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OVERVIEW



oday, 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 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, the Nacogdoches County Broadband Committee partnered with 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 steps would have the greatest impact toward improving broadband access, adoption, and use across every local sector. Pursuant of this goal, between July and October 2021, Nacogdoches County collected responses from 1,929 households, 79 businesses, and 19 K-12 facilities, among other community sectors.

Funding for this project was provided by the following public and private organizations:
Stephen F. Austin University, City of
Nacogdoches, County of Nacogdoches,
Nacogdoches ISD, Nacogdoches Economic
Development Corporation, NacSpace, and Better
Together, which is a community collaborative
focused on improving the health, mental health,
and wellbeing of all Nacogdoches County
residents. Better Together's initiatives are funded
via the Hogg Foundation for Mental Health's
Collaborative Approaches to Well-Being in Rural
Communities Initiative.

As part of the countywide engagement, CN Texas staff met with community officials to determine community needs and to gather qualitative data for consideration in the study.

NACOGDOCHES COUNTY, TEXAS

QUICK FACTS

Population

64,653

Households

24,722

Median Household Income

\$47,572

Poverty Rate

21.3%

Adults with a Bachelor's Degree or Higher

23.6%

Hispanic or Latino

21.0%

Households with Broadband Access¹

70.97%

Source:

https://data.census.gov/cedsci/profile?g=0500000US48347

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, July 2021.

https://connectednation.org/texas/planning/

NACOGDOCHES COUNTY OVERVIEW



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.

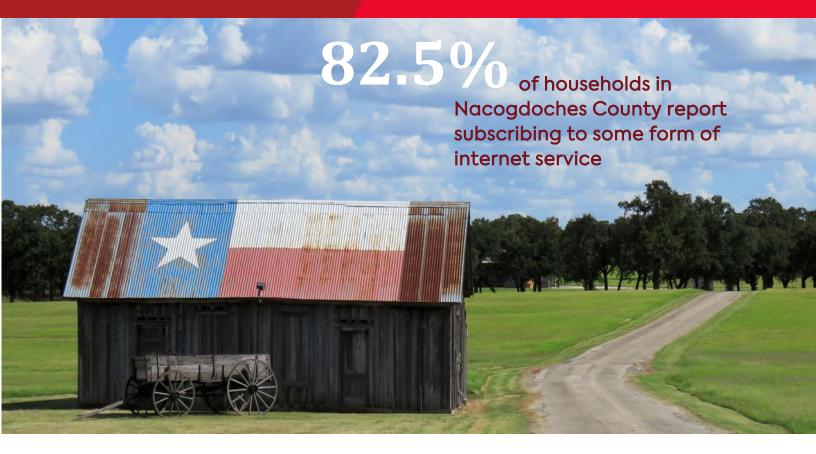
Data collected as part of the engagement played an integral role in developing a unique, locally informed action plan for Nacogdoches County. The following provides a summary of that assessment, as well as recommendations for improving broadband and technology access, adoption, and usage.

Recommendations	Short-Term Actions (6-12 Months)	Long-Term or Ongoing Actions (12 Months+ or Ongoing)
Coordination: Create a broadband committee in Nacogdoches County comprised of local stakeholders	*Appoint committee chair for the Nacogdoches County Broadband Committee (NCBC) *Identify eight advisory council members *Conduct routine broadband meetings based on goals, timeline, & needs *Maintain awareness of state-level initiatives	*Build community awareness for broadband expansion *Host monthly NCBC meetings and update corresponding website
Access: Achieve universal broadband access	*Review current and planned broadband deployments in county (meet with Internet Service Providers) *Reduce or eliminate local barriers to broadband deployment *Consider conducting a broadband field validation study among city/council officials	*Pursue federal and state funding opportunities *Leverage community assets and partnerships to increase broadband access and adoption
Adoption: Promote greater broadband adoption levels across all community sectors	*Promote free and reduced-cost broadband programs *Increase access to public computing centers	*Partner with public, private, state, and local entities to promote and sponsor digital skills development courses *Empower local organizations to be digital skills trainers
Use: Use broadband internet and related technologies to improve the health and quality of life of Nacogdoches County residents	*Identify community advocates in the following areas: economic development, health and human services, public safety, and education *Create workshop curricula using community resources and free online databases and host workshops	*Update curricula based on new resources/community needs *Curate online presence for Nacogdoches County businesses and community institutions

CN Texas created an interactive map. To access the map, please click <u>here</u>.

NACOGDOCHES COUNTY OVERVIEW





For households that do not subscribe to home internet service, the top barrier is a lack of available service, followed by the cost of internet service.

Only **69.61%** of households in Nacogdoches 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.

Nacogdoches County households pay more on average for access to the internet (\$89.45) than other Connected communities (\$71.96).

About 67% of households and 60% of businesses reported that they were dissatisfied with their current internet service. The top reasons for dissatisfaction were slow speeds and unreliable connections.

