



OVERVIEW

Today, technology plays a pivotal role in how businesses operate, how institutions provide services, and where consumers choose to live, work, and play. The success of a community depends on how broadly and deeply the community adopts technology resources, which includes access to reliable, high-speed networks; the digital literacy of residents; and the use of online resources locally for business, government, and leisure.

The Connected Nation Texas (CN Texas) Connected Program partnered with the Jones County Broadband Team to conduct a study designed to determine the availability of broadband infrastructure; how its residents are adopting and using broadband services; and what steps would have the greatest impact toward improving broadband access, adoption, and use across every sector locally.

Pursuant of this goal, between February 2021 and May 2021, Jones County conducted a comprehensive survey of broadband technology access and adoption across the community that collected responses from 646 households. CN Texas staff also met with community officials to determine community needs and to gather qualitative data for consideration in the study. Overall, the assessment was designed to identify issues and opportunities to close the local Digital Divide.

Jones County is in a good position to improve broadband access, adoption and use throughout the community. With Rural Digital Opportunity Fund (RDOF) money (once approved) and Coronavirus State and Local Fiscal Recovery Funds flowing into the county, the future looks bright. Understanding how to partner with

Jones County – Quick Facts		
Population	19,943	
Number of Households	6,034	
Median Household Income	\$50,344	
Poverty Rate	14%	
Bachelor's Degree or Higher	11.70%	
Home Ownership Rate	74.60%	
Hispanic or Latino Population	27.50%	
Black or African American Population	14.50%	
Households Served with Broadband ¹	34.44%	

Source: U.S. Census 2019: https://data.census.gov/cedsci/profile?g=0500000US48253

local providers and keeping up with grant expenditures is imperative to long-term success. Many recommendations in this action plan are inexpensive or cost nothing at all but will contribute greatly to community development. Increasing broadband adoption and use throughout the county will contribute to greater quality of life.

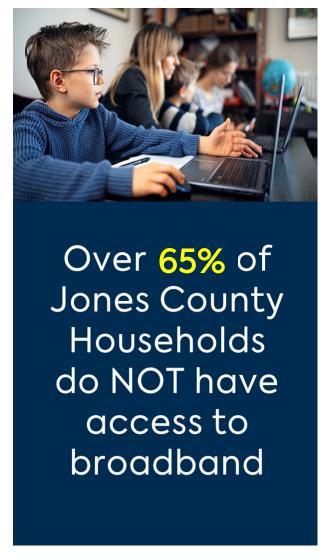
The following provides a summary of that assessment as well as recommendations for improving broadband and technology access, adoption, and use. The community action plan brings specific attention to broadband expansion, specifically through community adoption and infrastructure advancements. Looking specifically at broadband access in Jones County, the community has expansive RDOF allocations that could bring greater broadband access to community residents through new infrastructure projects. This action plans takes these federal allocations into account.

¹ The current FCC definition of broadband is a minimum of 25 Mbps download and 3 Mbps upload. This data is derived from Connected Nation Texas, July 2021. https://connectednation.org/texas/wp-content/uploads/sites/19/2021/07/TX_Broadband_Availability_SpeedTier_Counties_2021_07_31.pdf.



KEY FINDINGS

- Only 34.44% of households in Jones County have access to internet service at speeds that the FCC defines as "broadband" (25 Mbps download and 3 Mbps upload). Statewide, 96.78% of households have broadband access at these speeds.
- Only 17.38% of households in Jones County have access to internet service at speeds needed to run many modern applications (100 Mbps downstream and 10 Mbps upstream). Statewide, 92.05% of households have internet access at this speed.
- Nearly **one-third (31.3%)** of households either use non-fixed internet connections² such as dial-up, satellite, and mobile-only services or are not adopting broadband at all.
- For households that said they do not subscribe to home internet service, the top barrier was the cost of internet service, followed by a lack of available service.
- 56% of households reported that they were dissatisfied with their current internet service. The top reasons for dissatisfaction were slow speeds and an unreliable connection.
- 95.7% of households said they would like to have improved or additional options for home internet service.



The average internet speed reported by households in Jones County (16.3 Mbps) is significantly lower than connections in other Connected communities (33.8 Mbps) surveyed.

² Non-fixed internet connections include dial-up, satellite, and mobile-only services. These non-fixed types of internet services, while providing basic access, can often be plagued by connection latency, have costly monthly data plans, or can be impacted by weather, terrain, large expanses of open water, and other environmental factors.



