

Addressing Your Community's Unique Needs

Young County, Texas Executive Summary





03	Overview	

- 06 Infrastructure Results
- 09 Household Survey Results
- 14 Recommendations



oday, technology plays a pivotal role in how businesses operate, how institutions provide services, and where consumers choose to live, work, and play. A community's success has become dependent on how broadly and deeply it adopts technology resources, which include access to reliable, high-speed networks, the digital literacy of residents, and the use of online resources for local business, government, and leisure.

As such, Young County stakeholders partnered with the Connected Nation Texas (CN Texas) Connected Community Engagement Program to conduct a study designed to determine the availability of broadband infrastructure, how county residents are adopting and using broadband services, and what action steps would have the greatest impact toward improving broadband access, adoption, and usage across every local sector.

Pursuant of this goal, between January and April 2023, Young County conducted a comprehensive survey of broadband technology access and adoption across the community that collected responses from 229 households. CN Texas staff also met with community officials to determine community needs and gather qualitative data for consideration in the study.

This study approached broadband holistically – focusing on the quality of life offered when residents and community leaders alike access, adopt, and use broadband in a productive and meaningful capacity. With this approach, the assessment identified issues and action opportunities necessary to close the local Digital Divide.

Data collected as part of the engagement played an integral role in developing a unique, locally informed action plan for Young County. This document provides a summary of that assessment, as well as recommendations for improving broadband and technology access, adoption, and usage. Additionally, CN Texas created <u>an interactive map</u>.

YOUNG COUNTY, TEXAS QUICK FACTS

Population

17,867

Households 7.409

Median Household Income \$52,074

> Poverty Rate 14.2%

Adults with a Bachelor's Degree or Higher

25.7%

Hispanic or Latino **19.6%**

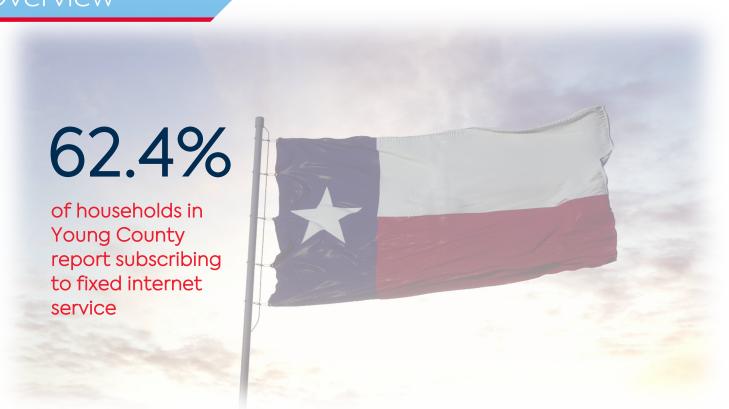
Households with Broadband Access¹

84.45%

Source: Young County U.S. Census Profile

¹The current FCC definition of broadband is a minimum of 25 Mbps download and 3 Mbps upload. These data are derived from the <u>FCC National Broadband Map</u> – with numbers as of June 2022.





For households that do not subscribe to home internet service, the top barriers are a **lack** of broadband service availability and the cost of service.

81.8% of households in Young County have access to internet service at speeds needed to run many modern applications (100 Mbps downstream and 20 Mbps upstream). Statewide, **87%** of households have internet access at these speeds.

Half of employed survey respondents in Young County (50%) report teleworking in some capacity. Of those, 45% telework every day and 26% telework at least once per week.

Fewer than 2 out of 5 households surveyed (38.5%) and more than 1 out of 4 businesses (28.6%) report being dissatisfied with their current internet service. The top reasons for dissatisfaction are slow speeds, unreliable connections, and high prices.

Over 3 out of 4 households (77.8%) said they would like to have improved or additional options for home internet service.

Infrastructure Results

Young County Infrastructure



A ccording to data from the FCC's National Broadband Map, initially released in June 2022, 84.45% of Young County households have access to broadband of at least 25/3 Mbps – the current definition of broadband set forth by the Federal Communications Commission (FCC). Broadband service in Young County is distributed throughout the county.

Below is the list of internet service providers (ISPs) in Young County. Please contact your provider for the most up-to-date information on speeds, prices, and service areas.