More than 19 out of 20 households (95.6%) said they would like to have improved or additional options for home internet service.



INFRASTRUCTURE: Nacogdoches County



According to CN Texas broadband data initially released in July 2021, followed by additional public feedback, field validation, and provider input: over two-thirds (70.97%) of Nacogdoches 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 Nacogdoches County is concentrated near the towns of Cushing, Garrison, and Nacogdoches.

Below is the list of internet service providers (ISPs) in Nacogdoches County.

BROADBAND INFRASTRUCTURE OUICK FACTS

Unserved Households (25/3 Mbps) 6,928

Households Served (10/1 Mbps) 93.62%

Households Served (25/3 Mbps) 70.97%

Households Served (50/5 Mbps) **70.32%**

Households Served (100/10 Mbps)
69.61%

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

PROVIDER	TECHNOLOGY	MAXIMUM DOWNLOAD SPEED (Mbps)	MAXIMUM UPLOAD SPEED (Mbps)
AT&T Southwest	DSL	25	2
Mai 300thwest	Fixed Wireless	10	1
Cable ONE	Cable	1000	50
Consolidated Communications	DSL	100	100
NDemand	Fixed Wireless	10	3
Suddenlink Communications	nlink Communications Cable		50
Windstream Sugar Land Inc.	DSL	200	200

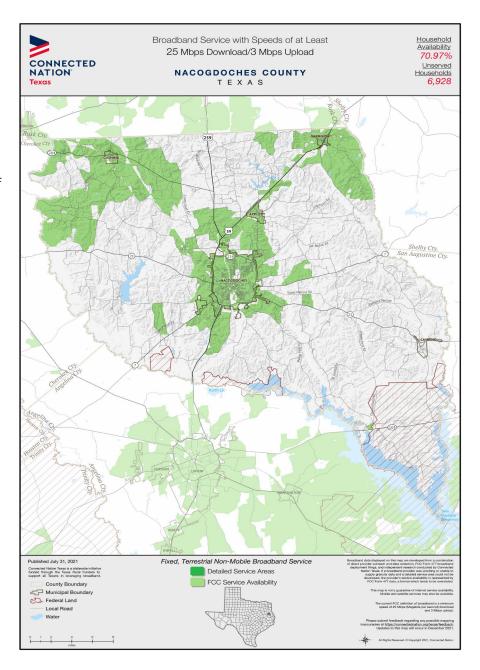
INFRASTRUCTURE: Nacogdoches County



Below is Nacogdoches County's (25/3 Mbps) map. To access the full map, go to https://connectednation.org/texas/county-maps/ and select Nacogdoches 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 Nacogdoches County and statewide 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 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.

Access the full map as a PDF here.







HOUSEHOLDQUICK FACTS

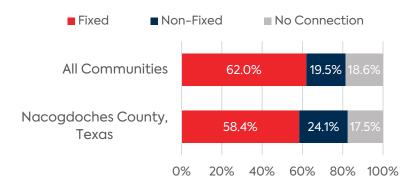
Fixed Home Broadband Adoption **58.4%**

Average Monthly Internet Cost \$89.45

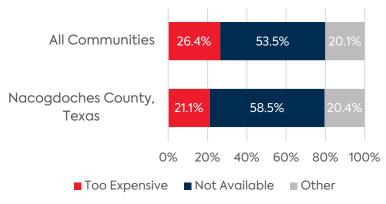
Average Download Speed **29.7 Mbps**

Households Satisfied with Service 33%

Home Broadband Adoption



Primary Barrier



he following provides an overview of results from a broadband survey conducted in Nacogdoches County between July and October 2021. Altogether, CN Texas received 1,929 completed surveys from households across the county, and respondents provided insights into their internet connectivity or lack thereof. Data from Nacogdoches 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.

ADOPTION

In Nacogdoches County, 58.4% of households that took the survey subscribe to fixed broadband service delivered via a cable, DSL, fiber, or fixed wireless technology. Almost one-quarter of respondents (24.1%) indicate they have internet service delivered via dial-up, satellite, or a mobile wireless service. This leaves 17.5% of survey respondents without internet access at home.

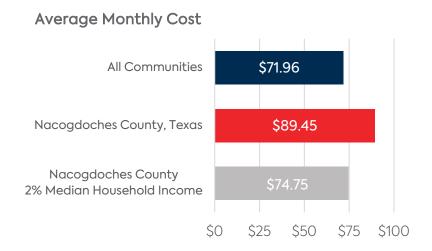
Among those without a home internet connection, 58.5% said they did not have broadband because it was not available to them, while one-fifth (21.1%) indicate that it was too expensive. Like in many communities, cost and availability are the two primary barriers to home broadband adoption.

