




Connected
A CONNECTED NATION Initiative

Addressing Your Community's Unique Needs

Castro County, Texas Executive Summary

January 2023

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NATION** 
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03	Overview
06	Infrastructure Results
09	Household Survey Results
14	Recommendations



Overview



Today, 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, Castro 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 October and December 2022, Castro County conducted a comprehensive survey of broadband technology access and adoption across the community that collected responses from 25 households. CN Texas staff also met with local 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 Castro 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 [an interactive map](#).

CASTRO COUNTY, TEXAS

QUICK FACTS

Population

7,371

Households

2,417

Median Household Income

\$53,551

Poverty Rate

11.4%

Adults with a Bachelor's Degree
or Higher

21.8%

Hispanic or Latino

64.9%

Households with
Broadband Access¹

94.85%

Source: [Castro 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 Connected Nation Texas and last updated in January 2022. <https://connectednation.org/texas/planning/>



64%

of households in
Castro County
report subscribing
to fixed internet
service



For households that do not subscribe to home internet service, the top barrier is a **lack of broadband service availability**.

76.5% of households in Castro County have access to internet service at speeds needed to run many modern applications (100 Mbps downstream and 10 Mbps upstream). Statewide, **93.6%** of households have internet access at these speeds.

Over 2 out of 5 employed survey respondents in Castro County (**43.8%**) report teleworking in some capacity. Of those, **28%** telework at least once per week and **29%** telework once per month.

Roughly 1 out of 5 households surveyed (**21.1%**) reported being dissatisfied with their current internet service. The top reasons for dissatisfaction were slow speeds, unreliable connections, and high prices.

Nearly 4 out of 5 households (**78.9%**) said they would like to have improved or additional options for home internet service.



Infrastructure Results



According to CN Texas broadband data initially released in January 2022, followed by additional public feedback, field validation, and provider input, 94.85% of Castro 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 Castro County is distributed throughout the county.

Below is the list of internet service providers (ISPs) in Castro 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)
124

Households Served (10/1 Mbps)
97.21%

Households Served (25/3 Mbps)
94.85%

Households Served (50/5 Mbps)
81.55%

Households Served (100/10 Mbps)
76.45%

Broadband data released by CN Texas in January 2022:
<https://connectednation.org/texas/mapping-analysis/>

PROVIDER	TECHNOLOGY	MAXIMUM DOWNLOAD SPEED (Mbps)	MAXIMUM UPLOAD SPEED (Mbps)
AMA TechTel Communications	Fixed Wireless	100	10
AMA TechTel Communications	Fiber	50	8
Amarillo Wireless	Fixed Wireless	20	5
FASI	Fixed Wireless	10	2
Mid-Plains Communications	Fiber	200	100
Mid-Plains Communications	DSL	25	25
Plains Internet	Fixed Wireless	25	3
South Plains Telephone Cooperative	Fiber	1000	1000
Suddenlink Communications	Cable	400	40
T-Mobile	Fixed Wireless	25	3
Valor Telecommunications of Texas LP	DSL	200	200
Vexus	Fiber	1000	1000
West Plains Telecommunications Inc.	Fiber	200	75
West Plains Telecommunications Inc.	DSL	10	1
West Texas Rural Telephone Cooperative Inc.	Fiber	500	20
West Texas Rural Telephone Cooperative Inc.	DSL	10	1.5