INFRASTRUCTURE

The first step in understanding the state of broadband infrastructure in Jones County and the rest of Texas is having accurate maps. Accordingly, CN Texas works with providers to develop a variety of broadband maps at a state and county level. Data shown on these maps is 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 were 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, a format that tends to overstate the service territory.

Broadband - Quick Facts			
Number of Unserved Households	3,956		
Households served (10/1 Mbps)	89.24%		
Households served (25/3 Mbps)	34.44%		
Households served (50/5 Mbps)	17.51%		
Households served (100/10 Mbps)	17.38%		

Broadband data collected by CN Texas in 2021 https://connectednation.org/texas/mapping-analysis/.

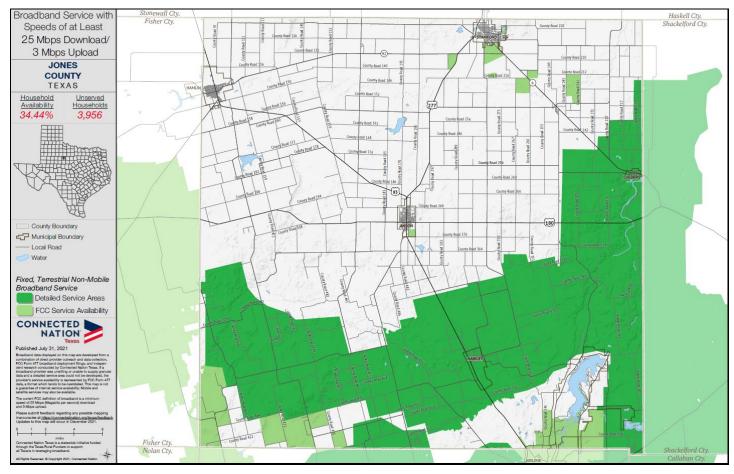
According to CN Texas, broadband data collected in July 2021 — with additional public feedback, field validation, and provider input — a little under two-thirds of Jones County (65.56%) do not have access to broadband at least 25/3 Mbps, the current definition of broadband as set forth by the Federal Communications Commission (FCC). There were nine providers as shown on the table below:

Internet Service Providers in Jones County

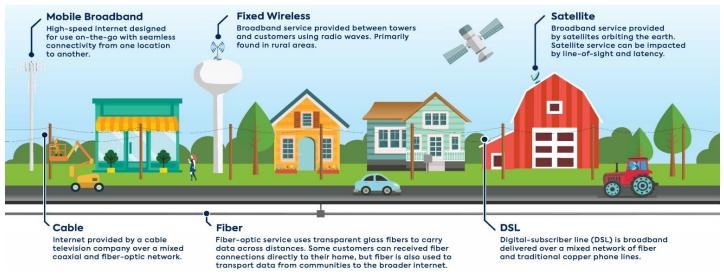
PROVIDER	TECHNOLOGY	MAXIMUM DOWNLOAD SPEED (Mbps)	MAXIMUM UPLOAD SPEED (Mbps)
AMA TechTel Communications	Fixed Wireless	100	10
AT&T Southwest	DSL	25	3
Mid-Plains Communications	Fiber	200	100
Rise Broadband	Fixed Wireless	25	5
Suddenlink Communications	Cable	15	2
Taylor Electric Cooperative	Fiber	1000	1000
Taylor Tologom	Fiber	1000	1000
Taylor Telecom	DSL	25	3
TRANSWORLD NETWORK CORP	Fixed Wireless	15	2
Valor Telecommunications of Texas LP	Fiber	1000	1000
	DSL	50	50



Below is Jones County's (25/3 Mbps) map. Other portions of the county are served by internet service providers (ISPs) offering slower advertised speeds.



Other broadband availability maps for Jones County can be found here.





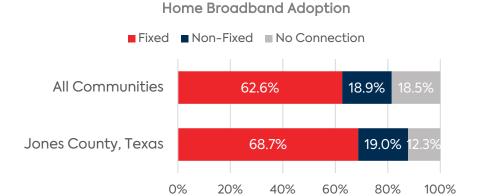
HOUSEHOLDS - DETAILED FINDINGS

The following provides an overview of results from a broadband survey conducted in Jones County between February 2021 and May 2021. Altogether, CN Texas received 646 completed surveys from households across the county, and respondents provided insights into their internet connectivity, or lack thereof. Data from Jones County are compared to data from across dozens of other rural Connected participating communities across Michigan, Ohio, Texas, and Pennsylvania to benchmark and identify areas for improvement.