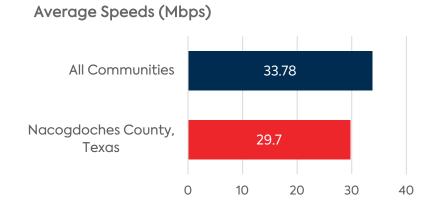


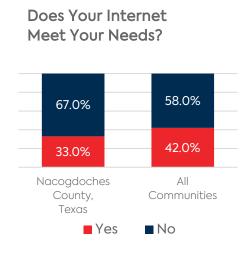
CONNECTION DETAILS

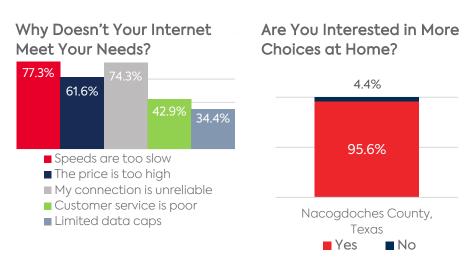
Two percent of monthly income is a recognized standard for measuring the affordability of a home internet connection. Respondents indicate that, on average, their internet connection costs about \$89.45 per month. This is higher than the monthly cost in other communities (\$71.96). Two percent of the median household income in Nacogdoches County is \$74.75 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 29.70 Mbps, which is a little above the minimum defined speed.











Competition provides residents with choices for service, allowing households the ability to switch providers if their current service does not meet their needs. Two-thirds (67%) of responding households indicate that their internet connection does not meet their needs. This is a higher rate of dissatisfaction than among households in other communities (58%).

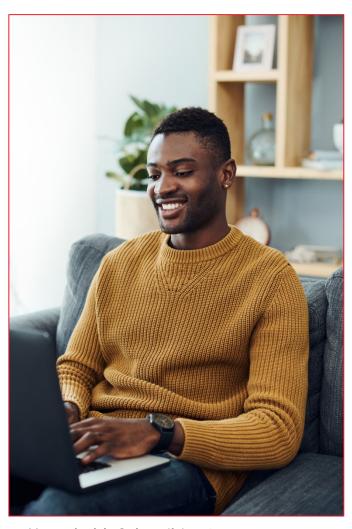
When asked why their connection does not meet their needs, 77.3% of dissatisfied households indicate that their speed is too slow; 61.6% say the price is too high, and almost three-quarters (74.3%) indicate that the connection is unreliable. Respondents could choose more than one reason for dissatisfaction.

Finally, 95.6% of all respondents indicate that they are interested in additional internet choices for their home.

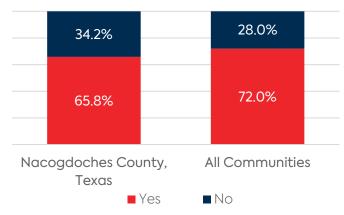
MOBILE CONNECTIVITY

Almost two-thirds (65.8%) of households reported that they subscribe to mobile internet service, which they access via a smartphone or similar mobile device. This is on par with what is reported in other Connected Communities (72.0%).

Additionally, 32.7% of mobile-connected households report that they 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



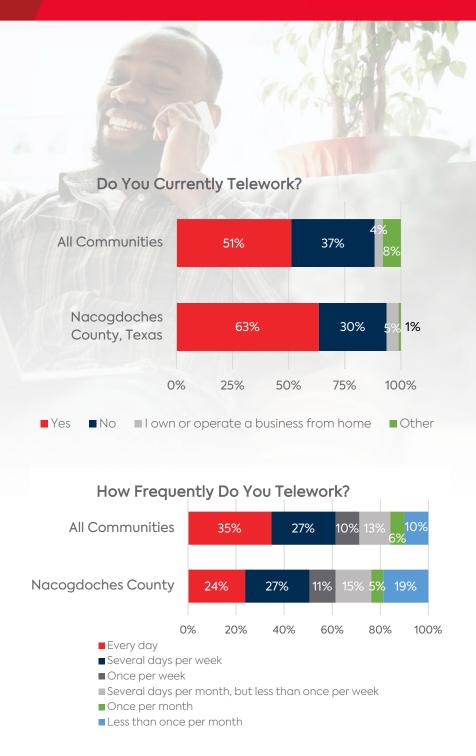


TELEWORK

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. In Nacogdoches County, the lack of broadband access was a likely barrier to organizations operating virtually if needed.

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.

Approximately 63% of employed respondents in Nacogdoches County telework in some capacity. Almost one-quarter (24% of this group) telework every day.







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

Goal 1: Establish central leadership for broadband advancement in Nacogdoches County as a tool for economic advancement and an enhanced quality of life.

To ensure the success of the community action plan and to equip Nacogdoches County with the necessary tools for broadband growth, the community should centralize broadband expansion and improvement efforts in a single entity. It is important to have a council that represents all community sectors so that they can funnel all broadband interests of the community in one place. Broadband is more than just infrastructure; it is the backbone upon which economic advancement and quality of life can be enhanced. Thus, making centralized leadership an integral component of long-term success in Nacogdoches County.

