategy Details and Timeline</p>
<p>Requirement 12</p> <p>An explanation of how the implementation strategy addresses gaps in existing state, local and private efforts to address the barriers identified in Statutory Requirement 1 above.</p>	<p>Chapter 5: Implementation</p>

<p>Requirement 13</p> <p>A description of how the State intends to accomplish the implementation strategy described above by engaging or partnering with:</p> <p>Workforce agencies such as state workforce agencies and state/local workforce boards and workforce organizations.</p> <p>Labor organizations and community-based organizations, and</p> <p>Institutions of higher learning, including but not limited to four-year colleges and universities, community colleges, education and training providers and educational service agencies.</p>	<p>Chapter 5: Implementation</p> <p>5.c Strategy Details and Timeline</p>
<p>Requirement 14</p> <p>A timeline for implementation of the plan.</p>	<p>Chapter 5: Implementation</p> <p>5.c Strategy Details and Timeline</p>
<p>Requirement 15</p> <p>A description of how the State will coordinate its use of State Digital Equity Capacity Grant funding and its use of any funds it receives in connection with the Broadband Equity, Access, and Deployment Program, or other federal or private digital equity funding.</p>	<p>Chapter 2: Introduction and Vision for Digital Opportunity</p> <p>2.b Texas Context</p> <p>Chapter 5: Implementation</p> <p>5.a Introduction</p>
<p>Requirement 16</p> <p>A description of any changes made to the Digital Equity Plan in response to comments received and inclusion of a written response to each comment received.</p>	<p>Chapter 4: Collaboration and Stakeholder Engagement</p> <p>4.c Public Comment</p> <p>Footnotes throughout the document</p> <p>Appendix J: Record of Public Comments and Actions Taken</p>



Appendix G: Online Digital Opportunity Survey

Texas Digital Opportunity Plan: Online Public Survey (10-15 minutes)

The State of Texas is designing solutions to ensure that all residents have access to high quality and affordable internet service, devices, skills training, and digital support. This 10-minute Public Survey will gather information about your current experiences using the internet and should be completed by one individual per household.

The survey is available in four languages: English, Spanish, Mandarin, and Vietnamese.

You can select the language of your choice from the top-right corner of this page. You can also choose to listen to each question (and its answer Options, where applicable) in your chosen language by clicking on the audio button next to each question.

The survey is completely anonymous. All questions are optional, unless specified otherwise. You may skip all optional questions. You can exit the survey at any point and return to the same page where you left by coming back to this website. We do not ask for any personally identifiable information (e.g., name, email, address). We collect demographic information so that we can make sure we are representing all neighborhoods and demographic groups.

Your feedback is vital to understanding barriers to internet access, affordability, and adoption, to help close the digital divide.

Thank you for your time and participation.



Part 1: Preliminary Demographic Information

1. Do you reside in Texas and are you 18 or older? (Required)
 - a. Yes
 - b. No

If Q0 == No, display text:

Thank you for your interest in taking this survey on digital opportunities. Unfortunately, this survey is focused on state residents. Respondents must also be over the age of 18.

If Q0 == Yes, proceed with survey:

2. What is your ZIP Code? [Text box]
3. Do you or anyone you reside with belong to any of the following groups? Please check all that apply. [Multiple answers]
 - a. 60 years of age or older
 - b. U.S. Veteran
 - c. Living with a disability
 - d. English language learner and/or have difficulty understanding English
 - e. Rural area resident
 - f. Member of a Tribe or Tribal community
 - g. U.S. immigrant
 - h. Unhoused or experiencing homelessness
 - i. None of the above
4. Which best describes your race/ethnicity? Please check all that apply. We are asking this question to ensure our survey responses are fully reflective of the diversity of the state's population. [Multiple answers]
 - a. American Indian/Alaska Native
 - b. Asian
 - c. Black or African American



- d. Hispanic/Latino, or of Spanish origin
- e. Middle Eastern or North African
- f. Native Hawaiian or Other Pacific Islander
- g. White
- h. Prefer not to answer
- i. Other (please specify):
[Text box]

5. Including yourself, how many people currently reside with you?

[Multiple choice with Options from 1 to 8 and then 9+]

- | | | |
|---|---|----|
| 1 | 4 | 7 |
| 2 | 5 | 8 |
| 3 | 6 | 9+ |

6. **(If Q4 > 1)** How many people who reside with you are children aged 18 or younger?

[Multiple choice with Options from 0 to 8, and then 9+]

- | | | |
|---|---|----|
| 0 | 4 | 8 |
| 1 | 5 | 9+ |
| 2 | 6 | |
| 3 | 7 | |

7. **(If Q4 != 9+)** Is your total annual household income before taxes more or less than X?

[Display X based on Q4:

- | | |
|------------------------|------------------------|
| a. If Q4 == 1 \$20,385 | e. If Q4 == 5 \$48,705 |
| b. If Q4 == 2 \$27,465 | f. If Q4 == 6 \$55,785 |
| c. If Q4 == 3 \$34,545 | g. If Q4 == 7 \$62,865 |
| d. If Q4 == 4 \$41,625 | h. If Q4 == 8 \$69,945 |



- i. If Q4 == 9 or more
Question not displayed]
- j. More
- k. Less
- l. I don't know

8. What is your total annual household income before taxes?

- a. Under \$20,000
- b. \$20,000 - \$30,000
- c. \$30,000 - \$40,000
- d. \$40,000 - \$50,000
- e. \$50,000 - \$60,000
- f. \$60,000 - \$70,000
- g. \$70,000 - \$80,000
- h. \$80,000 - \$90,000
- i. \$90,000 - \$100,000
- j. \$100,000 - \$110,000
- k. \$110,000 - \$120,000
- l. \$120,000 - \$130,000
- m. \$130,000 - \$140,000
- n. \$140,000 - \$150,000
- o. Over \$150,000
- p. Prefer not to say

9. Which of the following best describes the area where you live?

- a. Rural area
- b. Suburban area
- c. Urban area
- d. I don't know
- e. Other (please specify):
[Text box]

10. How did you hear about this survey? Please select all that apply.

- a. Email
- b. Social media
- c. News outlets and media
(radio, TV)
- d. Community based or
government
organization(s)
- e. My local elected official
- f. Other (please specif



9.1 (if 9 == a) Which organization or person emailed you the survey? [Text box]

9.2 (if 9 == d) Which organization did you hear about the survey from? [Text box]

Part 2: Home Internet and Devices

Please respond to the questions in this section on behalf of all members of your household.

11. Can you connect to the internet from home? This includes connecting to the internet from a desktop, laptop, tablet computer, or from a smartphone. (Required)

- a. Yes
- b. No
- c. I don't know

12. (If Q10 == Yes) Which of the following devices do you use to connect to the internet at home? Please check all that apply. [Multiple answers]

- a. Desktop computer
- b. Laptop computer
- c. Tablet computer
- d. Smartphone
- e. I don't have a device that can connect to the internet
- f. I don't know
- g. Other (please specify): [Text box]



13. **(If Q10 == Yes)** How do you connect to the internet at home? Please check all that apply.

- a. Subscribe to home internet service
 - b. Community Wi-Fi (such as free Wi-Fi provided by a community organization)
 - c. Mobile data plan (including mobile
 - d. I don't know
 - e. Other (please specify): [Text box]
- connected tablets, smartphones, hotspots and MiFis)

14. **(If Q10 == Yes)** On a rating scale of 1 to 5, with 5 being the highest rating, how would you rate your Internet Service Provider in terms of:

- a. Reliability of the Internet service (for example, there are no service interruptions, and the service speed is for the most part consistent) [Matrix]
- b. Reliability of the Customer service (for example when you contact the company to ask a question about your service) [Matrix]
 - i. 1 – not at all reliable
 - ii. 2 – slightly reliable
 - iii. 3 - reliable
 - iv. 4 – very reliable
 - v. 5 – extremely reliable

15. **(If Q10 == Yes)** Which of these Options best describes your internet service at home in terms of speed and reliability?

- a. Adequate or good enough for my needs and/or my family's needs

- b. Not adequate or good enough for my needs, and/or my family needs
- c. I don't know

16. How often do you use a desktop, laptop, or tablet computer?

- a. Every day
- b. A few times a week
- c. A few times a month
- d. A few times a year
- e. Rarely or never
- f. I don't know

17. How frequently do you use the internet or go online for the following?
[Options: a) Never b) Rarely c) Sometimes d) Often [Matrix]

- | | |
|--|---|
| a. Working from home | j. Accessing healthcare information or services |
| b. Attending online classes | k. Applying for or using public benefits (such as SNAP, Social Security, Medicare, Medicaid, etc.) |
| c. Shopping | l. Participating in public or government meetings |
| d. Paying bills | m. Contacting elected officials |
| e. Accessing bank information | n. Finding information about government services (e.g., election information, agency contact information, or public benefits) |
| f. Keeping in touch with family and friends | o. Staying up-to-date with the news and current events |
| g. Searching for educational resources for myself or for someone in my household | |
| h. Looking for or applying to a job, for myself or someone in my household | |
| i. Improving my skills for work | |



- p. Searching for available housing

18. On a rating scale of 1 to 5, with 5 being the highest rating, how important is having access to the internet at home for each of the following activities? [Matrix] [Options: 1-not at all important; 2- slightly important; 3-important; 4- very important; 5-extremely important]

- a. Working from home
- b. Attending online classes
- c. Shopping
- d. Paying bills
- e. Accessing bank information
- f. Keeping in touch with family and friends
- g. Searching for educational resources for myself or for someone in my household
- h. Looking for or applying to a job, for myself or someone in my household
- i. Improving my skills for work
- j. Accessing healthcare information or services
- k. Applying for or using public benefits (such as SNAP, Social Security, Medicare, Medicaid, etc.)
- l. Participating in public or government meetings
- m. Contacting elected officials
- n. Finding information about government services (e.g., election information, agency contact information, or public benefits)
- o. Staying up to date with the news and current events
- p. Searching for available housing

19. Do you connect to the internet in other places where you are not using your own connection plan, for example a Wi-Fi network at a library or a café or while at work?
- a. Yes
 - b. No
20. **(If Q18 == Yes)** Where else do you connect to the internet when not using your own connection plan? Please check all that apply. [Multiple answers]
- a. At work
 - b. At the home of relatives or friends
 - c. At a retail store (such as McDonalds, Taco Bell, Starbucks)
 - d. At a school or library
 - e. In a parking lot of a school, library, retail store or restaurant
 - f. At a public space (such as a park, government building)
 - g. On public transit
 - h. Using Community Wi-Fi (such as free Wi-Fi provided by a community organization)
 - i. I don't know
 - j. Other (please specify):
[Text box]
21. **(If Q15 = a, b, c, or d)** Are you familiar with cyber security measures (such as ad blockers, virus scanning software, etc.) to prevent unauthorized access and damage to your devices?
- a. Yes
 - b. No
 - c. I don't know what cyber security means

22. **(If Q20 == Yes)** Do you have any cyber security measures (such as ad blockers, virus scanning software, etc.) set up on the desktop, laptop, or tablet computer you use?

- a. Yes
- b. No
- c. I don't know

23. **(If Q10 == No)** Which of the following explains why you do not currently subscribe to home internet service? Please check all that apply.

- a. Home internet services are too expensive
- b. Nobody in my household has a desktop, laptop, or tablet computer
- c. Home internet services are not available or adequate where I live
- d. Nobody in my household knows enough about using a computer/laptop
- e. I am concerned about privacy, identity theft, and other types of cybercrime
- f. I can do everything I need to using my smartphone
- g. Other (please specify):
[Text box]

24. **(If Q10 == Yes)** Approximately how much is your total monthly bill (including taxes) for home internet?

[Text box with verification that it is a number]

25. **(If Q10 == Yes)** Which company is your internet service provider?
[Alphabetized, Multiple choice]

- a. Astound Broadband
- b. AT&T
- c. Earthlink
- d. Frontier



- e. Optimum
- f. Spectrum
- g. T-Mobile Home Internet
- h. Verizon
- i. Windstream (Kinetic)
- j. Xfinity (Comcast)
- k. I don't know
- l. Other (please specify)

Part 3: Affordable Internet Programs & Affordable Connectivity Program

26. Have you heard about the Affordable Connectivity Program (ACP), a federal program that provides discounted internet service for low-income households?

- a. Yes
- b. No
- c. I don't know

(If no, to Q25) We will provide information about these services at the end of this survey.

Text to be provided at the end:

Affordable Connectivity Program (ACP) is a federal program offering discounts toward Internet service, for lower-income households, those in public housing, families with children who qualify for free or reduced lunch, or households who receive benefits. To learn more about the Affordable Connectivity Program and how to enroll, click [here].

<https://www.fcc.gov/affordable-connectivity-program-providers>



27. Have you heard of other discounted internet services that companies make available to low-income households?

- a. Yes
- b. No
- c. I don't know

28. Are you currently enrolled in any of these discounted internet service programs? Please check all that apply.) [Multiple answers]

- a. Affordable Connectivity Program (ACP)
- b. Lifeline/Tribal Lifeline
- c. Other affordable internet service
- d. None of these
- e. I don't know

29. Please specify which "other affordable internet service" you are currently enrolled in:

(If Q27 == d. None of these)

30. Why are you not currently enrolled? Please check all that apply. [Multiple answers]

- a. I don't need it
- b. I probably will not qualify
- c. I don't know how to apply
- d. I applied but was told I am not eligible
- e. I was enrolled before, but I was told I am no longer eligible
- f. Application process is too difficult
- g. Application takes too much time
- h. I applied but never received a response
- i. I was sold a more expensive plan

j. I don't know

k. Other (please specify):
[Text box]

Part 4: Digital Literacy Skills

31. For each of the following tasks, please indicate how comfortable you would be doing this task, or whether you just do not understand what the task is about. If you do not wish to answer this question, please click next. (Options: Not comfortable at all; Somewhat comfortable; Comfortable; Very comfortable; Extremely comfortable; I don't understand what the task is about)

[Matrix]

- | | |
|--|--|
| a. Connecting a computer or smartphone to a Wi-Fi network | e. Making an appointment online, for example with the DMV |
| b. Sending an email with an attached image or document | f. Downloading and installing a new app (application) on your smartphone or tablet |
| c. Searching for information online about jobs or healthcare | g. Deleting cookies on a web browser |
| d. Paying bills online | h. Setting up protection against phishing and spam email |

32. **IF Q4 >= 1 (Children are present in household)** How comfortable are you with setting up parental controls or apps to block or monitor a child's access to some types of websites or applications?

- | | |
|---------------------------|--------------------------|
| a. Not comfortable at all | d. Very comfortable |
| b. Somewhat comfortable | e. Extremely comfortable |
| c. Comfortable | |



- f. I don't understand what the task is about

33. If you have trouble with computers or the internet, is there someone in your household or community who can help you? Please check all that apply. [Multiple answers]

- a. Yes, I can get help from someone in my household
- b. Yes, I can get help from someone in my community (such as a friend, neighbor,
- c. Yes, I can get help from a paid service in my community
- d. No
- e. I don't know
- community-based organization, librarian)

34. Would you be interested in internet or computer training classes for you or your family?

- a. Yes
- b. No
- c. I don't know

Part 5: Internet Speed Test

35. **(If Q10 == Yes)** Would you like to know how fast your home internet connection is? If you are taking this survey from home, you can choose "Take the Internet Speed Test," and click "Next," and the survey can start a test to measure the speed of your internet connection. No personally identifying information (address, etc.) will be recorded. The goal of this question is to measure the quality of your home internet service. Please make sure you are at home and connected to Wi-Fi or directly to the internet before starting.



If you are not taking this survey from your home, please choose, "Skip the Internet Speed Test" and click "Next."

If you prefer not to run the Internet Speed Test, please choose "Skip the Internet Speed Test," and click "Next."

- a. Take the Internet Speed Test
- b. Skip the Internet Speed Test

(If "Skip the Internet Speed Test" is not checked for Q33) The Internet Speed Test has started. Please wait a few seconds for the Internet Speed Test results to appear.

Once a Download and Upload number appears, click on "Next" to proceed. Please note that no personal data will be collected as part of this speed test.

- Please enter your download speed: [Text box]
- Please enter your upload speed: [Text box]

End of Survey

(On a separate page) You have reached the end of the survey. All answers are saved. You can use the "Previous" button to review your responses. Otherwise click "Next" to complete the survey.

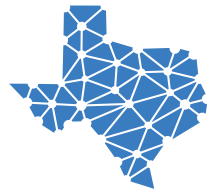
Thank you for taking the survey! Your response will help shape the state's policies and investments to close the digital divide for all its residents and commitment to closing the digital divide.



Broadband is now essential for vital services and opportunities, but millions of Texans still lack adequate broadband service or the devices and skills to use it. If you would like to learn more about the Texas Broadband Plan, please click [\[here\]](#).

To learn more about the Texas Broadband Development Office, please click [\[here\]](#).

Appendix H: Paper Digital Opportunity Survey



Texas Digital Opportunity Plan: Public Survey

The State of Texas is designing solutions to ensure that all residents have access to high quality and affordable internet service, devices, skills training, and digital support. This Public Survey will gather information about your current experiences using the internet and should be completed by one individual per household. The survey is completely anonymous. Your feedback is vital to understanding barriers to internet access, affordability and adoption, to help close the digital divide. Thank you for your time and participation.

Do you reside in Texas and are you 18 or older?

- Yes No

What is your **zip code**: _____

Do you or anyone you reside with belong to any of the following groups? Please check all that apply.

- | | | |
|---|--|--|
| <input type="checkbox"/> 60 years or older | <input type="checkbox"/> English language learner and/or have difficulty understanding English | <input type="checkbox"/> U.S. immigrant |
| <input type="checkbox"/> U.S. Veteran | <input type="checkbox"/> Rural area resident | <input type="checkbox"/> Unhoused or experiencing homelessness |
| <input type="checkbox"/> Living with a disability | <input type="checkbox"/> Member of a Tribe or Tribal community | <input type="checkbox"/> None of the above |

Can you connect to the internet from home?

This includes connecting from a desktop, laptop, tablet, or smartphone.

- Yes – Please answer **questions 1-6**
- No – Please skip to **question 7** (*Flip this page over*)

Please answer the following questions only if you CAN connect to the internet from home.

I. Which of the following devices do you use to connect to the internet at home? Please check all that apply.

- | | | |
|---|---|--|
| <input type="checkbox"/> Desktop computer | <input type="checkbox"/> Smartphone | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> Laptop computer | <input type="checkbox"/> I don't have a device that can connect to the internet | <input type="checkbox"/> Other (please specify): _____ |
| <input type="checkbox"/> Tablet computer | | _____ |

2. How do you connect to the internet at home? Please check all that apply.

- | | |
|---|--|
| <input type="checkbox"/> Subscribe to home internet service | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> Community Wi-Fi (such as free Wi-Fi provided by a community organization) | <input type="checkbox"/> Other (please specify): _____ |
| <input type="checkbox"/> Mobile data plan (including mobile connected tablets, smartphones, hotspots and MiFis) | _____ |

3. Which of these options best describes your internet service at home in terms of speed and reliability?

Adequate or good enough for my needs and/or my family's needs

Not adequate or good enough for my needs and/or my family's needs

I don't know

4. On a rating scale of 1 to 5, with 5 being the highest rating, how would you rate your Internet Service Provider in terms of reliability of the Internet service (for example, there are no service interruptions, and the service speed is consistent for the most part)

1 – not at all reliable

3 – reliable

5 – extremely reliable

2 – slightly reliable

4 – very reliable

5. Approximately how much is your total monthly bill for home internet? \$ _____

6. Are you currently enrolled in any of these discounted internet service programs? Please check all that apply.

Lifeline

Other affordable internet service:

Affordable Connectivity Program (ACP).
(ACP is a federal program to help low-income households pay for internet service and connected devices. For more information, call 877-384-2575.)

None of these

I don't know

Please answer the following questions only if you CANNOT connect to the internet at home.

7. Do you connect to the internet in other places, for example a Wi-Fi network at a library or a café or while at work?

Yes

No

8. Where else do you connect to the internet? Please check all that apply.

At work

At a public space (such as a park, government building)

I don't know

At the home of relatives or friends

On public transit

Other (please specify):

At a retail store or restaurant (such as McDonalds, Taco Bell, Starbucks)

Using Community Wi-Fi (such as free Wi-Fi provided by a community organization)

At a school or library

In a parking lot of a school or library

9. Which of the following explains why you do not currently subscribe to home internet service? Please check all that apply.

Home internet service is too expensive

Nobody in my household knows enough about using a computer/laptop

I can do everything I need to using my smartphone

Nobody in my household has a desktop, laptop, or tablet computer

I am concerned about privacy, identity theft, and other types of cybercrime

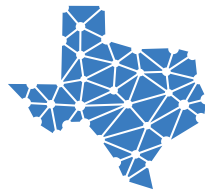
Other (please specify):

Home internet service is not available or adequate where I live

Thank you for taking the survey. Your response will help shape the State's policies and future funding allocations to close the digital divide for all Texans.

Email to: Plan4Broadband@cpa.texas.gov • Mail to: Texas Comptroller's Broadband Development Office,
P.O. Box 13528, Austin, Texas 78711-3528 • Fax to: (512) 463-3510

If you would like to learn more, please visit: **BroadbandForTexas.com**.
If you have any questions, please email **Plan4Broadband@cpa.texas.gov**.



Plan de Equidad Digital del Estado de Texas: Encuesta Pública

El estado de Texas está diseñando soluciones para garantizar que todos los residentes de Texas tengan acceso a servicios de internet, dispositivos, capacitación en habilidades y apoyo digital asequibles y de alta calidad. Esta encuesta de Equidad Digital recopilará información sobre sus experiencias actuales en el uso de internet y debe ser completada por una persona por hogar. La encuesta es completamente anónima. Sus comentarios son vitales para comprender las barreras al acceso, la asequibilidad y la adopción de internet, para ayudar a cerrar la brecha digital. Gracias por su tiempo y participación.

¿Reside en Texas y tiene 18 años o más?

- Sí No

¿Cuál es su **código postal**? _____

¿Usted o alguien con quien reside pertenece a alguno de los siguientes grupos? Por favor marque todas los que apliquen.

- | | | |
|--|---|--|
| <input type="checkbox"/> 60 años o más | <input type="checkbox"/> Aprendiendo inglés y/o tengo dificultades para entender inglés | <input type="checkbox"/> Inmigrante estadounidense |
| <input type="checkbox"/> Veterano de los EE.UU. | <input type="checkbox"/> Residente de un área rural | <input type="checkbox"/> Sin vivienda o sin hogar |
| <input type="checkbox"/> Persona o familia que vive con una discapacidad | <input type="checkbox"/> Miembro de una tribu o comunidad tribal | <input type="checkbox"/> Ninguna de las anteriores |

¿Puede conectarse al internet desde casa? Esto incluye conectarse al internet desde una computadora de escritorio, una computadora portátil, una tableta o desde un teléfono inteligente.

- Sí – Por favor responda las **preguntas 1-6**
- No – Por favor salte a la **pregunta 7** (voltea esta página).

Por favor responda a las siguientes preguntas solo SI PUEDE conectarse al internet desde su casa.

1. ¿Cuál de los siguientes dispositivos utiliza para conectarse a internet en su casa? Por favor marque todos los que correspondan.

- | | | |
|--|---|---|
| <input type="checkbox"/> Computadora de escritorio | <input type="checkbox"/> Teléfono inteligente | <input type="checkbox"/> No sé |
| <input type="checkbox"/> Computadora portátil | <input type="checkbox"/> No tengo un dispositivo que pueda conectarse al internet | <input type="checkbox"/> Otros (por favor especifique): _____ |
| <input type="checkbox"/> Tableta | | |

2. ¿Cómo se conecta al internet en casa? Por favor marque todo lo que corresponda.

- | | |
|--|--|
| <input type="checkbox"/> Me suscribo al servicio de internet en el hogar | <input type="checkbox"/> No sé |
| <input type="checkbox"/> Wi-Fi comunitario (como Wi-Fi gratuito proporcionado por una organización comunitaria) | <input type="checkbox"/> Otra (por favor especifique): _____ |
| <input type="checkbox"/> Plan de datos móviles (incluidas tabletas, teléfonos inteligentes, puntos de acceso y MiFi conectados a dispositivos móviles) | |

3. ¿Cuál de estas opciones describe mejor su servicio de internet en casa en términos de velocidad y confiabilidad?

Adecuado o suficientemente bueno para mis necesidades y/o las necesidades de mi familia

No es adecuado o lo suficientemente bueno para mis necesidades y/o las necesidades de mi familia

No sé

4. En una escala de calificación del 1 al 5, siendo 5 la calificación más alta, ¿cómo calificaría a su proveedor de servicios de internet en términos de: **La confiabilidad del servicio de internet** (por ejemplo, no hay interrupciones en el servicio y la velocidad del servicio es en su mayor parte constante)

1 – nada confiable

3 – confiable

5 – extremadamente confiable

2 – poco confiable

4 – muy confiable

5. Aproximadamente, ¿cuánto es su factura mensual total de internet en el hogar? \$ _____

6. ¿Está actualmente inscrito en alguno de estos programas de servicio de internet con descuento? Por favor marque todos los que correspondan.

Lifeline

Otro servicio de internet económico: _____

Programa de Descuentos para internet (ACP).
(ACP es un programa federal para ayudar a los hogares de bajos ingresos pagar el servicio de internet y los dispositivos conectados. Para más información, llame: 877-384-2575.)

Ninguno de esos

No sé

Por favor responda a las siguientes preguntas solo si NO PUEDE conectarse al internet desde su casa.

7. ¿Se conecta a internet en otros lugares, por ejemplo, una red Wi-Fi en una biblioteca o una cafetería, o mientras está en el trabajo?

Sí

No

8. ¿Dónde más se conecta al internet? Por favor marque todos los que correspondan.

En el trabajo

En un estacionamiento de una escuela o biblioteca

Wi-Fi comunitario (como Wi-Fi gratuito proporcionado por una organización comunitaria)

En casa de familiares o amigos

En un espacio público (como un parque, un edificio gubernamental)

No sé

En una tienda minorista o restaurante (como McDonalds, Taco Bell, Starbucks)

En transporte público

Otros (por favor especifique): _____

En una escuela o biblioteca

9. ¿Cuál de los siguientes explica por qué actualmente no está suscrito al servicio de internet residencial? Por favor marque todos los que correspondan.

Los servicios de internet en el hogar son demasiado caros

Los servicios de internet en el hogar no están disponibles o no son adecuados donde vivo

Me preocupa la privacidad, el robo de identidad y otros tipos de ciberdelincuencia

Nadie en mi hogar tiene una computadora de escritorio, portátil o tableta

Nadie en mi hogar sabe lo suficiente sobre el uso de una computadora de escritorio/portátil

Puedo hacer todo lo que necesito usando mi teléfono inteligente

Otro (por favor especifique): _____

¡Gracias por participar en la encuesta! Su respuesta ayudará a dar forma a las políticas estatales y futuras asignaciones de fondos para cerrar la brecha digital para todos los Tejanos.

Envíe por correo electrónico: Plan4Broadband@cpa.texas.gov • Envíe por correo: Texas Comptroller's Broadband Development Office, P.O. Box 13528, Austin, Texas 78711-3528 • Envíe por fax a: (512) 463-3510

Si quieres obtener más información, visite: **BroadbandForTexas.com**.

Si tiene alguna pregunta, por favor envíe un correo electrónico a **Plan4Broadband@cpa.texas.gov**



Appendix I: Digital Resources Mapping Tool Survey

Texas Digital Opportunity Plan: Digital Resources Mapping Tool Survey (DRMTS)

Make your voice heard! Help close Texas's digital divide.

The Texas Broadband Development Office is developing the Texas Digital Opportunity Plan, which will help inform how the State develops policies and funds programs to promote broadband accessibility, affordability, and adoption throughout Texas.

We need your feedback to help close the digital divide in your community. Your participation will help us uncover:

- What programs and services are being offered.
- Where these programs and services are being offered, and
- To whom these programs and services are being offered.

Section 7:

If your organization's programs are not currently digital opportunity focused, but could be leveraged to support digital opportunity, please complete this section. For example, if your program delivers meals to low-income households, it may also be utilized to deliver information about affordable internet service programs and digital skills training programs. We would like



to learn more about your program(s) and their potential to support the State's digital opportunity efforts.

If you have programs that support covered populations which may also be leveraged to promote or support digital opportunities for Texans, you should complete this survey. For example, if you provide meals to low-income households, your program could also provide information to residents about digital skills training programs and subsidies for affordable internet service.

Who should take part?

As part of this effort, we need input from ALL government agencies, nonprofits, experts, practitioners, funders, researchers, and community organizers. If your work helps people in your community access the internet, computers or digital skills training, or other information and resources, you should take part in this survey.

Instructions

You can only take the survey once. As you go through each page, all answers are saved automatically. You can go back and forth between pages to check and review answers. Questions marked with an asterisk (*) are required.

Time commitment: 10 Minutes



DRAFT DIGITAL RESOURCES MAPPING QUESTIONNAIRE

Questions marked with an asterisk (*) indicate a required question.

Section 1: Basic Information

If you are completing this on behalf of another entity, please provide your contact information below.

1. Please provide your name:*

2. Please provide your email address:*

For the following, please provide contact information for the organization.

3. What is the name of the organization that provides the digital opportunity resource, program, plan, or initiative that the State should consider in its Digital Opportunity Plan?

4. Name: _____

5. Email Address: _____

6. Position/Title: _____

7. County where this organization is based: _____



8. Website of the organization (if applicable):

9. What is your relationship to this organization?*
- I am an employee or member of the organization
 - I know this organization well or have benefitted from its work
 - Other (please specify)
10. Federal funding for digital opportunity identifies certain “Covered Populations,” who are most impacted by lack of broadband access. Which populations does this organization serve? Select all that apply.*
- Households at or below 150% of the Federal Poverty Level
 - Aging Individuals (Age 60+)
 - Incarcerated Individuals
 - Veterans
 - Individuals with Disabilities
 - Individuals with Language Barriers (Limited English Proficiency individuals, etc.)
 - Ethnic or Minority Communities
 - Rural Communities
 - Other (please specify) _____
11. Which of the following best describes the organization? Select all that apply.
- 1. Community Anchor Institution**
- School (K-12)
 - Library
 - Health clinic or health center



- Hospital or other medical provider
- Public Safety Entity (Non-government)
- Community College
- Public or State university
- Private university
- Public housing or affordable housing organization
- Community-support or community-based organization
- Workforce development organization
- Other: please specify: _____

2. Government or Public Organization

- Tribal Government
- State Government
- County Government
- City Government
- Local or Regional Authority
- Council or Metropolitan Planning Organization
- Public Safety Entity (Government)
- County Office of Education
- Special District
- Other: please specify: _____

3. Private Sector and Non-Governmental Organizations

- Internet Service Provider
- Labor Organization



- Foundation/Philanthropic Organization
- Non-Profit Organization
- For-Profit Corporation or Business
- Other: please specify: _____

12. Which of the following types of digital opportunity programs or resources does the organization provide? Select all that apply. [Directs to relevant section based on responses below]

- Broadband Access, Affordability and Adoption (select this if you promote or provide assistance with internet access, hotspots, ACP, Lifeline/Tribal Lifeline, etc.) (Section 2)
- Computer/Device Access (Section 3)
- Digital Skills and Technical Support (Section 4)
- Digital Opportunity Program Funding (Section 5)
- Digital Opportunity Research, Planning, or Organizing (Section 6)
- Cybersecurity and Privacy Training
- Publicly Accessible Online Services
- Workforce Development
- Public Computer Center
- We do not provide digital equity programs or services, but our organization may be interested (Section 7)
- Other (please specify) _____

13. If you do not provide digital opportunity programs or services, what types of programs or services do you provide?



14. Please indicate if your organization's programs and services are:
- Statewide
 - Regional or across multiple counties
 - County-wide
 - City-wide or across multiple cities
 - Neighborhood-based or across multiple neighborhoods
 - Specific to an individual location
 - Specific to a Tribal Nation or available to multiple Tribal Nations
 - Other (please specify) _____
15. What county or counties does the organization provide services in? Select below. [Full list of counties will be shown below on the web version]
- Foard
 - Karnes
 - San Jacinto
 - ...
16. What cities or towns do you provide services in? Select below. [Full list of cities will be shown below on the web version]
- Houston
 - Dallas
 - Austin
 - ...
17. If you have additional detail about where this program/organization provides services, please describe here (e.g., with zip codes or neighborhood names).
-



18. What should we know about this organization and its programs or plans that could be leveraged to support digital opportunity?
-

We'd love to learn more about this organization and its work. If you have additional time to provide more information for consideration in the digital opportunity planning effort, and/or if you have a plan, report, or other resource to upload and share, please Click Next.

[Next page below]

If you have reports or other documents related to the organization, program, plan, or other resource you are submitting, please upload [here](#) (please click link in new tab). Examples of relevant data include local broadband deployment plans, local digital opportunity plans, GIS files, annual reports, program data, etc.

19. If you have links related to the organization, program, plan, or other resource you are submitting, please provide below.
-

Section 2: Broadband Access, Affordability and Adoption

20. Which of the following describes your organization?

- Library or School/Higher Education
- Government Agency
- Non-Profit or Community-Based Organization
- Internet Service Provider (ISP)



Library or School/Higher Education Questions

21. Do you promote or provide hotspots for students/residents?
- Yes
 - No
22. Do you promote or provide subsidies for home internet access?
- Yes
 - No
23. Do you participate in the E-Rate Program?
- Yes
 - No
24. Do you provide WLAN or Wi-Fi at your facilities for public use?
- Yes, at all our program sites
 - Yes, at some of our program sites
 - No
25. Do you provide information or support to help individuals register for the Affordable Connectivity Program (ACP), a Federal program that provides discounted internet services to low-income households or individuals?
- Yes
 - No
26. Do you provide information or support to help individuals register for Lifeline or Tribal Lifeline?
- Yes
 - No
27. Which of the following are barriers to increasing the impact of your broadband access and affordability program(s)? Select all that apply.



- Lack of staff or organizational capacity
- Lack of awareness and engagement in communities we serve
- Lack of funding availability
- Difficulty in accessing funding sources
- Lack of community trust
- Other: _____

28. What sources of funds support your broadband access and affordability programs? Select all that apply.

- Federal or State Funding
- Government Grants / Subsidies
- Philanthropic Grants
- Individual or Corporate Donations
- Earned Income
- User Fees
- Other: _____

29. What is your organization's history of and current capacity to receive funding from federal, state, or local governments?

[Text Description]

30. If your organization has a fiscal sponsor who helps secure government grants, please provide the sponsor name:

31. How many broadband access and affordability programs does your organization offer?

- 1



- 2
- 3 or more
- None

The following section will appear one, two, or three times depending on the answer to preceding question. Header for page (if chosen 2 or 3 programs): Answer the questions below for one program at a time.

32. What is the name of your broadband access & affordability program?

33. Please provide a brief description of the program below.

[Text Description]

34. How many individuals or households did you serve through this program in the last year?

35. If your organization serves other entities, how many entities did you serve through this program? Entities _____

36. How many individuals or households do you expect to serve through this program in the next year?

37. How many entities do you expect to serve through this program in the next year? Entities _____

38. What is the annual budget for your broadband program(s)?

39. If your program is funded by one-time funding, what is that amount?

One-time funding _____



40. What is the cost (including taxes and fees) to an individual or household to participate in your broadband program(s), if any? Please state if per month/quarter/year or a one-time fee.
-

41. If your organization would like to provide additional input that the State should consider about broadband access and affordability programs in the development of the Texas Digital Opportunity Plan, please share your perspective here. (200 words max)
-

Government Agency Questions

42. Do you promote hotspot services for residents?

Yes

No

43. Do you promote subsidies for home internet access?

Yes

No

44. Do you promote the E-Rate Program?

Yes

No

45. Do you provide WLAN or Wi-Fi at your facilities for public use?

Yes, at all our program sites

Yes, at some of our program sites

No

46. Do you provide information or support to help individuals register for the Affordable Connectivity Program (ACP), a Federal program that



provides discounted internet services to low-income households or individuals?

Yes

No

47. Do you provide information or support to help individuals register for Lifeline or Tribal Lifeline?

Yes

No

48. Which of the following are barriers to increasing the impact of your broadband access and affordability program(s)? Select all that apply.

Lack of staff or organizational capacity

Lack of awareness and engagement in communities we serve

Lack of funding availability

Difficulty in accessing funding sources

Lack of community trust

Other: _____

49. What sources of funds support your broadband access and affordability programs? Select all that apply.

Federal or State Funding

Government Grants / Subsidies

Philanthropic Grants

Individual or Corporate Donations

Earned Income

User Fees

Other: _____



50. How many broadband access and affordability programs does your organization offer?

- 1
- 2
- 3 or more
- None

The following section will appear one, two, or three times depending on the answer to preceding question. Header for page (if chosen 2 or 3 programs): Answer the questions below for one program at a time.

51. What is the name of your broadband access & affordability program?

52. Please provide a brief description of the program below.

[Text Description]

53. How many individuals or households did you serve through this program in the last year?

54. If your organization serves other entities, how many entities did you serve through this program? Entities _____

55. How many individuals or households do you expect to serve through this program in the next year?

56. How many entities do you expect to serve through this program in the next year? Entities _____

57. What is the annual budget for your broadband program(s)?



58. If your program is funded by one-time funding, what is that amount?

One-time funding_____

59. If your organization would like to provide additional input that the State should consider about broadband access and affordability programs in the development of the Texas Digital Opportunity Plan, please share your perspective here. (200 words max)

Non-Profit or Community-Based Organization Questions:

60. Do you promote or provide or provide hotspots for residents?

Yes

No

61. Do you promote or provide subsidies for home internet access?

Yes

No

62. Do you provide information or support to help individuals register for the Affordable Connectivity Program (ACP), a Federal program that provides discounted internet services to low-income households or individuals?

Yes

No

63. Do you provide WLAN or Wi-Fi at your facilities for public use?

Yes, at all our program sites

Yes, at some of our program sites

No



64. Which of the following are barriers to increasing the impact of your broadband access and affordability program(s)? Select all that apply.

- Lack of staff or organizational capacity/support
- Lack of awareness and engagement in communities we serve
- Lack of funding availability
- Difficulty in accessing funding sources
- Linguistic barriers
- Lack of community trust
- Other: _____

65. What sources of funds support your broadband access and affordability programs? Select all that apply.

- Federal or State funding
- Government Grants / Subsidies
- Philanthropic Grants
- Individual or Corporate Donations
- Earned Income
- User Fees
- Other: _____

66. What is your organization's history of and current capacity to receive funding from federal, state, or local governments?

[Text Description]

67. If your organization has a fiscal sponsor who helps secure government grants, please provide the sponsor name:

68. How many broadband access and affordability programs does your organization offer?



- 1
- 2
- 3 or more

The following section will appear one, two, or three times depending on the answer to preceding question. Header for page (if chosen 2 or 3 programs): Answer the questions below for one program at a time.

69. What is the name of your broadband access & affordability program?

70. Please provide a brief description of the program below.

[Text Description]

71. How many individuals or households did you serve through this program in the last year?

72. If your organization serves other entities, how many entities did you serve through this program? Entities _____

73. How many individuals or households do you expect to serve through this program in the next year?

74. How many entities do you expect to serve through this program in the next year? Entities _____

75. What is the annual budget for your broadband program(s)?

76. If your program is funded by one-time funding, what is that amount?

One-time funding _____



77. What is the cost (including taxes and fees) to an individual or household to participate in your broadband program(s), if any? Please state if per month/quarter/year or a one-time fee.

78. If your organization would like to provide additional input that the State should consider about broadband access and affordability programs in the development of the Texas Digital Opportunity Plan, please share your perspective here. (200 words max)

Internet Service Provider (ISP) Questions

79. Do you participate in the Affordable Connectivity Program (ACP), a Federal program that provides discounted internet services to low-income households or individuals?

Yes

No

80. Do you participate in Lifeline and/or Tribal Lifeline?

Yes

No

81. Do you provide subscription plans specifically for low-income individuals or households?

Yes

No

82. Do you participate in any other subsidized or low-cost broadband program?

Yes

No



If Yes, please describe: _____

83. Do you provide other resources or specific programs to support affordable residential broadband access?

Yes

No

If Yes, please describe these resources:

84. Please indicate the range of costs (including taxes and fees) to an individual or household to participate in your subsidized broadband program(s):

85. How many subscribers (for all your service plans) do you currently serve?

86. How many of these subscribers are enrolled in subsidized broadband programs? _____

87. Do you offer a computer/device subsidy program?

Yes

No

88. If Yes, please describe: _____

89. Do you provide access to digital skills training resources?

Yes

No

90. If Yes, please describe and link to the resource (if available):

91. What other digital opportunity-related programs do you offer? Select all that apply:

Grant programs

Broadband adoption grants



- Digital literacy grants
 - Technical training programs
 - Workforce development programs
 - Other: _____
92. Do you promote the Affordable Connectivity Program (ACP), a Federal program that provides discounted internet services to low-income households or individuals?
- Yes
 - No
93. If yes to the above, in what ways do you promote the ACP?
- Print advertisements
 - Radio advertisements
 - Television advertisements
 - Online advertisements
 - Bill Inserts
 - Website
 - Other: _____
94. Do you provide enrollment assistance for the ACP and other subsidy programs?
- Yes
 - No
95. Which of the following are barriers to increasing the impact of your broadband access and affordability program(s)? Select all that apply.
- Lack of staff or organizational capacity/support
 - Lack of awareness and engagement in communities we serve
 - Lack of funding availability



- Difficulty in accessing funding sources
- Competitive pricing from other providers
- Debt collections due to subscribers that default on payments
- Linguistic barriers
- Lack of community trust
- Other: _____

96. What sources of funds support your broadband access and affordability programs? Select all that apply.

- Federal or State funding
- Government Grants / Subsidies
- Philanthropic Grants
- Corporate Social Responsibility Funds
- User Fees
- Other: _____

97. What is your organization's history of and current capacity to receive funding from federal, state, or local governments?

[Text Description]

98. If your organization has a fiscal sponsor who helps secure government grants, please provide the sponsor name:

99. If your organization would like to provide additional input that the State should consider about broadband access and affordability programs in the development of the Texas Digital Opportunity Plan, please share your perspective here. (200 words max) _____



Section 3: Device Access

100. Which of the following best describes your organization's role(s) in promoting device access? Please select all that apply.*

- Public Computer Center
- Device Refurbisher
- Device Wholesaler / Retailer
- Device Distributor
- Other: _____

101. What types of digital devices are available through your organization? Please select all that apply.*

- Desktop
- Laptop
- Smartphone
- Tablet
- Chromebook, or similar
- Office Devices (i.e., printers, scanners)
- Adaptive/assistive technology
- Other: _____

102. What are the eligibility criteria for individuals or households to participate in your program(s)? Please select all that apply.*

- Income-based eligibility
- Participation in Federal Assistance Programs (i.e., SNAP, TANF)
- Living on Tribal Lands
- Participation in Affordable Connectivity Program (ACP)
- Participation in Lifeline or Tribal Lifeline
- Eligibility Through Child/Dependent



- Member of Protected Population (blind, deaf, other disabilities)
- No Eligibility Requirement
- Other: _____

103. Which of the following are barriers to increasing the impact of your device access program(s)? Select all that apply.

- Lack of staff or organizational capacity/support
- Lack of awareness and engagement in communities we serve
- Lack of funding availability
- Difficulty in accessing funding sources
- Competitive pricing from retailers
- Device distribution
- Lack of community trust
- Other: _____

104. What sources of funds support your device access programs? Select all that apply.

- Federal or State funding
- Government Grants / Subsidies
- Philanthropic Grants
- Individual or Corporate Donations
- Earned Income
- User Fees
- Other: _____

105. What is your organization's history of and current capacity to receive funding from federal, state, or local governments?

[Text Description]



106. If your organization has a fiscal sponsor who helps secure government grants, please provide the sponsor name:

107. How many device access programs does your organization offer?

- 1
- 2
- 3 or more
- None

The following section will appear one, two, or three times depending on the answer to preceding question. Header for page (if chosen 2 or 3 programs): Answer the questions below for one program at a time.

108. What is the name of your device access program?

109. Please provide a brief description of the program below.

[Text Description]

110. What is the annual budget for your device access program(s)?

111. If your program is funded by one-time funding, what is that amount?

One-time funding _____

112. What is the cost (including taxes and fees) to an individual or household to participate in your device access program, if any? Please state if per month/quarter/year or a one-time fee.

113. How many devices did you distribute through this program in the last year?



- i. Desktops____
- ii. Laptops____
- iii. Smartphones____
- iv. Tablets____
- v. Chromebook, or similar____
- vi. Office Devices (i.e., printers, scanners)____
- vii. Adaptive/assistive technology__
- viii. Other: please specify device and quantity

114. How many devices do you anticipate distributing through this program in the next year?

- ix. Desktops____
- x. Laptops____
- xi. Smartphones____
- xii. Tablets____
- xiii. Chromebook, or similar____
- xiv. Office Devices (i.e., printers, scanners)____
- xv. Adaptive/assistive technology__
- xvi. Other: please specify device and quantity

115. If your organization would like to provide additional input that the State should consider about device access programs in the development of the Texas Digital Opportunity Plan, please share your perspective here. (200 words max)

Section 4: Digital Skills & Technical Support



116. What type of digital skills & technical support services does your organization provide? Please select all that apply.*

- Digital Support Rep
- In-Person Support for individuals
- In-Person Support for group
- Online Chat Support
- Phone Support/Call Centers
- In-Person Instructor-Led Classes
- Online/Virtual Instructor-Led Classes
- Online Self-Paced Courses
- Other: _____

117. What are the eligibility criteria for individuals to participate in your program(s)? Please select all that apply.*

- Income-based eligibility
- Participation in Federal Assistance Programs (i.e., SNAP, TANF)
- Living on Tribal lands
- Participation in Lifeline or Tribal Lifeline
- Eligibility Through Child/Dependent
- Member of Protected Population (blind, deaf, other disabilities)
- No Eligibility Requirement
- Other: _____

118. What digital skills topics does your organization support? Please select all that apply.*

- Computer Software (including certification programs) - For example, Microsoft Office (Word, Excel, etc.)
- Computer Hardware (desktops, laptops, tablets)
- Smartphones



- Distance or Online Learning
- Email
- Employment/Job Search Tools
- Online Banking
- Online Safety/Cybersecurity/Avoiding Phishing and Scams
- Online Shopping
- Search Engines
- Social Media
- Telehealth/Telemedicine
- Video Calls/Online Conferencing
- Advanced digital skills (Coding, specific software, etc.)
- Other: _____

119. Which of the following are barriers to increasing the impact of your digital skills and technical support program(s)? Select all that apply.

- Lack of staff or organizational capacity/support
- Lack of awareness and engagement in communities we serve
- Lack of funding availability
- Difficulty in accessing funding sources
- Free and readily accessible digital skills training provided by organizations
- Language access
- Lack of community trust
- Other: _____

120. What sources of funds support your device access programs? Select all that apply.



- Federal or State funding
- Government Grants
- Philanthropic Grants
- Individual or Corporate Donations
- Earned Income
- User Fees
- Other: _____

121. What is your organization's history of and current capacity to receive funding from federal, state, or local governments?

[Text Description]

122. If your organization has a fiscal sponsor who helps secure government grants, please provide the sponsor name:

123. How many digital skills and support programs does your organization offer?

- 1
- 2
- 3 or more
- None

The following section will appear one, two, or three times depending on the answer to preceding question. Header for page (if chosen 2 or 3 programs): Answer the questions below for one program at a time.

124. What is the name of your digital skills and technical support program?



125. Please provide a brief description of the program below.

[Text Description]

126. How many individuals were served by this program in the last year?

127. How many individuals do you expect to serve through this program in the next year?

128. What is the annual budget for your digital skills and technical support program(s)? _____

129. If your program is funded by one-time funding, what is that amount?

One-time funding _____

130. What is the cost (including taxes and fees) to an individual or household to participate in your digital skills and technical support program(s), if any? Please state if per month/quarter/year or a one-time fee.

\$ _____

131. If your organization would like to provide additional input that the State should consider about digital skills programs in the development of the Texas Digital Opportunity Plan, please share your perspective here. (200 words max)

Section 5: Digital Opportunity Program Funding

132. If your organization provides digital opportunity funding, which of the following describes your organization? Please select all that apply.*

- Community Anchor Institution
- Community Foundation
- Corporate Foundation



- Corporate Responsibility Program
- Financial Institution
- Healthcare Institution
- Private Foundation
- Non-Profit Funder (e.g., Goodwill, United Way)
- Other: _____

133. Which of the following types of digital opportunity services are eligible for your organization's support? Please select all that apply.*

- Broadband Access & Affordability
- Device Access
- Digital Skills & Technical Support
- Digital Support Representative
- Other: _____

134. What types of entities are eligible for your organization's support? Please select all that apply.*

- Community Anchor Institution (e.g., libraries)
- Educational Institutions
- Foundation/Philanthropic Organization
- Non-Profit or Community-Based Organization
- Private Sector Entity
- State, County or Municipal Government Agency
- Tribal Government Agency
- Other: _____

135. How many digital opportunity funding programs does your organization offer?

- 1



- 2
- 3 or more
- None

The following section will appear one, two, or three times depending on the answer to preceding question. Header for page (if chosen 2 or 3 programs): Answer the questions below for one program at a time.

136. What is the name of your digital opportunity funding program?

137. Please provide a brief description of the program below.

[Text Description]

138. How many organizations did this program fund in the last year?

139. How many organizations do you anticipate funding via this program in the coming year?

140. How much digital opportunity funding did your organization distribute in the last year?

141. How much digital opportunity funding does your organization anticipate distributing in the coming year?

142. If your organization would like to provide additional input that the State should consider in the development of the Texas Digital Opportunity Plan, please share your perspective here. (200 words max)

Section 6: Digital Opportunity Research, Planning, or Organizing



143. Which of the following activities does your organization provide?
(Please select all that apply)

- Digital opportunity data collection or research
- Digital opportunity / inclusion planning
- Digital opportunity organizing or coalition-building

144. Please describe your organization's research, planning, or organizing activities, briefly. (100 words max)

145. How many individuals, households, or organizations has your organization engaged in your data collection, planning, or organizing activities in the last year?

- Individuals _____
- Households _____
- Organizations _____

146. If your organization would like to provide additional input that State should consider in the development of the Texas Digital Opportunity Plan, please share your perspective here. (200 words max)

Section 7: Other Organizations' Questions

147. What sources of funds support your programs? Select all that apply.

- Federal or State Funding
- Government Grants/Subsidies
- Philanthropic Grants
- Individual or Corporate Donations
- Earned Income



User Fees

Other: _____

148. What is your organization's history of and current capacity to receive funding from federal, state, or local governments?

[Text Description]

149. If your organization has a fiscal sponsor who helps secure government grants, please provide the sponsor name:

150. How many programs does your organization offer?

1

2

3 or more

None

The following section will appear one, two, or three times depending on the answer to preceding question. Header for page (if chosen 2 or 3 programs): Answer the questions below for one program at a time.

151. What is the name of your program? _____

152. Please provide a brief description of the program below.

[Text Description]

153. How many individuals or households did you serve through this program in the last year?



154. If your organization serves other entities, how many entities did you serve through this program?

Entities _____

155. How many individuals or households do you expect to serve through this program in the next year?

156. How many entities do you expect to serve through this program in the next year?

Entities _____

157. What is the annual budget for your program?

Budget per year _____

158. If your program is funded by one-time funding, what is that amount?

One-time funding _____

159. What is the cost to an individual or household to participate in your program, if any? Please state if per month/quarter/year or a one-time fee.

\$ _____



Survey Completion

Clicking “Next” will complete the survey. All answers are already saved. You can use the “Previous” button if you want to review any responses.

Thank You for completing our survey!

Stay Engaged

Broadband is now essential for vital services and opportunities, but millions of Texans still lack adequate broadband service or the devices and skills to use it. The Texas Digital Opportunity Plan is Texas' commitment to closing the digital divide. If you would like to learn more about the Texas Digital Opportunity Plan, click [here](#).

[Join us](#) as we engage and support partners across the state to achieve Broadband for Texas!

Appendix J: Record of Public Comments and Actions Taken

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
1	3	Our internet in brookeland tx., Rayburn county is extremely expensive, especially for seniors on a fixed income, the population in this area could and would support broadband services, we are left out in jasper county	no	11/28/2023	Comment reviewed. No changes made.
2	1	I hope I live long enough to see it. At 83 I doubt that I will	no	11/28/2023	Comment reviewed. No changes made.
3	1	05/08/1970 Years of Slavery Experience in this industry and the United Arab Republic and the United Kingdom and Korea and Europe and United States owners trustee's Minutes Shareholders Director's and I am very interested in this industry	yes	11/29/2023	Comment reviewed. No changes made.
4	1	I live on very low income and life is so hard and depressing and disabled	no	11/29/2023	Comment reviewed. No changes made.
5	1	Overall, good. The devil is in the details though.	no	11/29/2023	Comment reviewed. No changes made.
6	4	n English translated by Google Jorge Manuel figueiras Filipe Barreira leaves a warning about civic and social commitment, the difference between public comments and euphemisms as a tool for participation in civic processes, broadband is used so that public comments can serve to understand reality, a good investment, if Broadband serves to satisfy communities with euphemisms, a terrible investment, the difference is in the choice, communities choose the guillotine of the Reduplica Prosecutor's Offices or communities choose the legitimization of Criminal Organizations. Temperate Jorge Barreira Compromiso cívico y social: Los texanos estarán más conectados entre sí, con sus comunidades y su gobierno con herramientas mejoradas para participar en procesos cívicos. Em Português Jorge Manuel figueiras Filipe Barreira deixar um alerta sobre o compromisso cívico e social a diferença de comentários públicos e os eufemismos como ferramenta de participação de processos cívicos , a banda larga se servir para que os comentários públicos sirvam para conhecer a realidade um bom investimento , se banda larga servir para contentar as comunidades com os eufemismos , péssimo investimento , a diferença esta na escolha , as comunidades escolham pela guilhotina das Procuradorias de Reduplica ou as comunidades escolhem a legitimação de Organizações Criminosas. Atemperante Jorge Barreira	yes	11/30/2023	Comment reviewed. No changes made.
7	3	I would like to see broadband offered at 808 Bittercreek Road in Sweetwater, Texas. Texas Electric has provided affordable internet close to our area. I would like to see funds to let them further their development. Starlink is available, but it is not the most affordable.	no	11/30/2023	Comment reviewed. No changes made.
8	1	I've lived on the edge of internet civilization for about 24 years and am looking forward to fiber. They pushed the tube for the fiber in front of my house about 15-20 years ago. I'm still waiting.	no	11/30/2023	Comment reviewed. No changes made.
9	1	I'm trying to move to the land I purchased at 500 CR 253 Sweetwater Tx but internet access is very limited. I will need the internet in order to be able to work from home for my real estate business as well as use it for my cattle operation. Taylor Electric Cooperative put in internet service for the houses just north of me but stopped less than 2 miles from my place because there are only a about a dozen homes in this area.	no	11/30/2023	Comment reviewed. No changes made.

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10	2	Artificial intelligence is advancing rapidly, bringing opportunities to K12 education and workforce readiness. Artificial intelligence will drastically transform the future of work for the next generation of professionals – this change is inevitable. According to the World Economic Forum, AI technology will create many new jobs, highlighting the importance of developing a young workforce of AI experts particularly from the Black community. The Changing Expectations Closing the AI Education Gap Initiative engages students and teachers as creators - not just consumers - of AI technology. In the Youth Creating AI Voice Chatbots for Social Justice online course, learners build critical thinking skills while confronting bias by participating in hands-on projects that develop AI chatbots to tackle social justice problems. With Infrastructure Investment and Jobs Act funding, we should partner to close AI education and workforce readiness gaps in Texas for the Black community.	no	12/2/2023	Comment reviewed. Addressed in section 5.c.i.
11	2	I got so many people messaging with my email and acting accounts and they are making it seem like I gave them permission or they messed with my Supreme Court case and sabotage my opportunity to get my son back from CPS and I passed the drug test and did the classes and at the end of the 5 years representing my family. CPS never informed me they diagnosed him as autistic. But when my son was born he had the umbilical cord warped around his neck and wasn't breathing because the doctor pulled him out by his head	yes	12/3/2023	Comment reviewed. No changes made.
12	1	Affordable broadband for seniors.	no	12/4/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
13	1	I just want high-speed internet where I live so I can use stream services like Netflix and Amazon video. I'd also like to do online gaming. AT&T and the other services aren't available here. Instead it's either a 5G hotspot from Verizon or unreliable satellite internet services!	no	12/5/2023	Comment reviewed. No changes made.
14	1	We don't have internet and need it. 5 miles south of Jasper tx	no	12/5/2023	Comment reviewed. No changes made.
15	1	We finally have internet service through Windstream phone company. But service man says we will only have copper line service with mbps of 10. Will never be any better. We think all the advertising about fiberoptic wire will never be available to rural areas. You only care about getting that service in large populated areas.	no	12/5/2023	Comment reviewed. No changes made.
16	1	Most residents in southern Newton County / Deweyville, do not have access to high speed fiber or hard line internet. The only option for hard line internet is DSL from AT&T and that speed is limited to 5mb/s down speeds. That is the fastest hard line internet that we can get. The map shows out area as 100 mb/s down, but this isn't correct, otherwise I would have it. Please get us here in South Newton County some decent internet that is fiber or some other hard line. Thanks	no	12/5/2023	Comment reviewed. No changes made.
17	2	Most residents in southern Newton County / Deweyville, do not have access to high speed fiber or hard line internet. The only option for hard line internet is DSL from AT&T and that speed is limited to 5mb/s down speeds. That is the fastest hard line internet that we can get. The map shows out area as 100 mb/s down, but this isn't correct, otherwise I would have it. Please get us here in South Newton County some decent internet that is fiber or some other hard line. Thanks	no	12/5/2023	Comment reviewed. No changes made.

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18	3	Most residents in southern Newton County / Deweyville, do not have access to high speed fiber or hard line internet. The only option for hard line internet is DSL from AT&T and that speed is limited to 5mb/s down speeds. That is the fastest hard line internet that we can get. The map shows out area as 100 mb/s down, but this isn't correct, otherwise I would have it. Please get us here in South Newton County some decent internet that is fiber or some other hard line. Thanks	no	12/5/2023	Comment reviewed. No changes made.
19	4	Most residents in southern Newton County / Deweyville, do not have access to high speed fiber or hard line internet. The only option for hard line internet is DSL from AT&T and that speed is limited to 5mb/s down speeds. That is the fastest hard line internet that we can get. The map shows out area as 100 mb/s down, but this isn't correct, otherwise I would have it. Please get us here in South Newton County some decent internet that is fiber or some other hard line. Thanks	no	12/5/2023	Comment reviewed. No changes made.
20	5	Most residents in southern Newton County / Deweyville, do not have access to high speed fiber or hard line internet. The only option for hard line internet is DSL from AT&T and that speed is limited to 5mb/s down speeds. That is the fastest hard line internet that we can get. The map shows out area as 100 mb/s down, but this isn't correct, otherwise I would have it. Please get us here in South Newton County some decent internet that is fiber or some other hard line. Thanks	no	12/5/2023	Comment reviewed. No changes made.
21	6	Most residents in southern Newton County / Deweyville, do not have access to high speed fiber or hard line internet. The only option for hard line internet is DSL from AT&T and that speed is limited to 5mb/s down speeds. That is the fastest hard line internet that we can get. The map shows out area as 100 mb/s down, but this isn't correct, otherwise I would have it. Please get us here in South Newton County some decent internet that is fiber or some other hard line. Thanks	no	12/5/2023	Comment reviewed. No changes made.
22	2	I'm in favor as long as people do not abuse the system and just try to get out of paying for Internet.	no	12/5/2023	Comment reviewed. No changes made.
23	1	This appears to be a get rich proposal for the promoters of this program. It comes with the Pie in the Sky promises that the people have fallen for over & over.	no	12/5/2023	Comment reviewed. No changes made.
24	5	As Former FCC Chair Tom Wheeler testified to Congress in March 2021, the NTIA emphasis should be to deploy future-proof technology with fiber optics versus inferior wireless technology. Fiber is unmatched in its superiority. Fiber broadband is future proof, with unmatched life span of 25-50, unmatched in speed and scalability, unmatched in capacity, unmatched in low or miniscule latency, unmatched in cybersecurity and privacy, unmatched in reliability, unmatched in ease of adoption (no EMS disabled accommodation needed), unmatched in resiliency including during extreme weather conditions. The NTIA must refocus its priorities on the protection of life and property with FIBER. "Accelerating" has meant accelerating the deployment and access to poles and rights of way for wireless at all costs despite injury to health and damage to property values. Residents' voices have been drowned out by corporate and state interests. There is strong opposition to wireless,	no	12/5/2023	Comment reviewed. No changes made.

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25	3	I live in rural Newton County, outside of Kirbyville. I work from home but the internet is so bad that many days, it prevents me from being able to log into the sites I need to in order to do my job. My company provided me with a MiFi but it only gets 4G which is just as bad as HughesNet, the only internet provider here. There is no fiber optic, no broadband, no other internet provider here. I'm stuck with subpar internet service. We need better internet service here. We need 5G service for internet.	no	12/5/2023	Comment reviewed. No changes made.
26	1	Please provide rural broadband internet.	no	12/6/2023	Comment reviewed. No changes made.
27	1	Please provide Broadband services in rural areas it's needed not only for school children for their home work ,but also for senior citizens for Civic and Social Engagement and Healthcare services with their Doctors	no	12/6/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
28	1	Need Internet in our area. In 2020 my son had to go to drive for miles to a friends house to complete his studies Wireless Internet signal is weak most times or non existent.	no	12/6/2023	Comment reviewed. No changes made.
29	1	I have lived in this rural area for 38 years and have never had internet other than dial up and Spectrum and others do not offer service in my area.	no	12/6/2023	Comment reviewed. No changes made.
30	5	twenty years ago, no one knew how important internet access is. from education opportunities to working from home internet access is key. please consider our home so the next generation have the same chances as our suburban folks.	no	12/6/2023	Comment reviewed. No changes made.
31	1	Rayburn Country, Jasper & Newton counties and our deep east Texas counties have been identified for quite sometime based on insufficient and abandoned services. The time is now for growth of broadband as more and more citizens are moving to rural ETx, schools are expanding and infrastructure projects progress. All of the above support the needs based expansion to get broadband here sooner than later. The surveys, studies and town halls have all been done, the action plan is in place and Urgency Is Imperstive before another Catastrophic Hurricane, Wildfire disaster affects our specific region. Thank you for allowing us to voice our comments. Please do not let this fall on deaf ears.	no	12/6/2023	Comment reviewed. No changes made.
32	3	I was told by Sparklight that it would cost us 50K to get internet to our home. Obviously this is not an option. Living in a rural area the lack of available internet is very difficult	no	12/6/2023	Comment reviewed. No changes made.
33	1	The school uses Google classroom but a lot of kids have no internet access at home.	no	12/6/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
34	3	Need for faster speed reliable internet to obtains needed resources services in all areas of our families' life	no	12/6/2023	Comment reviewed. No changes made.
35	3	I live in a rural area and fiber optic Internet is not available in my area. We only have Spectrum and it's horrible. We have Internet outages several times a month. My husband isn't able to work from home because of the unreliable Internet.	no	12/6/2023	Comment reviewed. No changes made.
36	1	High speed internet in rural areas is limited. Options that are available are expensive.	no	12/6/2023	Comment reviewed. No changes made.
37	1	I think it would be great to have faster internet in Burkeville and Shankleville communities	no	12/6/2023	Comment reviewed. No changes made.
38	1	Jasper County in my area does not have access to internet with the exception of high cost satellite, making it to costly for most residents	no	12/6/2023	Comment reviewed. No changes made.
39	1	Internet is a critical part of modern day life.	no	12/6/2023	Comment reviewed. No changes made.
40	1	We need Internet in rural areas	no	12/6/2023	Comment reviewed. No changes made.
41	3	We will need better internet services in the Fannett area between 124 and 365	no	12/6/2023	Comment reviewed. No changes made.

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42	1	Better internet!	no	12/6/2023	Comment reviewed. No changes made.
43	1	We live in a rural community with limitations for internet. Currently we have 2 Iphones and an Ipad for internet service through Verizon. It is extremely difficult to manage because EVERYTHING is on line now and the signal is often poor.	no	12/6/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
44	1	How long before internet is accessible in rural areas like mine. I live outside of Mauriceville, Texas and need to use internet for medical appointments for myself and my elderly father.	no	12/6/2023	Comment reviewed. No changes made.
45	5	More information	no	12/6/2023	Comment reviewed. No changes made.
46	1	Need for wife who has medical conditions	no	12/7/2023	Comment reviewed. No changes made.
47	5	The Pottsboro Library has an established, robust digital navigator program. We distribute devices directly as well as through our partnerships with local nonprofits, and we provide group and one-on-one technology assistance. We've built an understanding of best practices, but need funding to expand through Grayson County and Fannin County. We've already laid such a strong foundation and are respected as the digital equity experts in our region. I'd like to see funding available directly to our organization as opposed to having to go through a competitive process to be a subawardee through another entity. We have proven ourselves and will continue to be a national leader in digital equity work.	no	12/7/2023	Comment reviewed. Addressed in section 5.c.ii.
48	1	My broadband provider is too expensive! Almost \$100.00 per month is so much for senior citizen 68 years old. I cannot afford a new computer so currently only have my iphone that will need updating soon as well. Affordability and internet safety are high priorities for me. Thank you for your time.	no	12/8/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
49	1	So you expect me to read 175 pages about the plan. I don't have time or the want to read it. I have satellite internet now which is awful. I wish the state would somehow subsidize internet providers to bring fiber optic to the rural areas. I'm sure these comments of mine will go in the round file, also known as the thrash can. But it did make me feel better. Thanks for your time. Ray.	no	12/8/2023	Comment reviewed. No changes made.
50	1	Es necesario el internet para tareas para los niños y el spectrum está muy caro	no	12/8/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
51	3	N/A	no	12/8/2023	Comment reviewed. No changes made.
52	3	It's a great opportunity for everyone.	no	12/8/2023	Comment reviewed. No changes made.
53	1	We need more options in the rural communities. We are forced to have one choice and the service is sub par with too many outages with no explanations or recourse.	no	12/8/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
54	1	I would like to have access to broadband Internet just like anyone else living inside city limits.	no	12/8/2023	Comment reviewed. No changes made.
55	5	looks good...in theory	no	12/8/2023	Comment reviewed. No changes made.
56	3	We are constantly losing Internet service. Mostly because a fiber has been cut during some construction. Please consider this as Broadband is implemented so many people and businesses depend on internet each day that when internet is lost, it brings our community down.	no	12/8/2023	Comment reviewed. No changes made.
57	5	As Broadband is implemented. Consideration must be taken for the monthly fee. If it is too expensive people will not be able to afford it. Especially those that have children in school or attending college online.	no	12/8/2023	Comment reviewed. No changes made.
58	1	Yes! Yes! Yes! We need this so bad. Everything is done online now. It will so improve business, education and the whole community!!!	no	12/8/2023	Comment reviewed. No changes made.

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59	1	We live in a rural area that has poor internet service. My husband has a heart defibrillator, that is monitored by wifi. For heath reasons we need a better system than what we have.	no	12/9/2023	Comment reviewed. Addressed in section 2.c.iv.3.
60	1	I currently live in a rural area on the "bad" side of town, which consists of mostly poor, black residents. Our city manager recently signed a contract with our major internet provider to lay fiber for faster internet, but it was only the wealthier, white side of town. I currently pay twice as much as the wealthier side for slower internet due to this new contract. These type of issues are why I fully support this initiative to increase equality and fairness in internet access for all Texans, especially to increase educational choices, health access, and employment opportunities for the poor, overlooked, and weakened voices of our communities. Thank you.	no	12/9/2023	Comment reviewed. No changes made.
61	5	The area that I live in is considered rural. It is 6 miles out of the town of Ozona, Tx. Although frontier provides fiber optic services to the town and Verizon provides high speed internet they do not do that out in this area. I have to rely on unreliable satellite internet which is provided at a high price per certain data usage. Now that almost everything is done online, I go thru my usage very quickly and have to buy additional data tokens just to be able to get emails and such to communicate with my doctor and such.	no	12/9/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
62	1	I appreciate that this an area of focus for our state. As a rural resident in the Northwest region it is incredibly frustrating to try to make a living farming when you can't get affordable internet service. I pay \$200 a month for slow internet services people 20 miles away in Abilene are paying \$100 for high speed fiber optic internet. There is fiber optic literally 3 miles from my farm, but when I call the ISP they won't consider because it is all farms and rural residents. Not enough for them to consider, yet they will run 10 miles of fiber go right by the rural residents to reach a new residential development. At the end of the day I don't have a lot of faith in the plan. Politicians will line their pockets and direct the funds to the communities with the best lobbist. Not to mention your goal is to provide 100mbps to rural communities, we will still be way behind as technology progresses, the rural residents and farmers will once again remain behind.	no	12/9/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
63	1	Not having dependable internet negatively impacts my life. In this modern world everything from zoom doctor visits to getting up to date news is dependent on internet service. We can't consistently go "online" and more and more services are requiring this. We can't even clearly stream Thursday night football :(no	12/9/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
64	1	Out internet service is very poor in our community of ozona texas. Families that have access can only run one source at a time, if you run television and computer it will continuously buffer Our students cannot complete homework	no	12/9/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
65	1	Texas Broadband Development Office is doing a lot of "words", but i don't see "action" in rural east texas (which seems to always get left out compared to larger population areas of the state). Is this a way for the Texas Braodband Office to burn through a bunch of money and be able to say "Yeah, we did a lot of notification on-line (which isn't reaching the unserved and underserved populace) and at the end of the day there is nothing left for implementation?"	no	12/9/2023	Comment reviewed. No changes made.
66	1	Want this to pass	no	12/11/2023	Comment reviewed. No changes made.
67	1	We are in need of reliable fast speed internet across the state, especially rural areas.	no	12/11/2023	Comment reviewed. No changes made.

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68	1	Internet in the rural area will help my kids to their homework.	no	12/12/2023	Comment reviewed. No changes made.
69	5	High speed internet service in the Swan community between Lindale, Texas and Tyler, Texas is almost non-existence. The main internet carriers doesn't have service in this area. We found KP Internet and the charge was over \$120 month. Service would go down consistently and the time to fix would be several days later. This was happening consistently. Now we are with T-Mobile. Very good service in the beginning but due to other customers joining, service is slow and drops often. We have to reconnect often for \$50. We have no carriers to choose from. Dedicated bandwidth is severely needed in this area. The community is continuing to grow and the need is a must for all the children that needs it for school and adults, especially those that work from home. Please help us! Thank you!	no	12/12/2023	Comment reviewed. No changes made.
70	3	Many towns such as Bullard have only one option and they are horrible. We need to join the rest of the country and give our residents multiple options for internet by supporting the infrastructure that will support our internet providers being better through competition.	no	12/12/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
71	1	Thank you	no	12/12/2023	Comment reviewed. No changes made.
72	1	i live outside city limit by a little bit and can not get internet that is reasonable i live at 4099 fm 2863 nacogdoches... broadband could help improve my life greatly	no	12/12/2023	Comment reviewed. No changes made.
73	1	Here in East Texas we need affordable internet and better internet service in East Texas.	no	12/12/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
74	1	Rural areas are the most needed areas.	no	12/12/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
75	3	Here in my area of East Tx. Upshur Co. There are no broadband options. We are able to use a unreliable hotspot from T mobile cell carrier and I'm able to purchase a Lte plan of 10mph of internet from Etex internet for \$88.00. With today's modern world we need stronger cheaper services in this area so we can do school work, installation of security cameras, work opportunities and overall enjoyment of the internet.	no	12/12/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
76	1	We have no landline telephone access since the 90s. The only means for Internet is wireless. If we want a landline telephone we have to pay out pocket to run a line from our property to the line of the company Century Link or Suden Link. I'm not sure the exact company name.	no	12/12/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
77	1	Our current internet goes off and on. It isn't consistent. I can be working on something or the children can be doing college work or homework and it goes out. We can't watch television sometimes.	no	12/12/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
78	1	Goal 1: All Texas have access to reliable affordable broadband internet service at home. We have lived in our home in a rural area for 30 years and we still do not have Internet.	no	12/12/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
79	1	5G is harmful to health. 5G enhances surveillance capabilities. 5G assists UN Agenda 2030 goals. Please do not implement.	no	12/12/2023	Comment reviewed. No changes made.
80	3	I reside on loop 571 in henderson, texas. east tex telephone is within walking distance of my home. yet they are not able to provide me with internet service when their slogan is literally "broadband for every barn."	no	12/13/2023	Comment reviewed. No changes made.
81	3	It would be nice to have working internet, to be able to watch the weather, buy food and paid bills	no	12/14/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
82	3	I live in Camp County, Texas on FM 993. My road and pretty much every state and county road outside the city limits of Pittsburg have ZERO access to fiber. The copper lines are all that is there and AT&T also refuses to even start new landline service without an act of congress (not literally but it feels like it). There are a few areas that have had wireless access from Peoples, but there are only 1 or 2 that I know of. ETEX Co Op in Upshur County will not install fiber over our county line. So we are left paying exhorbitant amounts for Starlink if we can get it or relying on cell tower signals. It is extremely frustrating to be dealing with this in 2023.	no	12/14/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
83	1	How are you going to get underserved people into the places for digital skills education? Either through outreach like mobile library units, or use the incentive method. If our library provides a good meal, people will show up in droves for digital literacy instructions. FREE Ice Cream in the summer, home made soup in the winter. Destigmatize the funding of incentives through grants for rural areas. Remember that Quality of Life and Social Enrichment are important too. Let us pay people for presentations! Telehealth instructors from the clinics!	no	12/14/2023	Comment reviewed. Addressed in section 5.c.ii.
84	5	Funding Local Partners should be a priority equal to or greater than funding organizations of the state. Small, rural libraries and community organizations are putting in the hard hours directly with the people that this entire project aims to benefit. Applying for and managing grants from State organizations is tedious, restrictive, and a big hassle for those of us with limited staff. The things we need to apply these massive programs are often stigmatized, i.e. staff supplies, volunteer stipends, operational costs, food, etc. or are not a typical need of medium to large organizations, as they are already covered under annual budgets. The deep, dark places that need broadband right NOW are consistently impoverished to include the staff, volunteers, and organizations that are offering the services. Fund the local nonprofits through grant management liasons, like LISC. Remove unnecessary restrictions. Fund recurring costs for libraries like hotspot lending services.	no	12/14/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
85	3	We live in very rural Caldwell county Texas, and at times, we virtually have no cell or internet service, we have used them all, and they all say same thing , " its a problem with your equipment, not our service", they lie, lead you astray, and then charge you very much for nothing. Our cell service allows us to watch a program with lots of buffering, and then we cut it off .	no	12/15/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
86	6	There is no reason to allow the providers to over sell and overload tower service, when they know exactly whats going to happen wne many users log on, no one can use the service,	no	12/15/2023	Comment reviewed. No changes made.
87	5	What is the proposed start / connectivity date and associated cost?	no	12/16/2023	Comment review. Addressed in section 5.c.
88	1	We have only 2 Internet Service Provider choices in rural Bandera county. One is Hughes satellite which we tried for 3 months and had speeds of only 5-8 mbps. We now use the only other provider, Rock Solid Internet which is also wireless and because we are on the edge of the wireless signal we cannot use any streaming services and frequently cannot even access our bank or government websites. We desperately need a 3rd choice. We currently pay Rock Solid almost \$100 per moth for very slow speeds, spotty coverage and high latency.	no	12/17/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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89	1	I will believe this when I see it. Probably will not happen in my lifetime where I am. We can barely get a phone signal out here. The county won't even take care of the county roads.	no	12/18/2023	Comment reviewed. No changes made.
90	3	Brookeland,Tx 75931	no	12/19/2023	Comment reviewed. No changes made.
91	1	We have no choice for internet other than satellite service which is very understandable and so very slow and expensive.	no	12/19/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
92	2	Need broadband. Paying exorbitant amt for internet	no	12/19/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
93	1	I think the most important thing to me is the affordability part of this grants to help this become a reality from companies and I appreciate that that's in the plan	no	12/19/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
94	1	Dependent on satellite internet which is unreliable and expensive rural needs fiberoptics	no	12/19/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
95	1	Just as rural residents were granted equal access compared with urban residents, to mail service through RFD buy the Congress, we rural residents need equal access to digital services. We are not second class citizens but with second class digital services we have been treated as second class compared with our rural counterparts!	no	12/20/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
96	1	Living in a rural area, dependable broadband service is not an option. It is frustrating to be living in a digital world without a reliable service to use.	no	12/20/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
97	1	Everyone needs access to broadband, just as we all need to be able to read and write. It is essential for communication these days. The entire State must have free access to broadband.	no	12/20/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
98	1	I support bringing broadband into rural areas, specifically West of Beaumont TX.	no	12/20/2023	Comment reviewed. No changes made.
99	3	Please correct the location of San Angelo on Pg. 123 Figure 22. The dot has San Angelo in Crockett County, not Tom Green.	no	12/20/2023	Comment reviewed. Addressed in section 3.a.v.12.
100	5	While the plan does a great job of identifying gap areas, I do not see any recommendations for implementing a sustainable ISP presence in the sparsely populated areas of the state. ISPs will not have a large enough market to sustain availability to affordable internet access without some form of subsidy for operations and maintenance similar to the Rural Electric Cooperatives. I'm concerned this 5 year TDOP does not adequately address sustainability.	no	12/20/2023	Comment review. Addressed in section 5.c.
101	1	I live 11 miles from Henderson and 3 miles from New London. I am in no man's land!! Broadband internet is not even close to being provided for this area!	no	12/21/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
102	1	It is unclear how Goal 1.2 could lower prices for those who are struggling financially but not below poverty. Maybe there could be a subsidy for non-competitive areas where there is only one internet provider for all customers?	no	12/21/2023	Comment reviewed. Addressed in section 5.c.iii.