BROADBAND INFRASTRUCTURE QUICK FACTS

Unserved Households (25/3 Mbps) 1152

Households Served (10/1 Mbps) 84.52%

Households Served (25/3 Mbps) 84.45%

Households Served (50/5 Mbps) 81.8%

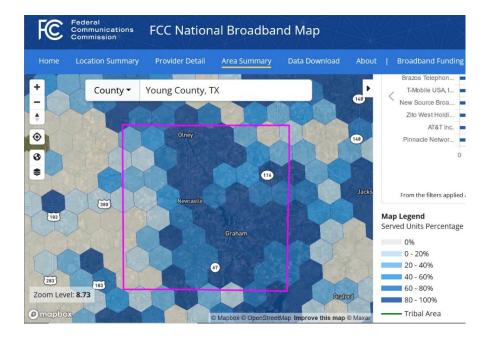
Households Served (100/20 Mbps) 81.8%

Broadband data released by the FCC for their <u>National</u> <u>Broadband Map</u>.

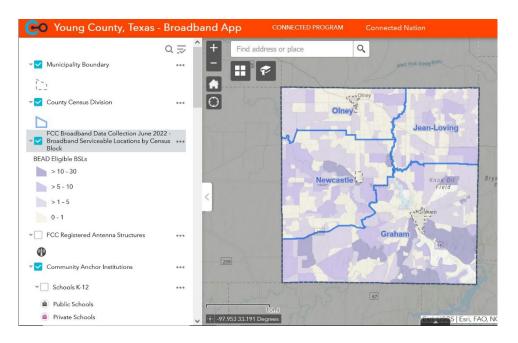
PROVIDER	TECHNOLOGY	MAXIMUM DOWNLOAD SPEED (Mbps)	MAXIMUM UPLOAD SPEED (Mbps)
AT&T Inc.	Copper	10	1
Brazos Communications	Copper	25	3
Brazos Communications	Fiber	1000	500
New Source Broadband	Fixed Wireless	100	50
T-Mobile	Fixed Wireless	25	3
U.S. Cellular Corp.	Fixed Wireless	10	1
Verizon	Fixed Wireless	50	4
Zito Media	Cable	1000	25

Young County Infrastructure

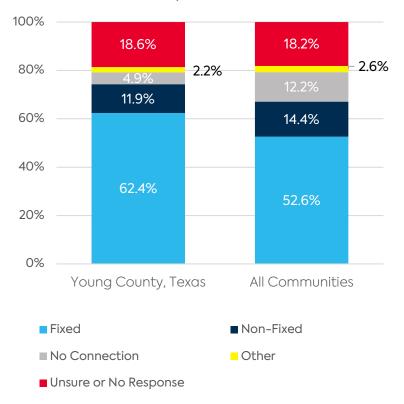
The first step in understanding the status of broadband infrastructure in Young County and statewide is having accurate maps. The first map shown below depicts wired and licensed fixed wireless broadband coverage at speeds of 25/3 Mbps from the FCC Broadband Map, also available <u>here</u>.



Accordingly, CN Texas also works on developing a variety of broadband maps at the state and county level. The map below illustrates BEAD Broadband Serviceable Locations at the census tract level; darker colors indicate that more locations are eligible for service expansion. Data shown on this map are derived from a combination of direct ISP outreach and data collection, FCC broadband data as of June 2022, and independent research conducted by CN Texas.



he following section provides an overview of results from a broadband survey conducted in Young County between January and April 2023. Altogether, CN Texas received 229 survey responses from households across the county; respondents provided insights into their internet connectivity or lack thereof. Data from Young County are compared to data from hundreds of other rural Connected communities that participated in the program across Michigan, Ohio, Texas, and Pennsylvania to benchmark and identify areas for improvement.