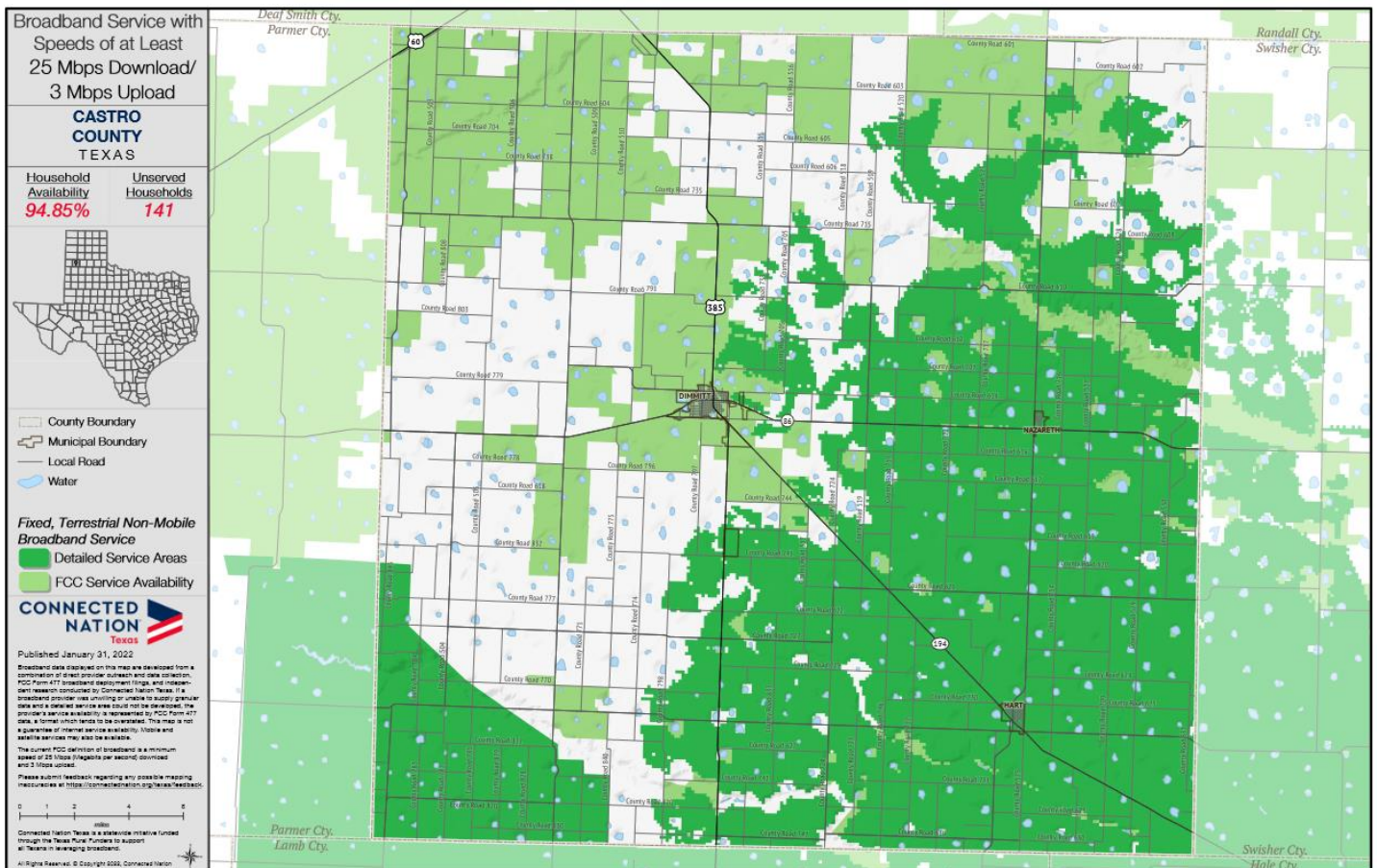
Castro County Infrastructure



Below is Castro County's (25/3 Mbps) map. To access the full map, go to <https://connectednation.org/texas/county-maps/> and select Castro County from the list. Portions of the county are served by internet service providers (ISPs) offering slower advertised speeds, and those areas are not shown on this map.

The first step in understanding the status of broadband infrastructure in Castro County and statewide is having accurate maps. Accordingly, CN Texas works with providers to develop a variety of broadband maps at the state and county level. Data shown on this map are derived from a combination of direct provider outreach and data collection, FCC Form 477 broadband deployment filings, and independent research conducted by CN Texas. If a provider was unable or unwilling to supply granular data and a detailed service area could not be developed, the provider's service is represented by Form 477 data alone – a format that tends to overstate the service territory.

To access the map as a PDF, click [here](#).





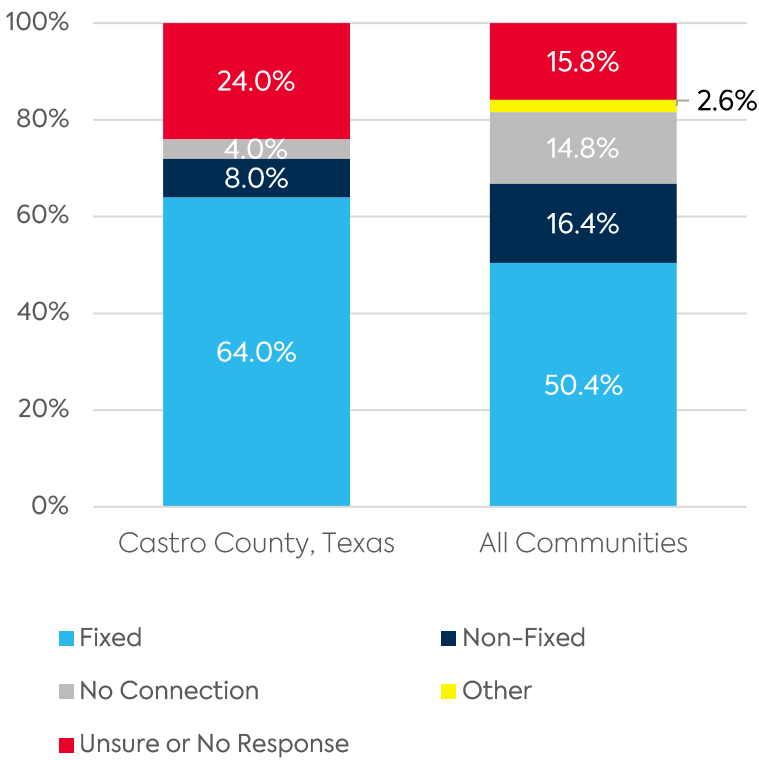
Household Survey Results

Household Survey Results



The following section provides an overview of results from a broadband survey conducted in Castro County between October and December 2022. Altogether, CN Texas received 25 survey responses from households across the county; respondents provided insights into their internet connectivity or lack thereof. Data from Castro 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