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103	3	Since US Steel closed down in Morris County thousands of residents were laid off. As a resident of Morris County, Texas and Chair, of the Economic Development Committee, it is our aim to ensure that the residents here have adequate access to Broadband in order to attract employers that pay higher wages with benefits. One of the issues we have is inaccurate data provided to the Federal Communications Commission. Due to his inaccurate data, we are determined to have satisfactory Internet service when in fact we do not. So, we are not allowed the opportunities that Broadband affords which would bring in more employers or increase the number of home businesses. We have a Broadband portal on our website at: www.morriscountycollab.com	no	12/21/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
104	1	Please see attached file for comment and analysis.	yes	12/22/2023	Comment reviewed. Addressed in sections 2.c.iv.1 and 4.a.
105	2	<ul style="list-style-type: none"> - Personal device ownership provides a unique computing experience that cannot be replicated through public use of computers or shared devices. Large screen devices such as laptops, desktops, Chromebooks, and tablets, are critical for a full and equitable experience. - To ensure that all residents are able to obtain a free or low cost computer, establishing a robust supply of free and affordable devices through accessible, community-level distribution systems is critical. - While short-term gains are possible, collective efforts must aim for sustainable solutions that far outlast the five-year federal investment. Building a plan around purchasing devices would be shortsighted. Instead, we must develop solutions that transform the way corporate, government, and institutional IT assets are managed at scale. - Affordable devices must be reliable; quantity cannot replace quality. The choice of device must match a recipient's intended use and context. 	no	12/22/2023	Comment reviewed. Addressed in section 5.c.ii.
106	5	<p>Generating a robust and ongoing supply of technology to be refurbished is necessary for a sustainable device ecosystem. It is typically corporations, government, and other large institutions that yield the biggest quantity and highest quality of devices that can be refurbished. Efforts such as a statewide campaign for businesses donations would be helpful to your Efforts, as well as targeted engagement of organizations with large amounts of technology.</p> <ul style="list-style-type: none"> - Refurbishing can be a viable workforce development program with a low entry point for staff and a robust career ladder to family sustaining wages. Plus, It may come with its own set of funding sources - Planning is required for deployment of computers to Covered Populations as It is a complex, multi-step, multifaceted process. Specific training and support should be provided. - Digitunity has a longstanding online technology donation matching platform that can be utilized to connect the supply of devices to deployment. 	no	12/22/2023	Comment reviewed. Addressed in section 5.c.i.
107	1	Affordability is a major concern for seniors on a fixed income. Satellite is available but expensive and not fully useable or reliable. Cannot stream media without buffering constantly despite having a limitless data plan.	no	12/22/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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108	1	We need reliable internet service for our jobs!!	no	12/22/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
109	1	all I can get is mobile or satellite which is expensive and not very reliable I live in an area that had an agreement with the phone companies that no one can cross the line so I can't get any inexpensive reliable service.	no	12/22/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
110	6	I read the entire Plan and I must say it is one of the best strategic documents produced. It will behoove our State to ensure its implementation so that we will continue to lead the Nation in economic, social, information, and education areas. I have one item of "concern" in that there was no appendices regarding negative or oppositional points/points of view regarding the Plan. Implementing this Plan seems to be dependent on grants and continuing grants from various government sources. It would augur well for the Plan have a steady source of revenue in order to keep the implementation moving. Any delay will have a dominoes effect which could push further implementation into the next decade. Other than that, this is what a Master Strategic Plan should look like, read like, and liked by Texans. Congratulations! Dr. David Bradford sends highest praise.	no	12/23/2023	Comment reviewed. Addressed in Section 5.c.iv.
111	1	WE ARE IN DIRE STRAIGHTS AS WE NEED HIGH SPEED INTERNET. SPECTRUM DOES NOT HAVE A LINE AT 2829 FM 2419 PAL. 75801	no	12/23/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
112	1	I NEED TO CONNECT TO HEALTHCARE AS I HAVE ESOPHAGEAL CANCER. NO FIBER ON FM 2419 PALESTINE, TX 75801	no	12/23/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
113	5	I've lived out here for 15 years we've been told for years that there would be high speed internet provided but nothing has ever been offered that works good and IF it does it's so expensive that nobody can afford it. There's nothing but poison water out here too. I've tried for years to get that tended to but I was told by the Lubbock water guy that "it's just not worth it to ". So in other words if we're not worth having safe drinking water I'm sure we're not worth having decent affordable internet	no	12/24/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
114	2	For inclusion in the TDOP, I am providing a digital opportunity plan for "Enhancing Artificial Intelligence (AI) Literacy for Black Communities in Central Texas." The requested AI literacy initiative aligns with the recent recommendations from the National AI Advisory Committee and with the recently introduced bill in the US Congress on the AI Literacy Act for fostering greater AI understanding for education and the workforce preparation of unserved and underserved populations. Please include the attached digital opportunity plan.	yes	12/24/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
115	2	Digital Literacy, AI Literacy, Home Network, and Device Security for African Americans. African American families recognize the importance of having home broadband, devices, and digital literacy skills training for themselves and their children. They also exhibit a strong desire to improve their own and their children's lives through these technological resources. When provided the opportunity to enhance their skills with technology, African Americans take advantage of it, dedicating themselves to learning, building self-confidence, applying their knowledge, and aspiring to use digital literacy skills to start a business or pursue an alternative career path. Please see the attached digital opportunity plan.	yes	12/24/2023	Comment reviewed. Addressed in section 5.c.iv.
116	1	WE ARE ALMOST CUT OFF FROM MEDICAL COMMUNICATION, 3-5 MBG ONLY PLEASE HELP ME - WE NEED IT 2829 FM 2419 75801	no	12/24/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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117	1	Elon Musk has already implimented the plan. Starlink is high-speed internet and is available throughout Texas.	no	12/24/2023	Comment reviewed. No changes made.
118	1	Living in the Berea Community 5 miles northeast of Jefferson has been a nightmare regarding internet service. I've had 7 or 8 providers and finally have Starlink. It's expensive at \$120 per month plus the \$600 for equipment. It's good but still a fraction of the urban speeds I'm used to.	no	12/27/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
119	1	Congratulations for this very comprehensive report and for the strong commitment to recognizing and leveraging the ongoing work of many organizations. Among these, the work of libraries and the Texas State Library and Archives Commission cannot be overstated. Libraries are uniquely positioned to meet several of the goals of this plan, especially Goals 3 (digital literacy), 4 (Cybersecurity and online privacy), and 5 (access to public resources and services). Libraries have for many years been front and center in the provision of training to support digital literacy, including cybersecurity and online privacy via programs, one-on-one instruction, and materials. Libraries were early adopters and providers of Internet access specifically to enable easier access to public resources including library catalogs, government documents, archival holdings, and a huge breadth of online content for use by persons of all ages to support work, study, and personal enrichment.	no	12/27/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
120	3	As the report shows, there are many barriers to access, including coverage, affordability, rural isolation, linguistic isolation, and digital literacy. It is appropriate that the report identifies libraries as key anchor institutions to address these barriers. With their ubiquitous presence throughout the state, professional commitment to information access, and trusted status in the community, libraries are uniquely positioned to be key players in addressing these barriers. Funding should be made available to support library efforts to help residents get online and use the Internet to its greatest advantage.	no	12/27/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
121	5	Hello! As a resident of Texas and a happy Starlink user, I am writing to express my disappointment in the Texas Digital Opportunity Plan. While I understand the goal of the plan to extend internet to rural areas in Texas, I am concerned that the plan unfairly excludes Starlink, a cutting-edge technology that has the potential to provide fast and reliable internet to thousands of Texans. As a customer, I have experienced firsthand the benefits of Starlink's satellite internet technology. The service has been a game-changer for me, providing fast and reliable internet access in areas where traditional providers struggle to reach. I believe that Starlink should be included in the Texas Digital Opportunity Plan, as it would provide a much-needed alternative to the limited internet options currently available in rural areas. Furthermore, I am concerned that the plan's focus on giving taxpayer money to internet broadband companies could lead to a lack of competition in the market	yes	12/28/2023	Comment reviewed. No changes made.

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122	1	I live in a rural area, a complete dead zone for home internet. Satellite internet is not worth the money, I would pay \$250 or more a month for something not worth it. We are coming on to the year 2024, EVERYTHING you do these days is online, job applications, banking, schooling, any and everything! I also have a son in high school that can not come home and complete homework because of all schools being electronic now and having a chromebook. I have no internet so therefore he can not do his school work. This is not fair to any resident and as much as it cost us to even live on earth these days, internet should be the #1 thing that is always available if not free! We can not help that time has changed and the government has forced everything and everyone to do everything on electronics! Something has to change and it needs to change fast!	no	12/28/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
123	2	I think this is going to be a great thing for Texans.	no	12/28/2023	Comment reviewed. No changes made.
124	3	We have decent internet in Pittsburg, but drive most anywhere out in the country, we lose it - if you're trying to find a location, it becomes rather difficult!	no	12/28/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
125	1	I find it almost impossible to communicate with the outside world in orders, to operate a rural farm. Internet is of most importance in South East, Smith County. Please help install ASAP. Thanks	no	12/28/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
126	1	We live in Leesburg, TX in the very rural area. Nothing really works here but Starlink but I cannot afford that. I use a Berizon jet pac and have very little usage.	no	12/28/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
127	3	We have a broadband card built into our computer but no service in rural Nacogdoches County	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
128	1	I am a senior citizen and need internet for necessities and only have one service provider. Rates are high and speed is terrible.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
129	3	I have finally found one company I'm thinking of signing with but \$700 to start up is pretty steep. Then \$125 a month then after. We live in Harrison county and there is nothing out here but trees. Hope they bring this around to our area. Thank you.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
130	1	I live in 75704 area code & we have very poor service, about 1 mile north of Tyler. We are in a dead zone T mobile & verizon have wireless in the area but they will not service us, said they cant put too many on their wireless.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
131	3	We live in the Lakeport community of Longview Texas and currently have Hughes Net as a Internet provider. The service is horrible, it buffs and lags all the time. We are currently in search of another provider that can provide the quality service needed to work from home and conduct online business. Today I went to the Sparklight office to see if they offer service for my address and they told me they had no plans to come to the rural area. Based on my experience and the experience of my neighbors fiber internet service would be the best choice for our area, but it doesn't seem to be in the future for our rural areas. Please help if you can. Thanks for listening to my concerns.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
132	1	I have a son with autism and we need internet to help him learn and improve his academic level.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
133	1	Our area is rural and we have not been included in other opportunities to get digital technology. We are not considered rural enough. Some of us still have dial up network. Please consider us	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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134	1	I'm a low income family and it will be sad for the help that I get to pay my internet. It helps with the homework my children get from school. It ends next month and is sad. I hope I can still afford the price if not I'll need to end my service with the company. Thank you.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
135	5	My internet provider (Etex communications) is the only hard line provider you can get in my area. I currently pay \$74/month for 50m of cooper internet (old school phone line internet!!) and my speed I truly get averages around 10-15mbps download. I have contacted them about the issue, it gets fixed for maybe a week or two and then goes back to how it was before. As a single mother I can not keep taking off work to attempt to get reliable internet. My cell phone service is faster than WiFi. Living in a small town that is not rich, there is a lot of kids that truly do need internet and can't because of the monopoly we have in East Texas with internet providers. We pay high rates for service that is extremely out dated. As more and more schools switch over to tablets and internet based school work, it makes it hard for some kids to be able to do school work at home. Bringing better internet to east Texas rural areas is something much needed.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
136	1	Need reliable internet in rural areas. So many things ya like home security systems and home entertainment rely on internet. Really need it to be able to work from home.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
137	1	Funny I came across this story. we were without internet (as slow as 12 mg is) today. Outage in the area I believe is the way it was put to me. Funny Optima has fiberoptic lines run right across the highway from our property (Hwy 79 in New Summerfield) I checked with the folk at the city. (Mayor, City manager, etc.) Seems they all have fiberoptic line run to their houses. I call Optima to see about it and was told it's not available here at my location. 100 gig of internet speed 40' away but told it was 20,000 plus feet from my location. No checking my location. Just what the computer tells them. I saw them running the line and talked to a guy that verified it is fiberoptic lines they were running. How long do you think it will be before they can cross Hwy 79 to our location? I moved out here from the Metroplex were it's faster than the old dial up speed. Not here. And it is being throttle to this snail's pace. 12 mg. laughable.	no	12/29/2023	Comment reviewed. No changes made.
138	3	.	no	12/29/2023	Comment reviewed. No changes made.
139	1	None	no	12/29/2023	Comment reviewed. No changes made.
140	1	none	no	12/29/2023	Comment reviewed. No changes made.
141	1	We need Internet that we can afford	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
142	1	I live in Diana Texas which is in Upshur County. This city has extremely poor internet and at a very high cost. 25mgs for 150.00 per month. We only have about 5,000 people in this area so when I have complained to the large companies they say it is not cost effective to lay lines here so we have to use satellite. We definately need help .	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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143	3	I live in Echo Lake which is a gated community in Henderson County with a mailing address of Murchison. We have no wireline internet access other than Brightspeed which at my address cannot even offer a 1MB speed. Other options are wireless internet but only available from T-Mobile but speed does not meet the 25 Mb requirement and access is spotty. The only other option is satellite internet and prices are extremely costly. There are 80 high end homes in this community and fiber optic cables run past our entrance, but so far no provider has offered to build any infrastructure to serve us.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
144	1	In regards to Goal 1: All Texans have access to reliable, affordable broadband internet service at home. o KPI 1.1 – Increase the percentage of Texans with reliable broadband subscriptions available in their homes. It is our experience living in Canton, TX that Zito Media is not providing reliable broadband service. Constant outages and slow response time make it untenable for work from home, entertainment services, and most importantly safety concerns with smart home security and environmental management. There is no alternative provider at our home location.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
145	2	KPI 1.1 - being rural, we have zero reliable broadband available to support remote employment. 25 Mbps is SLOW and not compatible to support VPN (which must businesses use). Employment is important. Rural needs to be given the same access as other community residents (high speed). Costs to rural residents should not be overpriced to help subsidize others that already have access. HIGH SPEED is needed instead. As I am reading through the plan, it is evident where the emphasis is given. More handouts to low income and immigrants on the taxpayer's back. Yes, the taxpayer that cannot even be employed because of lack of high speed choices.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
146	5	My residential address: 14473 State Highway 31 E Tyler TX 75705 I am exactly six miles from Loop 323 on Highway 31 East in Smith County, between Tyler and Kilgore. I live on five acres several hundred yards from the highway. All of our residences up and down the State Highway have been denied broadband or any cable service of any kind. I guess they are waiting for all the business and retailers to take over this stretch of highway before they provide service? Residents here are left with only satellite options and slow, expensive ones at that. I wanted to try and work from home and find that impossible. My Hughes net satellite service is spotty and slow. It seems areas around us and on side roads have some spotty broadband areas (such as Cherokee co-op), but they said I am too far from a connecting point and they only want to serve their electricity members. No service from cable providers, AT&T, Centurylink,. Please help State Highway 31E residents.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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147	5	Residents need to read the federal docs giving grants/loans. Any default results in the feds being given an undefined easement around & under the poles. Not all electric poles have easements & resulted in the illegal cutting down of 9 trees on my property w/o permission. I stood up for myself & fiber moved underground & to shoulder of road off my property. Have not been compensated for trees & TVEC plays dumb. I am not seeing any savings so have not signed up for fiber. Plus no disclosure as to whether the AI sonar has been programmed into chip in modem as demo on Internet. Road tagging violated TX law as everyone claimed not to know anything including local politicians. State passed a law requiring disclosure, yet they all knew from electric, to politicians to provider. They all lied & deceived just trying to bulldozer over unsuspecting homeowners to get hands on free money & illegal permanent easement. Sorry not inviting them into my home ever & kept them off land!	no	12/29/2023	Comment reviewed. No changes made.
148	1	This is a terrible idea. We already have enough trouble accessing what the rest of the developed world would consider high speed internet. Putting bureaucrats in charge would only make things worse. Not to mention the censorship issues that are bound to come with it.	no	12/29/2023	Comment reviewed. No changes made.
149	3	The area I live in has very limited internet providers. The ones that do provide it do not have reliable internet service.	no	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
150	1	Comcast appreciates the opportunity to comment on the Draft Texas Digital Opportunity Plan (Draft) and work with the Texas Broadband Development Office (BDO) to help achieve the goal of universal broadband connectivity, services, and digital skills for all. The Draft cites U.S. Census data that almost 2.8 million Texas households and 7 million Texans lack broadband access. The Draft also recognizes that the road to close the digital divide requires greater options for affordability and access to a continuum of digital literacy training and skills development to maximize the Internet’s capabilities. Comcast agrees with this vision. We recognize the critical roles that the public, private, and nonprofit sectors must play to ensure that digital equity efforts are successful. We are committed to digital equity efforts for every Texas community we serve. Given our long and proven track record of success expanding broadband access and adoption in Texas, we stand ready to partner.	yes	12/29/2023	Comment reviewed. No changes made.
151	2	As the Draft identifies, achieving success in digital equity aligns with other State agencies’ plans and goals for the business and telecommunications sector; educational outcomes; health outcomes; deliveries of essential services; and civic and social engagement. We support this multifaceted approach – gains made in increased broadband adoption, digital literacy, skills, and cybersecurity protections will yield benefits across the State and sectors. That is why it is critical to make strategic investments in programs that have demonstrated results; create a forum for sharing best practices; and convene practitioners and partners for long-term and sustainable initiatives. Additional comments in attached file titled Digital Opportunity Plan _ Ch. 2. Introduction & Vision for Digital Opportunity.	yes	12/29/2023	Comment reviewed. Addressed in section 2.c.iv.1

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152	3	No comments. Project UP One-sheeter attached. Project UP is our comprehensive initiative to advance digital equity and help build a future of unlimited possibilities.	yes	12/29/2023	Comment reviewed. No changes made.
153	4	We applaud the BDO's partnerships with umbrella organizations, including United Ways of Texas. Comcast has a strong partnership with the United Way of Greater Houston, United Way of Brazoria County, and United Way of Galveston, providing them with funding to help advance digital opportunities that drive awareness of affordable connectivity options like the Affordable Connectivity Program (ACP); assist with digital navigation (DN) work; support digital skilling opportunities; and help remove barriers to adoption. During Digital Inclusion Week 2023, we partnered with all 3 United Way agencies to provide device support to individuals who lack access.	yes	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
154	5	We agree with the BDO that broadband adoption, digital literacy, device access, and other aspects of digital opportunity require locally based, culturally appropriate efforts and funding. In 2023 alone, we committed more than \$1 million to help shrink Texas' digital divide by investing in more than 60 nonprofits and organizations that help Texans gain Internet access and develop digital skills necessary for today's workforce. Additional comments in attached file titled Digital Opportunity Plan _ Ch. 5. Implementation.	yes	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
155	6	Comcast encourages Texas to focus on digital equity efforts that will be the most impactful, including DNs, digital skills training programs, and partnerships. We believe that partnerships are paramount to advancing digital equity efforts because closing the digital divide starts at the local level by meeting people where they are and responding to their specific needs. Communities win when the private sector, government, and community organizations join forces to achieve shared goals. To that end, Texas should create an inclusive framework that allows many organizations to participate directly in grant programs and fosters such participation through partnerships and coalitions. Our more than a decade of dedicated digital adoption and community engagement efforts demonstrate that the private sector has been a critical partner in facilitating digital equity efforts to date. Additional comments in attached file titled Digital Opportunity Plan _ Ch. 6. Conclusion.	yes	12/29/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
156	7	No comments. Internet Essentials flyer attached. Internet Essentials has connected over 10 million low-income households for over 10 years to fast, reliable internet.	yes	12/29/2023	Comment reviewed. No changes made.
157	5	It seems efficient to work with electrical distributors as they've got the infrastructure in place to add onto greatly reducing cost and time of all new infrastructure to carry data.	no	12/29/2023	Comment reviewed. No changes made.
158	3	We have begged our rural coop for service greater than copper wire. We are promised fiber in the next few months and are so hopeful as satellite is not the answer in today's world. Video's don't download, there is no Zoom, telemedicine, or the ability to study on line. Emergencies are out of the question. Security of any kind is unavailable. Of course streaming is out of the question. Should we have another Covid, we are SOL.	no	12/30/2023	Comment reviewed. No changes made.

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159	1	No comments	no	12/30/2023	Comment reviewed. No changes made.
160	1	We have had poor internet as long as we have lived here, about 8 years or so. When we first moved in century link provided about 20 mps download which was hardly enough. When covid hit they reduced it to 10mps download. It's hardly usable, and made it near impossible when in person meetings/ contact got moved to online video conference services. Now the company operating in our area is Brightspeed. I reached out to them and they say they have no plans of increasing the speed in our area. There is a company called Etex fiber internet that brought fiber internet down hwy 79 from Jacksonville. I can see the highway from my house, but they will not provide service because we are over there 500 ft or so limit. East texas is a beautiful place to live, but the lack of proper internet has always been something to contest with. My neighbors and I would be very happy to see a decent internet provider service our area. Thank you for your work.	no	12/30/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
161	3	Have optimum (Cox, Suddenlink) for over 30 years. Since becoming optimum the service has deteriorated immensely. Being on a fixed income since retiring, they are unwilling to work with you to cut costs. As an example, I currently have 1gb internet and basic cable for roughly \$125 a month. To cut the internet speed to 300mb my bill would not change. To cut to 100mb the bill would lower \$20. They make excuses that I am on a promotional plan that when it expires my cost will go up. Now, Frontier comes to town, I sign up for 1gb and VOIP telephone \$70 a month. All is great for about 2 days then off it goes, tech comes out fixes the problem and it works fine for about a week then out again. Get it back up and I decide that because I need the phone to cancel the phone with Frontier and get it with another carrier. A few days later my internet goes out again and when I call to check why, I am advised that because I cancelled the phone portion, Frontier decided to close my account.	no	12/30/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
162	5	We are extremely dissatisfied with the limited, unreliable and pricey options available in our rural area. One internet company wanted to charge us \$2,000.00 just for running a line from the road to our house. Hughesnet was our only option and it is inefficient and costly. We need options.	no	12/30/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
163	3	I live in a rural area in Hallsville where the only Internet options are satellite. Not only is the monthly cost for satellite almost twice what those in the city pay for broadband, it is slow and unreliable. I have a son in junior high and all of his homework is to be done online. On a clear, pretty day, it can take up to five minutes for a single page of homework to fully load or submit. If it's raining, it takes longer if it will work at all. Most of my bills have to be paid online, any work from home opportunity is simply out of the question, as are any fun online activities such as streaming services. All of this creates added frustration around what should be simple tasks. The amount and quality of valuable family time is reduced, job opportunities that would improve work life balance go unanswered, and a significant chunk of the family budget goes to unreliable service. Fast and reliable Internet is a necessity for American families today.	no	12/30/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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164	1	I believe the pandemic taught us just how critical our situation is, regarding the lack of affordable, reliable internet in our area. I believe the program goals shown in executive summary are exactly what is needed, and I hope the rural areas are a priority, as well as areas with a high concentration of low income residents. What I am seeing in my community, is that we only have one reliable provider(only serving some parts of the community, not all) and that provider has doubled its price in the last year. The only way to reign in the high price, is competition moving into the area. I dont see that happening in the next five years. However, if there is anything I can do to assist in this important program, please let me know.	no	12/31/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
165	1	Internet services are needed in rural areas and in some area of the cities. In both areas the signal is blocked by tall structures or natural barriers. In these areas more antennas are needed.	no	12/31/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
166	3	Our rural area doesn't have consistent high speed internet availability. We do have providers, but the service needs strengthening in order to make paying the high monthly costs worth doing. At nearly a hundred dollars per month, our household internet is off about as much as it's on. It's often too weak to run more than one device. We need help in rural Lamar County. Thank you.	no	12/31/2023	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
167	4	Partnering with United Ways of Texas is a smart strategy. They have existing access to hyperlocal organizations without having to go through many layers. United Ways of Texas connects with local United Ways who are already engaged with nonprofit service providers who are directly and regularly interfacing with the target audiences of this outreach.	no	1/1/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
168	1	As a rural Texan resident, we are in dire need of reliable internet connectivity. We live seven miles outside city limits and can only use satellite based internet which has substantial limitations. Please approve funding for fiberoptic internet lines to rural communities.	no	1/1/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
169	4	Partnering with the United Way is an excellent way to share resources. They have connections with most nonprofits on the Island.	no	1/2/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
170	1	I am opposed to the state providing the broadband/internet access to the areas in Texas currently without access. Millions of persons have been paying for their own personal access for years. The monthly charges however for internet have become outrageous. I would like to see some state/ government regulation for the charges. Towers may be provided to the rural areas for internet just as electricity, but individuals must still pay for the service. It is promoted as being a "free" service. This is not a fair practice.	no	1/2/2024	Comment reviewed. No changes made.
171	1	We need affordable broadband in Rayburn country, Brookeland Texas, we have the population to support it.	no	1/2/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
172	6	No. Subsidizing this for companies to gat won't build is wrong. Let companies build their own without my funding.	no	1/2/2024	Comment reviewed. No changes made.
173	1	I am sick and tired of paying for other people. I have never taken a handout and do not think I should be paying for someone's internet among ALL the other handouts. WHEN WILL IT EVER END????	no	1/2/2024	Comment reviewed. No changes made.

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174	1	Absolutely no, As a resident of Texas I'm not responsible for other people's situations they pick where they want to live and should be responsible for whatever is needed to supply their needs	no	1/2/2024	Comment reviewed. No changes made.
175	3	No, if the profitability margin was there, internet/ broadband would already be there. As a taxpayer, I don't want to pay for someone else's broadband.	no	1/2/2024	Comment reviewed. No changes made.
176	1	I live near the limit of the only internet provider in my area. It is a line of sight provider, and the equipment is apparently not reliable. Internet access is constantly interrupted, or down. Very frustrating and hard to consistently access services that I use. This area needs some investment in infrastructure to fix this problem. I would change providers, but there are no choices.	no	1/2/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
177	1	Do NOT do this. We VOTED AGAINST THIS!! Do not charge Texans to implement this plan. No!! No!!	no	1/2/2024	Comment reviewed. No changes made.
178	1	This idea is a mistake because it will never end. Once the main lines are run, we'll end up subsidizing the services as well. This is a big waste of our tax money. I have family and friends that live in rural Texas and they do just fine with local microwave, Cell and satellite services. They also know that eventually as the areas around them become developed, these additional services will become available to them without paying additional in taxes to fund other people's connections. The only way I'd agree to this is if a deal was struck by the Internet Providers to pay us back once a designated amount of subscribers have signed up, Then this money gets refunded to the taxpayers and this board is dissolved.	no	1/2/2024	Comment reviewed. No changes made.
179	2	Texans have already said by vote they are not in favor of this. No means no. This is a work-around to implement something Texan taxpayers don't want to pay for. This is an overreach of state government. It is not the job of a state government to provide/maintain/control digital opportunities. States struggle to provide efficient drivers license appointments. Why would we want to put a state in charge of digital access? This is ripe for fraud, waste, and abuse. If digital opportunities are profitable, they will be created by the private sector. This effort would ultimately expand government reach at the expense of the taxpayers. No. If people in rural areas want wifi but don't have it, they can either relocate or pay for it locally. It's not the state's job to provide.	no	1/2/2024	Comment reviewed. No changes made.
180	1	I believe we voted on this as a state and it did not pass. The majority of Texans believe it is not needed. We should not be using tax dollars to pay for this. This pushes way to close to socialism. Communities without infrastructure should pull together to pay and have businesses within community contribute to pay to build infrastructure.	no	1/2/2024	Comment reviewed. No changes made.
181	3	I don't want to pay for the implementation of high speed internet in rural areas. People whose choose to live in rural areas should pay for the services they use. I don't want an extra tax.	no	1/2/2024	Comment reviewed. No changes made.
182	1	I only have an MBA so can't understand all the stuff.	no	1/2/2024	Comment reviewed. No changes made.
183	1	They should be the ones trying to get them.	no	1/2/2024	Comment reviewed. No changes made.
184	1	I believe that broadband issue was shot down on the election this is your your way of around it No means No!	no	1/2/2024	Comment reviewed. No changes made.
185	1	affordable access broadband internet is a necessity in my retirement years at this time. Doctors appointments, paying bills, Google directions to locations, news, etc.	no	1/2/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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186	1	I live in a very rural area. I used Directv to get internet. I do not support using my tax dollars for this. We already voted "no" to this.	no	1/2/2024	Comment reviewed. No changes made.
187	1	No public money should be used to support private companies to provide service. If it's feasible the corporation should invest it's own capital. Free handouts need to be over	no	1/2/2024	Comment reviewed. No changes made.
188	5	I did not find anything about COST, or COST per number of residences each area would cost the Tax Payers of Texas...Will this increase my property Tax? I thought this was voted one was turned DOWN. Why are you doing this on early January, unless it is to CATCH people when they are not paying attention.	no	1/2/2024	Comment reviewed. No changes made.
189	1	Regarding the subject line: This was on the ballot at some point in the past, to pay for other folks to have high speed internet in rural/underserved areas. It was voted down. People live in rural areas, but they are not condemned to live there. They can move. Some people move there to escape technology. If the community wants it of believe they need it, they can do the necessary self-taxing to bring the service in. I am not interested in subsidizing, for the rest of my and their lives, someone's ability to upload what they are having for lunch, to the internet. Education happened Long before the internet so trying to sell 'me' on needing it 'for the children' falls on deaf ears. Let me be clear; No, I do not support this tax burden. I didn't when it was on the ballot and I don't support this end run to push it through, over my down vote.	no	1/2/2024	Comment reviewed. No changes made.
190	1	MY PHONE BILL ALREADY HAS TOO MANY GOVERNMENT MANDATED ADD ONS FOR SERVICES THAT DO NOT BENEFIT ME. I ABSOLUTELY OPPOSE ANY NEW CHARGES FOR ANY PURPOSE. I AM CONTACTING MY REPRESENTATIVE AND SENATOR TO COMPLAIN ABOUT YOUR BEHAVIOR. YOUR COMMISSION NEEDS TO BE SUNSETED.	no	1/2/2024	Comment reviewed. No changes made.
191	6	National sovereignty and global productivity will go to the nation that deploys the INTELLIGENT INFRASTRUCTURE, the foundation of ARPA-I. Without Intelligent Infrastructure, the BDO is advocating building the same Digital Dirt Roads the nation has been building since 1996. The Federal Infrastructure Bank and infrastructure investors are mobilizing \$billions in private capital to build the Roads of the 21st Century. Texas can leverage \$10s of billions of private capital for the deployment of this new asset class. Strategic to transportation, data privacy, public safety, supply chains, resilient grids, and Commerce. BDO is as strategic to the state as the Railroad Commission. Data is the NEW Oil. The Economic Impact of INTELLIGENT INFRASTRUCTURE will be measured in the \$billions, Save Lives, and create millions of new jobs. https://youtu.be/9tHc1A8hE_M	yes	1/2/2024	Comment reviewed. No changes made.
192	1	Texans have already voted on this issue this past November. We voted the issue down. There is no point for the commission. Turn off the lights, lock the door and go home..!! No, we do not want it nor to pay for it....what part of that do you not understand..!?!?	no	1/2/2024	Comment reviewed. No changes made.

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193	1	I'm against this project. People choose where to live. In rural areas they accept the trade-offs of limited or available services. In "under served" communities I think if a household can afford phone service then they can budget for internet with the phone provider. Taxpayers should not be subsidizing the cost of internet access.	no	1/2/2024	Comment reviewed. No changes made.
194	1	I should not have to pay for other people. I have to pay for my internet service, so should everyone else. Texans voted against pin November, don't push it down our throats.	no	1/2/2024	Comment reviewed. No changes made.
195	1	Strategy 1 should specifically mention the Texas Department of Housing and Community Affairs and the Texas Housing Association for enhancing and expanding their programs. These two State agencies are used extensively by public housing authorities for education, training, and affordable housing acquisition and development. Strategy 2 The Plan should specifically target public housing authorities as 100% of the population they serve are part of the Covered Populations in the Plan. Underserved Populations should include Housed Individuals in Public Housing Authorities since Housing Authorities house individuals that are 100% part of the Covered Populations in the Plan.	no	1/2/2024	Comment reviewed. Addressed in section 5.c.i.
196	4	4.b.i Statewide Working Groups should include representatives from the Texas Housing Association and the Texas Department of Housing and Community Affairs. 4.b.ii.1 Business and Telecommunications Task Force; 4.b.ii.3 Economic and Workforce Development Task Force; 4.b.ii.5 Essential Services Task Force should include members of the Texas Housing Association (THA) and the Texas Department of Housing and Community Affairs (TDHCA). I found the TDHCA only in 4.b.ii.5. Public Housing Authorities use the TDHCA to access funding and tax credits for rehab, acquisition and development of affordable housing for individuals that are part of the Covered Populations. Public Housing Authorities use a state-wide organization like THA to express their concerns and needs to the State of Texas, the Department of Housing and Urban Development and the US Congress.	no	1/2/2024	Comment reviewed. Addressed in section 4.d
197	4	Why is AMAC not represented as a stakeholder? You have the very liberal AARP. It is very unfair not to have a conservative origination representing Texas seniors.	no	1/2/2024	Comment reviewed. No changes made.
198	1	I am against Texas funding a private broadband. It's another tax. I'm against it. It's more invasive government.	no	1/2/2024	Comment reviewed. No changes made.
199	6	Too much to read all the stuff you all spew out! But, VERY HAPPY at this point to have good internet, even with connection stop & starts. We had to pay HIGH prices to FRAUDSTER HUGHESNET, a REAL BUNCH of SCAMHEAD CRIMINALS!!!!!!!!!!!! NO ONE LIKES THEM!!!! I know us taxpayers are paying for part of this so called free Biden Infrastructure Bill for rural internet & other stuff. But, I think after a few years prices will skyrocket when Government moves on to other hot items. Now, some nice discounts, but will not last long. And, we are paying a lot of taxes to you all in every bill for internet, mobile & nonmobile phone bills! Very high taxes. Sometimes 45% of bill is taxes to Texas & Biden, aka Corporate Welfare Office. And, I still believe business, governments, non residential entities will HOG bandwidth in future just like HUGHESNET did in spring 2020 when Covid-19 hit. No regulation leads to abuse! and, Heavy Government same.	no	1/2/2024	Comment reviewed. No changes made.

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200	4	Why is AMAC not represented as a stakeholder? You have the very liberal AARP. It is very unfair not to have a conservative origination representing Texas seniors.	no	1/2/2024	Comment reviewed. No changes made.
201	6	The State of Texas should not be involved in using taxpayers money for a private business profit. Our state cannot properly manage our power grid now using billions of tax prayers dollars. Now will take more of our hard-earned money for more bureaucracy BS that only hurts we the taxpayers. Broadband is NOT an essential service that should not be subsidize by the taxpayers. There are things we don't have because of where we chose to live and because of my choices I don't believe it's the responsibility of other taxpayers to provide for me. This feels like another Biden student loan forgiveness program just passing the buck on to hard working people for someone else benefit. How many new millionaires will grow out of this feel-good scheme or Biden plan??	no	1/2/2024	Comment reviewed. No changes made.
202	3	<p>Section 3.a Needs Assessment, 3.a.i Methodology</p> <p>The City of Dallas provided the TX BDO over 300 public surveys conducted on the ground, utilizing various avenues to engage covered and underserved communities, including the City's libraries and community centers. However, it was observed that the City's surveyor took more time explaining the purpose of the survey than the respondents took to fill it out. This highlights an issue faced by many covered and underserved communities, as they may not be aware of the current initiatives underway in Texas to address and close the digital divide.</p> <p>(Section 3.a.iv. 1 Immigrants)</p> <p>Given that the Texas population includes a significant number of immigrants with undocumented status, estimated to be approximately 1.6 million individuals, the findings of the Digital Opportunity Survey reveal that immigrants are underrepresented and and face unique challenges.</p> <p>Please see full recommendations attached:</p>	yes	1/2/2024	Comment reviewed. No changes made. Comment is not actionable at this time.
203	4	<p>Section 4.c Looking Ahead</p> <p>Recommendation: Establish an On-the-Ground Outreach Coordinator</p> <p>The City of Dallas strongly recommends the appointment of a dedicated Outreach Coordinator who can work directly with communities where English is a second language and work with immigrant populations. This role would focus on bridging communication gaps, building trust, and ensuring that these communities are informed and involved in the implementation of the Texas Digital Opportunity Plan.</p> <p>Please see full recommendations attached:</p>	yes	1/2/2024	Comment reviewed. No changes made. Comment is not actionable at this time.

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204	1	I have not read the entire plan as it is very extensive. I have a general question and comment as a local government agency. 1) Why can't we use the wheel from the old telephone model as a starting place and have designated service districts? The universal fund plan worked and can work to get broadband started. Once you establish a local provider for every area and build the infrastructure, then you can loosen the rules and providers can expand and compete. 2) Polk County used ARPA funds to create a grant program to build in our unserved areas. Our two local internet providers won the bids through the RFP process. Having local providers and supporting them has been the key to our success. We are now almost 100% serviced with an infrastructure we can count on in the future. Local companies that our based in our community has a much greater benefit than building the infrastructure and having no one there to support it. We have the most outstanding support from the local provide	no	1/2/2024	Comment reviewed. No changes made. Outside the scope of the digital opportunity plan.
205	6	I have a strong resentment against MY funding other peoples' internet service. Primarily, I envision that once this is approved, my and my children, and grand children will be paying for his for life.	no	1/2/2024	Comment reviewed. No changes made.
206	3	I have a few questions and the one comment. 1. Who is going to pay for this broadband service to those who cannot afford it. 2. Is the monies coming out of the Texas surplus? 3. Is this going to be a tax to the residents of Texas; ie property taxes? 3. Was this not voted down in November of 2023? 4. How is this proposal going to effect our income, which is already stretched close to breaking point? Comment: We live in a rural area since 2010. We have paid for internet via satellite (not great) up to June of 2023 when we went to point-to-point (much better). Since 2021, we live on a fixed income with no internet assistance and haven't asked for any. This issue is not someone else's problem only ours.	no	1/2/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
207	3	I live in rural Texas. High speed internet is not readily available to me and my household without paying thousands of dollars for a hundred foot tower to receive a line of sight signal or six or seven hundred dollars for SpaceX new satellite both of which is hard on a Social Security budget. Especially when we are raising a 14 year old grandson that eats us out of house and home.	no	1/2/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
208	2	To insure maximum competition with due consideration of differences in technology and quality of service, it is important that all potential providers be treated equally. For that reason no incentive, assistance, or promotion should be provided to any provider that is not also offered to its competitors. In particular, high-speed broadband service is already widely available in rural Texas from low-earth-orbit satellites. This high-speed satellite service is expensive but could become more affordable with more customers sharing the cost. The state should not be subsidizing its competitors either directly or indirectly without offering the same subsidies to any existing potential provider.	no	1/3/2024	Comment reviewed. No changes made. Outside the scope of the digital opportunity plan.

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209	7	<p>Public Comment Form</p> <p>Are you providing comments as a resident or on behalf of an organization?</p> <p>Organization</p> <p>Do you identify as or provide services to any of the following covered populations? Select all that apply.</p> <p>60 years of age or older</p> <p>English language learner and/or have difficulty understanding English</p> <p>Immigrant</p> <p>Incarcerated individual(s) in non-federal facilities</p> <p>Living with a disability</p> <p>Low-income households (<150% federal poverty level)</p> <p>Member of a tribe or tribal community</p> <p>Racial or ethnic minority</p> <p>Rural area resident</p> <p>Unhoused or experiencing homelessness</p> <p>U.S. veteran</p> <p>None of the above</p> <p>First Name:*</p> <p>Jorge Manuel Figueiras</p> <p>Last Name:*</p> <p>Filipe Barreira</p> <p>E-mail:*</p> <p>jorge.barreira.1971@sapo.pt</p> <p>Organization Name*:</p> <p>Jorge.barreira.1971@sapo.pt</p> <p>Title:</p> <p>Suplicio de Vidaa</p> <p>Select a chapter to provide a comment:*</p>	yes	1/3/2024	Comment reviewed. No changes made.
210	4	<p>Through the United Way Galveston, Family Service Center of Galveston was able to utilize 3 laptops for students in need. These laptops were specifically utilized through The Future Is Us, a program designed by the community to decrease the school to prison pipeline and increase educational engagement.</p>	no	1/3/2024	Comment reviewed. No changes made.
211	1	<p>Why should I pay for someone elses internet access when I already pay for my own?</p>	no	1/3/2024	Comment reviewed. No changes made.
212	1	<p>Goal 1: All Texans have access to reliable, affordable broadband internet service at home.</p> <p>My wife and I reside in the rural part of southwest Young county. The only access to internet service is through Satellite service. This service is limited in data that is available and then service is slowed to the point it is worthless. This service is cost me \$116.00 per month. We live on FM 1974 and have high speed fiber optic cable 1 mile from our property to the West and 4 miles to the East.</p> <p>Brazos Communication in Olney TX have promised access to this fiber optics for the past 4 years and as of today they can no tell me when the service will be available. There are a total of 8 people that possibly would connect to this fiber optic service if only Brazos Communication would provide it!</p>	no	1/3/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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213	1	Equal living arrangement opportunities to all!	no	1/3/2024	Comment reviewed. No changes made.
214	1	My wife & I are in our 70's, have medical conditions that require being able to communicate quickly for medical situations. Banking, insurance, utilities are all going "digital", so it's important we have quick, reliable & affordable internet! ,	no	1/3/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
215	1	We need fiber optic broadband in Upper East Texas as it is the most reliable for internet access.	no	1/3/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
216	1	Noooooooooooo	no	1/3/2024	Comment reviewed. No changes made.
217	5	Please see attached file. Thank you for your time in reviewing our comments.	yes	1/3/2024	Comment reviewed. Addressed in section 4.d
218	3	We are unable to receive internet because this one acre is not developed. Only the home we rent. They're a place of business on either side of home that have internet. There is not a company that provides the service to our home.	no	1/3/2024	Comment reviewed. No changes made.
219	1	Important to provide broadband to both unserved and unserved areas before money is withdrawn	no	1/3/2024	Comment reviewed. No changes made.
220	6	We live in brownsboro outside the city limits and our speed is only 3	no	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
221	1	makes sense	no	1/4/2024	Comment reviewed. No changes made.
222	1	Broadband internet service has become as essential to the economy as public roads are for the movement of goods and services. A statewide policy for internet infrastructure is necessary for the State's economy to compete in the world market. Just as the State addressed the need for rural farmers to have access to Farm to Market State funded roads, rural areas of the State also required board band for economic growth; if we wish to see equiqaipable economic and educational opportunities throughout the State.	no	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
223	2	One key requirement of state digital equity plans is that they include a state's vision of digital equity. The National Telecommunications and Information Administration (NTIA) suggests that digital equity visions address at least these two questions: 1.What will digital equity look like in the context of your state? 2.What are the broad goals that should be accomplished in executing this plan (e.g., improve rural health outcomes, increase underrepresented youth employment in technology-related fields)? NTIA has specifically advised states to "lead with equity," intentionally identifying, amplifying, and centering the voices of those most affected by the digital divide and disconnected communities. With the extraordinary task and responsibility of state policymakers and local communities in mind, the Benton Institute for Broadband & Society launched the Visions of Digital Equity project to aid both in ensuring that more community voices are heard in crafting visions that i	yes	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
224	1	I would like to see KPI's setup for measuring the access and use of telehealth. With costs continuing to rise, I strongly believe access to affordable and reliable high speed internet access will go a long way in driving down costs and improving outcomes.	no	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
225	1	I vehemently oppose tax payer funded internet for certain segments of our population. It is wrong to expect us to pay for a service that is not necessary to sustain life. I would imagine most folks have smart phones so they are connected.	no	1/4/2024	Comment reviewed. No changes made.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
226	7	Regarding Appendix E: Detailed Asset Inventory, we'd like to include the following organizations in Travis County that provide existing digital opportunity programs. Please see the following: English version: https://www.traviscountytexas.gov/images/bdeo/docs/resources.pdf Spanish version: https://www.traviscountytexas.gov/images/bdeo/docs/resources-espanol.pdf I've also uploaded this information as a file.	yes	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
227	7	The residents of South Texas and the Colonies respectfully and humbly ask the Texas BDO to keep in mind that this area is one of only a few Federally mandated Persistent Poverty Regions. Current incumbent ISP FCC map data has been proven to be overstated and inaccurate which is part of the root cause of the region being largely underserved or unserved. We respectfully petition for potential special consideration for the region. Thank you and with respect, GA	no	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan and some are not actionable at this time.
228	3	Connectivity is critical, but connectivity doesn't mean fiber only. Fiber is a great backhaul, middle-mile and sometimes last-mile resource, however, is not the only way to provide connectivity. Wireless connectivity can provide massive amounts of connectivity at a fraction of the cost. Please don't discount what wireless can do either as an interim solution or a long-term plan to provide connectivity from both in-ground fiber, and aboveground wireless.	no	1/4/2024	Comment reviewed. No changes made. Outside the scope of the digital opportunity plan.
229	3	It seems that Texarkana, even though it is designated as a metropolitan area, still has a very poor fiber infrastructure for its citizens and businesses. There is only 1 service provider with a stable network/backbone (Sparklight) but they do not serve most remote areas of the city. The other service provider is Windstream and their network is in poor condition with higher than normal system outages. Also, Windstream does provide "internet" in remote areas but only via DSL and a max speed of 100MG.	no	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
230	1	It seems that Texarkana, even though it is designated as a metropolitan area, still has a very poor fiber infrastructure for its citizens and businesses. There is only 1 service provider with a stable network/backbone (Sparklight) but they do not serve most remote areas of the city. The other service provider is Windstream and their network is in poor condition with higher than normal system outages. Also, Windstream does provide "internet" in remote areas but only via DSL and a max speed of 100MG.	no	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
231	1	See attachment.	yes	1/4/2024	Comment reviewed. Addressed in section 5.c.i.
232	5	LIVE IN THE COUNTRY AND ALREADY HAVE BROADBAND IN USE Very HELPFUL IN ALL COMMUNICATIONS WE USE.	no	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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233	2	<p>Texas Broadband Development Office</p> <p>Dear Ladies & Gentlemen,</p> <p>I am writing to express my deep concern about the Texas Digital Opportunity Plan's (TDOP) inaccurate assessment of broadband availability in Multi-Dwelling Units (MDUs). This miscount significantly underestimates the true extent of the digital divide in our state and risks excluding countless Texans from vital broadband access.</p> <p>My specific concerns are as follows:</p> <p>Undercounting of MDUs: The current methodology used to identify unserved areas appears to significantly underestimate the number of MDUs lacking adequate broadband options. This leads to an inaccurate picture of the digital needs of residents in apartment buildings, condominiums, and other shared living spaces.</p> <p>Exclusion of underserved MDU residents: As a result of this miscount, many MDU residents are mistakenly classified as having access to broadband when, in reality, they may face limited options, high costs, or unreliable service. This exclusion from the TDOP's target population leaves them without the resources and support they need to bridge the digital divide.</p> <p>Negative impact on funding allocation: The inaccurate MDU data could lead to an unfair distribution of TDOP funding, potentially diverting resources away from communities with the greatest need. This would further exacerbate the digital inequities faced by MDU residents and hinder our state's overall progress in closing the digital divide.</p> <p>To ensure the TDOP accurately reflects the broadband needs of all Texans, I urge the BDO to take the following actions:</p> <p>Implement a more accurate methodology for counting MDUs: This should involve working with MDU owners, residents, and broadband providers to gather comprehensive data on</p>	no	1/4/2024	Comment reviewed. No changes made. Not actionable at this time.
234	7	Please add Austin Public Library to Appendix E: Detailed Asset Inventory. I can provide additional information if requested.	no	1/4/2024	Comment reviewed. Addressed in Appendix E.
235	7	Reference "Appendix E - Detailed Asset Inventory." This is a request to update the info for "Changing Expectations" which is listed as a Community Support Organization. Please add the following info for "Org Stated Barriers": Lack of Funding Availability	no	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
236	1	<p>Strategy 1. I like that the Texas State Library system will be leveraged for this. Local libraries should be well resourced to provide these expansion services. Support should include capital costs, costs for new equipment, and most importantly- staffing.</p> <p>Consider investing resources to digital literacy in relation to the adoption of Artificial Intelligence (Ai)</p>	no	1/4/2024	Comment reviewed. Addressed in section 5.c.iv.

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237	2	NTIA Measurable Objective Category 5: Online Accessibility and Inclusivity of Public Resources- There should be specific investments made for ongoing community engagement in this process. I am a South Texan resident and I had not been engaged nor did I know about this process until the last day of public comment. There needs to be more effort in sustained engagement where community members are regularly consulted and given some of the power to decide how these resources will be used. This means engagement in Spanish, with specific outreach to young people, disabled people, and low-income residents. The document mentions inclusivity of public resources, but I'd like to see a more explicit explanation of how that is being operationalized.	no	1/4/2024	Comment reviewed. Addressed in section 5.c.iv.
238	4	NTIA Measurable Objective Category 3: Digital Literacy-Consider investing resources specifically for mass adoption of artificial intelligence (Ai) and make Texas a leader in this emerging sector. In regards to digital literacy, it will be critical to provide skill development in high growth tech careers such as software engineering and Ai. Other cities such as Oklahoma City have used ARPA dollars to provide free certifications for jobs in software development and cyber security. Similar initiatives--particularly in the lowest income areas of the state such as South Texas (where 37% of the population live in poverty)--would be a game changer in terms of economic opportunity. The Valley is in desperate need for something like this. Provide residents with stipends/basic income, childcare, language accessibility and/or other resources that would facilitate participation in programs like these.	no	1/4/2024	Comment reviewed. Addressed in section 5.c.iv .
239	7	Appendix A + D: Local Digital Opportunity Plan Tracker and Stakeholder Engagements and Participants- why is there no representation from South Texas? Hidalgo, and Starr county are largely missing.	no	1/4/2024	Comment reviewed. Addressed in section 4.d
240	2	The ISP Survey is very informative, and while the private sector has had 25 years to build out broadband service, it is still very spotty throughout rural Texas. Public funding should mostly be for municipalities and counties that would strategically plan and build the infrastructure for all their citizens, especially the unserved and underserved. We are now at a point where broadband service should be recognized as a utility. It would be laughable to have a totally private road and hi-way system in any area, but that is where we are currently at with broadband. In the 1990's I personally built the initial fiber optic networks in every major city in Texas for a CLEC. While I remain a proponent of fiber, it is not the solution for rural Texas. Building fiber to the home is like building an interstate hi-way into your driveway. The FCC allocated CBRS Spectrum and other available wireless spectrums will significantly address the broadband infrastructure deficiencies in rural Texas. A combination of using fiber as the transmission lines and wireless as the distribution lines will enable Texas to significantly provide broadband infrastructure throughout every area of the state with existing funds. NODABL Networks, a Texas based Broadband System Integrator was formed 4 years ago to partner with public entities to serve the underserved in rural areas throughout the U.S.	yes	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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241	4	<p>Most cities own and control their water, sewer, and street systems. The thought of adding broadband services is a little scary and even hard to comprehend. But the heavy lifting is already covered in cities because of their ownership of ROW's, billing systems already in place for residents and businesses, service employees, and existing facilities like buildings and towers to house the equipment. The technology to build the cloud for broadband for a city is straight forward and surprisingly inexpensive.</p> <p>The Texas Comptroller of Public Accounts, and the Texas Broadband Development Office recently published the Texas Broadband Five Year Action Plan (August 2023). This report stated 78% of surveyed elected officials ranked broadband access as the top priority of their community.</p> <p>Broadband providers have had 25 years to provide service to Texans, yet there are big gaps of service throughout our state in the urban and especially rural areas.</p> <p>Federal and state funds are now available to address this, yet in most cases they are funding the very companies responsible for the gaps.</p> <p>How silly and inefficient would it be to privatize our road and highway system without city planning and input. Imagine the cost, frustration, and confusion of such a system, sound familiar?</p> <p>Texas based NODABL Networks, a designer and builder of Broadband infrastructure was formed to provide a better way to strategically serve Texans!</p> <p>As a native Texan with 45 years of experience in tele-communications, I would be honored to serve your office in assisting to fulfill this great Digital Plan.</p>	yes	1/4/2024	Comment reviewed. No changes made.
242	1	We have internet service. Just pay for the low incomes to have it.	no	1/4/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
243	1	Internet	no	1/5/2024	Comment reviewed. No changes made.
244	1	more affordable internet	no	1/5/2024	Comment reviewed. No changes made.
245	1	Me parece perfecto esté Internet	no	1/5/2024	Comment reviewed. No changes made.
246	1	Would like the help for our kids in our community to have great internet service for their education, and our elderly to communicate with doctors.	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
247	1	Na	no	1/5/2024	Comment reviewed. No changes made.
248	1	Internet will help out the community in many wonderful ways	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
249	3	El acceso al servicio de internet a un precio accesible es muy necesario. Para los adultos mayores por ejemplo, muchas veces tiene uno que buscar información sobre el medicamento que uno toma diariamente y de como este nos afecta de alguna manera u otra. El acceso al internet ya no es un lujo, es una necesidad para todos. La mayoría de los doctores mandan las citas al correo electrónico y el cheque del seguro social se tiene que hacer por depósito directo - para todo eso se necesita acceso al internet, y este está cada día más caro e inaccesible.	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
250	1	In my case internet is extremely slow in my area I still end up paying at least \$30 that is high for my income	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
251	5	I would like to have other forms of service mobile hotspot	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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252	1	Low income family. I will still like to qualify for this “discount” is a really good help. I really need this internet for my kids to be able to make their homework at home. Is a really good help my providing this help and is much need.	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
253	2	Regarding individuals becoming comfortable navigating the internet and accessing what the internet has to offer, such as employment, marketing, and information. It is important for our community to secure affordable internet, and knowledge of digital literacy regardless of immigration status and social security requirements.	no	1/5/2024	Comment reviewed. Addressed in section 5.c.ii.
254	1	<p>In Chapter 1 “Executive Summary,” Goal 1 and Goal 2 state access to reliable, affordable internet services and devices in and at the home. Goals that specify access only in the home leave out individuals who are housing insecure and may be the most at need because they cannot afford home internet access service. Affordability is the biggest barrier to getting access to the internet. And individuals with affordability challenges often choose mobile internet over home internet if they cannot afford both because mobile internet a basic, key component of surviving and participating in this digital world.</p> <p>Recommendation: Update Goal 1 and 2 to the following:</p> <p>Goal 1: All Texans have access to reliable, affordable broadband internet service in and outside the home.</p> <p>Goal 2: All Texans have access to affordable computers and other internet-enabled devices in and outside the home, with corresponding technical support services.</p> <p>-----</p> <p>In Chapter 1 (pages 16 – 19), covered and underserved populations are listed but are missing key groups.</p> <p>Recommendation: Please include incarcerated individuals, unemployed individuals, and individuals with low literacy levels to the covered and underserved populations.</p>	no	1/5/2024	Comment reviewed. Addressed in Glossary and section 3.a.iii.5

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255	2	<p>In Chapter 2, section 2.c.iii (pages 27 – 28), the list of covered populations in Table 1: Covered Populations in Texas includes individuals with low literacy levels and incarcerated individuals.</p> <p>Support: It is good that Texas’ covered populations follows NTIA’s covered populations (listed in pages 16 – 19) and in addition, includes individuals with low literacy levels and incarcerated individuals.</p> <p>Recommendation: Please include unemployed individuals in the Covered Populations in Texas. We also recommend that the covered populations are equally considered for funding opportunities.</p> <p>-----</p> <p>In Chapter 2, Texas Goal 1.1 states the aim is to increase the percentage of Texans with reliable broadband subscriptions in their home from 68% to 80% by 2030. Given the amount of funds and timeline available, the percentage target goal should be higher.</p> <p>Recommendation: Please provide transparency as to how the goal percentage of 80% was identified.</p> <p>-----</p> <p>In Chapter 2, Texas Goal 4.1 states the aim is to increase the percentage of Texans who are familiar with cybersecurity and online privacy measure. While being aware of how to be safe online is important, it’s more important to actually have the skills and ability to be safe online.</p> <p>Recommendation: Update the goal to “Increase the percentage of Texans who have basic cybersecurity digital skills to stay safe online.”</p>	no	1/5/2024	Comment reviewed. Addressed in section 2.c.iii.
256	3	<p>I'm voicing my strong support for your tdp as a rural citizen of Texas with very poor service with my internet, my cell phone signal, and my landline although I pay the same amount for these services as the next person. This is not at all fair, so anything you can do to address and fix this situation will be greatly appreciated... not only for the elderly who are in great need of help, but also for younger people for the sake of education and career opportunities and advancement. I live alone and am trying to keep both my cell phone and landline for safety problems. I've told people not to even call me on my landline as it drops calls and I've not been able to get it fixed although they've tried numerous times. At their suggestion, I've even bought new phones to no avail. My cell signal is very undependable as well. I know y'all are mainly concerned with the broadband development and mainly for younger people, but anything that could be done to help the older ones with technology in general is greatly needed. We need classes geared to the elderly not to everyone in general as we are so far behind the wider population as far as technology is concerned. I'm an 80 year old retired public school teacher living alone approximately ten miles out of town and trying to take care of myself. It's so hard.</p>	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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257	1	<p>Thank you again to the Governor, Comptroller and the Texas BDO for the passionate work and amazing results which have achieved thus far. I would like to specifically thank the BDO for referencing South Texas starting on page 9 of the Executive Summary.</p> <p>Many of the systemic root causes of the region being one of the historically most underserved and unserved areas in the country when it comes to connectivity are listed. I believe this train of thought and affirmation of the current state of connectivity, or lack thereof, fully complies and addresses the spirit and letter of NTIA's mandate that "entities must also prioritize persistent poverty / high-poverty areas, speed of proposed network..."</p> <p>As your personal, repeated visits to South Texas and other areas have revealed, there are some areas where the common corporate mantra of maximization of shareholder profits has led to a de facto "separate and not equal" level of service to the region.</p> <p>The will of the people of the great State of Texas was expressed voting in favor of Texas Proposition 8. It should be noted that South Texas was amongst the highest percentage voting block in favor of the proposition (see attached image reflecting voting results by the New York Times).</p> <p>I again, respectfully thank the Governor, Comptroller, and the BDO for their vision in bringing Internet for All to Texas.</p>	yes	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
258	7	<p>Please include the following information to Appendix E: Detailed Asset Inventory.</p> <p>An Excel file has been attached to this submission.</p>	yes	1/5/2024	Comment reviewed. Addressed in Appendix E.
259	7	<p>Attached is an update for Appendix E - Detailed Asset Inventory.</p> <p>Additional comments have been included as a part of the DECA submission.</p>	yes	1/5/2024	Comment reviewed. Addressed in Appendix E.
260	1	<p>we live in a rural area. internet is extreemly slow.my neighbor has on kind of internet access and i do hot spot on my additional phone</p>	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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261	3	<p>Under the BOOT and BEAD grant programs – grants should be reviewed for any complaints filed against applicants to ensure all companies act in Good Faith and utilize Fair Business Practices. Applicants with unresolved Unfair Business complaints files with the Texas state Attorney General’s Office, those with active injunctions, and those with pending litigation brought by the State or Federal agencies or private entities should be rejected and denied. For example See: Plaintiff, the State of Texas (“Texas”) v. GEV IO LLC D/B/A NOMAD INTERNET..., for violations of the Texas Deceptive Trade Practices – Consumer Protection Act, Texas Business and Commerce Code §§ 17.41–17.63 (C2023-0560B)</p> <p>My personal experience involves two ISP provers (Shout Broad Band and Community Internet Providers) who violated lease provisions- which are still in pre-litigation. These companies are listed under the BOOT and BEAD programs. My personal experience involves two ISP provers (Shout Broad Band and Community Internet Providers) who violated lease provisions- which are still in pre-litigation. These companies are listed under the BOOT and BEAD programs. These violations caused a direct impact to neighborhood internet service and affected multiple households in our neighborhood causing undue service interruptions. These actions do not build trust in the community as stated 3.b.vi Broadband Adoption - “There is a lack of trust in internet service providers and pricing that makes some residents reluctant to adopt digital tools”</p>	no	1/5/2024	Comment reviewed. No changes made.

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262	6	<p>This note will provide the results of our digital equity work with Texas HBCUs. We ask you to include the attached report, as you see fit, in your plan and provide a link or reference for where we can find the information.</p> <p>I also want to thank you for recently meeting with me and working with the Student Freedom Initiative (SFI) staff. I'm convinced we align in our efforts to close the digital divide and drive digital inclusion for all in Texas.</p> <p>As we discussed, SFI has undertaken a comprehensive assessment of the challenges the communities surrounding Texas HBCUs face. We have gathered the communities virtually or in person to discuss broadband infrastructure and digital equity.</p> <p>The linked attachment contains insight from:</p> <ul style="list-style-type: none"> (1) community events held in-person or virtually at HBCUs, (2) community surveys, (3) questionnaires conducted with HBCU representatives, and (4) in-depth analysis of publicly available data in Texas. <p>Our comments include detailed recommendations for addressing challenges informed by outreach to key HBCUs and their communities.</p> <p>We are happy to share these recommendations, building on the work that you have already done. We hope to continue working together to advocate for policies and funding to remedy many deficit areas.</p> <p>Thank you for your time and consideration. We look forward to your response and the opportunity to continue collaborating to close the digital divide for Texas HBCUs and their</p>	yes	1/5/2024	Comment reviewed. Addressed in sections 2.c.iv.1 and 4.a.

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263	6	<p>These comments are not related to a specific chapter, but to the overall scope of the document and mission of the Texas Broadband Development Office (BDO).</p> <p>While 'digital skills training' and conquering the 'digital divide' are worthy goals, the basic fact exists that without broadband connectivity these goals will not ever be achieved.</p> <p>The singular focus of the Texas Broadband Development Office (BDO) must be on broadband connectivity for everyone in the state of Texas. Doing otherwise will only perpetuate any digital inequalities between those that have broadband connectivity and those that do not.</p> <p>Some background; I live in Austin and have inherited property in Camp and Upshur counties (near Pittsburg, TX). I have attempted to obtain broadband connectivity on this property. None is available. Cellular service on the property is problematic.</p> <p>Previously, I intended on building a 'smart' home on the property as I would like to monitor the building remotely since I will not be there all the time. Without broadband connectivity, this is impossible, unless I obtain very pricey connectivity via satellite.</p> <p>The BDO will never achieve it's mission unless affordable broadband connectivity is available to all Texans throughout the state.</p>	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
264	7	Please see the attached file.	yes	1/5/2024	Comment reviewed. Addressed in section 5.c.iv.
265	1	<p>I think it would be good to briefly include the KPI numbers in the Goals section Executive Summary.</p> <p>Strategy 1 (p. 10): Would be good to include the names of other key statewide organizations (TEA, THECB) They are mentioned later in the report but important to mention here.</p> <p>Strategy 2 (p. 10) states that BDO will allocate a portion of the Capacity Grant to create a digital grant program. It would be good to inform the public about "how much of the portion" will be. 25%? 50%?</p>	no	1/5/2024	Comment reviewed. No changes made. Comment is not actionable at this time.
266	2	P. 23-- technology agnostic is an unfamiliar term. Although the spirit of the term can be captured, I wonder if it is truly possible to be technology agnostic, especially since we know that technology must be able to meet the internet speed requirements to make it usable and accessible.	no	1/5/2024	Comment reviewed. No changes made.
267	4	Reaching the most vulnerable and marginalized populations will continue to be a challenge. It is mentioned in the report that LEP and unhoused are more likely to use public internet services, which often includes public libraries. It's important to know that the city of San Antonio recently implemented a pilot program to place police officers (in addition to the security guards already there) in the main public library due to disruptions occurring. If this trend continues, vulnerable populations like the undocumented or unhoused will feel intimidated and likely refrain from visiting public libraries.	no	1/5/2024	Comment reviewed. No changes made. Outside the scope of the digital opportunity plan.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
268	5	National Church Residences recognizes that reliable Internet access, and specifically wi-fi, has become more than an amenity in multi-family affordable housing and is increasingly an important resource for residents to fully participate in their health care, banking, social connections and more. We applaud Texas' goal 1 for all Texans to have access to reliable, affordable broadband internet service at home and want to make sure low-income residents residing in apartments are not over looked. Many times Internet and wi-fi infrastructure installation and service provision has proven to be financially infeasible for long term operations in nonprofit low-income housing due to rent limits and, for some properties, HUD multifamily restrictions. We recommend the Texas Broadband Development Office work with the Texas Department of Housing and Community Affairs to develop a funding program to provide grant funds for broadband deployment in properties receiving a low-income housing tax credit award. These grant funds, provided through BEAD and DEA funding rounds, should be awarded at the same time and in partnership with LIHTC awards and would be earmarked for the installation of broadband infrastructure and operating costs of affordable internet service. Our organization would be happy to provide further input on this concept if needed.	no	1/5/2024	Comment reviewed. Addressed in section 5.c.i.
269	5	The Emergency Connectivity Fund (ECF) is a great model for the Texas BDO because going through the libraries utilizes already-established organizations serving most of the covered populations. ECF is a program that helps schools and libraries provide the tools and services their communities need for remote learning. The BDO should use ECF as a model and focus on expanding the use cases to telehealth, and other digital opportunity initiatives. With our ECF award, we are achieving most of Texas's Vision for Digital Opportunity including reliable and affordable broadband internet service, affordable devices, and technical support. Here is a list of eligible equipment and services ecf_esl.pdf (fcc.gov)	yes	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
270	1	Hispanic Federation appreciates the opportunity to provide comments on the Texas Digital Opportunity Plan. HF is the premier Latino nonprofit membership and advocacy organization in the United States that seeks to empower and advance the Hispanic community, support Hispanic families, and strengthen Latino institutions through work in the areas of education, health, immigration, civic engagement, economic empowerment, and the environment. We hope our comments on Texas' digital opportunity plan help inform the development of the state's final proposal in a manner that truly meets the needs of Latino and low-income populations in Texas. Please see comment attached.	yes	1/5/2024	Comment reviewed. Addressed in sections 3.a.iii.6 and 5.c.ii.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
271	2	<p>P. 24: "In November 2023, Texas voters approved a state constitutional amendment to create the \$1.5 billion Broadband Infrastructure Fund, under the Comptroller's office. The Comptroller's office estimates that deploying broadband throughout the state and closing remaining coverage gaps will cost close to \$10 billion. If approved, the constitutional amendment could unlock funding to augment the \$3.3 billion NTIA has awarded to Texas under the BEAD Program." There will still be a \$5.2 billion shortfall with the \$1.5 billion that "could" be unlocked.</p> <p>Recommendation: Include language that recognizes this shortfall and some language to show what the BDO will do to address it.</p> <p>P. 29: "54 percent of Texas jobs require digital skills training beyond that received in high school or an equivalent level of education, yet only 45 percent of Texas workers have those skills."</p> <p>Recommendation: It would be beneficial to understand what skills are needed. Can this information be included?</p> <p>P. 30: "Alignment with existing statewide priorities/goals"</p> <p>Recommendation: Are there other plans that should be included and should more analysis be done to show where there is overlap with these plans and TDOP? Additional plans found that may be included: - https://bit.ly/3TQzHz0 - https://bit.ly/3S9yPUV</p>	yes	1/5/2024	Comment reviewed. No changes made.

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272	3	<p>P.55: Although statewide, a majority have device access (7% have “only a smartphone as the device they use to get online”) regional data can be vastly different in counties with more significant disparities. This point is highlighted on p.101, “Nevertheless, counties across the region face their own unique challenges and disparities.” For example, in our Alamo Region, there are 4 counties at 0% for households without broadband, but the majority face 70+%, including our own. Most (PH/HCV) residents we serve only have their phone initially, to get online.</p> <p>Aside from statistical differences based on county vs. region, the data can be significantly impacted by whether the respondent is part of covered populations, as seen in the Covered Populations Needs Assessment. The human experiences of the resident, especially among these populations, can affect aspects that have not been fully measured. For example, low-income households often experience environments with higher rates of property crimes such as theft and property damage, causing a barrier in maintaining working device access. Aging populations may require more in-person assistance for digital literacy and tech support, vs. virtual support and self-paced tools. These are key considerations in how we approach resident needs and distribute resources. Please see recommendations.</p> <p>P.56: Statewide reflects most are familiar with cybersecurity “[90%] of respondents are familiar with cybersecurity measures and 86[%] have cybersecurity measures set up on their devices.” These stats may be much lower locally, especially considering varying proportions of covered populations and their needs/barriers. It would be constructive to know what level of familiarity, being that assistance keeping devices clear of and removing malware/adware/ransomware is a common issue and call driver for most tech support companies. (Although most companies consider call drivers internal, did locate FTC report: https://www.ftc.gov/system/files/ftc_gov/pdf/ftc_ransomware_report_oct_2023.pdf) See recommendations at bottom.</p>	no	1/5/2024	Comment reviewed. Addressed in section 5.c.iv.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
273	4	<p>Section 4a - Table 17 (Page 140) - Summary of Public Engagement Impact</p> <p>While the BDO performed extensive outreach via survey, in-person and virtual public meetings, regional & statewide working groups, task forces, digital resource mapping, and tribal engagements; the survey response #'s are strikingly low, particularly as it pertains to paper responses which are likely collected from the most vulnerable populations (hardest to reach or most likely to be disconnected or lack skills/literacy).</p> <p>There is continued concern around reaching and properly accounting for the needs of these populations.</p> <p>Recommendation: Continued survey and response gathering to occur semi-annually, inclusive of thorough needs assessment and review of current access and service provision in all communities. This allows for a living broadband opportunity survey process which is ongoing and engages a supported in-person component to measure success in areas which lack access.</p> <p>Section 4a - Figure 28 (Page 142) - Economic Regions</p> <p>This engagement model was designed for maximum participation with individuals from covered populations and the organizations that serve or represent them and we are in agreement with the regions as they are laid out here.</p> <p>Recommendation: Standardizing the service delivery and funding distribution approach to match these regions.</p> <p>Section 4a - Covered Populations (as stated in Section 2.c.iii - Table 1) - Pages 27-28</p>	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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274	5	<p>Page 157: "The needs assessment and asset inventory reveal that once reliable broadband service is available in all communities, Texans will need programs that drive down subscription costs to end users, as well as digital literacy training to enable full and safe use of broadband-enabled technologies. Thus, the BDO developed these strategies to advance adoption of the internet once it becomes available through BEAD and other sources of funding."</p> <p>Questions: How will the state enable programs to drive down subscription costs? Listing in BEAD? Pg 167 is unclear. How will the state ensure subscription plans from ISP's will be made affordable?</p> <p>Recommendation: Establish parameters for ISP Compliance Consistency in providing low cost options and ensuring consumers have equitable signup options.</p> <p>Page 164: "If funds remain, consider providing funding to partners to develop programs or activities."</p> <p>Questions: Can remaining funds be offered to local partners?</p> <p>Recommendation: Establish routes for funding to go to local needs</p> <p>Page 160/165: "2.1: Stand up a state-led local digital opportunity fund to directly fund organizations offering digital opportunity resources to covered populations and geographies with the highest needs."</p> <p>Comments: Highest needs determined with current data may be in issue if an area looks like it</p>	no	1/5/2024	Comment reviewed. Addressed in section 5.c.iii.

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275	7	<p>We don't have comments on this section, but wanted to provide a document with information about the Aging and Disability Tech Collective, see attached.</p> <p>Active members who provided comments include:</p> <ul style="list-style-type: none"> - Suzanne Anderson: Chief Executive Officer, AGE of Central Texas - Catherine Crago: Head of Strategic Initiatives and Resource Development, Housing Authority of the City of Austin - Skye Downing: Digital Equity Programs & Partnership Director, Community Tech Network (CTN) - Kami Griffiths: Executive Director/Co-founder, Community Tech Network (CTN) - Serita Lacasse: Executive Director, Senior Access - Lindsey McQuiston: Manager of Career Services, Goodwill Central Texas - Jessica Strom: Digital Inclusion Programs Manager, Opportunity Home - Hannah Quintanilla: ACP Outreach Coordinator, Opportunity Home - Jess Ross: Executive Director, Austin Free-Net (AFN) - Anita Swanson: Project Manager, Texas Technology Access Program, The University of Texas at Austin 	no	1/5/2024	Comment reviewed. No changes made.
276	1	<p>AARP commends the Texas Broadband Development Office (BDO) for its thoughtful, comprehensive, and clearly written draft Digital Opportunity Plan (Plan). The Executive Summary at the Plan's outset provides an excellent overview of the key elements in the Plan (vision, the state of digital equity in Texas, stakeholder engagement, and implementation).</p> <p>AARP has actively advocated for reliable affordable high-speed internet access for years and appreciates the opportunity to submit comments on the BDO's Plan. AARP's comments reflect a perspective based on many years of advocacy for older adults on a wide range of issues – including health care, caregiving, affordable utilities, etc. - and its active engagement with federal and state advocacy for affordable, reliable, sustainable high-speed internet access and devices, supported by digital literacy training and tech support. AARP has now reviewed twenty-four other draft state digital opportunity plans and so brings that perspective to this review of the Texas Plan. In the years ahead, AARP welcomes the opportunity to work with the BDO to contribute to the Plan's successful implementation.</p>	yes	1/5/2024	Comment reviewed. Addressed in section 5.c.iv.
277	2	AARP appreciates the opportunity to comment on Section 2. Due to character limits, our comments on this Section are included in the attached document.	no	1/5/2024	Comment reviewed. Addressed in section 2.c.iv.3
278	3	AARP appreciates the opportunity to comment on Section 3. Due to character limits, our comments on this Section are included in the attached document.	no	1/5/2024	Comment reviewed. Addressed in Appendix E.

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279	4	<p>AARP commends the BDO for its comprehensive engagement with stakeholders and representatives of covered populations from throughout the state and its impressive collaboration in developing the Plan. We appreciate the thorough stakeholder engagement conducted with older Texans (Aging Individuals represented 42% of covered population distribution of Texas’ online survey), as indicated on page 25 of Appendix C: Needs Assessment and Asset Inventory Report, Methodology and Limitations. We also appreciate the inclusion of the table “Online Digital Opportunity Survey Results: Two Covered Population Groups” in Appendix C. This indicates that the BDO should pay particular concern to older adults living in rural areas (e.g., transportation to community anchor institutions, and older adults with disabilities. e.g., accessibility and technical support of public resources).</p> <p>AARP appreciated the opportunity to directly contribute to the Plan in various ways, including participating in the Statewide Working Group and the Civic and Social Engagement Task Force.</p> <p>AARP is hopeful this collaboration will provide a solid foundation for the successful implementation of the Plan in the years to come, and, in that spirit, appreciates the Plan’s commitment to ongoing engagement. AARP also is impressed by the Plan’s comprehensive discussion of its various approaches to ensuring collaboration and partnerships.</p> <p>Regarding Section 4.c.i, Public Comment Process, AARP recommends that the BDO greatly expand the character limit on its draft Digital Opportunity online public comment form which appears to prevent feedback on specific sections of the Plan that exceeds approximately 1,000 characters. Of the 23 draft state digital equity/opportunity plans reviewed by AARP, this appears to be one of the most restrictive limits we have seen. It is not clear whether the option to upload a file is a welcomed avenue to offer broader comment (“If you have additional documents to support your comments, such as an existing plan, upload it here” ,</p>	no	1/5/2024	Comment reviewed. No changes made. BDO plans to offer final plan in full in Spanish.
280	5	AARP appreciates the opportunity to comment on Section 5. Due to character limits, our comments on this Section are included in the attached document.	no	1/5/2024	Comment reviewed. Addressed in sections 1. and 5.c.ii
281	6	The concluding section captures the challenges of achieving digital connectivity for all and the vision of such achievement. AARP looks forward to working with the BDO to contribute to Texas’ achievement of (and sustainability of) digital connectivity for all.	no	1/5/2024	Comment reviewed. No changes made.
282	5	Please see attached document.	yes	1/5/2024	Comment reviewed. Addressed in sections 3.a.iii.1 and 5.c.i.
283	1	Attached document with all comments and recs.	yes	1/5/2024	Comment reviewed. Addressed in Appendix B.

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284	2	<p>Recommendation: We agree that both populations should be considered covered, we just need that to be consistent across the plan so groups are not left behind.</p> <p>2.d Strategy and Objectives – (TDOP p. 48)</p> <p>1) Goals are not ambitious (KPI 1.1, 1.2, 1.3) - It is important that the BDO is developing strategies and objectives to ensure the NTIA measurable objectives are being met. However, we are concerned that the target goals for Texas Goals KPI 1.1, 1.2 and 1.3 are set too low given the seven-year time horizon, the amount of funds available through BDO to address closing the digital divide in Texas and the current resources and organizations both at the state and local level on these issues.</p> <p>Recommendation: We recommend a target goal of 90% by 2030 in a fiscally responsible way.</p> <p>2) Measuring what matters - (KPI 2.2, 3.2) The target measure for 2.2 measures the # or % of organizations that offer digital skills and technical skills. The challenge is that the number of organizations offering services does not translate to the quality or the availability of services provided.</p> <p>Recommendation: We recommend that additionally the BDO measure the number of Texans receiving the technical support and service. This also applies to KPI 3.2.</p> <p>3) Cybersecurity and digital citizenship - (KPI 4.1) We are concerned that this definition is vague. There is more to what Texans are seeking to learn and do on cybersecurity. Even when Texans are aware and receive cybersecurity training, they may still not feel safe online. Our question is what does the target of 99% by 2030 refer to and measure?</p> <p>Recommendation: Texans have rights and responsibilities when it comes to cybersecurity. We recommend the inclusion of digital citizenship training to ensure that all users are trained as stewards of their online activities in a safe and responsible manner. Texas agencies should provide quarterly updates on cybersecurity guidance and guidelines for Texans using their platform. Offer services and supports for Texans</p>	yes	1/5/2024	Comment reviewed. Addressed in appendix B.