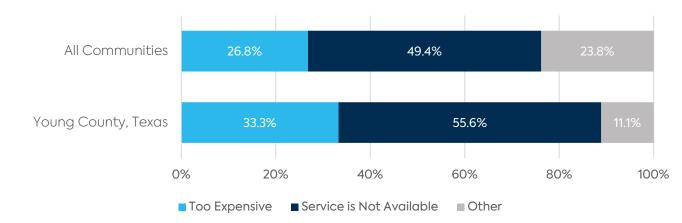


Home Broadband Adoption

ADOPTION

In Young County, 62.4% of households that took the survey subscribe to fixed broadband service delivered via a cable, DSL, fiber, or fixed wireless technology, while 11.9% indicate they have internet service delivered via dial-up, satellite, or a mobile wireless service. This leaves 4.9% without internet and 18.6% of survey respondents unsure of what service they have or provided no response.

Among those without a home internet connection, 33.3% said they did not have broadband because it was too expensive. An additional 55.6% say service is not available.



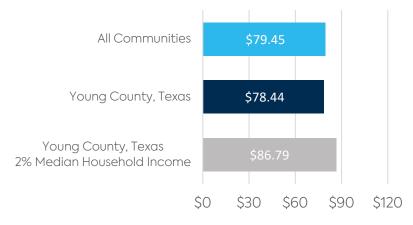
Primary Barrier



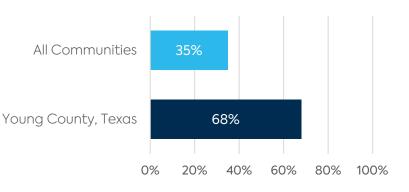
Two percent of monthly income is a recognized standard for measuring the affordability of a home internet connection. Respondents indicate that, on average, their internet connection costs about \$78.44 per month. This is slightly lower than the monthly cost paid in other communities (\$79.45). Two percent of the median household income in Young County is \$86.79 per month.

The FCC currently defines broadband as an internet connection with a download speed of at least 25 Mbps and upload speed of at least 3 Mbps. On average, respondents indicate that their connection's advertised download speed is 129 Mbps. In Young County, 68% of internet-connected households subscribe to download speeds faster than 25 Mbps.

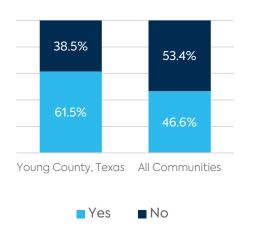




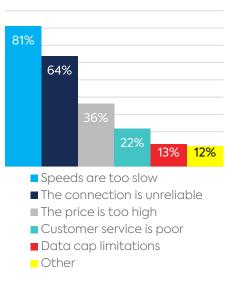
Percentage of Respondents with At Least 25/3 Mbps



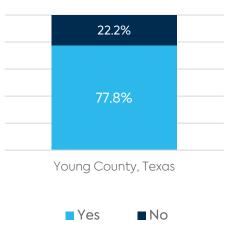
Does Your Internet Meet Your Needs?



Why Doesn't Your Internet Meet Your Needs?



Are You Interested in More Choices at Home?



Competition provides residents with choices for service, allowing households the ability to switch providers if their current service does not meet their needs. More than 3 out of 5 (61.5%) responding households indicate that their internet connection meets their needs. This is a higher rate of satisfaction than among households in other communities (46.6%).

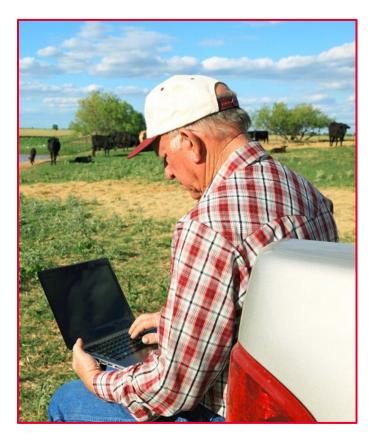
When asked why their connection does not meet their needs, 81% of dissatisfied households indicate that their speed is too slow, 64% report that their connections are unreliable, and 36% say that prices are too high. Respondents could choose more than one reason for dissatisfaction.

Finally, over 3 out of 4 respondents (77.8%) indicate that they are interested in additional internet choices for their home.

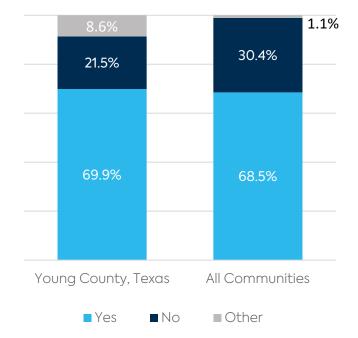
MOBILE CONNECTIVITY

Roughly 7 out of 10 households (69.9%) reported that they subscribe to mobile internet service that they access via a smartphone or similar mobile device. This is slightly more than what is reported in other Connected communities (68.5%).