Overall, this proposed goal takes the existent Nacogdoches County Broadband Committee (NCBC) and refreshes its mission and empowers community broadband advocates to further the broadband agenda in Nacogdoches County. Note: for the sake of this document, "Council," "Committee," and "NCBC" are synonymous.

Objective:

Create a Broadband Committee in Nacogdoches County comprised of local stakeholders who are dedicated and equipped with the skills, resources, and opportunity to bridge the digital divide.

Actions:

Action 1 – Create a County Broadband Committee and appoint a chair to oversee broadband matters in the county. Nacogdoches County should establish a comprehensive community group known locally as the Nacogdoches County Broadband Committee. The first step is to appoint a chair of the committee. The county should collaborate to find available funds to provide for the chair's salary. Nacogdoches County would benefit from a designated community champion who can organize, plan, and track broadband projects and opportunities in the community.



The responsibilities of the committee chair should include:

- Oversee county broadband goals, objectives, and ongoing projects with relation to funding (budget), timeline (schedules), and need (service area)
- Coordinate monthly council meetings: date, time, locations, guest speakers, presentation materials
- Provide funding reports to the general committee and Commissioners Court
- Maintain open lines of communication with internet service providers (ISPs) in the community and facilitate partnerships with municipalities and organizations as needed

Second, a board of advisors should be selected who will augment the work of the chair, providing outreach to their respective professional fields.

Board of advisor members could include representatives of each of these sectors:

- Health Care: Local physicians or hospital staff, East Texas Community Health Services, Burke, Brown Family Health Center, Nacogdoches Memorial Hospital, Garrison Nursing Home, Nacogdoches Medical Center
- Government: County Judge, County Commissioners, Mayor, City Council, County IT Director
- Education (K-12): Superintendents, School IT Directors, and other representatives from Central Heights ISD, Chireno ISD, Cushing ISD, Douglass ISD, Etoile ISD, Garrison ISD, Martinsville ISD, Nacogdoches ISD, Woden ISD, Regents Academy, Christ Episcopal School. Fredonia Hill Baptist Academy, and Nacogdoches Christian Academy,
- Education (Higher Education): Stephen F. Austin University
- Public Safety: Nacogdoches County Sheriff's Office, Nacogdoches Police Department, Nacogdoches Fire and Rescue and surrounding VFDs, Nacogdoches County EMS
- Agriculture: County agricultural agent, leading agricultural producers
- Business: Nacogdoches Chamber of Commerce, Nacogdoches Economic Development Corporation (NEDCO)
- Community At-Large: Someone from the community who is interested in furthering the broadband agenda of Nacogdoches County

The responsibilities of the Committee should include:

- Create a strategic vision for the county regarding broadband access, tracking short-term and long-term progress towards achieving universal broadband access in Nacogdoches County
- Stay up to date on state and federal broadband legislation
- Monitor broadband grant expenditures in the County
- Apply for applicable state and federal grant programs
- Monitor state, national, and global technology trends



- Ensure digital engagement in Nacogdoches 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
- Participate in regular meetings. The Committee should meet at least once a month. Meetings
 can be held virtually, in-person, or in a hybrid capacity to accommodate the needs of
 members. 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 Nacogdoches County.

Action 2 – Collaborate with broadband providers and local officials on planning broadband projects that impact Nacogdoches County. The Council should pursue financial and strategic partnerships with internet service providers. Ultimately, Nacogdoches County should play a strategic role in ongoing or planned projects that will benefit the most residents.

Should Nacogdoches County, or any municipality, choose to spend any federal funds on broadband, it is important that they are prepared, informed, and equipped to begin working with reliable provider partners.

Action 3 – Create a technology portal/website to promote local broadband resources and track ongoing NCBC progress and initiatives. The website should include resources related to digital literacy, digital skills, reduced-cost broadband offerings in the county, public computing centers, and other relevant information for residents and ISPs. The Chair should also update the site with council meeting minutes, initiatives, decisions, and ongoing resolutions.

Action 4 – <u>Track state and national broadband policy</u>. The Broadband Committee should remain informed and up to date on any publications, events, and policy briefs published by the (1) Governor's Broadband Development Council (GBDC) and (2) Broadband Development Office (BDO). The Council should coordinate ongoing community outreach efforts and initiatives in accordance with the long-term objectives of these entities. Local broadband teams should mirror the successes and objectives laid out by the State.

Responsible Parties:

Community anchor institutions: libraries, schools, businesses, non-profits, etc.; Internet service providers; Local units of government; Community residents.



Timeline:

Members of the broadband council should be identified within 16 weeks of receiving this plan. The committee should convene within four weeks of the appointment of its members.