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285	3	<p>DECA Network - Texas Digital Opportunity Plan (TDOP) Coordinated</p> <p>Public Comments</p> <p>Chapter 3 - Current State of Digital Opportunity 3.b Asset Inventory 3.b.i Description As it relates to Appendix E: Detailed Asset Inventory, please see attached uploaded file "Travis County/City of Austin Resource Guide" https://www.traviscountytx.gov/images/bdeo/docs/resources.pdf DECA will continue to update Appendix E: Detailed Asset Inventory beyond the deadline of January 5, 2024.</p> <p>3.b.iii Existing Digital Opportunity Plans Travis County and the City of Austin are currently working on their 2024 digital opportunity plans and will share with the BDO upon completion.</p> <p>3.b.vi Broadband Adoption An in-depth overview of the multitude of device access and skills training programs that help address the diverse regional urban and rural community mix in the Capital Region is needed.</p> <p>3.b.viii Conclusion: Gap Analysis For the Capital Region the significant challenges which so many organizations face in addressing digital opportunity are coupled with the complexities of a booming population center like Austin, which serves 10+ contiguous counties of community members who travel in and out of Austin for work and other critical regional economic inputs. Income disparities and the decreased availability of affordable housing have resulted in patterns of suburban sprawl within a diverse region mixed with urban, suburban, and rural residents.</p>	yes	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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286	4	<p>DECA Network - Texas Digital Opportunity Plan (TDOP) Coordinated</p> <p>Public Comments</p> <p>Chapter 4 - Collaboration and Stakeholder Engagement</p> <p>1. Section 4.a – Collaboration and Stakeholder Engagement (p.139)</p> <p>Challenge: Covered Populations Definition</p> <p>1) Justice Impacted</p> <p>Currently the BDO is focusing on closing the digital divide for the currently incarcerated. Which according to the ACS data that the BDO is citing comprises 1% of the Texas population, which we think is very important. However, when it comes to closing the digital divide for the justice impacted, this data leaves out a very significant portion of Texans. The Texans being left out of the covered population in TDOP are the formerly incarcerated. According to Prison Policy Initiative data on how many people are released from each state’s prisons and jails every year from August 2022 (https://www.prisonpolicy.org/blog/2022/08/25/releasesbystate/) in 2019 alone 1,072,029 Texans were released from prison or jail. Given the estimated population of Texas at 30,000,000 (TDOP Report, P. 139) that would mean 3.57% of Texas population. Added to that is the report from Texas Appleseed from February 2023 Issue Brief_Clean Slate Final (Feb 2023).pdf (texasappleseed.org) citing Texas Department of Public Safety they report that “More than nine million Texans have a criminal record.” Texans leaving the system need to be digitally connected to meet the obligations of their exit from the criminal justice system, such as having a reliable and affordable mobile plan and or video chat capability for remote communication with their parole officers, appropriate devices such as a desktop to complete employment applications</p>	yes	1/5/2024	Comment reviewed. No changes made. Comment is not actionable at this time.

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287	5	<p>DECA Network - Texas Digital Opportunity Plan (TDOP) Coordinated</p> <p>Public Comments</p> <p>Chapter 5 - Implementation</p> <p>5.c.ii Implementation – Strategy 2: Fund Local partners (p.165)</p> <p>On page 16 of TDOP it outlined ten covered populations from NTIA (over 60 years, disabilities, language barriers, low-income households, racial or ethnic minority groups, rural residents and veterans, immigrants, tribal and unhoused). On page 28 of TDOP the BDO cites has identified nine covered populations who are experiencing the digital divide with incarcerated individuals and individuals with low literacy levels are added to the BDO list, while immigrants, tribal communities and the unhoused are grouped as populations “uniquely impacted by the digital divide” (p.28). TDOP p. 165 BDO states that “the grant program may place higher priority on applications that address specific disparities and only cite unhoused, low-income, limited English proficiency and immigrants. The concern that we have is how will organizations that serve the remainder of the covered populations be prioritized for funding?</p> <p>Recommendation: We recommend that all covered populations are equally considered for funding and support in the BDO’s strategy for implementation and data collection and success measurements.</p>	yes	1/5/2024	Comment reviewed. Addressed in Glossary and section 3.a.iii.5
288	5	<p>Please make room to fund Councils of Government for public awareness, fiber implementation, operations and sustainability. Consider offering low cost loans and/or debt refinancing. Fund local partners already engaged in the effort to bring high speed internet to rural areas. Strategy 2 to fund local partners is a fantastic idea. Build some discretion into your ability to provide funding to meet unique circumstances. Be flexible. Allow local partners to make their point to receive funding that may not fit your pre-determined mold.</p> <p>Thank you for the opportunity to be a part of the planning process. It is much appreciated.</p>	no	1/5/2024	Comment reviewed. No changes made. Already addressed within the plan.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
289	3	<p>While the Plan is thorough, there are two areas of emphasis that drive LISC’s digital equity focus that we believe will be important to the long-term success of Texas’s investment and should be emphasized in the Plan: further identifying what makes serving rural and less populated areas with digital inclusion services distinct from urban service delivery and a more pronounced commitment to providing technical assistance for increased capacity of community-based organizations to carry out this program of work.</p> <p>With 22.8% of Texas counties classified as rural, LISC suggests the Plan would benefit from including more reference to rural community needs, particularly:</p> <ul style="list-style-type: none"> • Section 3.a.ii Needs Assessment – Indicate how these results vary between urban and rural areas. • Section 3.a.iii Covered Populations Needs Assessment – Identify rural regions for each covered population area so readers can easily identify variances between urban and rural areas for different populations. • Section 3.a.iv Underserved Population – Indicate how these results vary between urban and rural areas. • Section 3.a.v Economic Regions of Texas – Clearly label each region as urban or rural, particularly to assist those who are unfamiliar with the geography of the State. 	yes	1/5/2024	Comment reviewed. No changes made. Comment is not actionable at this time.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
290	5	<p>We applaud the references to digital devices and services as integral to workforce development, and we encourage the State to structure its State Capacity Grant program implementation to monitor and report on how broadband and computer access and adoption leads to skills gains and greater employment opportunities. This emphasis could be made in the following section:</p> <ul style="list-style-type: none"> Section 5.c.i Strategy 1: Partner with and Fund Statewide Organizations - While community-based organizations are often trusted resources in local areas, they can lack internal capacity or expertise regarding digital skill-building. We recommend the Plan specifically commit to the suggested partnerships with the Texas Workforce Commission and Texas A&M University to promote digital upskilling among rural and urban residents in the State, and to help track the impact of programming on workforce development and digital upskilling. <p>We commend the Plan’s vision for pursuing partnerships among statewide organizations. Through our established programs, LISC has found that long-term benefits can be achieved by building the capacity of diverse, place-based organizations to carry out the work of digital inclusion.</p> <p>We encourage the Texas Broadband Office to structure grantmaking to intermediaries to subgrant to lower capacity, place-based organizations to ensure that dollars are widely and evenly dispersed. For example:</p> <ul style="list-style-type: none"> Section 5.c.1 Strategy 1: Partner with and Fund Statewide Organizations - This section lists various examples of potential statewide partnerships, including a reference to initiating new state grant programs, listing “adding capacity for assistance” as one possible focus area. LISC recommends the Plan specifically include support for grant application, implementation and administration to provide more targeted assistance to municipalities with limited staff and organizational capacity. As noted above, we suggest a focus on funding intermediary organizations will lead to more durable outcomes. Committing to these actions will also 	no	1/5/2024	Comment reviewed. Addressed in section 5.c.ii.
291	1	I have a number of comments in the attached file. For simplicity, I am submitting one form with comments rather and multiple duplicate submissions.	yes	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
292	1	<p>Thank you for allowing us to provide comments on the Texas Digital Opportunity Plan. We hope our comments help strengthen the plan to close the digital divide and provide opportunities for all Texans.</p> <p>Our first comment is regarding Data collection that informs TDOP – As with all data collection efforts, it is important to improve partnership with trusted organizations serving at the state and local level to reach and correctly read the realities of Texans and their experience with the digital divide.</p> <p>Recommendation: We recommend for the BDO to continuously fund a living digital opportunity survey for our state so that we can allow for time to have outreach and engagement by Texans to understand the current state of digital divide. And to ensure that both lived experience and anecdotal data from all the communities in Texas are gathered without the restriction of an unachievable, short deadline. It will also provide a year to year baseline for measuring success. We also would encourage the BDO to collaborate with CAls (such as libraries) and community groups and organizations to provide more opportunities and targeted goals for in-person survey and feedback to ensure that all Texans have the opportunity to share their experiences and needs.</p> <p>GOALS - As to the goals that BDO has identified which will guide the implementation efforts - we believe that correctly categorizing a location as ‘served’, “underserved” and “unserved” is crucial to meeting the important goal of serving all Texans. The BDO has made the strategic decision to move from LightBox as a mapping vendor to use FCC’s Broadband Data Collection. We think this is the right decision for BDO and will help align the Texas broadband map with the federal map and define reliable broadband more accurately. However, we do have a concern regarding CostQuest Associates (the FCC’s data analytics and mapping vendor) commenting in their documentation that Multi-Dwelling units (Multi-Tenant Environments) are categorized as one location in the FCC broadband availability map. The challenge remains</p>	yes	1/5/2024	Comment reviewed. Addressed in section 5.c.iv.

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293	2	<p>2.d Strategy and Objectives – (TDOP p. 48)</p> <p>1) Goals are not ambitious (KPI 1.1, 1.2, 1.3) - It is important that the BDO is developing strategies and objectives to ensure the NTIA measurable objectives are being met. However, we are concerned that the target goals for Texas Goals KPI 1.1, 1.2 and 1.3 are set too low given the seven-year time horizon, the amount of funds available through BDO to address closing the digital divide in Texas and the current resources and organizations both at the state and local level on these issues. Recommendation: We recommend a target goal of 90% by 2030 in a fiscally responsible way.</p> <p>2) Measuring what matters - (KPI 2.2, 3.2) The target measure for 2.2 measures the # or % of organizations that offer digital skills and technical skills. The challenge is that the number of organizations offering services does not translate to the quality or the availability of services provided. Recommendation: We recommend that additionally the BDO measure the number of Texans receiving the technical support and service. This also applies to KPI 3.2.</p> <p>3) Cybersecurity and digital citizenship - (KPI 4.1) We are concerned that this definition is vague. There is more to what Texans are seeking to learn and do on cybersecurity. Even when Texans are aware and receive cybersecurity training, they may still not feel safe online. Our question is what does the target of 99% by 2030 refer to and measure? Recommendation: Texans have rights and responsibilities when it comes to cybersecurity. We recommend the inclusion of digital citizenship training to ensure that all users are trained as stewards of their online activities in a safe and responsible manner. Texas agencies should provide quarterly updates on cybersecurity guidance and guidelines for Texans using their platform. Offer services and supports for Texans in the covered population to have the knowledge, information and skills to feel and be safe online. Suggestions include: 1) Make TEA mandated high school cybersecurity training available or required for workforce-oriented training, ensure covered population digital literacy services fund this work: https://tea.texas.gov/about-tea/news-and-multimedia/news-releases/sboe-news/sboe-</p>	yes	1/5/2024	Comment reviewed. No changes made. Not actionable at this time.
294	3	<p>3.b Asset Inventory</p> <p>3.b.i Description As it relates to Appendix E: Detailed Asset Inventory, please see attached uploaded file "Travis County/City of Austin Resource Guide" https://www.traviscountytx.gov/images/bdeo/docs/resources.pdf</p> <p>We will continue to update Appendix E: Detailed Asset Inventory beyond the deadline of January 5, 2024.</p> <p>3.b.iii Existing Digital Opportunity Plans Travis County and the City of Austin are currently working on their 2024 digital opportunity plans and will share with the BDO upon completion.</p>	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
295	4	<p>1. Section 4.a – Collaboration and Stakeholder Engagement (p.139) Challenge: Covered Populations Definition</p> <p>Justice Impacted Currently the BDO is focusing on closing the digital divide for the currently incarcerated, which comprises 1% of the Texas population according to the ACS data cited by the BDO. The City agrees that this is very important. However, when it comes to closing the digital divide for the justice impacted, this data leaves out a very significant portion of Texans from the covered population: the formerly incarcerated. According to data from the Prison Policy Initiative (https://www.prisonpolicy.org/blog/2022/08/25/releasesbystate/), 1,072,029 people were released from Texas prisons and jails in 2019 alone. Given the population of Texas of 30 million (TDOP Report, P. 139), that would mean 3.57% of Texas population. Overall, more than nine million Texans have a criminal record, according to Texas Department of Public Safety data cited in a recent report from Texas Appleseed, Issue Brief Clean Slate Final (Feb 2023).pdf (texasappleseed.org). Texans leaving the system need to be digitally connected to meet the obligations of their exit from the criminal justice system, such as having a reliable and affordable mobile plan, video chat capability for remote communication with their parole officers, appropriate devices to complete employment applications, and the digital skills to re-enter the workforce.</p> <p>Recommendation: It is important to ensure that Texans who are re-entering the community from the criminal justice system have access to reliable and affordable broadband, affordable and sustainable data plans, devices beyond smart phones and technical workforce skills training to use the devices and navigate essential services online. We recommend that the BDO consider expanding the covered population group in TDOP (p. 28) to include current as well as former incarcerated individuals in Texas.</p> <p>Veterans</p>	no	1/5/2024	Comment reviewed. Addressed in Glossary and section 3.a.iii.5.
296	5	<p>5.c.ii Implementation – Strategy 2: Fund Local partners (p.165) On page 16 of TDOP it outlined ten covered populations from NTIA (over 60 years, disabilities, language barriers, low-income households, racial or ethnic minority groups, rural residents and veterans, immigrants, tribal and unhoused). On page 28 of TDOP the BDO has identified nine covered populations who are experiencing the digital divide with Incarcerated individuals and individuals with low literacy levels added to the BDO list, while immigrants, tribal communities and the unhoused are grouped as populations “uniquely impacted by the digital divide” (p.28). TDOP p. 165 BDO states that “the grant program may place higher priority on applications that address specific disparities and only cite unhoused, low-income, limited English proficiency and immigrants. The concern that we have is how will organizations that serve the remainder of the covered populations be prioritized for funding? We recommend that all covered populations be given equal consideration for funding and support.</p>	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan and some are not actionable at this time.

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Comment Number	Relevant Section of the Plan (Chapter Number)	Feedback Provided (Comment)	Other Comments (Did the commenter attach a file as part of their comments?)	Date Submitted	Written Responses and Actions Taken by State in Response
297	2	<p>On behalf of Lead for America (LFA) and our American Connection Corps (ACC) program, we would like to take this opportunity to thank your office and governor for prioritizing digital inclusion opportunities strategically in your state, particularly in regards to reaching rural and underserved communities and incorporating more boots-on-the-ground approaches through non-profit and community partnerships and Digital Navigator models like the American Connection Corps. We offer these comments from our perspective as a 501(c)(3) nonprofit organization and national AmeriCorps program that currently places digital inclusion AmeriCorps Members in 28 states - including the following placements in Texas:</p> <ul style="list-style-type: none"> - Communities Unlimited - Texarkana - Communities Unlimited - Houston - Communities Unlimited - Nacogdoches - Partners for Rural Impact - East Texas (Diboll/Lufkin) <p>As you are already aware, nearly 20% of Americans still lack a broadband connection or digital device at home according to the 2020 US Census, and many more lack the skills and experience to effectively navigate and use the internet for essential services.</p> <p>In a recent 2022 research study, the Boston Consulting Group studied digital navigator programs and found from a survey of over 1,500 people that digital navigators can drastically increase the effectiveness of digital equity programs (Kalmus, 2022). With support from a digital navigator, over 65% of survey respondents were able to obtain internet access, computer or tablet at home, and over 85% reported using the internet more (Kalmus, 2022). This illustrates the crucial role that digital navigators can play and the importance of creating, supporting, and expanding digital navigator positions across Texas.</p> <p>In the plan draft proposed in December 2023, the Texas state broadband office highlights this in the following ways:</p>	no	1/5/2024	Comment reviewed. Addressed in section 2.c.iv.1.

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298	3	<p>There is an increasing need for boots-on-the-ground capacity building in rural and emerging communities and we believe that the American Connection Corps model has proven successful in helping to meet this need and can be used as an example for expanding and improving Texas’ digital opportunity plan implementation.</p> <p>Since 2021, ACC has successfully graduated 75 AmeriCorps members, who have hosted over 360+ digital skill-building workshops and community forums, and launched 75+ public-private partnerships. As a result of these members service they have enrolled 6,500+ households into the American Connectivity Program (ACP) Benefits and channeled \$45,503,609 to local communities.</p> <p>On page 132 - Section 3.b.v - Figure 26, barriers to implementing digital opportunity programs: THis figure showcases the lack of capacity of boots-on-the-ground as a tremendous implementation barrier. The highest implementation barrier being funding available. The plan does not explicitly mention interns, volunteers or AmeriCorps members.</p> <p>We would like to emphasize that AmeriCorps Members can be strategically recruited and leveraged to help communities build capacity for digital inclusion. For example in 2023, Lead for America implemented a groundbreaking public private partnership with the state of Massachusetts and Comcast to provide Digital Navigators to nonprofits and regional planning organizations statewide by placing 15 American Connection Corps members across the state of MA. Read more about this innovative partnership approach to digital navigation here: https://masstech.org/news/mbi-comcast-partners-to-expand-broadband-adoption</p> <p>Texas’s digital opportunity plan should specifically reference the need for increasing capacity and talent through the use of volunteers, interns and AmeriCorps members, including partnering with organizations such as Lead for America’s ACC program as well as the Texas state service commission on AmeriCorps, OneStar Foundation.</p>	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan and some are not actionable at this time.

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299	6	<p>Background on LFA & ACC: Since 2018, Lead for America (LFA) has created over 400 full-time service opportunities for outstanding leaders across the nation. In 2021, LFA began partnering with AmeriCorps and has since recruited over 230 highly motivated, exceptional, and diverse leaders to serve in underserved rural and urban communities across America.</p> <p>In 2021, LFA launched the American Connection Corps (ACC) – a national AmeriCorps program focused on advancing economic prosperity in rural and emerging communities. ACC has specifically focused on through collaborative efforts to expand high-speed broadband and closely focused around capacity on infrastructure and access initiatives, thus closing the digital divide. ACC was developed in partnership with the American Connection Project (ACP), a coalition led by Land O’Lakes, Microsoft, Comcast and over 175 companies and organizations spanning numerous industries, collectively advocating for innovative policies enabling high-speed internet access to all Americans.</p> <p>Overview: We have witnessed firsthand the transformative impact of both the Rural LISC cohort model, American Connection Corps and AmeriCorps on individuals and communities alike.</p> <p>We applaud the historic investment to enhance digital equity efforts afforded by the Infrastructure Investment and Jobs Act. Implemented strategically, these funds will reduce and eliminate historical, institutional, and structural barriers to technology access and use. We greatly appreciate the NTIA’s leadership and comprehensive approach to designing and implementing the State Digital Equity Capacity Grant Program and the Digital Equity Competitive Grant Program, which will significantly increase and improve the direction of resources dedicated to removing systemic barriers and providing equal access to opportunity.</p> <p>We are pleased to offer comments to the Texas digital opportunity plan. We highly appreciate</p>	no	1/5/2024	Comment reviewed. No changes made.
300	1	Need, better opportunity in jobs	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
301	1	See attached	yes	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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302	1	<ul style="list-style-type: none"> •Page 24, Section 2.b.iii typo in the sentence “Critically, instead simply of” should read “instead of simply” •Page 24, Section 2.b.iii: Last paragraph: “If approved, the constitutional amendment could unlock funding to augment” is written as if we don’t know if the state funding was approved. However, the sentence before this paragraph refers to the passed of the amendment. Suggest editing this paragraph. •Page 27, Section 2c.iii: if possible, when the final document is formatted, suggest making sure that the whole table is together on one page. •Page 29, Section 2c.iv.1 there is weird spacing in this phrase “an equivalent level of education” in the stence that starts with “According to the National Skills Coalition” •Pages 30-36: 2.c.iv Alignment with existing statewide priorities/goals and 2c.iv.2 Education: The workforce-focused plans included in this document are thoughtful and extensive. The education-focused portion of this document is under-developed and either exhibits a lack of outreach to or feedback from education state agencies. <ul style="list-style-type: none"> oPage 34: The education portion of the document only references Texas Education Agency, which oversees K-12 school districts. However, throughout the document community colleges and universities are referenced. We suggest referencing the Texas Higher Education Coordinating Board, which oversees public higher education, and including its strategic plan. Without this, only half of the education agencies and partners are actually included in this process. oTexas Higher Education Coordinating Board’s Strategic Plan is entitled “Building a Talent Strong Texas” and it includes valuable metrics and strategies that are also aligned with the 	yes	1/5/2024	Comment reviewed. Addressed in section 1.

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303	3	<ul style="list-style-type: none"> •Page 54, Texans do not have internet because it is too expensive or not available to them: Bullet 3 states that “Figure 1 shows where Texans use”. We thought Figure 1 was missing, but I found it on page 57. Is it possible to move this Figure up in the document closer to the beginning of this section? •Page 59, Findings: states that “Aging individuals have some of the greatest share of inadequate internet speeds ... next to rural residents.” It’s not clear what “next to rural residents” means. Is it possible to use a different, more clarifying word here so those of us interested in rural or older residents know which group has the most challenges? Or is the phrase next to meant to communicate that they have equal challenges? •Page 59, Findings, last paragraph: states that “Aging individuals often use the internet to access healthcare information or services, the second highest among covered or underrepresented populations.” Is it possible to say, “behind X group” so we know which group uses it most? It’s not 100% clear where this information is coming from so the reader can’t look it up. Even if you cite the source (which would be useful), it’s helpful to the reader to know who the other group is since they are referenced. •Page 63: “TDCJ facilities may participate in remote video visitations at a cost of \$10 for 60 minutes” It’s striking in reviewing this section how underrepresented incarcerated individuals are in this survey. This piece of information about costs to incarcerated individuals raises further questions about whether there is additional data available about usage of remote video visitations or the actual number of sites where the program is available or how many people use it or how much incarcerated individuals are spending on this program. This information may not be available, but if it is, it seems that organizations serving incarcerated individuals would benefit from having this highlighted. •Page 65: “the second highest among covered populations” it would be helpful to reference 	no	1/5/2024	Comment reviewed. Addressed in section 3.a.
304	1	<ol style="list-style-type: none"> 1. Does the BDO have a sense of how the funds will be allocated to reach the stated goals? For example, what percentage of funding will go toward equipment vs. access, etc.? 2. The BOOT program and the upcoming BEAD funding emphasizes inmates as a covered population. Are there any plans to implement digital equity programs for prisoners? 	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan and some are not actionable at this time.
305	2	<ol style="list-style-type: none"> 1. Can the BDO provide a few examples of existing digital opportunity plans? Additionally, are those plans in line with Digital Equity best practices? 2. Does the BDO have any plans for funding ACP or similar program should ACP not be renewed for 2024 and beyond? 	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
306	4	<ol style="list-style-type: none"> 1. Will applicants be able to access the raw data for use in their proposals? 	no	1/5/2024	Comment reviewed. No changes made. BDO plans to make this data available via the open data portal
307	5	Will certain populations be given preference over others for TDOP funding?	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.
308	6	<ol style="list-style-type: none"> 1. Will the TDOP funding be released at one time or in Phases like the BOOT program? 2. If it is going to be a phase approach, what is the expected timeline? 	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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309	2	<p>The digital divide, encompassing various definitions, presents a multifaceted challenge that can be addressed through diverse funding strategies. As an IT professional, I frequently encounter inquiries regarding the distinctions between fiber and Spectrum internet.</p> <p>Beyond merely establishing home internet connections, the digital divide has evolved into a more complex issue. Cities and states are striving to offer internet access to all residents, prompting exploration of alternative approaches to tackle this disparity effectively. Optimal utilization of funds involves initiating programs and projects that empower municipalities to furnish resources, thus addressing the digital divide comprehensively.</p> <p>Our focus should extend beyond mere internet connectivity, encompassing all aspects of the contemporary digital landscape. Education and training become imperative to foster digital literacy, equipping individuals to adeptly navigate and adapt to the demands of today's digital world. Moreover, these efforts will contribute to workforce development, enhancing the skills needed to thrive in the evolving digital environment.</p> <p>Municipalities should have the capability to establish Technology Centers as a means to tackle the numerous challenges posed by today's digital divide.</p>	no	1/5/2024	Comment reviewed. No changes made. Elements of this comment already exist within the plan.

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310	2	<p>"2.c.iv Alignment with State Outcome Areas" should lay out labor standards and workforce guidelines to be applied to all programs and public funding sources within the BDO to promote good jobs and safe workplaces within the telecommunications industry. The deployment of funds from the BOOT and BEAD programs will require more skilled telecom workers to ensure that Texans can effectively afford and adopt quality broadband services. In December 2022, The U.S. Government Accountability Office (GAO) published a report titled "Telecommunications Workforce: Additional Workers Will Be Needed to Deploy Broadband, but Concerns Exist About Availability."</p> <p>The report's analysis found that thousands more skilled workers will be needed to deploy broadband and 5G funded by recent federal programs. Assuming a 5-year funding time period, about 34,000 additional workers would be needed by the peak year of funding in 2023.</p> <p>Currently, the telecommunications sector faces workforce challenges that make it difficult to hire and retain workers, notably wage stagnation and an increasingly subcontracted workforce:</p> <p>a)Wage Stagnation and Labor Market Challenges - The telecommunications industry has faced wage stagnation in recent decades. The lowest-wage telecommunications workers (at the 10th percentile in the wage distribution) have seen inflation-adjusted wages fall 0.3% annually since the 1970s, and the median telecommunications worker wage increased just 0.4% annually, compared with 1.8% annual productivity growth in that period. Wage stagnation translates into difficulty hiring and retaining workers, and creates problems for the stability and health of the telecommunications labor market.</p> <p>b)Need for directly employed workforce - Unlike in other types of construction, broadband and telecommunications are characterized by historical direct employment with only the recent proliferation of subcontracting arrangements. In traditional heavy construction, a general contractor manages the project and selects craft-based contractors. Given the long history of this arrangement, both employers and labor unions in traditional construction have</p>	no	1/5/2024	Comment reviewed. No changes made. Outside the scope of the digital opportunity plan.

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311	2	<p>Chapter 2: Introduction & Vision for Digital Opportunity 2.c.iv.1 Economic and Workforce Development</p> <p>The Harris County Office of Broadband strongly urges the State of Texas to adopt language prioritizing middle-skills job training and certifications to grow these skills in our workforce and expand career paths in digital technology, such as for telecommunications technicians. Including this language in the Texas Digital Opportunity Plan directly aligns with the Texas Workforce Commission’s 2023-2027 Strategic Plan, strengthening the State’s broadband workforce, services, and competitiveness.</p> <p>Occupational forecasting from the Fiber Broadband Association (FBA) estimates that nearly 205,000 fiber optic technicians will be needed over the next five years. In addition, the U.S. Department of Labor reported a projected average growth of 6% for telecommunications technicians’ positions nationwide, in contrast to a three percent 3% projected average growth for all occupations.</p> <p>In 2022, the national annual median pay for a telecommunications technician was \$60,190, more than 88% higher than the \$31,975 median in Harris County. Job training and trade certification programs are critical components to increasing personal income, housing stability, and economic mobility by attaining higher wage employment in high demand occupations, while growing the State’s economy and technical workforce.</p> <p>In Harris County, the majority, 52%, of residential and business units served by a commercial service are not connected by fiber. Given the expected national increase in fiber network deployments as part of the Broadband Equity Access and Deployment (BEAD) program, it is imperative that Texas utilize these funding opportunities to upskill its workforce across all sectors including low-income households and individuals. A skilled workforce will expedite the expansion of the State’s fiber backbone into underserved areas and densify fiber where it currently exists, benefitting individuals, businesses, and the State.</p>	no	1/5/2024	Comment reviewed. Addressed in section 2.c.iv.1.

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312	3	<p>Chapter 3: Current State of Digital Opportunity 3.a.v.4 Gulf Coast Region</p> <p>While the TDOP plan (found on page 106) emphasizes the potential for improved broadband connectivity in the Gulf Coast region, it is crucial to acknowledge that the actual connectivity experienced by the covered populations might deviate significantly. Estimates provided by the Harris County Office of Broadband, utilizing data from the Federal Communications Commission (FCC) National Broadband Map, suggest that Harris County alone may have approximately 550,000 underserved or unserved broadband locations. It is imperative to note that these figures are estimations and should be regarded as reference points rather than precise measurements.</p> <p>A matter of particular concern arises in high-poverty areas, where an estimated 140,000 of these underserved or unserved broadband locations are situated in renter-occupied multi-family buildings. This information is drawn from both the FCC National Broadband Map and the US Census. It is crucial to account for the evolving conditions in the classification of these locations, as this data represents approximations and may not comprehensively capture the intricacies of the connectivity challenges in the region.</p> <p>An examination of Harris County Census data further indicates that BEAD covered populations are disproportionately concentrated in zip codes containing BEAD-eligible MDUs (Multi-Dwelling Units). In essence, MDUs serve as a direct conduit to assist our target covered populations. Specifically, the covered populations residing in Harris County MDUs and facing connectivity challenges include: Households in Poverty, Seniors, Veterans, Individuals with Disabilities, Rural Dwellers, Black, Native American, Asian, Pacific Islander, Two or More Races, Some Other Race, and Hispanic or Latino of Any Origin. The significant concentration of these underserved areas underscores the urgent need for targeted deployments.</p> <p>The Harris County Office of Broadband urges the State of Texas Broadband Development</p>	no	1/5/2024	<p>Comment reviewed. No changes made. Elements of this comment already exist within the plan and some are not actionable at this time.</p>

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313	5	<p>Chapter 5: Implementation 5.c.ii Strategy 2: Fund Local Partners</p> <p>The Harris County Office of Broadband recommends the proposed grant program include criteria that places a high priority on plans that address disparities and employ an effective, regionally coordinated approach between governmental and non-governmental entities focused on broadband availability and access. A cornerstone of the State of Texas' TDOP deployment plan should be communication and coordination with local and regional entities to align programs and people Statewide for more effective outcomes. Leveraging the strength of existing coalitions and organizations will extend TDOP's impact. Existing entities providing digital opportunity programming and services have well-developed, coordinated outreach programs to residents and communities most in need. The State can immediately add value by formally collaborating with governmental and non-governmental entities leveraging existing effective methods to reach Texans. The Harris County Office of Broadband recommends the State make a concerted effort to work with a diverse network to achieve its goals and strengthen the overall impact from the work. The Harris County Office of Broadband supports the proposed grant criteria and prioritization matrix outlined by the State, as detailed on page 165 of the TDOP. It is recommended that these criteria encompass all covered populations to ensure a more equitable evaluation of grant applications. This inclusive approach will contribute to a fair and comprehensive consideration of all applicants, fostering a more balanced and accessible distribution of digital opportunity resources.</p>	no	1/5/2024	Comment reviewed. Addressed in section 5.c.ii.
314	5	see attachment	yes	1/5/2024	Comment reviewed. Addressed in sections 5. and 5.c.ii

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315	1	Thank you to the Texas BDO for the opportunity to provide comments. As with BOOT and BEAD, the most important rule or policy of the TX BDO that will need to be changed is the reliance on the TX Lightbox Map and the FCC Broadband map created by CostQuest. As we have shared with the BDO, and Comptroller Hegar has noted, the maps do not represent the digital divide in Texas. They represent the ISP reporting of who they contend they "can" cover in 10 days and that they have some form of infrastructure that "passes" the community or location in question. The actual residential household subscriptions/actual service or type of service is not part of the "fabric". Thus, when the BOOT program was opened up, not a single ISP or subgrantee (partner cities, counties, anchor institutions) could apply in the Rio Grande Valley Region (as one example). Several of us had to write letters to the elected officials who wanted to understand why no one applied. No one applied because they did not qualify according to BDO rules. One can see why they would be surprised-- after all as you point out in your Executive Summary for the Texas Digital Opportunity Plan: "The data demonstrates that needs are not equal across populations and geographies, and thus the plan requires approaches tailored to the communities most in need. For example, rural and economically disadvantaged ... demonstrate a higher overall need. The Upper Rio Grande and South Texas regions experience the highest rates of digital disparity coupled with limited organizational resources (p. 8-9)." Because of historic underinvestment and disinvestment and other systemic barriers, the region is one of four "persistent poverty" regions in the country. It is also over 93% Hispanic. In some of our focus groups we also learned that the "reason" many residents do not have a household fixed internet subscription is that the service is so poor (often relying on satellite (highest cost/least reliable), wireless that is too far from the fiber tower, legacy cable, or DSL (copper telephone lines). So, the poor unreliable service is not worth the high cost. It's often a logical family decision. Because of the interrelated nature of the "three legs of the stool" of digital opportunity which include the focus of the TDOP, we should not look at the BDO IJA programs as unrelated. There are often reasons for low "adoption" that are logical when the service is unreliable. We are finalizing our Rio Grande Valley Digital Opportunity Plan and will provide it to the BDO by early February 2024. During	yes	1/5/2024	Comment reviewed. Addressed in Appendix A.
316	3	Would like to see more broadband access and affordability in rural areas.	no	1/5/2024	Comment reviewed. No changes made.
317	1	see attached	yes	1/6/2024	Comment reviewed. Addressed in section 5.c.iii.

Appendix J.1: Attachments to Public Comments



Modern Slavery Act 2015

Slavery and Human trafficking statement (“Statement”) as required under s54 of the Modern Slavery Act 2015 (“the Act”) for the financial year ended 31 December 2020 (“Financial Year”). This statement applies to all companies within Intercontinental Exchange, Inc. (“ICE”) that are required to have a modern slavery statement in accordance with the Act (“the Relevant Companies”).

Introduction

Intercontinental Exchange (NYSE:ICE) is a Fortune 500 company formed in the year 2000 to digitize the energy markets and provide greater price transparency.. ICE is a leading provider of data, technology, and market infrastructure.

ICE provides financial technology and data services across major asset classes that offer our customers access to mission-critical workflow tools that increase transparency and operational efficiencies. We operate [exchanges](#), including the [New York Stock Exchange](#), and [clearing houses](#) that help people invest, raise capital and manage risk across multiple asset classes. ICE operates 13 exchanges and 6 clearing houses worldwide. As the parent company of the New York Stock Exchange, ICE is the premier venue for raising capital in the world, driving economic growth and transforming markets.

Our comprehensive fixed income [data services](#) and execution capabilities provide information, analytics and platforms that help our customers capitalize on opportunities and operate more efficiently. Regardless of asset class, ICE provides the data to help surface new insights that lead to innovation. We design, build and operate an integrated network of data solutions that connect all points of the transaction workflow. From cross-asset pricing and reference data, to analytics and thousands of indices that provide streaming insight, to emerging metrics such as ESG, we securely deliver the data you need. At ICE Mortgage Technology, we are transforming and digitizing the U.S. residential mortgage process, from consumer engagement through loan registration. Together, we transform, streamline and automate industries to connect our customers to opportunity.

Our policies and controls

ICE and the Relevant Companies are committed to ensuring that there is no modern slavery or human trafficking in their supply chains or in any part of their business.

The ICE Modern Slavery Policy reflects this commitment to acting ethically and with integrity in all ICE business relationships, and to implementing and enforcing effective systems and controls to ensure slavery and human trafficking is not taking place anywhere in our supply chains. ICE is committed to maintaining systems and processes that protect its employees and avoid any issue that can be perceived as a human rights violation. ICE implements policies related to non-discrimination, equal opportunity and non-harassment. This financial year has seen the continuation of compulsory anti-workplace harassment and anti-sexual harassment training for all employees across the ICE Group.

ICE believes that its approach to professionalism, respect and integrity has served ICE well, and continues to ensure that the rights of employees and applicants are protected around the world. ICE complies with all applicable laws and regulations on forced or child labor, and the rights of employees to organize a union. The ICE Global Code of Business Conduct, which is applicable to all Directors and all employees of the ICE group, is designed to ensure compliance with our core values that focus on professionalism and integrity.

Assessment of Modern Slavery Risk

It is ICE’s view that it operates within an industry where the risk of modern slavery is low, based on the nature of the relevant products and services as well as the location of significant operations.

Notwithstanding this, ICE unequivocally supports the drive to eradicate modern slavery and fully supports the requirements of the Act. Relevant Companies are undertaking their fifth broad “Modern



Slavery Risk” review of their current vendor base, focusing on the vendors that make up the top 75% of spend and identified relevant third parties.

The Relevant Companies use the ICE Vendor Management Policy, in place since October 2015 to categorise vendors, based on a defined criteria, into High, Medium or Low risk categories. As part of the fifth annual Modern Slavery Risk review, these vendors and relevant third parties are evaluated for Modern Slavery risk using the guidance published by the Walk Free Foundation (and other sources)¹ on tackling modern slavery in supply chains. This review will categorize relevant entities as low, moderate or high risk in terms of their likely involvement in and/or connection to modern slavery. The Relevant Companies are committed to sending out the Modern Slavery Statement and Policy to all Relevant Company vendors that make up the top 75% of spend, as well as the relevant third parties that have been identified.

Any vendors or relevant third parties that receive a rating of medium or higher in the fifth annual Modern Slavery Risk review will also receive a mid-year review aimed at identifying if any further information about the vendor or relevant third party concerning modern slavery has been made available since the previous review. The category of relevant third parties has also been expanded.

Vendor Due Diligence Processes

As part of ICE’s initiative to identify and mitigate relevant risks, the ICE Vendor Management Policy framework comprises two main elements: (i) Due Diligence and (ii) Risk Assessment. These procedures include but are not limited to:

1. Due Diligence and Initial Risk Assessment

All vendors must complete a vendor profile. The Vendor Management Office (“VMO”) performs an initial qualification of the vendor to generate the relevant risk assessments (including but not limited to factors such as Info-sec, HR, Financial, BCP, physical security and compliance with applicable law which includes modern slavery legislation). The depth of the assessments is driven by the criticality, scope of engagement as well as the initial risk qualification. Reviews entail inquiry into legal, regulatory and reputational public and non-public records. Each vendor is evaluated using the vendor rating scorecard as defined within the Vendor Management System (“VMS”).

ICE continues to review the vendor risk assessment process with the aim of ensuring that it can identify vendors that may be affected by modern slavery practices.

2. Risk Assessment

Each vendor will be evaluated and VMO is responsible for evaluating vendors based on a defined criteria and assigning vendors to an appropriate risk class. Risk ratings are reviewed when a material change in the vendor relationship is identified or if the vendor’s ability to provide services to ICE is impacted by an external or internal event. The VMO updates the data in the VMS and a recalculation of the tier is automatically generated. If a recalculation results in the change of a risk tier, a communication is sent to the business owner and respective risk partners notifying them of the change in frequency with which VMO assesses the vendor relationship.

The VMO and business units will periodically consider and review vendors in the highest risk category no less than annually. This takes into account various considerations, including but not limited to changes with the vendor, industry-wide changes (regulatory, legal, or other industry wide change) or changes within ICE VMO (for example information security, BCP, KPI changes).

¹ “The Global Slavery Index 2018” available here: <https://www.globallslaveryindex.org/resources/downloads/#gsi-2018> the Freedom in the World, available here: <https://freedomhouse.org/countries/freedom-world/scores> the US Department of State’s Trafficking in Person’s Report 2020, available here: <https://www.state.gov/reports/2020-trafficking-in-persons-report/> and the US Department of Labour List of Goods and Services, available here: <https://www.dol.gov/agencies/ilab/reports/child-labor/list-of-goods>.



Complaint Reporting Procedures

Complaints or concerns related to ICE accounting, auditing, internal controls or financial reporting can be submitted anonymously and confidentially, or with full disclosure. Our employees around the world have access to a hotline that can be easily found on the company's internal website and is part of ICE's Global Reporting and Anti-Fraud Policy. For external parties wishing to access the hotline, they can refer to the Global Code of Business Conduct policy.

Vendor adherence to our values

ICE has zero tolerance to slavery and human trafficking. To ensure all those in our supply chain and vendors comply with our values, we ensure when entering into a contract with a vendor, our standard terms and conditions require vendors to adhere to all applicable laws, which will include relevant anti-slavery legislation.

**MINISTÉRIO PÚBLICO - Procuradoria da República da
Comarca de Vila Real**
**Procuradoria do Juízo Local Criminal de Chaves - Sec
Inquéritos**
Palácio da Justiça - Largo do Arrabalde
5400-097 Chaves
Telef: 276340520 Fax: 276090048
Mail: chaves.ministeriopublico@tribunais.org.pt



Certificação Cítilus: elaborado em 25-09-2023

802/23.0T9CHV
Exmo(a) Senhor(a)
Jorge Manuel Figueiras Filipe Barreira

VIA E-MAIL

Referência: 38673304

Inquérito 802/23.0T9CHV

Data: 25-09-2023

Assunto: Notificação

Fica V. Ex^a notificado, na qualidade de Autor, nos termos e para os efeitos a seguir mencionados:

De que foi proferido despacho de arquivamento no Inquérito acima referenciado, nos termos do art.º 277º do Código de Processo Penal, cuja cópia se junta.

O/A Oficial de Justiça,

Marcelo Duarte Carvalho



MINISTÉRIO PÚBLICO - Procuradoria da República da Comarca de Vila Real
Procuradoria do Juízo Local Criminal de Chaves - Sec Inquéritos

Palácio da Justiça - Largo do Arrabalde
5400-097 Chaves

Telef: 276340520 Fax: 276090048 Mail: chaves.ministeriopublico@tribunais.org.pt

Inquérito

Os factos denunciados não consubstanciam a prática de qualquer ilícito criminal pelo que determino o arquivamento dos autos nos termos do artigo 277º, nº 1, do Código de Processo Penal.

*

Cumpra o disposto no artigo 277º, nº 3, do Código de Processo Penal.

*

Nos termos da Circular nº 8/2008 da PGR e para os efeitos aí previstos, consigna-se que a prescrição do procedimento criminal ocorrerá em 29.8.2028.

(texto elaborado e revisto pelo signatário, artigo 94.º, n.º 2, do CPP)

Chaves, data e assinatura certificadas digitalmente

O Procurador da República

Alberto Mendes

Appendix J.1: Attachments to Public Comments- Comment 11

CC-7767

Filed 6/30/2021 5:32 PM
Jamie Clem
District Clerk
Nolan County, Texas
Reviewed By: Kayla Deleonardo

1



June 30, 2021

Ms. Jaime Clem
300 E. 3rd St.
Sweetwater, TX 79556**RE: ITIO N.V.
Cause Number: CC-7767**

Ms. Clem,

I represent Brian Villarreal. Mr. Villarreal is appealing this case to the Eleventh Court of Appeals. The trial on this matter was conducted on November 20, 2020. The trial court signed the judgement on May 25, 2021. In addition to this request, Mr. Villarreal will file a Notice of Appeal and Presumption of Indigence.

Mr. Villarreal requests the clerk's record be prepared as required by the Texas Rules of Appellate Procedure 34.5(a), but not limited to:

1. Original Petition for Emergency Protection of a Child, for Conservatorship, and for Termination;
2. Any Amended Petitions;
3. Order of Termination signed and filed on May 25, 2021;
4. Affidavit of Indigence;
5. Statement of Points of Appeal;
6. Notice of Appeal;
7. Request for Documents to be included in Clerk's Records;
8. Request to Prepare Reporter's Record;
9. District Clerk's Notification to court reporter of filing of Presumption of Indigence;
10. Court's Docket Sheet; and
11. Court's Order on Statement of Points of Appeal.

**P.O. Box 1531
Abilene, Texas 79604**danna.wolfe@earthlink.net**770-595-4824 cell
325-261-0335 telephone**

Thank you for your cooperation in this matter. Please let me know should you have any questions or concerns.

Very truly yours,

Danna L. Wolfe



Appendix J.1: Attachments to Public Comments- Comment 104



**STUDENT
FREEDOM
INITIATIVE**

HONORING THE PAST, GUIDING OUR FUTURE.

Broadband and Digital Equity Public Comment

HBCU communities in the state of
Texas

December 2023



Texas Broadband Development Office

Texas Digital Opportunity Plan Public Comment Response

Addendum

From: Student Freedom Initiative (SFI)

For review by the Texas Broadband Development Office: Please note that this document, the SFI MD Statewide Digital Equity Plan Public Comment Response includes (i) the entirety of text submissions contained in the public comment response submitted by SFI to the Texas Office of Statewide Broadband as well as (ii) additional details on facts and figures developed via the SFI community survey and engagement with HBCU communities via joint townhalls.

2.1.2 Our Mission

Observation: The overall vision of the Digital Opportunity Plan encompasses the key dimensions of digital opportunity that must be addressed to close the digital divide in the state of Texas. The Plan outlines six major objectives related to digital opportunity, as well as the strategies proposed to achieve each. We commend Texas for including objectives and associated strategies tied to the challenges disproportionately faced by the state's covered populations. The state could consider further measures in enabling community participation in the planning and implementation of these objectives.

Recommendations:

Consider community input and engagement in addition to data sharing with the Office of Broadband Deployment. Strategy 1 of Objective 1 discusses data sharing regarding covered populations. However, service estimation and aggregated public data sources may not always capture gaps in broadband or device access. For this reason, SFI has engaged with HBCUs to gauge accessibility and affordability in surrounding communities through town halls and surveys. Insights from these outreach efforts are enclosed to provide further context on the specific challenges faced by covered populations in the communities surrounding HBCUs.

Consider implementing feedback mechanisms, such as surveys and community forums. In addition to key performance metrics outlined in Section 5, Texas may also consider creating opportunities for feedback from covered populations to continuously gather input and measure the effectiveness of the Plan's strategies in addressing the challenges they are facing.

2.2 Alignment with Existing Efforts to Improve Outcomes

Observation: The Plan aligns the objectives outlined in Section 2 with Texas's broader goals around economic and workforce development outcomes, educational outcomes, health outcomes, civic and social engagement, and the delivery of other essential services.

Recommendation:

Engage a broader group of stakeholders for alignment and implementation. One of the key goals outlined in the Plan is to advance digital literacy and workforce development to ensure all Texans have access to digital skills needed for a 21st -century workforce. We commend Texas for recognizing that educational institutions are well-positioned to be partners in expanding workforce development and internet access for students. HBCUs are particularly well-positioned to address challenges related to digital literacy due to their proximity to covered populations in surrounding communities.

Texas should expand on and directly name the specific HBCUs that will be involved in the effort to expand digital skills credentialing and advanced IT certifications. For example, HBCUs may be included as partner organizations to offer opportunities for skills development. The Student Freedom Initiative (SFI) has engaged HBCUs to learn of their potential involvement in workforce coalitions within the state to determine the path forward. Partnerships like these exemplify how HBCUs can serve as implementation partners to support education and training programs related to digital upskilling.

Consider adopting a series of state-funded high-technology workforce development programs to address the additional workers needed per year to build infrastructure. As highlighted by the U.S. Government Accountability Office in a 2022 study¹, thousands of additional workers would be needed to build infrastructure defined by the result of funding released by 8 recent broadband programs², depending on the pace at which these programs provide funding. Given the demand for additional workers, targeted funding programs through public-private partnerships could support a robust, targeted digital literacy and workforce development program offering training in areas such as cybersecurity, technical support, and software engineering (Arkansas has developed a similar initiative, Arkansas Fiber Academy: <https://www.arkansascc.org/arkansasfiberacademy>).

Up to 26% of the communities' populations could be a priority for digital literacy outreach – this includes those above the age of 25 with less than a high school degree and those with income at the poverty level.

3.1.1 Digital Inclusion Assets by Covered Population

Recommendations:

Consider an additional strategy of providing increased opportunities for device use and access in public spaces (e.g., device loans from libraries). Objective 2 outlines a goal to ensure access to affordable devices for all Texans addresses increased pathways for device ownership. While most households own at least 1 computing device – ownership ranges from 80-97% – there is an opportunity to increase the share with access to a laptop/desktop computers. In 7 of the 9 HBCU communities', only 54-71% of households own a laptop/desktop compared to state and national averages of 77% and 79%, respectively. Expanding usage

¹ Telecommunications Workforce: Additional Workers Will Be Needed to Deploy Broadband, but Concerns Exist About Availability, U.S. Government Accountability Office, 2022 (<https://www.gao.gov/assets/gao-23-105626.pdf>)

² The 8 programs include Broadband Equity and Access Deployment Program, Rural Digital Opportunity Fund, Capital Projects Fund, Tribal Broadband Connectivity Program, ReConnect Program, Enabling Middle Mile Grants Program, Broadband Infrastructure Program, Rural Broadband Program

opportunities in public spaces accessed by community members may be a complementary effort. 30% of individuals believe there are no nearby public computers readily available (See Figure 1). 16% of individuals indicated interest in expanded programs for device access in public spaces (See Figure 2). Additionally, 36% indicated interest in programs for rental, refurbished or discounted priced devices, suggesting programs to expand device access may have a high impact in HBCU surrounding communities (See Figure 2).

Figure 1: Household device access (% of respondents, N = 79 individuals)

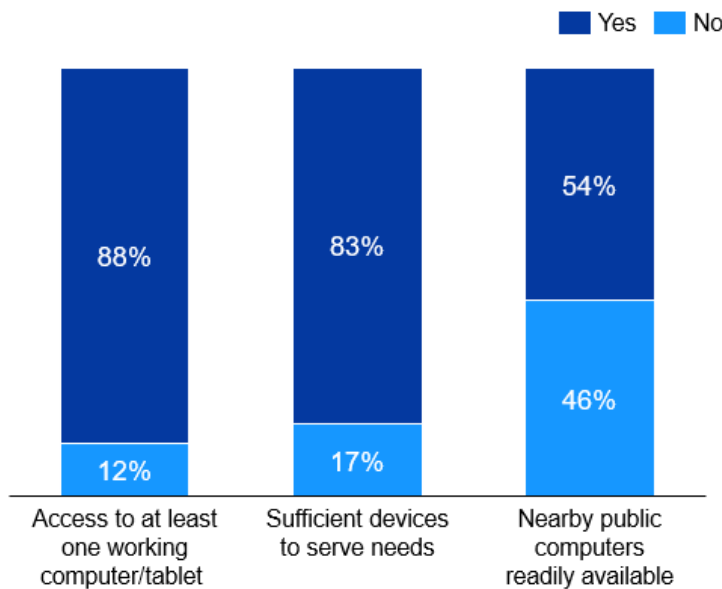
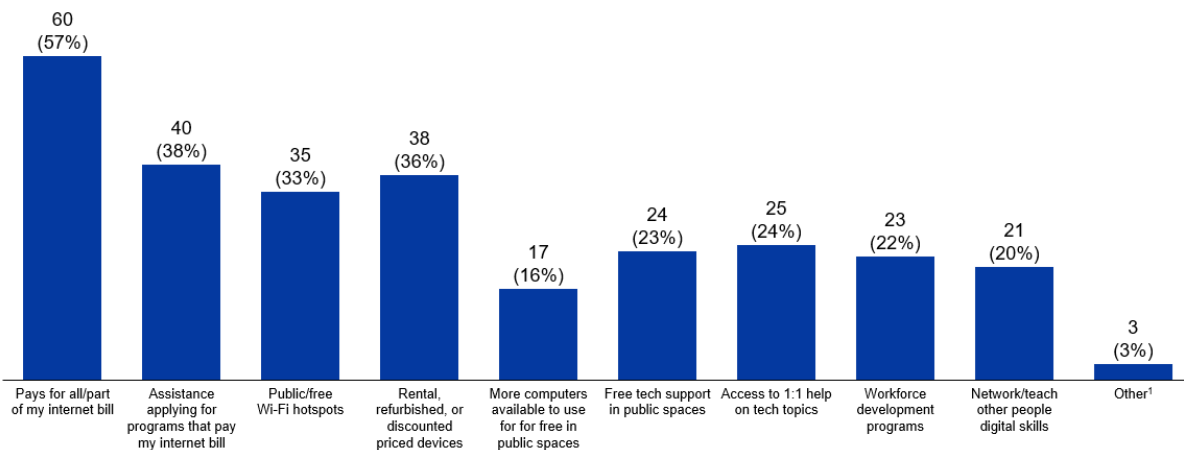


Figure 2: Broadband and digital inclusion programs of interest (# (%)) of respondents, N = 105 individuals)

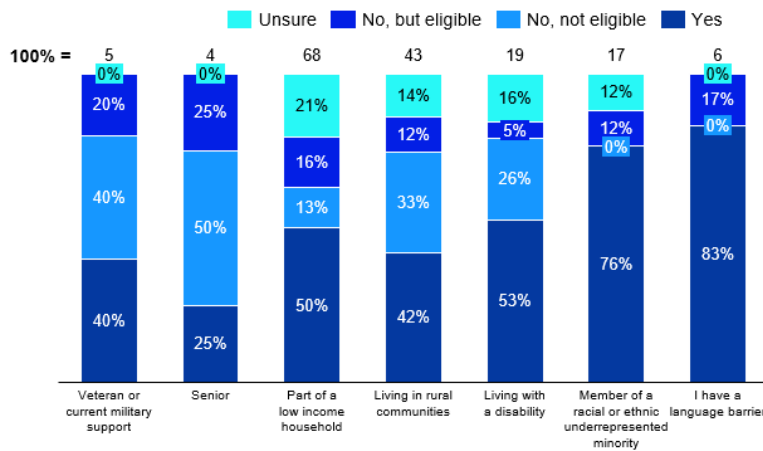


Consider further tailoring the strategies and key activities to the needs of covered populations. Families in these communities are more likely to be living at or within the federal poverty level. For example, ~43% of Paul Quinn’s surrounding community lives on less than 150% of the federal poverty level, which is more than 2x the state average of 19%. Given that

BEAD guidance indicates that priority should be given to such locations, funding in this area will be critical. Given that BEAD guidance indicates that priority should be given to such locations, funding in these areas will be critical (See Appendix A).

The Plan cites supporting statewide efforts of enrollment into the Affordable Connectivity Program (ACP) as a strategy to achieve Texas’ 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. As referenced in the SFI Texas Public Comment Response Addendum, in communities including aging individuals, members of racial or ethnic underrepresented minorities, low-income households, and individuals living with disabilities, up to 25% indicated that they are currently eligible for ACP but are not enrolled (See Figure 3). Statewide contacts should be further defined by Texas to include organizations that serve these covered populations.

Figure 3: ACP participation by population (% of respondents, N = variable by population)



3.2.1 Barriers for Covered Populations, Adoption, and Affordability

SFI would like to highlight the nuances of the communities surrounding the state’s HBCU communities regarding digital opportunity and how this can be considered in Texas’s approach to closing the digital divide. SFI has held joint town halls with Texas HBCUs and conducted interviews with the HBCU leadership and has gathered survey input from over 100 community stakeholders. The lived experiences of residents, businesses, local government, faith-based, and other organizations provided a qualitative layer to the quantitative data analyses.

Increase broadband adoption in HBCU communities and prioritize building infrastructure in low-income communities. Up to ~70% of households in HBCU communities are not subscribed to broadband internet compared to ~30% across the rest of the state and nationally, suggesting a significant gap in connectivity – the communities of Texas College, Jarvis Christian, and Paul Quinn are facing particular challenges.

None of the unserved and underserved locations in four HBCU communities (Huston-Tillotson, Paul-Quinn, St. Philip’s and Texas Southern) have received prior federal funding awarded to

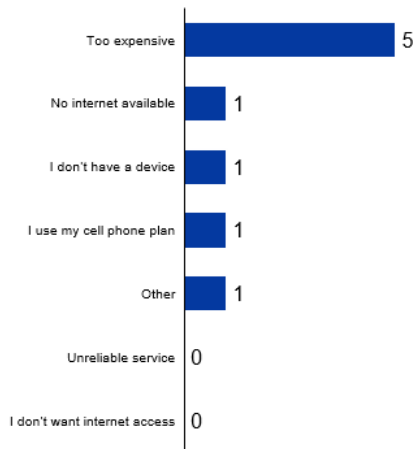
ISPs as part of CAF II, RDOF, RBE, Reconnect, NTIA BIP, and RUS. whereas at least 32% of the unserved and underserved locations in the state have received such funding.

Though most Texas HBCU communities are deemed well-served, there are still several where ~35-70% of locations would be considered underserved or unserved. In addition, there are still many unserved and underserved locations that have yet to receive federal funding – this number is as high as 100% in Huston-Tillotson, Paul-Quinn, Texas Southern, and St. Philip’s surrounding communities.

Some of the households in these surrounding communities are likely to be facing affordability challenges – up to 43% of families in Paul Quinn’s surrounding community are living on an income less than 150% FPL – but ACP uptake is inconsistent (ranging from 3-58%), indicating significant potential to increase enrollment rates in some areas.

This gap is compounded by the number of unserved and underserved locations that remain unfunded by federal programs. Many individuals in these communities are unsatisfied with their current internet, with the main reasons being that it is too expensive, too slow (e.g., pages take too long to load), or has unreliable service (e.g., frequent outages). For those without internet access, the main reason is that individuals find the current cost too expensive (See Figure 4).

Figure 4: Why individuals do not have internet (# of respondents, N = 6 individuals)

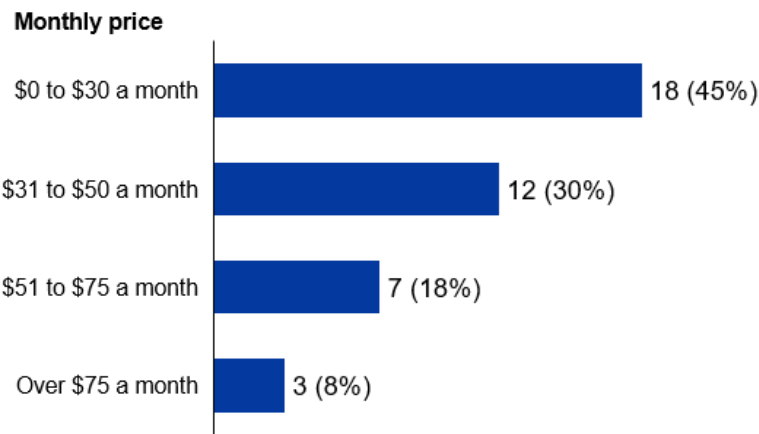


Drive positive impact in HBCU communities through affordability levers. Many of the households in communities surrounding HBCUs are likely to be facing affordability challenges. ACP enrollment within Huston-Tillson’s and Prairie View’s surrounding communities is much lower than the state – Huston-Tillson’s rate is 3% vs. ~35% in the state and nationally – indicating that increasing affordability awareness could be considered a priority.

Up to 41% of respondents who are formerly incarcerated, living with a disability, from low-income households, or part of racial or ethnic underrepresented minorities find the cost of internet connection to be unaffordable. Respondents would consider <\$30/month affordable, which is less than half of the state average cost of \$72.94/month, as stated in Section 3.1.5 (See

Figure 5). 57% of respondents shared interest in a program that would assist in the costs associated with internet service, demonstrating potential impact for expansion of low-cost internet programs (See Figure 2).

Figure 5: Affordable monthly price for internet (# (%) of respondents, N = 40 individuals)



Enhance device access in HBCU communities. As Texas recognizes, the lack of device access is one of the primary barriers for internet adoption among racial and ethnic underrepresented minorities, veterans, and individuals living with disabilities. HBCU communities are less likely to have access to internet-compatible devices. HBCU communities are less likely to have access to internet-compatible devices – in 5 of the 9 communities, 29-40% of households do not have desktops/laptops vs. 23% across the state and 21% nationally – indicating potential demand for widely accessible and inexpensive options.

4.1 Coordination and Outreach strategy

Recommendation:

Consider deepening partnerships with HBCUs in the state. Texas may consider providing additional funding to create a similar program to the NTIA CMC grant program. Funds could be directed to upgrading and expanding the fiber and wireless infrastructure on the respective campuses (public Wi-Fi hot spots) and creating digital navigator immersion community outreach programs with college students as instructors. As mentioned before, HBCUs are in a strong position to provide broadband & high-tech specific job training programs to their local communities that would assist in developing deeper cooperation, relationships, and partnerships with each HBCU targeting covered populations, which may be highly represented in the surrounding communities.

HBCUs may be able to help advance several of Texas’s outlined objectives, given their central role in their surrounding communities. This positions them well to expand opportunities for public device access, disseminate information about state and local government programs, and offer opportunities for civic and social engagement for covered populations. In addition to being central to the community, HBCUs can serve as a partner in planning and enhancing educational programs targeted towards internet safety, digital literacy, and workforce development.

5.1 Implementation strategy and key activities

Recommendation:

More clearly differentiate the relative execution timing of short- and long-term goals.

While the Plan outlines KPIs and a timeline associated with each of the six goals, there is no specific timeline for measures of progression or completion provided. Including designated timeframes for each of the goals will better ensure the state is on track to achieving the targeted outcomes.

Consider long-term sustainability of outputs in continuing support for broadband access and equity. Texas may find it helpful to address the sustainability of initiatives beyond the five-year timeline and how the state will continue to support digital equity efforts through longer standing programs.

Consider including the criteria for grant applications and the rationale behind the prioritization of funds. Across all goals, each has strategies requiring additional funding towards existing programs and organizations throughout the state. By clearly outlining the criteria across the numerous grants and provision of funds, community stakeholder organizations will be able to better prepare for upcoming funding opportunities.

Relatedly, 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. This is especially important given that SFI has learned from engagement with community organizations that they would be interested in offering such digital inclusion programs and services if additional funding were available.

Appendix A

FOR INTERNAL USE ONLY

Synthesis of insights from Texas's community needs assessment

PRELIMINARY, WORK IN PROGRESS

Based on this analysis, there are **3 potential focus areas to increase broadband and digital equity in Texas's HBCU communities:**

- Increase broadband adoption amongst those without subscriptions
- Expand broadband availability to the remaining underserved and unserved locations, including low - income areas
- Address additional challenges with internet and device affordability and access

Digital equity dimension

- Broadband adoption
- Infrastructure
- Device access
- Affordability
- Digital literacy
- Demographics

Initial insights

Up to ~70% of households in HBCU communities are not subscribed to broadband, which is ~2x the state average

Though most Texas HBCU communities are deemed well -served, there are **still several where ~35-70% of locations would be considered underserved or unserved**. In addition, there are **still many unserved and underserved locations that have yet to receive federal funding** – this number is as high as 100% in Huston - Tillotson, Paul-Quinn, Texas Southern, and St. Philip's surrounding communities

While most households own at least 1 computing device – ownership ranges from 80-97% – **there is opportunity to increase the share with access to a laptop/desktop computers**. In 7 of the 9 HBCU communities¹, only 54 -71% of households own a laptop/desktop compared to state and national averages of 77% and 79%, respectively

Some of the households in these surrounding communities are likely to be facing affordability challenges – up to 43% of families in Paul Quinn's surrounding community are living on an income less than 150% FPL – **but ACP uptake is inconsistent (ranging from 3-58%), indicating significant potential to increase enrollment rates in some areas**

Up to 26% of the communities' populations could be a priority for digital literacy outreach – this includes those above the age of 25 with less than a high school degree and those with income at the poverty level

The HBCUs are in **diverse surrounding communities**, where a **significantly higher share of Black individuals** reside – up to 70% in Paul Quinn's community – compared to the state (12%)

Source: US Census Bureau 2021 ACS 5 -year estimates, US Census ACS Public Use Microdata Sample (PUMS), CostQuest, FCC DATA Maps May 2023, USAC, Education Superhighway ACP Enrollment Dashboard
DOCUMENT INTENDED TO PROVIDE INSIGHT FOR CONSIDERATION BASED ON CURRENTLY AVAILABLE INFORMATION AND IS NOT INTENDED TO PRESERVE OR PROMOTE SPECIFIC ACTION

1

FOR INTERNAL USE ONLY

Current state of digital equity across SFI partner Texas HBCUs

PRELIMINARY, WORK IN PROGRESS
As of October 2023

Legend:

- Target SFI Partner schools
- Rurality
- Not compared to state
- On par with state (within +/- 5pp)
- Lower than state (>5pp in negative direction)
- Higher than state (>5pp in positive direction)

Digital equity dimension	Metric	Huston-Tillotson	Jarvis Christian	Paul Quinn	Prairie View A&M	Texas Southern	South-western Christian	St. Philips College	Wiley	State	National
Broadband adoption	HHS with an internet subscription	89%	76%	60%	82%	85%	80%	74%	77%	87%	87%
	HHS with broadband ¹	80%	31%	39%	44%	70%	65%	52%	30%	69%	72%
Infrastructure	Share of served locations	99.9%	39%	99.6%	67%	99%	88%	99.9%	91%	97%	88%
	Unserved and underserved locations unfunded by federal programs ²	100%	0.2%	100%	94%	97%	99%	100%	100%	78%	68%
	ISPs providing fiber technology ²	9	2	3	1	4	3	9	1	1	-
Device access	HHS with access to ≥1 device ³	96%	85%	80%	97%	91%	91%	88%	91%	89%	94%
	HHS with a desktop or laptop	88%	64%	54%	79%	77%	71%	55%	40%	65%	77%
Affordability	Families <150% FPL ⁴	17%	20%	43%	13%	24%	23%	37%	33%	26%	19%
	ACP-eligible HHS	32%	34%	46%	40%	47%	41%	45%	45%	48%	41%
	ACP-eligible HHS enrolled	27%	58%	39%	3%	32%	35%	52%	27%	48%	35%
Digital literacy	Families 100-125% FPL	2%	5%	9%	1%	4%	6%	7%	7%	2%	4%
	Aged 25+ without high school degree	8%	9%	21%	9%	10%	18%	26%	30%	15%	15%
Demographics	Racial/ethnic URP ⁵	42%	29%	97%	69%	64%	59%	87%	88%	68%	54%
	Black population	10%	25%	70%	43%	39%	24%	11%	39%	38%	12%
	Living with a disability	9%	20%	23%	9%	11%	14%	18%	13%	20%	11%
	Rural population ⁶	0%	100%	0%	22%	0%	100%	0%	0%	100%	12%

1. Broadband defined as fiber, cable, or DSL internet.
 2. As of May 2023, based on the FCC DATAmaps; does not account for any challenges. Federal funding awarded to ISPs as part of CAF II, RDOF, RBE, Reconnect, NTIA/BIP, and RUS.
 3. Includes smartphones.
 4. FPL = federal poverty level.
 5. URP = Under-represented population.
 6. Using OMB definition of rurality (i.e., <50,000 population).

Source: US Census Bureau 2021 ACS 5-year estimates, US Census ACS Public Use Microdata Sample (PUMS), CostQuest, FCC DATAmaps May 2023, USAC, Education Superhighway ACP Enrollment Dashboard, 2010 Rural/Urban Commuting Area Codes
DOCUMENT INTENDED TO PROVIDE INSIGHT FOR CONSIDERATION BASED ON CURRENTLY AVAILABLE INFORMATION AND IS NOT INTENDED TO PRESERVE OR PROMOTE SPECIFIC ACTION

5



CHANGING EXPECTATIONS

PO Box 1965, Round Rock, Texas 78680 | phillip.eaglin@changeexpectations.org | (512) 496-6824

For inclusion in the TDOP, I am providing a digital opportunity plan for "Enhancing Artificial Intelligence (AI) Literacy for Black Communities in Central Texas." The requested AI literacy initiative aligns with the recent recommendations from the National AI Advisory Committee and with the recently introduced bill in the US Congress on the AI Literacy Act for fostering greater AI understanding for education and the workforce preparation of unserved and underserved populations. Please include the following digital opportunity plan.

Changing Expectations, an Austin-based 501c3 nonprofit organization can help with the implementation of the TDOP plan. I am Phillip G. Eaglin, PhD, Founder and CEO of Changing Expectations, and I recently served as the Principal Investigator of the Changing Expectations Computer Science for ALL Research-Practitioner Partnership (CSforALL RPP) Project, which provided the African American and Hispanic Students with Disabilities in Computer Science Research Alliance with funding from the National Science Foundation (NSF). Dr. Eaglin's LinkedIn page is here [Phillip G. Eaglin, PhD | LinkedIn](#)

Dr. Eaglin has 33 years of experience as a STEM, computer science, and artificial intelligence educator working at the local, state, regional, and national levels. Dr. Eaglin has worked as a middle and high school science teacher, a science and STEM professional development and technical assistant provider for the US Department of Education's Eisenhower Math and Science Consortium and the Comprehensive Centers, and an educator preparation specialist for the Texas Education Agency. In his work at Changing Expectations, Dr. Eaglin has served as the Principal Investigator for two NSF projects on broadening participation in computing -- the first one focused on preparing Black and Hispanic boys in cybersecurity and the second one a Computer Science for ALL Research-Practitioner Partnership (CSforALL RPP) on advancing inclusive artificial intelligence (AI) education and social justice in computing. Here's more information about our National Science Foundation [MBK - Coding Makerspace — Changing Expectations \(changeexpectations.org\)](#) Here's more information about our Changing Expectations CSforALL RPP. [CSforALL:RPP — Changing Expectations \(changeexpectations.org\)](#) Here are MBK Coding Makerspace photos [MBK Coding Makerspace — Changing Expectations \(changeexpectations.org\)](#) and

a video from the [MBK Coding Makerspace on WebVR](#) with the support of the Mozilla Foundation.

Dr. Eaglin currently serves on one of the founding steering committee members of the Computer Science Teachers Association's Black Affinity Group, as an Executive Officer of the Austin Area Alliance of Black School Educators, and as a Life Member of the National Alliance of Black School Educators. Most recently, Dr. Eaglin received The Black Fund Award from the Austin Community Foundations to support the 5th cohort of Black male youth learning to design AI voice chatbots for social justice in the Changing Expectations My Brother's Keeper (MBK) Coding Makerspace on AI as well as the City of Austin award to support the 1st cohort of Black female youth in the Changing Expectations Black Girls in AI Coding Makerspace.

Dr. Eaglin, ten young men of color, and their parents from Austin, Texas received a personal invitation to the White House Conference on Inclusive STEM Education for Youth of Color on October 28, 2016, and the My Brother's Keeper STEM + Entrepreneurship Roundtable Discussion on Opening Doors and Creating Opportunities on October 27, 2016. Here's an Austin news story about our White House visit [Local student group meets tech industry leaders at White House | kvue.com](#)

A 501c3 nonprofit founded in 2010, Changing Expectations provides the highest impact STEM, computer science, and artificial intelligence education to inspire primarily Black youth in K-16 to pursue computing careers and tech entrepreneurship and to support their teachers and parents in underserved, low-income schools.

Specifically, Changing Expectations suggests that the TDOP includes this digital opportunity plan to support AI literacy programs that provide AI education focused on developing AI users, AI managers, and AI developers for the Black community in Central Texas. Our goals are to:

- Close the digital divide by ensuring Black communities can access and use AI skills crucial for 21st-century education and the workforce
- Increase the number of Black AI users, managers, and developers
- Address relevant social issues like racial bias in AI through project-based learning

To achieve these, Changing Expectations will leverage our expertise in providing AI education programs starting in 2019 through our National Science Foundation project on CSforALL. Our AI voice chatbot design and literacy

education and workforce preparation programs will empower participants to gain firsthand experience mitigating algorithmic bias by collaborating to build AI chatbots that serve the Black community, like providing resources to victims of police violence.

Changing Expectations is also prepared to support underserved parents in accessing the benefits of AI, like using ChatGPT to help their children with their homework. Once parents are comfortable with ChatGPT, they can start using it to help their children with their homework in many ways. For example, ChatGPT can be used to generate ideas for writing assignments, to help with research, and to check for grammar and spelling errors.

Changing Expectations plans to collaborate with local schools, businesses, and community groups to make the AI literacy initiative accessible through multiple pathways – both online and in-person. By creating this AI Literacy program for the Black community, one of the most underserved groups, we hope to serve as a model at the national level.

Changing Expectations believes this comment strongly aligns with recently introduced legislation in the US Congress on December 15, 2023, through H.R.6791, the AI Literacy Act to amend the Digital Equity Act of 2021 to facilitate artificial intelligence opportunities.

The AI Literacy Act would:

Amend the Digital Equity Act and codify AI literacy as a component of digital literacy.

Define AI literacy as the skills associated with the ability to comprehend the basic principles, concepts, and applications of artificial intelligence, as well as the implications, limitations, and ethical considerations associated with artificial intelligence.

Highlight the importance of AI literacy for national competitiveness, workforce preparedness, and the well-being and digital safety of Americans.

Ensure the eligibility of efforts to increase AI literacy in public elementary and secondary schools, in community colleges, in institutions of higher education, and by community institutions like nonprofits and libraries through the Digital Equity Competitive Grant Program.

A one-pager of the AI Literacy bill can be found [here](#) and full text of the bill can be found [here](#).

Inclusive AI literacy for the Black community needs to include education and workforce development to prepare as AI managers and developers, not just AI

users. Providing comprehensive AI literacy education for the Black community is necessary to create and benefit from equitable AI for Black people. Here's a study to further support the need for increased diversity among AI developers:

'Disastrous' lack of diversity in AI industry perpetuates bias, study finds

<https://www.theguardian.com/technology/2019/apr/16/artificial-intelligence-lack-diversity-new-york-university-study>

The current [Changing Expectations Closing the AI Education Gap Initiative](#) supports the implementation of an artificial intelligence (AI) literacy curriculum that will be offered to educators across Texas and youth through the Changing Expectations My Brother's Keeper Coding Makerspace and Black Girls in AI Coding Makerspace. The Closing the AI Education Gap Initiative creates digital equity and social justice in computing through a variety of methods, including teacher community of practice meetings, in-person and virtual coding makerspace sessions, conference presentations, online courses, and one-on-one mentorship. Texas educators and their Black students receive access to and support with designing an AI voice chatbot that addresses a culturally relevant problem: anti-Black violence in online and in-person spaces, including in police violence and brutality.

The Changing Expectations My Brother's Keeper (MBK) Coding Makerspace has been previously supported by the National Science Foundation, the Mozilla Foundation, the Micron Foundation, The Black Fund, and Google Fiber. The Black Girls in AI Coding Makerspace is currently being supported by the City of Austin and the Austin Community Foundation. The MBK Coding Makerspace is an exciting and community-oriented program. We provide a fundamental AI course as self-paced pre-work to familiarize students with the basic concepts of AI (e.g., machine learning, natural language processing), all while bolstering their capacity to disrupt anti-Black violence online and in person. The Changing Expectations [Black Girls in AI Coding Makerspace](#) began in July 2023 to complement the My Brother's Keeper Coding Makerspace on AI. In 2022, we completed the fourth cohort of the My Brother's Keeper Coding Makerspace on Artificial Intelligence with the Micron Foundation's support. [MBK Coding Makerspace 2021 - 2022 — Changing Expectations \(changeexpectations.org\)](#)

Here are links to more information about the Changing Expectations AI literacy education online courses that we provide:

Youth Creating AI Voice Chatbot Projects for Social Justice Course

<https://www.changeexpectations.org/ai-chatbot-for-social-justice>

Youth Creating AI Computing Projects with Scratch and Micro:Bit

<https://www.changeexpectations.org/ai-computing-microbit>

During Saturday makerspace sessions and virtual meetups each semester, we will run a “Build a Voice-Enabled Chatbot for Social Justice” program that is fun and competitive. We use and improve the Changing Expectations AI Course curriculum on designing AI voice-enabled chatbots to solve social justice problems as the guide for getting students to build real, functioning voice chatbots using IBM Watson Assistant. Participants must involve family members in the research and design process for their voice-enabled chatbot projects, which extends the reach and increases the number of community members who benefit from accessing the resources of this work. Our focus is on young people who might otherwise not have access to quality computer science education programs to close the opportunity gaps they face. This is a positive use of youth time and energy that leads to job opportunities that can close the racial wealth gap and build generational wealth for the Black community of Austin, Texas. Anti-Blackness persists in our educational system and the community is in dire need of Black-led education for us, by us.

In conclusion, there is a growing demand for AI skills in the workforce. According to a recent report by the World Economic Forum, AI is one of the top 10 skills that will be in demand in the future. However, the Black community is underserved and underrepresented in the field of AI. This is due to a number of factors, including lack of access to quality education and teacher professional development, unconscious bias, and systemic racism.

This digital opportunity will address these market needs by providing AI literacy education to the Black community in Central Texas. The program will provide hands-on experience with AI, as well as instruction in the theoretical foundations of AI. This program will help to close the digital divide and ensure that Black students have access to the skills they need to succeed in the 21st century economy. It will also help to increase the number of Black teachers and Black parents who are teaching AI literacy. This will help to create a more diverse and inclusive workforce in the field of AI.

The Closing the AI Education Gap program aligns with building equity and creating a sustainable ecosystem in the following ways:

- **Equity:** The program provides AI literacy education to the Black community in Central Texas. This helps to close the digital divide and provide digital equity by ensuring that Black people have access to the skills they need to succeed in the 21st century economy. That also helps to create a more equitable society by providing AI education to the Black community who are underrepresented and underserved. It will also help to create a more diverse and inclusive

workforce in the field of AI, which will help to ensure that AI is developed and used for the benefit of all.

- **Sustainability:** The AI literacy program provides hands-on experience with using and managing AI tools, as well as instruction in the theoretical foundations of AI. That helps students to develop the skills they need to use and sustain AI systems that are beneficial to society. It also promotes the responsible development and use of AI and helps to create a more sustainable future. AI has the potential to be a powerful tool for good, but it is important to ensure that it is developed and used responsibly. This digital opportunity helps to promote the responsible development and use of AI by providing education and training to the Black community in Central Texas.



CHANGING EXPECTATIONS

PO Box 1965, Round Rock, Texas 78680 | phillip.eaglin@changeexpectations.org | (512) 496-6824

Digital Literacy, AI Literacy, Home Network, and Device Security for African Americans

African American families recognize the importance of having home broadband, devices, and digital literacy skills training for themselves and their children. They also exhibit a strong desire to improve their own and their children's lives through these technological resources. When provided the opportunity to enhance their skills with technology, African Americans take advantage of it, dedicating themselves to learning, building self-confidence, applying their knowledge, and aspiring to use digital literacy skills to start a business or pursue an alternative career path.

Despite family and personal responsibilities, low-income African Americans challenge themselves to succeed despite the lack of digital opportunities and systemic racism. Building programs based on trust and providing support for digital navigator capacity are recommended as effective strategies to involve the African American community in digital inclusion. Offering free and appropriate digital literacy skills training to African Americans, especially those with limited resources, is an investment with numerous benefits for any community aiming to build a stronger economy and a more inclusive society.

As a marginalized segment of the U.S. population, the TDOP must support the empowerment of the African American community by ensuring access to affordable broadband, computers, and digital literacy skills. Moreover, it is crucial to integrate specific digital skills support to empower the community further. This includes providing consumers with a fundamental understanding of their cable Internet Service Provider (ISP) hardware and home internet network. African Americans should be informed about typical cable ISP hardware security, and suggestions should be offered on how they can enhance their home network security.