Households – Quick Facts		
Fixed Home Broadband Adoption ³	68.7%	
Average Monthly Cost of Internet	\$71.89	
Average Download Speed	16.28 Mbps	
Households Satisfied with Service	44.0 %	

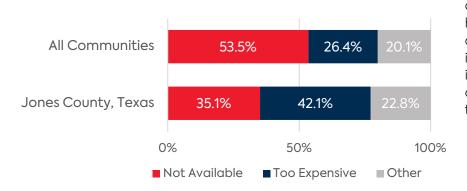
Source: Jones County Household Survey conducted by CN Texas

ADOPTION



In Jones County, 68.7% of households that took the survey subscribe to fixed broadband service delivered via a cable, DSL, fiber, or fixed wireless technology. Just over 19% of respondents indicate they have internet service, but it is delivered via dial-up, satellite, or a mobile wireless service. This leaves just under one-fifth (12.3%) of households without internet access at home.

Primary Barrier to Home Broadband Adoption

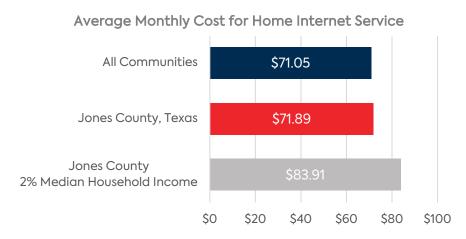


Among those without a home internet connection, 35.1% said they did not have broadband because it was not available to them, while nearly 42.1% indicate that it was too expensive. Like in many communities, cost and availability are the two primary barriers to home broadband adoption.

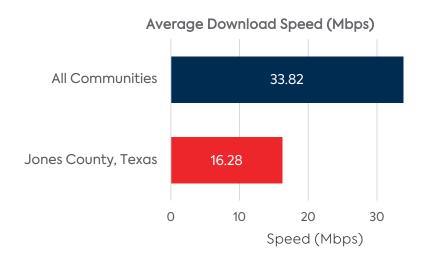
³ Fixed home broadband connections are those provided by cable, DSL, fiber, or fixed wireless technology.



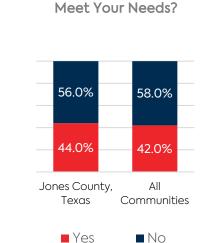
CONNECTION DETAILS



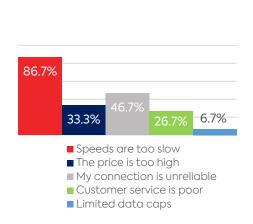
Two percent of monthly income is a recognized standard for measuring the affordability of a home internet connection. Respondents indicate that, on average, their internet connection costs \$71.89 per month. This is very close to monthly costs in other communities. Two percent of the median household income in Jones County is \$83.91 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 download speed is 16.28 Mbps, which is less than half the speed of household connections in other communities and below the defined speed of broadband, which is 25 Mbps.



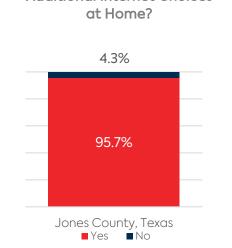
Does Your Internet Connection



Why Does Your Connection

Not Meet Your Needs?

40



Are You Interested in

Additional Internet Choices



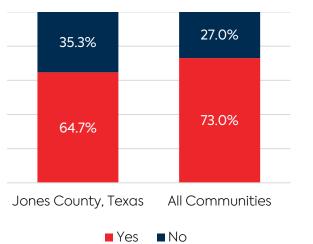
Competition provides residents with choices for service, allowing households the ability to switch providers if their current service does not meet their needs. About 56% of respondents indicate that their internet connection does not meet their needs. This is a similar rate of dissatisfaction to households in other communities. When asked why their connection does not meet their needs, 86.7% of households indicate that the speed is too slow. A third say the price is too high, and nearly half (46.7%) indicate that the connection is unreliable (respondents could choose more than one reason). Finally, nearly every respondent (95.7%) indicate that they are interested in additional internet choices for their home.