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/

Current Broadband Funding https://connectednation.org/current-broadband-funding

BroadbandUSA: Federal Funding Guide https://broadbandusa.ntia.doc.gov/resources/federal

Guide to Federal Broadband Funding Opportunities in the U.S.

https://www.internetsociety.org/resources/doc/2021/ auide-to-broadband-funding-opportunities-in-us/ City of Memphis: Broadband Project Manager, Senior https://memphistn.referrals.selectminds.com/jobs/broadband-project-manager-senior-1529

Letter: Do your part on broadband https://www.thepilot.com/opinion/letter-do-yourpart-on-broadband/article 026daa54-3370-11ec-

94a1-f72ef6c67483.html

The Anatomy of a Community Broadband Manager https://nextcenturycities.org/the-anatomy-of-a-broadband-manager/

TARA Leadership: Rondella Hawkins https://austintexas.gov/page/tara-leadership

Josh Edmonds: Director of Digital Inclusion for the City of Detroit

https://detroitmi.gov/news/city-hires-new-director-help-close-detroits-digital-divide

Coronavirus State and Local Fiscal Recovery Funds, County Allocation

https://home.treasury.gov/system/files/136/fiscalrecoveryfunds countyfunding 2021.05.10-1a-508A.pdf

Goal 2: Achieve universal broadband access in Nacogdoches County so all residents have affordable, reliable, and high-quality service.

The NCBC should work towards ensuring that everyone in Nacogdoches has access to high-speed internet. Nacogdoches, like the rest of Texas, should be a place where *everyone* can access the economic, educational, and entrepreneurial opportunities presented by the abundance of resources available via technology access. Those without access will be left behind as more and more opportunities are only available online. The following is an excerpt from the 2021 Governor's Broadband Council Report: "In order to expand broadband access to all Texans, the state faces two simultaneous challenges. First, there remains barriers to access which are particularly prevalent in rural areas. As of July 2021, roughly 85 percent of all Texans who lack broadband access live in rural areas (nearly 700,000 individuals). Furthermore, over 100,000 Texans in urban areas are similarly unable to access broadband from their homes."



According to data published by Connected Nation Texas in July 2021, roughly 71% of homes in Nacogdoches County have access to broadband at speeds of 25/3 Mbps. This leaves almost 7,000 homes unserved. This means over 7,000 households are missing the opportunity to access the internet where tremendous opportunities are being generated every day.

Objective:

Increase access to reliable, fast, and affordable broadband through strategic partnerships with internet service providers, regional organizations, and local stakeholders who can expand and improve broadband infrastructure.

Actions:

Action 1 – Review current and planned broadband deployments in the county. The broadband council, in partnership with community leaders, should meet with internet service providers (ISPs) in the community. This includes meeting with those providers who have been allocated funding through the Rural Digital Opportunity Fund (RDOF) and those who have pledged to build in and around the county, such as Vexus Fiber. Community leaders should assess the **status** and **viability** of ongoing, or upcoming, infrastructure improvement and expansion projects. It will be important to know and understand where new or improved infrastructure is being built around the county and how it will affect broadband speeds and delivery to residents.

Furthermore, when meeting with providers, community leaders should address the survey results, highlighting the need for affordable, reliable, and fast service. It is important for providers to understand the consumer base in Nacogdoches County to provide the best customer service experience. Two-thirds of residents with a broadband subscription (67%) report being dissatisfied with their current service, citing slow speeds, unreliable connections, and high prices as the leading reasons for dissatisfaction. Armed with this information, broadband providers can strategically address their service areas and improve access throughout the county.

Vexus Fiber

In November 2021, Vexus Fiber announced plans to expand their fiber network in the City of Nacogdoches and surrounding areas. According to a press release issued by Vexus, "The network will be privately funded by Vexus, introducing more than 15,000 residences and businesses to symmetrical multi-gigabit speed internet service... Vexus fiber plans to begin construction in the spring, with availability to some neighborhoods and businesses before the end of 2022. Full completion of the network, throughout most of Nacogdoches, will take approximately 18 months." The full press release can be found in the appendix at the end of this document.

RDOF

RDOF Phase I Auction Winning Bids:

• CCO Holdings (Charter): 4,685 locations for \$9,617,038.00



- LTD Broadband: 53 Locations for \$59,562.00
- Windstream Services: 15 Locations for \$45,084.00

As of now, RDOF awards are pending federal review. The FCC must determine the viability of RDOF projects during a long form review process before issuing funding. Certain RDOF recipients have defaulted in their contractual obligations, and more are expected. It is important to maintain situational awareness of RDOF and ongoing projects throughout the community. For more information about the RDOF program, please see the accompanying links in the resource section.

Action 2 – Consider conducting a broadband field validation study. As Nacogdoches County seeks to bring better connectivity to residents, it is important to know what providers serve the community and where their infrastructure is located. Accordingly, Nacogdoches County should consider conducting a field validation study. This would entail locating, identifying, and documenting targeted wireline platforms such as digital subscriber line (DSL), hybrid fiber coaxial (HFC), fiber-to-the-home (FTTH), middle mile fiber optic transport lines, and fixed wireless transmit locations, mapping infrastructure assets and provider service boundaries. Such work would allow the community to accurately assess and map known broadband speeds and delivery platforms.