In addition, it is important to educate African Americans on staying safe on personal devices when away from a home internet network. Providing practical tips and guidance on maintaining digital security outside the home environment will contribute to a more comprehensive and resilient digital literacy foundation for the African American community. By addressing these specific digital skills needs, the TDOP can prepare African Americans to navigate the digital landscape confidently, fostering both personal and generational success.

In addition, Changing Expectations suggests that the TDOP includes artificial intelligence (AI) literacy programs that provide AI education focused on developing AI users, AI managers, and AI developers in the African American community. That opportunity includes the following goals – close the digital divide by ensuring African American communities can access and use AI skills crucial for 21st-century education and the workforce, increase the number of African American AI users, managers, and developers, and AI literacy education to address culturally relevant issues like racial bias in AI. Changing Expectations can help to implement this plan.

Changing Expectations, an Austin-based 501 c3 nonprofit organization can help with the implementation of the TDOP plan. I am Phillip G. Eaglin, PhD, Founder and CEO of Changing Expectations, and I recently served as the Principal Investigator of the Changing Expectations Computer Science for ALL Research-Practitioner Partnership (CSforALL RPP) Project, which provided the African American and Hispanic Students with Disabilities in Computer Science Research Alliance with funding from the National Science Foundation (NSF). Dr. Eaglin's LinkedIn page is here [Phillip G. Eaglin, PhD | LinkedIn](#)

Dr. Eaglin has 33 years of experience as a STEM, computer science, and artificial intelligence educator working at the local, state, regional, and national levels. Dr. Eaglin has worked as a middle and high school science teacher, a science and STEM professional development and technical assistant provider for the US Department of Education's Eisenhower Math and Science Consortium and the Comprehensive Centers, and an educator preparation specialist for the Texas Education Agency. In his work at Changing Expectations, Dr. Eaglin has served as the Principal Investigator for two NSF projects on broadening participation in computing -- the first one focused on preparing Black and Hispanic boys in cybersecurity and the second one a Computer Science for ALL Research-Practitioner Partnership (CSforALL RPP) on advancing inclusive artificial intelligence (AI) education and social justice in computing. Here's more information about our National Science Foundation [MBK - Coding Makerspace — Changing Expectations \(changeexpectations.org\)](#) Here's more information about our Changing Expectations CSforALL RPP. [CSforALL:RPP — Changing Expectations \(changeexpectations.org\)](#) Here are MBK Coding Makerspace photos [MBK Coding Makerspace — Changing Expectations \(changeexpectations.org\)](#) and a video from the [MBK Coding Makerspace on WebVR](#) with the support of the Mozilla Foundation.

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Appendix J.1: Attachments to Public Comments- Comment 121

12/28/2023

Please Read the full document. The comments section was not able to hold my full comment.

Hello! As a resident of Texas and a happy Starlink user, I am writing to express my disappointment in the Texas Digital Opportunity Plan. While I understand the goal of the plan to extend internet to rural areas in Texas, I am concerned that the plan unfairly excludes Starlink, a cutting-edge technology that has the potential to provide fast and reliable internet to thousands of Texans.

As a customer, I have experienced firsthand the benefits of Starlink's satellite internet technology. The service has been a game-changer for me, providing fast and reliable internet access in areas where traditional providers struggle to reach. I believe that Starlink should be included in the Texas Digital Opportunity Plan, as it would provide a much-needed alternative to the limited internet options currently available in rural areas.

Furthermore, I am concerned that the plan's focus on giving taxpayer money to internet broadband companies could lead to a lack of competition in the market. This could result in higher prices and lower quality service for consumers. By including Starlink in the plan, we can promote competition and drive innovation in the industry, leading to better outcomes for all Texans.

I urge you to reconsider the exclusion of Starlink from the Texas Digital Opportunity Plan and work towards providing high-speed internet access to all Texans, regardless of where they live. Thank you for your time and consideration.

Ch. 1. Executive Summary

Comcast appreciates the opportunity to comment on the Draft Texas Digital Opportunity Plan (Draft) and work with the Texas Broadband Development Office (BDO) to help achieve the goal of universal broadband connectivity, services, and digital skills for all.

The Draft cites U.S. Census data that almost 2.8 million Texas households and 7 million Texans lack broadband access. The Draft also recognizes that the road to close the digital divide requires greater options for affordability and access to a continuum of digital literacy training and skills development to maximize the Internet's capabilities. Comcast agrees with this vision. We recognize the critical roles that the public, private, and nonprofit sectors must play to ensure that digital equity efforts are successful. We are committed to digital equity efforts for every Texas community we serve.

Given our long and proven track record of success expanding broadband access and adoption in Texas, we stand ready to partner with the State in its digital equity efforts through various existing programs.

Ch. 2. Introduction & Vision for Digital Opportunity

As the Draft identifies, achieving success in digital equity aligns with other State agencies' plans and goals for the business and telecommunications sector; educational outcomes; health outcomes; deliveries of essential services; and civic and social engagement. We support this multifaceted approach – gains made in increased broadband adoption, digital literacy, skills, and cybersecurity protections will yield benefits across the State and sectors. That is why it is critical to make strategic investments in programs that have demonstrated results; create a forum for sharing best practices; and convene practitioners and partners for long-term and sustainable initiatives.

2.c.iv.1 Economic and Workforce Development

We applaud the BDO's partnerships with organizations like Goodwill Industries (Goodwill), an organization that Comcast also supports. Goodwill Houston recently recognized Comcast as Business Partner of the year for our partnership and investment in their Career Pathway Program, which provides digital skills training to support transferable career readiness skills and provides participants with an opportunity to earn a credential that supports career placement or advancement. This is an example of a robust model that can be scaled and replicated statewide. By leveraging the work of existing partners and investing in career pathway programs, the State will see success as the Draft seeks to support the Texas Workforce Commission's Strategic Plan's goals of connecting more people to online job searching and applications and ensuring that the workforce receives the skills training needed to prepare for an increasingly digital landscape.

2.c.iv.2 Education

[Comcast and Region 4 Education Service Center partnered with the Texas Education Agency's Connect Texas Program](#) to ensure Texas students had access to Internet during the pandemic. Our Internet Essentials Partnership Program (IEPP) accelerates Internet adoption and provides an opportunity for school districts and other organizations to fund and quickly connect large numbers of students and families to broadband access. Some of our Texas IEPP partners include the University of Houston-Downtown, BakerRipley, and [Lone Star College](#).

2.c.iv.6 Business and Telecommunications

Comcast strongly supports broadband deployment and adoption initiatives in Texas and stands ready to further support the State's efforts. We continue to invest heavily in the State, with investments during the past 3 years totaling \$3 billion, including \$1.2 billion toward technology and infrastructure improvements like Internet network upgrades. Nearly 3 million Texas homes and businesses have access to Xfinity Internet and Comcast Business products and services, including speeds of 1.2 gigabits per second or more.

Over the past 3 years, we added and upgraded nearly 10,000 miles of our network to connect homes and businesses and are preparing for the rollout of our next generation 10G network across the United States, including Texas. This growth is all part of the more than \$20 billion investment we made in our networks nationwide from 2018 to 2022, which now cover more than 60 million U.S. homes and businesses.

Appendix J.1: Attachments to Public Comments- Comment 152



Comcast's \$1B Commitment to Advance Digital Equity and Build a Future of Unlimited Possibilities

Project UP is our comprehensive initiative to advance digital equity and help build a future of unlimited possibilities. Backed by a \$1 billion commitment to reach tens of millions of people, Project UP encompasses the programs and community partnerships across Comcast, NBCUniversal, and Sky that connect people to the Internet, advance economic mobility, and open doors for the next generation of innovators, entrepreneurs, storytellers, and creators.

Our Impact:

10 Years

of leadership in supporting digital equity

\$1 Billion

Committed over the next 10 years

Millions

Of people reached

1,000+

Community partnerships

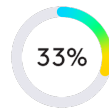
Why Project UP?



50 percent of low-income families lack access to the technology required for online education.¹



By 2030, the demand for workers with basic digital skills will increase by 69 percent.²



1 in 3 people used the Internet to find a new job or earn a higher income after receiving help from a Digital Navigator.³

Our Focus Areas:

Connectivity & Adoption

Connecting people to the Internet, technology, and resources needed to succeed in a digital world.

Skills & Creativity

Creating opportunities and new career pathways in media and technology and opening doors for new voices to be heard and stories to be shared.

Entrepreneurism

Equipping entrepreneurs and small business owners with the skills, digital resources, and opportunities they need to thrive.

internet essentials



NBCU ACADEMY



COMCAST NBCUNIVERSAL LIFT Labs



INNER-CITYARTS

CODE PATH *ORG



1) <https://soeonline.american.edu/blog/digital-divide-in-education>

2) <https://www.mckinsey.com/featured-insights/future-of-work/skill-shift-automation-and-the-future-of-the-workforce>

3) <https://www.bcg.com/publications/2022/how-to-close-digital-divide-with-human-approach>

Ch. 4. Collaboration & Stakeholder Engagement

We applaud the BDO's partnerships with umbrella organizations, including United Ways of Texas. Comcast has a strong partnership with the [United Way of Greater Houston](#), [United Way of Brazoria County](#), and United Way of Galveston, providing them with funding to help advance digital opportunities that drive awareness of affordable connectivity options like the Affordable Connectivity Program (ACP); assist with digital navigation (DN) work; support digital skilling opportunities; and help remove barriers to adoption. During [Digital Inclusion Week 2023](#), we partnered with all 3 United Way agencies to provide device support to individuals who lack access.

Ch. 5. Implementation

5.c.ii Strategy 2: Fund Local Partners

We agree with the BDO that broadband adoption, digital literacy, device access, and other aspects of digital opportunity require locally based, culturally appropriate efforts and funding. In 2023 alone, we committed [more than \\$1 million to help](#) shrink Texas' digital divide by investing in more than 60 nonprofits and organizations that help Texans gain Internet access and develop digital skills necessary for today's workforce.

5.c.iii Strategy 3: Promote Internet Adoption

The Draft recognizes that community outreach and engagement by DNs is vital to assist individuals in signing up for Internet service and learning about affordable options. Comcast currently partners with organizations in Texas to create and support DN programs, including partnering with [SER Jobs to launch a DN program](#) in four of Houston's Complete Communities sites. This program empowers people by teaching them digital skills and demonstrating how Internet access can open opportunities for their whole family. The DNs offer a "back-to-basics" technology-based curriculum and teach participants fundamental skills. Through this partnership, DNs have provided ACP information to 1,650 families, 201 individuals received technical support, 196 individuals were referred/signed up for high-speed Internet through ACP, and 181 individuals increased their knowledge after completing the "back-to-basics" class.

We also launched an employee-based DN pilot within multi-dwelling units to promote digital literacy and increase connectivity among residents.

The Draft recommends defining a low-cost option. Since 2011, 1.4 million low-income Texas residents in 358,000 homes have connected to the Internet through Comcast's Internet Essentials (IE). IE is the largest and most successful broadband adoption initiative in the industry, connecting more than 10 million Americans to broadband Internet at home since launching in 2011. IE is designed to be a wraparound solution that addresses the main barriers to broadband adoption. IE provides subscribers with access to broadband service at speeds of 50/10 Mbps for \$9.95 per month or 100/20 Mbps for \$29.95 per month (for IE Plus), access to millions of Xfinity WiFi hotspots, a wireless gateway at no additional cost, the ability to obtain low-cost or no-cost computers, unlimited data, and free digital skills training.

Appendix J.1: Attachments to Public Comments- Comment 155

Ch. 6. Conclusion

Comcast encourages Texas to focus on digital equity efforts that will be the most impactful, including DNs, digital skills training programs, and partnerships. We believe that partnerships are paramount to advancing digital equity efforts because closing the digital divide starts at the local level by meeting people where they are and responding to their specific needs.

Communities win when the private sector, government, and community organizations join forces to achieve shared goals. To that end, Texas should create an inclusive framework that allows many organizations to participate directly in grant programs and fosters such participation through partnerships and coalitions. Our more than a decade of dedicated digital adoption and community engagement efforts demonstrate that the private sector has been a critical partner in facilitating digital equity efforts to date. TDOP implementation should seek to amplify and scale the efforts of these existing successful relationships and ensure that the private sector continues to be a force multiplier for public funding.

Appendix J.1: Attachments to Public Comments- Comment 156



**Free
Internet
Service**

**Affordable
Connectivity
Program**

Get connected to home internet for FREE!

Save with the Affordable Connectivity Program!

internet essentials

Internet Essentials from Xfinity provides reliable, high-speed home internet to qualifying households for a low monthly price. You may be eligible to get Internet Essentials FREE, when you qualify for and enroll in the Affordable Connectivity Program (ACP).

The ACP is a government program that provides eligible households a credit of up to \$30/month towards internet service.

Apply today if you participate in programs like Lifeline, SNAP/EBT, Medicaid, or free and reduced price school lunch. For more eligibility information, visit xfinity.com/getIE.

Internet Essentials:

~~\$9.95~~ **\$0** After ACP credit
Per Month

Getting started is easy with no annual contract and equipment included at no additional cost.


- Fast, reliable connection with download speeds up to 50 Mbps.
- Good for 4 devices.
- Stream and download music and videos.
- Make video calls and share files.
- Stay connected on the go with over 20 million WiFi hotspots nationwide.
- Access to free online learning and digital resources.

Apply now

 Go to xfinity.com/getIE

 Call 1-855-846-8376

 Visit an Xfinity store

 Scan the code with your phone's camera



Standard data charges apply.

xfinity

Restrictions apply. Not available in all areas. Limited to Internet Essentials ("IE") residential customers 18 years of age or older meeting certain eligibility criteria. If a customer is determined to be no longer eligible for the IE program, regular rates will apply to the selected Internet service. Subject to Internet Essentials program terms and conditions. Home drop-off and professional install extra. Advertised price applies to a single outlet. Actual speeds vary and are not guaranteed. For factors affecting speed visit xfinity.com/networkmanagement. Affordable Connectivity Program: Only eligible households may enroll. Benefit is up to \$30/month (\$75/month Tribal lands). After the conclusion of the Affordable Connectivity Program, you'll be billed at Comcast's standard monthly prices, including any applicable taxes, fees, and equipment charges. Once you have successfully enrolled, you will see the Affordable Connectivity Program credit toward your Internet service. For complete details visit xfinity.com/acp. ©2022 Comcast. All rights reserved. FLY-PHO-BIL-IE-ACP-0922



Servicio de Internet gratis

Programa de Descuentos para Internet

¡Conéctate al Internet GRATIS para el hogar!

¡Ahorra con el Programa de Descuentos para Internet!

internet essentials

Internet Essentials de Xfinity proporciona Internet para el hogar de alta velocidad confiable a hogares elegibles por un bajo precio mensual. Podrías ser elegible para obtener Internet Essentials GRATIS, cuando califiques y te suscribas al Programa de Descuentos para Internet (ACP).

El ACP es un programa gubernamental que proporciona a hogares elegibles un crédito de hasta \$30 al mes para el servicio de Internet.

Solicítalo hoy si participas en programas como Lifeline, SNAP/EBT, Medicaid o el programa de almuerzos escolares gratuitos o de precio reducido. Para más información sobre elegibilidad, visita es.xfinity.com/getIE.



Internet Essentials:

~~\$9.95~~ al mes **\$0** después del crédito ACP

Empezar es fácil sin contrato anual y equipo incluido sin costo extra.

- Conexión rápida y confiable con velocidades de descarga de hasta 50 Mbps.
- Bueno para 4 equipos.
- Haz streaming y descarga música y videos.
- Haz videollamadas y comparte archivos.
- Mantente conectado dondequiera que vayas con más de 20 millones de hotspots de WiFi en todo el país.
- Accede a recursos digitales y aprendizaje en línea gratis.

Solicítalo ahora

🖥️ Visita es.xfinity.com/getIE

☎️ Llama al 1-855-765-6995

🏪 Visita una tienda Xfinity

📱 Escanea el código con la cámara de tu teléfono



Se aplican cargos estándares por la transmisión de datos.

Se aplican restricciones. No está disponible en todas las áreas. Limitado a nuevos clientes residenciales de Internet Essentials (IE) de al menos 18 años de edad que cumplan con ciertos requisitos de elegibilidad. Si se determina que un cliente ya no es elegible para el programa de IE, se aplicarán las tarifas regulares al servicio de Internet seleccionado. Sujeto a los términos y condiciones del programa de Internet Essentials. Entrega a domicilio e instalación profesional son extra. El precio anunciado se aplica a una sola conexión. Las velocidades reales varían y no están garantizadas. Para factores que afectan a la velocidad, visite es.xfinity.com/networkmanagement. Programa de Descuentos para Internet (ACP): Solo pueden inscribirse los hogares elegibles. El beneficio cubre hasta \$30/mes (\$75/mes en Territorios Tribales). Después de concluir el Programa de Descuentos para Internet, se le facturará a los precios mensuales estándares de Comcast, incluyendo cualquier cargo por equipo, tarifas e impuestos aplicables. Una vez inscrito correctamente, verá el crédito del Programa de Descuentos para Internet para su servicio de Internet. Para detalles completos, visite es.xfinity.com/acp. ©2022 Comcast. Derechos Reservados. FLY-PHO-BIL-IE-ACP-0922

Appendix J.1: Attachments to Public Comments- Comment 191



H.B. No. ___

**89th Session
State of Texas**

AN ACT

INTELLIGENT INFRASTRUCTURE COMMERCE ACT

relating to the development and funding of intelligent infrastructure to support advanced transportation services, broadband for all, resilient energy grids, autonomous mobility, transcontinental supply chains, advanced air mobility, border security, and protection of data under a Data Utility Commission.

Intelligent Infrastructure touches the day-to-day life of each of our fellow citizens, and its deployment is crucial to the overall competitiveness and prosperity of our country. Intelligent Infrastructure is the foundation of ARPA-I and will support the 21st century economy. Intelligent Infrastructure provides advanced city services, resilient and growing economies, closing the technology divide, enabling autonomous systems, and, most importantly, securing data for people, cities, and governments. The impact of Intelligent Infrastructure will be measured in the billions in economic expansion, save lives, and create millions of new jobs.

Similar to the 1936 Rural Electrification and the 1956 Interstate Highways; Intelligent Infrastructure will be transformational to commerce and security.

Resilient electrical grids, broadband for all, edge computing, autonomous systems, terrestrial GPS, Industry 4.0 solutions, and the new data economy require Intelligent Infrastructure to support deployment and upgrades. Intelligent Infrastructure can eliminate 70% of the deployment costs and upgrades for the next 30 years. Public Infrastructure Network Nodes (PINNs) will be as foundational as transformers on the electrical grid.

Research and insight about Intelligent Infrastructure: Korok Ray, Director of the Mays Innovation Research Center at Texas A&M University, Brent Skorup at the Mercatus Center at George Mason University. Smart City, Dumb (passive) Infrastructure.

BUILDING A STRONGER AND MORE CONNECTED TEXAS



EXECUTIVE SUMMARY

**“The great economic revolutions in history are infrastructure revolutions,”
Jeremy Rifkin**



INTELLIGENT INFRASTRUCTURE WILL DRIVE THE ECONOMY

Intelligent Infrastructure touches the day-to-day life of each of our fellow citizens, and its deployment is crucial to the overall competitiveness and prosperity of our country. Intelligent Infrastructure (the foundation of ARPA-I) goes beyond transportation and will be the brains of our economy. Providing advanced city services, resilient and carbon-free economies, closing the technology divide, enabling autonomous systems, and most important; securing data for people, cities, and governments. The Economic Impact of Intelligent Infrastructure will be measured in the \$billions in economic expansion, Save Lives, and create millions of new jobs.

Industry 4.0 is driving a resurgence of manufacturing, infrastructure, and construction. As the United States, moves to reestablish manufacturing leadership our productivity is dependent on our ability to deploy Intelligent Infrastructure and automated/autonomous systems outside the factory. The deployment of Intelligent Infrastructure and the Federal Infrastructure Bank can significantly contribute to a national revival of innovation, resilience, economic growth, and job creation.



“Intelligent Infrastructure depends on leadership, It will be the brains of our economy.”

Norm Anderson

WHY INTELLIGENT INFRASTRUCTURE

Resilient Electrical Grids, Broadband for All, Edge Computing, Autonomous Systems, Terrestrial GPS, Industry 4.0, and the 21st-Century Economy require Intelligent Infrastructure to support deployment. Intelligent Infrastructure will eliminate 70% of the deployment costs and upgrades for the next 30



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years. Public Infrastructure Network Nodes (PINNs) will be as foundational as transformers on the electrical grid.

We have kicked the problems forward for two decades. Government agencies have estimated that V2X would cost between \$30 billion and \$65 billion. The National Highway Traffic Safety Administration (NHTSA) estimated that mandating DSRC would cost an extra \$5 billion each year and that by 2060 the total costs would be \$108 billion. Estimates for true 5G are in excess of \$200 billion, the edge devices for micro-grids at \$100+ billion, and edge computing in hundreds of billions.

Intelligent infrastructure will spark a national revival similar to the 1936 Rural Electrification and the 1956 Interstate Highways. Intelligent Infrastructure (the foundation of ARPA-I) will be the brains of our economy. Great research and insight about Intelligent Infrastructure from Brent Skorup at the Mercatus Center at George Mason University. Smart City, Dumb (passive) Infrastructure.

INTELLIGENT INFRASTRUCTURE ENABLES

BROADBAND	RESILIENCE
Broadband for all is a national priority as spectrum is where we will build our economic future. The national buildout of Intelligent Infrastructure will eliminate the Digital Divide and allow us to upgrade systems for decades to come.	Micro-grids will be vital to ensure we have resilient energy delivery. New demand coming to the grid from electrification of mobility, manufacturing, and water treatment. We need our grids to be intelligent.
MOBILITY 4.0	SUPPLY CHAIN
New Mobility solutions provide distributed, multi-modal, on-demand/door-to-door transportation and connected roadway coordination. Providing advanced mobility to the elderly, disadvantaged, and communities outside current operations.	Advanced logistics requires regional infrastructures that support more resilient supply networks. They support autonomous rovers, shuttles, drones, and other delivery platforms within the community.
VISION ZERO	HEALTH
Public safety operations involve intensive interactions. Situational awareness & Telemetry is a critical component to provide emergency response teams about the victims, dangers, and environment of any given situation.	Telemedicine represents medical care provided remotely to a patient in a separate location using two-way voice and visual communication. Real-time data enables higher-quality remote healthcare.
CONSTRUCTION	SMART CITY
Active Digital Twin, Digital twins speed the process of designing, modeling, and operating both intelligent cities and regions. They can dramatically improve planning across political jurisdictions.	To protect data privacy, security, and sovereignty of residents and visitors. This secure and trusted exchange will support the regional digital twin, the Zebra platform, investor networks, and investment management.
SUSTAINMENT	INDUSTRY 4.0
More automated maintenance and sustainment of our nations \$trillions of physical infrastructure will allow us to become more productive and sustainable. Automation will eliminate potholes, rust, wildfires, wear & tear from future worries.	As we reestablish manufacturing leadership our productivity is dependent on our ability to deploy automated/autonomous systems outside the factory. Empowering local production will create millions of new diverse jobs.



WHAT IS INTELLIGENT INFRASTRUCTURE

PINNs and Device Modules	Fiber Backbone and Data Exchange	Power and Energy Storage	Wireless and M2M Networks
Smart Ducts/ Smart Vaults	APNT Position and Perception	Sovereign Data Exchange	Active Digital Twins

The center of Intelligent Infrastructure is the Public Infrastructure Network Node (“PINN”). The PINN is a neutral host enclosure housing computing, transportation systems, environmental sensors, microgram devices, communication antennas, data servers, and other instrumentation hardware. PINNs are linked by fiber and redundant power in urban and suburban areas, along transportation corridors, and within public and private campuses to form Intelligent Grids.

Data centers provided the neutral host real estate that became evergreen. Meaning we could continually upgrade these facilities with the newest compute, storage, network, and devices. The Sidewalk needs an EVERGREEN PLAN to support technologies today, tomorrow, and for decades to come. “This is Tower 2.0, this electric condo will hold 4x the number of tenants we had and drive much larger capital IRR for the lead player. Tower 1.0 was enabling consumer networks, PINNs are enabling Industry 4.0.” Ted Miller, Founder and former Chairman/CEO of Crown Castle.

What sets this infrastructure apart is its intricate integration into the fabric of our sidewalks—a unified framework that champions Integrated City Services, Autonomous Systems, Community-Enriching Commercial Use Cases, and the sanctity of National Security and Privacy. Intelligent Infrastructure is the Liberty Pole of the 21st Century:

- ➔ Foundational to Economic Development Zones
- ➔ Provides Advanced Community Services
- ➔ Enables Innovation Ecosystems at Local Level
- ➔ Protects Data Security, Privacy, Sovereignty, and Trust
- ➔ Management and Operation at the Local Level
- ➔ Enables the Next National and Global Industries
- ➔ Drives Economic Growth and Creates Millions of Jobs
- ➔ Builds a Stronger and More Connected Nation

“PINNs will allow us to quickly achieve practical signal densification in urban environments through improved uptake by municipal governments. This will help accelerate secure, resilient, and low-latency networks to enable a new industrial economy.”

US FCC Commissioner

The Public Infrastructure Network Nodes were designed with this in mind and also include open interfaces permitting hardware and software upgrades

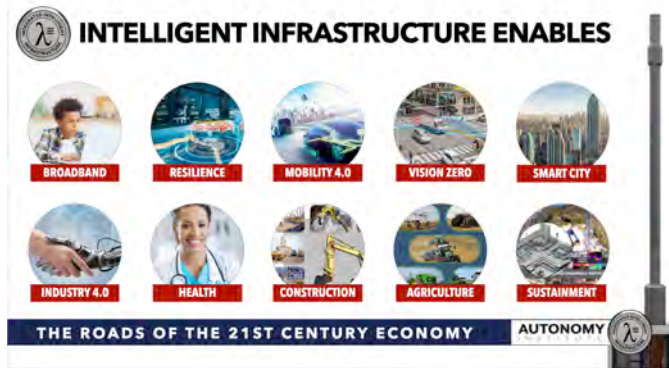


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without requiring infrastructure replacement. Time to stop bolting, strapping, and hanging 21st-century devices onto wood poles.

The first deployments will finalize the open standard Public Infrastructure Network Nodes (PINNs). PINNs support a high-performance level of edge computing. This digital infrastructure is based on over a decade's worth of

research and development and will provide a platform that can easily be upgraded with new sensors, new radio access networks, and a continued evolution of computing resources. These PINNs enable the next generation of advanced computing at the edge, provide low latency networking, and a diverse sensor array for many use cases.



THE HOW OF INTELLIGENT INFRASTRUCTURE

Consider PINNs as condominiums or housing for a wide array of advanced technology.

Economic Development Zones	New Industry Asset Class	Neutral Host Infrastructure	Resilience and Sustainment
Streamlines CAPEX & Operations	Future Proof for 30+ Years	Unified Security & Access	Consolidated Street Scape

PINNs are configured with edge computing servers including both Central Processing Units (CPUs) for basic operations and inference-optimized low-power Graphics Processing Units (GPUs) for AI/ML application at the edge. The power supply and space in the PINNs supports future reconfiguration and expansion of the computing elements (up to 10KW per PINN), including future upgrades such as Field

Programmable GateArrays (FPGA), specialized machine learning chips, or simply newer servers as they change rapidly over time.

PINNs provide a shared civic infrastructure funded by private industry. PINNs will support deployment without large physical hardware deployment for research devices, software, hardware, and sensors. Each

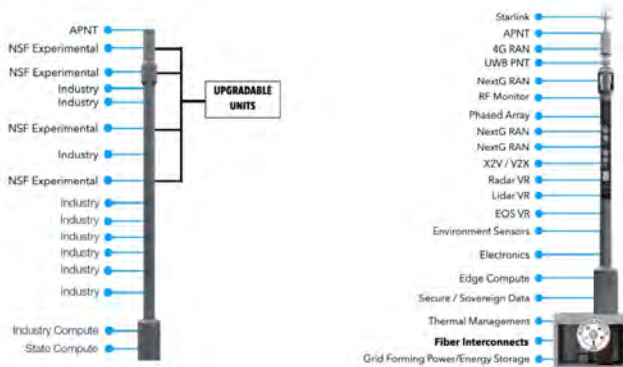


Figure 4 - PINN components illustrated.

PINN can capture, process, and analyze over a



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petabyte of data per month which should provide ample computing power for new

"Much like what we are finding in the military, we need a commercial variant of a smart infrastructure that is highly secure but upgradeable." Bruce Jette, retired Assistant SECDEF of Army Acquisitions, Logistics, and Technology

advanced algorithms and complex artificial intelligence experimentation.

FUNDING INTELLIGENT INFRASTRUCTURE

Intelligent Infrastructure is the marriage of technology and infrastructure. The difference between Intelligent Infrastructure and "Dumb" Infrastructure is the *multiple sources of use cases and revenue per infrastructure project* versus only one source of revenue, i. e. tolls, or government bonds. This is very important to the infrastructure investors and anyone financing of infrastructure since multiple sources of revenue will help assure the repayment of loans. This is not important if the Federal Government will grant the funds for such projects with no repayment expected, but this is highly unlikely now and in the future. How revenue will accrue to the government and to the builders of the Intelligent Infrastructure will depend on the technology deployed and the commercial value of the services and data generated. Intelligent Infrastructure will allow local government to generate new revenue and taxable events to subsidize or even replace current models of maintaining our current Infrastructure.

The Time is Now Norm Anderson, the Legendary Infrastructure Leader, said it best: "Intelligent Infrastructure depends on leadership, It will be the brains of our economy."

For decades Norm Anderson pulled together leaders and visionaries to invigorate the buildout of the infrastructure for the 21st century. His passion has spawned an army to make his vision a reality. His book ***Vision: Our Strategic Infrastructure Roadmap Forward*** lays out a roadmap for the United States. https://www.youtube.com/watch?v=EomH_IIDqps

ECONOMIC ZONES: Intelligent Infrastructure Economic Zones (I2EZ) have the potential to revive cities and communities across the United States in several ways: Job creation and economic growth; Urban revitalization and redevelopment; Enhanced connectivity and accessibility; Innovation and entrepreneurship; Sustainable and resilient communities; and Community engagement and participation.

To ensure the success of I2EZ, it's crucial to establish supportive policies, encourage public-private partnerships, prioritize long-term sustainability, and address workforce development. Affordability, and equitable access to resources and opportunities is vital to ensure that the benefits of these zones are shared widely across cities and communities. Aligning innovation capital with infrastructure capital, leveraging non-dilutive funds, economic development zones, and new policy/tax code on capital gains.



THE IMPACT OF INTELLIGENT INFRASTRUCTURE:

1. **Revolutionizing Infrastructure:**

Intelligent Infrastructure involves integrating sensing, computing, and communication capabilities into physical structures like roads and buildings. This modernization is crucial for improving efficiency, safety, and resilience, addressing the aging infrastructure in the U.S., and maintaining global competitiveness. Intelligent Infrastructure (the foundation of ARPA-I)



will be the brains of our economy. Providing advanced city services, resilient and carbon-free economies, closing the technology divide, enabling autonomous systems, and most important; securing data for people, cities, and governments. Creating millions of new jobs and economic growth nationwide.

2. **Economic and Social Benefits:** The deployment of Intelligent Infrastructure can create millions of jobs, eliminate digital divides, increase national productivity, and build resilient communities. It's expected to be a major economic driver, with the market growing from \$97 billion in 2021 to \$434 billion by 2028, delivering significant economic growth. There will be communities everywhere that will be enabled to thrive when connected via 21st century corridors. Making thriving rural, regional and urban communities.

“National sovereignty and global productivity will go to the nation that deploys the Intelligent Infrastructure enabling Industry 4.0. Unleashing the largest productivity boom in world history.”

3. **Public Infrastructure Network Nodes (PINNs):**

These are central to Intelligent Infrastructure, functioning like neural pathways and connecting various city elements. PINNs will stimulate economic growth, create tech and construction jobs, and attract businesses, fundamentally transforming urban landscapes.

4. **Cost-Effectiveness and Long-term Impact:**

Intelligent Infrastructure is expected to reduce deployment costs of upgrades by 70% over the next 30 years, comparable in impact to rural electrification and the interstate highway system.

5. **Supporting AI and Edge Computing:** AI's increasing role in various industries requires low-latency compute environments, making edge computing essential. This shift in technology infrastructure is a crucial component of Intelligent Infrastructure. Intelligent

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Infrastructure enables Active Digital Twins and Spatial Computing, which will be leading applications and services.

6. **Impact on Various Sectors:** The initiative will cover sectors like broadband for all, intelligent city communication networks, smart grids, intelligent transportation networks, and others, leading to maximized asset utilization and cost-effectiveness, and driving substantial productivity growth. Intelligent Infrastructure enables a resilient and superior terrestrial solution to the national GPS system.
7. **Establishing Data Utility Commissions to Protect Data.** The future depends on the creation of Public-Private “Data-Exchanges” that provide Data Security, Data Privacy, Data Sovereignty, and Data Trust of all the information collected.
8. **Federal Infrastructure Bank & Private Investment:** The Federal Infrastructure Bank and infrastructure investors are allocating substantial funds for Intelligent Infrastructure Economic Zones. This approach aligns with private sector participation and will help in rapidly deploying this infrastructure across the nation.
9. **Legislative & Policy Support:** There's a push to advance legislation that supports Intelligent Infrastructure and Autonomous Systems, ensuring the U.S. leads in 21st-century innovation. This includes creating a Federal Autonomy Administration and authorizing the use of federal land for deploying Intelligent Infrastructure elements.
10. **Economic Zones and Business Models:** Intelligent Infrastructure Economic Zones will use a REIT model for funding, targeting substantial investments. These zones are expected to revitalize infrastructure, create unified communities, and offer new opportunities in various sectors.
11. **Collaborative Development:** There is a significant focus on forming coalitions and partnerships across various sectors, including government, academia, and industry, to advance the development and deployment of Intelligent Infrastructure.
12. **Future Prospects and Opportunities:** Intelligent Infrastructure is seen as a platform for future growth, creating new industries and markets and requiring leadership and collaboration for success. It involves real-time, sustainable, and resilient infrastructure development that supports city ecosystems comprehensively.

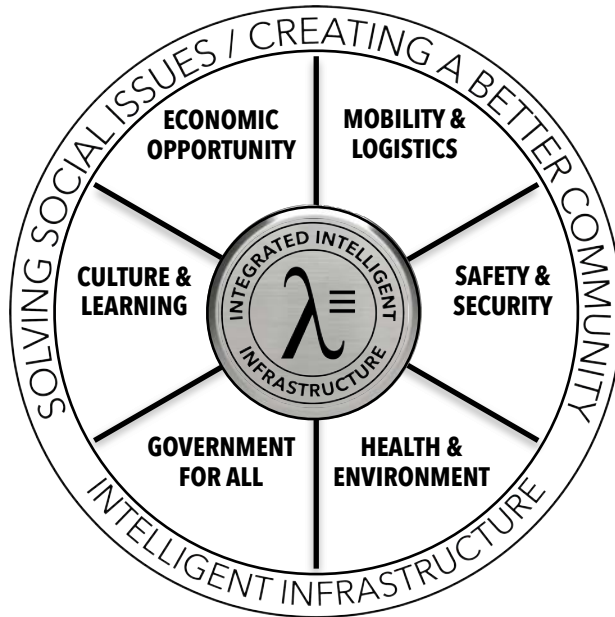
“Industry 4.0, is expected to lead operations to the next s-curve of productivity delivering \$3.7 trillion in growth in the coming decade.

McKinsey & Company

The Intelligent Infrastructure deployments, supported by the Federal Infrastructure Bank and private-public partnerships, is poised to be a transformative force in the U.S., driving innovation, economic growth, job creation, and national resilience.



INTELLIGENT INFRASTRUCTURE ECONOMIC ZONE COALITION



BUILDING A STRONGER AND MORE CONNECTED NATION

Appendix J.1: Attachments to Public Comments- Comment 202

Chapter 3. Current state of Digital Opportunity in Texas (Section 3.a Needs Assessment, 3.a.i Methodology)

The City of Dallas provided the TX BDO over 300 public surveys conducted on the ground, utilizing various avenues to engage covered and underserved communities, including the City's libraries and community centers. However, it was observed that the City's surveyor took more time explaining the purpose of the survey than the respondents took to fill it out. This highlights an issue faced by many covered and underserved communities, as they may not be aware of the current initiatives underway in Texas to address and close the digital divide.

Recommendation for methodology approach:

1. Collaborate with Nonprofits and Consulates:

- **Establish Partnerships:** Collaborate with both digital equity nonprofits and other nonprofits across Texas to leverage their networks, expertise, and resources. Forming partnerships will help in reaching a broader audience and tapping into existing community relationships.
- **Consulate Partnerships:** Build strategic partnerships with consulates to ensure targeted outreach to diverse communities, including immigrant populations. Consulates can play a key role in facilitating communication and trust within their respective communities.

2. Multilingual and Accessible Materials:

- **Translation Services:** Provide translation for ALL survey materials in languages commonly spoken in Texas communities. This ensures that language is not a barrier to participation, and the survey is accessible to diverse populations.
- **Accessible Formats:** Offer the survey in multiple formats, such as audio and easy-to-read versions, to cater to individuals with different accessibility needs.

3. Offline Survey Options:

- **Paper Surveys:** Work with community centers, libraries, and local organizations, including consulates, to facilitate paper survey collection.
- **Assistance Centers:** Set up assistance centers where individuals can go to receive help in completing the survey, whether online or on paper.

4. Educational Campaign:

- **Digital Literacy Workshops:** Offer workshops on basic digital literacy skills to empower individuals who may be hesitant to participate due to lack of internet knowledge.

- **Awareness Campaign:** Launch a targeted awareness campaign through local media, community newsletters, and social media to educate the public about the survey and its significance.
5. **Incentives and Recognition:**
 - **Incentive Programs:** Consider implementing incentive programs to encourage survey participation.
 6. **Flexible Submission Options:**
 - **Phone Surveys:** Explore the possibility of offering a phone survey option for those who prefer or are more comfortable providing information over the phone.
 - **Assistance Hotline:** Establish a helpline or hotline where individuals can call for assistance in completing the survey or to request a paper survey.
 7. **Data Security and Privacy:**
 - **Communicate Security Measures:** Clearly communicate the security measures in place to protect the privacy of survey participants, addressing any concerns individuals may have about sharing personal information.
 8. **Continuous Feedback and Adaptation:**
 - **Feedback:** Establish a feedback mechanism to gather input from community members throughout the survey process. Use this feedback to make ongoing improvements to the survey and outreach strategies.
 9. **Social Media Engagement:**
 - **Social Media Campaigns:** Leverage the TX BDO's social media platforms to run targeted campaigns, engaging community leaders from both non-profits and consulates to amplify the survey message and drive participation.

Chapter 3. Current state of Digital Opportunity in Texas (Section 3.a.iv. 1 Immigrants)

Given that the Texas population includes a significant number of immigrants with undocumented status, estimated to be approximately 1.6 million individuals, the findings of the Digital Opportunity Survey reveal that immigrants are underrepresented and face unique challenges. Based on the findings, here are the City's recommendations to address the needs of undocumented immigrants in Texas:

1. **Targeted Outreach and Education:**
 - Develop and implement targeted outreach campaigns to raise awareness among immigrant communities about the Texas Digital Opportunity Plan and its initiatives.
 - Collaborate with immigrant-serving organizations, healthcare providers, libraries, school districts, and nonprofits to disseminate information.

2. Multilingual Support and Translated Materials:

- Provide survey materials, educational resources, and program information in multiple languages commonly spoken by immigrant communities in Texas.
- Establish multilingual support services to assist immigrants in navigating the application processes for digital opportunities.

3. Community Workshops and Training:

- Organize community workshops and training sessions in collaboration with community organizations to provide immigrants with information on affordable internet options, digital literacy skills, and cybersecurity awareness.
- Offer hands-on assistance with program enrollment and application processes during these workshops.

4. Partnerships with Community Organizations:

- Strengthen partnerships with healthcare organizations, libraries, school districts, and nonprofit organizations that serve immigrant communities to facilitate targeted outreach and support initiatives.
- Engage community leaders within immigrant populations to promote digital inclusion and the benefits of internet connectivity.

5. Increased Technical Support:

- Provide enhanced technical support services specifically tailored to the needs of immigrants, addressing common challenges and concerns related to internet connectivity and device usage.
- Collaborate with community organizations to establish local support centers where immigrants can seek assistance.

6. Community Engagement Events:

- Host community engagement events that specifically target immigrant populations, providing a platform for open dialogue, addressing concerns, and gathering feedback on digital inclusion initiatives.
- Utilize these events to connect immigrants with resources, programs, and opportunities available through the Texas Digital Opportunity Plan.

7. Promotion of Internet Training Classes:

- Promote internet and computer training classes tailored to the needs and preferences of immigrant communities.
- Collaborate with community organizations to offer these classes in accessible locations with flexible schedules to accommodate diverse work and family commitments.

8. Regular Assessments and Feedback:

- Conduct regular assessments to evaluate the effectiveness of outreach and support initiatives among immigrant populations.
- Gather feedback directly from immigrant communities to identify evolving needs and challenges, allowing for continuous improvement of digital inclusion strategies.

10. Inclusive Messaging and Assurance:

- Ensure that all outreach materials explicitly convey that immigration status will not impact an individual's eligibility or access to benefits under the Texas Digital Opportunity Plan. Emphasize inclusivity and stress that the initiatives are available to all residents, regardless of immigration status.
- Work with legal experts to incorporate language in program documentation and outreach materials that reinforces the commitment to nondiscrimination based on immigration status and ensures compliance with relevant regulations.

By incorporating these assurances in their materials, the Texas Digital Opportunity Plan can actively communicate its commitment to inclusivity and assure immigrant communities that their participation will not be affected by their immigration status. This transparent and inclusive messaging is crucial to fostering trust, encouraging broader participation, and representation in efforts to bridge the digital divide in the state.

Appendix J.1: Attachments to Public Comments- Comment 153

Chapter 4. Collaboration & Stakeholder Engagement (Section 4.c Looking Ahead)

Recommendation: Establish an On-the-Ground Outreach Coordinator

The City of Dallas strongly recommends the appointment of a dedicated Outreach Coordinator who can work directly with communities where English is a second language and work with immigrant populations. This role would focus on bridging communication gaps, building trust, and ensuring that these communities are informed and involved in the implementation of the Texas Digital Opportunity Plan.

Key Responsibilities of the Outreach Coordinator:

1. Cultural Competency and Language Proficiency:

- The coordinator should be fluent in the languages spoken by the target communities and possess cultural competency to effectively engage with residents.

2. Community Partnership Building:

- Actively collaborate with state stakeholders, community organizations, advocacy groups, and leaders to establish meaningful partnerships.
- Facilitate communication channels between the Texas Broadband Development Office and community members.

3. Education and Empowerment:

- Organize information sessions and workshops to educate residents about the benefits of broadband access and digital literacy.
- Empower community members by providing resources and support for navigating digital tools and services.

4. Addressing Concerns and Building Trust:

- Serve as a point of contact for addressing concerns, questions, and misconceptions about the digital initiative.
- Build trust within the community by ensuring transparency and inclusivity in the planning and implementation processes.

5. Feedback Collection:

- Actively seek feedback from the community on their unique needs and challenges related to digital access.
- Use this feedback to inform ongoing adjustments to the Texas Digital Opportunity Plan and conversations.

By appointing a dedicated Outreach Coordinator, the Texas Broadband Development Office can demonstrate a commitment to inclusivity and ensure that the benefits of the digital opportunity plan reach all Texans, regardless of language or immigration status.

Appendix J.1: Attachments to Public Comments- Comment 209



802/23.0T9CHV

Exmo(a) Senhor(a)
Jorge Manuel Figueiras Filipe Barreira

VIA E-MAIL

Referência: 38673304

Inquérito 802/23.0T9CHV

Data: 25-09-2023

Assunto: Notificação

Fica V. Ex^a notificado, na qualidade de Autor, nos termos e para os efeitos a seguir mencionados:

De que foi proferido despacho de arquivamento no Inquérito acima referenciado, nos termos do art.º 277º do Código de Processo Penal, cuja cópia se junta.

O/A Oficial de Justiça,

Marcelo Duarte Carvalho



MINISTÉRIO PÚBLICO - Procuradoria da República da Comarca de Vila Real
Procuradoria do Juízo Local Criminal de Chaves - Sec Inquéritos

Palácio da Justiça - Largo do Arrabalde
5400-097 Chaves

Telef: 276340520 Fax: 276090048 Mail: chaves.ministeriopublico@tribunais.org.pt

Inquérito

Os factos denunciados não consubstanciam a prática de qualquer ilícito criminal pelo que determino o arquivamento dos autos nos termos do artigo 277º, nº 1, do Código de Processo Penal.

*

Cumpra o disposto no artigo 277º, nº 3, do Código de Processo Penal.

*

Nos termos da Circular nº 8/2008 da PGR e para os efeitos aí previstos, consigna-se que a prescrição do procedimento criminal ocorrerá em 29.8.2028.

(texto elaborado e revisto pelo signatário, artigo 94.º, n.º 2, do CPP)

Chaves, data e assinatura certificadas digitalmente

O Procurador da República

Alberto Mendes

Appendix J.1: Attachments to Public Comments- Comment 217



EducationSuperHighway Comments for BDO's Digital Opportunity Plan

Summary

EducationSuperHighway commends the Texas Broadband Development Office (BDO) for a forward-looking digital opportunity plan. We are excited for the opportunity to share our experiences with internet access, the digital divide, and programmatic strategies that can ensure digital equity. In particular, we suggest a statewide ACP-focused cohort model to convene organizations in the state that are focused on digital opportunity. We describe such a cohort below and how we can support this pro bono. We have already discussed these concepts with some of your staff so this may not be new for all BDO team members.

Background

Approximately 28 million households in the United States do not have high-speed broadband. 18 million of these households are offline because they cannot afford an available Internet connection. This broadband affordability gap is concentrated in America's cities and has become one of the primary inhibitors of access to economic security and opportunity. It is a reality centered in our nation's poorest communities and disproportionately impacts people of color. The Affordable Connectivity Program (ACP) can connect millions of unconnected households. Achieving national best practice ACP adoption rates can significantly accelerate closing the broadband affordability gap, connecting two-thirds of the 18 million households impacted by this gap. States should use 5-Year Action plans, Digital Equity Act plans and funding to outline and implement key strategies to increase ACP adoption.

The impact of the ACP can be felt equally across partisan lines, with participation rates nearly identical in Republican (31.2% of eligible households) and Democrat states (30.8%).¹ And contrary to the historical narrative that suggests broadband affordability is predominantly an urban issue, rural America has taken the greatest advantage of the ACP to-date. Through April 2023, ACP enrollment data shows that 15% of all rural households have enrolled in ACP, while 14% of households in metro or urban areas have enrolled in the benefit.²

Millions of eligible households are not taking advantage of the program as they are unaware that the ACP exists. Surveys of low- and lower-middle-income households have found that in some communities, up to 75% of eligible households are unaware that they might be eligible for federal broadband benefits. Trust in the program is another critical barrier, as many eligible households

¹<https://arnicusc.org/broadband-for-all-the-affordable-connectivity-program-acp-benefits-households-across-party-lines>.

² <https://www.benton.org/blog/affordable-connectivity-program-and-rural-america>



are concerned about sharing personal information as part of the enrollment process. Finally, enrollment barriers such as application accessibility, language assistance, and documentation challenges necessitate direct support for a portion of eligible households that cannot complete the enrollment process independently.

Broad outreach alone often fails to build the trust needed to drive people to action and should be paired with outreach and enrollment support from trusted sources such as government agencies that administer benefit programs, school districts, community health centers, faith leaders, community-based organizations, and businesses they regularly interact with. These organizations have existing relationships with eligible households, know the most effective time, place, and manner to increase awareness in the communities they serve, and have established outreach channels such as in-person community events, digital marketing, emailing, phone banking, text messaging, physical information distribution and posters in high-traffic target areas. Furthermore, they provide trusted space and avenues to support enrollment in the ACP, and can help mitigate some of the challenges households face when they enroll.

To overcome the complex barriers that keep under-resourced households offline, EducationSuperHighway believes that state leaders should take action to convene a state-wide ACP-focused cohort that brings together these critical trusted government agencies and institutions, leveraging Broadband Equity, Access, and Deployment (BEAD) and Digital Equity Act (DEA) funds to enable outreach to and support for unconnected households. At a micro level, the cohort will provide a collective framework to ensure the creation and sustainability of an ecosystem of organizations and stakeholders working on digital equity initiatives, with a particular focus on the ACP. At a macro level, this work can provide a model for what state-wide ACP implementation could look like, as well as confirm the most effective role that the state may play in supporting future capacity or competitive grant-funded recipients in alignment with 5-Year Action and Digital Equity Plans.

The cohort should consist of a series of workshops intended to promote ways in which leveraging the ACP contributes to achieving digital equity across the state. To facilitate this, EducationSuperHighway can provide pro bono co-facilitation of the cohort and serve as a subject matter expert and technical advisor, providing its expertise to the cohort community. This group should strive to create a collaborative space where organizations can learn from and inform one another's work across the state. It should also promote coordination and collaboration between the state, its agencies, and other stakeholders, alleviating the unintentional creation of silos, gaps, and/or redundancies in programming.

In several states to-date, EducationSuperHighway has partnered with State Broadband Offices and is implementing the cohort model and working in partnership to equip FCC grant recipients, as well as other digital equity-minded and focused organizations, with foundational knowledge on



the ACP and how leveraging this program contributes to achieving digital equity across the state. This includes: 1) how the ACP operates; 2) tools, training, and resources with respect to awareness and enrollment activities and tactics; 3) the intricacies of cross-sector partnerships and campaign execution; and 4) best practices for implementing digital and on-the-ground ACP campaigns.

Roles & Responsibilities

State Broadband Offices and their staff are uniquely positioned to lead the creation and facilitation of a statewide ACP Cohort. In order to ensure an effective and streamlined cohort implementation, a Broadband Office staff member should be designated to lead the cohort engagement. It is also a best practice to include additional staffing resources with a focus on communications, who can assist with managing state-led communications, campaigns, messaging and awareness initiatives related to the cohort. A critical element of the state's role will be to incentivize motivation and participation, and states should set an ACP enrollment goal in order to achieve this that is measurable and can be used to regularly assess progress and course-correct where appropriate.

Objectives and Programming

The main objective of the ACP Cohort is to combine the expertise and experience of key state agencies/offices, trusted institutions, organizations, and stakeholders to make a larger impact on the state's most unconnected communities. An important output of this cohort should be to increase ACP enrollment across the state. Through the creation of curated resources and programming, and a series of workshops, the cohort should:

1. Create a forum for knowledge sharing, including an understanding of current ACP-related work across the state and specific ACP enrollment goal setting through guest speakers and cohort member updates
2. Share lessons learned and emerging best practices
3. Address common barriers
4. Provide opportunities for cohort members to support and reinforce one another
5. Supplement and leverage needed resources where possible (i.e., cross-posting marketing outreach and sharing digital equity advocate personnel)
6. Create a pipeline for future funding opportunities, including identifying funding intermediaries that can help expand the funds' reach and impact by supporting smaller and less resourced organizations, to ensure that key state organizations can contribute to ACP adoption

In closing, the creation of a statewide ACP-focused cohort will serve to ensure that mechanisms for increasing broadband affordability and connecting unconnected households remain a cornerstone of the state's 5-Year Action Plan and Digital Equity Plan. The cohort will secure cohesion between the state's plans, the execution of their capacity grant funds, and alignment with



the ecosystem of competitive grant funded institutions to create the conditions for successful ACP adoption statewide.

APPENDIX

EducationSuperHighway Resources & Tools

The following are examples of the tools and resources that EducationSuperHighway can incorporate into an ACP-focused Cohort curriculum.

- [PromoteACP Resource Hub](#): A hub of free-to-download awareness and marketing materials (collateral, social media text, event toolkits and resources, FAQs, and more) developed based on partner and consumer feedback. The materials complement resources provided by USAC and the FCC, and serve as a strong foundation for new and improved promotional materials for the pilot.
- [LearnACP Certification Course](#): An interactive and self-paced online course that equips community advocates with the knowledge and resources to support its members when applying to the ACP. In addition to an overview of the benefit and how the applicant can enroll, the course provides practical scenarios for the advocate to confirm their understanding of ACP eligibility, common issues, and considerations.
- [GetACP.org pre-enrollment tool](#): This mobile website helps applicants find out if they're eligible for the ACP, determine the easiest way to qualify, identify documents they'll need for the application, and find broadband plans in their area. In addition, the tool provides a personalized checklist of documents the applicant should have available when they apply, and key information for enrollment in an internet service plan. The tool supplies a list of low-cost and eligible plans in the applicant's area with direct contact information for providers.
- [ACP Enrollment Dashboard](#): An easy-to-navigate dashboard of state and city enrollment data. Users can navigate to a state, see city-specific data, filter, and download reports. With data updated monthly, the dashboard can help local leaders effectively target ACP



awareness and adoption efforts, and demonstrate the impact that programming is having on ACP adoption.

Appendix J.1: Attachments to Public Comments- Comment 223

VISIONS OF DIGITAL EQUITY

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VISIONS OF DIGITAL EQUITY

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Broadband Delivers Opportunities
and Strengthens Communities

1041 Ridge Road, Unit 214
Wilmette, IL 60091
benton.org

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Foreword

Digital equity—or, digital opportunity, if you prefer—is having a moment.

Our persistent digital divide is a barrier to our economic competitiveness and equitable distribution of essential public services, including health care and education. And the digital divide exacerbates existing wealth and income gaps, especially in communities of color, lower-income areas, and rural parts of the United States.

But the U.S. is making an unprecedented investment to ensure that individuals and communities have the capacity to fully participate in our society and economy. This includes access to, and the use of, affordable information and communication technologies, such as wired and wireless broadband, internet-enabled devices, and applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration.

This is a huge undertaking with momentous implications on the future of the Nation.

Each state has been asked to envision how life there can be transformed by achieving digital equity. As part of their digital equity plans, states have the opportunity to illustrate how ubiquitous, affordable connectivity to reliable, high-speed broadband will benefit communities through increased access to health care, education and job training, economic growth, and civic participation.

With this extraordinary opportunity before state policymakers and local communities in mind, the Benton Institute for Broadband & Society launched the Visions of Digital Equity project to aid both in ensuring that more community voices are heard in crafting visions that increase opportunity for all.

We learned that a well-crafted vision of digital equity has the potential to be very powerful. It can:

- **Offer a glimpse of a state transformed by universal connectivity,**
- **Provide a roadmap and resources for the digital inclusion efforts to come, and**
- **Act as a north star for goal setting, planning, and implementation efforts over the months and years to come.**

Through surveys, community meetings, interviews, conversations, and a collaborative writing process with community contributors, we have arrived at a set of principles to help guide both the process and the resulting visions of digital equity.

We hope these principles help the residents in each state evaluate their digital equity plans.

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Let's make the most of this moment. The best visions of digital equity will be community centered and focused on creating change, specific and clearly articulated, and ambitious but attainable.

This report is a guide to dreaming big: 1) to envisioning a state transformed by ubiquitous, reliable, affordable, high-speed internet access and 2) to help states “lead with equity,” intentionally identifying, amplifying, and centering the voices of people and disconnected communities most affected by the digital divide.

In short, we're asking states to articulate what success looks like when we achieve digital opportunity for all.

Adrienne B. Furniss

Executive Director

Benton Institute for Broadband & Society

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Visions of Digital Equity Principles

All 50 states, the District of Columbia, and Puerto Rico are currently working on digital equity plans. One key component of the plans is the development of states' visions for digital equity. These efforts are the initial state-level planning and envisioning at this scale and scope.

This project focuses on the unique opportunity for states to craft **visions of digital equity** that are guided by the people who are most impacted by the digital divide, and improving the lives of all.

The National Telecommunications and Information Administration (NTIA), which will review all state digital equity plans, suggests that digital equity plans address at least these two questions:

1. **What will digital equity look like in the context of your state?**
2. **What are the broad goals that should be accomplished in executing this plan (e.g., improve rural health outcomes, increase underrepresented youth employment in technology-related fields)?**

NTIA has specifically advised states to “lead with equity,” intentionally identifying, amplifying, and centering the voices of those most affected by the digital divide and disconnected communities.

With the extraordinary task and responsibility of state policymakers and local communities in mind, we undertook this project to aid both in ensuring that more community voices are heard in crafting visions that increase opportunity for all.

Digital equity work did not begin, nor will it end, with this time of historic federal funding. Digital equity advocates around the country have been working for many years to close the digital divide. This project draws on the expertise of national and local experts in this field.

Through surveys, community meetings, interviews, conversations, and a collaborative writing process with community contributors, we have arrived at **ten Principles for Digital Equity Visions**, organized around five themes, to help guide both the process and the resulting **visions of digital equity**.

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I. Strive for Equity Beyond Just Digital

Congress defines digital equity as “the condition in which individuals and communities have the information technology capacity that is needed for full participation in the society and economy of the United States.” The Infrastructure Investment and Jobs Act states that “achieving digital equity is a matter of social and economic justice and is worth pursuing.” Without digital equity, it is increasingly difficult to ensure the economic, political, and social rights and opportunities everyone deserves.

Although Congress finds that the benefits of broadband should be broadly enjoyed by all, the digital divide disproportionately affects communities of color, lower-income areas, rural areas, people with disabilities and language barriers, seniors, and veterans, among others. These barriers are even more pronounced for people and communities who represent multiple such populations. A call for equity recognizes that due to historical actions, we do not all start from the same place or on a level playing field, and requires us to acknowledge and make adjustments to correct for these imbalances. The goal is a just and equitable society, where everyone is able to meet their basic needs, exercise their agency, and access a range of opportunities.

Digital equity efforts aim to address these imbalances by connecting everyone, especially those groups who have been disproportionately impacted by the digital divide, in order to facilitate equitable access to essential public services, including health care and education, and to make the United States more economically competitive.

With this in mind, we offer the following principles:

- 1. Digital equity is equity and cannot stand outside the broader work of ensuring that everyone has opportunities based on their needs.** Without digital equity, communities will continue to face significant barriers in accessing opportunities and vital resources, thereby perpetuating existing inequalities and further widening the digital divide. Digital visions should articulate a commitment to remove barriers and empower the most vulnerable in our communities.
- 2. Envision a state transformed by digital equity.** Successful digital equity efforts result in healthier, more robust communities and more opportunity for all. Digital equity visions should illustrate how ubiquitous, affordable connectivity to reliable, high-speed broadband will benefit communities through increased access to health care, education and job training, economic growth, and civic participation.

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II. Empower Communities

Digital equity is the product of digital equity ecosystems—that is, the interactions between individuals, populations, communities, and their larger socio-technical environments that all play roles in shaping the digital inclusion work in local communities to promote more equitable access to technology and social and racial justice. Digital equity is not the responsibility of broadband providers or governments alone. All players must understand the local, cultural drivers and social barriers to broadband adoption while taking ownership of the solutions in addressing these barriers.

Communities themselves should be the ones identifying community needs. Government officials must devote time and resources to authentic outreach to the people and communities who are most profoundly impacted by inequity, paying attention to the needs they identify. In order to accomplish this and do so with the level of trust that will be required, government officials should engage (and compensate) community leaders in facilitating ongoing conversations and holistic, considerate, inclusive input gathering. The importance of this cannot be overstated. The people and communities who are intended to be served by digital equity programs must be engaged in setting goals and evaluating efforts.

With this in mind, we offer the following principles:

3. Devising digital equity visions must be an inclusive, collaborative, and ongoing process led by those most impacted by the digital divide, especially communities that have historically suffered from unequal access to broadband.

A top-down approach to digital equity visioning, planning, and implementation will not succeed. Digital equity visions, strategies, and approaches, as well as the specific state digital equity plans, must be the result of collaborative exercises that directly engage communities in the planning process with government, broadband providers, philanthropies, and other organizations. These processes must value and center the perspectives of the people digital equity efforts are intended to serve. Without a seat at the table for community members, there can be no equity. This process is about building relationships and trust, authentically engaging the community and addressing any historical issues.

4. Digital equity planning should include creating and sustaining healthy digital equity ecosystems. Digital inclusion coalitions often include libraries, community-based organizations, local governments, housing authorities, and others in communities across the country. These coalitions organize to cooperatively address equitable access to and use of communication technologies and play a key role in promoting and supporting healthy digital equity ecosystems. Since many of the underconnected face an array of barriers to adoption, relying on ecosystems makes sense to deliver comprehensive, holistic, wraparound services to address complex needs.

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III. Focus on Community Benefits

Digital equity visions extend beyond access to broadband and devices to focus on community benefits—programs and activities that respond to community needs as identified by individuals in those communities. A focus on community benefits should help increase understanding of the social impact of programs and policies on the intended communities; achieving community benefits in this way will help increase community indicators of health, financial security, education, and civic engagement.

Digital equity visions and plans must include delivering the programs and services necessary to ensure that all individuals in the United States have sustainable access to, and the ability to use, affordable information and communication technologies, including digital literacy training, quality technical support, and applications and online content designed to enable and encourage self-determination, collaboration, and participation in society.

Just as important as leveraging the positive potential of connectivity is the imperative to create secure online spaces, and to provide training and support for those seeking to safely engage in online and digital activity. These protections—critical for communities disproportionately experiencing harms including digital discrimination, data extraction, and fraud—are also critical to achieving digital equity.

With this in mind, we offer the following principles:

- 5. Advance and ensure digital safety, privacy, and well-being.** Digital equity visions and efforts must center choice, privacy, safety, and digital health at their core, and must empower participants with the tools and skills needed to navigate risks and avoid harms associated with digital environments.
- 6. Technology should open opportunities, not create or sustain barriers for people.** Digital equity efforts should reduce and remove a full range of barriers through universal design (including multilingual availability) and inclusive access for those with disabilities, which benefits all people and society broadly.

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IV. Plan for Sustainability

“Achieving digital equity for all people of the United States requires additional and sustained investment and research efforts,” Congress found in the Infrastructure Investment and Jobs Act. Without sustained investment in digital adoption and inclusion efforts at the community level, the huge new investments in broadband infrastructure and affordability cannot close the digital divide.

Digital equity visions, strategies, and plans must address the ability to respond to today’s community needs while also looking ahead at how those needs will evolve and what will be required to meet them. These efforts must be long-term and sustainable to ensure that community needs continue to be assessed and addressed.

With this in mind, we offer the following principles:

- 7. Digital equity efforts must bridge short-term impact and long-term, iterative, and sustainable efforts.** Closing the digital divide will not be a one-shot effort; it will be a long-term commitment that should adjust to and reflect changing technology, policy, and circumstances and community needs. Sustained digital equity efforts require short- and long-term key performance indicators as well as periodic assessments of progress.
- 8. Network resilience is crucial for ensuring equitable and reliable digital access, enabling sustained digital equity.** Networks in all areas must be able to endure various threats to stability, including climate change, disasters, and similar future system stressors.

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V. Stay Accountable to the Vision and the Community

Transparency and public accountability are critical to the success of publicly supported digital equity efforts. As noted previously, successful digital equity visioning and planning are inclusive processes that must engage and benefit the people and communities who are meant to be served. It is critical that communities are fully empowered to evaluate and hold accountable those who receive funding to implement solutions.

With this in mind, we offer the following principles:

9. Achieving digital equity requires well-defined metrics for success along with sound measurements and evaluation.

Digital equity plans must include strategies for:

- a. Ethical data collection, interpretation, and use that is adaptive and transparent, and that employs continuous learning practices as well as best practices for informed consent and limits to overcollection and unnecessary retention of data.
- b. Shared power approaches such that historically and systemically marginalized groups can hold government and institutions accountable for equitable creation and implementation of the digital equity plans.
- c. Going beyond quantitative measures to consider qualitative data and local data collection illustrated through storytelling.

10. Digital equity visioning and planning requires clear accountability mechanisms and transparent reporting that is widely disseminated. Empowering community members in a transparent process will ensure that principles are adhered to and digital equity funds are spent wisely.

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Applying These Principles

We envision two broad uses for these principles: 1) for state offices to devise digital equity plans, ensuring that they meet this moment of ambition and investment; and 2) for community advocates to draw on these principles as measures of the degree to which state officials are being accountable for the planning process and the outcomes of those plans.

1. State Offices

- a. **Develop authentic relationships with community advocates and community-based organizations to engage in a reflective dialogue to understand community concerns and issues.**
- b. **Review engagement activities and existing plans for areas of improvement and increased focus on issues raised by communities.**
- c. **Consider additional activities as inspired by examples, case studies, and calls to action.**
- d. **Meet with community groups to collectively review recommendations in these principles and prioritize actions that address the various concerns they raise.**
- e. **Practice transparency in both planning and execution.**

2. Community Advocates

- a. **Identify who from local community may currently be missing from organizing and coordinating activities**
- b. **Present these principles to state-level and local offices and advocate that they utilize them in their planning process**
- c. **Use this report as a resource to assist in making strong arguments and applications grounded in research and supported by work happening in the broader community.**
- d. **Identify organizations in community that are best suited to create and/or help grow a digital equity coalition.**
- e. **Draw inspiration from examples and case studies to encourage local application of larger lessons or local iterations of established models**
- f. **Connect with national organizations and those from other communities to compare notes on activities, successes, struggles, and efforts to close the digital divide locally.**

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A Checklist for Evaluating Digital Equity Visions

The National Telecommunications and Information Administration asks states to address two critical questions in their visions of digital equity:

- **What will digital equity look like in the context of your state?**
- **What are the broad goals that should be accomplished in executing this plan (e.g., improve rural health outcomes, increase underrepresented youth employment in technology-related fields)?**

As states and their communities evaluate draft visions of digital equity, please consider these additional questions:

1. **Does your digital equity vision address the broader work of ensuring that everyone has opportunities based on their needs? Does your digital equity vision articulate a commitment to remove barriers and empower the most vulnerable in your state?**
2. **Does your digital equity vision illustrate how ubiquitous, affordable connectivity to reliable, high-speed broadband will benefit all your communities through increased access to health care, education and job training, economic growth, and civic participation?**
3. **Is your digital equity vision the result of inclusive, collaborative exercises that directly engaged communities in the planning process with government, broadband providers, philanthropies, and other organizations? Have these efforts focused on the perspectives of the people digital equity efforts are intended to serve, including the “covered populations” identified in the Infrastructure Investment and Jobs Act?**
 - a. **Did the state broadband office develop authentic relationships with community advocates and community-based organizations to understand community concerns and issues?**
 - b. **Did the state broadband office meet with community advocates and community-based organizations to review the state’s draft digital equity vision and plan and discuss concerns?**
4. **Does your digital equity vision include creating and sustaining digital inclusion coalitions of libraries, community-based organizations, local governments, and housing authorities?**
5. **Does your digital equity vision advance and ensure digital safety, privacy, and well-being, empowering people with the tools and skills they need to navigate risks and avoid harms associated with digital environments?**

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6. Does your digital equity vision plan on using technology to open opportunities and not create or sustain barriers for people?
7. Does your digital equity vision bridge short-term impact and long-term, iterative, and sustainable efforts?
8. Does your digital equity vision consider resilience, ensuring that networks in all communities are able to endure various threats to stability, including climate change, disasters, and similar future system stressors?
9. Does your digital equity vision include appropriate and measurements and evaluation frameworks?
10. Does your digital equity vision include accountability mechanisms and transparent reporting that is widely disseminated? Did the state broadband office practice transparency in creating and revising the draft digital equity vision and plan?

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Challenges to Achieving Digital Equity or “Why Covered Populations Are Covered”

In 2021, a Pew Research Center survey found that seven percent of U.S. adults did not use the internet at all.¹ Internet non-adoption is linked to a number of demographic variables, but it is strongly connected to age, educational attainment, and household income.²

In community-driven efforts to address digital inequities, there is no one-size-fits-all approach. For this reason it is important to disaggregate data so solutions can be identified, evaluated, and expanded to address the needs of those who are the most disconnected.

The Infrastructure Investment and Jobs Act’s Digital Equity Act recognizes eight “covered populations” as disproportionately experiencing digital inequity. These groups are to be a focus of efforts supported through grants and planning processes:³

- **Individuals living in households with incomes at or below 150 percent of the poverty line.**
- **Individuals 60 years of age or older.**
- **Veterans.**
- **Individuals with disabilities.**
- **Individuals with barriers to the English language (including English language learners and those with low literacy).**
- **Members of racial and ethnic minority groups.**
- **Individuals residing in rural areas.**
- **Individuals incarcerated in non-federal correctional facilities.**

These groups experience difficulties accessing the internet for varied yet overlapping reasons. Below, we provide data that explains why these populations are being targeted for digital equity efforts.

Households With Low Incomes

In the United States, people living in poverty tend to be clustered in certain regions, counties, and neighborhoods rather than evenly spread across the nation.⁴ Research has shown that living in areas where poverty is prevalent creates impediments beyond people’s individual circumstances. Concentrated poverty contributes to poor housing and health conditions, higher crime and school dropout rates, and unemployment. As a result, economic conditions in very poor areas not only limit opportunities for poor residents but also replicate themselves.

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An important dimension of poverty is its persistence over time. There are 341 persistently poor counties in the United States (comprising 10.9 percent of all U.S. counties).⁵ The geography of persistent-poverty counties is strongly associated with historical patterns of rural settlement going back centuries.⁶ Historically, the large majority (approximately 85 percent) of persistent-poverty counties are nonmetro, accounting for about 15 percent of all nonmetro counties.⁷

Poverty does not strike all demographics equally.

- **In 2018, 10.6 percent of men and 12.9 percent of women lived in poverty in the United States. The poverty rate for married couples in 2018 was only 4.7 percent—but the poverty rate for single-parent families with no wife present was 12.7 percent, and for single-parent families with no husband present, it was 24.9 percent.**
- **In 2021, the poverty rate for people living with a disability was 24.9 percent.⁸ That’s about 4 million people living with a disability in poverty.⁹**
- **In 2021, the poverty rate for seniors was over ten percent.¹⁰**
- **According to 2021 U.S. Census data, the highest poverty rate by race is found among Native Americans (24.3 percent), with Blacks (19.5 percent) having the second-highest poverty rate, and Hispanics (of any race) having the third-highest poverty rate (17.1 percent). Whites had a poverty rate of 10 percent, while Asians had a poverty rate of 9.3 percent.¹¹**
- **The USDA estimated that 10.2 percent of U.S. households were food insecure in 2021. This means that approximately 13.5 million households had difficulty with access at all times to enough food for an active, healthy life for all household members. Rates of food insecurity were substantially higher than the national average for households with incomes near or below the federal poverty line.¹²**

Some 15 percent of home broadband users in the United States said they had trouble paying for their high-speed internet service during the coronavirus outbreak.¹³ That includes 34 percent of those with household incomes of less than \$30,000 a year.¹⁴

For adults with household incomes below \$30,000 a year, roughly a quarter (24 percent) say they don’t own a smartphone, and more than four in ten do not have home broadband services (43 percent) or a desktop or laptop computer (41 percent).¹⁵ By comparison, each of these technologies is nearly ubiquitous among adults in households earning \$100,000 or more a year.¹⁶

During the COVID-19 pandemic, a quarter of home broadband users with annual household incomes ranging from \$30,000 to just under \$50,000 said they had trouble paying for broadband service, as did 8 percent with household incomes ranging from \$50,000 to \$74,999.¹⁷

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A 2021 national survey of low- and lower-middle-income households asked these households what they pay for service and to identify monthly service fees that would be too expensive for their budgets.¹⁸ That survey found a range of perspectives on affordability:

- **40 percent of households whose incomes were below \$50,000 annually said they could not afford any monthly fee;**
- **22 percent reported that \$25 per month would be a comfortable figure for their household budgets; and**
- **38 percent said that figures that align roughly with lower-cost market rates (between \$55 and \$70 per month) would be affordable for them.**

Older Adults

Researchers at the Humana Foundation and AARP's Older Adults Technology Services (OATS) found that nearly half of older Americans live with technological barriers. And nearly 22 million American seniors do not have wireline broadband access at home. There are poignant correlations between digital disengagement and race, disability, health status, educational attainment, immigration status, rural residence, and, of course, income.¹⁹

- **Among older Americans, the two strongest predictors of lack of broadband were low educational attainment (less than a high school degree) and income below \$25,000. Both groups of people were more than ten times as likely to be offline at home as the reference categories for people with higher education or higher incomes, respectively.**
- **Race was a significant factor as well. Black people were 2.6 times as likely to be offline, and Latinos were 3.4 times as likely to be offline, as White people.**
- **Living in areas of high concentrations of poverty was associated with a 6.7 times higher likelihood of lacking home broadband, while living in Census tracts with over 50 percent Black-Americans corresponded to a 3.7 times higher likelihood.**
- **Health status plays a role, with people reporting poor-to-middling health being over three times as likely to be offline, as well as people reporting functional impairment (twice as likely), frequent depressive symptoms (1.5 times as likely), and Medicaid enrollment (2.7 times as likely).**
- **Household composition and place of residence are important factors. Older adults who are single (2.7 times as likely) or live in rural areas (1.6 times as likely) have elevated odds of lacking home internet service.**

Researchers have found that insufficient practical training in technology use²⁰ and the attendant difficulty in using computers²¹ both contribute to these disparities. Furthermore, ageism reduces self-efficacy for technology use, further reducing confidence in one's

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ability to use technology;²² physical and mental limitations can make technology harder to use; and people who did not grow up using technology may devalue the benefits and usefulness of these services, or see the barriers as greater than the benefits without intentional support and opportunities for benefit.²³

Veterans

As of 2017, there were approximately 18.2 million veterans in the United States, constituting approximately 7.3 percent of the adult U.S. population.²⁴

An analysis of 2016 American Community Survey data found that U.S. veterans lagged in internet access when compared with non-veterans.²⁵ More recently, the lack of access to the internet became more visible when the U.S. Department of Veterans Affairs (VA) tried to employ telemedicine and other technology-enabled approaches to serving veterans.²⁶

In a 2019 report assessing broadband access and adoption, the Federal Communications Commission found that a significant number of veterans (2.2 million households) lacked access to fixed broadband, mobile broadband, or both.²⁷ Specifically, for 92.5 percent of veterans, at least one provider of 25 Mbps/3 Mbps fixed broadband services was available, but only 78.4 percent of veterans had 10 Mbps/3 Mbps mobile LTE broadband coverage. Among households with veterans, approximately 85 percent, or 14.4 million, reported that they had paid connections to the internet in their homes. (In comparison to non-veteran households, veteran households had at that time a slightly higher percentage subscription rate for fixed broadband.) However, households with veterans subscribed to mobile broadband services at lower rates than households without veterans. The FCC found that more veterans used a mobile device (62.2 percent) to connect to the internet in any location, compared with using a desktop (37.8 percent) or laptop (44.4 percent) computer.

For those veterans who lacked a broadband connection, the FCC reported that barriers to broadband adoption included insufficient digital literacy, perception of irrelevance, price, and lack of deployment where they live.

- **Two-thirds of veteran households without internet users indicated that the primary reason was lack of interest or necessity. The tendency of veterans to be older than the general population, coupled with digital literacy challenges for senior citizens, may make digital literacy an especially important challenge for veterans' broadband adoption.**
- **Veterans with the lowest incomes are most likely to go without broadband at home,²⁸ indicating that price is a significant barrier to adoption.**
- **Veterans were more likely than non-veterans to cite lack of a computer (or an inadequate computer) as the primary barrier to subscribing to an internet service.**
- **Veterans residing in rural areas are likely to have more limited access to fixed and mobile broadband services in the home.**

Differences between veterans' and non-veterans' broadband adoption, the FCC found,

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reflected both the overall demographics of the populations and issues unique to veterans. For example, while veterans were more likely to live in a household without children and the mobile broadband subscription rate for these households lags behind the rate for non-veteran households without children, veteran households with children subscribed to mobile broadband at higher rates than non-veteran households with children. Income also played a role: veterans were less likely to be among those with the lowest incomes (in the lowest quintile), a group that tends to subscribe to fixed and mobile broadband at lower rates; veterans were more often in the middle of the income distribution (third and fourth quintiles) groups that adopt fixed broadband at higher rates.

Veteran households were more likely to be men living alone than non-veteran households. Male-only households at the time subscribed to fixed and mobile broadband at lower rates than average, and veteran male-only households subscribed to both fixed and mobile broadband at lower rates than non-veteran male-only households. Fixed and mobile broadband subscription rates were also lower for female-only households in general, but veteran female-only households were more likely to subscribe to fixed and mobile broadband than non-veteran female-only households.

Individuals With Disabilities

In 2018 more than 40 million people in the United States were living with a disability, according to the U.S. Census Bureau.²⁹ According to a 2021 Pew Research Center survey, even as majorities of these Americans report having certain technologies, the digital divide between those who have a disability and those who do not remains for some devices:³⁰

- **Some 62 percent of adults with a disability say they own a desktop or laptop computer, compared with 81 percent of those without a disability.**
- **Just 72 percent of adults with a disability say they own a smartphone, compared with 88 percent of those without a disability.**
- **Seventy-two percent of adults with a disability report having high-speed internet at home, compared with 78 percent of adults without a disability.**
- **Roughly a quarter of Americans with disabilities (26 percent) say they have high-speed internet at home, a smartphone, a desktop or laptop computer, and a tablet, compared with 44 percent of those who report not having a disability.**
- **Americans with disabilities are three times as likely as those without a disability to say they never go online (15 percent versus 5 percent). And while three-quarters of Americans with disabilities report using the internet on a daily basis, this share rises to 87 percent among those who do not have a disability.**
- **Older Americans are more likely than younger adults to report having a disability. And these older age groups generally have lower levels of digital adoption than the nation as a whole.**

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Additionally, people living with a disability can find it harder to find a job, limiting their income, access to technology, and opportunity to develop digital skills. In 2017 (the most recent year for which statistics are available), only 53.3 percent of deaf working-age adults were employed, compared with 75.8 percent of hearing people. Equally as important, 42.9 percent of deaf people have opted out of the labor force, more than double the rate of hearing people (20.8 percent).

Even for those with access who have adopted broadband, the internet still may not be a welcoming place. There have been many lawsuits over the years claiming that websites are not accessible to those with disabilities.³¹

Individuals With Language Barriers

English remains the dominant language on the internet, and those with limited English-language proficiency face additional barriers in using the internet.