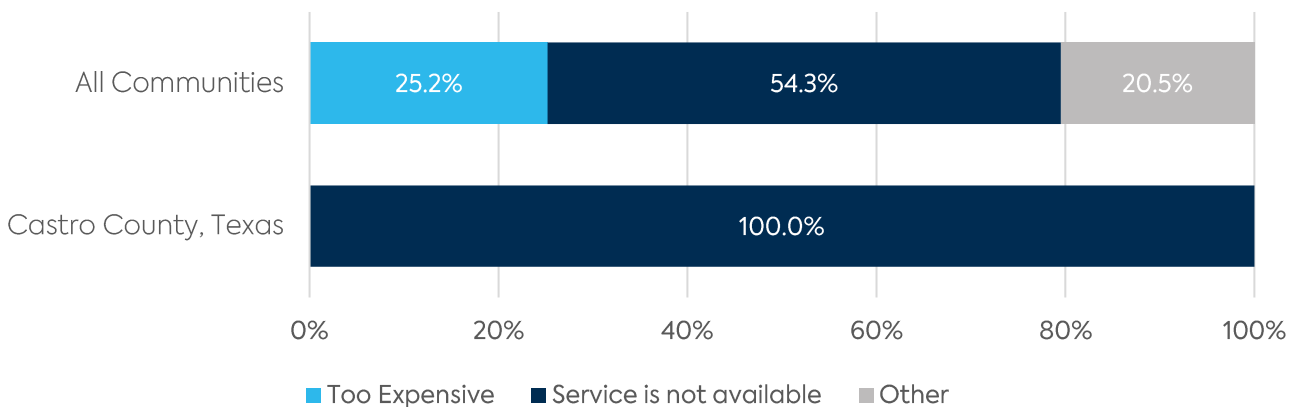


ADOPTION

In Castro County, 64% of households that took the survey subscribe to fixed broadband service delivered via a cable, DSL, fiber, or fixed wireless technology, while 8% indicate they have internet service delivered via dial-up, satellite, or a mobile wireless service. This leaves 4% without internet and 24% of survey respondents unsure of what service they have or provided no response.

Among those without a home internet connection, 100% said they did not have broadband because it was not available at their address.

Primary Barrier

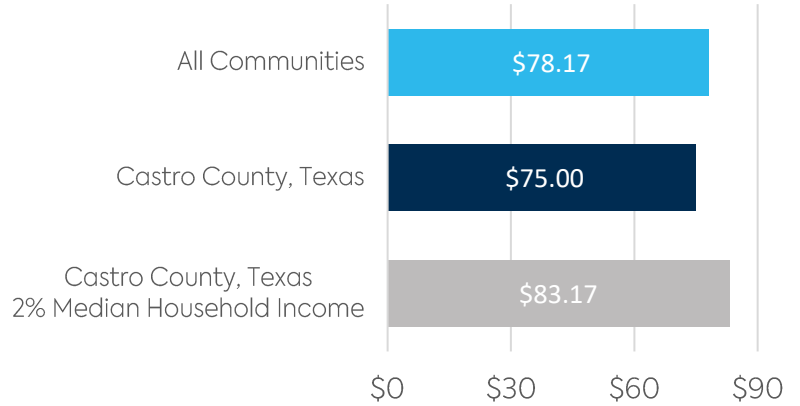




CONNECTION DETAILS

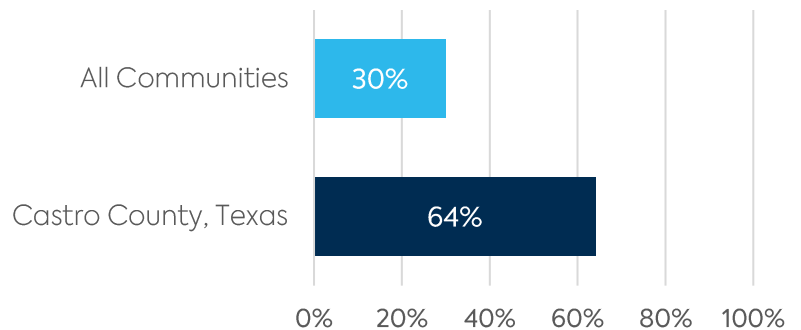
Two percent of monthly income is a recognized standard for measuring the affordability of a home internet connection. Respondents indicate that, on average, their internet connection costs about \$75 per month. This is slightly lower than the monthly cost paid in other communities (\$78.17). Two percent of the median household income in Castro County is \$83.17 per month.

Average Monthly Cost

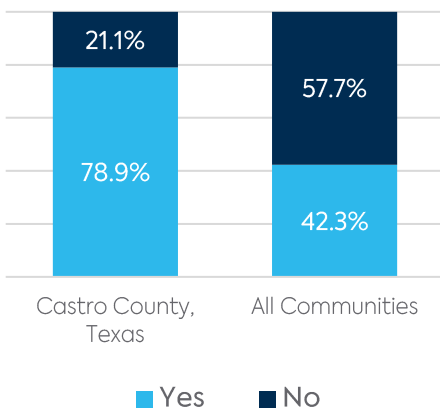


The FCC currently defines broadband as an internet connection with a download speed of at least 25 Mbps and upload speed of at least 3 Mbps. On average, respondents indicate that their connection's advertised download speed is 172.14 Mbps. In Castro County, 64% of internet-connected households subscribe to download speeds faster than 25 Mbps.