Action 3 – <u>Pursue federal and state funding opportunities</u>. Following meetings with providers, the broadband council should identify state and federal funding programs that are beneficial and likely to further the community's broadband agenda. Broadband funding programs focus not only on infrastructure expansion and improvement but on device acquisition, digital literacy, improving connectivity in community organizations, and other related areas. In a time when broadband is at the forefront of state and federal legislative conversation, it is important for the broadband council to make the most of available funds. Resources with broadband funding programs have been linked in the below resources.

Action 4 – <u>Eliminate local barriers to broadband deployment</u>. The NCBC should review local policy to ensure there are no barriers to broadband deployment, such as deployment moratoria, unfair or burdensome rights-of-way negotiation and approval processes, excessive fees for permits and other costs, and other unreasonable conditions. The committee should ensure that all required information is easily accessible to providers via the committee website.

Timeline:

The community should outline the scope of broadband infrastructure projects (ongoing and planned) and begin meeting with providers within four months of receiving this community action plan.



Resources:

Governor's Broadband Development Council 2021 Report

https://gov.texas.gov/uploads/files/business/2021 GB DC Report (Final - 9-17-21).pdf

Guide to Federal Broadband Funding Opportunities in the US

https://www.internetsociety.org/resources/doc/2021/guide-to-broadband-funding-opportunities-in-us/

Current Broadband Funding

https://connectednation.org/current-broadbandfunding

BroadbandUSA: Federal Funding Guide

https://broadbandusa.ntia.doc.gov/resources/federal

Texas Broadband Providers by County https://connectednation.org/texas/planning/

Auction 904: Rural Digital Opportunity Fund https://www.fcc.gov/auction/904

FCC: First RDOF Default Public Notice https://www.fcc.gov/document/first-rdof-default-public-notice

Vexus Fiber Announces New Build Plans in Nacogdoches: \$20 Million 100% Fiber Optic Network to Go Live in 2022

https://www.vexusfiber.com/press-releases/10925/

Vexus Fiber Expanding in Texas https://www.telecompetitor.com/vexus-fiberexpanding-in-texas/

Goal 3: Increase broadband adoption and use in Nacogdoches County to increase the County's digital capacity.

Broadband adoption is critical for increasing the digital capacity of a community and empowering residents and community leaders. Adoption not only refers to subscription to a service provider, but also refers to the daily use of the internet. Broadband adoption requires basic computer skills and access to a personal device that enables an individual to accomplish basic tasks. Since the inception of public internet, the leading barriers to broadband adoption in areas where access is not an issue have been affordability, lack of digital skills, and lack of awareness. Therefore, it is imperative for project plans to reflect programs that can help overcome barriers to adoption – particularly for low-income households and other vulnerable populations.

In the household survey, 21% of households who do not have internet stated cost was a barrier. The cost barrier can be further explained by the poverty rate in the county. According to U.S. Census data, one in five residents are living in poverty¹ – with more than one in three residents of the City of Nacogdoches living in poverty.² These poverty rates are both higher than the statewide average of

¹ United States Census Quick Facts Nacogdoches County, Texas https://www.census.gov/quickfacts/fact/table/nacogdochescountytexas,TX/PST045219.

² Nacogdoches, Texas (TX) Poverty Rate Data https://www.city-data.com/poverty/poverty-Nacogdoches-Texas.html.



13.6%.³ Compared to the state average, the disparity in these numbers present a distinct need for affordable broadband options in Nacogdoches County. As such, it is important for qualifying residents to know there are options that exist to make broadband more affordable.

Objective:

Increase the adoption and use of broadband and related technologies by the residents of Nacogdoches County.

Action 1 – <u>Promote programs that help residents overcome the affordability barrier to broadband adoption.</u> The county should work with community leaders and institutions to publicly promote programs and opportunities designed to reduce the cost of broadband service. This can be done by advertising in the newspaper, providing updates in monthly school newsletters, posting flyers in public buildings throughout the county, or publicly discussing at Commissioners' Court and city hall meetings.

Below are some programs and resources that are available to residents:

- Resources to locate affordable internet service or computers: Using online resources,
 Nacogdoches residents can identify local and national providers who offer special low-cost
 services for vulnerable populations, older adults, and low-income families with children. Such
 resources include_EveryoneOn (https://www.everyoneon.org/), which helps residents locate
 low-cost internet services and affordable computers by ZIP code and by need based on their
 participation in assistance programs.
- Low-cost internet services offered by providers: In Nacogdoches County, AT&T offers the *Access from AT&T* program for \$10 per month or less based on the maximum speed available at the address, with download speeds up to 25 Mbps. Suddenlink offers *Optimum Advantage Internet* for \$14.99 per month for up to 50 Mbps.⁴
- State and federal low-cost programs: There are two critical programs that offer discounts for broadband to eligible households:
 - o **State Lifeline Program:** This is a government assistance program run by the Public Utility Commission of Texas that provides a discount to qualifying low-income customers that subscribe to voice telephone service or broadband internet access service. The Lifeline discount for qualifying low-income customers may be up to \$12.75 depending on the services a resident subscribes to and the customer's eligibility. Lifeline service is non-transferrable and is limited to one discount per household.
 - Federal Lifeline Program: Lifeline is also available at the federal level to help qualifying low-income consumers achieve access to phone and internet service.