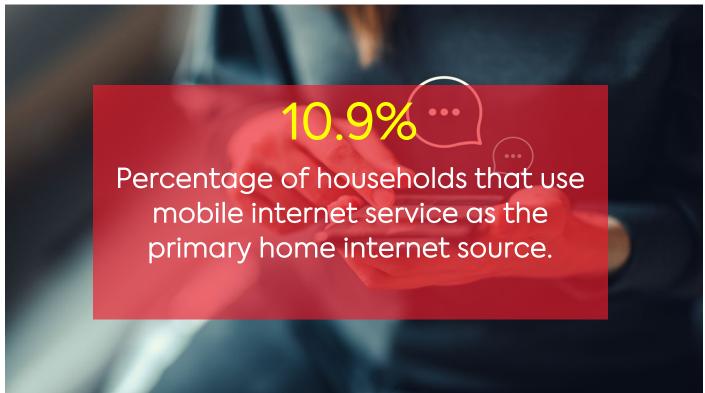
MOBILE CONNECTIVITY

Nearly 65% of Jones County households (64.7%) report that they subscribe to mobile internet service, which they access via a smartphone or similar mobile device. This is slightly less than reported in other Connected communities.

Additionally, about 10.9 % of all households report that they rely on their mobile connection as their primary source of internet connectivity at home, and 14.1% use mobile service to connect other household devices to the internet





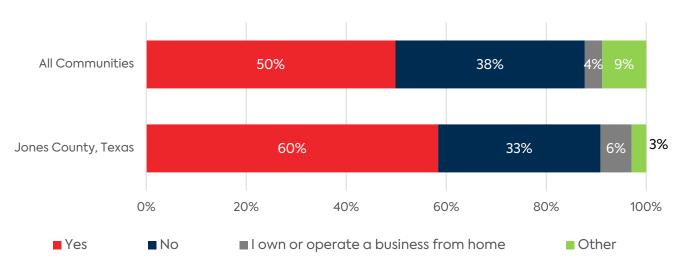


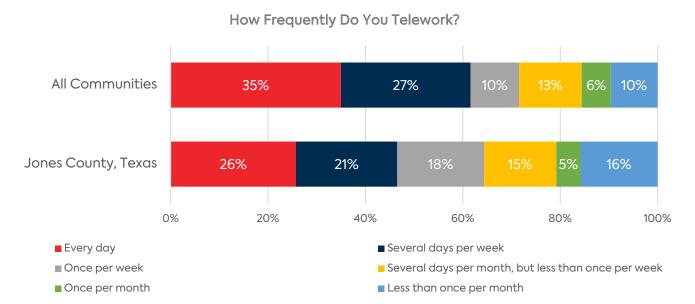


TELEWORK

Teleworking, or telecommuting, refers to working outside of the conventional workplace and communicating with it by way of telecommunications or computer-based technology. Teleworkers often do not register on typical measures of economic or workforce activity. Economic development strategies traditionally involve the attraction or retention of employers. While this is a critical part of growing a local economy, telework represents an opportunity to attract or retain employees even though their employer may not be located within the community, but only if those employees have access to advanced broadband infrastructure. Approximately 61% of residents in Jones County indicate that they telework at least part of the time. This is more than residents in other communities, though teleworkers in Jones County work from home just about as often as teleworkers in other communities.

Do You Currently Telework for Your Job?







RECOMMENDATIONS

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

Goal 1: Improve broadband speeds and connectivity in Jones County through strategic partnerships.

Three out of five survey respondents in Jones County (60%) indicated they telework, with an additional 7% of respondents indicating they own or operate a business from their home. Yet, in almost all community sectors, survey respondents indicated by and large the leading reasons for dissatisfaction with their current internet service provider were slow speeds and unreliable connections. Teleworkers need reliable and fast internet connections to fulfill professional obligations. Looking beyond telework, reliable and fast internet is essential to connectivity and functionality. For Jones County, the issue is not a lack of broadband use, it is a lack of fast and reliable broadband that meets the needs of the community members. Improving broadband speeds and connectivity will come with associated costs, making partnerships with community organizations, internet service providers, and financial supporters advantageous for the community and its residents.

Objective:

Promote greater broadband access, adoption, and use in Jones County through broadband infrastructure improvements.