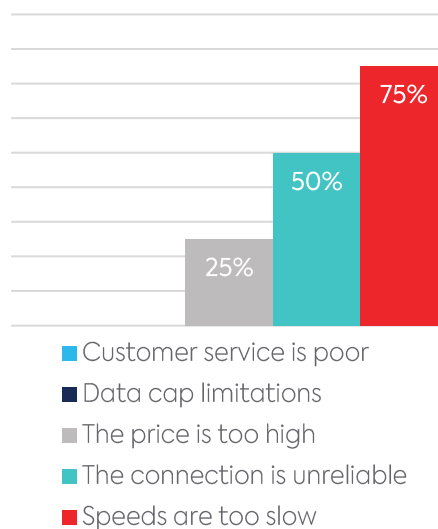
Percentage of Respondents with At Least 25/3 Mbps



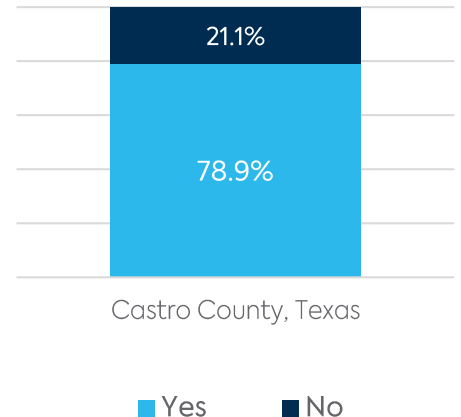
Does Your Internet Meet Your Needs?



Why Doesn't Your Internet Meet Your Needs?



Are You Interested in More Choices at Home?



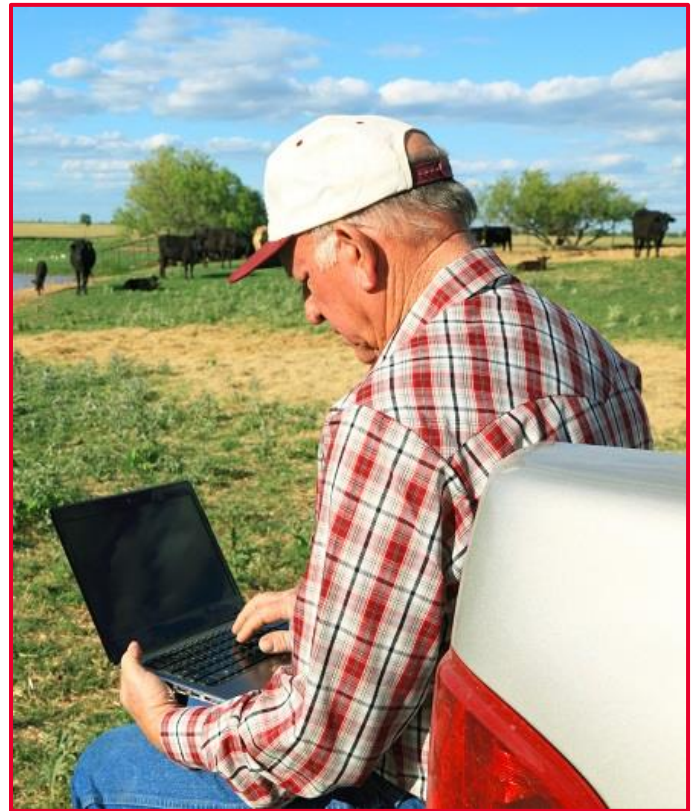
Household Survey Results



Competition provides residents with choices for service, allowing households the ability to switch providers if their current service does not meet their needs. Roughly 4 out of 5 (78.9%) responding households indicate that their internet connection meets their needs. This is a higher rate of satisfaction than among households in other communities (42.3%).

When asked why their connection does not meet their needs, 75% of dissatisfied households indicate that their speed is too slow, 50% report that their connections are unreliable, and 25% say that prices are too high. Respondents could choose more than one reason for dissatisfaction.

Finally, around 4 out of 5 respondents (78.9%) indicate that they are interested in additional internet choices for their home.

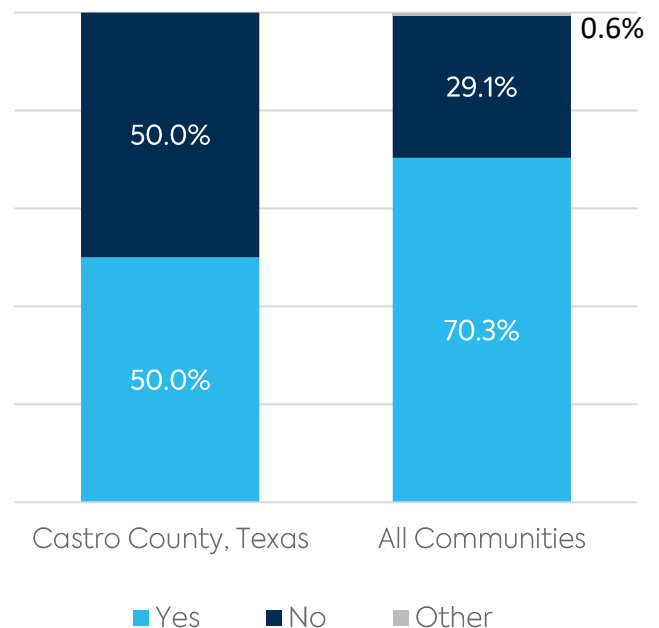


MOBILE CONNECTIVITY

Half of surveyed households (50%) reported that they subscribe to mobile internet service that they access via a smartphone or similar mobile device. This is less than what is reported in other Connected communities (70.3%).