³ Source: https://www.census.gov/quickfacts/fact/table/nacogdochescountytexas,TX/RHI125219

⁴ These programs are subject to change by the provider and may not be available to the whole county.



- Additional information about the program can be found on the Federal Communications Commission (FCC) <u>website</u>.
- The Emergency Benefit: The FCC recently launched a temporary Emergency Broadband Benefit (EBB) Program in response to the COVID-19 pandemic which provides a discount on monthly bills (\$50 per month plus \$100 for a device) for qualifying low-income households. To find out which providers are offering this service, go to https://getemergencybroadband.org/companies-near-me/. The list of providers offering EBB in Nacogdoches include some providers listed on the CN map, including AT&T, Suddenlink and Windstream.

With the passage of the Infrastructure Investment and Jobs Act (commonly referred to as the Infrastructure Bill), the EBB will become permanent under a new name, the "Affordable Connectivity Program." The program will offer a subsidy of \$30 a month for qualifying homes.

• Nacogdoches Public Library: The library loans hotspots and laptops to patrons. These devices were funded via a grant from the U.S. Institute of Museum and Library Services and Texas State Library and Archives Commission.



Low-Cost Broadband Program Summary

Provider	Program Name	Cost and Features	Eligibility	How to Apply
AT&T	Access from AT&T	\$10/month or less based on the maximum speed available at the address with speeds up to \$25 Mbps. Free installation	Households with families on Supplemental Nutritional Access Program (SNAP) Families on the National School Lunch and Head Start Programs Household with income at or below 135% of the federal poverty guidelines.	APPLY ONLINE or call 1-855-220-5211 (English) or
Suddenlink	Optimum Advantage Internet	\$14.99/month Up to 50 Mbps Internet Free installation Free Wi-Fi router Unlimited data	Households with families on Supplemental Nutritional Access Program (SNAP) Seniors 65 years or older and eligible for or receive Supplemental Security Income (SSI) Veterans that receive state or federal public assistance.	<u>APPLY ONLINE</u> or call 1-844-358-3147
State and Federal Governments	Lifeline (State and Federal)	Up to \$12.75 discount for broadband service from participating providers (\$3.50 state discount and \$9.25 federal discount.	At least one person in household who receives: SNAP, TANF, or SSI Housing Assistance National School Lunch Program Household with income based at or below 150% and 135% of the federal poverty guidelines for the state and federal discounts respectively.	APPLY ONLINE or DOWNLOAD application package and send by mail For more information on the federal program, click HERE
Federal Government	Emergency Broadband Benefit Program	\$50 per month discount and a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet. This program is available during the COVID-19 pandemic period or until the \$3.2 Billion fund is exhausted. The program could be made permanent via the infrastructure bill.	 An income at or below 135% of the Federal Poverty Guidelines or participates in certain assistance programs, such as SNAP, Medicaid, or Lifeline. National School Lunch and Head Start Programs Federal Pell Grant recipient Experienced a substantial loss of income due to COVID-19 Meets the eligibility criteria for a participating provider's existing low-income or COVID-19 program 	1. Contact a participating broadband provider 2. APPLY ONLINE 3. Call 833-511-0311 for a mailin application or print a copy, and return it along with copies of documents showing proof of eligibility to: Emergency Broadband Support Center P.O. Box 7081 London, KY 40742
Nacogdoches Public Library	Library of Things	Free	Contact the library staff at for eligibility requirements.	4. Call (936) 559-2970



Consider the following institutions and leaders to help promote these programs:

- School Districts: Central Heights ISD, Chireno ISD, Cushing ISD, Douglass ISD, Etoile ISD, Garrison ISD, Martinsville ISD, Nacogdoches ISD, Woden ISD
- Private Schools: Regents Academy, Christ Episcopal, Fredonia Hill Baptist Academy, Nacogdoches Christian Academy
- Local and county government:
 - o Chireno, Cushing, Garrison, Nacogdoches City Councils
 - Nacogdoches County
- Local media:
 - o Newspapers: The Daily Sentinel, The Pine Log, La Lengua,
 - Radio: KLDN 88.9FM "Red River Radio," KSAU 90.1FM, KSWP 90.9FM, KAVX 91.9FM, KFOX – 95.9FM, KJCS – 103.3FM "The Bull," KYKS – 105.1FM, KTBQ – 107.7FM, KSFA – 860AM
 - o Television: KTRE-TV (ABC), KFXK and KFXL (FOX), KLSB-TV (NBC)
- Other: Nacogdoches Public Library, The Salvation Army, Nacogdoches United Way, other public locations such as convention centers, food pantries, and visitor centers

Action 2 – Ensure that Nacogdoches County residents have access to affordable internet-enabled devices that meet their needs. Of note, 4% of residents who do not have a home internet connection cited not owning a computer as barriers to adoption. Therefore, this issue coupled with the high poverty rate in Nacogdoches County means that there is a need to make affordable devices available in the county. There are two ways to achieve this. 1) Promote programs that provide access to low-cost devices such as PCs for People or HumanIT, and 2) The County and/or the cities in Nacogdoches County should create a program where departments and businesses could donate surplus computing devices for refurbishment and distribution or sale in high-need communities.