Actions:

Action 1 – To effectively understand the broadband funding landscape in Jones County, community leaders should meet with internet service providers who have already been allocated federal money, including recipients of funding through the Connect America Fund (CAF) and the Rural Digital Opportunity Fund (RDOF). The community should meet with local ISPs to assess the status of ongoing or upcoming infrastructure improvement and expansion projects. As Jones County considers expanding and improving broadband infrastructure, the goal should be to pursue strategic projects that are not needlessly redundant (i.e., expand access where RDOF and CAF winners are already working).

RDOF (Phase I Auction Winning Bids):

AMG Technology (Nextlink) - 3 locations - \$1,932

LTD Broadband - 6 locations - \$4,428

Resound Networks - 1.666 locations - \$1.450.838.90

CAF (Phase II Auction Winning Bids):

AMG Technology (Nextlink) - 191 locations - \$156,381.50

ISPs who attended the May Provider Meeting:

Taylor Telecom: Paul Beale

Nextlink: Steve Burks



<u>Rise Broadband</u>: Stephen Miller <u>AT&T</u>: Rick Tyler & Ed Casko

Action 2 – During meetings with providers, the community should discuss the role the county or a city could play (through financial backing or strategic partnership) to *speed up* project completion, *ensure* project completion, or start a new one altogether. Ultimately, Jones County should play a strategic role in ongoing or planned projects that will widely benefit the most residents.

Jones County has been allocated \$3.9 million in Coronavirus State and Local Fiscal Recovery Funds. While the county does not have to make any decisions about spending these funds until the Treasury Department issues final rules, it is important for the community to begin building relationships with local providers in preparation for passage of those final rules. Should Jones County choose to spend any of the federal funds on broadband, it is important that they are prepared, informed, and readily equipped to begin working with reliable partners.

Action 3 – Jones County should establish and maintain relationships with regional organizations and elected officials. Additionally, the county should engage in regional broadband planning efforts with the express intent of improving broadband access, adoption, and use among Jones County residents and surrounding communities. Not only will residents benefit from broadband improvement in Jones County, they will reap the benefit of broadband advancements in surrounding communities economically, technologically, and socially.

Regional Organizations and Elected Officials to Partner With:

- West Central Texas Council of Governments
- Chambers of Commerce (Anson and Stamford)
- Other "Connected Communities": Fisher, Shackelford, Throckmorton, others to come
- Rep. Stan Lambert's Office

Responsible Parties:

Local units of government; broadband providers; community and regional organizations

Timeline:

Community leaders should begin meeting with internet service providers within three months of receiving this plan. While Jones County does not have to allocate funding or spend federal dollars within that same three months, the community should outline the scope of broadband infrastructure projects (ongoing and planned) within that timeline.

Resources:

- Texas Broadband Providers by County https://connectednation.org/texas/planning/
- Auction 904: Rural Digital Opportunity Fund https://www.fcc.gov/auction/904
- Connect America Fund Phase II FAQs https://www.fcc.gov/consumers/guides/connect-america-fund-phase-ii-faqs
- Coronavirus State and Local Fiscal Recovery Funds https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/state-and-local-fiscal-recovery-funds
- Coronavirus State and Local Fiscal Recovery Funds, County Allocation
 https://home.treasury.gov/system/files/136/fiscalrecoveryfunds_countyfunding_2021.05.10-1a-508A.pdf



- Guide to Federal Broadband Funding Opportunities in the U.S. https://www.internetsociety.org/resources/doc/2021/guide-to-broadband-funding-opportunities-in-us/
- Current Broadband Funding https://connectednation.org/current-broadband-funding
- BroadbandUSA: Federal Funding Guide https://broadbandusa.ntia.doc.gov/resources/federal

Goal 2: Develop a Technology Action Committee.

Establishing a formal, long-term community Technology Action Committee can help to sustain the implementation of the technology action plan and the growth of broadband and technology access, adoption, and use in the community. Ideally, the team would: 1) promote broadband and technology access, adoption, and use; 2) monitor local, national, and global technology trends; 3) educate the community on broadband and technology and empower digital engagement; 4) attend and facilitate events focused on technology innovation, broadband infrastructure, and connectivity in general; 5) take action on recommendations from the plan as well as others that promote sustainable broadband solutions.

Objective:

Promote sustainable short- and long-term technology goals in Jones County.