Additionally, 23.1% of mobile-connected households report that they either rely on those mobile connections as their primary source of home internet connectivity or use mobile service to connect other household devices to the internet.



Households Subscribing to Mobile Internet Service

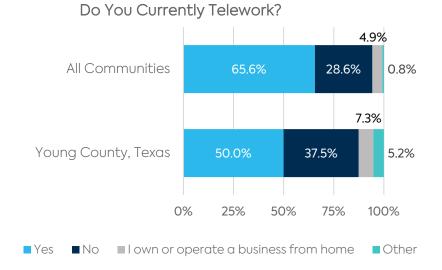




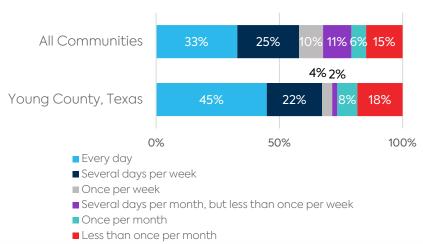
Teleworking, or telecommuting, refers to working outside of the conventional workplace by way of telecommunications or computerbased technology. The COVID-19 pandemic forced many organizations to allow their staff to telework.

Teleworking is quickly becoming a critical part of growing a local economy because it represents an opportunity to attract and retain employees even when employees are not located in the same community as their employers. However, this only works if those employees have access to advanced broadband infrastructure.

Half of employed respondents in Young County (50%) telework at least part of the time. Over 2 out of 5 teleworkers (45%) work remotely every day, while approximately 26% telework at least once per week.









he following recommendations are presented to assist Young County in expanding broadband access and adoption throughout the community.

Young County is approximately 930 square miles and home to nearly 18,000 people in four cities and five independent school districts (U.S. Census Bureau, 2021). As the county continues to grow, it will be important that residents, business owners, and community leaders have access to fast, affordable, and reliable high-speed internet.

Young County stakeholders partnered with Connected Nation for a local Connected Community Engagement designed to assess the connectivity, affordability, and general technology needs of the county's residents. Based on data from a countywide survey and community feedback, CN Texas makes the following recommendations.

Goal 1: Establish central leadership in Young County as a tool for economic and community development.

The state of Texas is eligible for \$4 billion under the Infrastructure Investment and Jobs Act (IIJA) via the Broadband, Equity, Access, and Deployment (BEAD) Program and the Digital Equity Act. These programs will fund projects that help expand high-speed internet access and ensure Texas communities have the information technology capacity needed for full participation in our society, democracy, and economy by promoting a diverse array of digital advancement projects. With this once-in-a-generation infusion of money coming from the federal government, it is critical that Young County establishes a formal Broadband Council to ensure work is completed as part of this local engagement. The council is also vital to ensuring that the community is staying on top of the state, local, and federal broadband happenings. A standing group of leaders is already active in the county as it relates to broadband space. Moving forward, it's a matter of making it official.

Objective: Establish a permanent broadband team in Young County that can serve as the go-to point of contact for questions, meetings, and projects.

Action 1 – Establish a Broadband Council to act as advisors to the county and appoint a Broadband Liaison to lead the effort.

Broadband Council advisory members should include representatives from a wide variety of community stakeholders, such as:

- Health Care: Local physicians or hospital staff
- Government: County Judge, County Commissioners, Mayor, City Council, County IT Director

- Education (K-12): Superintendents, School IT Directors
- Education (Higher-Education): University, community college, trade schools or workforce training
- Public Safety: County Sheriff's Office, Police Department, Fire and Rescue and surrounding Volunteer Fire Departments, Emergency Medical Services
- Agriculture: County Ag Agent, leading ag producers
- Business: Chamber of Commerce, Economic Development
- Library: Public Library Directors, librarians
- Community At-Large: Someone from the community who is interested in broadband

Broadband Council responsibilities should include:

- Keep abreast of state and national broadband policy initiatives and notable broadband news. Stay up to date on publications, events, and policy briefs published by the Governor's Broadband Development Council (GBDC) and Broadband Development Office (BDO), as well as monitor notable broadband developments via industry newsletters and focused research.
- Keep the community informed of projects and progress, and invite community participation to maintain buy-in and high adoption rates. Getting community buy-in is essential to the long-term success and sustainability of community initiatives. Success of local initiatives requires community support, transparency, and engagement. Not only will this help keep the momentum going, but it will show ISPs there is true interest for expanded service in the area, which will encourage greater investment in the region.
- Stay up to date on state and federal broadband legislation.
- Apply for applicable state and federal grant programs.
- Ensure digital engagement in all community sectors (telehealth, telework, education, commerce, etc.).
- Attend workshops, webinars, meetings, and general training that discuss telecommunications, and broadband specifically.
- Provide digital literacy and digital skills assistance to the community's at-risk populations.
- Hold regular meetings. The council should meet at least once a month. Meetings can be held virtually, in person, or in a hybrid capacity to accommodate members' needs. These meetings should provide updates on community activities, allow time for guest speakers and presentations, and offer an open forum for discussion about broadband advancements in the county.

Timeline: Establish an official Broadband Council and select a countywide liaison immediately.

Responsible parties: Economic Development Director, County Judge, City Manager, and Director of Chamber of Commerce

Action 2 – Appoint a Broadband Council leader.

The broadband team needs a point person, a champion for connectivity in the county. Whether paid or volunteer, part-time or full-time, this person will be the point of contact for broadband in the county. They will stay up to date on broadband policy news, new construction projects in the region, new laws, and funding opportunities, as well as maintain visibility to keep the community educated and engaged in internet adoption and expanded internet deployment.

Timeline: Establish an official broadband team and select a countywide team leader immediately.

Responsible parties: County Judge, Commissioners Court, Economic Director, and Broadband Council

Action 3 – Track state and national broadband policy.

The Broadband Council should remain informed and up to date on publications, events, and policy briefs published by the Governor's Broadband Development Council (<u>GBDC</u>) and the Broadband Development Office (<u>BDO</u>). The committee should coordinate ongoing community outreach efforts and initiatives in alignment with the long-term objectives of the aforementioned entities. The Broadband Council's priorities should mirror the successes and objectives laid out by the state. Taking advantage of federal and state funding as it becomes available will position Young County to increase digital opportunities for all residents.

Resources:

- The FCC High-Cost program: CAF A-CAM
- The Rural Digital Opportunity Fund (RDOF)
- <u>Coronavirus State and Local Fiscal Recovery Funds, Allocation by County</u>
- ARPA SLFRF, Final Rule
- Governor's Broadband Development Council
- <u>The Texas Statute</u>
- <u>Senate Bill 1238</u>
- The 2021 Governor's Broadband Development Council's Report
- The 2020 Governor's Broadband Development Council's Report
- The Texas Broadband Development Office
- The Texas Broadband Plan 2022
- Coronavirus State and Local Fiscal Recovery Funds, County Allocation
- Final Rule

- <u>CN's list of Current Broadband Funding</u>
- BroadbandUSA: Federal Funding Guide
- Guide to Federal Broadband Funding Opportunities in the U.S.

Broadband readiness

- Texas Broadband Providers by County
- <u>Smart Cities Readiness Guide</u>
- Next Century Cities Becoming Broadband Ready Toolkit
- <u>Municipal Boards: Best Practices for Adoption Technology</u>

Broadband leadership

- Ector County TX forms taskforce to set up broadband office
- City of Memphis: Broadband Project Manager, Senior
- Letter: Do your part on broadband
- The Anatomy of a Community Broadband Manager
- TARA Leadership: Rondella Hawkins

Goal 2: Increase broadband access and reliability across Young County.

The FCC defines broadband as a 25 Mbps download speed by 3 Mbps upload speed connection (25/3). In Young County, per the FCC 2022 Broadband Map, 84.45% of households have access to internet at broadband speeds of 25 Mbps download and 3 Mbps upload, leaving 1,327 households unserved. Eighty-eight-point-eight percent of Young County residents have access to 100 Mbps download and 20 Mbps upload speed (FCC, 2022). Residents were prompted to either self-report the broadband speed they subscribe to from their internet provider or take a speed test through the survey portal. Data revealed that, on average, 68% of households subscribe to download speeds faster than 25 Mbps. Young County households reported an average download speed of 129 Mbps.