Additionally, 30% 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





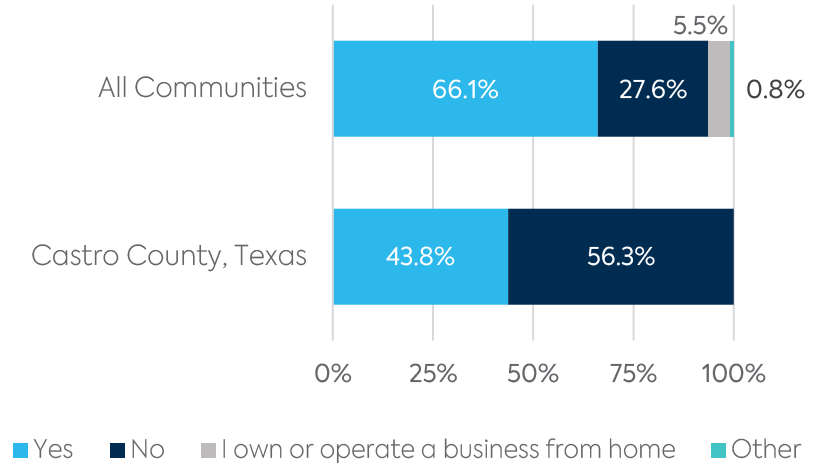
TELEWORK

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

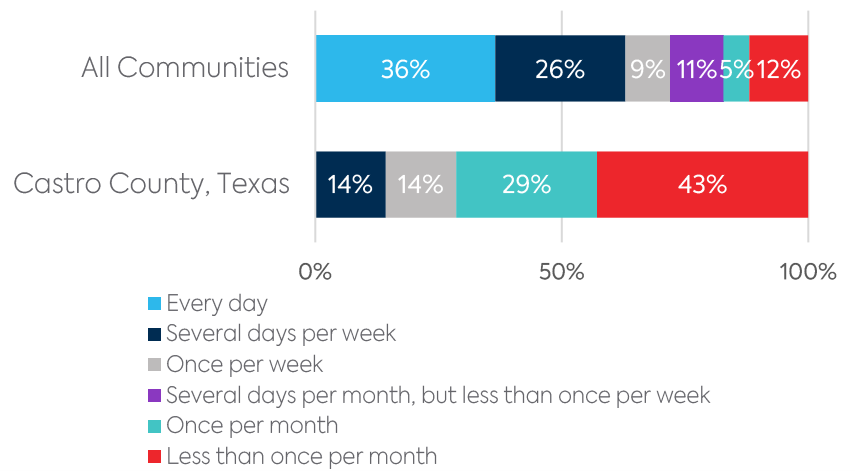
Teleworking is quickly becoming a critical part of growing a local economy because it represents an opportunity to attract and retain employees even when employees are not located in the same community as their employers. However, this only works if those employees have access to advanced broadband infrastructure.

Just over 2 out of 5 employed respondents in Castro County (43.8%) telework at least part of the time. More than 1 out of 4 teleworkers (28%) work remotely at least once per week, while approximately 29% telework once per month.

Do You Currently Telework?



How Frequently Do You Telework?





Recommendations



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

Goal 1: Improve broadband access, adoption, and use in Castro County through greater education, participation, and planning.

Objective: Establish broadband leadership and increase buy-in among community stakeholders.

The Castro County Community Engagement gathered data from residents over two months in late 2022. Additionally, CN Texas conducted one-on-one interviews with community leaders, including Jill Millican, Superintendent of Dimmitt ISD, Anthony Montelongo, Director of IT of Dimmitt ISD, Dr. Kara Garlitz, Superintendent of Nazareth ISD, Felice Acker and Molly Forman of Texas A&M AgriLife Extension Service, Adrian Rosas, City Manager of Hart, Retta Knox and Janet Sammann, local businesswoman, and Marcus Brockman, Branch Manager of People's Bank.

Community leaders gathered with CN Texas staff in November 2022 for a community conversation and broadband bootcamp. Leaders shared challenges with connectivity in the county, including the lack of options, the reliability of networks, and the need for increased connectivity across agricultural businesses. These thoughts are reflected in the recommendations that follow and helped shape the understanding and unique context of the region.

Sixty-one percent of Castro County households indicate they subscribe to service with download speeds faster than 25 Mbps. The current federal definition of broadband is 25/3 Mbps, but many of the new federal grant programs, including those in the Bipartisan Infrastructure Law and the CARES ACT, require higher speeds of 100/20 Mbps or 100/100 Mbps, respectively.