Actions:

Action 1 – The Jones County Commissioners Court should commission a comprehensive community group referred to as the Technology Action Committee. The committee should include individuals who represent all community sectors including healthcare, government, education, public safety, agriculture, communications, etc. The committee's ultimate intention should be to pursue and implement short- and long-term technology goals. The committee should pursue sustainable and forward-thinking technology solutions that will benefit residents, businesses, and community organizations in Jones County.

Members could include:

- Healthcare: Clinic Director, Family Doctors, Hospital Director
- Government: County Judge, County Commissioners, Mayor, City Council, County IT Director
- Education: Superintendents, School IT Directors (Anson ISD, Hawley ISD, Hamlin ISD, Stamford ISD, Lueders-Avoca ISD)
- Public Safety: Sheriff, Volunteer Fire Chief, TDCJ and ICE Rep., EMS
- Agriculture: County Ag Agent, Leading Ag Producers
- Communications: CEO, Government Affairs, Communications Director of ISPs
- **Business:** Chamber of Commerce President (Anson and Stamford Chamber), Stamford Development Corporation
- At-Large Community Members: Passionate Jones County residents who can be the hands and feet of committee efforts

Action 2 – The committee should meet at least once a month. Meetings can be held virtually or in-person to accommodate needs of members. These meetings should cover community happenings of the prior month, allow time for guest speakers and presentations, and offer an open forum for discussion about broadband advancements in Jones County.



The responsibilities of the committee should include:

- Stay up-to-date on state and federal broadband legislation
- Maintain awareness and help Jones County apply for federal and state grants
- Monitor state, national, and global technology trends
- Ensure digital engagement in Jones County in all community sectors (telehealth, telework, online learning, Wi-Fi in businesses, etc.)
- Update Commissioners Court, City Council and other governing bodies as needed
- Attend workshops, webinars, meetings, and general training that discuss broadband specifically and telecommunications generally
- Provide digital literacy and digital skills assistance to at-risk populations in the community

Action 3 – Each committee member should promote sustainable technology best-practices in their respective community sector and in the community overall. This looks like targeted outreach, social media marketing, and conversations with community stakeholders. Through a coordinated effort, Jones County will be able to prepare for the future while also ensuring residents are fully engaged online in the here and now.

By staying apprised of local, state, and national technology trends and appointing a core group of community members to stay informed of ongoing telecommunications activities, Jones County will be a leader in the digital space in the short- and long-term.

Responsible Parties:

Community anchor institution: schools, businesses, hospitals, agriculture centers; government leaders and elected officials; community residents

Timeline:

The Commissioners Court should designate members of the Technology Action Committee within 16 weeks of receiving this plan.

Resources:

- Municipal Boards: Best Practices for Adoption Technology https://insights.diligent.com/boardroom-technology-local-government/municipal-boards-best-practices-for-adopting-technology
- Smart Cities Readiness Guide https://rg.smartcitiescouncil.com/
- Texas Broadband Providers by County https://connectednation.org/texas/planning/



Goal 3: Market Jones County as a digitally-prepared and engaged community.

Broadband connects people to the world and opens the door to opportunity. Where there is broadband, there is development, achievement, and innovation. In rural Texas, broadband looks like economic development, greater scholastic achievement, workforce expansion, connection to telehealth services, infrastructure improvement, and general technological advancements. When embraced as an integral part of life, broadband contributes to a thriving community and promotes greater quality of life for residents. In Jones County, it is important to embrace and market the known, evident benefits of broadband to facilitate continued community expansion and improvement.

Objective:

Demonstrate Jones County's digital preparedness through community development, online engagement, and high quality-of-life standards.

Actions:

Action 1 – The aforementioned Technology Action Committee will create marketing materials that showcase Jones County's digital preparedness. The committee, in conjunction with government leaders (city and county level), should identify advocates in each of the following areas who will assist with this marketing endeavor. The following are areas that most directly impact residents' quality of life. These factors will become the foundation of the community's broadband marketing strategy.

<u>Telework:</u> Telework offers greater flexibility in work schedules and expands the number of job opportunities for rural Texans, while also increasing the number of potential applicants for employers.

<u>Telehealth:</u> Online medical services allow residents to speak with top-of-the-line doctors, dentists, surgeons, dermatologists, veterinarians, and medical specialists through the click of the button. These online services are not only important in times of emergency, but they allow residents flexibility when meeting with medical professionals.