In 2019, more than 44.9 million immigrants lived in the United States.³² One-third (14.8 million) were low income, meaning that their family's income was below 200 percent of the federal poverty level.³³ These immigrants face challenges including language barriers and lack of access to information.³⁴ In 2019, approximately 46 percent of immigrants ages five and older (approximately 20 million people) were Limited English Proficient (LEP). Immigrants accounted for 81 percent of the country's 25.5 million LEP individuals. In 2019, 15 percent of low-income immigrants lived in an unbanked household—that is, one in which no household member had a checking or savings account—in which the process of paying for monthly service can be more difficult.

According to the Program for the International Assessment of Adult Competencies (PIAAC; also known as the Survey of Adult Skills), as of 2015, 36 percent of native-born, native-language adults reached higher levels of proficiency solving problems in digital environments or using digital tools compared to just 12 percent of U.S. residents who are foreign-born and speak a language other than English.³⁵ Immigrants who speak a language other than English in the home were also four times as likely as English speakers to have no experience with computers.

In 2016, the Sesame Workshop's Joan Ganz Cooney Center found that 10 percent of families headed by Hispanic immigrants had no access to the internet, compared with 7 percent of U.S.-born Latinos.

The National League of Cities identified a number of key factors that make it harder to bridge the digital divide:³⁶

- **About 23 percent of immigrants are undocumented. Because of their legal status and a fear of deportation, this segment of the immigrant community has a strong desire for privacy. This can make it difficult to reach these people and connect them with services that could help bridge the digital divide. And many programs ask for personal information that members of this community may not be comfortable sharing.**

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- Due to their immigration status and fears of deportation, many immigrants live “underground” and outside established support systems, eschewing programs that might benefit them, like digital equity efforts.
- Many governmental programs operate only in English. Language access, including in public information campaigns, advertisements, and program enrollment processes, is a driving force in keeping LEP residents from getting digitally connected.

Members of Racial and Ethnic Minority Groups

According to a 2021 Pew Research Center survey,³⁷ Black and Hispanic adults in the United States remain less likely than White adults to say they own a traditional computer or have high-speed internet at home. But there are no racial and ethnic differences when it comes to other devices, such as smartphones and tablets:

- Eighty percent of White adults report owning a desktop or laptop computer, compared with 69 percent of Black adults and 67 percent of Hispanic adults.
- Eighty percent of White adults also report having a broadband connection at home, while smaller shares of Black and Hispanic adults say the same—71 percent and 65 percent, respectively.
- When it comes to accessing the internet, mobile devices play a larger role for Hispanic adults compared with White adults. A quarter of Hispanics are “smartphone-only” internet users—meaning they own a smartphone but lack traditional home broadband services. By comparison, 12 percent of White adults and 17 percent of Black adults fall into this category.

In extensive research on the impact of racial discrimination on home-internet adoption, Free Press found, in 2016, that people in many communities of color lagged behind, even after accounting for income differences:³⁸

- While 81 percent of Whites and 83 percent of Asians had home internet at that time, only 70 percent of Hispanics, 68 percent of Blacks, 72 percent of American Indian/Alaska Natives, and 68 percent of Native Hawaiian/Pacific Islanders were connected at home.
- The median household incomes of Whites (\$62,950) and Asians (\$77,166) were far higher than those of Hispanics (\$45,148) and Blacks (\$36,898). However, these differences in income across race and ethnicity did not explain the entirety of this digital divide.
- There was still a racial/ethnic digital divide even among people in the lowest income quintile. Among those with annual family incomes below \$20,000, 58 percent of low-income Whites had home internet access, versus just 51 percent of Hispanics and 50 percent of Black people in the same income bracket.

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- **This adoption gap existed between people of these races and ethnicities in all income strata, but the gap was largest among the poorest people in America.**
- **Low-income households and people of color were less likely to have home internet connections. But if they did connect at home, they were more likely to rely solely on mobile wireless. While 29 percent of low-income internet-connected households were mobile-only, just 15 percent of households earning more than \$100,000 were mobile-only.**

Bias by internet service providers further exacerbates the impact of poverty: Internet providers prefer to serve areas that have higher incomes, so lower-income neighborhoods are often at a disadvantage in terms of accessing internet services even if individuals can afford them.³⁹ Research has even shown that communities of color are more likely to pay higher rates for the same level of internet access in the same city, often only blocks away from where lower rates are charged.⁴⁰

A 2022 investigation by The Markup found that AT&T, Verizon, EarthLink, and CenturyLink disproportionately offered slow internet service to lower-income and least-White neighborhoods for the same price they offered speedier connections in other parts of town.⁴¹

Individuals in Rural Areas

According to the U.S. Department of Agriculture, the 46 million U.S. residents living in rural areas make up 14 percent of the U.S. population.⁴² Historically, internet providers have underserved rural areas due to a myriad of factors, including smaller rural populations providing fewer customers, decreased rural adoption rates, and more difficult rural terrain in comparison to urban areas. Even when internet is available in rural areas, less competition among limited providers may result in higher prices and limited speed options for residents.⁴³

According to a 2021 Pew Research Center survey, rural adults remain less likely than suburban adults to have home broadband and less likely than urban adults to own a smartphone, tablet computer, or traditional computer.⁴⁴ Roughly seven in ten rural Americans (72 percent) say they have a broadband internet connection at home. Rural residents go online less frequently than their urban counterparts: Eight in ten adults who live in rural communities say they use the internet on at least a daily basis, compared with roughly nine in ten of those in urban areas (88 percent). In addition, three in ten or more urban (37 percent) and suburban (30 percent) residents say they are online almost constantly, while about a quarter of rural residents (23 percent) say the same.

In a 2018 Pew survey, adults who lived in rural areas were more likely to say access to high-speed internet was a major problem in their local community: 24 percent said this, compared with 13 percent of urban adults and 9 percent of suburban adults.⁴⁵ Similar rates of concern about access to high-speed internet were shared by rural adults in both lower- and higher-income households, as well as by those with various levels of educational attainment.

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These comparably lower levels of adoption among rural residents may be due to a unique feature of rural life. Even though rural areas are more wired today than in the past, current infrastructure does not support consistently dependable broadband access in many rural areas.⁴⁶

As noted previously, there are 341 persistently poor counties in the United States. And approximately 85 percent of persistent-poverty counties are nonmetro, accounting for about 15 percent of all nonmetro counties.⁴⁷ Persistently poor counties are more racially and ethnically diverse than counties that are not persistently poor.⁴⁸ While minority groups make up a smaller share of the overall rural population compared with urban areas, the groups are often highly concentrated in persistent-poverty clusters.⁴⁹ Nonmetro Blacks/African Americans had the highest incidence of poverty in 2019 (30.7 percent), while nonmetro American Indians/Alaska Natives had the second-highest rate (29.6 percent). The poverty rate for nonmetro Whites in 2019 was less than half as much (13.3 percent) of both of those other groups. Nonmetro Hispanics had the third-highest poverty rate of any individual race or ethnicity—21.7 percent.

Incarcerated Individuals

Through a series of acquisitions and mergers over three decades, prison technology companies like JPay and Global Tel Link (GTL) have dominated the prison telecommunications space, effectively becoming virtual monopolies. Anticompetitive practices have allowed corporations to gouge families with high prices and ancillary fees for prison phone calls,⁵⁰ a practice that reportedly left one in three inmate families in debt.⁵¹

“Until recently, correctional institutions were surrounded by a digital moat, isolating the people inside. We’re trying to build a bridge across that moat.”

—Chris Grewe, CEO of American Prison Data Systems

Surrounded by a “digital moat,”⁵² incarcerated people are disadvantaged by a lack of access to training opportunities in digital skills otherwise available to the general public. The result is a returning prison population ill prepared for the challenges of reentering free society.⁵³

Although internet access is expanding in some corrections facilities,⁵⁴ it is often still limited or prohibited by law.⁵⁵ And even when internet access is available, the costs of internet use can be prohibitive.⁵⁶

Researchers Paolo Arguelles and Isabelle Ortiz-Luis find that inmates have little opportunity to engage with technology while behind bars. Correctional facilities partner with JPay and GTL to provide inmates with corrections-grade tablets preloaded with a selection of games and music, educational content, mental health and legal resources, and secure messaging services. In most cases, tablets come with a restrictive operating system configured so that inmates are only able to access the facility’s secure local area network (LAN). Inmates are unable to access the open internet.

Arguelles and Ortiz-Luis also found that the exploitative tactics of prison technology companies have spread to tablet programs. Although correctional facilities often receive

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tablets from companies free of charge to prisons and American taxpayers, the companies negotiate exclusive contracting deals with facilities, charging exorbitant prices for inmates to use the devices and pricing ebooks, games, videos, music, and messaging services well above their normal fair-market price. Every email requires paid “postage,” as does every attached image and additional page, with the price of a digital stamp raised around special days like Christmas and Mother’s Day. If families wish to spend time with an incarcerated loved one over video chat, JPay charges \$10 for thirty minutes and \$1 for one thirty-second “videogram.” By charging inmates and their families excessive fees to stay connected, companies exacerbate the issues their tablet program claims to help solve, disproportionately affecting lower-income families who may not be able to afford the costs of keeping in touch with loved ones.

On January 5, 2023, President Joe Biden signed the Martha Wright-Reed Just and Reasonable Communications Act to help ensure just and reasonable charges for telephone and advanced communications services in correctional and detention facilities across the country. Congress’s goal in passing the Martha Wright-Reed Act was to help reduce financial burdens that prevent incarcerated people from being able to communicate with loved ones and friends. The Federal Communications Commission is currently considering rules to implement the new law.

Importantly, the Federal Communications Commission hasn’t been the only venue in the fight for prison phone justice. Martha Wright decided to sue the Corrections Corporation of America and challenge the monopoly system that enabled telecommunications companies in the private prison system to charge high rates for inmate call services. In *Martha Wright v. Corrections Corporation of America*, the plaintiffs, represented by the Center for Constitutional Rights, alleged that these exclusive deals and high rates violate the constitutional rights of the incarcerated.

Conclusion

As part of their digital equity planning, states are tasked with identifying barriers to broadband adoption that their covered populations face.

States’ plans need to establish measurable objectives for documenting and promoting, among each covered population, the achievement of digital equity in the minimum of five key barriers and needs:

1. **the availability of, and affordability of access to, fixed and wireless broadband technology;**
2. **the online accessibility and inclusivity of public resources and services;**
3. **digital literacy;**
4. **awareness of, and the use of, measures to secure the online privacy of, and cybersecurity with respect to, an individual; and**
5. **the availability and affordability of consumer devices and technical support for those devices.**

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As the discussion above illustrates, however, each single covered population may face multiple barriers and needs and many barriers and needs are experienced by multiple covered populations.

For a community focused on digital equity, broadband adoption is about understanding and responding to the connectivity needs of individuals. This entails surveying and engaging with community members, especially those that have traditionally underutilized broadband technology has been. Broadband adoption work is best done in coordination with other assistance programs with the aim of addressing people’s needs holistically.

The role of broadband adoption programs goes beyond simply stating the benefits of broadband or assuming that people will want to get online. Successful adoption programs—such as trainings, discount sign-ups, or device distribution events—often meet people where they are, encourage them, and show them how they can safely use the internet to improve their lives.

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Understanding Digital Equity Ecosystems

Digital Equity Ecosystems are the interactions between individuals, populations, communities, and their larger sociotechnical environments that all play a role in shaping the digital inclusion work in local communities to promote more equitable access to technology and social and racial justice. —Rhinesmith and Kennedy

Dr. Colin Rhinesmith from the Digital Equity Research Center and Susan Kennedy from the Community Informatics Lab at Simmons University developed the concept of “digital equity ecosystems” as a way to more deeply understand the local, cultural drivers and social barriers to broadband adoption as a starting point for promoting digital equity, as well as to understand how community-based coalitions responded to the triple challenges of the COVID-19 pandemic, racial injustice, and digital inequality. Published by the Benton Institute for Broadband & Society, [Growing Healthy Digital Equity Ecosystems During COVID-19 and Beyond](#) provided one of the first national studies of digital inclusion coalitions in the United States.

This way of thinking about digital inequalities can assist researchers, practitioners, and policymakers in seeing the creative and innovative community-based solutions that have emerged in response to the COVID-19 pandemic, particularly in poor communities and communities of color that were disproportionately impacted by the coronavirus. State broadband offices are required to work with digital inclusion coalitions, and a digital equity ecosystems approach can offer a framework to develop and implement digital equity plans together.

Dr. Rhinesmith has also worked with Dr. Rafi Santo to develop [a measurement framework](#) to better understand the data and evaluation needs of community coalitions.

Measuring Digital Equity

Principles 9 and 10 highlight the critical need for accountability in digital equity work, and the role of metrics and evaluation in ensuring such accountability. Measurement is essential to documenting and understanding a community’s path to digital equity. Sharing learnings within a community or between different communities requires not just quality data but also a measurement framework that approximates the complex problems and ultimate goal of digital equity.

Many researchers and practitioners have developed a variety of indices, scorecards, maps, and data visualization tools to measure and display different aspects of digital equity, using a range of publicly available datasets, most notably the American Community

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Survey, the Federal Communications Commission’s Form 477 Fixed Broadband Deployment Data, speed test data from Ookla and M-lab, and broadband usage data from Microsoft’s Airband initiative. No one tool is applicable in all circumstances. Rather, the tools listed herein have specific purposes and aim to offer actionable insights.

Federal agencies have been directed by recent legislation to demonstrate the impact of the investment in broadband. To that end, the Census Bureau and the National Telecommunications and Information Administration have created the [ACCESS BROADBAND dashboard](#), which connects the changes in broadband availability and adoption to economic development. Displaying indicators such as employment, small-business establishments, wages and income, poverty, home values, population change and migration, educational attainment, and gross domestic product (GDP), the interactive dashboard can offer an evolving picture of how broadband could impact local economies.

Tying technology indicators to not just socioeconomic indicators but also education and housing presents a multifaceted picture of the quality of life in a city and makes the case for interdependent strategies to direct investment. The [Digital Advancement Municipal Index](#) uses 16 key indicators across four categories to profile cities’ prosperity in the digital economy.

Mapping tools, such as the [2021 Digital Divide Index](#) (DDI), allow users to see how digital inequity intersects with other social inequities. Developed by Dr. Roberto Gallardo of Purdue University’s Center for Regional Development, the DDI combines data on broadband infrastructure and adoption with socioeconomic indicators that are known to impact technology adoption to present a picture of the digital divide at a county or census-tract level.

The National Digital Inclusion Alliance’s [Digital Equity Scorecard](#) employs another, narrower benchmarking approach that homes in on whether and how much states are investing in digital skills. Using data from the Department of Labor’s Bureau of Labor Statistics, the scorecard compiles data on whether and to what extent states recognize the need for investment in digital skills and have put in place appropriate plans to address such gaps.

The [Maryland Digital Equity Index](#) allows for comparisons among different areas within the state to help diagnose where investment and attention is needed. Created in partnership between Dr. John Horrigan of the Benton Institute for Broadband & Society, Dr. Seema Iyer of the Baltimore Neighborhood Indicators Alliance—Jacob France Institute, and the Community Development Network of Maryland, the index combines internet subscription and device access data with demographic data at the zip code level. The index can demonstrate geographic disparities, for instance, showing that the majority of those without internet access in the state live in urban areas.

The [New York State Digital Equity Portal](#) is also focused on a particular state, but in addition to subscription data and demographic data, it also includes BroadbandNow’s data on internet package prices and Ookla speed test data. Developed by the [New York State Library](#), the [John R. Oishei Foundation](#), [Community Tech New York](#), and the [Cornell University ILR School Buffalo Co-Lab](#), the portal allows for granular detail and multiple map layers, displaying results by zip code and congressional districts.

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Frameworks Focused on How Local Coalitions Promote Digital Equity

Beyond using large public datasets, the digital equity community is also developing new frameworks that focus on how local coalitions are working to promote digital inclusion, equity, and justice in and with other members of their communities. Two such approaches are the Digital Equity Ecosystems Measurement (DEEM) Framework and the Digital Opportunities Compass.

Digital Equity Ecosystems Measurement Framework

A clearly articulated, rigorous, and accessible framework to measure the efforts led by local coalitions can further support initiatives to promote universal broadband, deliver new opportunities, and strengthen digital equity ecosystems.

The [Digital Equity Ecosystems Measurement \(DEEM\) Framework](#), developed by Dr. Colin Rhinesmith and Dr. Rafi Santo, aims to better understand the data and evaluation needs of community coalitions. This participatory design research project convened 32 digital equity and digital justice coalition leaders and members.

Rhinesmith and Santo chose participatory design as a research methodology because it is an effective tool to engage coalitions in co-designing tools to evaluate and assess their community work. Participatory design helps empower people across a wide range of disciplines, including community informatics, a field of research and practice focused on advancing digital inclusion, equity, and justice.

The DEEM framework provides local coalitions a way to both understand and measure the health, strength, and impacts of their efforts alongside their communities. The framework includes indicators at each of the three measurement levels that local coalitions can use to gather data to inform planning, improvement, and argumentation.

The Digital Equity Ecosystems Measurement (DEEM) Framework

COALITION HEALTH	MEMBER STRENGTH	COMMUNITY IMPACT
Indicators related to the organization, structure, and relationships of a coalition as a whole.	Indicators related to the capacities and efforts of coalition members related to the valued impacts of the coalition.	Indicators related to positive changes to the lives of individuals and the broader community that a coalition is hoping to bring about through its efforts focused on advancing digital inclusion, equity, and justice.

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Digital navigators are individuals who address the whole digital inclusion process—home connectivity, devices, and digital skills—with community members through repeated interactions.

The DEEM framework assumes that coalitions focused on digital inclusion, equity, and justice vary in the specifics of their goals and structure, as well as in how they define what success looks like. Some coalitions engage in advocacy-related work in order to enact policy change, leveraging collective voice, aligned commitments, and specialized roles within campaigns that result in shifts in local or state policies that directly impact community-level outcomes. Other coalitions engage in direct service provision themselves, as in the case of facilitating Digital Navigator programs.

Still others aim to support members through capacity-building opportunities or through funds to develop and implement new community-based services addressing digital equity issues. The indicators offered by the DEEM framework are meant to serve as a menu of options—rather than a strict, hierarchical formula—for coalitions to draw from as they strategize how data can play a role in advancing their work.

Depending on the goals, structure, and stage of development of a given coalition, some indicators might be more useful than others. Rhinesmith and Santo highlight how specific purposes of data use might leverage distinct indicators across the DEEM framework in order to address particular needs. The specific lists of indicators in each of the three levels of the framework offer coalitions opportunities to discuss data gathering to meet their needs and goals both internally and externally with other stakeholder groups in their communities. We also provide concrete suggestions and examples to help coalitions see how to use the DEEM framework in practice.

DEEM Framework Example Indicators

- **Coalition Health**—member participation, clarity of opportunities, sense of belonging, internal alignment, collective efficacy, community representation, responsive governance
- **Member Strength**—member focus, capacity, geographic reach, demographic reach, equity orientation
- **Community Impact** (i.e., digital inclusion, equity, and justice indicators)—community-wide digital access and skills; community use of technology for civic, educational, health, and social connection; community ownership over technology and media.

The DEEM framework can help coalitions gather data to improve their planning and implementation. It can also be used for argumentation, to make the case in front of external stakeholders, such as policymakers and funders, who might want to better understand the community impact of coalition work on the ground.

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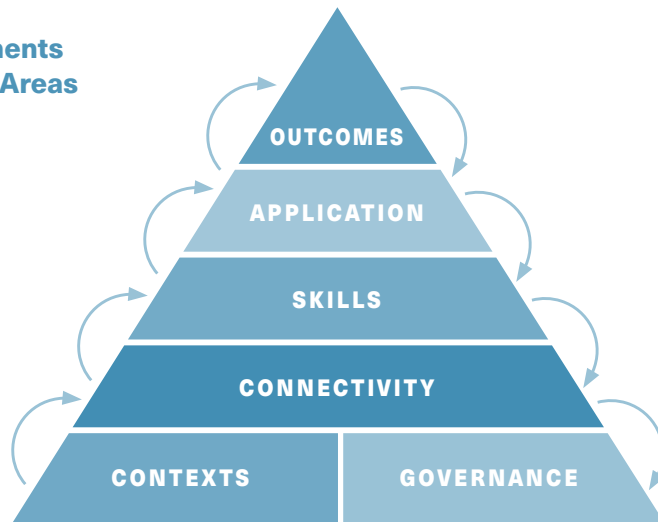
Digital Opportunities Compass

In order to be best prepared for the investment made possible through the Broadband Equity, Access, and Deployment (BEAD) and Digital Equity Act programs established by Congress in the Infrastructure Investment and Jobs Act, digital equity researchers have also begun to collaborate on frameworks to understand the full impact of these programs in communities beyond access and affordability. The [Digital Opportunities Compass](#), authored by Colin Rhinesmith, Pierrette Renée Dagg, Johannes M. Bauer, Greta Byrum, and Aaron Schill, presents a way for communities and states to develop a shared understanding of holistic digital equity, assess the current situation, and identify areas that require action.

The Digital Opportunities Compass offers a customizable approach to utilize a coherent set of indicators and metrics to create a baseline assessment of the state of digital equity, in order to monitor changes over time and evaluate the effectiveness of interventions to improve digital equity.

The Digital Opportunities Compass includes six components: Contexts, Governance, Connectivity, Skills, Application, and Outcomes. Each component includes indicators that have a bearing on the process and outcomes of digital equity initiatives on the ground. The indicators under each component allow stakeholders to do an assessment of their overall conditions in order to determine where additional areas of attention may be needed.

Six Components & Indicator Areas



- 1. CONTEXTS** – indicators related to sociodemographic, economic, and community level factors.
- 2. GOVERNANCE** – indicators related to local, state, and federal policy, governance, and power.
- 3. CONNECTIVITY** – indicators related to the existence of necessary network infrastructure, as well as the accessibility, affordability, and adoption of internet service and network-enabled devices.
- 4. SKILLS** – indicators related to a broad range of activities centered around digital literacy (including secure online practices), training, and skills attainment.
- 5. APPLICATION** – indicators related to the uses and application of digital connectivity and skills, while considering additional sociotechnical contexts.
- 6. OUTCOMES** – indicators related to the broader effects of improved digital equity on individuals, communities, and states.

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The Digital Opportunities Compass can be used to:

- Identify key groups of factors that influence digital equity efforts and outcomes
- Measure and assess digital equity efforts and outcomes over time
- Utilize a standardized core set of metrics that can be expanded and customized to meet state and community needs
- Build, as far as possible, on existing data and indices
- Augment existing data with new (qualitative and quantitative) data
- Innovatively design infrastructure to help automate data collection (e.g., quality measurement in routers)

The Digital Opportunities Compass can be used as part of focus groups, in capacity-building programs for planners and decision-makers, or to facilitate the multi-stakeholder digital equity planning process. The researchers hope that the Digital Opportunities Compass encourages deeper discussion, debate, and reflection on how to measure digital equity.

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Developing These Principles

This project began with the intention to help states write their visions of digital equity, visions that go beyond speed benchmarks like "all households connected to 25/3 by 2030." We want to encourage states to develop ambitious agendas and ensure that more community voices are heard in crafting a future with increased opportunity for all—opportunity enabled by affordable, reliable, high-speed internet service.

We adopted a collaborative process, wanting to build on the existing work done by allied organizations in the space, especially those working closely with people most affected by the digital divide. These principles were developed through surveys, community meetings, interviews, conversations, and a collective writing process. The process was led by Andrew Coy of Initial Velocity, LLC, who served as the Benton Institute's Community Coordinator.

We established a steering committee of practitioners and researchers with deep experience in the field to help us define the scope of the project. We also relied on them to spread the word, ensuring that we considered a range of digital inclusion work happening around the country.

The community-facing survey collected input on the work of organizations that are addressing the needs of what Congress calls "covered populations," in order to understand where we need more attention and capacity.

Most crucially, the principles emerged from a series of consultations with our community contributors. These six individuals brought diverse perspectives to the issues surrounding digital equity, from Alaska to Texas, covering rural, urban, and tribal challenges, highlighting issues of digital accessibility and digital justice. Through this process of community engagement, we arrived at the five themes and ten principles for Visions of Digital Equity. In the Community Contributor essays, you can learn about community-based approaches to closing the digital divide.

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Our work was informed by discussions with six Community Contributors and their experience with community-based digital inclusion efforts:

Brittany Woods-Orrison, Broadband Specialist, Alaska Public Interest Research Group and Native Movement

Kathy Fall, Digital Equity Program Manager, Community Tech NY (CTNY)

Dr. Danielle King, Community Equity Fellow, Lead for America, KY

Reyda Taylor, FUSE Executive Fellow, Travis County, TX

Chloe Mun, Program Manager, Travis County, TX

Thomas "Tommy" Horejes, Ph.D., Director for Legal Compliance & Advocacy, Convo Relay

The Benton Institute convened a national Steering Committee of digital equity leaders to guide the project:

Christopher Ali, Ph.D. Penn State University

Cindy Altick Aden, University of Washington

Johannes Bauer, Ph.D., Quello Center, Michigan State University

Tyrance Billingsley II, Black Tech Street

Greta Byrum, Benton Institute for Broadband & Society

Angie Cooper, Heartland Forward

DeAnne Cuellar, Institute for Local Self-Reliance

Kathryn de Wit, Pew Charitable Trusts

Brian Donahue, Next Century Cities

Shayna Englin, California Community Foundation

Ellen Forbes, Older Adults Technology Services (OATS)

Oleta Garrett Fitzgerald, Southern Rural Black Women's Initiative

Drew Garner, Common Sense Media

Swati Ghosh, New Growth Innovation Network

Tobey Gordon Dichter, Generations on Line

Dawit Kahsai, AARP

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Caroline Sanchez Crozier, LatinX Digital Leaders Now and League of United Latin American Citizens
Angela Siefer, National Digital Inclusion Alliance
Casey Sorensen, PCs for People
Joshua Stager, Free Press
Shirlett Stapleton, Southern Rural Black Women's Initiative
Felicia Sullivan, Jobs for the Future
Karisa Tashjian, Digitunity
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Stacey Wedlake, Technology & Social Change Group at the University of Washington Information School
Danae Wilson, Department of Technology Services, Nez Perce Tribe
Fallon Wilson, Ph.D., #BlackTechFutures Research Institute
John Windhausen, Jr., Schools, Health & Libraries Broadband (SHLB) Coalition
Brittany Woods-Orrison, Alaska Public Interest Research Group

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Broadband Delivers Opportunities
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Appendix J.1: Attachments to Public Comments- Comment 226



Central Texas Resources for Digital Needs

This resource list was put together by Travis County, the City of Austin, and the organizations listed below to provide residents with information on digital Central Texas resources.

*Indicates bilingual assistance

If you need assistance in using the listed resources, please contact **Austin Free-Net** at **512-236-8225** or **access@austinfreenet.net**. Office hours are Monday through Friday from 9AM – 4PM.

Organization	Contact
Who gives out free or discounted devices?	
Austin Free-Net's Learn and Earn Program	www.austinfreenet.net/learnandearn
Austin Public Library's technology lending program	https://library.austintexas.gov or https://data.austintexas.gov/stories/s/Technology-Access/n5ud-qjtt
*EveryoneOn	www.everyoneon.org/find-offers
Human-I-T	www.human-i-t.org/low-cost-devices
PC's for People	www.pcsforpeople.org
Pflugerville Public Library's hotspot and laptop checkout program	https://library.pflugervilletx.gov/services/computers-and-internet
*Workforce Solutions Capital Area	www.wfscapitalarea.com
How can I get free or discounted internet?	
Affordable Connectivity Program	www.affordableconnectivity.gov or 877-384-2575
Who can help sign people up for the Affordable Connectivity Program, a US government program to help low-income households pay for internet service and connected devices?	
Austin Free-Net	www.austinfreenet.net/digital-navigators or 737-238-6783
*Austin Urban Technology Movement (AUTMHQ)	www.autmhq.org/individuals

Goodwill Central Texas	CareerAdvancement@goodwillcentraltexas.org
Human-I-T	www.human-i-t.org/acp
Who offers public access to computers?	
*Austin Free-Net	www.austinfreenet.net
Austin Urban League	https://aaul.org/tca
City of Austin	https://data.austintexas.gov/stories/s/Technology-Access/n5ud-qjtt
*El Buen Samaritano	elbuen.org/services/adult-education
Goodwill Central Texas	<p>Goodwill Community Center location 1015 Norwood Park Blvd open M-Th 8AM-12PM and 1PM-4:30PM</p> <p>Goodwill Resource Center 6505 Burleson Road open 8AM-4:30PM intake@goodwillcentraltexas.org or 512-637-7569</p>
Pflugerville Public Library	https://library.pflugervilletx.gov/services/computers-and-internet
Travis County Community Resource centers	<p>Business Hours at all locations: 8:00 AM to 5:00 PM, Monday through Friday. Closed on County holidays.</p> <p>Del Valle: South Community Center 3518 Farm to Market 973 Del Valle, TX 78617</p> <p>Manor: East Rural Community Center 600 W Carrie Manor St. Manor, TX 78653</p> <p>Jonestown: Northwest Rural Community Center 18649 Farm-to-Market 1431 #6a Jonestown, TX 78645</p> <p>Oak Hill: West Rural Community Center 8656 Texas HWY 71 Austin, TX 78735</p> <p>Pflugerville: North Rural Community Center 15822 Foothill Farms Loop Pflugerville, TX 78660</p> <p>Central Austin 5325 Airport Blvd Austin, TX 78751</p>
Who can help with computer issues?	

*Austin Free-Net's digital navigators	www.austinfreenet.net/digital-navigators or 512-236-8225
Who can help build basic technology skills?	
*Austin Free-Net's digital literacy classes and workshops	www.austinfreenet.net/public-access-programs
Austin Public Library's computer classes at select libraries	https://library.austintexas.gov/events/computers-technology
Community Tech Network's Tech Teach-Ins	www.communitytechnetwork.org/blog/category/tech-teach-ins
Community Tech Network and AGE of Central TX's Senior Connect program	www.communitytechnetwork.org/blog/senior-connect-update
Compudopt	www.compudopt.org/digitalskills or 855-532-5060
Drive Your Learning	www.driveyourlearning.org/
Goodwill Central Texas's digital skills and online tools	www.goodwillcentraltexas.org/indeed Digital training: intake@goodwillcentraltexas.org or 512-637-7580
Human-I-T's online computer basics courses and office hours	www.human-i-t.org/digital-training
Who can help build advanced technology skills?	
African American Youth Harvest Foundation's adult computer literacy training and certifications	https://aayhf.org
Austin Film Society	www.austinfilm.org/classes-events
Austin Urban League	https://aaul.org/tca
*Austin Urban Technology Movement (AUTMHQ)	www.autmhq.org/individuals
Where can I get online resources for building digital skills in multiple languages?	
Austin Free-Net's Digital Navigators	www.austinfreenet.net
*Austin Urban Technology Movement (AUTMHQ)	www.autmhq.org/individuals
*Immigrant Connections	www.immigrantsrefugeesandschools.org/post/google-classroom-and-more-in-multiple-languages
Texas State Library and Archives Commission	www.tsl.texas.gov/ld/AEL/LandLtoolkit

General Assistance

***ConnectATX** (www.unitedwayaustin.org/connectatx) and ***2-1-1** (www.211texas.org or call 2-1-1) also connect you to digital resources along with assistance on food, health, transportation, childcare, job training, and housing.

If you are an organization that provides free or discounted internet, devices, and skills training to Central Texas residents and would like to be added to this list, please contact internet@traviscountytexas.gov.

Online Version

The online version of this resource guide can be found at www.traviscountytexas.gov/bdep/resource-for-digital-needs.

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Appendix J.1: Attachments to Public Comments- Comment 231

Texas Digital Opportunity Plan – Public Comment
University of Houston Downtown
Dr. Maria Bhattacharjee, UHD Bilingual e-Library Director
bhattacharjeem@uhd.edu

This comment addresses the Executive Summary of the Texas Digital Opportunity Plan. This plan includes areas of critical need such as economic and workforce development, education, and accessibility of essential services to close the digital divide in Texas. The University of Houston-Downtown (UHD) has similar goals. UHD received an NTIA Connecting Minority Communities Pilot Program grant for 2.5 million to upgrade the UHD bilingual (Spanish and English) e-library to address issues in low-income Hispanic communities related to connectivity, literacy, and the preparation of the labor force to meet the challenge of economic growth in Houston, Texas. The partner for the grant implementation is Aldine ISD in Houston, which has a total of 61,633 students. The district's [Hispanic](#) student population is 73.9%. Additionally, 64.2% of these students participate in the free or reduced lunch program, and 41.6% are English Language Learners.

The target population for the UHD e-library grant is low-income Hispanic families in Aldine ISD. The challenges encountered in helping these families are the lack of affordable connectivity and access to electronic devices to access the UHD e-library to learn literacy and technology in preparation for an increased technology job market. They need the Internet and a device for daily practice of the skills we teach. Therefore, goals 1, 2, and 3 in the Executive Summary of the Texas Digital Opportunity Plan are a must to successfully implement our grant and close the digital divide in the state of Texas.

Additionally, creating a database of partners will be very helpful in combining efforts and avoiding duplication. UHD will continue to assist the Hispanic community in technology, literacy, and preparation for the job market, which, in turn, will increase the economic growth of the [Houston community](#). As such, UHD welcomes additional partnerships as we progress with our goals. Thanks for the opportunity to comment.

Appendix J.1: Attachments to Public Comments- Comment 240

• Who is NODABL?

NODABL is a nationwide broadband solutions provider headquartered in Waxahachie, Texas. We provide custom-designed fiber and wireless networks and specialize in solutions for small-to mid-sized communities. Our ConnectedCommunity™ branded networks are secure, affordable, state-of-the-art, and are offered as a “managed service” so that customers can enjoy the benefits of a private network without the hassle of managing it.

• How do ConnectedCommunity™ networks enable Smart Cities?

A secure, reliable, mobile wireless network is necessary for digital transformation of a city to a “smart city,” and for the city to offer smart city services to its residents. NODABL’s ConnectedCommunity™ networks provide LTE and 5G wireless connectivity over a wide coverage area allowing the city to offer smart city services such as free WiFi in public spaces, automated water/gas/electricity meter reading, smart parking, remote monitoring of city facilities, video surveillance of public spaces, and other innovative services.

• Can NODABL do an assessment of a city’s current broadband coverage?

Yes. NODABL uses internal tools and partnerships with third party service providers who provide Geographic Information Systems mapping to benchmark existing broadband coverage provided via fiber, cable, and wireless across the city. Our assessment can include a web-based questionnaire to residents for self-reporting of broadband connectivity. Such professional services are offered for a nominal fee which is waived if the assessment is part of a ConnectedCommunity™ network implementation by NODABL.



• How does ConnectedCommunity™ network help small businesses?

Our network provides secure LTE and 5G cellular connectivity across the city. A vendor at a city park or a farmer’s market or a small business that might need internet connection for secure Point of Sale transactions or for other business purposes can utilize the city’s ConnectedCommunity™ network for internet access. Cellular connectivity provides high data security and end-to-end data encryption and is, therefore, preferable for conducting financial transactions.

• How does ConnectedCommunity™ network help with public safety?

As a custom designed broadband network, the uplink and downlink data rates can be tailored for specific applications and use cases. Cameras equipped with artificial intelligence and connected to the network can be used for video monitoring of public spaces. Law enforcement can use camera features such as facial recognition, motion detection, license plate recognition, etc. for rapid response. Newer technologies for gunshot detection can be supported on the network to enhance public safety. Our network can also be used for installing Emergency Call Boxes (Blue Light Phones) in select locations that residents can use to call for emergency services.

CONTINUED ON BACK

- **How can low-income neighborhoods benefit from a broadband solution?**

Low-income neighborhoods in communities are generally underserved or unserved for broadband. Commercial broadband service providers ignore these neighborhoods as they are deemed unprofitable for Return on Investment. With a city owned ConnectedCommunity™ broadband network the city can provide free or steeply discounted broadband service in such neighborhoods to promote digital equity and enable resident participation in the modern economy.

- **Will NODABL offer services to difficult-to-serve areas and small and rural communities that have been overlooked by nationwide Internet Service Providers (ISPs) and wireless operators?**

Offering affordable broadband solutions to difficult-to-serve areas and rural and small- to mid-sized communities is the focus of ConnectedCommunity™ networks. Federal funds from the America Rescue Plan Act and the Instructure Investment and Jobs Act can be used by communities for network deployment and maintenance, creating a “once-in-a-generation” opportunity. Use of Federal funds dramatically lowers the threshold for return on investment and allows NODABL or the local government to offer broadband services at discounted prices

- **How can municipally owned networks generate revenue for the city?**

Broadband network deployment involves buildout of high-value infrastructure such as underground or aerial fiber backbone routing and communication towers for mounting radios and antennas. These infrastructure improvements become attractive to commercial ISPs and wireless operators who may want to collocate their equipment on city-owned infrastructure and provide rental revenue to the city. Excess fiber or wireless capacity on a city-owned broadband network can be leased to commercial entities to create a new revenue stream for the city. Alternatively, the city can create an open fiber/wireless network where the city acts as a neutral host and leases the network to commercial entities who in turn provide retail broadband and internet services to the community.

To learn more, go to nodabl.com/connectedcommunity

- **Who owns and manages the ConnectedCommunity™ network?**

There are multiple network ownership and operation models that can be used based on the city's preferences. In one model the network can be wholly owned and operated by the city. Per a National League of Cities study, 900 municipalities across the country own and manage broadband networks. In another model the network can be owned by the city but operated by a third party as a managed service. NODABL is flexible and open to designing an ownership and operation model that suits the city.

- **How is NODABL different from the competition?**

NODABL is laser-focused on difficult-to-serve areas and small-to mid-sized cities which have been largely ignored by nationwide ISPs and wireless operators. NODABL custom designs the network for each community and its intended use cases, and optimizes for coverage, capacity, and cost. Our broadband solution includes, as necessary, a fiber middle-mile network and last-mile LTE and 5G wireless network. NODABL provides a turnkey solution from Network Planning and Design to Network Installation and Launch to Post-Launch Network Monitoring and Optimization. Furthermore, where practical, NODABL uses local labor for network installation and maintenance.

- **Does NODABL offer pilot deployments? How much do they cost?**

Yes. And that is another way NODABL differentiates itself from the competition. Our networks are scalable and can grow as the community needs grow over time. We offer communities a low-cost pilot/starter network deployment that the community can use to validate important use cases. The cost for such a pilot deployment can range from \$40,000 to \$75,000 depending on how much of the existing infrastructure can be leveraged. When the key use cases are validated, the community can build on the pilot network for community-wide coverage. NODABL provides a turnkey solution from Network Planning and Design to Network Installation and Launch to Post-Launch Network Monitoring and Optimization. Furthermore, where practical, NODABL uses local labor for network installation and maintenance.



Contact Information:
Marc Metteauer
mmetteauer@nodabl.com
830-660-7602

Nodabl is committed to connecting America, one community at a time.

Appendix J.1: Attachments to Public Comments- Comment 241

With the Federal government committing billions of dollars for buildout of broadband infrastructure across the country, local government leaders who have the responsibility to spend the allocated funds wisely in their communities are faced with confusing technology choices. In this brief, the pros and cons of fiber optic and wireless broadband technologies are explained to help government leaders make the right choices for their communities. In reality, no one technology alone is sufficient, and fiber and wireless technologies must work in harmony to deliver optimum broadband solutions to communities.

Broadband Infrastructure

As shown in the Table below, there are many parallels between the nation's transportation and broadband infrastructures. In broadband, the



Long-Haul Fiber Networks play the same role as the Interstates; the Middle-Mile or City/Metro Networks are comparable to state and county highways which provide the bridge

between Interstates and city streets; and the Last-Mile Networks are comparable to city and neighborhood streets and deliver the broadband access to local homes and businesses.

CONTINUED ON PG 2

Transportation Infrastructure			Broadband Infrastructure		
Interstate Roadways	Function to move large volume of traffic at high speeds over long distances	Owned/maintained by States	Long-haul Fiber Networks	Function to move large volume of traffic at high speeds over long distances	Owned/maintained by fiber network operators or nationwide cellular carriers
State and County Highways	Function to connect Interstates to city streets and move moderate volume of traffic	Owned/maintained by States and Counties	Middle-Mile Networks/ Metro Networks	Function to connect long-haul fiber to last-mile network	Owned/operated by metro fiber network or cellular carriers
City and Neighborhood Streets	Function to move low volume of traffic and provide access to homes and businesses	Owned/maintained by City or is privately owned/maintained	Last-Mile Networks	Function to provide broadband data access to homes and businesses	Owned/maintained by a variety of players including fiber, cable, wireless service providers

Broadband is defined by the Federal Communications Commission as a data connection with minimum 25/3 Mbps downlink (DL)/uplink (UL) speeds which are sufficient for a household to perform basic browsing tasks on the internet. Higher DL/UL speeds are desirable to future proof the broadband infrastructure.

Fiber refers to fiber optic cables through which information is transmitted as pulses of light over long distances. Each fiber is about the diameter of human hair. A fiber optic cable contains few to hundreds of such fibers bundled together. A fiber optic network comprises of such optical cables running over long distances (long-haul fiber network), over medium distances (middle-mile or city/metro networks), and short distances (Fiber to the Home/FTTH).

Wireless refers to a connection that uses radio signals instead of cables to deliver broadband service to a home or business. There are three main wireless broadband technologies, namely, cellular, microwave, and satellite. Cellular has the advantage over fiber, microwave, or satellite services of providing mobile access (e.g., access to broadband connection in a moving vehicle) in addition to stationary or Fixed Wireless Access (FWA).

Last-Mile refers to the connectivity gap between an internet service provider's broadband infrastructure and a customer's home or business. Last mile connectivity is one of the biggest costs many businesses and homeowners face when trying to access broadband services and is a key consideration for local government leaders when selecting suitable broadband infrastructure for their communities.

Lessons learned from the transportation infrastructure can be applied in designing the broadband infrastructure for communities.

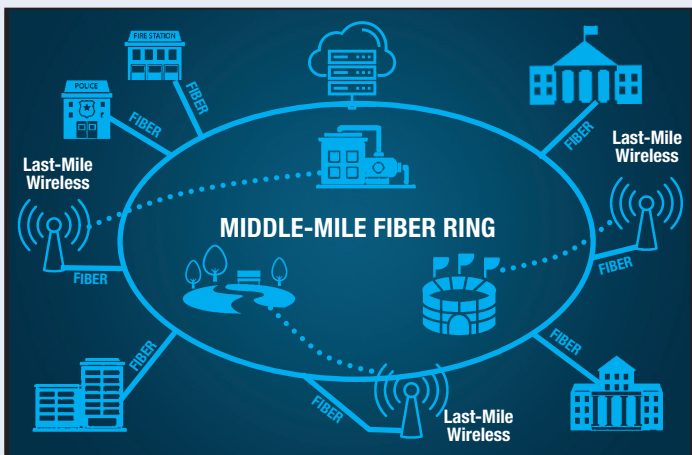
- 1) Ensuring last-mile broadband access in the community is an important responsibility for local governments, comparable to ensuring that residents and businesses have access to well-maintained city and neighborhood streets.
- 2) Just as city and neighborhood streets are publicly owned, it is not unreasonable for the last-mile broadband

infrastructure in communities to be publicly owned or owned via innovative public-private partnerships.

- 3) There is no “one size fits all” for any community and the broadband infrastructure must be custom-designed utilizing the most optimal middle-mile and last-mile technologies to provide residents, businesses, and local governments with versatile and cost-effective broadband access.

Smart Choices for Local Governments

Contrary to conventional wisdom that considers fiber as the holy grail for delivering last-mile broadband to communities everywhere, Fixed Wireless Access using state-of-the-art



Long-Term Evolution (LTE) and 5G cellular technologies is a more cost-effective last-mile alternative for small, rural, suburban, or less densely populated communities.

As shown in the figure to the left, communities need a practical approach that leverages fiber for the middle-mile network, and mostly wireless for the last-mile network. With this approach key broadband metrics such as data speeds, cost, ease of implementation, security, and affordability can be optimized for the community. Fiber is not a practical or cost-effective last-mile solution in many scenarios because fiber installation requires extensive permitting, digging, and resolution of right of way issues between private landowners, local governments, and different jurisdictions that can lead to delays and cost increases. Last-mile fiber typically takes months or even years for buildout whereas wireless can be installed in a matter of days and at a lower cost.

Ownership and Control

There is no one definitive ownership model in broadband. As shown in the table to the right, local governments can choose between public ownership, private ownership, or collaborative public-private partnership. The public-private partnership model allows local governments to share costs, risks, and revenues with private entities, and incentivize broadband in rural communities where the return on investment for private capital is low.

According to a National League of Cities, approximately 900 communities have already made investments in publicly owned broadband. For local governments that do not want

the hassle of operating a broadband network, NODABL offers a custom-designed middle-mile to last-mile broadband network “as a managed service.”

	Public	Public-Private Partnership	Private
	Public entity funds, owns, and operates infrastructure and provides services	Public entity funds owns infrastructure, private entity operates and provides services	Private entity funds owns and operates infrastructure and provides services
Middle-Mile Network	Public or Private	Public or Private	Private
Last-Mile Network	Public	Public	Private
Network Operation	Public	Private	Private
Service to Customers	Public	Private	Private

To learn more, go to nodabl.com/connectedcommunity

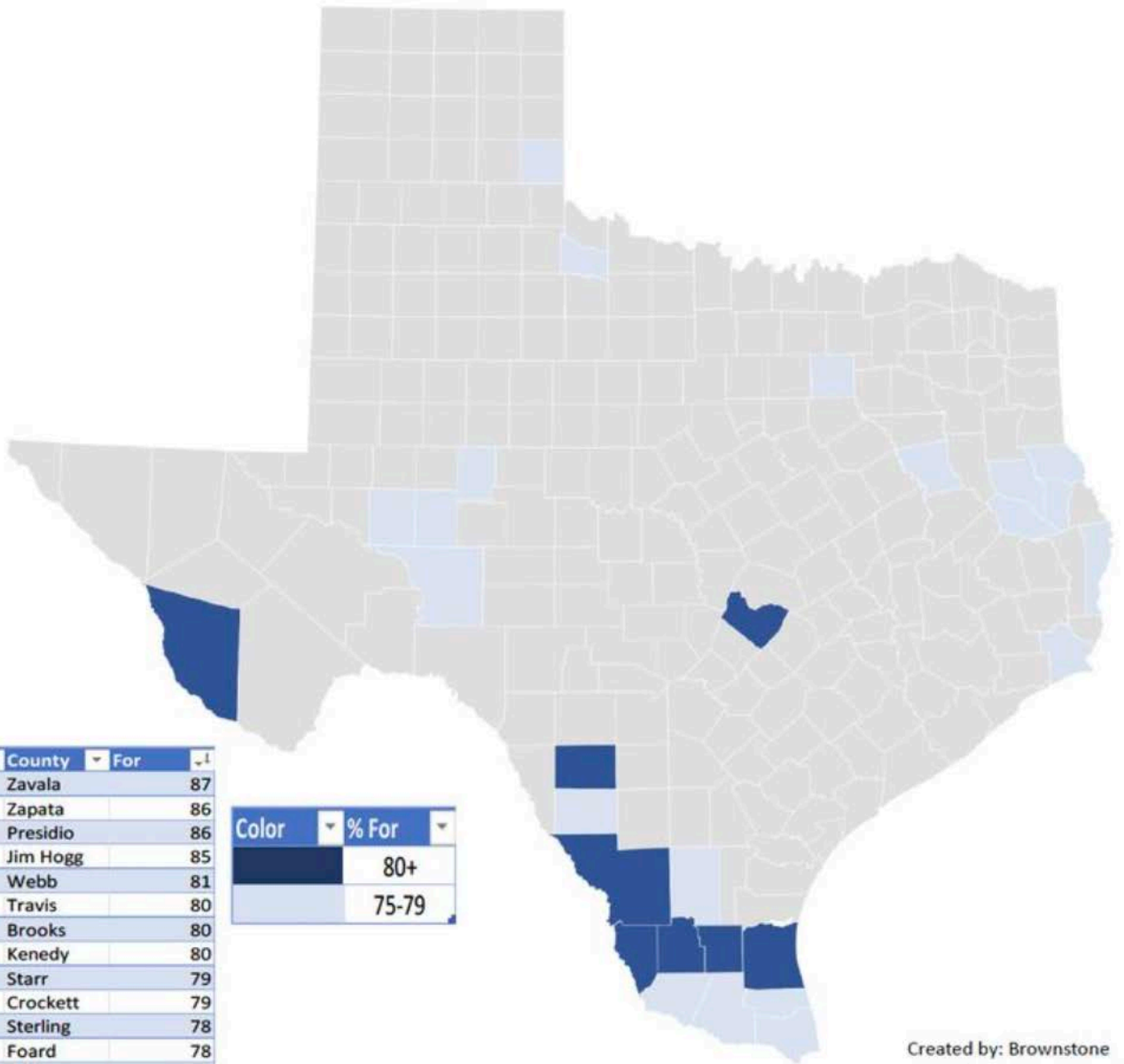


Contact Information:
 Marc Metteauer
mmetteauer@nodabl.com
 830-660-7602


Appendix J.1: Attachments to Public Comments- Comment 257

Texas Proposition 8- Broadband Infrastructure Fund

Counties Voting Over 75%



State	County	For
Texas	Zavala	87
Texas	Zapata	86
Texas	Presidio	86
Texas	Jim Hogg	85
Texas	Webb	81
Texas	Travis	80
Texas	Brooks	80
Texas	Kenedy	80
Texas	Starr	79
Texas	Crockett	79
Texas	Sterling	78
Texas	Foard	78
Texas	Dallas	77
Texas	Hidalgo	77
Texas	Cameron	77
Texas	Jefferson	77
Texas	Shelby	77
Texas	San Augustin	77
Texas	Willacy	77
Texas	Duval	77
Texas	Upton	77
Texas	Reagan	77
Texas	Dimmit	76
Texas	Angelina	75
Texas	Nacogdoche	75
Texas	Anderson	75
Texas	Newton	75
Texas	Collingsworth	75

Color	% For
	80+
	75-79

Created by: Brownstone
with information sourced from
the New York Times.

							Covered Populations Served						
Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Low-Income Households	Ageing Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English Proficiency Individuals	Minority Communities	Rural Communities	Other
Travis County		Workforce Development, Computer Device Access, Digital Skills and Technical Support; Workforce Development; Public Computer Center, broadband access, digital opportunity research and planning	Government or Public Organization	County Government	x	X	x	x	x	x	x	x	
Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots for Residents	Promote/Provide Subsidies for Home Internet Access	Provide Info or Support for ACP Registration	Org Stated Barriers	Org Sources of Funding					
County Wide	County	https://www.traviscountytx.gov/	Yes			Yes	Lack of Staff or Organizational Capacity; Lack of Funding Availability	Federal or State Funding; Philanthropic Grants					
Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8	Date Recorded					
Travis County Community Resource centers provide public access to computers. Business hours at all locations: 8:00 AM to 5:00 PM, Monday through Friday. Closed on County holidays.	In partnership with the Travis County Outreach Team, the Travis County Broadband and Digital Equity Program provided outreach and technical support to community members signing up for the Affordable Connectivity Program (ACP).							9/13/2023					
<ul style="list-style-type: none"> - Del Valle: South Community Center (3518 Farm to Market 973 Del Valle, TX 78617) - Manor: East Rural Community Center (600 W Carrie Manor St Manor, TX 78653) - Jonestown: Northwest Rural Community Center (18649 Farm-to-Market 1431 #6a Jonestown, TX 78645) - Oak Hill: West Rural Community Center (8656 Texas HWY 71 Austin, TX 78735) - Pflugerville: North Rural Community Center (15822 Foothill Farms Loop Pflugerville, TX 78660) - Central Austin (5325 Airport Blvd Austin, TX 78751) 													

Org Name	Org Description	Org Broadband Focus Area	Org Broad Category	Org Subcategory	Date Recorded			
Human-I-T	Human-I-T is a non-profit Digital Opportunity practitioner. It's mission is to	Broadband Access, Affordability and Adoption;Computer Device	Community Anchor Institution;Private	Community Support or	5/9/2023			
Covered Populations Served								
Low-Income Households	Aging Individuals (Age 60+)	Incarcerated Individuals	Veterans	Individuals with Disabilities	Limited English	Minority Communities	Rural Communities	Other
X	X	X	X	X	X	X	X	X
Org Service Area	Org County of Operation	Org Website	Public WLAN or WiFi Provided	Promote/Provide Hotspots	Promote/Provide	Provide Info or Support for	Org Stated Barriers	Org Sources of
Travis		human-i-t.org	Yes	Yes	Yes	Yes	Lack of Staff or	Federal or State
Programs Offered								
Org Program 1	Org Program 2	Org Program 3	Org Program 4	Org Program 5	Org Program 6	Org Program 7	Org Program 8	
Human-I-T Online: A marketplace	Case-Worker style Digital Navigation (English & Spanish): Holistic in-house	Low-Cost Devices: Human-I-T provides new and refurbished low-cost	High-Speed Internet & ACP Access (English	Digital Literacy Training	Digital Upskilling (English & Technical Support (English &			

Appendix J.1: Attachments to Public Comments- Comment 262



**STUDENT
FREEDOM
INITIATIVE**

HONORING THE PAST, GUIDING OUR FUTURE.

Broadband and Digital Equity Public Comment

HBCU communities in the state of
Texas

December 2023



Texas Broadband Development Office

Texas Digital Opportunity Plan Public Comment Response

Addendum

From: Student Freedom Initiative (SFI)

For review by the Texas Broadband Development Office: Please note that this document, the SFI MD Statewide Digital Equity Plan Public Comment Response includes (i) the entirety of text submissions contained in the public comment response submitted by SFI to the Texas Office of Statewide Broadband as well as (ii) additional details on facts and figures developed via the SFI community survey and engagement with HBCU communities via joint townhalls.

2.1.2 Our Mission

Observation: The overall vision of the Digital Opportunity Plan encompasses the key dimensions of digital opportunity that must be addressed to close the digital divide in the state of Texas. The Plan outlines six major objectives related to digital opportunity, as well as the strategies proposed to achieve each. We commend Texas for including objectives and associated strategies tied to the challenges disproportionately faced by the state's covered populations. The state could consider further measures in enabling community participation in the planning and implementation of these objectives.

Recommendations:

Consider community input and engagement in addition to data sharing with the Office of Broadband Deployment. Strategy 1 of Objective 1 discusses data sharing regarding covered populations. However, service estimation and aggregated public data sources may not always capture gaps in broadband or device access. For this reason, SFI has engaged with HBCUs to gauge accessibility and affordability in surrounding communities through town halls and surveys. Insights from these outreach efforts are enclosed to provide further context on the specific challenges faced by covered populations in the communities surrounding HBCUs.

Consider implementing feedback mechanisms, such as surveys and community forums. In addition to key performance metrics outlined in Section 5, Texas may also consider creating opportunities for feedback from covered populations to continuously gather input and measure the effectiveness of the Plan's strategies in addressing the challenges they are facing.

2.2 Alignment with Existing Efforts to Improve Outcomes

Observation: The Plan aligns the objectives outlined in Section 2 with Texas's broader goals around economic and workforce development outcomes, educational outcomes, health outcomes, civic and social engagement, and the delivery of other essential services.

Recommendation:

Engage a broader group of stakeholders for alignment and implementation. One of the key goals outlined in the Plan is to advance digital literacy and workforce development to ensure all Texans have access to digital skills needed for a 21st-century workforce. We commend Texas for recognizing that educational institutions are well-positioned to be partners in expanding workforce development and internet access for students. HBCUs are particularly well-positioned to address challenges related to digital literacy due to their proximity to covered populations in surrounding communities.

Texas should expand on and directly name the specific HBCUs that will be involved in the effort to expand digital skills credentialing and advanced IT certifications. For example, HBCUs may be included as partner organizations to offer opportunities for skills development. The Student Freedom Initiative (SFI) has engaged HBCUs to learn of their potential involvement in workforce coalitions within the state to determine the path forward. Partnerships like these exemplify how HBCUs can serve as implementation partners to support education and training programs related to digital upskilling.

Consider adopting a series of state-funded high-technology workforce development programs to address the additional workers needed per year to build infrastructure. As highlighted by the U.S. Government Accountability Office in a 2022 study¹, thousands of additional workers would be needed to build infrastructure defined by the result of funding released by 8 recent broadband programs², depending on the pace at which these programs provide funding. Given the demand for additional workers, targeted funding programs through public-private partnerships could support a robust, targeted digital literacy and workforce development program offering training in areas such as cybersecurity, technical support, and software engineering (Arkansas has developed a similar initiative, Arkansas Fiber Academy: <https://www.arkansascc.org/arkansasfiberacademy>).

Up to 26% of the communities' populations could be a priority for digital literacy outreach – this includes those above the age of 25 with less than a high school degree and those with income at the poverty level.

3.1.1 Digital Inclusion Assets by Covered Population

Recommendations:

Consider an additional strategy of providing increased opportunities for device use and access in public spaces (e.g., device loans from libraries). Objective 2 outlines a goal to ensure access to affordable devices for all Texans addresses increased pathways for device ownership. While most households own at least 1 computing device – ownership ranges from 80-97% – there is an opportunity to increase the share with access to a laptop/desktop computers. In 7 of the 9 HBCU communities', only 54-71% of households own a laptop/desktop compared to state and national averages of 77% and 79%, respectively. Expanding usage

¹ Telecommunications Workforce: Additional Workers Will Be Needed to Deploy Broadband, but Concerns Exist About Availability, U.S. Government Accountability Office, 2022 (<https://www.gao.gov/assets/gao-23-105626.pdf>)

² The 8 programs include Broadband Equity and Access Deployment Program, Rural Digital Opportunity Fund, Capital Projects Fund, Tribal Broadband Connectivity Program, ReConnect Program, Enabling Middle Mile Grants Program, Broadband Infrastructure Program, Rural Broadband Program

opportunities in public spaces accessed by community members may be a complementary effort. 30% of individuals believe there are no nearby public computers readily available (See Figure 1). 16% of individuals indicated interest in expanded programs for device access in public spaces (See Figure 2). Additionally, 36% indicated interest in programs for rental, refurbished or discounted priced devices, suggesting programs to expand device access may have a high impact in HBCU surrounding communities (See Figure 2).

Figure 1: Household device access (% of respondents, N = 79 individuals)

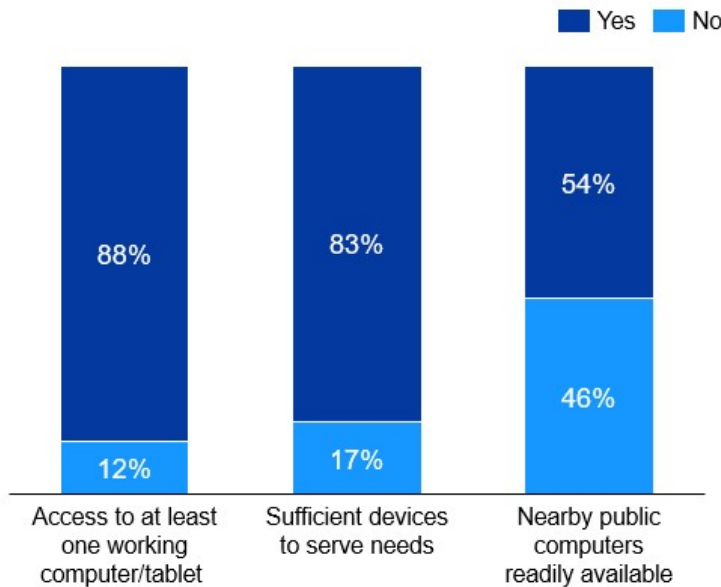
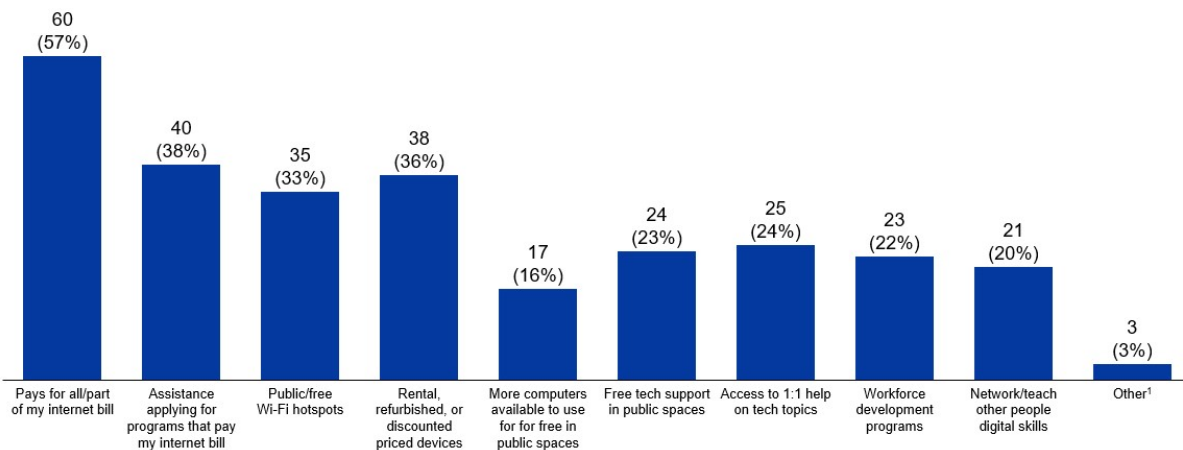


Figure 2: Broadband and digital inclusion programs of interest (# (%) of respondents, N = 105 individuals)

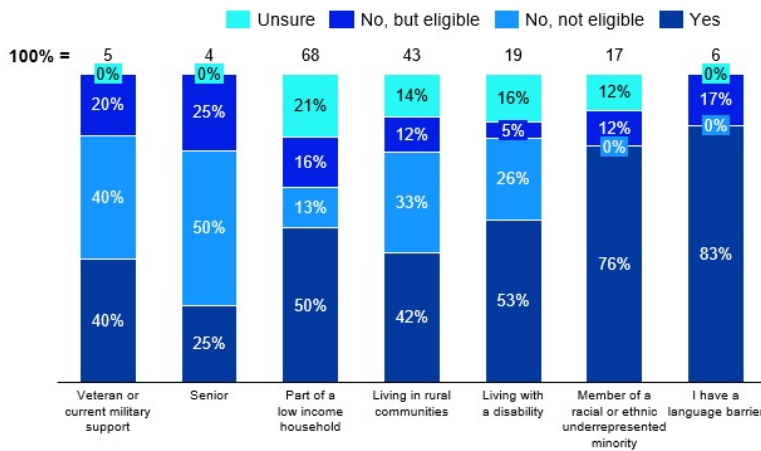


Consider further tailoring the strategies and key activities to the needs of covered populations. Families in these communities are more likely to be living at or within the federal poverty level. For example, ~43% of Paul Quinn’s surrounding community lives on less than 150% of the federal poverty level, which is more than 2x the state average of 19%. Given that

BEAD guidance indicates that priority should be given to such locations, funding in this area will be critical. Given that BEAD guidance indicates that priority should be given to such locations, funding in these areas will be critical (See Appendix A).

The Plan cites supporting statewide efforts of enrollment into the Affordable Connectivity Program (ACP) as a strategy to achieve Texas’ 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. As referenced in the SFI Texas Public Comment Response Addendum, in communities including aging individuals, members of racial or ethnic underrepresented minorities, low-income households, and individuals living with disabilities, up to 25% indicated that they are currently eligible for ACP but are not enrolled (See Figure 3). Statewide contacts should be further defined by Texas to include organizations that serve these covered populations.

Figure 3: ACP participation by population (% of respondents, N = variable by population)



3.2.1 Barriers for Covered Populations, Adoption, and Affordability

SFI would like to highlight the nuances of the communities surrounding the state’s HBCU communities regarding digital opportunity and how this can be considered in Texas’s approach to closing the digital divide. SFI has held joint town halls with Texas HBCUs and conducted interviews with the HBCU leadership and has gathered survey input from over 100 community stakeholders. The lived experiences of residents, businesses, local government, faith-based, and other organizations provided a qualitative layer to the quantitative data analyses.

Increase broadband adoption in HBCU communities and prioritize building infrastructure in low-income communities. Up to ~70% of households in HBCU communities are not subscribed to broadband internet compared to ~30% across the rest of the state and nationally, suggesting a significant gap in connectivity – the communities of Texas College, Jarvis Christian, and Paul Quinn are facing particular challenges.

None of the unserved and underserved locations in four HBCU communities (Huston-Tillotson, Paul-Quinn, St. Philip’s and Texas Southern) have received prior federal funding awarded to

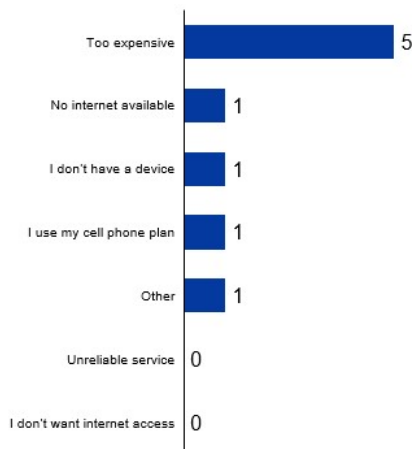
ISPs as part of CAF II, RDOF, RBE, Reconnect, NTIA BIP, and RUS. whereas at least 32% of the unserved and underserved locations in the state have received such funding.

Though most Texas HBCU communities are deemed well-served, there are still several where ~35-70% of locations would be considered underserved or unserved. In addition, there are still many unserved and underserved locations that have yet to receive federal funding – this number is as high as 100% in Huston-Tillotson, Paul-Quinn, Texas Southern, and St. Philip’s surrounding communities.

Some of the households in these surrounding communities are likely to be facing affordability challenges – up to 43% of families in Paul Quinn’s surrounding community are living on an income less than 150% FPL – but ACP uptake is inconsistent (ranging from 3-58%), indicating significant potential to increase enrollment rates in some areas.

This gap is compounded by the number of unserved and underserved locations that remain unfunded by federal programs. Many individuals in these communities are unsatisfied with their current internet, with the main reasons being that it is too expensive, too slow (e.g., pages take too long to load), or has unreliable service (e.g., frequent outages). For those without internet access, the main reason is that individuals find the current cost too expensive (See Figure 4).

Figure 4: Why individuals do not have internet (# of respondents, N = 6 individuals)

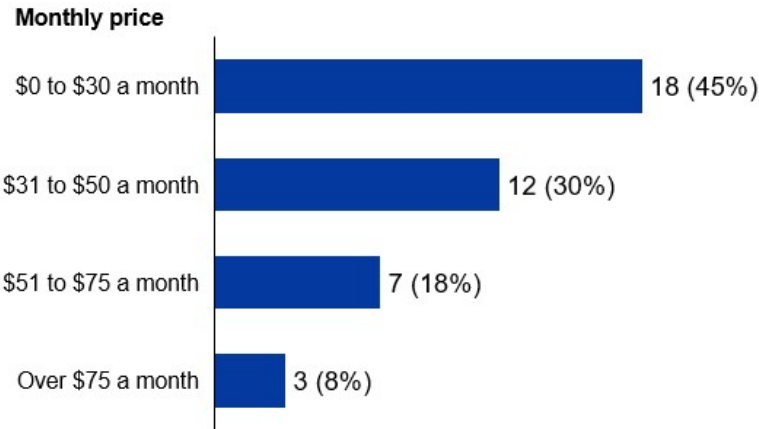


Drive positive impact in HBCU communities through affordability levers. Many of the households in communities surrounding HBCUs are likely to be facing affordability challenges. ACP enrollment within Huston-Tillson’s and Prairie View’s surrounding communities is much lower than the state – Huston-Tillson’s rate is 3% vs. ~35% in the state and nationally – indicating that increasing affordability awareness could be considered a priority.

Up to 41% of respondents who are formerly incarcerated, living with a disability, from low-income households, or part of racial or ethnic underrepresented minorities find the cost of internet connection to be unaffordable. Respondents would consider <\$30/month affordable, which is less than half of the state average cost of \$72.94/month, as stated in Section 3.1.5 (See

Figure 5). 57% of respondents shared interest in a program that would assist in the costs associated with internet service, demonstrating potential impact for expansion of low-cost internet programs (See Figure 2).

Figure 5: Affordable monthly price for internet (# (%) of respondents, N = 40 individuals)



Enhance device access in HBCU communities. As Texas recognizes, the lack of device access is one of the primary barriers for internet adoption among racial and ethnic underrepresented minorities, veterans, and individuals living with disabilities. HBCU communities are less likely to have access to internet-compatible devices. HBCU communities are less likely to have access to internet-compatible devices – in 5 of the 9 communities, 29-40% of households do not have desktops/laptops vs. 23% across the state and 21% nationally – indicating potential demand for widely accessible and inexpensive options.

4.1 Coordination and Outreach strategy

Recommendation:

Consider deepening partnerships with HBCUs in the state. Texas may consider providing additional funding to create a similar program to the NTIA CMC grant program. Funds could be directed to upgrading and expanding the fiber and wireless infrastructure on the respective campuses (public Wi-Fi hot spots) and creating digital navigator immersion community outreach programs with college students as instructors. As mentioned before, HBCUs are in a strong position to provide broadband & high-tech specific job training programs to their local communities that would assist in developing deeper cooperation, relationships, and partnerships with each HBCU targeting covered populations, which may be highly represented in the surrounding communities.

HBCUs may be able to help advance several of Texas’s outlined objectives, given their central role in their surrounding communities. This positions them well to expand opportunities for public device access, disseminate information about state and local government programs, and offer opportunities for civic and social engagement for covered populations. In addition to being central to the community, HBCUs can serve as a partner in planning and enhancing educational programs targeted towards internet safety, digital literacy, and workforce development.

5.1 Implementation strategy and key activities

Recommendation:

More clearly differentiate the relative execution timing of short- and long-term goals.

While the Plan outlines KPIs and a timeline associated with each of the six goals, there is no specific timeline for measures of progression or completion provided. Including designated timeframes for each of the goals will better ensure the state is on track to achieving the targeted outcomes.

Consider long-term sustainability of outputs in continuing support for broadband access and equity. Texas may find it helpful to address the sustainability of initiatives beyond the five-year timeline and how the state will continue to support digital equity efforts through longer standing programs.

Consider including the criteria for grant applications and the rationale behind the prioritization of funds. Across all goals, each has strategies requiring additional funding towards existing programs and organizations throughout the state. By clearly outlining the criteria across the numerous grants and provision of funds, community stakeholder organizations will be able to better prepare for upcoming funding opportunities.

Relatedly, 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. This is especially important given that SFI has learned from engagement with community organizations that they would be interested in offering such digital inclusion programs and services if additional funding were available.

Appendix A

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Synthesis of insights from Texas's community needs assessment

PRELIMINARY, WORK IN PROGRESS

Based on this analysis, there are **3 potential focus areas to increase broadband and digital equity in Texas's HBCU communities:**

- Increase broadband adoption amongst those without subscriptions
- Expand broadband availability to the remaining underserved and unserved locations, including low - income areas
- Address additional challenges with internet and device affordability and access

Digital equity dimension

- Broadband adoption**
- Infrastructure**
- Device access**
- Affordability**
- Digital literacy**
- Demographics**

Initial insights

Up to ~70% of households in HBCU communities are not subscribed to broadband, which is ~2x the state average

Though most Texas HBCU communities are deemed well -served, there are **still several where ~35-70% of locations would be considered underserved or unserved**. In addition, there are **still many unserved and underserved locations that have yet to receive federal funding** – this number is as high as 100% in Huston - Tillotson, Paul-Quinn, Texas Southern, and St. Philip's surrounding communities

While most households own at least 1 computing device – ownership ranges from 80-97% – **there is opportunity to increase the share with access to a laptop/desktop computers**. In 7 of the 9 HBCU communities¹, only 54 -71% of households own a laptop/desktop compared to state and national averages of 77% and 79%, respectively

Some of the households in these surrounding communities are likely to be facing affordability challenges – up to 43% of families in Paul Quinn's surrounding community are living on an income less than 150% FPL – **but ACP uptake is inconsistent (ranging from 3-58%), indicating significant potential to increase enrollment rates in some areas**

Up to 26% of the communities' populations could be a priority for digital literacy outreach – this includes those above the age of 25 with less than a high school degree and those with income at the poverty level

The HBCUs are in **diverse surrounding communities**, where a **significantly higher share of Black individuals** reside – up to 70% in Paul Quinn's community – compared to the state (12%)

Source: US Census Bureau 2021 ACS 5 -year estimates, US Census ACS Public Use Microdata Sample (PUMS), CostQuest, FCC DATA Maps May 2023, USAC, Education Superhighway ACP Enrollment Dashboard
DOCUMENT INTENDED TO PROVIDE INSIGHT FOR CONSIDERATION BASED ON CURRENTLY AVAILABLE INFORMATION AND IS NOT INTENDED TO PRESCRIBE SPECIFIC ACTION

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Current state of digital equity across SFI partner Texas HBCUs

PRELIMINARY, WORK IN PROGRESS
As of October 2023

Legend: Target SFI Partner schools, Not compared to state, Lower than state (>5pp in negative direction), Rurality, On par with state (within +/- 5pp), Higher than state (>5pp in positive direction)

Digital equity dimension	Metric	Huston-Tillotson	Jarvis Christian	Paul Quinn	Prairie View A&M	Texas Southern	Southwestern Christian	St. Philips College	Wiley	State	National
Broadband adoption	HHS with an internet subscription	89%	76%	60%	82%	85%	80%	74%	77%	87%	87%
	HHS with broadband ¹	80%	31%	39%	44%	70%	65%	52%	30%	69%	72%
Infrastructure	Share of served locations	99.9%	39%	99.6%	67%	99%	88%	99.9%	91%	97%	88%
	Unserved and underserved locations unfunded by federal programs ²	100%	0.2%	100%	94%	97%	99%	100%	100%	78%	68%
	ISPs providing fiber technology ²	9	2	3	1	4	3	9	1	1	-
Device access	HHS with access to ≥1 device ³	96%	85%	80%	97%	91%	91%	88%	91%	89%	94%
	HHS with a desktop or laptop	88%	64%	54%	79%	77%	71%	55%	40%	65%	77%
Affordability	Families <150% FPL ⁴	17%	20%	43%	13%	24%	23%	37%	33%	26%	19%
	ACP-eligible HHS	32%	34%	46%	40%	47%	41%	45%	45%	48%	41%
	ACP-eligible HHS enrolled	27%	58%	39%	3%	32%	35%	52%	27%	48%	35%
Digital literacy	Families 100-125% FPL	2%	5%	9%	1%	4%	6%	7%	7%	2%	4%
	Aged 25+ without high school degree	8%	9%	21%	9%	10%	18%	26%	30%	15%	11%
Demographics	Racial/ethnic URP ⁵	42%	29%	97%	69%	64%	59%	87%	88%	68%	54%
	Black population	10%	25%	70%	43%	39%	24%	11%	39%	38%	12%
	Living with a disability	9%	20%	23%	9%	11%	14%	18%	13%	20%	11%
	Rural population ⁶	0%	100%	0%	22%	0%	100%	0%	0%	100%	12%

1. Broadband defined as fiber, cable, or DSL internet.
2. As of May 2023, based on the FCC DATAmaps; does not account for any challenges. Federal funding awarded to ISPs as part of CAF II, RDOF, RBE, Reconnect, NTABIP, and RUS.
3. Includes smartphones.
4. FPL = federal poverty level.
5. URP = Under-represented population.
6. Using OMB definition of rurality (i.e., <50,000 population).

Source: US Census Bureau 2021 ACS 5-year estimates, US Census ACS Public Use Microdata Sample (PUMS), CostQuest, FCC DATA Maps May 2023, USAC, Education Superhighway ACP Enrollment Dashboard, 2010 Rural Urban Commuting Area Codes
DOCUMENT INTENDED TO PROVIDE INSIGHT FOR CONSIDERATION BASED ON CURRENTLY AVAILABLE INFORMATION AND IS NOT INTENDED TO PRESCRIBE SPECIFIC ACTION

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Appendix J: Record of Public Comments and Actions Taken- Comment 264 Attachment

Comments from Sharon Strover

Professor, University of Texas at Austin and Co-Director, Technology and Information Policy Institute

1. First, I applaud the Broadband Development Office for making good progress on putting together a plan. Although Texas was among the last of the states to initiate planning processes and to investigate the state of broadband throughout our large region, it is making terrific efforts on those fronts.
2. My comments primarily address the Needs Assessment that was undertaken to both inventory current assets for promoting digital opportunities and to examine digital opportunity needs around the state. The report notes that its key datasets included the American Community Survey from the Census Bureau and NTIA's digital equity act population viewer, and that it was supplemented with more locally gathered data. While ACS is widely used and represents accepted practices in terms of sampling and analysis, and the Population Viewer from NTIA is useful, the state of Texas missed an opportunity to undertake a systematic survey and assessment of our own needs here in Texas.
3. First, the Digital Opportunity Survey was a good effort to alert more people to the fact that the state was examining broadband needs with energy and concern. While most statisticians would discard the data that that survey generated as useless because it is based on a self-selected sample, often called an 'accidental' sample, I disagree. **Such data can be useful to gather information about the key topics that concern people.** That said, because the sample is not representative, and because it is composed primarily of closed ended questions, it has limited utility and **cannot be used for any statistically generalizable purposes.** I would strongly urge that the state look to some of the efforts of other states that have in fact deployed carefully crafted, statistically valid, well-designed surveys to profile digital needs, especially among underserved populations. It is precisely the underserved populations who would be most likely left out of the Digital Opportunity Survey since it was available primarily online; indeed 9440 of the 11,385 survey responses came from online sources. A clear representation of the extent to which the self-selected sample survey data deviate from the Census survey data available is found in Appendix C, where substantial population groups are clearly either under- or overrepresented in various instances (for example, on a page headed by "respondents belonging to one or more covered populations" – there are no page numbers in the online version of Appendix C). In one example, ACS data show 58% of the covered population in Texas are members of a racial or ethnic minority, while the Texas survey shows that 40% of its respondents belong to racial or ethnic minorities. I suspect that these discrepancies ultimately understate many of the needs of the population, particularly both affordability and digital literacy needs.
4. So too, the DMRTS was unsystematic in its survey. I would grant that it is difficult to be entirely systematic in inventorying digital assets. However, I see no evidence that there was **any** methodology short of "tell your friends and contacts" behind that survey's recruitment. It is telling that there were no responses at all from 136 counties. Consequently, the data analysis in

the appendix is not particularly useful. To the extent that implementation also is based on it, those plans too may be on shaky ground.