When understanding a community's connectivity, it is important to look holistically at broadband access, adoption, and use. This includes a focus on whether a physical internet connection is available at a residence or business, but also if people can afford the service, have a high-quality device, and have the skills to leverage their connection to use the applications they want.

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

To foster better community participation in broadband planning and increase digital equity, a permanent Broadband Council should be formed from community stakeholders who represent the



county's diversity. Maintaining a broadband focus and establishing leadership is essential. Holding regular meetings of this coordinated group of stakeholders will ensure that broadband remains a priority and that participants are sharing different opportunities. This sharing of opportunities will allow for increased collaboration and efficiencies, as stakeholders work together. Many priority areas for local communities, including housing, health care, education, and economic development, have a connection to broadband adoption, access, or use. In Castro County, connections to public safety, education, and agriculture were common themes in the survey results and community conversations.

Critically, the Broadband Council needs a key leader, a champion who understands how broadband can support the county. This person will be the point of contact for all broadband-related activities in the county, which will be especially important this year as Texas begins its Broadband Equity, Access, and Deployment (BEAD) and Digital Equity Act (DEA) planning and implementation work. This person will stay up to date on broadband policy news, new construction projects in the region, new laws, and funding opportunities, as well as maintain a local presence to keep the community educated and engaged in internet adoption and expanded internet deployment.

Once this point person is selected, the full Broadband Council should be coordinated and activated.

Members should include representatives from a wide variety of community stakeholders, such as:

- Health care: Local physicians, health care providers
- Government: County Judge, County Commissioners
- 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, business owners, managers
- Library: Library Director, Librarian
- Tribal Leaders
- Community At-Large: Someone from the community who is interested in broadband

The Broadband Council should set its own strategies and goals for connectivity. This Technology Action Plan provides key data and recommendations, based on survey analysis, mapping data, and conversations with community leaders, and can be a foundational document to work from in the coming months. Additionally, the council should:



- 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 Oklahoma Office of Broadband, 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 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.
- Ensure digital engagement in all community sectors (telehealth, telework, education, commerce, etc.).
- Attend workshops, webinars, meetings, and general training that discuss telecommunications generally, and broadband specifically.
- Hold regular meetings. The council should meet at least once a month. 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.

Because there is so much work happening in broadband at the local, regional, state, and federal level, tracking updates and announcements is critical. Key federal agencies involved in broadband grants, administration, and regulation include the Federal Communications Commission (FCC), the National Telecommunications and Information Administration (NTIA), and the U.S. Department of Agriculture. In Texas, the Texas Broadband Development Office is the key entity responsible for broadband policy, grantmaking, and implementation. Following their updates, subscribing to their newsletters, and attending their webinars and meetings will keep Castro County informed about upcoming opportunities.

Action 2 – Create and maintain a connectivity resource list on city and/or county website to promote and encourage citizen use of resources.

Having a centralized set of broadband resources for the county will allow residents easy access to resources that match their needs. This list can be cross-posted on city websites or social media pages in Hart, Dimmitt, and Nazareth. This list can include public Wi-Fi availability by location, public access computers, library hours and technology offerings, community-based organizations that support digital skills training or online education opportunities, affordability programs, and more. Several of the recommendations that follow also include references to promotion of resources – this website



can be a key part of that strategy. Additionally, the Broadband Council should consider offering downloadable posters and flyers with these resources so schools, libraries, and community-based organizations can access and post them in their buildings, or distribute them to their clients.

Action 3 – Increase public awareness of broadband challenges and opportunities.

Increased education could help Castro County residents stay up to date on broadband-related activities in the county, region, and state, and inform them of opportunities to increase access or get more affordable service. Several recommendations that follow have a public-facing education component. The Broadband Council should think strategically about how to engage with the community and hear about challenges directly from them. A formal communication plan could support this work.

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

Responsible parties: County Judge, Commissioners Court, community broadband team

Resources:

- [The FCC High-Cost program: CAF A-CAM](#)
- [The Rural Digital Opportunity Fund \(RDOF\)](#)
- [Coronavirus State and Local Fiscal Recovery Funds, Allocation by County](#)
- [ARPA SLFRE, Final Rule](#)
- [Governor's Broadband Development Council](#)
- [The Texas Statute](#)
- [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](#)
- [CN's list of Current Broadband Funding](#)
- [BroadbandUSA: Federal Funding Guide](#)
- [Guide to Federal Broadband Funding Opportunities in the U.S.](#)

Broadband readiness

- [Texas Broadband Providers by County](#)
- [Smart Cities Readiness Guide](#)



- [Next Century Cities Becoming Broadband Ready Toolkit](#)
- [Municipal Boards: Best Practices for Adoption Technology](#)

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: Build and maintain relationships with Internet Service Providers (ISPs) to improve internet access and speeds for all Castro County residents.

Objective: Ensure all residents have access to internet and speeds that meet their needs for work, education, telehealth, and quality of life purposes.

Interviews and survey results indicate high variability in access to and reliability of internet connections. Many people discussed how their home connection often can't support multiple devices, limiting work and education options for multi-resident households. Additionally, survey respondents described the connection in their office as sufficient but connection at their home as insufficient, limiting both work-from-home options as well as online entertainment at home.