Sixty-two percent of residential respondents indicated they were dissatisfied with their internet service due to slow speeds and unreliable connections. This level of dissatisfaction contributes to 78% of the respondents requesting additional choices for home internet service.

Objective: Support and expand fast and reliable high-speed internet to Young County.

Action 1 – Maintain open communication and positive relations with internet service providers (ISP)s working in the county, as well as any ISPs with plans to work in the county or those that have received federal funding to begin work in the county.

The Broadband Council should conduct regular check-ins with area providers to stay abreast of proposed and ongoing broadband expansion efforts, including construction and expansion progress or changes in plans, to identify any obstacles or challenges they are facing, and to communicate community goals and objectives. Open communication allows ISPs to better understand community needs, and communities to better understand the obstacles and barriers ISPs face. This understanding can encourage creative problem-solving, which can lead to finding solutions through public-private partnerships. Public-private partnerships are arrangements between public entities, such as local governments, and private entities, such as service providers, to achieve a common goal. They are often, but not always, funding arrangements.

Additionally, the county should strive to be an environment that is amenable to business. This means having easy-to-use websites that allow ISPs and vendors quick access to relevant information, as well as fostering a business environment that rewards open communication and timely resolution of concerns. Of local businesses surveyed, 71.4% said they were satisfied with their current internet service. Those that said they were dissatisfied stated that poor customer service, slow speeds, and unreliable connections were the key reasons.

ISPs working in Young County, based on June 2022 FCC and CN data, are AT&T Inc., Brazos Communications, New Source Broadband, T-Mobile, U.S. Cellular Corp., Verizon, and Zito Media.

Timeline: Young County Broadband Council should reach out to ISPs for an initial meeting with community stakeholders and decision makers as soon as Broadband Council leadership is established.

Action 2 - Create a county-level broadband resources website.

The website should serve as a one-stop resource guide for broadband providers, community residents, and local leaders. Online materials should include resources related to digital literacy, digital skills, reduced-cost broadband offerings, public-computing centers, and other relevant information for residents and ISPs. This website should be prominently promoted on a countywide website that is commonly accessed by the public. The content on the site should be monitored and maintained by the county-appointed Broadband Liaison.

Goal 3: Increase broadband adoption and use among Young County residents by promoting reduced-cost internet plans and subsidy programs.

Households without an internet connection face many barriers to obtaining connectivity. In Young

County, 33% of residents who do not subscribe to home broadband service stated it was because the service is too expensive. Everyone should be able to access the internet, regardless of income level. It's important for the Broadband Council and community leaders to promote free and reduced-cost internet programs for residents. Additionally, low-income residents may be eligible for assistance with their monthly home internet expenses from ISPs with low-cost internet packages and government internet subsidy programs that address internet affordability.

Objective: Increase access adoption and use of broadband by addressing cost barriers in Young County.

Action 1 – Promote programs that help residents overcome affordability barriers to broadband adoption, including Lifeline and the Affordable Connectivity Program.

Information about the availability of public Wi-Fi and public computers should be shared widely on the county broadband resources website references in Goal 2, posted on social media, and promoted throughout the community. Information about monthly internet subsidy programs and ISPs with low-cost subscription packages should be kept updated and shared widely on the resources website, at the library, on social media, and promoted throughout the community.

There are two main federal internet subsidy programs, and ISPs often have their own low-cost programs as well:

Lifeline is a federal program administered through the FCC Universal Service Administrative Co. that lowers the monthly cost of phone or internet services for eligible consumers, who can get up to \$9.25 off the cost of phone, internet, or bundled services each month. Households can qualify based on income or participation in federal or tribal assistance programs. More information can be found <u>here.</u>

The Affordable Connectivity Program (ACP) was created to help households struggling to afford internet service. The ACP provides a \$30 a month credit toward internet coverage (\$75 a month for qualifying residents on tribal lands) and up to \$100 for the purchase of a device. Households can qualify based on income or participation in federal or tribal assistance programs. To receive the connected device discount, consumers must enroll in the ACP with a participating provider. The internet company will provide the discount to the consumer, then seek reimbursement. Find out which providers participate click <u>here</u>. More information about the program can be found <u>here</u>.