5. In providing non-random, non-generalizable data, I would expect that the Office might emphasize transparency around what it does have in the way of data. All the data should be available somewhere, including the transcripts of the public meetings.
6. **Given the vulnerability of the TX Digital Opportunity Survey statistics here, they cannot be used as baseline data for much of anything in the body of the report.** This means that the KPIs should be rethought and recalibrated when you have acceptable data.
7. I suggest you take a look at Missouri's statewide Internet Survey as well as the public record of its 20 focus groups. Their qualitative data gathering was driven not by self-selected samples but rather by a careful, census-data-driven selection processes. It is a very nice model.
8. I strongly urge that you implement a statistically valid mechanism for gathering data in the future. There are plenty of reputable survey organizations, at Texas universities and in the private sector, that could assist with this. Indeed, cultivating greater expertise with solid data based on granular knowledge of the state by using local resources would be beneficial in many ways.

Appendix J: Record of Public Comments and Actions Taken- Comment 269 Attachment

Tekwav LLC in partnership with Connect2Educate has been serving people who live in rural Grayson County for whom broadband access, affordability and adoption have been challenging, including adults over 60, veterans, English language learners, individuals living with disabilities, people who primarily live in rural areas, individuals belonging to racial and ethnic minority groups and those living at or below the federal poverty level. According to Digital Equity Act of 2021, the covered populations named in the legislation include Rural residents and defines Rural Area as a city or town that has a population of greater than 50,000 inhabitants. Unfortunately, Grayson, Fannin, and Cooke counties are always bundled with the Metroplex Region. Grayson, Fannin, and Cooke counties do not have any cities over 50,000 population.

In the past 3 years we have spent countless hours helping rural Grayson County schools and libraries apply for Emergency Connectivity Fund (ECF). We partnered with the Texoma Council of Governments to apply for NTIA's Broadband Infrastructure Program to try and bring much needed broadband infrastructure to Grayson and Fannin county.

Through the Texas State Library and Archives Commission (TSLAC) TSLAC CARES grant program we partnered with Pottsboro Library on a \$24,852 grant to utilize the Educational Broadcast Service Spectrum. We then partnered with Pottsboro Library to form a consortium of Grayson County libraries to apply for Emergency Connectivity Fund to provide 3445 Fixed Wireless connections to library patrons. Unfortunately, 2945 connections were removed to reflect the quantity associated with libraries that are not the filing entity because USAC did not recognize the Grayson County Libraries Consortium. In the end, Pottsboro Library was awarded 500 connections for 12 months, but that funding runs out on June 30, 2024, and because they took so long to approve the application, only about 6 months of service will be utilized.

The ECF is a great model for the Texas BDO to follow because going through the libraries utilizes already established organizations serving most of the covered populations. ECF is a program that helps schools and libraries provide the tools and services their communities need for remote learning. The BDO should use ECF as a model and focus on expanding the use cases to telehealth, and other digital opportunity initiatives. With our ECF award, we are achieving most of Texas's Vision for Digital Opportunity including reliable and affordable broadband internet service, affordable devices, and technical support. Here is a list of eligible equipment and services [ecf_esl.pdf \(fcc.gov\)](#):

Eligible Equipment includes:

- Wi-Fi hotspots
- Modems (e.g., air cards)
- Routers
- Devices that combine a modem and router
- Connected devices (laptop computers and tablet computers)

Notes: (1) Any components included by the manufacturer with eligible equipment, and necessary for the equipment to operate, for example cords and chargers, do not require cost allocation.

(2) Smartphones and desktop computers are ineligible for support under this Program.

(3) A manufacturer's multi-year warranty for a period of up to three years that is provided as an integral part of an eligible component, without a separately identifiable cost, is also eligible.

In general, eligible advanced telecommunications and information services include commercially available fixed or mobile broadband Internet access services. These services must be purchased by a school or library for off-campus use by students, school staff, or library patrons.

Eligible Services include:

- Cable Modem
- Digital Subscriber Line (DSL)
- Leased Lit Fiber (e.g., fiber to the home or to the premises)
- Satellite
- Wireless (e.g., fixed wireless, microwave, or mobile broadband)

The Pottsboro Library provides Digital skills training through another funding source, but those funds are limited as well. As for Cybersecurity awareness and online privacy, it can easily be added as a Digital skills training through a separate program. Tekwav would be willing to offer office space to help expand the Pottsboro Library's initiatives.

Appendix J.1: Attachments to Public Comments- Comment 270

January 5, 2024

Texas Broadband Development Office
111 E. 17th Street
Austin, TX 78701

RE: Public Comment – Texas Digital Opportunity Plan

To whom it may concern:

Hispanic Federation appreciates the opportunity to provide comments on the Texas Digital Opportunity Plan. HF is the premier Latino nonprofit membership and advocacy organization in the United States that seeks to empower and advance the Hispanic community, support Hispanic families, and strengthen Latino institutions through work in the areas of education, health, immigration, civic engagement, economic empowerment, and the environment. We hope our comments on Texas' digital opportunity plan help inform the development of the state's final proposal in a manner that truly meets the needs of Latino and low-income populations in Texas.

For several years, HF has worked closely with Latino community-based organizations across the U.S., including partner agencies in Texas, teaching essential digital skills to prepare Latinos for the increasingly digital workplace. Through our Latino Digital Accelerator and Latino Digital Equity Center initiatives, we have enhanced the capacity of Latino-led and -serving nonprofits providing critical digital skills training in recognition of the significant digital divide Latinos face. In our 2022 report *Closing the Latino Digital Divide: Lessons Learned from Community-Based Approaches to Latino Digital Skilling*¹, we outline our successful approach to closing the Latino digital divide with emphasis on supporting trusted community institutions offering culturally and linguistically responsive programming to increase digital skills along with vital wraparound services to meet the needs of their communities.

We know that technological advancements are changing the requirements for our workforce and Latino-led and -serving nonprofits engaged in workforce training must respond to the shifting labor market demands to best prepare Latino workers for the digital economy. The federal Digital Equity Act, passed as part of the Infrastructure Investment and Jobs Act in 2021, is a historic investment in meeting this demand. The funding that Texas is receiving through this legislation will not only help residents get badly needed access to high-speed internet and digital devices, but also equip them with the skills they need to use those tools effectively to achieve their economic aspirations. Equipping people with the digital skills they need for the workplace and in their everyday lives is an integral part of achieving broader digital inclusion goals.

¹ Hispanic Federation. Closing the Latino Digital Divide: Lessons Learned from Community-Based Approaches to Latino Digital Skilling. Fall 2022. https://www.hispanicfederation.org/images/HF-Closing_the_Latino_Digital_Divide-Report22.pdf

Recent research from the nonprofit National Skills Coalition and the Federal Reserve Bank of Atlanta highlights the demand for digital skills in our state. The *Closing the Digital Skill Divide*² report analyzed millions of Help Wanted ads and found that fully 91% of jobs in Texas today require digital skills or likely digital skills. These numbers hold true across industries and for workers at every level of education and experience. This research is especially important to highlight as more than half of Latino workers have limited to no digital skills, and one-fourth of Latinos have access to the internet only through smartphones. Latinos make up 18% of the overall U.S. labor market and will continue to account for one out of every two new workers that join the workforce by 2025. However, Latinos also hold jobs that are at the highest risk of elimination due to automation of any identity group at close to 60%. The forecast is clear: without digital skills, Latinos will be disproportionately excluded from jobs that will advance their economic mobility.

When looking at broadband connectivity, Latinos face challenges in the digital space – whether looking at connectivity, access to equipment, or digital literacy, Latinos lag all other groups. A 2021 survey found Latinos compared to White non-Hispanics were far less likely to have home broadband (80% vs. 65%)³. Reports also found that roughly one-third (35%) of households with children ages 6 to 17 and an annual income below \$30,000 a year do not have a high-speed internet connection at home, compared with just 6% of such households earning \$75,000 or more a year. Latinos are the second largest racial or ethnic group in Texas at 39% of the population which is more than double the national share of Latinos (18%). Since 2000, the Latino population has grown 76%, almost double the state rate of 41%.⁴ With regard to internet services in Texas, approximately half of people living at or below 150 percent of the federal poverty level lack high-speed internet; 16.3% of foreign-born people in rural communities lack access to broadband internet and 30.8% of racial and ethnic minorities did not have high-speed internet at home.⁵

As the State of Texas is aware, community-based organizations and anchor institutions are woven into the fiber of the Latino community, and thus, can reduce service barriers by operating within Latino neighborhoods, providing education and training bilingually or in Spanish. These organizations understand community needs and culture and are committed to serving those with the greatest need. These organizations are important digital equity stakeholders that can serve as ambassadors for conducting outreach, delivering trainings, offering digital navigation and technical assistance to expand access to digital opportunities in Latino communities. We urge the State of Texas to collaborate with community-based organizations as they are best placed to connect within the communities which these funds are aimed and can maximize the opportunity provided by the current administration to ensure digital equity for all.

² National Skills Coalition & Federal Reserve Bank of Atlanta. *Closing the Digital Skill Divide*. February 2023.

https://nationalskillscoalition.org/wp-content/uploads/2023/02/NSC-DigitalDivide_report_Feb2023.pdf

³ Sara Atske and Andrew Perrin, “Home broadband adoption, computer ownership vary by race, ethnicity in the U.S.,” Pew Research Center. July 16, 2021. [Black, Hispanic adults less likely to have broadband or traditional PC than White adults | Pew Research Center](#)

⁴ Latino Policy & Politics Institute. *15 Facts About Latino Well-Being In Texas*. February 22, 2023.

<https://latino.ucla.edu/research/15-facts-latinos-texas/#:~:text=Latinos%20are%20the%20second%20largest,the%20state%20rate%20of%2041%25>

⁵ American Immigration Council. *Examining Gaps in Digital Inclusion in Texas*. December 2022.

https://www.americanimmigrationcouncil.org/sites/default/files/examining_gaps_in_digital_inclusion_in_texas.pdf

Thank you again for the opportunity to submit these comments. We hope to be part of the effort that closes the digital divide for unserved and underserved populations throughout the great state of Texas. Such an effort will provide historically marginalized populations access to critical broadband services and digital skilling they need and deserve.

Sincerely,

Diana Caba

Vice President for Community & Economic Development, Hispanic Federation

Appendix J.1: Attachments to Public Comments- Comment 271

Aging and Disability Tech Collective

The purpose of this document is to share the list of active members of the Aging and Disability Tech Collective (ADTC) along with a brief history of the group. This will be submitted as part of our comments about the Texas Digital Opportunity Plan to the Broadband Development Office.

Brief History

A taskforce was initiated in May of 2020 by the Aging Services Council of Central Texas with the purpose of developing a long term plan for helping older adults get access to tech devices, training, support, and programming. In October of that year the group conducted a technology needs survey, [view results here](#), which led to Austin Free-Net (AFN) and Senior Access participating in a train-the-trainer program facilitated by Community Tech Network (CTN). In May of 2021, CTN received funding to launch Senior Connect in partnership with AGE of Central Texas and the program provided tablets and training to 125 older adults in four languages. AGE received funding in July of 2022 to continue Senior Connect.

In January of 2023, the taskforce was renamed to Aging and Disability Tech Collective (ADTC) and meets monthly to share resources and ideas, and to discuss partnership opportunities. ADTC is a working group of the Texas Digital Equity Network (TXDEN).

Active Members

- Suzanne Anderson: Chief Executive Officer, AGE of Central Texas
- Catherine Crago: Head of Strategic Initiatives and Resource Development, Housing Authority of the City of Austin
- Skye Downing: Digital Equity Programs & Partnership Director, Community Tech Network (CTN)
- Kami Griffiths: Executive Director/Co-founder, Community Tech Network (CTN)
- Serita Lacasse: Executive Director, Senior Access
- Lindsey McQuiston: Manager of Career Services, Goodwill Central Texas
- Jessica Strom: Digital Inclusion Programs Manager, Opportunity Home
- Hannah Quintanilla: ACP Outreach Coordinator, Opportunity Home
- Jess Ross: Executive Director, Austin Free-Net (AFN)
- Anita Swanson: Project Manager, Texas Technology Access Program, The University of Texas at Austin

Appendix J.1: Attachments to Public Comments- Comment 276

**AARP Texas Public Comments on the Draft
TEXAS DIGITAL OPPORTUNITY PLAN
January 5, 2023**

Section 1: Executive Summary

AARP commends the Texas Broadband Development Office (BDO) for its thoughtful, comprehensive, and clearly written draft Digital Opportunity Plan (Plan). The Executive Summary at the Plan's outset provides an excellent overview of the key elements in the Plan (vision, the state of digital equity in Texas, stakeholder engagement, and implementation).

AARP has actively advocated for reliable affordable high-speed internet access for years and appreciates the opportunity to submit comments on the BDO's Plan. AARP's comments reflect a perspective based on many years of advocacy for older adults on a wide range of issues – including health care, caregiving, affordable utilities, etc. - and its active engagement with federal and state advocacy for affordable, reliable, sustainable high-speed internet access and devices, supported by digital literacy training and tech support. AARP has now reviewed twenty-four other draft state digital opportunity plans and so brings that perspective to this review of the Texas Plan. In the years ahead, AARP welcomes the opportunity to work with the BDO to contribute to the Plan's successful implementation.

Section 2: Introduction & Vision for Digital Opportunity

AARP appreciates the strong trajectory of action Texas has taken in recent years by establishing the Governor's Broadband Development Council in 2019, passing HB 5 in 2021 to create the BDO, and the passing of legislation in 2023 and subsequent voter approval to establish the Broadband Infrastructure Fund. AARP supported each of these measures.

AARP supports fully the Plan's multi-faceted vision for digital opportunity and appreciates the fact that the BDO's vision encompasses key elements of digital opportunity – availability, affordability, and digital skills adoption.

AARP supports the BDO's five goals, which are provided in a clear, concise format:

- Goal 1: All Texans have access to reliable, affordable broadband internet service at home. Too many older Texans lack access to reliable and affordable broadband internet service at home. AARP commends Goal 1 including reliability as a key indicator of quality service, and the data collection practices that will detail whether reliable service is being delivered at a granular level (preferably household). To supplement KPI 1.1.3, AARP recommends that the Plan include a commitment to track ACP participation, and, to the extent feasible, to track the participation by geography, age, race, and any other attribute for which data are available.

TEXAS DRAFT DIGITAL OPPORTUNITY PLAN DECEMBER 2023

The following table, which shows ACP participation in Texas, disaggregated by age, is an example of the type of data that the BDO could track and report (and is based on data reported by Universal Service Administrative Company, as of November 2023):

Age	Number	Percent
18-24	122,287	8%
25-49	877,795	52%
50-64	363,689	22%
65-84	290,387	17%
85+	23,605	1%
Total	1,677,763	

- Goal 2: All Texans have access to affordable computers and other internet-enabled devices in their home, with corresponding technical support services. Ensuring that older adults have access to affordable, reliable, easy-to-use devices is a long-standing focus of AARP advocacy. U.S. Census American Community Survey data for Texas shows a continuing age-based gap in device adoption, which underscores the importance of digital opportunity programs that help to close this gap. Moreover, aging Texans with disabilities may benefit from specialized devices or training.
- Goal 3: All Texas have a broad foundation of digital literacy skills and access to a continuum of digital skills development programs. AARP commends the BDO for prioritizing digital literacy skill development in the state. In AARP’s experience, lack of digital skills is a substantial barrier preventing older adults adopting broadband and new technology. See Implementation section for detailed comments and suggestions for setting up a successful digital skills development program in Texas.
- Goal 4: All Texans feel safe online and are familiar with cybersecurity and online privacy measures. Trust and privacy concerns remain a barrier preventing older adults from adopting broadband and new technology. A recent AARP survey (Tech Trends, 2023) found that 18% of survey respondents expressed concern about trust and privacy. AARP maintains that older adults’ lack of digital literacy and gaps in digital skills exacerbate fears about online safety and privacy, making some more reluctant to obtain home access to high-speed internet. Digital know-how, comfort using new technologies and applications, and having the skills to protect one’s privacy are interrelated and critically important to older adults. Moreover, aging individuals are especially susceptible to scams and are concerned about their privacy being jeopardized. For example, a recent Pew Report states: “Two-thirds (67%) of adults say they understand little to nothing about what companies are doing with their personal data, up from 59%.” The Report also states that about seven-in-ten Americans are overwhelmed by the number of passwords they must remember, and nearly half (45%) report feeling anxious about whether their passwords are strong and secure. <https://www.pewresearch.org/short-reads/2023/10/18/key-findings-about-americans-and-data-privacy/>

- Goal 5: Increase the percentage of Texans who utilize the internet for public resources and services. AARP supports efforts to make it easier for older Texans to access governmental and community resources.

AARP suggests the final Plan include an additional goal to reflect a commitment by Texas to solidify a robust digital opportunity ecosystem within the state that will thrive beyond the five-year funding provided by the Digital Equity Act. Once achieved, a robust and healthy digital opportunity ecosystem will sustain coordinating entities providing the necessary ongoing support and programming to address all facets of the digital divide. This concept aligns with, but expands upon, Strategy 4 on Page 10 which calls for maintaining a living Digital Opportunity Plan.

AARP appreciates the Plan's alignment in 2.c.iv.3 (page 37) with the health priorities of the state and commends the Plan's detailed discussion of telemedicine. Remote access to state-of-the-art health care is critically important to aging individuals and their families. We encourage the BDO to explore health and wellness digital skills training classes for covered populations, as well as telemedicine and healthcare. Health digital skills training classes can aid covered populations' interpretation and understanding of their health (e.g., knowing where to access health information and studies, and assist in the measuring and monitoring of their health through technology. e.g., wearable devices, apps).

Section 3: Current State of Digital Opportunity

We commend the BDO for using the DRMTS to create an asset inventory. We encourage the BDO to continue to utilize the DRMTS to help capture additional digital opportunity offerings across the state. A publicly available resource could help individuals find programs that are suited for them and inform stakeholders and representatives of covered populations as they seek to collaborate with that implementation.

There are a few relevant aging individual assets missing from the asset inventory including:

- OATS flagship program, "Senior Planet from AARP" is available to all Texans virtually, as well. On a national level, Senior Planet is also available to Texas residents, virtually via SeniorPlanet.org and via a National Tech Hotline: 888-713-3495 which is monitored by Senior Planet Trainers from 9am – 5pm EDT, Monday through Friday.
- Senior Planet from AARP also has a licensing program that equips local organizations across the country with the tools and curriculum to help older adults access technology and use it to enhance their lives. Licensing partners within Texas include: Pottsboro Library; Lakehills Area Library; The Senior Source (Dallas); YMCA of El Paso; The Richardson Adult Literacy Center; Jewish Family Service of Greater Dallas (JFS); All Hands Cultural Community Center (Wichita Falls); Impact Hub Houston; Worklife Ministry, Inc.; Austin Area Urban League; The Women's Resource of Greater Houston; L-H Transitional Center, Inc.; Family Houston; 3 Leaf Literacy, Leadership & Learning Institute (Dallas); and the Riter C. Hulsey Public Library (Terrell).

- The City of San Antonio’s Department of Human Services and Older Adults Technology Services (OATS) from AARP are working together to implement technology programs to support older San Antonians. This partnership includes programs for older adults from OATS by AARP, through its flagship program Senior Planet, providing tech support and hundreds of virtual and in-person classes that engage 2,200 older adult participants. It also includes information about Senior Planet online resources, access to a technology help hotline, and technology training programs available at local senior-serving community centers, including classes about how to apply for the Affordable Connectivity Program (ACP). This program also features the ability for partners to capture program impact and broader participants gains through data collection activities by reviewing program survey data, call logs, as well as qualitative information gathered through formal and informal discussions with participants in programs.
- The City of San Antonio Department of Human Services, the University of Texas at San Antonio (UTSA) and Older Adults Technology Services (OATS) from AARP are working together to bridge technology and nutrition gaps among older adults. Led by UTSA’s Nutrition and Dietetics Program, this initiative is designed to empower older adults in San Antonio by providing them with comprehensive technology resources and nutrition support. The program provides tablets, internet access, tech support, and a five-week technology training course at the City’s 11 Comprehensive Senior Centers. Following the technology course, the UTSA team administers a 15-week digital nutrition intervention developed specifically for older adults. Recently, the program celebrated the graduation of its first cohort, consisting of 160 older adults. The second cohort is already underway, with activities planned through April 2024. This initiative is made possible through a three-year, \$1.18 million grant from the National Institutes of Health (NIH).

AARP commends the BDO for its robust efforts to determine and establish a digital opportunity baseline for the state. Establishing such a baseline is essential for charting progress in the future to ensure that precious digital opportunity resources are directed in the most effective manner. AARP also appreciates the BDO acknowledging outreach methodology limitations, in particular the difficulty in garnering wide and deep feedback from individuals who are not currently online.

The Plan’s assessment of the needs of aging individuals broadly resonates with AARP’s experiences:

- Aging individuals report internet availability and adequacy as key barriers
- Aging individuals express concern about adequate internet speeds
- Aging individuals have less comfort with basic digital literacy skills and would be interested in internet or computer training classes

The Plan observes that 86% of the state belongs to covered populations. In Texas, 18% of the population consists of aging individuals. Individuals within the various covered populations overlap, which, in turn, can inform the design of specific programs and projects. AARP is fully prepared to work with the BDO and representatives of other covered populations to collaborate on the successful implementation of digital opportunity programs and projects that address this overlap (e.g., aging individuals living in rural areas; low-income aging individuals; aging

individuals who are a racial or ethnic minority; individuals who are aging and have disabilities; etc.).

AARP recommends the Plan include the Affordable Connectivity Program (ACP) as a key asset, since it is a critically important way to help members of the covered populations afford high-speed internet access. However, as is also the case in other states throughout the country, far fewer households in Texas participate in the ACP than are eligible to do so. The Plan states, among other things, that in Texas an estimated 38 percent of eligible households have enrolled, which is a rate slightly lower than the estimated national level of 41 percent. AARP appreciates that the BDO recognizes that there is still significant opportunity for growth in enrollment.

The ACP is a critically important way to address the affordability barrier.

- AARP supports and furthermore is fully prepared to assist Texas in increasing ACP participation
- AARP is hopeful that the BDO will continue to monitor ACP participation, particularly by certain demographic cuts (e.g., age and race).
- AARP is actively advocating for the continuation of funding for ACP or a successor program.
- AARP welcomes the opportunity to work with the BDO and representatives of other covered populations throughout the state to help increase ACP participation levels.

Section 4: Collaboration and Partner Engagement

AARP commends the BDO for its comprehensive engagement with stakeholders and representatives of covered populations from throughout the state and its impressive collaboration in developing the Plan. We appreciate the thorough stakeholder engagement conducted with older Texans (Aging Individuals represented 42% of covered population distribution of Texas' online survey), as indicated on page 25 of Appendix C: Needs Assessment and Asset Inventory Report, Methodology and Limitations. We also appreciate the inclusion of the table "Online Digital Opportunity Survey Results: Two Covered Population Groups" in Appendix C. This indicates that the BDO should pay particular concern to older adults living in rural areas (e.g., transportation to community anchor institutions, and older adults with disabilities. e.g., accessibility and technical support of public resources).

AARP appreciated the opportunity to directly contribute to the Plan in various ways, including participating in the Statewide Working Group and the Civic and Social Engagement Task Force.

AARP is hopeful this collaboration will provide a solid foundation for the successful implementation of the Plan in the years to come, and, in that spirit, appreciates the Plan's commitment to ongoing engagement. AARP also is impressed by the Plan's comprehensive discussion of its various approaches to ensuring collaboration and partnerships.

Regarding Section 4.c.i, Public Comment Process, AARP recommends that the BDO greatly expand the character limit on its draft Digital Opportunity online public comment form which appears to prevent feedback on specific sections of the Plan that exceeds approximately 1,000 characters. Of the 23 draft state digital equity/opportunity plans reviewed by AARP, this appears to be one of the most restrictive limits we have seen. It is not clear whether the option to upload a file is a welcomed avenue to offer broader comment (“If you have *additional* documents to support your comments, *such as an existing plan*, upload it here”, emphasis added).

As is the case with the vast majority of the state draft plans that AARP has reviewed, the BDO’s full draft Plan is not communicated in languages other than English. In some instances, other states provide a link to the draft digital connectivity plan in one or more languages other than English. AARP recommends that full draft Plan be made available in Spanish and other major language(s) spoken in Texas to encourage and facilitate ongoing collaboration during the Plan’s implementation with those individuals not proficient in English.

Section 5: Implementation

The Plan’s approach to implementation dovetails well with the assets and barriers the Plan identifies and describes in Section 3 and builds off of the partnerships and relationships described in Section 4. The many elements of the plans for implementation appears ambitious yet pragmatic.

Balance

Regarding Strategies 1 “Partner With and Fund Statewide Organizations” and Strategy 2: “Fund Local Partners”, AARP appreciates to need to balance investments in both local and statewide digital opportunity programs. Texas will need to simultaneously invest in practitioners and partners with existing successful programs and reach communities that currently lack any digital opportunity resources. This will require simultaneous investments in local programs and organizations and statewide programs, perhaps through state agencies (like state libraries) or through organizations that operate statewide.

Texas will also need to balance investments in capacity building and direct services. Some organizations and communities are new to digital inclusion and/or need increased capacity to scale their digital opportunity program. To invest in capacity building, Texas could support the establishment of digital opportunity coalitions and adding capacity to existing ones. It could also invest in the creation of local, regional, or Tribal digital opportunity plans that will support capacity building and thoughtful implementation. Meanwhile, many organizations are already equipped to deliver digital opportunity services (e.g., digital skills trainings, etc.) to residents, and will extend their reach with additional resources.

Texas will further need to balance investments in proven models and those with new, innovative strategies. Striking a healthy balance of investing in programs, organizations, and models that are proven to be effective while also providing space for innovation and expansion of the field will increase effectiveness.

Texas will need to balance ownership and control of strategies. Some strategies should be owned by state and local agencies, some by anchor institutions, and others by local community-based organizations. Diversifying the types of organizations responsible for carrying out implementation strategies will support the growth of a robust digital opportunity ecosystem. Investing in capacity across different organization types will also help ensure sustainability by protecting against shifts in funding.

Data Collection and Transparency

As mentioned in comments on Section 2, AARP supports the final Plan including a goal to achieve and sustain a robust digital opportunity ecosystem in Texas. To ensure that sustainability is prioritized from the beginning of implementation, AARP recommends that the BDO add a section to the Implementation section that reflects a commitment to data collection and transparency in its Plan. The BDO includes valuable information, data, tables, maps, and figures throughout the Plan. AARP is encouraged that the BDO pledges to “continue to research, gather, measure and analyze data to evaluate progress against KPIs,” on page 170. AARP is hopeful that the final Plan expands on that to include data and lessons learned beyond information tied to KPIs.

In its review of states’ draft digital equity plans, AARP advocates for states to establish and to maintain a well-publicized, easy-to-use digital equity “dashboard” that monitors availability, affordability (speeds, prices), and adoption (numbers of subscribers, if possible, disaggregated by covered populations and geography). This dashboard could include aggregated metrics to track general trends and maps to display information visually on an ongoing basis. The dashboard could also capture and share program-level best practices from across the state.

The BDO could tap into its partnership with Texas A&M and/or relationships with other educational institutions to bring GIS, statistical, and other skills to the state’s efforts to identify gaps in digital equity and to monitor its success in closing those gaps. Making this information readily available to all can help community-based organizations and all members of the digital ecosystem tailor programs and adopt best practices. Moreover, this data and information sharing will show industry, philanthropy, and government that each will reap the benefits of investment in digital opportunity programs.

Affordability

Within 5.c.iii Strategy 3, Promote Internet Adoption, AARP recommends that the final Plan discuss the importance of ISP commitments to provide consumers with access to unbundled, affordable broadband service. Also, AARP is hopeful that the BDO will, as part of its BEAD middle-class affordability plan, require prospective subgrantees to offer at least one unbundled broadband product with a transparent price (i.e., no hidden fees) and certify that it will continue to provide this option to middle-income households for a specific number of years (for example, five years).

AARP commends the consideration of the BDO’s Goal 2: “All Texans have access to affordable computers and other internet-enabled devices in their home, with corresponding technical support services.” Having accessible devices within the home can help with document

management and text editing, e.g., the size of the screen and file management. Older adults will also be able to use interactive video, such as Zoom, to display group screens or live chats.

Also relative to affordability, AARP is hopeful that the BDO's final Plan will discuss and emphasize publicly owned and operated internet access networks, which can lead to more affordable prices than do commercially owned ones. AARP suggests that the final Plan discuss this strategy as one of various approaches to achieving affordability.

Digital Skills

AARP commends the consideration of the BDO's Goal 3: "All Texans have a broad foundation of digital literacy skills and access to a continuum of digital skills development programs." Having access to a suite of ongoing digital skills development programs will ensure outcomes are sustained and extend beyond basic training. New or hesitant users of technology may be more likely to adopt digital skills if classes extend beyond basic training.

AARP requests the BDO consider including a foundational digital literacy skill/s and accessing healthcare information programs for older adults within the Implementation Section. As the BDO has indicated within the Aging Individuals section of the Needs Assessment on page 59, "Aging individuals have less comfort with basic digital literacy skills such as connecting a computer or smartphone to a Wi-Fi network..." and "Aging individuals often use the internet to access healthcare information or services, the second highest among covered or underrepresented populations."

Expanded Authority

If needed, AARP urges the BDO to seek legislative authority to require providers to submit data to assist with the implementation and assessment of the progress of the Digital Opportunity Plan (e.g., regarding deployment, prices, adoption, speeds, and technology). AARP has engaged in state legislative high-speed internet access advocacy in many jurisdictions throughout the country and is fully prepared to assist with legislative advocacy that would facilitate the BDO's achievement of digital equity.

Section 6: Conclusion

The concluding section captures the challenges of achieving digital connectivity for all and the vision of such achievement. AARP looks forward to working with the BDO to contribute to Texas' achievement of (and sustainability of) digital connectivity for all.

Contact:

For questions, feel free to reach out to Stephanie Mace, associate state director of advocacy and outreach with AARP Texas, at 979.224.0766 and smace@aarp.org.

Appendix J.1: Attachments to Public Comments- Comment 282

January 5, 2024

Re: Texas Digital Opportunity Plan

Texas Broadband Development Office,

Thank you for the opportunity to provide comments on the Texas Digital Opportunity Plan, *Chapter 5: Implementation*. The purpose of the Texas Digital Opportunity Plan (referred to as “the plan”) is “to address broadband access, affordability, and adoption for all Texans,” and Texas Appleseed thanks the Texas Broadband Development Office (BDO) for prioritizing non-infrastructure related digital opportunity considerations for Texas individuals, families, and communities.¹

Introduction

Texas Appleseed is a nonpartisan nonprofit focused on bringing about policies that are fair, just, and equitable for all Texans. Fueled by data, legal expertise, and a commitment to supporting vulnerable communities, our work has shaped hundreds of state and local policies and positively affected millions of Texans.

Through its Fair Financial Services Project, Texas Appleseed advocates for fair market practices across many financial services areas and has been a leader in working to implement strong data privacy protections for Texans. Our data privacy work focuses on mitigating the risks of financial exploitation and technological abuse for vulnerable groups, including survivors of abuse and older adults. In order for the state to ensure that “every Texan has the skills and abilities to fully and safely utilize broadband access,”² the state must recognize that with access to the internet comes exposure to online harms that, unless equipped with the awareness and knowledge of how to safely prevent and address such harms, can be devastating for Texans.

After a thorough review of the Texas Digital Opportunity Plan, **Texas Appleseed has developed two key recommendations to strengthen the effectiveness of the plan:**

- Prioritize data privacy education in grant requirements for funding statewide organizations and local partners; and
- Expand research efforts and data collection methods to explore digital harms that Texans face.

¹ Texas Broadband Development Office & Texas Comptroller of Public Accounts. Texas Digital Opportunity Plan (November 2023), pg. 5. See: <https://infinite-peak-70034.herokuapp.com/images/TDOP.pdf>

² *Id.*

Texas' Vision for Digital Opportunity focuses on improving "quality of life" for Texans through access to affordable and reliable broadband, and it is critical that the BDO does not undermine this focus by failing to address the real life digital harms that Texans may be faced with as they increase their online activity.³

Digital Harms Facing Texans

The *Texas Digital Opportunity Survey* developed by the BDO found that "most Texans are familiar with cybersecurity and online privacy measures," with 90% of survey respondents being familiar with cybersecurity measures and 86% having had cybersecurity measures set up on their devices.⁴ This could potentially indicate that most Texans are aware of the steps they need to take to protect themselves from online harms, but as advances in digital technologies allow for online behavior to be increasingly and incessantly monitored, it is much easier for bad actors to discover innovative ways to take advantage of people using information gleaned from online sources and activities. Additionally, the survey results found that several covered populations - Aging Individuals;⁵ Individuals with Limited English Proficiency;⁶ Individuals Who Belong to a Racial or Ethnic Minority Group;⁷ and Low Income Households⁸ - were not as familiar with cybersecurity measures or did not have or know if they have cybersecurity measures on their devices, which further shows that vulnerable, at-risk, and minority populations in Texas are at a disadvantage when it comes to not only accessing and utilizing internet services, but also at knowing how to protect themselves from online abuses.

For Texans that are actively online, large amounts of digital information is being collected using a range of methods, including online cookies, registered loyalty cards, purchase history, public social media platforms, device or browser identifiers, and more.⁹ Texans are becoming more aware of the harmful ways that their information is being used, such as through targeted advertising that can manipulate decision-making or exploit vulnerable circumstances.¹⁰ This mass collection of data creates opportunities for personal information to be placed in the wrong hands, such as through data breaches, or even the purchase of personal information from data brokers - businesses that

³ *Id* at 6.

⁴ *Id* at 56.

⁵ *Id* at 60.

⁶ *Id* at 77.

⁷ *Id* at 81.

⁸ *Id* at 89.

⁹ Lois Beckett, "[Everything We Know About What Data Brokers Know About You.](#)" ProPublica, (June 13, 2014).

¹⁰ Jeannie Paterson, Shanton Chang, Marc Cheong, Chris Culane, Suelette Dreyfus, and Dana McKay, "[The Hidden Harms of Advertising by Algorithm and Interventions from the Consumer Protection Toolkit.](#)" International Journal on Consumer Law and Practice, Volume 9, pp. 1-24, (September, 2021).

have no direct relationship with an individual but are still able to collect and sell personal, sensitive information to and from third parties - which causes real harm to unsuspecting Texans.¹¹

Digital privacy invasions, such as identity theft, can bring risks to the wellbeing and security of vulnerable populations that are most susceptible to digital harms. As a result, there are significant ramifications to financial stability and individual safety. Abusive individuals can use the vast array of information available online to perpetrate financial abuse and continue to harass survivors of domestic violence and human trafficking. Data show that economic exploitation is prevalent in abusive relationships, and this type of abuse is enabled by the ease of accessing and using the data of victims and survivors.¹²

For older adults, elder abuse through digital exploitation and fraud is a devastating occurrence that can leave people without their hard earned savings and retirement money.¹³ Unfortunately, Texas is a leader in terms of the losses of over 60 years-of-age victims of elder fraud, with losses reaching more than \$100 million.¹⁴ If Texans do not fully understand the ways in which a lack of online protection can lead to privacy invasions and digital abuses, the state is putting new internet users in harm's way before they have even begun to reap the benefits of broadband access. While little accountability exists regarding what type of information can be collected, who has access to the data, or how it is protected, there are strategies that the BDO can incorporate into the plan that can ensure that Texans that gain access to broadband connectivity and the online world are proactively protected from digital harms.

Chapter 5 Recommendations: Digital Harm Awareness, Education, and Research

Recommendations to enhance *Chapter 5: Implementation* are centered around the fourth outcome objective that the BDO created in order to guide the implementation of the plan: Awareness of, and the use of, measures to secure the online privacy of, and cybersecurity with respect to, an individual. For this outcome, the plan's goal is to "increase the percentage of Texans who are familiar with cybersecurity and online privacy measures," which will be accomplished by employing

¹¹ In recent years, we have seen major data breaches from [T-Mobile](#), [Equifax](#), [Robinhood](#), and [Edfinancial](#), which put millions of consumers' personal, private financial data at risk, and have brought about growing data privacy concerns from consumers.

¹² A 2019 report by the National Domestic Violence Hotline found that nearly one in three Texans who called the hotline disclosed experiencing economic/financial abuse, and 19% disclosed experiencing digital abuse, which was defined as abuse through "the use of technologies such as texting and social networking to bully, harass, stalk, or intimidate a partner." See: National Domestic Violence Hotline, "[Texas State Report](#)." (2019).

¹³ Elder "exploitation" is defined as "the fraudulent use or otherwise illegal, unauthorized, or improper act or process of an individual, including a caregiver or fiduciary, that uses the resources of an elder for monetary or personal benefit, profit, or gain, or that results in depriving an elder or rightful access to, or use of, benefits, resources, belongings, or assets." See: Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119, 111-148 (2010).

¹⁴ Federal Bureau of Investigation, "[2021 Elder Fraud Report](#)" (2022).

Strategy 1 (Partner With and Fund Statewide Organizations) and Strategy 2 (Fund Local Partners).¹⁵ Because the plan identified that online privacy and cybersecurity concerns are seen as a challenge to broadband adoption, Texas Appleseed has determined two recommendations that will help Texans overcome this barrier and provide the state with the resources and tools it needs to better understand and address data privacy concerns: 1) prioritizing data privacy education in grant requirements for funding statewide organizations and local partners, and 2) expanding research efforts and data collection methods to explore digital harms that Texans face.¹⁶

Increasing Data Privacy Awareness and Education

As society advances, so do its technologies, and it is imperative for online users to be equipped with the knowledge of the online harms they may encounter, how to effectively prevent and address those harms, and what tools and resources are available to help them best prioritize their online safety and security. While there is no federal data privacy law that provides protections to all internet users, Texas recently passed two data privacy laws that now give Texans a new set of baseline data privacy rights to help them gain control over what happens to their online data, which can help internet users be more proactive in protecting themselves from online abuses.¹⁷ However, without proper knowledge and understanding of what Texans can do to protect themselves as they gain access to the online world, data privacy rights remain ineffective. Based on the findings of the *Digital Rights Mapping Tool Survey* administered by the BDO, current Digital Opportunity Programs do not prioritize cybersecurity and privacy training, which further demonstrates the strong need for the prioritization of data privacy education as broadband becomes more accessible to Texans.¹⁸

Of the four key strategies that the BDO developed to help guide the implementation of the plan, Strategies 1 and 2 can both be enhanced to address the need for important cybersecurity and privacy education. For Strategy 1, partnerships with organizations can include incorporating data privacy awareness and education-centered initiatives to help provide new internet users with the necessary tools to understand the potential harms they may encounter as they navigate the online space and how to best prevent and address online harms. For Strategy 2, grant requirements with partners can require the offering of cybersecurity and privacy trainings centered on equipping Texans with important knowledge about online harms, including:

- An introduction to data privacy and its importance for internet users,
- Clear steps users can take to maximize digital privacy and control on their online (e.g., adjusting online browser settings, blocking cookies, etc.),

¹⁵ *Supra* note 8, at 50.

¹⁶ *Id* at 51.

¹⁷ On September 1, 2023, two data privacy laws went into effect in Texas: [House Bill 4](#) (the Texas Data Privacy and Security Act), and [Senate Bill 2105](#), which requires data brokers to register with the state.

¹⁸ *Id* at 131.

- Legal rights in Texas and applicable federal laws, and
- How to access existing tools and protections against digital threats, such as fraud and financial abuse.

The BDO can build this type of education into current digital citizenship, digital literacy, and digital opportunity programs to ensure that Texans that gain access to broadband services are more effectively prepared to address digital harms.

Expanding Research Efforts on Digital Harms

While several digital harms have already been identified, such as identity theft and financial abuse, the ways in which bad actors can take advantage of Texans online and cause significant harm are only growing, such as the rapid development and use of artificial intelligence. It is important for the BDO to not only recognize the ways in which digital abuses can have devastating impacts on Texans, but for the state to invest in and expand data collection and research efforts to further explore the current and rising types of digital harms that Texans may face, ways in which these harms can be addressed, and methods by which these harms can be prevented. This recommendation strongly aligns with Strategy 4 (Maintain a Living Digital Opportunity Plan), in which the BDO can include a new category dedicated to:

- Exploring statewide digital harms (such as through community focus groups);
- Equipping organizations and local partners with the knowledge and tools to train their staff, and therefore, its community members on digital harms, and
- Developing a living resource guide that is accessible to and provides Texans with helpful resources to prevent and address online harms.

Thank you again for the opportunity to provide comments on the Texas Digital Opportunity Plan. The digital age has created ingenious ways for abusers, fraudsters, and scammers to gain access to people's personal information online and wreak havoc on a person's overall wellbeing, and as Texas works to expand broadband access and eliminate the digital divide, it is important for the state to ensure that it is setting Texans up for success by providing them with the knowledge, tools, and resources to practically and effectively protect themselves from digital harms.



Briana Gordley
Senior Policy Analyst, Texas Appleseed

Appendix J.1: Attachments to Public Comments- Comment 283

DECA Network - Texas Digital Opportunity Plan (TDOP) Coordinated Public Comments

Chapter 2 - Introduction & Vision for Digital Opportunity

Consistent set of Covered Populations

On the topic of covered populations, we found the plan to be inconsistent on who they considered in those groups. For example, in section 2.c.iii, the covered populations do not match the NTIA's covered populations noted on page 16. In section 2.c.iii, individuals with low literacy levels and incarcerated individuals were added.

Recommendation: We agree that both populations should be considered covered, we just need that to be consistent across the plan so groups are not left behind.

2.d Strategy and Objectives – (TDOP p. 48)

1) Goals are not ambitious (KPI 1.1, 1.2, 1.3) - It is important that the BDO is developing strategies and objectives to ensure the NTIA measurable objectives are being met. However, we are concerned that the target goals for Texas Goals KPI 1.1, 1.2 and 1.3 are set too low given the seven-year time horizon, the amount of funds available through BDO to address closing the digital divide in Texas and the current resources and organizations both at the state and local level on these issues.

Recommendation: We recommend a target goal of 90% by 2030 in a fiscally responsible way.

2) Measuring what matters - (KPI 2.2, 3.2) The target measure for 2.2 measures the # or % of organizations that offer digital skills and technical skills. The challenge is that the number of organizations offering services does not translate to the quality or the availability of services provided.

Recommendation: We recommend that additionally the BDO measure the number of Texans receiving the technical support and service. This also applies to KPI 3.2.

3) Cybersecurity and digital citizenship - (KPI 4.1) We are concerned that this definition is vague. There is more to what Texans are seeking to learn and do on cybersecurity. Even when Texans are aware and receive cybersecurity training, they may still not feel safe online. Our question is what does the target of 99% by 2030 refer to and measure?

Recommendation: Texans have rights and responsibilities when it comes to cybersecurity. We recommend the inclusion of digital citizenship training to ensure that all users are trained as stewards of their online activities in a safe and responsible manner. Texas agencies should provide quarterly updates on cybersecurity guidance and guidelines for Texans using their platform. Offer services and supports for Texans in the covered population to have the knowledge, information and skills to feel and be safe online. Suggestions include: 1) Make TEA mandated high school cybersecurity training available or required for workforce-oriented training, ensure covered population digital literacy services fund this work: <https://tea.texas.gov/about-tea/news-and-multimedia/news-releases/sboe-news/sboe-newsletter/new-cybersecurity-courses-available-next-school-year>; https://codehs.com/course/TX_foundations_cyber/overview; (2) Ensure that a portion of the funds go to training teachers in Title 1 schools using these standards: <https://niccs.cisa.gov/education-training/cybersecurity-teachers>

4) Benchmarking – (KPI 5.1) The BDO has identified baseline data for what the respondents used the internet for, which includes news and current events, healthcare, educational resources, improving workforce skills and finding information about government services. The BDO is benchmarking the success of this KPI against only one of those categories (healthcare). These are essential categories of knowledge and skill for how to use the Internet by Texans.

Recommendation: We recommend that separate targets be set to measure each category: news and current events, healthcare, educational resources, improving workforce skills and finding information about government services. We believe that some categories are missing, such as job opportunities and access to public services.

5) Data collection – As with all data collection efforts, it is important to improve partnership with trusted organizations serving at the state and local level to reach and correctly read the realities of Texans and their experience with the digital divide.

Recommendation: We recommend for the BDO to continuously fund a living digital opportunity survey for our state so that we can allow for time to have outreach and engagement by Texans to understand the current state of digital divide. And to ensure that both lived experience and anecdotal data from all the communities in Texas are gathered without the restriction of an unachievable, short deadline. It will also provide

a year to year baseline for measuring success. We also would encourage the BDO to collaborate with CAIs (such as libraries) and community groups and organizations to provide more opportunities and targeted goals for in-person survey and feedback to ensure that all Texans have the opportunity to share their experiences and needs.

6) Racial and minority groups - As a coalition working on closing the digital divide in Central Texas, DECA is encouraged that the BDO is including racial and minority groups in the covered populations of TDOP. However, the BDO is not consistently including this covered population in target strategies and measured metrics for success. We are concerned when looking at applying the racial equity lens to digital literacy and how workers of color are affected by digital skill gaps

<https://nationalskillscoalition.org/wp-content/uploads/2020/12/Digital-Skills-Racial-Equity-Final.pdf>

One of our members offers the following:

“ African American families recognize the importance of having home broadband, devices, and digital literacy skills training for themselves and their children. They also exhibit a strong desire to improve their own and their children's lives through these technological resources. When provided the opportunity to enhance their skills with technology, African Americans take advantage of it, dedicating themselves to learning, building self-confidence, applying their knowledge, and aspiring to use digital literacy skills to start a business or pursue an alternative career path.

Many African Americans challenge themselves to succeed despite the lack of digital opportunities and systemic racism. Building programs based on trust and providing support for digital navigator capacity are recommended as effective strategies to involve the African American community in digital inclusion. Offering free and appropriate digital literacy skills training to African Americans, especially those with limited resources, is an investment with numerous benefits for any community aiming to build a stronger economy and a more inclusive society.”

Recommendation: As a marginalized segment of the U.S. population, the TDOP must support the empowerment of the African American community by ensuring access to affordable broadband, computers, and digital literacy skills. Moreover, it is crucial to integrate specific digital skills support to empower the community further. This includes providing consumers with a fundamental understanding of their cable Internet Service Provider (ISP) hardware and home internet network. African Americans should be

informed about typical cable ISP hardware security, and suggestions should be offered on how they can enhance their home network security.

Recommendation: In addition, it is important to educate African Americans on staying safe on personal devices when away from a home internet network. Providing practical tips and guidance on maintaining digital security outside the home environment will contribute to a more comprehensive and resilient digital literacy foundation for the African American community. By addressing these specific digital skills needs, the TDOP can prepare African Americans to navigate the digital landscape confidently, fostering both personal and generational success.

Recommendation: In addition, Changing Expectations suggests that the TDOP includes artificial intelligence (AI) literacy programs that provide AI education focused on developing AI users, AI managers, and AI developers in the African American community. That opportunity includes the following goals – close the digital divide by ensuring African American communities can access and use AI skills crucial for 21st-century education and the workforce, increase the number of African American AI users, managers, and developers, and AI literacy education to address culturally relevant issues like racial bias in AI. Changing Expectations can help to implement this plan.

7) Access in the home - In chapter 2 under the measurable objects and goals, goal 1 and 2 states access to reliable, affordable internet services and devices at the home. With this language specifying to the home, we worry this leaves out individuals who 1) are housing insecure and 2) may be experiencing the most challenges because of affordability issues and can only afford mobile internet. As you know in our needs assessment, we heard a lot that individuals often choose mobile internet over home internet if they couldn't afford both. The most basic need is mobile internet and we worry this isn't being prioritized and considered.

In chapter 1 "Executive Summary," goal 1 and 2 (page 7 and 8) states the goal is all Texans have access to reliable, affordable broadband internet service and computer (and other internet-enabled devices) in the home.

The language specifying "in" or "to" the home leaves out individuals who 1) are housing insecure and 2) may be experiencing the most challenges because of affordability issues and can only afford mobile internet. Individuals often choose mobile internet over home internet if they couldn't afford both. The most basic need is mobile internet and we worry this isn't being prioritized and considered.

Recommendation:

Goal 1: All Texans have access to reliable, affordable broadband internet service in and outside the home.

Goal 2: All Texans have access to affordable computers and other internet-enabled devices in and outside the home, with corresponding technical support services.

Chapter 3 - Current State of Digital Opportunity

3.b Asset Inventory 3.b.i Description

As it relates to Appendix E: Detailed Asset Inventory, please see attached uploaded file “Travis County/City of Austin Resource Guide”

<https://www.traviscountytexas.gov/images/bdeo/docs/resources.pdf>

DECA will continue to update Appendix E: Detailed Asset Inventory beyond the deadline of January 5, 2024.

3.b.iii Existing Digital Opportunity Plans

Travis County and the City of Austin are currently working on their 2024 digital opportunity plans and will share with the BDO upon completion.

3.b.vi Broadband Adoption

An in-depth overview of the multitude of device access and skills training programs that help address the diverse regional urban and rural community mix in the Capital Region is needed.

3.b.viii Conclusion: Gap Analysis

For the Capital Region the significant challenges which so many organizations face in addressing digital opportunity are coupled with the complexities of a booming population center like Austin, which serves 10+ contiguous counties of community members who travel in and out of Austin for work and other critical regional economic inputs. Income disparities and the decreased availability of affordable housing have resulted in patterns

of suburban sprawl within a diverse region mixed with urban, suburban, and rural residents.

- We offer the Capital region collaborations as a model for addressing the uneven distribution of digital opportunity assets within a region which represents the diversity of rural and urban simultaneously.
- We offer GTOPs and other DECA collaborations (e.g. HACA) for ACP enrollment

Affordability remains the barrier to adoption in Central Texas. The focus and opportunity in urban areas remains on affordability. Given that a bipartisan bill is being proposed in Congress appropriating \$7 billion to the Affordable Connectivity Fund through FY24, our question is how will the BDO help in supporting Texas households after the funds run out in FY24.

Chapter 4 - Collaboration and Stakeholder Engagement

1. Section 4.a – Collaboration and Stakeholder Engagement (p.139)

Challenge: Covered Populations Definition

1) Justice Impacted

Currently the BDO is focusing on closing the digital divide for the currently incarcerated. Which according to the ACS data that the BDO is citing comprises 1% of the Texas population, which we think is very important. However, when it comes to closing the digital divide for the justice impacted, this data leaves out a very significant portion of Texans. The Texans being left out of the covered population in TDOP are the formerly incarcerated. According to Prison Policy Initiative data on how many people are released from each state's prisons and jails every year from August 2022 (<https://www.prisonpolicy.org/blog/2022/08/25/releasesbystate/>) in 2019 alone 1,072,029 Texans were released from prison or jail. Given the estimated population of Texas at 30,000,000 (TDOP Report, P. 139) that would mean 3.57% of Texas population. Added to that is the report from Texas Appleseed from February 2023 Issue Brief_Clean Slate Final (Feb 2023).pdf (texasappleseed.org) citing Texas Department of Public Safety they report that "More than nine million Texans have a criminal record." Texans leaving the system need to be digitally connected to meet the obligations of their exit from the criminal justice system, such as having a reliable and affordable mobile

plan and or video chat capability for remote communication with their parole officers, appropriate devices such as a desktop to complete employment applications and the digital skills to re-enter the workforce. Also, a point about the data about the Capital Region: Summary in Appendix C of TDOPS PowerPoint Presentation (infinite-peak-70034.herokuapp.com). In the demographics table it states that “Incarcerated Individuals” are 0% of the population Capital Region. We think this data needs to be reviewed and revised. According to Jail Exchange Travis County Correctional Complex, TX Inmate Search, Information (jailexchange.com) simply looking at one of the ten counties in the Capital Region “The Travis County Correctional Complex has a monthly turnover of 40% of their inmate population, another 30% turnover every 90 days, another 20% every six months, and approximately 10% stay incarcerated between six and twelve months. Every year Travis County law enforcement agencies arrest and detain approximately 71,800 offenders.” We believe that the number and % of incarcerated individuals in the Capital Region needs to be reviewed and revised.

Recommendation:

It is important to ensure that Texans who are re-entering the community from the criminal justice system have access to reliable and affordable broadband, affordable and sustainable data plans, devices beyond smart phone and technical workforce skills training to use the devices and navigate essential services online. We recommend that the BDO consider expanding the covered population group in TDOP (p. 28) to include current as well as former incarcerated individuals in Texas.

2) Veterans

According to TDOP (p. 64) Central Texas is one of the regions in Texas that has the highest proportion of veterans (8%). What we are learning from the work being done in the region serving this covered population is that closing the digital divide for veterans needs to include the digital opportunity and skills for their spouses. Spouses of veterans often drop out of the workforce to accompany their family from military base to base during the active military career of their spouses. And often they fall behind on the digital skills and resources needed to successfully re-enter the workforce.

Recommendation:

We recommend that families of veterans be included in the covered population along with the veterans to ensure that they receive the attention, funding, and resources for access to affordable and reliable broadband, the appropriate devices they need beyond a smartphone, and the digital skills training they need.

3) Low Income

Recommendation:

We recommend that the “Low-Income households” covered population be amended to include “Low- and No-Income households” to include the estimated 4.1% unemployed Texans.

<https://www.texastribune.org/2023/10/03/texas-unemployment-rate-high/>

<https://www.expressnews.com/business/article/mass-layoffs-coming-across-texas-2024-dallas-fed-18586816.php>

Chapter 5 - Implementation

5.c.ii Implementation – Strategy 2: Fund Local partners (p.165)

On page 16 of TDOP it outlined ten covered populations from NTIA (over 60 years, disabilities, language barriers, low-income households, racial or ethnic minority groups, rural residents and veterans, immigrants, tribal and unhoused). On page 28 of TDOP the BDO cites has identified nine covered populations who are experiencing the digital divide with Incarcerated individuals and individuals with low literacy levels are added to the BDO list, while immigrants, tribal communities and the unhoused are grouped as populations “uniquely impacted by the digital divide” (p.28). TDOP p. 165 BDO states that “the grant program may place higher priority on applications that address specific disparities and only cite unhoused, low-income, limited English proficiency and immigrants. The concern that we have is how will organizations that serve the remainder of the covered populations be prioritized for funding?

Recommendation: We recommend that all covered populations are equally considered for funding and support in the BDO’s strategy for implementation and data collection and success measurements.

Appendix J.1: Attachments to Public Comments- Comment 284

DECA Network - Texas Digital Opportunity Plan (TDOP) Coordinated Public Comments

Chapter 2 - Introduction & Vision for Digital Opportunity

Consistent set of Covered Populations

On the topic of covered populations, we found the plan to be inconsistent on who they considered in those groups. For example, in section 2.c.iii, the covered populations do not match the NTIA's covered populations noted on page 16. In section 2.c.iii, individuals with low literacy levels and incarcerated individuals were added.

Recommendation: We agree that both populations should be considered covered, we just need that to be consistent across the plan so groups are not left behind.

2.d Strategy and Objectives – (TDOP p. 48)

1) Goals are not ambitious (KPI 1.1, 1.2, 1.3) - It is important that the BDO is developing strategies and objectives to ensure the NTIA measurable objectives are being met. However, we are concerned that the target goals for Texas Goals KPI 1.1, 1.2 and 1.3 are set too low given the seven-year time horizon, the amount of funds available through BDO to address closing the digital divide in Texas and the current resources and organizations both at the state and local level on these issues.

Recommendation: We recommend a target goal of 90% by 2030 in a fiscally responsible way.

2) Measuring what matters - (KPI 2.2, 3.2) The target measure for 2.2 measures the # or % of organizations that offer digital skills and technical skills. The challenge is that the number of organizations offering services does not translate to the quality or the availability of services provided.

Recommendation: We recommend that additionally the BDO measure the number of Texans receiving the technical support and service. This also applies to KPI 3.2.

3) Cybersecurity and digital citizenship - (KPI 4.1) We are concerned that this definition is vague. There is more to what Texans are seeking to learn and do on cybersecurity. Even when Texans are aware and receive cybersecurity training, they may still not feel safe online. Our question is what does the target of 99% by 2030 refer to and measure?

Recommendation: Texans have rights and responsibilities when it comes to cybersecurity. We recommend the inclusion of digital citizenship training to ensure that all users are trained as stewards of their online activities in a safe and responsible manner. Texas agencies should provide quarterly updates on cybersecurity guidance and guidelines for Texans using their platform. Offer services and supports for Texans in the covered population to have the knowledge, information and skills to feel and be safe online. Suggestions include: 1) Make TEA mandated high school cybersecurity training available or required for workforce-oriented training, ensure covered population digital literacy services fund this work: <https://tea.texas.gov/about-tea/news-and-multimedia/news-releases/sboe-news/sboe-newsletter/new-cybersecurity-courses-available-next-school-year>; https://codehs.com/course/TX_foundations_cyber/overview; (2) Ensure that a portion of the funds go to training teachers in Title 1 schools using these standards: <https://niccs.cisa.gov/education-training/cybersecurity-teachers>

4) Benchmarking – (KPI 5.1) The BDO has identified baseline data for what the respondents used the internet for, which includes news and current events, healthcare, educational resources, improving workforce skills and finding information about government services. The BDO is benchmarking the success of this KPI against only one of those categories (healthcare). These are essential categories of knowledge and skill for how to use the Internet by Texans.

Recommendation: We recommend that separate targets be set to measure each category: news and current events, healthcare, educational resources, improving workforce skills and finding information about government services. We believe that some categories are missing, such as job opportunities and access to public services.

5) Data collection – As with all data collection efforts, it is important to improve partnership with trusted organizations serving at the state and local level to reach and correctly read the realities of Texans and their experience with the digital divide.

Recommendation: We recommend for the BDO to continuously fund a living digital opportunity survey for our state so that we can allow for time to have outreach and engagement by Texans to understand the current state of digital divide. And to ensure that both lived experience and anecdotal data from all the communities in Texas are gathered without the restriction of an unachievable, short deadline. It will also provide a year to year baseline for measuring success. We also would encourage the BDO to

collaborate with CAIs (such as libraries) and community groups and organizations to provide more opportunities and targeted goals for in-person survey and feedback to ensure that all Texans have the opportunity to share their experiences and needs.

6) Racial and minority groups - As a coalition working on closing the digital divide in Central Texas, DECA is encouraged that the BDO is including racial and minority groups in the covered populations of TDOP. However, the BDO is not consistently including this covered population in target strategies and measured metrics for success. We are concerned when looking at applying the racial equity lens to digital literacy and how workers of color are affected by digital skill gaps

<https://nationalskillscoalition.org/wp-content/uploads/2020/12/Digital-Skills-Racial-Equity-Final.pdf>

One of our members offers the following:

“ African American families recognize the importance of having home broadband, devices, and digital literacy skills training for themselves and their children. They also exhibit a strong desire to improve their own and their children's lives through these technological resources. When provided the opportunity to enhance their skills with technology, African Americans take advantage of it, dedicating themselves to learning, building self-confidence, applying their knowledge, and aspiring to use digital literacy skills to start a business or pursue an alternative career path.

Many African Americans challenge themselves to succeed despite the lack of digital opportunities and systemic racism. Building programs based on trust and providing support for digital navigator capacity are recommended as effective strategies to involve the African American community in digital inclusion. Offering free and appropriate digital literacy skills training to African Americans, especially those with limited resources, is an investment with numerous benefits for any community aiming to build a stronger economy and a more inclusive society.”

Recommendation: As a marginalized segment of the U.S. population, the TDOP must support the empowerment of the African American community by ensuring access to affordable broadband, computers, and digital literacy skills. Moreover, it is crucial to integrate specific digital skills support to empower the community further. This includes providing consumers with a fundamental understanding of their cable Internet Service Provider (ISP) hardware and home internet network. African Americans should be informed about typical cable ISP hardware security, and suggestions should be offered on how they can enhance their home network security.

Recommendation: In addition, it is important to educate African Americans on staying safe on personal devices when away from a home internet network. Providing practical tips and guidance on maintaining digital security outside the home environment will contribute to a more comprehensive and resilient digital literacy foundation for the African American community. By addressing these specific digital skills needs, the TDOP can prepare African Americans to navigate the digital landscape confidently, fostering both personal and generational success.

Recommendation: In addition, Changing Expectations suggests that the TDOP includes artificial intelligence (AI) literacy programs that provide AI education focused on developing AI users, AI managers, and AI developers in the African American community. That opportunity includes the following goals – close the digital divide by ensuring African American communities can access and use AI skills crucial for 21st-century education and the workforce, increase the number of African American AI users, managers, and developers, and AI literacy education to address culturally relevant issues like racial bias in AI. Changing Expectations can help to implement this plan.

7) Access in the home - In chapter 2 under the measurable objects and goals, goal 1 and 2 states access to reliable, affordable internet services and devices at the home. With this language specifying to the home, we worry this leaves out individuals who 1) are housing insecure and 2) may be experiencing the most challenges because of affordability issues and can only afford mobile internet. As you know in our needs assessment, we heard a lot that individuals often choose mobile internet over home internet if they couldn't afford both. The most basic need is mobile internet and we worry this isn't being prioritized and considered.

In chapter 1 "Executive Summary," goal 1 and 2 (page 7 and 8) states the goal is all Texans have access to reliable, affordable broadband internet service and computer (and other internet-enabled devices) in the home.

The language specifying "in" or "to" the home leaves out individuals who 1) are housing insecure and 2) may be experiencing the most challenges because of affordability issues and can only afford mobile internet. Individuals often choose mobile internet over home internet if they couldn't afford both. The most basic need is mobile internet and we worry this isn't being prioritized and considered.

Recommendation:

Goal 1: All Texans have access to reliable, affordable broadband internet service in and outside the home.

Goal 2: All Texans have access to affordable computers and other internet-enabled devices in and outside the home, with corresponding technical support services.

8) Dataset gaps among racial and minority groups

Challenge: TDOP relies upon an accurate or best approximation of the current state of digital opportunity in Texas and although the BDO used the TDOP Public Survey to determine needs, there are known dataset gaps which limit the accounting of an accurate current state. As reflected from both quantitative data and lived experience aggregation of qualitative data, there are known dataset gaps amongst BIPOC populations TDOP seeks to cover.

Recommendation: We further recommend that while equally focusing on all covered populations remains important, that the BDO give special attention to all BIPOC populations who are underrepresented in the datasets that demonstrate need and that the BDO seeks to sustain a living Digital Opportunity Public Survey that will fill those gaps.

Appendix J.1: Attachments to Public Comments- Comment 285

DECA Network - Texas Digital Opportunity Plan (TDOP) Coordinated Public Comments

Chapter 3 - Current State of Digital Opportunity

3.b Asset Inventory 3.b.i Description

As it relates to Appendix E: Detailed Asset Inventory, please see attached uploaded file “Travis County/City of Austin Resource Guide”

<https://www.traviscountytexas.gov/images/bdeo/docs/resources.pdf>

DECA will continue to update Appendix E: Detailed Asset Inventory beyond the deadline of January 5, 2024.

3.b.iii Existing Digital Opportunity Plans

Travis County and the City of Austin are currently working on their 2024 digital opportunity plans and will share with the BDO upon completion.

3.b.vi Broadband Adoption

An in-depth overview of the multitude of device access and skills training programs that help address the diverse regional urban and rural community mix in the Capital Region is needed.

3.b.viii Conclusion: Gap Analysis

For the Capital Region the significant challenges which so many organizations face in addressing digital opportunity are coupled with the complexities of a booming population center like Austin, which serves 10+ contiguous counties of community members who travel in and out of Austin for work and other critical regional economic inputs. Income disparities and the decreased availability of affordable housing have resulted in patterns of suburban sprawl within a diverse region mixed with urban, suburban, and rural residents.

- We offer the Capital region collaborations as a model for addressing the uneven distribution of digital opportunity assets within a region which represents the diversity of rural and urban simultaneously.
- We offer GTOPs and other DECA collaborations (e.g. HACA) for ACP enrollment

Affordability remains the barrier to adoption in Central Texas. The focus and opportunity in urban areas remains on affordability. Given that a bipartisan bill is being proposed in Congress appropriating \$7 billion to the Affordable Connectivity Fund

through FY24, our question is how will the BDO help in supporting Texas households after the funds run out in FY24.

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DECA Network - Texas Digital Opportunity Plan (TDOP) Coordinated Public Comments

Chapter 4 - Collaboration and Stakeholder Engagement

1. Section 4.a – Collaboration and Stakeholder Engagement (p.139)

Challenge: Covered Populations Definition

1) Justice Impacted

Currently the BDO is focusing on closing the digital divide for the currently incarcerated. Which according to the ACS data that the BDO is citing comprises 1% of the Texas population, which we think is very important. However, when it comes to closing the digital divide for the justice impacted, this data leaves out a very significant portion of Texans. The Texans being left out of the covered population in TDOP are the formerly incarcerated. According to Prison Policy Initiative data on how many people are released from each state's prisons and jails every year from August 2022 (<https://www.prisonpolicy.org/blog/2022/08/25/releasesbystate/>) in 2019 alone 1,072,029 Texans were released from prison or jail. Given the estimated population of Texas at 30,000,000 (TDOP Report, P. 139) that would mean 3.57% of Texas population. Added to that is the report from Texas Appleseed from February 2023 Issue Brief_Clean Slate Final (Feb 2023).pdf (texasappleseed.org) citing Texas Department of Public Safety they report that "More than nine million Texans have a criminal record." Texans leaving the system need to be digitally connected to meet the obligations of their exit from the criminal justice system, such as having a reliable and affordable mobile plan and or video chat capability for remote communication with their parole officers, appropriate devices such as a desktop to complete employment applications and the digital skills to re-enter the workforce. Also, a point about the data about the Capital Region: Summary in Appendix C of TDOPS PowerPoint Presentation (infinite-peak-70034.herokuapp.com). In the demographics table it states that "Incarcerated Individuals" are 0% of the population Capital Region. We think this data needs to be reviewed and revised. According to Jail Exchange Travis County Correctional Complex,

TX Inmate Search, Information (jailexchange.com) simply looking at one of the ten counties in the Capital Region “The Travis County Correctional Complex has a monthly turnover of 40% of their inmate population, another 30% turnover every 90 days, another 20% every six months, and approximately 10% stay incarcerated between six and twelve months. Every year Travis County law enforcement agencies arrest and detain approximately 71,800 offenders.” We believe that the number and % of incarcerated individuals in the Capital Region needs to be reviewed and revised.

Recommendation:

It is important to ensure that Texans who are re-entering the community from the criminal justice system have access to reliable and affordable broadband, affordable and sustainable data plans, devices beyond smart phone and technical workforce skills training to use the devices and navigate essential services online. We recommend that the BDO consider expanding the covered population group in TDOP (p. 28) to include current as well as former incarcerated individuals in Texas.

2) Veterans

According to TDOP (Table 13, p. 125) Capital Region population has 5% veterans. What we are learning from the work being done in the region serving this covered population is that closing the digital divide for veterans needs to include the digital opportunity and skills for their spouses. Spouses of veterans often drop out of the workforce to accompany their family from military base to base during the active military career of their spouses. And often they fall behind on the digital skills and resources needed to successfully re-enter the workforce.

Recommendation:

We recommend that families of veterans be included in the covered population along with the veterans to ensure that they receive the attention, funding, and resources for access to affordable and reliable broadband, the appropriate devices they need beyond a smartphone, and the digital skills training they need.

3) Low Income

Recommendation:

We recommend that the “Low-Income households” covered population be amended to include “Low- and No-Income households” to include the estimated 4.1% unemployed Texans.

<https://www.texastribune.org/2023/10/03/texas-unemployment-rate-high/>

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Appendix J.1: Attachments to Public Comments- Comment 287

DECA Network - Texas Digital Opportunity Plan (TDOP) Coordinated Public Comments

Chapter 5 - Implementation

5.c.ii Implementation – Strategy 2: Fund Local partners (p.165)

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Recommendation: We recommend that all covered populations are equally considered for funding and support in the BDO’s strategy for implementation and data collection and success measurements.

Appendix J.1: Attachments to Public Comments- Comment 289



January 5, 2023

Greg Conte
Director, Texas Broadband Development Office
Texas Comptroller of Public Accounts
Lyndon B. Johnson State Office Building
111 East 17th Street
Austin, Texas 78774

RE: Texas Digital Opportunity Plan

Mr. Conte:

Rural LISC and LISC Houston would like to thank the Texas Broadband Development Office in the Office of the Comptroller for Public Accounts for the opportunity to provide comments on the Texas Digital Opportunity Plan.

We applaud the historic investment to enhance digital equity efforts afforded by the Infrastructure Investment and Jobs Act. Implemented strategically, these funds will reduce and eliminate historical, institutional, and structural barriers to technology access and use. We greatly appreciate the NTIA's approach to designing and implementing the State Digital Equity Capacity Grant Program, and we find the Texas Digital Opportunity Plan, drafted as a requirement of that program, to be very comprehensive and well-designed, promising significant outcomes for the State of the Texas.

Background on LISC

LISC is a nonprofit housing and community organization and certified Community Development Financial Institution (CDFI) with offices in 38 cities nationwide and a rural network encompassing 140 partners serving 49 states and Puerto Rico. LISC's work supports a wide range of activities, including affordable housing, digital inclusion, economic development, building family wealth and incomes, education, community safety, and community health. LISC mobilizes corporate, government, and philanthropic support to provide local community development and business development organizations with loans, grants, equity investments, capacity building, and technical assistance.

LISC supports digital inclusion initiatives in rural and urban communities to ensure that all individuals and communities can fully participate in our society and economy. We believe community resiliency necessitates affordable, robust broadband internet options, widely available internet-enabled devices and equipment that meets users' needs, and access to digital literacy training and technical support. With four decades of experience investing in communities' social and economic infrastructure, LISC recognizes the promise of new digital

equity investments to help meet the needs of historically disconnected individuals and communities.

Where possible and with available funding, LISC has put digital upskilling at the center of its frontline human services programming for more than a decade, supporting more than 100 organizations nationwide with cross-training for dedicated Digital Connectors to identify, support and train adult workers in the basic digital skills necessary to pursue and attain employment. LISC's FOC® partners have developed internal digital skill assessments tailored for their target population and aligned with their program offerings to assess digital skills enabling thousands of individuals to search for, apply, and enroll in employment and training services, including Houston-area organizations: the Alliance in Gulfton, the Chinese Community Center in Alief, Volunteers of America in Independence Heights and Wesley Community Center near Northside.

Residents of small communities should have equal access to the opportunities afforded by the digital realm, and community-facing organizations like libraries, work-serving organizations and affordable housing developments play key role as part of the human infrastructure providing these services. With support from the T.L.L. Temple Foundation, Rural LISC is assisting rural-facing FOCs with robust digital upskilling programming through established programming at the Legacy Institute for Financial Education in Lufkin and through an expanding network across the Lufkin-Nacogdoches, Beaumont-Port Arthur and Texarkana regions. In partnership with seven Deep East Texas rural libraries, T.L.L Temple Memorial Library in Diboll, Arthur Temple Sr. Memorial Library in Pineland, Allan Shivers Library and Museum in Woodville, Jasper Public Library and Buna Library in Jasper County, Maud Public Library in Bowie County and San Augustine Public Library in San Augustine County, Rural LISC is supporting direct training of library staff in in-person and virtual settings, offering consultation with national resources providers such as Literacy Minnesota's Northstar Online Learning, and providing resources to invest in facility improvements that address local needs, resulting in more than 6,000 patrons served with free or affordable internet access and computer and internet skill development to date. Additionally, with a grant from Rural LISC, Come Dream, Come Build in Brownsville successfully supported more than 300 families in the Rio Grande Valley with digital upskilling as described in this profile from the U.S. Department of Education Office of Educational Technology: <https://tech.ed.gov/stories/rural-lisc/>.

Specific Comments

We are pleased to offer comments on the Texas Digital Opportunity Plan informed by our experience as an intermediary working in support of community-based organizations that are expanding digital inclusion initiatives in rural and urban communities.

The objectives and goals of the Plan are well-designed and include reference to a variety of important digital equity aspects LISC has found to be relevant to ensuring end-users benefit from digital inclusion programming. Specifically, we applaud the Plan for quantifying target numbers and key program indicators (KPIs) related to strategy and action steps. The Plan rightly notes the importance of partnering with and supporting local community organizations to address funding and capacity needs. Additionally, the Plan demonstrates a balanced use of data to inform its

decision-making, including multiple working groups, public meetings, and surveys, which LISC believes will make program implementation more impactful for Texas residents.

While the Plan is thorough, there are two areas of emphasis that drive LISC's digital equity focus that we believe will be important to the long-term success of Texas's investment and should be emphasized in the Plan: **further identifying what makes serving rural and less populated areas with digital inclusion services distinct from urban service delivery and a more pronounced commitment to providing technical assistance for increased capacity of community-based organizations to carry out this program of work.**

Rural Focus

With 22.8% of Texas counties classified as rural, LISC suggests the Plan would benefit from including more reference to rural community needs, particularly:

- *Section 3.a.ii Needs Assessment* – Indicate how these results vary between urban and rural areas.
- *Section 3.a.iii Covered Populations Needs Assessment* – Identify rural regions for each covered population area so readers can easily identify variances between urban and rural areas for different populations.
- *Section 3.a.iv Underserved Population* – Indicate how these results vary between urban and rural areas.
- *Section 3.a.v Economic Regions of Texas* – Clearly label each region as urban or rural, particularly to assist those who are unfamiliar with the geography of the State.

Digital Equity Program Will Build Community-Based Organization Capacity

We applaud the references to digital devices and services as integral to workforce development, and we encourage the State to structure its State Capacity Grant program implementation to monitor and report on how broadband and computer access and adoption leads to skills gains and greater employment opportunities. This emphasis could be made in the following section:

- *Section 5.c.i Strategy 1: Partner with and Fund Statewide Organizations* - While community-based organizations are often trusted resources in local areas, they can lack internal capacity or expertise regarding digital skill-building. We recommend the Plan specifically commit to the suggested partnerships with the Texas Workforce Commission and Texas A&M University to promote digital upskilling among rural and urban residents in the State, and to help track the impact of programming on workforce development and digital upskilling.

We commend the Plan's vision for pursuing partnerships among statewide organizations. Through our established programs, LISC has found that long-term benefits can be achieved by building the capacity of diverse, place-based organizations to carry out the work of digital inclusion. We recommend the Plan specifically address technical assistance, particularly to support communities in the grant application process, which is vital to creating more equitable access to government resources. While the Plan is correct in noting that new grant programs are needed to support initiatives such as digital literacy, LISC believes assistance in identifying and applying for grants is another essential component of capacity building. This is especially true

for rural or smaller communities, since these are often areas where municipal government roles are part-time positions or where multiple jobs are done by the same person, resulting in limited capacity. To address this gap, we encourage the Texas Broadband Office to structure grantmaking to intermediaries to subgrant to lower capacity, place-based organizations to ensure that dollars are widely and evenly dispersed. For example:

- *Section 5.c.1 Strategy 1: Partner with and Fund Statewide Organizations* - This section lists various examples of potential statewide partnerships, including a reference to initiating new state grant programs, listing “adding capacity for assistance” as one possible focus area. LISC recommends the Plan specifically include support for grant application, implementation and administration to provide more targeted assistance to municipalities with limited staff and organizational capacity. As noted above, we suggest a focus on funding intermediary organizations will lead to more durable outcomes. Committing to these actions will also further the Plan’s goal to support local partners, resulting in a bottom-up approach that lends agency to grassroots initiatives.

LISC appreciates the opportunity to provide these comments and we look forward to continued engagement. Please contact us at CCain@lisc.org or LJaramillo@lisc.org if you need additional clarification on the letter’s recommendations.

Sincerely,



Cait Cain
Vice President, Rural LISC



Laura Jaramillo
Executive Director, LISC Houston



Appendix J: Record of Public Comments and Actions Taken- Comment 291 Attachment

Support for a Living Digital Opportunity Plan

The City of Fort Worth appreciates the State's verbal commitment to using and prioritizing the new Broadband Infrastructure Fund to bridge gaps for Multi-dwelling Units (MDUs). The City of Fort Worth applauds this commitment and requests the State to formalize it in the various plans published for broadband and digital equity. This documentation will highlight progress toward the vision and goals outlined in this plan.

Related to this is the map, as mentioned in the plan. As the plan evolves, updating the map with actual download and upload speeds at home for the covered populations would be beneficial. With MDUs included, real improvements can support Goal 1, showcasing metrics for actual high-speed, affordable broadband. Presently, there is no mention of a process for gathering specific MDU information in this plan. While we appreciate the BDO's verbal commitment to MDUs, we urge the plan, possibly in 2.c.i., to include a review process to maintain an accurate broadband map and to assess speeds within MDU homes.

Support to Expand Strategy 2: Local Initiatives

The City of Fort Worth appreciates the plan's recognition of serving a diverse Texas population through partnerships with local organizations. Collaboration is essential to enhance affordability and access to high-speed broadband for all Texans.

To ensure inclusivity across diverse cities and covered populations in Texas, the City of Fort Worth requests further consideration for underrepresented populations in the plan. While the meetings held so far aimed to be inclusive and identify the needs of urban, minority, and low-income individuals, the information provided limited insight into mapping how to reach these covered populations with digital opportunity programs. While some cities have municipal initiatives, many areas, including the City of Fort Worth, await federal funding predominantly invested in rural and frontier counties. We eagerly anticipate partnering with the BDO to implement Strategy 2, addressing barriers for covered populations within the City of Fort Worth.