Residents described just “learning to deal with it” when discussing slow and unreliable connections, with challenges connecting even short distances outside of town.

Community satisfaction rates are not high in Castro County, with 57.7% of residents indicating that their internet service does not meet their needs. This is slightly higher but similar to other Connected communities, which have a 55.6% dissatisfaction rate. Of the survey respondents who are unsatisfied with their current internet service, 73% say that speeds are too slow and 71% indicate the connection is unreliable.

Broadband infrastructure and reliability were major points of discussion at the Castro County community meeting hosted in November 2022. The implications for public safety, in particular, were discussed.

Action 1 – Maintain open communications and positive relations with ISPs, including those



currently working in the county, providers with plans to work in the county, or those that have received federal funding to begin work in the county.

ISPs are an important partner for the county in its work to connect everyone. Maintaining open communication should include regular check-ins with ISPs to stay abreast of construction and expansion progress or changes in plans, to identify any obstacles or challenges they are facing, and to communicate community goals and objectives. The council should reach out to area ISPs with connectivity concerns, and to identify opportunities.

Open communication allows for ISPs to better understand community needs and for 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 ISPs, 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.

Action 2 – Track ongoing and planned broadband infrastructure projects, as well as upcoming federal, state, and private funding opportunities.

The Broadband Council should ensure the county has a comprehensive list of projects, including those funded by ISPs and several federal broadband programs. This list will help the council understand what, if any, gaps in access remain in the county and identify potential partners in expanding access to those areas. This catalog will also ensure that the council can regularly check in on active projects.

Additionally, several upcoming federal funding opportunities, most notably BEAD funding, will be available through the Texas Office of Broadband Development. Texas is likely to receive billions of dollars to expand internet at speeds of 100/20 Mbps to all residents of the state, starting with unserved areas. Unserved areas are defined as having no internet connection or having connection with speeds under 25/3 Mbps. Pinpointing unserved areas, as well as areas that are already on track for build-out, will help the council target its efforts.

Action 3 – Encourage residents to check their address on the FCC Broadband Map to see if the access and availability data is accurate.



The FCC released a pre-production draft of the [National Broadband Map](#) on November 18, 2022. This map includes coverage data for the entire country at the address level. These maps are currently undergoing a challenge process, where residents, local and state governments can challenge the validity of speed and coverage data on the map.

The FCC Broadband Map will continue to be refined and improved as ISPs provide additional data, and citizens, local and state governments, and other broadband partners challenge areas of the map that overstate coverage data. Residents can check their address on the map and complete a challenge process on the same website. Residents can challenge several data points and should check to make sure that their home is identified as a broadband serviceable location, that it accurately describes if they have access to broadband or not, and if the ISPs that indicate they provide service at specific speeds actually are available. To learn more about the challenge process, reference the [FCC Broadband Data Collection Help Center](#).

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

Resources:

- [FCC Broadband Availability Map](#)
- [FCC National Broadband Map Outreach Toolkit](#)

Goal 3: Ensure that Castro County residents can access and use broadband internet.

Objective: Increase Castro County residents access to the internet by utilizing subsidy programs to make high-speed internet more affordable at home, and by building their digital skills.

U.S. Census data indicates that 87.2% of Castro County residents subscribe to the internet. The Connected survey indicates 72.6% of residents subscribe to fixed or non-fixed wireless. For Castro County residents who do not subscribe to broadband services, 44.4% indicated that internet service is too expensive, compared to around 25.2% of residents in other Connected communities who indicate that price is a barrier to adoption. Even for those who do subscribe to service, 51% expressed dissatisfaction with their service as it relates to pricing.

Additionally, 61.1% of residents noted that they have a mobile broadband subscription. Of these



residents, 13.6% use their mobile internet services as the only way they go online at home. During our one-on-one conversations, we learned that many people in Castro County rely on their mobile device as their primary internet connection.

Action 1 – Broadband Council should share resources about internet subsidy programs to residents to address affordability concerns.

Many residents have physical access to an internet connection but are unable to afford the monthly payment and/or the high-quality device needed to go online. Residents talked extensively about affordability challenges, highlighting that many families are often forced to choose either a cell phone plan or a home internet plan. Increasing public awareness about affordability programs can help more families get connected to the internet.

There are two key federal affordability programs:

- The [Affordable Connectivity Program \(ACP\)](#) was created to help households struggling to afford internet service. The ACP provides a \$30 a month credit, \$75 a month for qualifying residents on tribal lands, toward internet service, 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 ISP](#) that offers connected devices. The ISP will provide the discount to the consumer, then seek reimbursement.

The [ACP tool kit](#) is a great resource that communities can use to promote the program to residents.

- [Lifeline](#) is a federal program administered through the Federal Communication Commission (FCC) Universal Service Administrative Co. that lowers the monthly cost of phone or internet services for eligible consumers. Eligible consumers 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.

These programs assist low-income residents with the cost of internet, but ISPs must participate in order for residents to benefit. In cases where ISPs do not participate in federal subsidy programs, the Broadband Council should find out the reasons why not, and what steps can be taken to encourage them to do so.