<u>Public Safety</u> (911, interoperable networks): With reliable broadband comes increased public safety capability for EMS and police, fire departments. Not only can first responders communicate reliably with each other using mobile devices in the field, they can communicate with other agencies at the local, state, and federal level.

<u>Digital entertainment</u> (streaming services, gaming platforms): While school and work have long been linked with internet needs, at-home entertainment is now largely dependent on broadband. From smart TVs to gaming consoles, broadband is what ensures a family can stream Netflix, play games, and surf the web all the same time.



Online learning (K-12, higher education): Digital platforms connect teachers, administrators, and students alike with new and innovative curriculum and learning techniques. With reliable broadband throughout the county, students can connect to online, educational platforms from the school building and their kitchen table.

<u>E-commerce:</u> As businesses and community organizations expand their online presence, they expand their customer pool and ultimately increase profit. By utilizing websites and social media to market services and sell products, businesses are able to take part in a larger digital economy.

Community Advocates to Consider:

- Telework → Chambers of Commerce: Anson Chamber, Stamford Chamber
- Telehealth → Anson General Hospital, Anson Plaza Pharmacy, Anson Senior Living, Valley View Care Center, Stamford Health Department, Stamford Healthcare System, Stamford Family Health Center Clinic
- <u>Public Safety</u> → Hawley PD, Anson PD, MTC Bluebonnet Detention Center, Hamlin PD, Jones County Sheriff's Office, Stamford PD, TDCJ, Jones County EMC, Volunteer Fire (Anson, Hawley, Stamford, Hamlin, Lueders)
- <u>Digital Entertainment</u> → Internet Service Providers
- Online Learning → Superintendents (Anson ISD, Hawley ISD, Hamlin ISD, Stamford ISD, Lueders-Avoca ISD)
- <u>E-Commerce</u> → Stamford Development Corporation, Commissioners Court

Action 2 – Once the community has established key areas of broadband impact, the next step is to develop marketing materials that can be used locally, regionally, and across the state. The marketing materials should focus on the areas identified in action 1. Furthermore, the materials should highlight how important broadband is to community leaders and their commitment to technology advancement. While the majority of the marketing materials should highlight the lifestyle that broadband affords residents, it will also be important to highlight how community organizations, such as libraries, schools, businesses, and government entities, use broadband to contribute to overall quality of life. It is important that community organizations are given the opportunity to provide quotes, pictures, and material for the digital ads. The community should use free, online tools to create and edit the marketing material.

Action 3- Once the marketing materials are created, the next step is to distribute them far and wide. The goal is two-part. First, Jones County wants residents to see the value of living and doing business in the community. This goal is largely to retain residents who currently live in the community by showcasing all the resources and benefits offered by the county. Second, Jones County wants non-residents to hear about the county for the first time, discover the possibilities, and come for a visit — ideally a lifelong visit that includes buying a house, land, and sending their kids to the local elementary school. New residents, visitors, and businesses represent economic growth, job opportunities, and continued community growth/improvement.

Responsible Parties:

Community institutions: businesses, schools, libraries, organizations; local government leaders and elected officials; community residents; media outlets



Timeline:

With greater community development and expansion comes great opportunities for all residents. The sooner Jones County takes action to promote digital preparedness the sooner residents will see and experience the benefits. Jones County should begin developing marketing materials within six months of this action plan. By Q2 2022, Jones County should have published materials highlighting the digital preparedness of the community.

Resources:

- The Secret to Marketing Your City https://medium.com/@NYUurbanlab/the-secret-to-marketing-your-city-af563cde244
- 14 City Marketing Strategies to Attract More Travelers
- https://www.revfine.com/city-marketing/
- Texas Broadband Providers by County https://connectednation.org/texas/planning/
- New study shows digital preparedness helped organizations adapt to COVID-19
 https://news.microsoft.com/2021/05/06/new-study-shows-digital-preparedness-helped-organizations-adapt-to-covid-19/
- The \$0 Marketing Stack: 41 Free Options to Popular Paid Services and Tools https://buffer.com/library/free-marketing-tools/

INTERACTIVE MAP LINK:

https://connectednation.org/texas/jones/interactivemap

CONNECTED SURVEY RESULTS:

https://connectednation.org/texas/wp-content/uploads/sites/19/2021/07/Jones-County Portal-Results 07092021.pdf