For instance, the City of Fort Worth's Neighborhood Services Division and Digital Equity Division reports that 84% of low-income/subsidized housing facilities with inferior Internet service—such as fixed wireless access or aging Digital Subscriber Line Service (10Mbps Download/1Mbps Upload or less)—are located in Districts 2, 5, 6, 8, and 9. These districts predominantly comprise minority populations with poverty rates significantly above the city average of 13.4%. Districts 2, 5, and 8, with the highest minority populations and poverty rates, encompass 48.5% of these underserved housing facilities. Collaboration with the City of Fort Worth can contribute significantly to achieving Goal 1 metrics and Goal 5.

Another critical area is Workforce Development. With Texas' unemployment rate at 4.1%, targeting underemployed segments of the workforce becomes crucial. Current statistics show

African American unemployment rates at 6.3% and Hispanic unemployment at 5.1%. Targeted outreach for broadband deployment and workforce education should focus on reaching these covered populations. Given the inferior Internet service in low-income housing facilities, workforce development efforts should subsidize infrastructure deployment and digital opportunity funds in these high-density areas. Prioritizing affordability, device access, and online skills training can effectively reach these covered populations.

Measurement Data Comment:

The City of Fort Worth urges the State to reconsider organizing counties into economic regions for data analysis. The sample size used for tables 3 through 12 (13,000 responses) is significantly smaller than the population (30 million). Moreover, considerable variation exists between counties and municipalities within a region, like the metroplex. This proposed approach risks not meeting measurable objectives for all Texans, as defined by the NTIA. As a gateway to West Texas facing substantial, diverse population growth, the City requests the Plan ensure a more equitable assessment approach, possibly through county-by-county analysis, to accurately evaluate broadband access for Texans.

Covered Population Data for 3.a.iii.8 Low-Income Households:

A more informed understanding of low-income households' needs could stem from segmenting the population based on residency types: single-family non-subsidized/public housing, multi-family non-subsidized/public housing, single-family subsidized/public housing, and multi-family multi-dwelling unit subsidized/public housing. These segments likely have significantly different needs, necessitating distinct digital opportunity and infrastructure programs tailored to each sector of the low-income population.

Non-profit EducationSuperHighway (ESH) tracks this segmented data granularly. ESH's latest data reveal that 4 million low-income Texans reside in urban multi-dwelling units eligible for BEAD. Fort Worth accounts for 114,543 residents in 1,254 eligible MDUs. Incorporating EducationSuperHighway's data comprehensively into the Digital Opportunity Plan could enhance its scope and inform long-term strategies for Texas.

Support to Expand Health in Broadband:

The Federal Communication Commission's recent emphasis on Maternal Health highlights broadband connectivity's role in improving maternal health outcomes. Locally, Tarrant County's United Way notes significantly higher maternal mortality rates, particularly in the 76104 ZIP code, which suffers from severe health disparities. Leveraging broadband's potential in this context, as indicated by the FCC, presents a real opportunity digitally for the 76104 ZIP code to combat maternal mortality and improve public health outcomes.

[Link: FCC's Focus on Maternal Health](#)

City of Austin
Texas Digital Opportunity Plan (TDOP) Public Comments
January 5, 2024

Chapter 1 – Executive Summary

Thank you for allowing us to provide comments on the Texas Digital Opportunity Plan. We hope our comments help strengthen the plan to close the digital divide and provide opportunities for all Texans.

Our first comment is regarding Data collection that informs TDOP – As with all data collection efforts, it is important to improve partnership with trusted organizations serving at the state and local level to reach and correctly read the realities of Texans and their experience with the digital divide.

Recommendation: We recommend for the BDO to continuously fund a living digital opportunity survey for our state so that we can allow for time to have outreach and engagement by Texans to understand the current state of digital divide. And to ensure that both lived experience and anecdotal data from all the communities in Texas are gathered without the restriction of an unachievable, short deadline. It will also provide a year to year baseline for measuring success. We also would encourage the BDO to collaborate with CAIs (such as libraries) and community groups and organizations to provide more opportunities and targeted goals for in-person survey and feedback to ensure that all Texans have the opportunity to share their experiences and needs.

As to the goals that BDO has identified which will guide the implementation efforts - we believe that correctly categorizing a location as ‘served’, ‘underserved’ and ‘unserved’ is crucial to meeting the important goal of serving all Texans. The BDO has made the strategic decision to move from LightBox as a mapping vendor to use FCC’s Broadband Data Collection. We think this is the right decision for BDO and will help align the Texas broadband map with the federal map and define reliable broadband more accurately. However, we do have a concern regarding CostQuest Associates (the FCC’s data analytics and mapping vendor) commenting in their [documentation](#) that Multi-Dwelling units (Multi-Tenant Environments) are categorized as one location in the FCC broadband availability map. The challenge remains 1) currently a single connection to the building is designated as that building being served, 2) what is being designated as served on the FCC Map for an MDU is the quality of a single connection to the building, not the quality and the speed of broadband for each unit, 3) because the nuanced,

granular information and data is not being measured for MDUs, the needs of the covered populations who reside in MDUs are not being identified or addressed.

Regardless of how robust the internet connection is to the front door of the MDU, the quality of the connection will be determined by the number of living units divided by the connection to calculate the bandwidth and the quality of the internet per unit. This could change the categorization of MDUS to unserved or underserved.

The low-income households data would have been informed better by breaking out the population of low-income households between:

- Those that live in single family non-subsidized or public housing
- Those that live in multi-family or multi-dwelling non-subsidized or public housing
- Those that live in single family subsidized or public housing
- Those that live in multi-family multi-dwelling unit subsidized or public housing

The needs of these populations are likely significantly different and different digital opportunity and infrastructure programs will be required to meet the specific needs of each sector of the low-income population to ensure that all Texans are served by TDOP.

Chapter 2 - Introduction & Vision for Digital Opportunity

2.d Strategy and Objectives – (TDOP p. 48)

1) Goals are not ambitious (KPI 1.1, 1.2, 1.3) - It is important that the BDO is developing strategies and objectives to ensure the NTIA measurable objectives are being met. However, we are concerned that the target goals for Texas Goals KPI 1.1, 1.2 and 1.3 are set too low given the seven-year time horizon, the amount of funds available through BDO to address closing the digital divide in Texas and the current resources and organizations both at the state and local level on these issues.

Recommendation: We recommend a target goal of 90% by 2030 in a fiscally responsible way.

2) Measuring what matters - (KPI 2.2, 3.2) The target measure for 2.2 measures the # or % of organizations that offer digital skills and technical skills. The challenge is that the number of organizations offering services does not translate to the quality or the availability of services provided. Recommendation: We recommend that additionally the BDO measure the number of Texans receiving the technical support and service. This also applies to KPI 3.2.

3) Cybersecurity and digital citizenship - (KPI 4.1) We are concerned that this definition is vague. There is more to what Texans are seeking to learn and do on cybersecurity. Even when Texans are aware and receive cybersecurity training, they may still not feel safe online. Our question is what does the target of 99% by 2030 refer to and measure?

Recommendation: Texans have rights and responsibilities when it comes to cybersecurity. We recommend the inclusion of digital citizenship training to ensure that all users are trained as stewards of their online activities in a safe and responsible manner. Texas agencies should provide quarterly updates on cybersecurity guidance and guidelines for Texans using their platform. Offer services and supports for Texans in the covered population to have the knowledge, information and skills to feel and be safe online. Suggestions include: 1) Make TEA mandated high school cybersecurity training available or required for workforce-oriented training, ensure covered population digital literacy services fund this work: <https://tea.texas.gov/about-tea/news-and-multimedia/news-releases/sboe-news/sboe-newsletter/new-cybersecurity-courses-available-next-school-year>; https://codehs.com/course/TX_foundations_cyber/overview; (2) Ensure that a portion of the funds go to training teachers in Title 1 schools using these standards: <https://niccs.cisa.gov/education-training/cybersecurity-teachers>

4) Benchmarking – (KPI 5.1) The BDO has identified baseline data for what the respondents used the internet for, which includes news and current events, healthcare, educational resources, improving workforce skills and finding information about government services. The BDO is benchmarking the success of this KPI against only one of those categories (healthcare). These are essential categories of knowledge and skill for how to use the Internet by Texans.

Recommendation: We recommend that separate targets be set to measure each category: news and current events, healthcare, educational resources, improving workforce skills and finding information about government services. We believe that some categories are missing, such as job opportunities and access to public services.

5) Access in the home - In chapter 2 under the measurable objects and goals, goal 1 and 2 states access to reliable, affordable internet services and devices at the home. With this language specifying to the home, we worry this leaves out individuals who 1) are housing insecure and 2) may be experiencing the most challenges because of affordability issues and can only afford mobile internet. As you know in our needs assessment, we heard a lot that individuals often choose mobile internet over home internet if they couldn't afford both. The most basic need is mobile internet and we worry this isn't being prioritized and considered.

In chapter 1 "Executive Summary," goal 1 and 2 (page 7 and 8) states the goal is all Texans have access to reliable, affordable broadband internet service and computer (and other internet-enabled devices) in the home.

The language specifying "in" or "to" the home leaves out individuals who 1) are housing insecure and 2) may be experiencing the most challenges because of affordability issues and can only afford mobile internet. Individuals often choose mobile internet over home internet if they couldn't afford both. The most basic need is mobile internet and we worry this isn't being prioritized and considered.

Recommendation:

Goal 1: All Texans have access to reliable, affordable broadband internet service in and outside the home.

Goal 2: All Texans have access to affordable computers and other internet-enabled devices in and outside the home, with corresponding technical support services.

Chapter 3 - Current State of Digital Opportunity

3.b Asset Inventory 3.b.i Description

As it relates to Appendix E: Detailed Asset Inventory, please see attached uploaded file "Travis County/City of Austin Resource Guide"

<https://www.traviscountytexas.gov/images/bdeo/docs/resources.pdf>

DECA will continue to update Appendix E: Detailed Asset Inventory beyond the deadline of January 5, 2024.

3.b.iii Existing Digital Opportunity Plans

Travis County and the City of Austin are currently working on their 2024 digital opportunity plans and will share with the BDO upon completion.

Chapter 4 - Collaboration and Stakeholder Engagement

1. Section 4.a – Collaboration and Stakeholder Engagement (p.139)

Challenge: Covered Populations Definition

Justice Impacted

Currently the BDO is focusing on closing the digital divide for the currently incarcerated, which comprises 1% of the Texas population according to the ACS data cited by the BDO. The City agrees that this is very important. However, when it comes to closing the digital divide for the justice impacted, this data leaves out a very significant portion of Texans from the covered population: the formerly incarcerated. According to data from the Prison Policy Initiative (<https://www.prisonpolicy.org/blog/2022/08/25/releasesbystate/>), 1,072,029 people were released from Texas prisons and jails in 2019 alone. Given the population of Texas of 30 million (TDOP Report, P. 139), that would mean 3.57% of Texas population. Overall, more than nine million Texans have a criminal record, according to Texas Department of Public Safety data cited in a recent report from Texas Appleseed, [Issue Brief Clean Slate Final \(Feb 2023\).pdf \(texasappleseed.org\)](#). Texans leaving the system need to be digitally connected to meet the obligations of their exit from the criminal justice system, such as having a reliable and affordable mobile plan, video chat capability for remote communication with their parole officers, appropriate devices to complete employment applications, and the digital skills to re-enter the workforce.

Recommendation:

It is important to ensure that Texans who are re-entering the community from the criminal justice system have access to reliable and affordable broadband, affordable and sustainable data plans, devices beyond smart phones and technical workforce skills training to use the devices and navigate essential services online. We recommend that the BDO consider expanding the covered population group in TDOP (p. 28) to include current as well as former incarcerated individuals in Texas.

Veterans

According to TDOP 5% of the Texas population are veterans (Table 13, p. 125). What we are learning from the work being done in the Capital Region serving this covered population is that closing the digital divide for veterans needs to include the digital opportunity and skills for their spouses. Spouses of veterans often drop out of the workforce to accompany their family from military base to base during the active military career of their spouses. And often they fall behind on the digital skills and resources needed to successfully re-enter the workforce.

Recommendation:

We recommend that families of veterans be included in the covered population along with the veterans to ensure that they receive the attention, funding, and resources for access to affordable and reliable broadband, the appropriate devices they need beyond a smartphone, and the digital skills training they need.

Chapter 2 – Introduction & Vision for Digital Opportunity

Consistent set of Covered Populations

On the topic of covered populations, we found the plan to be inconsistent on who they considered in those groups. For example, in section 2.c.iii, the covered populations do not match the NTIA’s covered populations noted on page 16. In section 2.c.iii, individuals with low literacy levels and incarcerated individuals were added.

Recommendation: We agree that both populations should be considered covered, we just need that to be consistent across the plan so groups are not left behind.

Chapter 5 - Implementation

5.c.ii Implementation – Strategy 2: Fund Local partners (p.165)

On page 16 of TDOP it outlined ten covered populations from NTIA (over 60 years, disabilities, language barriers, low-income households, racial or ethnic minority groups, rural residents and veterans, immigrants, tribal and unhoused). On page 28 of TDOP the BDO has identified nine covered populations who are experiencing the digital divide with Incarcerated individuals and individuals with low literacy levels added to the BDO list, while immigrants, tribal communities and the unhoused are grouped as populations “uniquely impacted by the digital divide” (p.28). TDOP p. 165 BDO states that “the grant program may place higher priority on applications that address specific disparities and only cite unhoused, low-income, limited English proficiency and immigrants. The concern that we have is how will organizations that serve the remainder of the covered populations be prioritized for funding? We recommend that all covered populations be given equal consideration for funding and support.

Appendix J.1: Attachments to Public Comments- Comment 293



Central Texas Resources for Digital Needs

This resource list was put together by Travis County, the City of Austin, and the organizations listed below to provide residents with information on digital Central Texas resources.

*Indicates bilingual assistance

If you need assistance in using the listed resources, please contact **Austin Free-Net** at **512-236-8225** or **access@austinfreenet.net**. Office hours are Monday through Friday from 9AM – 4PM.

Organization	Contact
Who gives out free or discounted devices?	
Austin Free-Net's Learn and Earn Program	www.austinfreenet.net/learnandearn
Austin Public Library's technology lending program	https://library.austintexas.gov or https://data.austintexas.gov/stories/s/Technology-Access/n5ud-qjtt
*EveryoneOn	www.everyoneon.org/find-offers
Human-I-T	www.human-i-t.org/low-cost-devices
PC's for People	www.pcsforpeople.org
Pflugerville Public Library's hotspot and laptop checkout program	https://library.pflugervilletx.gov/services/computers-and-internet
*Workforce Solutions Capital Area	www.wfscapitalarea.com
How can I get free or discounted internet?	
Affordable Connectivity Program	www.affordableconnectivity.gov or 877-384-2575
Who can help sign people up for the Affordable Connectivity Program, a US government program to help low-income households pay for internet service and connected devices?	
Austin Free-Net	www.austinfreenet.net/digital-navigators or 737-238-6783
*Austin Urban Technology Movement (AUTMHQ)	www.autmhq.org/individuals

Goodwill Central Texas	CareerAdvancement@goodwillcentraltexas.org
Human-I-T	www.human-i-t.org/acp
Who offers public access to computers?	
*Austin Free-Net	www.austinfreenet.net
Austin Urban League	https://aaul.org/tca
City of Austin	https://data.austintexas.gov/stories/s/Technology-Access/n5ud-qjtt
*El Buen Samaritano	elbuen.org/services/adult-education
Goodwill Central Texas	<p>Goodwill Community Center location 1015 Norwood Park Blvd open M-Th 8AM-12PM and 1PM-4:30PM</p> <p>Goodwill Resource Center 6505 Burleson Road open 8AM-4:30PM intake@goodwillcentraltexas.org or 512-637-7569</p>
Pflugerville Public Library	https://library.pflugervilletx.gov/services/computers-and-internet
Travis County Community Resource centers	<p>Business Hours at all locations: 8:00 AM to 5:00 PM, Monday through Friday. Closed on County holidays.</p> <p>Del Valle: South Community Center 3518 Farm to Market 973 Del Valle, TX 78617</p> <p>Manor: East Rural Community Center 600 W Carrie Manor St. Manor, TX 78653</p> <p>Jonestown: Northwest Rural Community Center 18649 Farm-to-Market 1431 #6a Jonestown, TX 78645</p> <p>Oak Hill: West Rural Community Center 8656 Texas HWY 71 Austin, TX 78735</p> <p>Pflugerville: North Rural Community Center 15822 Foothill Farms Loop Pflugerville, TX 78660</p> <p>Central Austin 5325 Airport Blvd Austin, TX 78751</p>
Who can help with computer issues?	

*Austin Free-Net's digital navigators	www.austinfreenet.net/digital-navigators or 512-236-8225
Who can help build basic technology skills?	
*Austin Free-Net's digital literacy classes and workshops	www.austinfreenet.net/public-access-programs
Austin Public Library's computer classes at select libraries	https://library.austintexas.gov/events/computers-technology
Community Tech Network's Tech Teach-Ins	www.communitytechnetwork.org/blog/category/tech-teach-ins
Community Tech Network and AGE of Central TX's Senior Connect program	www.communitytechnetwork.org/blog/senior-connect-update
Compudopt	www.compudopt.org/digitalskills or 855-532-5060
Drive Your Learning	www.driveyourlearning.org/
Goodwill Central Texas's digital skills and online tools	www.goodwillcentraltexas.org/indeed Digital training: intake@goodwillcentraltexas.org or 512-637-7580
Human-I-T's online computer basics courses and office hours	www.human-i-t.org/digital-training
Who can help build advanced technology skills?	
African American Youth Harvest Foundation's adult computer literacy training and certifications	https://aayhf.org
Austin Film Society	www.austinfilm.org/classes-events
Austin Urban League	https://aaul.org/tca
*Austin Urban Technology Movement (AUTMHQ)	www.autmhq.org/individuals
Where can I get online resources for building digital skills in multiple languages?	
Austin Free-Net's Digital Navigators	www.austinfreenet.net
*Austin Urban Technology Movement (AUTMHQ)	www.autmhq.org/individuals
*Immigrant Connections	www.immigrantsrefugeesandschools.org/post/google-classroom-and-more-in-multiple-languages
Texas State Library and Archives Commission	www.tsl.texas.gov/ld/AEL/LandLtoolkit

General Assistance

***ConnectATX** (www.unitedwayaustin.org/connectatx) and ***2-1-1** (www.211texas.org or call 2-1-1) also connect you to digital resources along with assistance on food, health, transportation, childcare, job training, and housing.

If you are an organization that provides free or discounted internet, devices, and skills training to Central Texas residents and would like to be added to this list, please contact internet@traviscountytexas.gov.

Online Version

The online version of this resource guide can be found at www.traviscountytexas.gov/bdep/resource-for-digital-needs.

V1.2 081023

Appendix J: Record of Public Comments and Actions Taken- Comment 301 Attachment

There is an urgent need for enhanced technology access, connectivity, and comprehensive support programs for Houston's Hispanic families and Hispanic families all over the world.

In today's increasingly digital world, technology has become an integral part of education, professional development, and daily life. Unfortunately, many Hispanic families in Houston face barriers to accessing essential technological resources. These limitations not only hinder educational opportunities but also impact the ability of these families to fully participate in the workforce.

One critical aspect is the need for improved internet connectivity. In an era where remote work, online education, and digital communication are prevalent, reliable internet access is not just a convenience but a necessity. Many Hispanic families in Houston still lack consistent and affordable access to high-speed internet, limiting their ability to fully engage in educational and professional opportunities.

Moreover, the provision of tech support is crucial. Many families may have access to technology but lack the necessary skills to navigate and troubleshoot common issues. Implementing tech support programs tailored to the needs of Hispanic families can bridge this gap, empowering them to utilize technology effectively.

I also urge the establishment of community-based programs that address the needs of families as a whole rather than focusing solely on individual members. By creating comprehensive support systems, we can strengthen the resilience and cohesion of Hispanic families, fostering a sense of community and shared progress.

Literacy, both digital and traditional, plays a pivotal role in preparing individuals for success in the job market. It is essential that programs promoting literacy, including digital literacy, are made available and accessible to Hispanic families. The ability to read and write is not only a fundamental skill but also a gateway to higher education, career advancement, and overall personal development.

Addressing the technological disparities among Hispanic families in Houston is not only a matter of social justice but also an investment in the future prosperity of our community. By ensuring access to technology, providing comprehensive support, and promoting literacy, we can empower Hispanic families to compete effectively in the job market and contribute meaningfully to our society.

I appreciate your attention to this critical issue and look forward to seeing positive changes that will benefit the entire Houston community.

Appendix J.1: Attachments to Public Comments- Comment 302



**Public Comments to Texas Broadband Development Office
Texas Digital Opportunity Plan – January 5, 2024**

Section 2

- Page 24, Section 2.b.iii typo in the sentence “Critically, instead simply of” should read “instead of simply”
- Page 24, Section 2.b.iii: Last paragraph: “If approved, the constitutional amendment could unlock funding to augment” is written as if we don’t know if the state funding was approved. However, the sentence before this paragraph refers to the passed of the amendment. Suggest editing this paragraph.
- Page 27, Section 2c.iii: if possible, when the final document is formatted, suggest making sure that the whole table is together on one page.
- Page 29, Section 2c.iv.1 there is weird spacing in this phrase “an equivalent level of education” in the stence that starts with “According to the National Skills Coalition”
- Pages 30-36: 2.c.iv Alignment with existing statewide priorities/goals and 2c.iv.2 Education: The workforce-focused plans included in this document are thoughtful and extensive. The education-focused portion of this document is under-developed and either exhibits a lack of outreach to or feedback from education state agencies.
 - Page 34: The education portion of the document only references Texas Education Agency, which oversees K-12 school districts. However, throughout the document community colleges and universities are referenced. We suggest referencing the Texas Higher Education Coordinating Board, which oversees public higher education, and including its strategic plan. Without this, only half of the education agencies and partners are actually included in this process.
 - Texas Higher Education Coordinating Board’s Strategic Plan is entitled “Building a Talent Strong Texas” and it includes valuable metrics and strategies that are also aligned with the digital opportunity plan. The section entitled “Attainment of Postsecondary Credentials” includes information that is complementary to TWC’s plans. We recommend including and/or referencing this information.
Link: <https://www.highered.texas.gov/our-work/talent-strong-texas/>
 - Operation Connectivity was a productive program for K-12 partners but it would be great to see that other, ongoing, longer-term metrics or programs included in the “Alignment with existing programs” portion of the education section. In addition to including the Texas Higher Education Coordinating Board, we recommend reviewing and referencing TEA’s strategic plan. Link: <https://tea.texas.gov/about-tea/welcome-and-overview/tea-strategic-plan>
- Page 48, Table 2: Texas Goal 2.1 is split across pages. If possible, when the final document is formatted, suggest trying to keep all of the information in 2.1 together on one page. The same is true for “NTIA Measurable Objective Category 4”

Section 3

- Page 54, Texans do not have internet because it is too expensive or not available to them: Bullet 3 states that “Figure 1 shows where Texans use”. We thought Figure 1 was missing, but I found it on page 57. Is it possible to move this Figure up in the document closer to the beginning of this section?
- Page 59, Findings: states that “Aging individuals have some of the greatest share of inadequate internet speeds ... next to rural residents.” It’s not clear what “next to rural residents” means. Is it possible to use a different, more clarifying word here so those of us interested in rural or older residents know which group has the most challenges? Or is the phrase next to meant to communicate that they have equal challenges?
- Page 59, Findings, last paragraph: states that “Aging individuals often use the internet to access healthcare information or services, the second highest among covered or underrepresented populations.” Is it possible to say, “behind X group” so we know which group uses it most? It’s not 100% clear where this information is coming from so the reader can’t look it up. Even if you cite the source (which would be useful), it’s helpful to the reader to know who the other group is since they are referenced.
- Page 63: “TDCJ facilities may participate in remote video visitations at a cost of \$10 for 60 minutes” It’s striking in reviewing this section how underrepresented incarcerated individuals are in this survey. This piece of information about costs to incarcerated individuals raises further questions about whether there is additional data available about usage of remote video visitations or the actual number of sites where the program is available or how many people use it or how much incarcerated individuals are spending on this program. This information may not be available, but if it is, it seems that organizations serving incarcerated individuals would benefit from having this highlighted.
- Page 65: “the second highest among covered populations” it would be helpful to reference which group uses the internet to access healthcare information the most.
- Page 73: “The Texas A&M Distance Education Professional Development Center serves on the Education Taskforce ...” Is it possible to provide more details and context in this sentence? That would help readers understand why it is specifically called out. Is the goal to indicate that the needs of LEP individuals were specifically represented by A&M because they provide these services? Or did they make a very significant contribution to the conversation that should be highlighted here? If not, suggest removing this because it’s confusing and raises questions. Also, were there K-12 partners who shared LEP perspectives on the Education taskforce? If so, it would be helpful to reference that along with A&M because you don’t usually think of a Distance Education center providing LEP services.
- Page 75”: last sentence of first paragraph is confusing. Suggest re-wording as follows: “Next to low-income and unhoused individuals, people with limited English proficiency, are most likely to use only a smartphone to connect to the internet, as opposed to a computer or tablet.” As currently written, the reader has to stop and thinking through “devices at lower rates” and “highest rates of all covered and underrepresented populations” relative to the other two groups that are mentioned.
- Page 76, Table 6: suggest putting the table all on one page during final layout if possible.
- Page 76, Table 7: this table is split across three pages. Strongly suggest putting the table all on one page during final layout if possible.

- Page 91, Table 10: this table is split across three pages. Strongly suggest putting the table all on one page during final layout if possible.
- Thank you for including regional analyses. This is extremely helpful!

Appendix J.1: Attachments to Public Comments- Comment 314

The Texas Digital Opportunity Plan (TDOP) represents a critical step towards bridging the digital divide and fostering digital equity across the state. However, the plan can be significantly enhanced to more effectively address the diverse needs of all Texans. The following comments and suggestions are aimed at refining the TDOP to ensure it is comprehensive, inclusive, and responsive to the needs of marginalized and underserved communities, including tribal communities and incarcerated individuals. Our goal is for a more robust and impactful digital inclusion strategy for Texas.

Detailed Comments and Suggestions:

Task Force for Tribal Communities:

- *Recommendation:* Establish a dedicated task force to address the digital needs of all tribal communities in Texas. This task force should actively collaborate with tribal leaders to develop and implement tailored digital inclusion strategies, ensuring that these communities are not overlooked.

Local Digital Inclusion Organizations:

- *Funding and Support:* Allocate funds to local organizations and coalitions for deploying asset inventories and conducting impact assessments. These activities should focus on measuring critical indicators like affordability, access, broadband adoption, and other digital equity metrics, tailored to the specific needs of communities.

Coalition Building and Professional Development:

- *Funding Allocation:* Clearly earmark funds for building coalitions and providing professional development opportunities. This will enhance the capacity of local and regional organizations to offer effective digital inclusion services.

Survey Administration and Asset Inventories:

- *Local Participation and Support:* Encourage and fund local digital inclusion organizations and coalitions to administer the Digital Opportunity Survey. This will ensure a more comprehensive and nuanced data collection process, capturing the needs of covered and marginalized groups. Support these organizations in leading local asset inventory initiatives to augment the statewide inventory managed by the BDO.

Community-Facing Dashboard:

- *Development and Accessibility:* Create a publicly accessible, community-facing dashboard to track local, regional, and state progress in digital opportunity advancement. This dashboard should align with the

baseline data and KPIs from the TDOP executive summary, providing transparent and up-to-date information.

Inclusion of Incarcerated Individuals:

- *Engagement and Collaboration*: The BDO should forge partnerships with community-based organizations and the Department of Criminal Justice to specifically address digital equity challenges faced by incarcerated individuals. This initiative must consider the unique barriers this group encounters in accessing digital opportunities and participating in decision-making processes.

Concerns and Critiques:

- *Broad Strategy Implementation*: The plan's current focus on funding programs needs to be expanded to include vital aspects such as networking, ecosystem building, coordination, and information sharing.
- *Evaluation and Impact Measurement*: Allocate funding for local evaluations and impact assessments of digital opportunity programs. Develop more robust methods for measuring abstract goals, including the collaboration of regional partners in data collection and analysis.

Strategy-Specific Recommendations:

- *Digital Inclusion Coalitions*: Advocate for state support and funding to establish and sustain digital inclusion coalitions. These coalitions should concentrate on ecosystem building for CBOs at various levels, enhancing digital inclusion service delivery.
- *Beyond Promotion in Adoption*: Shift the focus of adoption strategies from mere promotion and marketing to substantive actions. This includes funding local organizations to improve digital skills training, ensure device ownership, and foster effective local coordination and trust.

Overall Plan Improvement Recommendations:

- *Prioritization of Grassroots Impact*: Redirect funding to prioritize local organizations and coalitions, fostering grassroots-level impact and ecosystem building.
- *Detailed Actionable Steps*: Incorporate more detailed and actionable steps into each strategy, clarifying funding allocations and defining partner roles.
- *Distinguishing ISPs*: Differentiate between large and small/community ISPs in funding and partnerships. Large incumbent ISPs should not receive funding allocated for digital equity work.
- *State-Level Support vs. Local Autonomy*: Achieve a balance between state-level support and the empowerment of local initiatives and organizations.

- *Inclusivity and Comprehensive Coverage*: Ensure that the strategies comprehensively cover all aspects of digital inclusion, such as adoption, skills training, device access and ownership, and program evaluation.
- *Statewide Digital Equity Fund*: Assign a Community Anchor Institution (CAI) to collect and administer a statewide digital equity fund, ensuring

Appendix J.1: Attachments to Public Comments- Comment 315

SOUTH TEXAS PROFILE

The Rio Grande Valley (RGV) Broadband Coalition

The RGV Broadband Coalition is charged with creating a regional broadband plan and currently includes: Lower Rio Grande Valley Development Council; City of Pharr and TeamPharr.Net; Region One Educational Service Center; La Union Del Pueblo Entero (LUPE); ARISE Adelante; Workforce Solutions (Hidalgo-Starr-Willacy); Workforce Solutions Cameron; City of Brownsville; City of Harlingen; RGV Counties - Cameron, Hidalgo, Starr, Willacy; VTX1 Companies; SmartCom; Lit Communities-BTX Fiber; CobbFendley Engineering; Vanguard Academy; Pharr-San Juan-Alamo ISD; South Texas College (STC); Texas State Technical College (TSTC); Lone Star National Bank; come dream. | come build. (cdcb); Valley Baptist Legacy Foundation; Brownstone Consulting; Graybar; STX Underground; University of Texas Rio Grande Valley (UTRGV); Connect Humanity; Rural LISC; Intercultural Development Research Association (IDRA); and Methodist Healthcare Ministries. *The service region of several partners includes the entire RGV, and more partners will be added as the work continues.*

RGV Broadband Coalition Programs

1) **Regional expansion of high-speed broadband infrastructure and affordable service:**

Efficiency in deploying high-speed networks will be achieved with city and county government broadband engineering and feasibility studies and partnerships with local Internet Service Providers (ISPs) and anchor institutions.

Cameron County, Hidalgo County, City of Brownsville, City of Pharr, City of Harlingen, City of San Juan, and the City of Alamo have completed, or are currently underway (Hidalgo County and the City of Mercedes), with their broadband feasibility plans.

Methodist Healthcare Ministries provided a \$1 million grant to support the City of Pharr's municipal broadband utility, TeamPharr.Net.

Valley Baptist Legacy Foundation provided a \$191,000 grant to connect Harlingen Housing Authority residents with high-speed broadband in a partnership with Spectrum.

Total cost for RGV infrastructure expansion TBD.

- 2) **Level Up RGV Digital Workforce Programs:** Broadband Network Design-Build-Maintenance; Community Digital Navigators/Digital Citizenship; Information Technology (IT); Cybersecurity; Telecommunications & Information Technology Policy and Law. All training/degree/certification programs include paid internships/apprenticeships, professional development, customer service skills. The RGV Digital Workforce Team, under the RGV Broadband Coalition, has followed [NTIA's Workforce Planning Guide](#), in identifying **existing programs to expand and gaps in workforce preparation** to incorporate new career credentials and experiential learning.

\$125,000 planning grant from Rural LISC to IDRA to facilitate the RGV Broadband Coalition's Digital Workforce Working Group. Total cost of the program TBD.

- 3) **Expanding Broadband Access and Digital Skills for Civic Participation:** A train-the-trainer program designed and led by La Union del Pueblo Entero (LUPE), ARISE Adelante, IDRA, Rural LISC, and cdcB, to teach *colonia* and other underserved residents digital skills through an interactive digital navigator program to apply their digital skills for community organizing to advocate for human rights, educational equity, U.S. Census participation, access to infrastructure and safe housing, and more.

\$50,000 grant from Connect Humanity (\$25,000 each) for LUPE and ARISE to plan the digital navigator program as part of the Level Up RGV Digital Workforce Planning. Annual cost of the program TBD.

- 4) **South Texas Small Business Broadband Fund:** A partnership for the RGV Region between Connect Humanity, the City of Pharr/TeamPharr.Net, Region One ESC, VTX1 Companies, SmartCom, BTX Fiber, Workforce Solutions Cameron, and Workforce Solutions (Starr, Hidalgo, Willacy) to address broadband affordability for high-speed internet, digital

tools/platforms, and digital skills (digitalization) for microenterprise and small business, and nonprofits/community health centers. See attached brochure.

\$200,000 grant from the Ford Foundation to Connect Humanity. Total investment required, \$10 million.

- 5) **RGV Strategic Telehealth Expansion Plan:** A partnership between local governments, including the City of Pharr and Brownsville, local ISPs, Methodist Healthcare Ministries, Valley Baptist Legacy Foundation, University of Texas Rio Grande Valley Medical School, La Union Del Pueblo Entero, community health clinics, and nonprofits to ensure health care providers have necessary internet speed and capacity and that they collaborate with ISPs to connect communities and colonias to provide robust telehealth services.

\$75,000 Telehealth planning grant from Methodist Healthcare Ministries for the City of Brownsville. Total cost of the regional expansion TBD.

Infrastructure Investment and Jobs Act and Need for a Regional Approach

The recent pandemic confirmed that affordable, reliable, high-speed internet for everyone is essential for survival and upward mobility in the rapidly evolving digital economy. The internet is the superhighway for economic development that enables entrepreneurship, job creation, remote work, educational equity, access to telehealth, civic participation, and much more.

New federal funds for broadband and digital equity under the Infrastructure Investment and Jobs Act (IIJA) - Broadband Equity, Access & Deployment Program (BEAD) also created the necessity for a comprehensive regional approach to broadband infrastructure expansion and complementary digital equity programs, including digital navigator programs and digital workforce training to meet the needs of the new labor market as all sectors increasingly require higher digital skills.

In today's labor market, over 90 percent of middle skills jobs require digital skills. Those are jobs that don't necessarily require a college degree but offer opportunities for upward mobility. These are "new collar" jobs that offer an entry into the middle class and beyond. In addition, the Brookings Institute released a [report](#) in February 2023 demonstrating how jobs in the U.S. are

dramatically increasing in digitalization—that is the level of digital skills required for jobs across industries. These are jobs that also offer higher wages. However, the report reveals that the RGV – the McAllen/Edinburg MSA and the Brownsville/Harlingen MSA have the lowest digitalization scores. The report stresses the need to focus on regions of the country that score low on digitalization, to deliberately design opportunities for those regions to participate in the digital economy, thus creating shared prosperity and a more resilient U.S. economy.

Geographic Reach and IIJA Covered Populations

Persistent Poverty

The Rio Grande Valley (RGV) is a mix of urban and rural and part of a federally recognized persistent poverty region, the Texas-Mexico Border, meaning over the last three decades at least 20 percent of the population lives below the poverty line. According to the latest U.S. Census QuickFacts (2022) for percentage of population living in poverty in the four RGV counties: Hidalgo County has 23.9%, Starr 25.2%, Willacy 34.3%, and Cameron 24.4%. The other persistent poverty regions of the country include Central Appalachia, the Mississippi Delta, the southern Black Belt, and Tribal Lands. In the IIJA, Congress instructed the NTIA to target these underserved areas of the country for broadband investment.

The Texas Border Colonias

Within the border region are also the Colonias, which are economically disadvantaged communities that are rural or “rural in nature” and lack safe housing and basic infrastructure, such as safe drinking water, wastewater, paved roads, and broadband. Many colonias are neighborhoods in unincorporated areas under county jurisdiction. They can also be extra jurisdictional territories around cities, or incorporated communities (small towns). As the Federal Reserve Bank of Dallas noted in the last full report about the status of the colonias in 2015, [*Las Colonias in the 21st Century: Progress Along the Texas-Mexico Border*](#), 61.4 percent of colonia residents lived below or near poverty. Cameron, Hidalgo, and Starr Counties are among the counties along the border with the highest concentration of colonias. The colonias are recognized by federal agencies as vulnerable communities that should be targeted for investment. The Federal Reserve’s colonias report and website, and its subsequent report,

[Closing the Digital Divide: A Framework for Meeting CRA Obligations](#), also document that broadband is an additional basic infrastructure and service severely limited in colonias and widely in the persistent poverty counties of the region.

Latino Population

As detailed in Table 1, the RGV region is over 90 percent Latino. The underinvestment in fiber infrastructure or network upgrades in these communities is called “digital redlining.” This occurs when mostly large incumbent Internet Service Providers (ISPs) calculate that capital investments in low-income neighborhoods and rural areas necessary for 21st century broadband infrastructure and upgrades will not allow them to maximize profits (required by shareholders). In his book, *Farm Fresh Broadband*, Dr. Christopher Ali calls this practice “the politics of good enough,” where low-income, rural, and BIPOC communities are told they should accept whatever service is available and rely on expensive and unreliable satellite service or legacy infrastructure such as DSL technology and early cable modem network architecture.

Table 1: Rio Grande Valley Percent Hispanic or Latino	
Starr County	96.3%
Hidalgo County	92.6%
Cameron County	90.0%
Willacy County	88.1%
Source: U.S. Census QuickFacts, 2022	

The ISP reported data for the FCC Federal Broadband Map claims that 100 percent of RGV residents have “access” to broadband at 250/25 Mbps. “Access”, for the FCC, just means the ISP reports they “can serve” the location, community or neighborhood in 10 days. However, the self-reported data by ISPs is not consistent with lived experience and local context, and reports by the U.S. Census, the Federal Reserve Bank of Dallas, Brookings Institute, and the National Digital Inclusion Alliance. The actual quality and cost/affordability of service is not included in the map. In sum, the map fails to incorporate appropriate research methodologies and does not layer the relevant datasets from the U.S. Census American Community Survey of actual fixed broadband

subscriptions, local surveys, speed test data, and poverty data that would help provide a more accurate picture of the digital divide and the basis for an equitable investment of IJJA funds. We know the U.S. has the highest cost of internet service compared to other developed countries and that low-income people and regions are most impacted by the digital divide, yet there is no consideration for affordability of service in determining unserved and underserved by the Texas BDO under the current grant eligibility rules.

Impact

The Texas Broadband Development Office (BDO) will incorporate Texas' regional plans, such as the RGV Broadband and Digital Equity Plan, into the Texas Digital Opportunity Plan which will lay the groundwork for investment in South Texas from the Bipartisan Infrastructure Investment and Jobs Act (IIJA), through grant programs administered by the BDO. Thus, the work of the RGV Broadband Coalition is vital to closing the digital divide, breaking the cycle of persistent poverty, and creating opportunities for upward mobility, business development, health equity, and prosperity in the South Texas region.

Contact

RGV Broadband Coalition Co-Chairs

Jordana Barton-Garcia, Senior Fellow, Connect Humanity & Statewide Working Group, TX Broadband Development Office | jordana@connecthumanity.fund

Manuel Cruz, Executive Director, LRGVDC, RGV9-1-1 District | mcruz@lrgvdc.org



Appendix J.1: Attachments to Public Comments- Comment 317

To: **Texas Broadband Development Office**

From: Methodist Healthcare Ministries of South Texas, Inc.

Date: **January 5, 2024**

Re: Texas Digital Opportunity Plan Public Comment

Introduction

Methodist Healthcare Ministries of South Texas, Inc. (MHM) is a faith-based, not-for-profit organization dedicated to creating access to health care for uninsured and low-income families through direct services, community partnerships, and strategic grant-making in 74 counties across South Texas. As critical services necessary for health and wellbeing move online, MHM is committed to **improving telehealth access** within its service region, **improving the wellness of the least served**, and increasingly, **providing digital equity services to ensure wraparound care** for its constituency.

MHM respectfully submits these comments to the Texas Broadband Development Office (BDO) in response to the Texas Digital Opportunity Plan (TDOP) Request for comments. These comments offer a perspective from a longstanding community backbone organization with expertise in the digital needs of people experiencing multiple overlapping barriers and challenges for BDO to consider.

Funding Allocation

We recommend a balanced allocation of funds to the Texas Education Agency, Texas E-Health, and other anchor institutions within strategy one. This dual investment approach will ensure that educational and health-related digital inclusion efforts receive adequate support, fostering holistic community well-being.

Capacity Grants

We suggest streamlining reporting requirements for Capacity Grants to promote broad participation, especially among smaller community-based organizations. Simplifying these requirements will facilitate the engagement of organizations with limited staff capacity for extensive reporting, fostering inclusivity in the plan's implementation.

Additionally, we advocate for specific considerations for organizations serving colonias and rural communities within the Capacity Grant requirements. Recognizing the unique challenges these entities face will help tailor the plan to address the distinct needs of diverse communities.

ACP Cliff and Connectivity

Addressing the Affordable Connectivity Program (ACP) cliff is crucial for sustaining connectivity. We recommend developing strategies to encourage Internet Service Providers (ISPs) or community initiatives to maintain connectivity post-ACP. Furthermore, a subsidy program for ISPs offering low-cost options to ACP holders after the ACP concludes should be explored to ensure continued access without financial barriers.

Creating a subsidy program for individuals who lose ACP subsidy is essential. This measure will safeguard digital inclusion efforts and mitigate potential disparities arising from the conclusion of ACP support.

Incorporating the impending changes related to ACP in Strategy 3 is vital. Acknowledging the evolving landscape and outlining contingency plans if ACP support concludes will enhance the plan's adaptability and long-term success.

Inclusion of Healthcare and Community Anchor Institutions

We emphasize the importance of incorporating community anchor institutions, including hospitals/clinics, schools, and affordable housing, in the Texas Digital Opportunity Plan. This will ensure that the plan addresses the connectivity needs of various community services, contributing to overall community health and development.

In closing, the Methodist Healthcare Ministries submits the aforementioned comments for consideration by the Texas Broadband Development Office, which we believe will enhance the effectiveness and inclusivity of the Texas Digital Opportunity Plan, contributing to the well-being of communities across the state.

Sincerely,

A handwritten signature in black ink that reads "Charito Lincoln". The signature is written in a cursive, flowing style.

Charito Lincoln
VP of Community Investments
Methodist Healthcare Ministries of South Texas, Inc.

Appendix K: Building the Broadband Industry Workforce and Supporting Digital Skills for Texans

Building the Broadband Industry Workforce and Supporting Digital Skills for Texans

Developed for



Texas Comptroller of Public Accounts

SUBMITTED BY SHERRY MATTHEWS GROUP – FEBRUARY 12, 2024

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Executive Summary

Introduction

The purpose of this white paper is to support the Texas Workforce Commission (TWC) and the Texas Broadband Development Office (BDO) in formulating strategies to:

- Build a robust workforce to meet the demands of broadband infrastructure expansion in Texas.
- Enable workers to receive the digital skills training required for the job roles and occupations necessary for infrastructure deployment.
- Ensure the state's covered populations and members of unserved/underserved communities are able to access the digital skills training relevant to participation in the broadband workforce.

Findings from the white paper will be integrated into the Texas Digital Opportunity Plan. It incorporates original and secondary research, data and economic trends and analysis into both high-level and detailed guidance relevant to the state's broadband workforce development. Qualitative research provided input on digital opportunity barriers and workforce opportunities from subject matter experts in businesses that employ broadband workers and training programs that skill those workers for employment. Insights discovered in secondary research identified industry and educational programs that are ready to deploy training or curriculum once funding is available. Also, secondary research identified grantee prospects that would need increased capacity to provide additional services and serve more people, or programs that serve as models for partners or grantee prospects to develop and scale.

Another purpose of this white paper is to showcase what other states and organizations have done to close the digital divide and build a robust broadband workforce. Those examples, contained in the Case Studies section, can help the BDO and TWC create an evidence-based road map for Texas efforts.



Sherry Matthews Group deployed an experienced team that included in-depth research, writing, editing and design professionals to develop compelling content and presentation style.

The Executive Summary highlights key findings and recommendations; sections that cover individual topics, data and opportunities; supporting graphic citations; and appendices with selected source materials.

Research and Analysis of the Texas Broadband Labor Market

Identifying the roles and occupations most needed for planning and deploying broadband expansion is critical to targeting career opportunities for in-demand jobs and identifying the skills, training and credentials required to fill those jobs. This white paper begins with findings from research on projected job-specific workforce demand and deficits in Texas, provided by the National Telecommunications Information Administration (NTIA). The research and analysis concentrates on workforce needs addressed by the Broadband Equity, Access and Deployment (BEAD) program goals and requirements. We have also included other input from other secondary research on issues that affect workforce development for the broadband industry.

Alignment with Other State Agency Goals and Strategies

The Digital Opportunity Plan aligns with strategic plans and initiatives established by Texas state agencies designed to provide effective on-ramps to quality jobs and spur economic development. Among these are the Tri-Agency Workforce Initiative and the Texas Workforce Investment Council (TWIC) Workforce System Strategic Plan.

Qualitative Research and Findings

BDO engaged our team to conduct qualitative research among two separate cohorts: subject matter experts representing broadband industry employers – human resource (HR) professionals for Internet Service Providers (ISPs) – and digital skills trainers representing programs that help individuals build and expand skillsets needed for high-quality employment. The methodology used for qualitative research was individual in-depth interviews (IDIs). Discussion guides for the IDIs are in Appendix A and B, respectively.



Key Findings and Analysis

The qualitative research section of this white paper contains extensive details on key findings from the IDIs conducted with HR and training professionals. Findings range from the top challenges they face to their suggestions for best practices that would help alleviate those challenges.

Our analysis of the research results from the two groups revealed they share four overarching obstacles to achieving success in training and employing a strong broadband workforce that has been afforded digital opportunities. The common obstacles are:

- Lack of awareness about broadband jobs and required skills and about training opportunities that provide digital skills and support services for covered populations.
- Need for substantially more funding levels for increasing digital opportunity and workforce development.
- Prevalence of inconsistencies in training standards and programs for both employers and trainers.
- Paucity of connections that would support the efforts of ISPs and digital skills trainers to raise awareness, get funding and link to resources to help them overcome the barriers they face.

Leveraging TWC's Established and New Programs

One of BDO's four primary strategies for achieving digital opportunity goals is to partner with and provide funding for statewide organizations already engaged in advancing digital skills and workforce readiness. For example, BDO's draft Digital Opportunity Plan envisions continuing the existing partnership with TWC. BDO could capitalize on several TWC state-funded programs that enable businesses, colleges and nonprofit organizations working to strengthen the state's workforce.

Leveraging Existing Industry-Related Programs

Secondary research found numerous industry-based programs in the broadband space that are ready to be leveraged for expanding the workforce in unserved/underserved communities and reach BEAD's covered populations. This white paper highlights examples of the most robust programs that provide industry-specific curriculum and training and certifications which could be adopted through digital opportunity funding.



Leveraging Localized Programs and Initiatives

Another of BDO's primary goals for achieving digital opportunity and building an inclusive workforce is to partner with and fund local programs and initiatives. Our secondary research identified Texas programs that might be future grantees or serve as models for grantees to implement and scale to meet demand. This white paper focuses on a few of the most promising programs advancing workplace development or support services with the potential to expand capacity and services specifically for broadband needs.

Texas Broadband Jobs Initiative

In reviewing both qualitative and secondary research on building a qualified and readily available workforce, we recommend a concentrated strategy to help address the systemic challenges echoed in the majority of research sources: a Texas Broadband Jobs Initiative. In response to common barriers to digital equity and workforce readiness, such an initiative would be a statewide effort to increase public education and awareness related to the broadband industry and the careers it offers. In addition, we recommend that BDO add an employee position to serve as a central link – the all-important connection – between the BDO and all the entities that compose the Texas Workforce system.

Case Studies of Other States' and Organizations' Programs

Secondary research identified many efforts that other states participating in the BEAD and Digital Equity Planning programs, or organizations boosting workforce development generally, have undertaken. We chose a sampling to spotlight in this section.

A Note on Nomenclature

Telecommunications is the industry category that has historically been involved with internet infrastructure, whereas broadband technology is relatively new. The telecommunications industry has most often been the subject for researching, analyzing and reporting on workforce issues for broadband workforce expansion. This white paper uses “telecommunications” where that term is specifically used in research subject matter, an occupation or credential, a training or the name of an organization.



Source materials studied in our secondary research recognized that the composition of the broadband workforce is fractured and complex. The variety of occupations, job titles, skills, job classifications, trainings, certifications and technology changes renders it difficult to make precise assessments or projections of labor market needs. The Broadband Infrastructure Deployment Job Skills and Training Opportunities Working Group concluded that the primary factor affecting the workforce challenges to the deployment of broadband “may be a lack of a ‘brand’ and ‘identity’ for broadband industry workers.”¹

Neither the U.S. Department of Labor Standard Occupational Classification (SOC) system nor the Occupational Information Network (O*NET) have broadband-specific job codes. The North American Industry Classification System (NAICS) does not have a business establishment code for broadband. This situation hinders labor participants – both workers and employers – in the development of a broadband workforce. It also thwarts government entities, such as TWC’s Labor Market Information (LMI) program, in their ability to collect, assess and report labor market statistics.





Research on Texas Telecommunications Workforce Supply and Demand

Expected labor shortages in the telecommunications roles deemed essential to implementing BEAD-funded broadband expansion are a top challenge to successful deployment in Texas. It was a major obstacle cited by each internet service provider (ISP) interviewed in the qualitative research and is stressed in most of the secondary research on workforce development.

Because broadband jobs are not yet on all regional or statewide in-demand or target occupations lists, labor market data on those jobs are slight. Workforce research provided by the National Telecommunications Information Administration (NTIA) helps fill that breach with data for assessing the Texas labor market.

Research Methodology

The research forecasted the telecommunications workforce needed to support the height of BEAD deployment. Secondary and primary research conducted for this white paper recognizes expected intra-industry and cross-industry competition for workers with the needed skills. The research provided by NTIA “contextualizes BEAD workforce demand within forecasted supply and demand across all industries that will compete to fill similar jobs,” a significant value for workforce development planning. The research methodology included:

- Identifying the jobs anticipated to be created as a result of BEAD funding and categorizing them into occupational roles that are likely to be required for BEAD deployment projects.
- Determining current labor demands, which factored in industries competing for the same occupations.
- Estimating future labor needs based on projecting baseline needs given current growth trends and then forecasting the additional workforce demands created by BEAD-funded projects.



Summary of Texas Findings

According to the research, the greatest labor shortages are forecast to be in the following occupation groups:

- Surveyors and Drafters.
- Trenchers.
- Master and Stage Electricians.
- Software Engineers.

Other occupation groups for which labor shortages are projected include:

- Laborers and Materials Movers.
- Trucking Crew.
- Fiber and Wireless Technicians.
- Equipment Operators.
- Structural Engineers.
- Network Architects and Coordinators.
- Inspectors.
- RF and Field Engineers.

Although the research provides significant insights into gaps in the Texas broadband industry workforce, it tells only a partial story. The researchers chose which target occupations to study based on their own analysis, not a defined list from the BEAD program. Because the research is statewide, it does not specify labor demands and supply for different areas of the state; nor does it address worker demographics, which are a vital consideration in strategies for creating digital opportunities for the covered populations. Both the qualitative and secondary research that form the bulk of this white paper bring focus to problems and possible solutions that address the most pressing needs.

To fully implement BEAD projects, many of the necessary labor roles exist outside the specialized occupations related to telecommunications. America Achieves and Rural Innovation Strategies developed a list of occupations to consider in determining the scope of the workforce.² Codes specific to these occupations would include a broad contingent of industries, not just broadband. The list includes:



- Construction Laborers.
- Customer Service Representatives.
- Electrical Power-Line Installers and Repairers.
- Electrical, Electronic and Electromechanical Assemblers.
- Electricians.
- First-Line Supervisors of Construction Trades.
- First-Line Supervisors of Mechanics and Installers.
- Miscellaneous Assemblers and Fabricators.
- Operating Engineers and Other Construction Operators.
- Personal Service Managers.
- Project Management and Business Operations Specialists.
- Sales Representatives of Services.
- Telecommunications Equipment Installers and Repairers.
- Telecommunications Line Installers and Repairers.

The Telecommunications Industry Registered Apprenticeship Program (TIRAP), built by and for telecom employers, recommends numerous occupations covered by the available apprenticeships. This program is described in the white paper section on industry-related training programs. Several TIRAP job titles are broadband-specific or cover broadband, such as:³

- Wireless Technician.
- Fiber Optic Technician.
- In-Building Wireless Installation Technician.
- Broadband Technician.
- Underground Utility Installer Technician.
- Overhead Utility Installer Technician.

Our research could not find individual codes on O*NET for these job titles. Even some titles used for job openings are not explicit. For example, a posting for “Cabling and Fiber Optic Technician” on Indeed.com actually included two positions: “Fiber Splicing Field Technician” and “Structured Cable Field Technician.”





Other Influences on the Broadband Labor Pipeline

The foregoing workforce research focused on selected occupation groups constituting BEAD demand. However, those occupations were not all-inclusive for the broadband industry workforce. The variety of occupations, job titles, job classifications or lack thereof, skills and competencies, trainings, certifications and technology changes exceeds most data reporting available on state and local levels.

This lack of data makes it difficult to fully assess or project labor market needs for purposes of the BDO Digital Opportunity Plan. According to *“Reimagining the Broadband Technology Workforce,”* an article from the Brookings Institution (2022):

“[I]nsufficient and underwhelming data exists [sic] on the workforce opportunities within the broadband industry, including in areas like wireline, wireless, fiber, satellite and other telecommunications services. For businesses to recruit and retain high-quality and skilled employees, workers need to know what and where the opportunities are.... Without the appropriate occupational classification of such industries in an expanding broadband labor market, it is nearly impossible to measure worker value, earnings potential and skills acquisition in these occupations, and it is challenging to develop career pathways and related learning curricula to ease transitions into these roles.”⁴

Brookings’ article emphasizes that the broadband industry workforce, both direct and indirect, requires more skills – many considered “middle skills” – than degrees. Such skills-based hiring widens the labor pool and opens jobs to more demographically diverse and historically underrepresented talent, helping to close the digital divide. However, these potential hires need to know what career opportunities are available and what it takes to become in-demand employees. Correspondingly, the employers hiring for relevant job openings need support in connecting with the newly skilled workers who are job-ready or who are candidates for further talent development.



Published by the Fiber Broadband Association (FBA) and Cartesian in 2023, the *Broadband Development Guidebook* recommends that states and regions help establish or leverage existing targeted training programs to secure an adequate supply of skilled workers.⁵ The FBA guidebook laid out specific broadband job roles across the continuum of the infrastructure implementation process. Knowing which workers will be needed over these phases will help organize digital opportunity planning around priority industry labor needs and the timing of those needs.

The following table outlines labor roles identified in the FBA guidebook for pre-construction through post-construction phases of broadband infrastructure deployment. As noted in the previous section, the roles listed here are not meant to be all-inclusive of the broadband workforce.

Pre-Construction	Construction	Post-Construction
Network Planning (Network Planner, Network Designer, Project Manager, Estimator)	Network Construction (Laborer, Pole/Anchor Foreman, Tower/Antenna Foreman, Safety Lead, Locator, Quality Inspector, Field Engineer)	Customer Installations (Premise Installation Technician, Customer Support Representative)
Surveying (Land Surveyor, Pole Surveyor, OSP Engineer)	Tower Construction (Tower Technician, Wireless Technician, Tower Climbers)	Field Maintenance (Maintenance Technician)
Permitting (Permit Officer)	Fiber Splicing (Fiber Optic Technician, Splicer Technician, Fiber Lineman)	
Procurement (Procurement Lead)	Optical Network Installation and Commission (Fiber Technician)	
	Wireless Network Installation and Commission (Antenna Installers, Wireless Technician, Electrician)	

Adapted from Broadband Development Guidebook, FBA and Cartesian (2023)



Need for Digital Skills Across the Broadband Development Labor Force

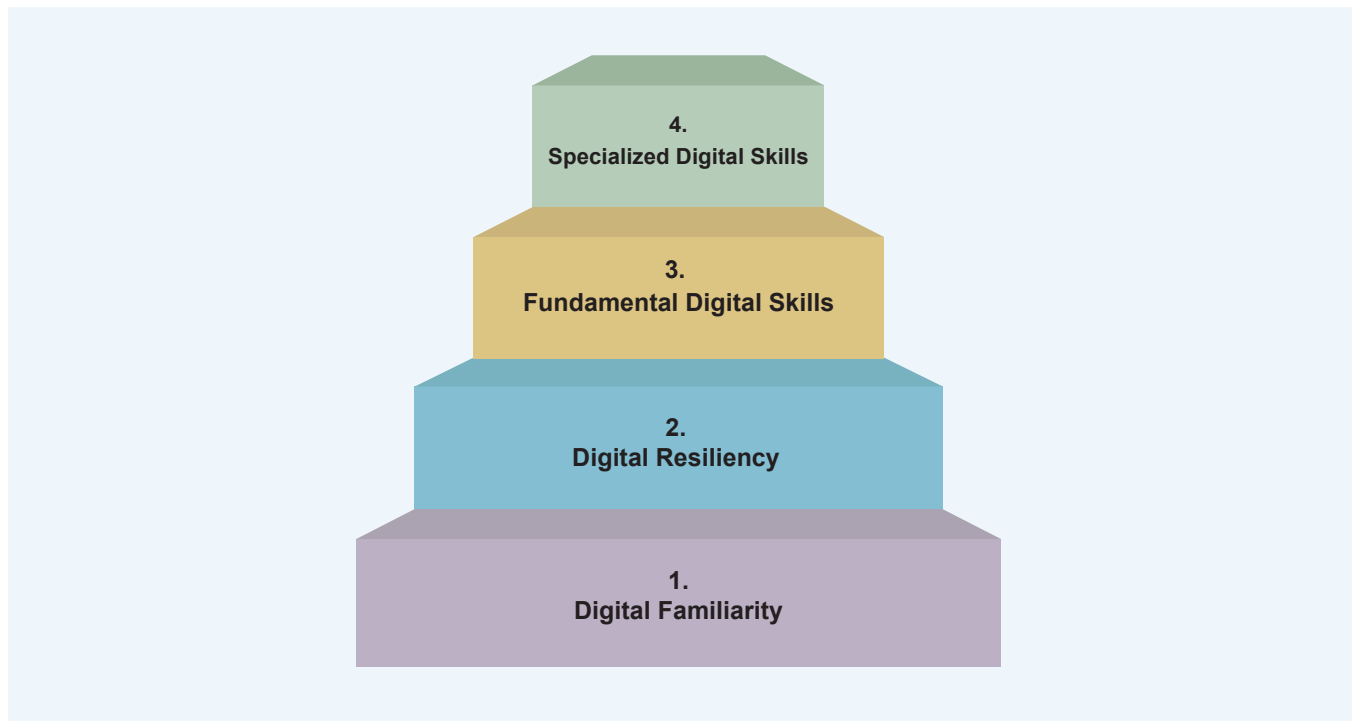
In a 2023 report, the Federal Reserve Bank of Atlanta’s Center for Workforce and Economic Opportunity stated that most workers must have digital skills across industries, from construction and other trades to scientific and technical services.⁶ Yet, the digital skills gap is massive:

“Over 92 percent of all jobs require digital skills, but approximately one-third of workers don’t have the foundational digital skills necessary to qualify for these jobs.”⁷

Emphasizing that “digital skills are critical for earners and learners at every stage of their careers,” the Federal Reserve also reported that digital skills are key to economic mobility. The higher the level of digital skills needed for a job, the higher median hourly wage. Thus, providing digital opportunity is essential to increasing economic opportunity.

Training Professional’s Hierarchy of Digital Skills

Both our qualitative and secondary research found that the lack of required digital skillsets is a core factor in the broadband industry’s current and projected labor shortage. We created the following pyramid graphic to show the hierarchy of digital skills, from basic to specialized. The skillset for each level is described on the following page.



1. Digital Familiarity

Prior to this stage, people are fundamentally unfamiliar with the digital world with no access to devices or the internet in any meaningful way. They don't know how to turn on a computer, create passwords, use a keyboard, navigate websites, understand standard icons, etc.

2. Digital Resiliency

Once they achieve familiarity and comfort, students acquire digital resiliency. This means they begin to feel confident using and applying their developing skills. For example, once they understand the basics of how website navigation generally works, they can go to other websites and comfortably find their way around. They are less discouraged and not as prone to giving up when learning or adapting skills.

3. Fundamental Digital Skills

Today employers expect fundamental skills such as familiarity with Microsoft Office tools and how to navigate a website, apply for jobs online, fill out forms, use search tools, teleconference, etc. Employers now consider these skills entry level basics and, unlike in the past, do not value “certifications” in these fundamental areas; for example, a Microsoft Office certification.

4. Specialized Digital Skills

Basic digital skills are mastered; they have begun or completed specialized, industry-recognized certifications that qualify them for both entry level and mid-level, well paying careers. Examples are technical training for customer service, servicing and repair, logistics and other specialized software for a multitude of industries.

Most jobs across the pre-construction through post-construction spectrum of broadband expansion require the fundamental skills that are three steps up in the digital skills pyramid. Many jobs require a number of technical and specialized digital skills at the top of the pyramid. Manual laborers on construction sites typically need more than basic skills to apply for a job, fill out time sheets, receive email instructions or operate automated equipment. With the evolving nature of broadband work, tower technicians require certification that demonstrates proficiency in unique sets of knowledge and skills. Even securing a commercial driver's license to drive the type of vehicles used in telecommunications construction is easiest done using the internet to download manuals, application forms and parts of the test.

In a publication from the Seattle Jobs Initiative, *Digitalization & Automation in the Construction Trades—Construction Sector in the Network Economy*, the author notes that “the use of digital technology is increasing in all aspects of the construction sector.”⁸ The workers most affected by the digital skills gaps, which include members of the covered populations, lose job opportunities. In addition, employers lose opportunities to diversify their workforce, and the labor pipeline narrows.





Alignment with Other State Agency Strategies and Initiatives

In addition to being consistent with BDO’s BEAD proposal and Broadband 5-Year Strategic plan, the Digital Opportunity Plan aligns with goals and strategies for plans established by other Texas state agencies related to providing equitable onramps to quality jobs and spurring economic development. They include the:

- Tri-Agency Workforce Initiative.⁹
- Texas Workforce Commission (TWC) Strategic Plan 2023–2027.¹⁰
- Texas Workforce Investment Council (TWIC) Accelerating Alignment – Workforce System Strategic Plan Fiscal Years 2024–2031.¹¹
- Texas Higher Education Coordinating Board (THECB) Building a Talent Strong Texas 2022-2030 Strategic Plan.¹²
- TWC Adult Education and Literacy (AEL) Strategic Plan Fiscal Years 2021–2026.¹³

Below are examples of goals and strategies articulated in the above-referenced materials that intersect with those of the Digital Opportunity Plan.

The three Texas state agencies collaborating on the Tri-Agency Initiative are the TWC, the THECB and the Texas Education Agency (TEA). A priority goal of the Tri-Agency Initiative is to ensure that employers have the qualified workers needed and that Texans have access to information, education and training necessary to identify and pursue pathways to employment in high-demand occupations.

Ensuring a skilled workforce is prepared and equipped to fill critical in-demand jobs, both now and in the future, is also a strategic goal for the TWC. One objective for achieving this goal is to support people with disabilities, veterans, foster youth, adult learners and second chance populations, helping them prepare for career success and closing gaps in labor force participation.



A major thrust of the TWIC's strategic plan is to institute and expand upskilling and reskilling programs, with an emphasis on meeting the needs of employers for middle-skill workers. This would include creating partnerships designed to align the talent pipeline with employer demand and disseminate best practices for regional upskilling initiatives to audiences across the state.

With a focus on postsecondary credentials of value, the THECB's strategic plan calls for educators to work with employers to understand today's high-demand, high-quality fields, aligning courses, programs and credentials with current and emerging workforce needs, for both first-time and mid-career students. The THECB also aims to expand work-based learning opportunities, including paid internships and apprenticeships.

In the TWC AEL strategic plan, increasing postsecondary education and training enrollments and supporting completions is a critical objective. One step toward achieving this is to help current, former and future AEL students navigate education and career pathways.



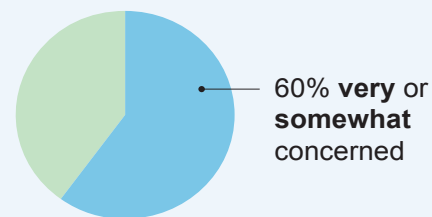


Qualitative Research and Findings

Qualitative research consisted of one-hour in-depth interviews (IDIs) with Texas subject matter experts in two segments central to the Digital Opportunity Plan: human resources (HR) directors from four ISPs and digital skills trainers from three different organizations. In a simplified construct, they are the talent recruiters and the talent trainers essential for equipping Texans with digital opportunities to meet the demand for a skilled, inclusive workforce.

Interview Cohort 1: ISP Human Resources Professionals

As stated in the Texas Broadband Five-Year Action Plan, shortages in the skilled labor workforce cause significant concern for ISPs. An industry survey conducted by BDO found that 60 percent of the ISP respondents are “very” or “somewhat” concerned about the availability of qualified workers and contractors.¹⁴ Labor shortages proved to be top of mind for the HR professionals we interviewed. Their concern about the tight competition in the labor market where the same skills may be applied elsewhere for more pay has also been expressed by multiple BDO task forces.



A BDO industry survey found that a majority of Texas ISP respondents are concerned about the availability of qualified workers and contractors needed for broadband infrastructure expansion.

Overview

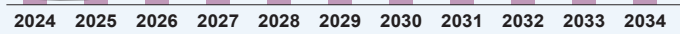
The ISP HR directors already face daunting challenges, especially in rural areas, to finding qualified talent in a growing industry that requires myriad skillsets. They know that broadband expansion will exacerbate labor shortages for construction and installation as new networks are built out or



old networks are refitted with fiber optic access. Participants expect the growth in demand for skilled employees will continue over the next 10 years. Their comments suggested the industry would benefit by generating awareness of broadband as a booming industry and a great career path enabled by appropriate training and beneficial support services.

Demand for Skilled Employees

ISP HR participants anticipate the demand for skilled employees will continue to grow over the next 10 years.



Key Findings

- The struggle to find properly trained or experienced employees is so great that sometimes the ISPs are forced to hire “bodies” to train on the job.
- The companies use a mix of employees and contractors, primarily due to the cost of having workers on staff. Reversing this reality cannot happen swiftly, so helping contractors improve their own workforce digital opportunities and diversity should be a consideration for BDO’s plans.
- They mainly use internal resources for recruiting, often via word-of-mouth.
- The biggest barrier to good training is cost, expressed in both money and time.
- The technology is always evolving so retraining new employees – and the trainers – is crucial.
- The availability of more technical training programs would be highly valuable. The process for upskill training is underdeveloped and ad hoc for many organizations.
- The respondents were not aware of apprenticeship programs in which their companies might participate.

TOP BARRIERS TO FINDING AND KEEPING EMPLOYEES:

- Hiring for specific locations.
- Finding management-level employees from outside the organization.
- Meeting the desire of employees for part-time only work when the businesses need FTEs.
- Hiring for manual labor jobs and matching competitive salaries for these positions.

Hiring professionals observed that the new generation of employees values salary over benefits, which can put employers at a disadvantage in a highly competitive marketplace.



“The larger the company, the better the resources when it comes to paying and attracting new hires. There is good competition for good workers. I may be competing against companies that pay \$75,000 for technical jobs.” HR PROFESSIONAL

MOST DIFFICULT ROLES TO FILL:

- Sales people.
- Engineers.
- Construction, which entails not only manual labor but also skills in splicing fiber optics and knowledge of when and where to dig.
- IT employees, particularly mid-level IT managers.

Anticipated future employment needs include manual labor workers, machinery experts, engineers, geographic information systems (GIS) technicians, computer-aided design (CAD) technicians, communication technicians, retail employees, project managers and leadership positions.

OPTIMAL EMPLOYMENT STRATEGIES:

- Having a corporate “VP of people” and a culture that incorporates hiring guidelines and support for recruiting applicants.
- Seeking out veterans as potential hires.
- Focusing on hiring beyond the traditional telecommunications workforce.
- Using diverse images in employment advertising.
- Creating partnerships with other organizations or schools to feed their employment funnel.
- Recruiting persons without four-year degrees.
- Hiring individuals who have done internships in the industry or in related or similar industries.
- Seeking out individuals willing to work in rural areas, particularly IT specialists/managers.

“In our communications and technical operations side, there is an opportunity to bring more women into that field. Historically there are just a lot of men that work in those roles.” HR PROFESSIONAL



BEST PRACTICES TO HELP THE INDUSTRY:

- Working with high-school career and technical education programs, regional training programs, community colleges and technical schools to make sure they are aware of and training for the specific growing needs in Texas.
- Helping young adults understand the opportunity to have a great career, regardless of their current education level or training. This is particularly true in rural areas and with underserved populations.
- Encouraging women to explore this traditionally male industry.
- Developing training programs in the prison systems.
- Encouraging college engineering programs to promote IT engineering.
- Conducting many job fairs across the state for the IT industry to show the breadth of types of jobs in the industry (sales, engineering, construction, manufacturing, service, etc.).
- Generating public awareness about the fiber industry and what it means for Texas.
- Producing or providing national safety guideline certifications.

“This is where the disconnect has happened: nobody told potential workers that this was an opportunity for a career when they were in high school, it was all about going to college. I think that if they saw something where there was a really great career, that pays well and gives them health insurance and a 401k, that would be an immense help for the next generation of kids.” HR PROFESSIONAL

A systemic approach to reducing the challenges for these businesses would help improve success for each of them and their communities to expand digital opportunities and contribute to their local and state economic growth. Such an approach could be advanced by state developed and funded programs or partnerships that address awareness of industry opportunity and needs. This would help generate the understanding that the broadband industry offers desirable careers and support training programs specific to the ISP industry. Examples of such programs and partnerships are in the Case Studies section of this white paper.



Interview Cohort 2: Digital Skills Trainers

Overview

The high-level trainers deliver programs that teach digital skills ranging from basic digital literacy to specialized competencies required for specific job certifications. They work with employment-focused Texas organizations, especially those that serve individuals representative of the covered populations.

Clients range from businesses such as ISPs to organizations seeking train-the-trainer education. Program trainees include first-time job seekers, people making career transitions and workers seeking upskilling and promotion in their current field. Job placements for individuals who have completed the training programs include areas such as logistics, IT help desks, construction, office administration, medical technology, commercial truck driving, utility services, field engineers, installers and equipment operators. Starting salaries across the jobs vary from \$40,000 to \$65,000 per year.

“Potential workers have to become aware that job training for the broadband industry is available, they must have the opportunity to access the training and they must be able to take it (such as help with costs, wraparound services, internet connection and devices).” **TRAINER**

While the importance of specific industry/job training and certification is a given, all training interviewees stressed that basic digital literacy and comfort with using basic technology is fundamental. Access to broadband, proper devices and up-to-date software are essential to achieving digital literacy and progressing through certifications. But the process shouldn't stop at digital literacy. Continued training and upskilling that leads to promotion and higher salaries is essential for retention of employees.

Special attention needs to be paid to members of the covered populations who may not have home environments or access to resources and can quickly fall behind in opportunities for workforce readiness.

NOTE: The ideal minimal number of IDIs per cohort is four different organizations. Sherry Matthews Group had access only to three digital training organizations, during the research project timeframe,



and two of the interviewees were from the same organization. However, what we learned from the IDIs is still valuable, and the trainer participants echoed the same concerns voiced in an array of published materials on building an inclusive broadband workforce.

Key Findings

“I believe generally most companies want to give people opportunity, but they are stuck behind thinking a college degree is required and people without a degree are passed over. Educating employers about the non-degreed talent pool available is untapped potential in a talent drought.” TRAINER

FINDING EMPLOYERS TO ENGAGE:

- Some organizations known for their training programs are contacted directly by employers.
- Others have to engage in one-on-one “selling” to employers via events like conferences and career/job fairs or contacting industry organizations. Some invite employers to attend program graduations and meet recent graduates to communicate the organization’s services.
- The key to success is being known as a source of quality employees and encouraging word-of-mouth success stories.

CHALLENGES WORKING WITH EMPLOYERS:

- Lack of training staff in-house on the part of the employer. There has been a disinvestment in training across the ISPs.
- Many of these organizations contract their digital trainers and have little control over the training of the trainers to deliver high-quality education. Lack of national guidelines on building the networks makes developing guidelines to follow more difficult.
- A switch from hiring employees to using contractors means many businesses are not hiring as much as in the past.
- Lack of ability to offer programs/training in more rural communities. Lack of broadband access in these areas is one of the challenges here.



- Need to overcome perceptions of hiring union workers, a significant matter given the BEAD directive to work with unions in diversifying and expanding the workforce.

“We have rural communities that we aren’t connected to and don’t have a presence in. A big challenge is figuring out a way to connect with those communities so that we can create access to the programs and services that we have.” **TRAINER**

TRAINING CHALLENGES:

- It is almost impossible to train if the employees don’t come to the job with basic digital literacy skills that bring a familiarity and comfort level, or digital resiliency, in applying those skills to learning digital systems on the job.
- The more technical the industry, the more digital skills are necessary.
- Higher education providers may not always focus on certifications that align with industries and jobs in demand based on limitations faced by the educational institution.
- There are safety issues in many of these jobs. Proper training can have a big impact on workplace safety.
- Soft skills are often lacking and are an important part of success: resume writing, interview skills, office etiquette, email writing, taking input, etc.
- Retraining and upskilling are important in a quickly changing technical landscape. Most companies look to industry certification programs to help their organization in these areas. Having internal apprenticeships would be beneficial.
- Considering how to deploy AI in training programs is a new issue that is coming fast and will impact both training and job performance.

BEST PRACTICES FOR DIGITAL TRAINING:

- Ensuring everyone is digitally literate is the first step. Access to broadband and devices is fundamental to achieving digital literacy.
- Hands-on training is a very important way to convey digital skills. Virtual training alone is not ideal.
- Generating awareness of available training programs is critical.



- Providing access to training is also critical. Directing people to appropriate training courses either online or available in their area at convenient times is essential to getting more people trained and certified.
- Affordability is key. This includes both the cost of the training programs and life costs such as transportation, access to broadband services, owning proper devices, child care, etc.
- New employees may not fully understand the job they accepted and are more likely to quit. Completing training for certifications can reduce this problem because new hires begin with better understanding of what the job involves. Better exposure to a “day-in-the-life” experience for high-demand jobs would also help.
- The focus must be on high-quality training. Doing it fast and wrong creates more problems than it solves.
- With competition for workers fierce, businesses have to be willing to pay more to hire and keep good employees.

Overarching Obstacles Shared by IDI Participants

In analyzing the IDI responses, four overarching obstacles common to both groups, and which also affect the talent pool, stood out.

Too Limited Awareness	Too Little Funding	Too Many Inconsistencies	Too Few Connections
<p>Lack of awareness about broadband jobs and required skills and about training opportunities that provide digital skills and support services for covered populations.</p>	<p>Need for substantially more funding levels for increasing digital opportunity and workforce development.</p>	<p>Prevalence of inconsistencies in training standards and programs for both employers and trainers.</p>	<p>Paucity of connections that would support the participants’ efforts to raise awareness, get funding and link to resources to help them overcome the barriers they face.</p>



Highlighting these commonalities helps BDO prioritize strategies that will have the greatest impact on shaping and implementing digital opportunity investments in workforce readiness. For example, according to BDO’s Draft Texas Digital Opportunity Plan, “**funding** is the primary barrier impacting organizations offering digital opportunity programming and resources. The second barrier is also related to funding: a lack of staff or **organizational capacity** (emphases added).”¹⁵

Because many businesses are not heavily investing in training programs, many will not consider employees who cannot demonstrate basic digital literacy. More robust funding sources for existing training organizations, and for nonprofits that provide support services focusing on key populations and that are scalable, would be one of the most valuable workforce investments provided by Digital Opportunity Grants.

Input from the qualitative research and more fully from secondary research indicates that the low desirability of some broadband jobs is a barrier to training and hiring workers to fill those job roles. The Broadband Infrastructure Deployment Job Skills and Training Opportunities Working Group¹⁶ summed up the challenge:

“Unlike industries with infrastructure mostly built out, the broadband industry faces unique challenges due to the volume of new and upgraded infrastructure to be deployed.”¹⁷

According to the Job Skills and Training Opportunities Working Group, in many cases these challenges – which can differ between rural and urban areas – may include:

- Workers having to be on-call and/or on the road.
- Unpredictable and uneven demand for certain skills.
- Perception of a lower level of “job security” during phases when peak demand is over and the unpredictability or uneven timing of those phases.
- Perception of personal security (many industry positions, such as tower climbers, work at heights, which can create concern about the risks entailed).

Especially important in areas where labor shortages require worker relocation, the Texas workforce research provided by NTIA advised that employers/contractors may need to offset job undesirability with more competitive benefits and the ability to balance job and family commitments. That research



report encouraged contractors to offer wraparound services to help workers get the certifications and experience needed to be competitive in a telecommunications labor market.

Much depends on the job location and the job roles. Valuable services may go beyond standard employee benefits packages for the type of workers needed. Such assistance may be borne by the employer; by a company partnering with community-based organizations (CBOs), nonprofits or labor industry organizations; or a mix of these entities. Target benefits could include on-site or stipends for child care, transportation – vehicles or reimbursement – (particularly where employee residences are far from work), temporary housing for those who need to work away from home and expenses for new or upskill training provided by evening or weekend programs. Offering internships and apprenticeships would also be beneficial for pre-employment, new employment and upskill training.