ISPs often have their own low-cost options or subsidized programs offering internet for consumers at a greatly reduced cost, so customers should always ask. The Bipartisan Infrastructure Law (BIL) of 2021 requires ISPs that receive federal grant money to offer low-cost service to eligible low-income households.

Action 2: Encourage increased broadband adoption by promoting digital literacy training and technology events.

Ensuring that residents have the skills to safely navigate the internet is critical to increasing adoption rates and ensuring they are able to take advantage of existing and planned broadband infrastructure. The Broadband Council should share resources and information about the benefits of technology to encourage greater participation in the digital space.

Digital literacy training is an excellent way to get community members interested in technology and up to speed. Whether it's to attend online education programs, see a doctor for a telehealth appointment, or video chat with family far away, **having adequate digital skills** increases people's use of technology and new applications that can support key interests in their life. Nonprofits, schools, and local governments can offer digital literacy classes to help residents develop the skills needed to use their devices. There are a variety of web-based and in-person curricula for teaching basic, intermediate, and advanced digital skills. These trainings can be application- or industry specific, such as trainings on how to navigate patient health portals for a specific hospital or doctor's office, or they can cover general topics, such as how to use the internet, cybersecurity tips, and more.

These basic and more advanced trainings can be offered by school districts, local nonprofits, faith-based organizations, and other groups that interact with and serve the community. As trusted partners, these groups are well-positioned to engage in training that will allow residents to build skills and learn how to safely navigate the internet.

Timeline: The Broadband Council should share information about affordability programs immediately and begin offering digital literacy or technology events within ix months.

Responsible parties: Library, ISPs, Broadband Council, K-12 schools

Resources:

Many free resources exist for digital literacy training, including:

- [Digital Learn – Free courses to learn anything about computers](#)



- [Digital Literacy Curriculum for K-12](#)
- [Free Applied Digital Skills – Google for Education](#)
- [Live, Virtual Classes for Seniors](#)
- [On-Site Technology Training for Small, Rural Michigan Businesses](#)
- [Importance of Tech for Small Businesses](#)

Goal 4: Ensure that the Castro County agricultural community has access to high-speed internet, technology resources, and education to improve efficiency and profitability.

Objective: Improve internet speeds for Castro County agriculture producers while championing innovation.

Castro County has an active and robust agricultural community, with some of the highest production in the state, making the county an important part of the regional and state economy. Agriculture is an essential industry, most often located in rural communities, yet it often struggles as a sector to access high-speed internet. In conversations with local ag producers, many indicated that an internet connection was present in some, but not all, parts of their operation.

When agricultural producers have access to high-speed internet, the available technology has transformed the way they work, bringing better outcomes, higher yields, and greater efficiency. Technology will play a large role in agriculture of the future, in how we feed ourselves, protect our natural resources, and conserve our land. The Castro County Broadband Council should coordinate with the ag community to better understand the technology needs of farmers and ranchers and support their success.

Action 1 – Convene ag producers and ISPs to discuss the sector’s challenges, opportunities, and needs.

The Castro County ag sector understands the importance of connectivity. Including the sector in the Broadband Council and other connectivity conversations ensures that its needs and challenges are represented in countywide and regional planning. As a critical contributor to the local and state economy, the ag sector must play an important role in expanding internet access.

As ag tech innovations continue to advance, they will require increased broadband speeds to stay connected. Open communication with ISPs serving the county could lead to additional opportunities to expand ag producers’ internet access. Decision makers should be mindful of opportunities to



improve ag efficiency and profits when making decisions about long-term planning, and ensure ag interests are included.

Action 2 – Partner with the AgriLife Extension office to encourage technology adoption by offering ag-specific technology training and digital literacy.

Ag-tech adoption in Castro County can expand with additional support. Conversations with AgriLife Extension staff and local ranchers indicate there are both current technology applications in use across operations and interest in adding more.

Depending on community interest and participation, education resources could be as simple as sharing links and information about innovations in ag technology on a county broadband resources website or through social media channels. The ag extension office could also partner with the local school districts to offer ag-specific digital literacy training classes. If the community shows interest, they could invite agriculture technology speakers to present workshops or seminars to local farmers and ranchers on technology applications that could benefit their operations (such as a presentation on SmartRanch technology, i.e., cattle tags to track cattle, sensors to let ranchers know when gates are open or tanks are dry). Thinking regionally could also be an important strategy in terms of convening farmers and ranchers from the Southern High Plains to discuss technology needs and opportunities.

More connectivity and technology could benefit America's family farms and ranches. The Castro County Broadband Council should strive to keep the ag sector in mind with all future planning.

Timeline: Broadband Council should begin sharing ag-tech resources immediately and consider scheduling classes within six months.

Responsible parties: Castro County AgriLife Extension office, Castro County Broadband Council

Resources:

- [U.S. Department of Agriculture](#)
- USDA National Institute of Food and Agriculture [Resources Page](#)
- [The Texas A&M AgriLife Extension Service](#)
- [Texas Rural Leadership Program](#)
- [The Farm Journal: Ag Web. technology](#)
- [Free online Agriculture course from universities across the globe](#)



- Ku, Linly. "[New Agriculture Technology in Modern Farming.](#)" *Plug and Play*, October 6, 2021.