The <u>ACP tool kit</u> is a great resource that communities can use to promote the program to residents.

ISPs often have their own low-cost options or subsidized programs offering internet for consumers at a reduced cost, so customers should always ask. The Bipartisan Infrastructure Law (BIL) of 2021 requires internet providers that receive federal grant money to offer low-cost service to eligible lowincome households. As of April 2023, Young County had 436 households enrolled in the ACP program (Universal Service Administrative Co., 2023).

Timeline: Broadband Council should share information about affordability programs immediately.

Goal 4: Ensure that Young County residents and businesses have access to digital literacy to improve outcomes in business, public safety, workforce readiness, and quality of life.

Objective: Partner with libraries and community organizations to provide digital literacy training.

Action 1 – Encourage the Library of Graham and the Olney Library to continue offering digital literacy classes, either in person or virtually.

Public libraries can be a great resource for residents without internet at home to connect online. Young County is home to the Olney Community Library and Arts Center and the Library of Graham, which have a large number of public computers for use — 23 and 20, respectively.

CN Texas is currently offering in-person and online digital literacy classes in basic computer skills that libraries can promote to residents. Additional topics could include more advanced technology, such as product-specific training on devices, modern technology like smart home devices or wearable technology, cybersecurity, and advanced software applications like multimedia and design programs.

Action 2 – Encourage Young County libraries or community organizations, such as chambers of commerce or service organizations, to offer web design and online marketing classes for local businesses.

A 2018 study commissioned by Google, "Connecting Small Businesses in the U.S.," found that the main reason businesses were not engaging online was not lack of access, but lack of an understanding of the value it brings. According to the study, small businesses that are active online are three times as likely to have recently hired additional workers than those that are not. Young County businesses could benefit from expanded online activity. Survey data indicate that nearly 39% of responding Young County residents interact with non-local business online daily, and 25% at least once a week. Only 46% of Young County residents interact with local business online daily, despite the fact that over 70% of responding businesses have a website. The primary ways that responding business interact online are email (83% daily, 17% at least once a week), Facebook (67% daily), and website update (33% daily, 17% at least once a month). Young County residents are doing business online, so expanding local businesses' online presence could be an opportunity for local businesses to increase revenue and keep funds local.

Timeline: Young County should begin digital literacy training for residents and businesses within six months.

Responsible parties:

- Broadband Council
- Libraries and library boards
- Chamber of Commerce
- Economic Development Board
- Downtown Development District
- Public safety entities
- Local businesses

Resources:

Digital Literacy, many free resources exist for digital literacy training

- <u>Connected Nation Digital Literacy Workshops</u>
- <u>Digital Learn Free courses to learn anything about computers</u>
- On-Site Technology Training for Small, Rural Michigan Businesses

Cybersecurity

- <u>Cybersecurity courses</u>
- <u>Cybersecurity & Infrastructure Security Agency</u> <u>Cyber Resource Hub</u>
- <u>Connected Nation Cybersecurity Workshops</u>

Goal 5: Identify funding opportunities for programs and projects using broadband and related technologies that benefit Young County.

Objective: Ensure that Young County utilizes all available resources to improve quality of life and



economic outcomes through technology.

Action 1 – Pursue grants that advance local community development using broadband technologies (e.g., workforce development, telehealth, digital literacy, etc.).

In conjunction with the countywide Connected Community Engagement, Young County has been allocated \$7,500 in funding to pursue applicable grant applications, if identified. For specifics, contact your CN Broadband Solutions Manager.

Timeline: Community should identify grant opportunities within one year.

Responsible parties:

- Local and county governments
- Young County Broadband Council

References:

<u>Federal Communications Commission. (2022).</u> *FCC National Broadband Map* [Map]. <u>U.S. Census Bureau. (2021).</u> *Explore Census Data.* Data.census.gov. <u>Universal Service Administrative Co. (2023).</u> ACP Households by County.