Leveraging TWC's Established and New Programs

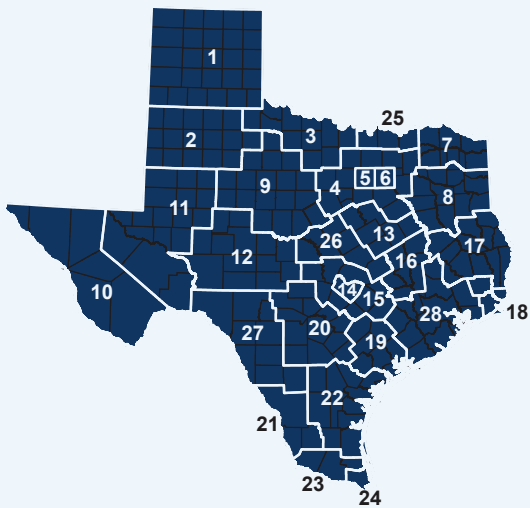
The first of BDO's four primary strategies for achieving digital opportunity goals is to partner with and fund statewide organizations already engaged in advancing digital skills and workforce readiness. In its draft Digital Opportunity Plan, the BDO envisions continuing the existing partnership with TWC and other state agencies to implement recommendations derived from qualitative and desktop research findings.¹⁸ Funding available from the state's forthcoming Capacity Grant would enable TWC and other statewide partners to enhance and expand their programs. Essentially, this would allow BDO to capitalize on the state's workforce development to provide and sustain equitable digital opportunities for covered populations and underserved or unserved regions.

Although no statewide TWC program is designed to meet the needs of a specific industry such as broadband, many programs can be used to fund and support the efforts of businesses, anchor institutions, CBOs, nonprofit organizations and trainers/educators working to develop the industry's labor force. The mechanism and staffing among TWC workforce offices, regional workforce leadership and other community/industry resources are in place. These assets offer launching points that could be deployed without building programs and partnerships from scratch.

TWC's 28 Local Texas Workforce Development Boards (TWFDBs), also have programs that offer grants for local colleges, businesses and industry and community organizations to educate and train workers with a prominent focus on skills development.



Local Workforce Development Boards Map



1. Panhandle
2. South Plains
3. North Texas
4. North Central
5. Tarrant County
6. Dallas
7. Northeast Texas
8. East Texas
9. West Central
10. Borderplex
11. Permian Basin
12. Concho Valley
13. Heart of Texas
14. Capital Area
15. Rural Capital
16. Brazos Valley
17. Deep East Texas
18. Southeast Texas
19. Golden Crescent
20. Alamo
21. South Texas
22. Coastal Bend
23. Lower Rio Grande Valley
24. Cameron County
25. Texoma
26. Central Texas
27. Middle Rio Grande
28. Gulf Coast

TWC Conduits to Workforce Development Funds

The IDI research highlighted the common need for raising awareness and providing connections that would help overcome obstacles to fulfilling digital opportunity. In addition to the programs below, TWC's workforce development infrastructure offers conduits to connect businesses, colleges, training organizations, adult education/learning providers, nonprofits and other eligible entities to the funding opportunities. These conduits include:

- TWC's job matching site WorkinTexas.com, where employers and job seekers can connect at no cost.
- Business Services Unit (BSU) staff at Workforce Solutions offices who serve as localized concierges to businesses wanting to establish operations or expand in the areas served by the BSUs.
- Regional Business Liaisons who provide economic and business development services in 10 regions around the state.
- The Texas Veterans Leadership Program, a resource and referral network for military veterans who served in Iraq and Afghanistan.



TWC Programs and Online Tools

Skills Development Fund (SDF).¹⁹ Assists businesses that want to train new workers or upgrade the skill levels and wages of existing workers. Public community colleges or technical colleges, the Texas A&M Extension Service (TEEX), TWFDDBs, or community-based organizations in partnership with a community or technical college may apply, and TWC will provide funding for customized training and curriculum development. Typical available funding is around \$2,000 per trainee but can vary based on the nature of the project.

Apprenticeship Program.²⁰ Apprenticeship is an earn while you learn program, allowing employees to learn skills while being paid to work. Apprentices participate in classroom training in addition to on-the-job training from experienced workers. Training results in an industry-recognized and portable credential. Eligible applicants are trade and industry groups, corporations, nonprofit organizations, educational institutions, employers, unions and joint labor-management organizations. The cost per participant varies but can be as high as \$10,000 per apprentice.

Texas Industry Partnership Program (TIP).²¹ A matching grant program that supports training for high-demand jobs as determined by a TWFDDB. The program leverages Workforce Innovation and Opportunity Act (WIOA)²² funds with industry partner funds. Matching funds must support certain WIOA activities and focus on High Demand/Target Occupations. This is determined by the TWFDDBs and/or the occupations in the Governor's target industries.

Self Sufficiency Fund Program (SSF).²³ Training grant that provides wraparound services like gas cards, transportation, child care, etc., to help individuals obtain industry recognized credentials. The program focuses on training for the following groups:

- Parents receiving public assistance like Temporary Assistance for Needy Families (TANF) or the Supplemental Nutrition Assistance Program (SNAP).
- Parents at risk of becoming dependent on public assistance.
- Individuals earning less than \$37,000 annually with a dependent child.
- Youth ages 18-24 living in a TANF household.

SSF grant recipients are community-based organizations, 501(c)(3) groups and public community or technical colleges. Grantees must provide occupational training that leads to an industry-recognized certification. Funding up to \$500,000 is available, with a target cost of \$2,500 per trainee.



High Demand Job Training Program (HDJT).²⁴ Goal is to increase high-demand job training in Texas communities. Local workforce boards and Economic Development Corporations (EDCs) partner to support their local economy. Funding comes from the WIOA and local economic development sales taxes. Matching funds must support certain WIOA activities and focus on High Demand/Target Occupations. This is determined by the Boards and/or the occupations in the Governor’s target industries. Grants are available up to \$150,000, which can be matched dollar for dollar up to \$300,000.

Skills for Small Business Program (SSB).²⁵ Supports training for businesses with fewer than 100 employees. The program focuses on training new and incumbent workers. Small businesses can apply to TWC for training provided by a local community or technical college. TWC will process the application and work with colleges to fund the courses. The course must already be on the college’s catalog. The target training costs are up to \$1,800 per new employee and \$900 per incumbent employee.

Upskill Texas.²⁶ Available to employers with 100 or more employees to apply for funds to identify and deploy qualified training for employees. To be eligible, employees must have worked for the employer for six months or more. A group of employees may receive the training if most of them worked for the employer for more than six months. Grants are available from \$150,000 to \$500,000. Employers must provide at least 50 percent of the training costs, which can include trainee wages.

Adult Education and Literacy (AEL) Program.²⁷ Prepares individuals for attainment of high school diploma or an equivalent and provides instruction in math, reading, writing, digital literacy and English as a second language. AEL also works with employers to provide a combination of contextualized academic instruction and occupational training in demand occupations, often at the employer site.

Vocational Rehabilitation Program.²⁸ Helps adults of all ages with disabilities get ready for, find or keep a job. The program also helps young students with disabilities prepare for life after school. In addition, the program assists businesses in hiring and supporting employees with disabilities.

NEW: Lone Star Workforce of the Future Fund (LSWF).²⁹ Enacted by the 88th Texas legislature and rolling out in 2024, the LSWF will have \$2.5 million annually, based on current appropriations. During the legislative discussions, broadband was referenced as one of the industries considered for this new grant program, along with other high-demand industries such as health care and semiconductor. Colleges and nonprofits are eligible for funding. LSWF goals, which align with broadband workforce needs, are to:

- Create and sustain a utilization-driven supply of qualified workers for entry-level to mid-level jobs in high-demand occupations.



- Address and close the gap between the skills needed by workers and the current skills of the available workforce.
- Increase the interest of current and future Texans to fill the available and emerging jobs that require less education than a bachelor's degree but more than a high school diploma.

Texas Career Check (TCC) Search Tool.³⁰ Created by the Labor Market Information department of TWC, TCC is an internet search tool for individuals exploring occupations to pursue. It consolidates data from federal and state data sources, including job projections from the 28 TWFDDB regions. Although not a funding program, TCC could be a candidate for BDO funds that would allow the tool to be expanded to include in-demand broadband industry occupations. Currently, it contains only two O*Net classified occupations for telecommunications.

Texas Labor Analysis Tool.³¹ This online tool allows users to create in-depth statewide or regional reports for aggregated or single regions to provide insight into the Texas labor supply and labor demand. The tool further facilitates the exploration of real-time occupation demand through analysis of current job postings, while also supporting regional demand assessments using both projected and latest employment numbers and earnings. Additionally, users can generate insightful reports on industries and occupations.

Telecommunications Training & Workforce Development Program Best Practices Checklist

NTIA's Internet for *All Workforce Planning Guide* contains a "Best Practices Checklist" to help BEAD-eligible entities evaluate existing workforce development programs and determine the initiatives, programs and efforts needed to ensure an available and highly skilled telecommunications workforce.³²

The planning guide states, "as a threshold matter, the workforce development investment must be tailored to address a specific need required for high-speed internet deployment. Once that threshold is met, states should carefully examine key aspects of a proposed or existing workforce program's design and the role of employer partners in the design and implementation of that program."

While Digital Opportunity Grants come from a specific funding allocation, the Texas Digital Opportunity Plan and BEAD Proposal must cohere for successful broadband expansion. Thus, the checklist is valuable for BDO's evaluation of training models and possible grantees, such as those in the next two sections.





Leveraging Existing Industry-Related Programs

Secondary research found numerous industry-based programs in the broadband space ready to be instituted for expanding workforce development in unserved/underserved communities and for individuals in the covered populations. Fiber optic training programs lead the pack in providing broadband industry-specific curriculum and certifications. As noted in some of the secondary research, many of the occupations needed for the broadband sector are in high demand by other industries.

What follows is a sampling of the most robust industry programs that are ready to deploy by businesses, colleges, technical schools and other organizations.

FBA OpTIC Path™ Course & Certification

The Fiber Broadband Association (FBA) developed content for this fiber optical telecom installer course and certification and partners with community, technical colleges, vocational schools and veteran programs nationwide to deliver the training.³³ OpTIC Path provides up to 144 hours of classroom training and hands-on experience to build the skills required for advanced entry-level fiber optics employment. By providing a scalable, skills-first fiber optic technician training program, FBA aims to address many of the skilled labor issues facing the industry.

OpTIC Path is designed on a building block format so that novices to the technology can follow it easily. Integrated skills training follows the classroom knowledge chapters. By the completion of the course, graduates will be able to install, test and troubleshoot components to completed systems, including at subscribers' fiber-to-the-home locations. Such training and certification are especially important to creating sustainable occupations needed to construct fiber infrastructure and to maintain networks long after the construction phase.



FBA members in Texas include tribal, industry and local government agencies. They range from the Alabama-Coushatta Tribe of Texas headquartered in Livingston, the City of Pharr and the Hill Country Telephone Cooperative to VTx1 Companies (an ISP that serves a large swath of central and south Texas) and Big Bend Telephone Company and to large ISPs like AT&T that provide services around Texas.

These member organizations would be key players in strategies to link the workforce ecosystem of employers, BDO and TWC funding sources, educational institutions, training programs and wraparound service providers to make OpTIC Path available to covered populations for a crucial pathway to broadband jobs.

Telecommunications Industry Registered Apprenticeship Program (TIRAP)

A joint venture of telecommunications companies, industry associations and the U.S. Department of Labor (DOL), TIRAP was developed as the first Registered Apprenticeship program in the telecommunications industry.³⁴ TIRAP provides an industry-driven, high-quality career pathway for employers to develop and prepare the future workforce. It also enables employees to obtain paid work experience, classroom instruction, progressive wage increases and a portable, nationally recognized credential. Registered Apprenticeships are industry-vetted and approved and validated by the DOL or a State Apprenticeship Agency.

TIRAP offers a best-practice solution that can be integrated into existing training and workforce development strategies to meet critical talent challenges, which include:

- Developing a properly trained and scalable workforce to build next-generation wireless networks and meet the demands of 5G and future generation of wireless technologies.
- Reaching underrepresented and disadvantaged populations to increase the diversity of the workforce.
- Developing rapid and responsive workforce training and upskilling models.

One challenge revealed in the IDI research is the lack of awareness of in-house training opportunities and participants specifically named apprenticeships. TIRAP training applies to several broadband-specific occupations, such as:

- Wireless Technician.
- Telecommunications Tower Technician.



- Fiber Optic Technician.
- In-Building Wireless Installation Technician.
- Broadband Technician.
- Underground Utility Installer Technician.
- Overhead Utility Installer Technician.
- Customer Service Representative.
- IT Generalist.

National Communications Training Centers (NCTC)

Based in Houston, NCTC is a nonprofit dedicated to training and certifying people to install fiber optic cable for the telecom industry.³⁵ Over the past 21 years, the organization has trained hundreds of technical workers for businesses and government clients. NCTC offers a unique 75 percent hands-on curriculum and a balance between theory, diagnosis and laboratory work.

Leaders in the fiber optic industry who have experience in the classroom and in the field present NCTC courses. Day and evening classes are available. Certifications cover a variety of specializations for broadband occupations, including:

- Fiber installers.
- Fiber splicer technicians.
- Fiber cable assemblers.
- Repairers, testers and inspectors of fiber installations.

BDI DataLynk

An internationally recognized fiber optics training firm BDI DataLynk is based in Austin.³⁶ Two Texas schools, Lee College in the Coastal Bend and Victoria College in South Texas, have instituted BDI-created curriculum. Those schools and their courses are described in the next section.

BDI also offers a five-day Fiber Optics Bootcamp. The program fee covers study materials, exam fees and textbooks for all three courses, and no prior experience is necessary to take the training. BDI provides classroom and virtual training for the Bootcamp, and the training is also offered onsite at company locations. The Bootcamp is an intensive, accelerated version of BDI's traditional



Fiber Optic training program that equips participants with Fiber Optic Association-sanctioned certifications. The certified fiber optic courses, which are recognized by the DOL, include:

- Certified Fiber Optics Technician.
- Certified Fiber Optics Specialist/Splicing.
- Certified Fiber Optics Specialist/Testing & Maintenance.

Telecommunications Education Center (TEC)

TEC was developed by the Wireless Infrastructure Association (WIA) with contributions from academia, subject matter experts and WIA members. It is also a national partner of TIRAP.³⁷ TEC's learning program is devoted to improving education, quality of work and safety within the telecommunications industry to meet the demands of the broadband and 5G industry.

The organization partners with businesses and educational institutions to meet training, education and professional development needs through unique blended learning environments: classroom, field, webinar and online. TEC's 5G Readiness Program is a turnkey training course that provides 50 hours of industry-validated training material and hands-on exercises. Instructor-led classroom training is held at the TEC onsite or at a partner's preferred training location. Webinar and online components allow participants to attend remotely.

Bundling more than 10 industry-recognized certifications, the TEC program enables participants to earn a 5G Readiness Certificate from WIA. The training leads to the competencies required to understand, plan and implement telecommunications solutions, including mobile broadband and 5G. TEC also connects qualified job candidates with companies actively seeking employees and paid apprentices. Select TEC courses are offered publicly as eLearning modules that can be completed anytime, anywhere, at the student's convenience via electronic devices such as computers, tablets and mobile phones.

NOTE: BROADBAND INDUSTRY ORGANIZATIONS AS LINKS TO POTENTIAL DIGITAL OPPORTUNITY PARTNERS

Although the three organizations described below do not offer robust training for broadband occupations and/or digital skills development, they could be valuable in linking their memberships to Digital Opportunity Grants and to TWC funding programs. They could also equip their members with grant information to distribute to the local communities they serve. Key targets for this information would include government, business and workforce leadership; colleges, technical schools and K-12 educators; anchor institutions; CBOs; nonprofits and media outlets.



NTCA – The Rural Broadband Association

NTCA represents more than 850 independent, family-owned and community-based broadband companies involved in building and delivering connectivity in rural and small-town communities across the country.³⁸ The association offers opportunities for rural telecom professionals to gain new knowledge, expand their professional networks and strengthen their connections within their organization and industry. NTCA events and education programs are available in a variety of formats, from in-person conferences to webinars, allowing members to explore new operational strategies and overcome their business challenges.

NTCA offers online learning opportunities, including webinars and a library of recorded live learning sessions from annual events, to keep broadband companies up to date on industry topics, products, services and solutions. NTCA's Certificate Program and specialty programming provide professional development. Held throughout the year, the association's events allow employees to earn credits and continuing education units. The NTCA created an online guidebook to funding from federal broadband programs.

To help diversify the rural broadband workforce, NTCA runs a Women in Telecom (WIT) initiative to support women entering or advancing in the industry. The effort includes a WIT leadership video series, a mentorship program that connects women in the industry to share knowledge and experience with one another and special events.

The Texas Telephone Association, Inc. (TTA)

Founded in 1905, TTA is the trade association that represents the incumbent local exchange telephone companies of Texas.³⁹ The TTA Foundation, the association's resource for learning opportunities, is focused on fostering a greater understanding of the importance of reliable, efficient telecommunications infrastructure to the state's economy.

By sponsoring and promoting lectures, seminars and other instructional endeavors, TTA advances education and research in telephony. It also promotes the field of telephony as a professional career choice. To this end, the Foundation grants scholarships to Texas high school students each year. The TTA website also posts relevant job listings.



Texas Statewide Telephone Cooperative, Inc. (TSTCI)

TSTCI is a statewide association representing rural telephone cooperatives and other rural independent telephone exchanges in Texas.⁴⁰ Its mission is to represent and serve the interests of the Texas rural independent telecommunications providers and their customers.

Although TSTCI does not directly provide educational or professional development opportunities, it would be a significant information source and connector about BDO digital opportunity funding for its members and their rural communities. Current relevant job listings are posted on the TSTCI website.





Leveraging Localized Programs and Initiatives

The second of BDO's four primary strategies for achieving digital opportunity goals is to partner with and fund local programs and initiatives. As stated in the draft Digital Opportunity Plan, many aspects for ensuring digital opportunity require locally based, culturally appropriate efforts. The BDO plans to allocate a portion of its Capacity Grant to create a digital opportunity grant program to fund local initiatives addressing the gaps in digital opportunity for covered populations and underserved regions.

Our desktop research identified established and new programs that could be potential grantees or serve as examples for grantees to pilot or adopt in their communities. This white paper features a few of the most promising programs that focus on workplace development or support services with the potential to expand capacity and services specifically for broadband needs, such as certifications, and be scaled to meet industry demand and be consistent with digital opportunity goals.

NPower

NPower, which participated in the trainer IDI research, creates pathways to economic prosperity by launching digital careers for military veterans and young adults from underserved communities.⁴¹ The nonprofit program operates in Dallas (its longest-time Texas location), San Antonio and Houston as well as in several other states. It provides metrics-driven technology training designed to build in-demand skills for the local job market through a community-based approach.

NPower's tuition-free IT workforce development program, Tech Fundamentals, has served unemployed and low-income veterans, veteran spouses and military reservists since 2013. With support from the City of Dallas and United Way in 2021, NPower expanded this program to include young adults ages 18-26 from under-resourced communities. In late 2022, with catalyst funding from



USAA, NPower established a Tech Fundamentals program in Greater San Antonio and now has a Houston location. It partners with employers for internships, apprenticeships and full-time placement.

The Tech Fundamentals program offers participants the basics of IT with real-world application and credentials. Components include:

- Up to 20 weeks of instructor-led virtual training.
- Opportunity for a paid internship or a project-based learning experience.
- Opportunity to earn industry-recognized certifications: CompTIA A+ & IT Fundamentals+ (ITF+), a Google IT Support Certificate and an IT Generalist Apprenticeship credential.* CompTIA (ITF+) is an introduction to basic IT knowledge and skills that helps individuals decide if a career in IT is right for them and also helps organizations prepare non-technical teams for digital transformation.
- Exposure to Microsoft, Cisco, AWS and other leading technologies.
- Mentoring from senior-level IT professionals.
- Employment readiness workshops.
- Job placement assistance with access to a wide range of top employers.
- A full range of ongoing social service and personal development support.

**U.S. Department of Labor recognition; availability varies by region.*

With its digital technology focus and wraparound services support, NPower is well positioned to add broadband-focused training for covered populations.

Friona Happy Tribe Academy in the Panhandle

The Texas Tribune recently published an article on this new child care program in Friona, located in Parmer County southwest of Amarillo.⁴² Friona's Happy Tribe Academy is a standout example of removing a huge obstacle to equitable workforce development for covered populations, especially in Texas' rural and small-town areas: access to childcare. Excerpts from the *Texas Tribune* article tell the story better than a rewritten description.

“[After the COVID-19 pandemic city officials noticed a shift among the area’s working-class population]: Fewer residents were interested in taking in-person jobs at companies in the town. One key reason: It was too difficult and costly to find child care ... Parmer County ... didn’t have a single



day care center. Parents were largely paying the price through long morning commutes to far-flung child care providers in the region. According to the National Database of Childcare Prices, the cost of child care in Texas can range from \$6,000 to nearly \$11,000 annually.

“The rise of remote jobs and telework during the pandemic made day-to-day life a little bit easier. Afterward, many Friona residents, 73 percent of whom are Hispanic, seemed reluctant to take jobs [requiring long commutes]...the high cost of child care forced them to make difficult decisions about whether they could continue living or working there at all.”

“Data from the Center of American Progress, a nonpartisan policy institute, show 63 percent of rural families in the Lone Star state live in a child care desert.”

“Parental relief – and a potential economic solution for the city – arrived after the Amarillo Area Foundation provided a grant for more than \$114,000 to the City of Friona to open a day care center in town.” The community foundation worked hand-in-hand with the city, and the Happy Tribe Academy opened in November 2023. The foundation also awarded funds to the City of Claude, 96 miles northeast of Friona, to establish a day care center.

This public-private nonprofit partnership to increase child care access serves as a model for remediating a vast barrier through BDO’s Digital Opportunity Grants.

TWC Child Care Programs: Statewide Resources

With strong programs dedicated to support for child care assistance, TWC also helps mitigate this barrier for working parents. These programs could be leveraged for digital opportunity efforts and include:

- Child Care Services (CCS), which offers child care scholarships for children under age 13 to help parents work, search for work or attend school or job training.⁴³ TWC’s website also links parents to a mapping search tool to find local child care providers.
- The Child Care Investments Partnership (CCIP) program helps local TWFDs and their partners work together.⁴⁴ Boards can partner to improve child care quality using both public and private funds. Areas of partner funding include business support for child care programs.



Pathways to Work

The Pathways to Work program, which is recognized in the Texas BEAD proposal, is a workforce development partnership among the United Way of Metropolitan Dallas (UWMD) and 55 community organizations, supported by JPMorgan Chase.⁴⁵ Today it is also funded by the City of Dallas, the National Fund for Workforce Solutions, Independent Bank, USAA, Target and several private foundations. Client partners include employers and industry associations and service and training providers.

The UWMD's ongoing projects seek to improve workforce equity throughout its service region. Through their Pathways program, the North Texas Area United Way partners with service providers, training organizations and employers in growing industries to develop work-ready training programs, deliver industry-recognized credentials and support workers as they move toward their goals and obtain jobs.

Pathways to Work provides comprehensive training and employment for displaced and underemployed workers in targeted occupations, including information technology, construction, industrial production and skilled trades, and transportation and logistics. Participants can also access work-readiness resources such as adult education, GED and ESL classes, career coaching, digital skills and devices, work-based learning experiences and supportive services such as transportation and child care.

Lee College

Lee College offers more than 100 associate degree and certificate programs, as well as non-credit workforce and community education courses, that prepare its diverse student body for advanced higher education successful entry into the workforce and a variety of in-demand careers.⁴⁶ The main campus and the workforce center are located in Baytown, and a satellite center operates in nearby Liberty. Lee serves a geographic area of more than 220,000 residents that includes 15 area school systems.

In partnership with BDI DataLynk, Lee College Community Education offers a Fiber Optics Network Certification Program on campus.⁴⁷ Students obtain practical working knowledge of fiber optics skills, with 85 percent of class time devoted to hands-on work. Courses prepare students for fiber optic exams, which are given and graded at the end of the classes, for four industry certifications. Lee promotes the program for:



- Current fiber optics technicians and specialists seeking certification.
- Current fiber workers who want to expand their technical knowledge.
- People who plan to enter the fiber optics field.

In addition, small business owners and aspiring entrepreneurs can go to the Lee College Small Business Development Center (SBDC) for free face-to-face business advising and low-cost training hosted by leading universities, colleges, state economic development agencies and private sector partners. Lee's SBDC is a service provider of the University of Houston Texas Gulf Coast SBDC Network serving businesses in 32 southeast Texas counties.

Victoria College

Victoria College is a two-year community college located on the coastal plains of south-central Texas. In addition to a core curriculum, it offers a number of programs and courses that educate students to enter targeted fields in business and technology and skilled trades.⁴⁸ It also provides employee training and workforce and continuing education. Victoria is designated by the U.S. Department of Education (DOE) as a Hispanic-Serving Institution (HSI). One of the college's goals is to be a catalyst for educational attainment, economic growth and cultural enrichment in partnership with business, industry, community groups and all levels of education.

Victoria also partnered with BDI DataLynk to offer a new fiber optics course.⁴⁹ The first of its kind in South Texas, the course responds to an emerging need identified by Victoria leaders. The one-week fiber-optics course is sanctioned by the Fiber-Optics Association (FOA) and recognized by the U.S. DOL. It is held at the college's Emerging Technology Complex.

Students who successfully complete the 40-hour course earn three FOA certifications, which are included within the course hours and costs:

- Certified Fiber Optics Technician.
- Certified Fiber Optics Specialist in Testing and Maintenance.
- Certified Fiber Optics Specialist in Splicing.

Texas State Technical College (TSTC)

TSTC is a junior college offering in-demand technical vocational education, including many courses of study that enable students to earn certifications and/or associate degrees.⁵⁰ The emphasis of each its system campuses is on advanced or emerging technical programs not commonly offered by



public junior colleges. In addition to new high school graduates, TSTC serves adult learners seeking a career change or updating skills, military veterans and high school students who want to take dual credit programs. Campus locations include Abilene, Breckenridge, Brownwood, East Williamson County, Fort Bend County, Harlingen, Marshall, North Texas, Sweetwater and Waco.

TSTC offers a Fiber Optic Broadband Technician Course designed to prepare and certify attendees as entry-level technicians in fiber optics and Category 5 and 6 network cabling technologies.⁵¹ The comprehensive course comprises 105 hours of instruction delivered over a three-week daytime schedule and/or six-week evening schedule. The course consists of lectures and extensive hands-on training. Upon successful completion, trainees are certified to install fiber optics and data cabling. They are also certified by Draka Universal Cabling Solution (DRAKA) and awarded a Certified Fiber Optic Technician certification from FOA.

New Texas Legislation: Funding for Community Colleges to Focus on Preparing Students for In-Demand Careers

A Texas law passed in 2023 will boost the development of the talent pipeline for the broadband and other industries that need high-quality and specialized skills. The community college finance reform moves towards an industry-led, outcomes-based funding model.⁵² Outcomes will be weighted to recognize the higher costs of educating students from economically and academically disadvantaged backgrounds and adult learners. Community colleges will also work with employers to ensure their courses and curriculum produce workers with the skills needed for the state's future economic growth. The legislation is designed to:

- Overhaul the state's method of financing community colleges, shifting toward an outcomes-focused, industry-aligned model.
- Increase college affordability by creating new scholarships to support the state's high-demand industries.
- Improve college capacity by providing funding for student support and inter-institutional shared services to better serve the state as its population grows.

Intercultural Development Research Association (IDRA)

Headquartered in San Antonio, IDRA is an independent, nonprofit organization whose mission is to achieve equal educational opportunity for children through strong public schools that prepare students to access and succeed in college.⁵³ It has long-standing partnerships with Rio Grande Valley communities to advance educational equity for students and families.



In April 2023, the Rural Local Initiative Support Corporation (LISC) awarded IDRA a \$125,000 grant to plan regional digital workforce development program in South Texas.⁵⁴ The grant award will support local planning and program design for “LevelUp RGV: A Digital Workforce Program” for high school and college students in the Rio Grande Valley, starting with Hidalgo, Cameron and Starr counties. LevelUp RGV will include structured coursework and paid internships in IT, broadband network design and build, community digital navigators and cybersecurity. In addition, all learning paths will include mentorship, professional development skills, internet safety and security, bilingual customer service training and digital inclusion policy and advocacy.

IDRA will facilitate development of the workforce plan in collaboration with several municipal and county governments, Team Pharr.Net, VTX1 Companies, BTX Fiber, SmartCom, CobbFendley Engineering, Brownstone Consulting, Connect Humanity, ARISE Adelante, La Union Del Pueblo Entero, Region One Education Service Center, Come Dream. Come Build, South Texas College and other regional workforce partners. In the announcement of the grant, IDRA said it plans to establish a foundation for competitive applications to bring in federal and state grants from the Infrastructure Investment and Jobs Act (IIJA) programs. IDRA plans to work with local governments, ISPs, educational and workforce organizations and nonprofits to create a regional plan for a comprehensive, culturally competent digital workforce development program.

Both IDRA and RGV communities are ideal candidates for Digital Opportunity Grants. Funding would enable IDRA to increase its capacity to serve un/underserved and covered populations across the state and for RGV communities to scale up the program to meet demands for the entire region and provide sustainable, well-paying careers for next-generation workers.

Windham School District (WSD): Education and Training for Incarcerated Texans

WSD, which was represented in the digital skills trainer IDI research and is on the BDO’s education task force, is a non-geographical school district that provides educational programs and services to inmates in the custody of the Texas Department of Criminal Justice (TDCJ).⁵⁵ The school district offers studies and training in telecommunications technology, network cabling/copper, network cabling/fiber optics, telephone systems and voice over internet protocol (VOIP), audio/video entertainment and energy management.

The programs run for six to eight weeks and do not require retrofitting of facilities. With a wait list of about 400 students, WSD would benefit greatly from Digital Opportunity Grant funding to accommodate these students and a much larger population of incarcerated individuals.





Texas Broadband Jobs Initiative

In reviewing our qualitative and secondary research on building a workforce for broadband expansion fast-tracked by BEAD and Equity Planning funding timelines, we recommend a concentrated yet sweeping strategy to help address the systemic challenges echoed in the majority of research sources: a Texas Broadband Jobs Initiative.

The Broadband Jobs Initiative, which could be sponsored by BDO alone or in conjunction with TWC, could uniformly kickstart inclusive broadband workforce development in Texas. As such, it would cast Texas as a leader in designing and implementing a statewide strategy for accomplishing the goals for the massive broadband expansion made possible by federal funds.

Creating Awareness of Workforce Development

The concept for this statewide effort responds to solving one of the biggest common obstacles voiced by IDI research participants and emphasized in secondary resource materials: lack of awareness. The broadband industry awareness gap impacts:

- Students exploring careers, new graduates seeking non-degreed credentials and workers who want to enter a different field. All of them need to know the applicable career pathways and where to receive funding assistance and support services that enable them to get the proper education.
- Digital skills trainers who connect trainees and employers. Trainers need to:
 - Know the skills that are in demand.
 - Connect with employers who need training services and offer job placements that provide successful trainees with a sustainable occupation.
 - Recognize the availability of funding sources that would allow them to expand their organizational capacity.



- Broadband industry employers. New and existing employers need to know where to locate a skilled talent pool, what specialized training exists to equip their potential or incumbent workers with the new or more advanced skills required and how to diversify their workforce.

Overarching Action Steps

Broadband Jobs Initiative components could include the following overarching action steps to forge a critical mass of touchpoints that span the state.

- Establish a brand identity for the Texas broadband jobs sector. This would go far beyond logo development. Historically, jobs in telecommunications, and specifically broadband, have not appeared on lists of targeted and in-demand jobs. The Broadband Jobs Initiative would heighten the industry's profile among the general public and education institutions; CBOs; nonprofits; and local business, government and community leaders.
 - Positioning broadband industry occupations as hot jobs would alert stakeholders representing populations and regions targeted for building an inclusive workforce and those active in creating the broadband talent pool about the urgent demands and opportunities the industry offers.
 - Branding would also help communicate broadband's importance in economic development in communities across the state.
- Raise awareness of the occupations involved in broadband deployment and identify what skillsets and certifications the diverse occupations require.
 - This effort would include information about high-quality jobs that pay well, many of which do not require four-year college degrees.
- Guide job seekers to appropriate training programs across the state and spotlight the educational and training programs that provide the spectrum of skills needed to be ready for industry jobs.
 - Depending on a job seeker's digital skill level, the training they need extends from basic digital literacy to specialized competencies and certifications.
 - It would also provide awareness of wraparound services that could support covered populations as they train for the in-demand occupations and when they become employees.



- Educate employers about how and where to find job candidates who have the right skillsets.
 - In addition, this would inform them about on-the-job training support, such as apprenticeships and internships that are available.
 - They would be able to find which training programs are available, including train-the-trainer programs for their in-house staff and find funding to pay for the training.
 - Employers would enhance their ability to create a more inclusive workforce.

Modeled on Statewide Public Awareness and Education Campaigns

The Texas Broadband Jobs Initiative would be similar to statewide public awareness and education campaigns conducted by TWC and numerous other state agencies and follow best practices for public service marketing communications strategies. Key elements would include comprehensive stakeholder participation and customized activities and tools.

WFDBs and their local Workforce Solutions offices would be central to promotion and execution of the initiative. Community outreach to covered populations and unserved/underserved areas would be essential. BDO task forces, working groups, partnerships and stakeholder relationships could be leveraged to provide subject matter expertise and executional support. Information about the Broadband Jobs Initiative could be featured in communications on relevant workforce programs, as well as relevant Texas state agencies and local offices of federal agencies that serve members of the covered populations.

The following strategic communication components would be key to deliver the right messages to the right entities. Components might be adjusted based on final strategy, audiences and budgets.

- Research for messages/positioning.
- Branding – logo, tagline and brand guidelines.
- Website graphics and content/design consultation.
- Paid media buy – digital, TV, radio, out of home (OOH), business journal print publications.
- Digital ad production.
- Social media web video production.
- Social ad production.
- OOH billboard production.
- Radio production.



- TV spot production.
- Print ad production.
- Employer HTML email production/distribution.
- Display booth/pop up banners for employment events.
- Stakeholder webinar to introduce the campaign.
- Online toolkit for stakeholders – newsletter articles, social media content, poster, fact sheet, sample email.
- Online toolkit for Digital Opportunity Grant applicants.*
- Online training for staff/stakeholders on new Work in Texas website features – demo and quick start guides.
- Online and printed collateral (job seekers and employers) – push cards, customizable fact sheets/flyers, electronic message board graphics for offices.
- Posters (for TWC Workforce Development offices, chambers of commerce, stakeholder partners).
- Outreach events.
- Press event to launch campaign.
- Statewide campaign media relations (media tour/media pitching around the state similar to BDO Public Comment Period efforts).
- Event media relations support (drive media to BDO, TWC or other existing events).

** This toolkit could be modeled on TWC’s Jobs & Education for Texans (JET) Grant Program.⁵⁶*

JET provides grants to buy and install equipment for career and technical education (CTE) courses which must lead to a license, certificate or post-secondary degree in a high-demand occupation. Eligible grant applicants are public junior, technical or state colleges, school districts; open-enrollment charter schools entered into a partnership with a public, state or technical college; and Windham School District. The toolkit includes:

- *Intro to JET video.*
- *JET FAQ.*
- *JET Application Flowchart.*
- *ESC Region/WDA Crosswalk.*
- *JET Brochure.*
- *2023 JET Grant Informational Webinar.*



Broadband Workforce Advisor

As demonstrated by our research, making connections with entities constituting the broadband workforce ecosystem is key. Adding at least one BDO full-time employee to serve as a Broadband Workforce Advisor as part of the Broadband Jobs Initiative would create a central link between the BDO and existing programs, such as:

- Those managed by TWC.
- Deployment-ready education and training.
- Businesses associated with the Texas broadband industry.
- Organizations that help feed the talent pipeline and engage unserved/underserved regions and covered populations.
- Other state agencies whose policies and goals align with BDO's Strategic 5-Year Plan and BEAD proposal as well as the Digital Opportunity Plan.





Case Studies

Texas and all other states participating in the BEAD and Digital Equity Planning programs are competing for the same skilled workers. Although Texas must set itself apart from other states in order to attract or retain these workers, learning from competitors is a vital tactic to support the state's endeavor. The following are examples of initiatives developed by other states, locales and industry organizations to support workforce development for broadband expansion.

Ohio Broadband and 5G Workforce Strategy

Ohio has been a pioneer in developing a comprehensive approach to broadband workforce development. The state is setting its sights on being a prime destination for the formation of new, innovative technology companies by deploying the next generation of wired and wireless communications. State leaders knew reaching this goal requires a skilled workforce.

Not waiting on the federal dollars to come, the Ohio Governor's Office of Workforce and Broadband Ohio drafted a three-pronged strategic plan in 2021 – the Ohio Broadband and 5G Workforce Strategy – to address three main issues: lack of industry career awareness, lack of education and training programs and lack of awareness of existing state and federal funding programs.⁵⁷ The Ohio legislature funded “Investing in Ohio's Future” which, combined with federal dollars, infuses Ohio with approximately \$500 million that was deployed over fiscal years 2022–2023.

Because we view the Ohio Broadband and 5G Workforce Strategy as an excellent statewide model for building an inclusive broadband workforce, this case study includes more detail than the other studies.

Ohio's strategy outlines a plan for industry career awareness and creating more training and education programs in the state. Addressing the needs of unserved and underserved communities and covered populations is ingrained in Ohio's plan. The strategy addresses three key issues:



1. Increasing broadband industry career awareness by exposing middle school and high school students to the industry through curriculum and internships.
 - a. To have the greatest impact on developing the next generation of broadband workers, Ohio is taking a multipronged approach that included introducing curricula in middle and high school alongside existing STEM programs, internships, pre-apprenticeships and apprenticeships.
 - b. The state has expanded its High School Tech Internship Pilot Program, a competitive opportunity for employers to hire high school interns and receive reimbursement for their wages. The High School Tech Internship program provides a quick-to-market, structured model for students to get exposure to the broadband and 5G industry while earning a wage.
2. Developing and scaling more education and training programs to ready Ohioans' entrance or advancement in the broadband industry. Ohio's strategy recognized the lack of standardization for the credentialing of industry occupations.
 - a. The state enlisted Telecommunication Education Center (TEC) to create a plug-and-play version of the center's 5G Readiness Program to develop and scale Ohio's training opportunities for business as part of the state's TechCred initiative. TEC's program is a 10-weekend certificate program at a community college or four-year degree institution. TEC is described earlier in this white paper. Ohio's TechCred Program gives businesses the chance to upskill current and future employees to help them qualify for a better job in today's tech-infused economy. Businesses who submit successful applications will be reimbursed, up to \$2,000 per credential, when current or prospective employees complete technology-focused credentials.
 - b. The Communications Infrastructure Contractors Association (NATE) informed the state that NATE has designed, and are in the process of designing, plug-and-play curriculum models that training providers can employ to begin scaling training efforts.
3. Capitalizing on state and federal funding programs to help finance the education and training that will bring to market the in-demand broadband talent supply. Ohio is leveraging multiple state funding programs that could be used to quickly bring to market the talent supply needed for the broadband and 5G industry.



- a. For example, it is drawing on the state’s Individual Microcredential Assistance Program (IMAP) that helps Ohioans who are low income, partially unemployed or totally unemployed participate in a training program to receive a credential at no cost to the student. Training providers that submit successful IMAP grant applications will be reimbursed up to \$3,000 upon completion of each microcredential.
- b. Ohio’s 20 local workforce development boards are taking advantage of applicable federal Workforce Innovation and Opportunity Act (WIOA) funds, which pay for training that leads to post-secondary credentials for eligible adults, dislocated workers and youth. The WIOA funding may also pay for on-the-job training to reimburse an employer’s costs of training a hired participant in the workplace.

GenerationUSA Technical Training Partnerships

GenerationUSA is a nonprofit whose mission is to transform education-to-employment systems to prepare, place and support people into careers that would otherwise be inaccessible.⁵⁸ The organization combines partnerships, employers, community colleges and training schools, and community organizations with mentorship and support to help their students excel. The nonprofit focuses on tracking and raising the return on investment (ROI) that employers get from recruiting and training. As a result, new hires can operate at higher productivity, with longer retention and faster speed to promotion.

GenerationUSA’s impressive data-centered methodology offers a model for funding the development of a customized training program that could be piloted and then scaled to meet Texas broadband workforce demand. The following infographic represents that methodology.





- 1 Jobs and employer engagement from the start.
- 2 Learner recruitment based on intrinsic, effort, and employment standards for the profession.
- 3 4-16 weeks of technical, behavioral, mindset & professional presence skill training, with social support services provided.
- 4 Interviews with employers for rapid job placement.
- 5 Mentorship during and after the program and an alumni community that follows graduates into the workplace.
- 6 Return on investment for employers, students, and society.
- 7 A data-centered approach at every step.

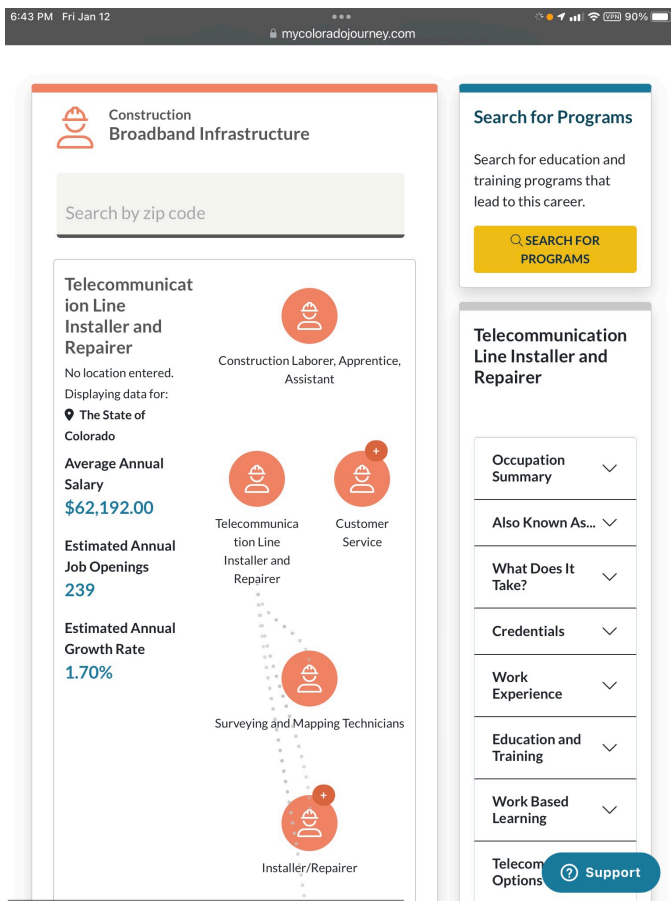
Screenshot from GenerationUSA's website.

My Colorado Journey

The Colorado Broadband Office Broadband Workforce Plan, developed by the state's Department of Labor and Employment, addresses equitable workforce development goals for the BEAD program.⁵⁹ During secondary research, our review of Colorado's plan led us to the state's My Colorado Journey website. The site connects job seekers and students to careers, education planning and support resources through a guided interactive process that drives action and goal completion.

One section of the website features the pathways to broadband infrastructure jobs and job advancement.⁶⁰ It serves as a model for creating awareness of occupations related to broadband industry opportunities and the pathways that lead to becoming a job candidate for broadband jobs. A screenshot from the My Colorado Journey site is on the following page.





Screenshot from My Colorado Journey website.

Vermont Partnership for Broadband Apprenticeships

The state’s investment in broadband apprenticeships is opening an accessible, affordable pathway to meet the needs of both workers and employers. A 2023 commentary published by the National Governors Association (NGA) recognizing state programs that are preparing for equitable broadband deployment cited this Vermont program focused on investing in apprenticeships.⁶¹

According to the NGA, the state’s “Community Broadband Board partnered with the Vermont Department of Labor and Vermont Technical College to launch a broadband installer technician apprenticeship program to expand the workforce required to build and maintain the state’s fiber optic network. The program provides free training that includes both classroom and online instruction and on-the-job training with local employers. The skills and credentials participants earn through this program also lead to career pathways in information technology, smart grid and engineering jobs. Additionally, since apprenticeship programs generally provide wages and tuition coverage,



apprenticeships create on-ramps for a more diverse workforce, helping states to meet the equity goals of federal broadband programs.”

Vermont “Pay It Forward” Fund

The Vermont Community Broadband Board is collaborating with Social Finance, an advisory and finance group, the Vermont Community Foundation and the Communications Workers of America (CWA) union to expand Vermont’s telecommunications workforce through Career Impact Bonds (CIBs). CIBs allow individuals to enroll in training programs at no upfront cost. The students or their future employers need only to pay back the cost of training if students become employed. The “Pay-It-Forward” model shifts risk away from students and employers and encourages the creation and retention of a ready and skilled workforce.⁶²

Maine Connectivity Authority (MCA) Labor Data Research and Analysis

As found in secondary research, comprehensive state-level data on current and projected demand for the telecommunications and broadband industry labor demand is meager. Maine’s MCA conducted an intensive data research project to help it develop strategies for expanding the state’s broadband workforce.⁶³ The MCA hired a specialized contractor to determine which occupations are most critical for broadband across the state. First, to gather vital data on the relevant broadband occupations, the contractor deployed sophisticated data analytics and stakeholder engagement. The firm then projected the demand for the needed occupations by developing multiple investment scenarios. Next, the firm created occupation profiles and career pathways. The final step was crafting strategies for how MCA should address employer and workforce needs. Strategies involved removing barriers to employment and promoting diversity, equity and inclusion.

Oklahoma State University Institute of Technology (OSUIT) Training Programs

The OSUIT Workforce & Economic Development Department has developed custom training programs for fiber optic technicians.⁶⁴ They include two certificate programs specifically developed for the Cherokee Nation, as well as a fiber lineman program developed for the Muscogee Nation Reintegration Program (MN-RIP) for people who were previously incarcerated. Both programs have led to an over 97 percent job placement rate.



Warriors4Wireless (W4W)

A nonprofit organization, W4W has created a career pathway for veterans to help bridge the gap between demand for wireless technicians and veterans seeking civilian employment.⁶⁵ The organization provides training, advanced certification and transitional support to provide an entryway into telecommunications employment.

Northwood Technical College (NTC) Broadband Academy

Located in Wisconsin, NTC and the Wisconsin State Telecommunication Association (WSTA) partnered to develop the college's Broadband Academy.⁶⁶ It offers two-level training for entry and senior-level personnel. The program is offered online to eliminate travel time and reduce expenses and is available "a la carte" to increase flexibility. NTC also partners with WSTA and other local telecommunications companies to offer scholarships and grants for students to enroll in program.

Montana Registered Apprenticeship Program (not broadband-specific)

The State of Montana created a Registered Apprenticeship Program, whereby apprentices can receive both on-the-job training and related college-level coursework to learn specific job and technical skills unique to the employer's profession. Program sponsors and employers (including unions) are located in nearly every county in Montana. Apprentices can find sponsors and employers through the Montana Department of Labor & Industry.⁶⁷

Jobs for the Future (JFF) Building Equity Pathways (not broadband-specific)

In partnership with 15 intermediary organizations such as CareerWise Colorado, JFF created Building Equitable Pathways for varied industry sectors.⁶⁸ The program works to bring together key players and mobilize cross-sector partnerships to promote equitable pathways into both education systems and industry workforces. Building Equity Pathways focuses on "ensuring that Black and Latinx youth and young people who are experiencing poverty can access the knowledge, skills, development opportunities, support and relationships necessary to thrive in education and the workforce."



North Carolina AT&T/Corning Fiber Optic Training Program

Corning is the largest manufacturer of fiber optic cable in the U.S. AT&T partnered with the Corning facility in Hickory to create a new training program focused on equipping thousands of technicians and network specialists across the industry to manage the growing fiber broadband network.⁶⁹ Designed for entry-level professionals, the curriculum includes the basics of fiber and optical cable including network fundamentals, safety, infrastructure and fiber theory; different types of cable; tutorials on splicing, system builds, hardware and connectivity; and testing and troubleshooting. The program, which launched its inaugural class in 2022, aims to train 50,000 American workers over the next five years.

Both AT&T and Corning will work with local community organizations to recruit trainees from a variety of diverse backgrounds and geographic locations. They also plan to work with community colleges and technical schools on a train the trainer program. Upon completion of the program, trainees will be ready to fill roles at carriers, construction firms and broadband companies.





Endnotes

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Appendices

Appendix A:

**In-Depth Interview Discussion Guide for Internet Service Provider
Human Resources Professionals**

Appendix B:

In-Depth Interview Discussion Guide for Digital Skills Trainers





SHERRY MATTHEWS GROUP

APPENDIX A

**TWC BDO Qualitative Research
TWC 173-8 Texas Digital Opportunity Plan Research Report
ISP HR PROFESSIONAL IDIs–Discussion Guide FINAL
November 2023**

INTRODUCTION (5 MINS)

- Introduce and explain the process, recording, no wrong answers, etc.
- Today we are discussing role for training, hiring, and retention at your business.

FUTURE NEEDS (10 MINS)

- What are the specific roles you expect to hire for in the next 1–3 years?
 - How many positions?
 - What are the skills or other academic/credentials required for these roles?
 - Are these roles part-time/full-time and/or shift work?
- Do you expect any of these roles to disappear in the next 5–10 years?
- Will any of them be short-term positions?

HIRING PROCESS (10 MINS)

- Do you rely on contractors, directly employed workers, or a combination of both?
- Are these roles part-time/full-time and/or shift work? Can be a percentage.
- How are you currently finding talent?
 - Do you see any barriers to finding the talent you need? If yes, list.
 - What strategies have you used to hire, retrain, and grow diverse talent (covered populations?)?
- Where are the major gaps you expect in hiring talent in the future? (e.g., labor supply, recruitment/sourcing talent, retainment, other barriers to hiring, etc.)
 - Are there any roles where you continually find a shortage of talent?
 - Do you know why this challenge exists?
- Does your company hire people in the region to work in the region, or can they work in different areas of the state?

DRIVING NEEDS (10 MINS)

- What will drive the new demand for jobs? (e.g., pace of infrastructure buildout, investment in new network maintenance, retirements, etc.)?
 - Construction?

- Sales/account management?
 - Service support?
 - Other?
- Does your company hire people regionally to work in that region, or can they work in different areas of the state?

TRAINING (15 MINS)

- How do you currently train different people for different roles (including on the job training, apprenticeships, etc.) Who are your partners if any?
- Are there new skills or knowledge that are/will be needed that weren't in the past?
- Do you see any barriers to training your employees with the skills they will need?
- Who are your partners if any?
- Do you currently seek opportunities to upskill talent? (e.g., recertification, safety, etc.).
- Do you have a model/approach for uptraining that you use?
 - What percentage of your employees have used these models?
 - How effective are they?
- Are there specific programs (i.e., apprenticeships, partnerships, etc.) that you think could be a strong model to scale? Why?

BEST PRACTICES (5 MINS)

- Are there any potential best practices or opportunities you've observed that Texas could elevate or support? (i.e., types of training, programming, data, initiatives, etc.).



SHERRY MATTHEWS GROUP

APPENDIX B

TWC BDO Qualitative Research
TWC 173-8 Texas Digital Opportunity Plan Research Report
TRAINING PROFESSIONAL IDIs–Discussion Guide FINAL
November 2023

INTRODUCTION (5 MINS)

- Introduce and explain the process, recording, no wrong answers, etc.
- Today we are discussing your role for training related to digital and tech training programs.

YOUR ROLE/PROGRAM (5 MINS)

- Who does your training program serve?
- What are the ways in which you source talent for your programs?
- How many graduates have you had?
- What types of jobs and where have they been placed? If you can share, what are their wage outcomes?
- For what job roles are you currently training?
 - Could you share a bit about your program? What are the skills/credentials that you are focused on and why?

EMPLOYERS (10 MINS)

1. What (TYPE OF) employers do you currently engage with?
2. How do you find them? Or do they find you?
3. How do you engage with them when it comes to digital training? (e.g., co-creation of programs, funding, hiring)?
4. Who do you generally work with on the employer side (HR, IT, etc.)?
5. What has worked well engaging with employers?
6. What are some of the challenges of engaging with employers when it comes to training digital skills?

SKILLS AND TALENT (30 MINS)

- What are some of the challenges or factors that talent faces in terms of **hiring**? (e.g., 4-year degree requirements, support for onboarding, recruitment practices)?
 - Do digital skills relate to this? How?
- What are some of the challenges or factors that talent faces in terms of **training**?

- Do digital skills relate to this? How?
- What are some of the challenges or factors that talent faces in terms of **retention**?
 - How do digital skills relate to this? How?
- When it comes to training, what are the digital skills/credentials you are focused on? Why?
- What areas of skills do you find applicants most lacking in?
- Are you currently involved in any programs to retrain/upskill talent?
- Which digital skills are in most demand?
 - Technical skills?
 - Software skills?
 - Broad internet skills?
- Identify gaps in the future impacted by broadband, including workforce digital skills, credentialing requirements, recruitment challenges, and others.
- Have you seen any specific programs or best practices that support hiring diverse talent?
- Any special circumstances to consider (remote working, small businesses, types of businesses, special needs cases, limited English skills, etc.)?

BEST PRACTICES (10 MINS)

- If you were to identify 5 best practices for making sure everyone, including underserved populations, are appropriately trained for a digital workforce, what would those best practices be? Are there specific programs (i.e., apprenticeships, partnerships, etc.) that you think could be a strong model to scale? Why?

Appendix L: Broadband Adoption for Rural Communities

Literature Review – Broadband Project

3. Economic and Social Impact

- Studying the economic benefits of improved broadband access in rural areas.
- Analyzing the role of broadband in attracting businesses and promoting entrepreneurship.
- Investigating the role of broadband in improving healthcare access in rural communities.
- Studying telemedicine adoption and its impact on healthcare outcomes.
- Research on the use of broadband for remote education in rural schools.
- Identifying barriers and solutions for effective e-learning in underserved areas.
- Examining how broadband can benefit agriculture and precision farming practices in rural areas.
- Promoting smart farming technologies through connectivity.

The National Digital Inclusion Alliance defines broadband adoption as “daily access to the internet: at speeds, quality, and capacity necessary to accomplish common tasks; with the digital skills necessary to fully participate online; and on a personal device and secure convenient network”.¹ With the service sector employment rate experiencing significant growth in the U.S. over the past several decades, and service-based industries, including professional and business services, real estate, finance, and health care, constituting about 70 percent of the U.S. gross domestic product (GDP), there is an increasing need to ensure availability and use of broadband applications across the country. Broadband gaps tend to restrict individuals’ ability to access essential services such as telework, telehealth, and remote education (Hunte Institute 2023; Mulverhill 2019; Stenberg et al. 2009). This, in turn, impacts community involvement or participation (Stern et al. 2011) and the overall competitiveness of society.

Numerous studies have aimed to analyze the economic impact of broadband access, adoption, and use. These studies investigated broadband and its effects on economic variables such as employment, business activity, income, population, as well as social factors like education, health, and quality-of-life. Some notable studies in this realm include Spell and Low (2021), Kim and Orazem (2017), Whitacre et al. (2014), Stenberg et al. (2009), Qiang et al. (2009), and Whitacre (2011). A recent examination by Valentín-Sívico et al. (2023) delved into quality-of-life impacts, including ease-of-use, mental health, and lifestyle benefits. Overall, these studies have consistently demonstrated that broadband not only enhances investment payoffs, but also transforms research and development, facilitates trade, and improves public services.

Access to the internet and broadband is unequal across regions (Hunt Institute 2023; Stenberg et al. 2009). Stenberg et al. (2009) observed that only 41 percent of adults in rural households had broadband access, compared to an estimated 55 percent of all U.S. adults in 2008, indicating a significant gap between rural and non-rural areas across the U.S. Moreover, there are varying degrees of broadband availability across rural communities (Stenberg et al. 2009), a difference that persists today. A recent commissioned study for El Paso County in Texas found that more than one

¹ National Digital Inclusion Alliance. Definitions <https://www.digitalinclusion.org/definitions/>

in four households of the Central and Lower Valley regions of Texas lacked internet access (Hunt Institute 2023). Valentín-Sívico et al. (2023) suggested that despite increased investment in response to the COVID-19 pandemic, millions of households in rural parts of the U.S. still lack adequate access to high-speed internet. Studies have attributed this “internet divide” to the higher cost of broadband provision or lower returns to broadband investment in sparsely populated areas, which have lower average income, higher average age, and lower educational attainment (Mulverhill 2019; Stenberg et al. 2009).

There is growing interest in understanding the effects of broadband in rural areas. Rural businesses and residents are increasingly adopting e-commerce and Internet practices (Stenberg et al. 2009), indicating a rising need for greater access in these regions. Furthermore, studies have shown that rural businesses and households are more likely to adopt broadband connections if they were as readily available as in urban areas (Stenberg et al. 2009; Stenberg and Morehart 2008). However, rural communities often have limited access to broadband services, contributing to challenges in retaining residents, generating tax revenues, and attracting skilled employees (Valentín-Sívico et al. 2023; Kim and Orazem 2017), thereby hindering economic growth and development. Qiang et al. 2009 suggested that broadband expansion in rural areas improves the operation of current markets by reducing information asymmetry and creating diverse economic opportunities for communities. This, in turn, can lead to income diversification, increased non-agricultural employment in rural zones, and higher earnings from agricultural jobs. Moreover, there are recommendations that broadband policies should be demand-oriented (Whitacre et al. 2014). Therefore, access to broadband is crucial for rural areas, enabling them to compete for both low- and high-end jobs and other economic opportunities.

As for Texas, Hunt Institute recommended conducting additional studies, focusing on rural communities. This recommendation stems from the Hunt Institute discovery that the percentage of population meeting the minimum broadband standards in El Paso County was overstated by the Federal Communications Commission (FCC). As such, failure to comprehend the complete extent of access, adoption and use of broadband services may result in underestimating the necessary intervention level in rural parts of Texas. The Hunt Institute also stressed the importance of digital literacy across the various regions in El Paso County, as significant proportions of households (in some cases exceeding 15 percent) exhibited non-proficiency in Microsoft Office and internet browsing. This digital need is likely prevalent across Texas, particularly in rural areas.

This review of previous studies conducted on the economic and social impact of broadband, as reported in this section, is not extensive but provides a preliminary view of broadband effects across the U.S. and in rural areas and offers general insight to similar effects in Texas. Additional data and research are needed to fully understand the impact of broadband on the economy, and the unique impact Texas communities may experience. In the subsequent sections, we briefly review some of the existing research on broadband’s influence on selected economic and social indicators.

Broadband Impact on the Economy

Broadband access and use enhance business activity and employment (Spell and Low 2021; Whitacre et al. 2014; Stenberg et al. 2009; Gillett et al. 2006; Ford and Koutsky 2005; Kelley 2004). Spell and Low (2021) estimated the 10-year economic benefits resulting from expanding fixed broadband adoption in three Missouri counties (Bollinger, Henry, and Nodaway) with varying existing adoption levels (ranging from 7.5 to 20 percentage points) and population sizes. The minimum scenario yielded employment gains in year 10 ranging from 79 to 261 workers, and GDP gains between \$23.3 million and \$109.4 million. The maximum scenario brought about employment gains between 159 and 524 workers, with GDP gains ranging from \$38.7 million to \$205.9 million. These results are likely applicable to comparable Missouri counties. Whitacre et al (2014) also found that high broadband adoption implies increase income growth, an increased number of firms, and higher employment rates. The authors' paper focused on rural counties in the U.S. However, their results showed that the impact of broadband availability was limited. Valentín-Sívico et al. (2023) also found no evidence supporting significant changes in internet usage related to employment for a small underserved rural community in northwest Missouri. It's worth noting that other studies have refuted this latter result.

Stenberg et al. (2009) assessed the economic impact of not having early access to broadband service on rural communities, examining 228 rural counties with high broadband availability in 2000. Using a quasi-experimental design (QED), they compared each county to a similar control group county and observed economic performances in employment and income across counties from 2002 to 2006. Counties with greater broadband access earlier experienced faster total employment and population growth, with private earnings being greater compared to similarly situated rural counties without broadband access.

Gillett et al. (2006) examined data from 1998 to 2002, finding that communities with broadband access experienced accelerated growth in employment, overall businesses, and IT-intensive sectors compared to those without broadband. Broadband contributed 1 to 1.4 percent to the employment growth rate and 0.5 to 1.2 percent to the business establishment growth rate. This result is consistent with the findings of Kim and Orazem (2017) of broadband availability having a positive and significant effect on locations of new firms. While Gillett and others analysis did not provide statistically significant evidence supporting the impact on average wage level, the study observed an increase in property values in 2000 associated with broadband availability by 1999 as housing rents were more than 6% higher in 2000 in zip codes where broadband was available. The positive impact of broadband was found to be consistent across various models tested at the zip code level, including those for economically distressed areas like the Appalachian region.

Ford and Koutsky (2005) compared per capita retail sales growth in Lake County, Florida, with ten other Florida counties selected as controls based on their similar retail sales level prior to Lake County's broadband rollout. Meanwhile, Kelley (2004) compared Cedar Falls, Iowa with its otherwise similar neighboring community of Waterloo. Both studies found that broadband connectivity had positive impacts on job creation, company and community retention, retail sales, and tax revenues.

After summarizing data from various commissioned reports and an ERS-sponsored workshop, Stenberg et al. (2009) concluded that “*rural communities that had greater broadband Internet access had greater economic growth*”. In comparing counties with broadband access by two thousand to those with little or no access, they found higher employment growth and nonfarm private earnings in counties with a longer history of broadband availability.

In essence, our initial findings from the existing literature support a positive relationship between broadband access, adoption and use on the growth and performance of rural businesses, income, and communities.

Broadband Impact on Social Indicators

Education and Human capital

Distance learning has become more necessary so the capability of delivering services to students can become more reachable. Rural schools, representing 18 percent of all students in the U.S., face challenges that are different from urban counterparts such as geographic isolation, human capital shortages, and a rapidly changing economy (Chuong and Schiess 2016). Therefore, distance learning is a tool to help these students engage with the broader community and gain exposure to innovative ideas (Mulverhill 2019). With Texas having more schools in rural areas than any other state in the U.S., about 275,000 students need more bandwidth for digital learning. The limited access to internet leads to a “homework gap” where a lack of home internet access prevents students from completing their homework after leaving school (Mulverhill 2019). Students today need to be technologically literate to have success in today’s labor force. Pew Research Center states that 52 percent of Americans who did not have broadband at home when growing up believe that they have a “major disadvantage” getting employed or being able to gain new career skills. Chuong and Schiess (2016) advocated the need for rural districts to have broadband through state grant programs and partnerships between districts and service providers as this is expected to bring about growth of personalized learning in rural areas.

Skilled human capital is a product of a strong education system, widely known as the value of the human capital resource to the growth and development of a society (Mulverhill 2019; Faggian et al. 2017). Internet access allows for better and more diverse access to information. Individuals acquire skills and develop social networks through broadband-enabled web applications. Johnson et al. (2005) noted that broadband connectivity has the potential to streamline, accelerate, and gradually reduce the expenses associated with various interactions, such as fostering collaboration among communities of interest and establishing consensus across significant distances. Furthermore, there is a belief that broadband can elevate the attractiveness of a city or country to the “creative class” of knowledge workers, drawing in human capital amidst the escalating global competition for talented individuals (Dutta and Mia 2008).

Telemedicine

Rural communities have historically encountered difficulties in accessing adequate local healthcare. Studies have shown that more accessible health information, products, and services generate higher economic benefits for rural communities and their residents. These benefits include reduced transportation time and costs, enhanced efficiency of emergency responses, decreased absenteeism at the workplace, reduced operating costs for many face-to-face doctor's offices, among others (Grubbs and Halbrook 2021; Whitacre 2008; Capalbo and Heggem 1999). The medical field has also benefited from not having to exploit the extra use of as many on-call doctors as well (Grubbs and Halbrook 2021). About 4.5 million Texas residents used telemedicine services during Covid-19 and 94 percent indicated that they would continue to do so in the future (Grubbs and Halbrook 2021). Additionally, there are sixty-four (64) Texas counties without a hospital and twenty-five (25) counties without a primary-care physician (Mulverhill 2019). These counties can benefit from reliable high-speed internet access that allows them to connect to experts in neighboring counties.

Whitacre (2011) examined the economic benefits of telemedicine from a community perspective. The study included twenty-four rural hospitals across Arkansas, Kansas, Oklahoma, and Texas. Whitacre found that the biggest benefit from the varied telemedicine services was improved turnaround for patients. Transportation cost savings for patients were estimated to range from \$2,000 to \$110,000 per year per hospital across the twenty-four hospitals. Estimated savings to patients who would have missed additional work time had they gone beyond their local hospital ranged from \$3,000 to \$70,000 for the twenty-four rural hospitals. Additional pharmacy and lab work that was gained by rural hospitals or their local affiliates was estimated to range from \$25,000 to \$1.3 million per annum. Though the cost savings for the hospital itself were not large, the author did note that there was some significant benefit for hospitals that converted their radiology and psychiatry consultations to telemedicine, ranging between \$43,000 and \$102,000. Overall, the total contribution of telemedicine services to the local economies was between \$20,000 and \$1.3 million annually, with an average annual impact of \$522,000.

Quality of Life

Quality-of-life as examined by Valentín-Sívico et al. (2023) pulls from the definition provided by Calman (1984) as the discrepancy between people's expectations and actual experiences. A perception or knowledge of broadband access being lower in rural areas can affect the rural community's ability to retain or attract residents and workers (Valentín-Sívico et al. 2022). Valentín-Sívico et al. (2023) assessed a wireless broadband network implemented in Turney, a small and underserved rural community in northwest Missouri. The evaluation involved a pre-survey conducted before the intervention and a post-survey administered after the intervention. The objective was to assess the effects of a faster, higher bandwidth internet intervention. The findings indicate that the intervention led to improvements in quality of life, particularly by reducing frustration through the enhanced capability to use multiple devices simultaneously. However, there is no evidence supporting significant changes in internet usage related to other

social indicators such as education and health as a direct result of the intervention. Despite potential negative social impacts of broadband or the internet, such as gambling addiction and online bullying, the overall advantages of internet access outweigh the drawbacks (Valentín-Sívico 2020).

Broadband Impact in Texas

Mulverhill (2019) noted that over 2 million households in Texas lack high-speed internet access. In a 2017 American Community Survey by the National Digital Inclusion Alliance, the top two worst-connected cities in the U.S. were in Texas: Laredo and Brownsville, with an estimated 39,000 households without internet access in those cities alone. Data from the Federal Communications Commission for 2016 shows a lower percentage of population with high-speed internet access in the counties primarily in the West Region of Texas.

Hunt Institute (2023) conducted an analysis of data gathered from households and businesses in El Paso County, Texas, with an aim of assessing the economic impact of expanding broadband infrastructure in the county. Based on 630 households and 2 internet providers in the county, 20.2% of all households rated their internet connection (quality of internet services across all providers) as excellent, 41.7% rated their connection as good, 29.2% rated it as average, and 8.9% reported poor home internet connection. This suggested another dynamic to the impact as access is not the only indicator to help understand the economic and social impact of broadband on the rural areas, but we also need to focus on adoption, use, and quality/reliability of services. The economic impact study considered the economic impacts of broadband expansion over a 17-year period between 2022-2040. The Impact Analysis for Planning (IMPLAN) results suggest the direct effect on output is \$47.5 million, while the indirect and induced effects are \$15.9 million and \$10.3 million, respectively. As such, over 64% of the total is driven by employment and income supported by the initial investment in broadband infrastructure. The total effect of the expansion project on output for El Paso County was conservatively estimated at \$73.7 million. Considering that the total cost of the project was estimated at \$36.4 million, this represents a two-fold return on the investment. The Hunt Institute's economic impact study estimated that every \$1 invested in El Paso's broadband infrastructure adds \$2 to the region's economic output. The improved capability of the new network will foster business development and job growth in the county.

In the case of agriculture, Minton and Alvarado (2022) stated that 25 percent of farms in Texas do not have any form of broadband services or internet access. Broadband access can better equip farmers to produce more output using precision farming methods. These innovative techniques allow for higher quality yields, increased efficiency of production, and reduced fuel and water usage. The Broadband Development Office's 2022 Texas Broadband Plan noted that "precision agriculture can reduce fuel usage by 40 percent, decrease water usage by 20 to 50 percent, and reduce chemical applications by up to 80 percent."

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Broadband Adoption for Rural Communities

Dr. Monty Dozier, Rachel Bauer, and Jordan Baze
Disaster, Assessment, and Recovery,
Texas A&M AgriLife Extension Service

Abstract

Broadband, also known as high-speed internet, is incumbent on households across the United States. Many Americans are reliant upon adequate broadband access for educational purposes, jobs, family entertainment, and telehealth appointments. In reviewing broadband adoption, the digital divide focuses on Internet adoption between urban and rural communities. This paper aims to focus on the factors that affect the adoption of broadband in rural areas. The COVID-19 pandemic has helped to highlight the gaps within the broadband system that were an issue pre-pandemic. Factors affecting the adoption rate of high-speed internet in rural settings are not having access to technology and limited broadband infrastructure.

Keywords: Broadband, Internet Access, Digital Divide, COVID-19 Pandemic, Affordability

Broadband Adoption for Rural Communities

Since the COVID-19 pandemic there has been a shift in the way communities operate. The pandemic highlighted key gaps within broadband adoption and further increased the divide between urban and rural communities. The pandemic forced schools into virtual learning, individuals that were considered non-essential had to work remotely, and doctors started advertising more telehealth appointments to prevent the spread of COVID-19. All these factors require one common denominator and that is access to broadband. In Washington, a study was conducted by Graves et al. to assess youths access to technology fit for online learning, and broadband availability in rural and urban settings. These findings show that youth in rural settings have significantly less access to technology than of those in urban communities. Seeing as how research has identified key challenges with broadband adoption the question should be: “How do we bridge the gap?”.

There are various types of broadband services offered across the United States, but what might be more effective for urban settings might not work for rural settings. Studies have shown that broadband companies gravitate towards metro areas because of better suited infrastructure. According to Brian Whitacre, an expert in rural economic development, urban areas offer a larger return on investment whereas rural settings offer smaller returns. Those in rural settings are at a disadvantage because of the limited broadband services available. Furthermore, broadband services offered within rural areas are more costly due to the lack of broadband competitors and poor infrastructure. Portugal et al. outlined the different types of broadband offered as cable internet, digital subscriber line, fiber, fixed wireless, mobile wireless internet, and satellite internet service.

In an effort to bridge the gap, electric cooperatives are starting to offer broadband service to rural communities. Electric cooperatives were initially created to help solve the challenge of bringing electricity to rural America. With these cooperatives already servicing rural communities, it makes them an ideal target for offering broadband services. These cooperatives are equipped with the resources needed to provide broadband like equipment and personnel. With already having infrastructure uniquely embedded in these communities, minor adjustments need to be made for cooperatives to run fiber through their utility poles (Read & Gong, 2022).

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Abstract

When researching factors that affect broadband adoption, one of the main key factors is affordability. Most broadband service providers focus on providing broadband to metro areas because of larger returns and updated infrastructure. Generally, more rural areas are going to cover a large geographical region composed of farmlands, hill country, or mountains. With there being limited broadband providers, it lets providers have total control of market cost. Studies have also shown that demographics have been linked to the affordability of broadband services. Unfortunately, low-income families, people of color, and young adults are at a disadvantage when it comes to their education and livelihoods due to costly broadband services.

Affordability

According to Reddick et al., there are five major factors that play into rural residents' ability to afford broadband services. Such factors are geographics, competition, profit based discrimination, technology cost, and socioeconomic factors. Residing in areas with lower population density raises the cost for broadband companies to deploy technology and/or equipment making the expansion decisions of broadband even harder. With there being little broadband infrastructure, it limits the competition of broadband providers which decreases the chances of fair market value to residents. The United States Department of Agriculture released data in 2018 showing that 22 percent of the total population of rural communities are made up of minorities (2020). Minority households have shown lower demands in broadband, which is alerting carriers not to expand broadband in those areas and alludes to profit-based discrimination (Reddick et al., 2020). In Texas alone two cities in the lower Rio Grande Valley rank in the top five for worst cities with no broadband in the US. Using statistics from the

National Census Bureau Portugal et al. noted a correlation between lower income houses and the ability for students of color to access online school resources during the COVID-19 pandemic.

All of the factors listed above align with the findings of other researchers.

Pew Research Center claims that the largest broadband providers in rural areas are going to be some of the top telephone companies like AT&T, Windstream, etc. Based off consumer reports, the mean price of AT&T is \$66 dollars, and Windstream is \$59 dollars. These are the prices for internet only, and they do not reflect the charges for electronics, equipment, or company fees. Furthermore, consumer reports also claims that 17 out of 50 states have laws prohibiting or increasing difficulties for localities to build their own network. In doing so, it decreases the chances of competition, which is a disadvantage for rural communities. Mack et al. discovered from a paper published by Mills and Whitacre that income and education are 63% of the difference between the adoption of broadband between non-metro and metro areas. In another study, research shows that the correlation between age and income is important because age can determine the cost associated with broadband. Individuals under the age of 24 are less likely to afford broadband because they are in-school, or just entering the workforce (Reddick et al.). Although, since the COVID-19 pandemic occurred it highlighted key issues with broadband access, so it could be subject to change since there is a push for remote learning.

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Abstract

Affordability is one of the main setbacks when it comes to the adoption rate of high-speed internet. To help ease the cost the FCC has established programs to help individuals obtain lower internet rates. The effort of these programs is great however, these programs are useless if rural areas lack the infrastructure needed to have reliable internet.

Key words: FCC, USF,

Programs

The Federal Communications Commission (FCC) was established and given the purpose of providing telecommunication to all United States citizens. The FCC has implemented policies and programs that make telecommunication efforts affordable for all. Through these policies, it created a branch of funds called the Universal Service Funds (USF) overseen by the FCC.

In an effort to bridge the affordability gap, the FCC provides the Affordable Connectivity Program (ACP), that targets low-income families who struggle to afford reliable internet access. As of 2021, the FCC award \$14 billion dollars to the ACP, which provides patrons the opportunity to work from home, virtual learn, and attend telehealth appointments. By participating in this program individuals can obtain services for \$30 per month. However, if you live on tribal lands, the cost is \$75 per month. Since the pandemic highlighted key issues within the broadband system the emergency broadband benefit arose to help mitigate the cost for households that had a loss of income or furloughed. Although, the ACP will be replacing the Emergency Broadband Benefit program. The National Telecommunications and Information Administration has launched the Internet For All Initiative that strives to connect the nation with

high-speed internet by providing more than \$48 billion in programs for internet technology deployment. For providers who receive broadband grants from Rural Utility Service (RUS) with their community connect program it is a requirement to deploy free broadband for no less than two years (Renkow & Kandilov).

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Abstract

When researching this particular topic, findings show that most studies related to broadband technology only review the lack of broadband infrastructure instead of reviewing what types of technology work best to bridge the gap. Although, the use of hotspots in local schools and libraries has improved student outcomes. The next section will focus on technology that enhances the expansion of the rural broadband effort.

Technology

A study conducted by Alimi et al. revealed that Fixed Wireless Access (FWA) is a great way for individuals to obtain fixed broadband in either rural or urban communities. In addition, 5G is considerably more enhanced when comparing other networks. Between FWA and 5G, FWA can leverage 5G technological enhancements to expand cost effective measures. The only downside to 5G FWA is the need for enough cell towers to support the increasing demand.

Figure 1.1 will outline the above acronyms and provide a broad description of them.

Figure 1.1

Broadband Technologies	
Acronyms	
FWA	Fixed Wireless Access
MBB	Mobile Broadband
5G	Fifth Generation

Sources: <https://www.mdpi.com/2076-3417/11/21/10427>

Siddeeq et al. conducted a study on enhanced mobile broadband, and he found various ways to boost 5G bandwidth by antenna techniques, diversity techniques, channel coding, and modulation techniques. The results from this study recommended that using antennas and channel coding would be the best option to support 5G services.

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Abstract

Broadband providers are hesitant to offer broadband services in rural parts of America because of the cost associated with updating or installing new infrastructure sparsely populated regions. Due to the lack of infrastructure in these regions, you can conclude that the competition is limited, making broadband unaffordable. As a provider, it does not make sense to deploy resources and be out of the cost to provide services to those who cannot afford it.

Return on Investment

The Federal Communications Commission (FCC) is working towards regulating prices for broadband businesses. In doing so, it eases the burden of cost associated with broadband, but it also creates setbacks for the expansion of broadband infrastructure. The cost of deploying infrastructure to rural areas is of great value due to covering such large widespread areas. In turn, it makes urban or metro areas more appealing because they already have the infrastructure and the steady economic means of these largely populated areas. Most research indicates that those in rural areas are more likely to have less job growth, and higher unemployment rates, Another factor that affects the return on investment for providers is grant programs. Renkow et al. conducted research on communities or zip codes that received grants or loans to analyze payroll growth. Stemming from this project Renkow et al. found that communities with lower payroll growth were more likely to receive grant or loan services. The Blandin Foundation found that it is harder to measure the return on investment with broadband service providers so more of the focus is placed on the economical benefits of rural communities.

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Abstract

Community Anchor Institutions are a great way to expand or enhance broadband in rural communities. CAIs are entities that need broadband bandwidth at high volumes which makes them the driving force for expansion efforts. These entities are considered to support broadband development because they have the grass root aspect.

Community Anchor Institutions

According to Cole, one of the most crucial steps to expanding broadband efforts is through community anchor institutions (CAIs). By conducting an inventory of CAIs, it opens up the potential for broadband funding for local and state governments. A few examples of a CAI are schools, colleges, libraries, and other community supported entities. According to Gina Spade, studies have shown that CAI cannot afford broadband technologies needed to support their community. In order to identify or determine the capacity of CAIs in your state, there are various ways to do so. See the figure below to view tools to help determine where CAIs are located.

Identifying Community Anchor Institutions
<i>The National Broadband Map-</i> https://broadbandmap.fcc.gov/home
<i>The National Center for Education Statistics</i>
<i>Institute of Museum and Library Services</i>

Sources: <https://broadbandmap.fcc.gov/home>
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[3005/#:~:text=According%20to%20footnote%2037%20of,community%20support%20org](https://www.usac.org/high-cost/learn/faqs/section-3005/#:~:text=According%20to%20footnote%2037%20of,community%20support%20organizations%20and%20entities)

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