Action 3 - Bring awareness and encourage the availability of public access computers across Nacogdoches County. This is important because not all households will be able to maintain and/or afford the level of internet access they may always require for essential use at all times. These public access computers and facilities should not be limited to public libraries; they could include mobile computer labs, workforce development centers, senior centers, afterschool centers, and places of worship. NCBC should consult with local government offices to ensure publicly funded facilities such as afterschool centers, community centers, and libraries have adequate internet-enabled devices and high-speed internet.

In our survey, only Nacogdoches Public Library indicated that that they offer public access to computers. To ensure all residents have access to the internet, Nacogdoches County should increase the number of publicly available computers in frequently accessed locations. This can include



increasing the number of devices in locations that currently serve the public or the addition of computers, laptops, and tablets in locations that currently have none. The County, schools, and library can use funds or grant money to acquire new devices or partner with community organizations and internet service providers to outfit buildings with computing devices.

Locations to consider:

- Schools, libraries, community organizations such as churches and food pantries
- Chamber of Commerce, EDC
- Government Buildings: City Hall, Courthouse
- Deep East Texas Council of Governments

Action 4 – Increase digital literacy skills and digital readiness training available in Nacogdoches

<u>County</u>. The NCBC should establish partnerships with colleges, universities, workforce development entities, business owners, and libraries to develop mentoring programs that advance digital readiness, digital skills, and upskilling to technology jobs, particularly those skills needed by employers. Partnerships should promote the importance of being digitally literate to stay safe online, improve job skills, and access electronic services, among others. Two survey respondents indicated that they provide some digital skills training in Nacogdoches, and the library has played a key leadership role in providing digital literacy training while providing general community support. Other community institutions noted that they could offer more services and training if they only had internet service.

Action 5 – <u>Partner with public and private entities across Nacogdoches County to develop a public service announcement</u>. NCBC should work with local entities to produce and release a PSA promoting the importance of broadband, digital skills and digital readiness, for advancing economic opportunity and quality of life in Nacogdoches County. Additionally, the PSA should be used to promote the NCBC's mission and vision and how it impacts the residents of Nacogdoches.

Responsible Parties:

Local units of government and elected officials; broadband providers; community and regional organizations and institutions: businesses, schools, libraries; community residents.

Timeline:

Disseminating information about free and reduced-cost broadband services should begin immediately to ensure anyone who wants access can get access. For residents who cannot access the internet at home, public computers are the next-best option for accessing the digital world. To meet the needs of these residents, Nacogdoches County should increase the number of free, public computing stations by the fall of 2022.



Resources

Emergency Broadband Benefit https://connectednation.org/ebbprogram/

Universal Service Administrative Co.: Lifeline https://www.lifelinesupport.org/#

Free Wi-Fi Hotspot Locator Apps https://www.lifewire.com/free-online-wifi-hotspot-locators-818276

Texas Broadband Providers by County https://connectednation.org/texas/planning/

Guide to Federal Broadband Funding Opportunities in the U.S.

https://www.internetsociety.org/resources/doc/2021/guide-to-broadband-funding-opportunities-in-us/

Human I-T https://www.human-i-t.org/

PCs for People https://www.pcsforpeople.org/

Current Broadband Funding

https://connectednation.org/current-broadband-funding

BroadbandUSA: Federal Funding Guide https://broadbandusa.ntia.doc.gov/resources/federal

How to Create a Public Computer Center https://www.newamerica.org/oti/blog/how-to-create-a-public-computer-center/

Northland Public Library https://www.northlandlibrary.org/computer-center/

First –Ever National Study: Millions of People Rely on Library Computers for Employment, Health, and Education (Bill and Melinda Gates Foundation) https://www.gatesfoundation.org/ideas/mediacenter/press-releases/2010/03/millions-of-peoplerely-on-library-computers-for-employment-healthand-education

Goal 4: Use broadband internet and related technologies to improve the health and quality of life of Nacogdoches County residents.

In 2021, Nacogdoches County partnered with Connected Nation Texas to better understand the broadband landscape of the community. Survey results reveal that, among other community sectors, 82.5% of residents subscribe to some sort of internet service (including mobile and non-fixed internet platforms), 66.7% of agriculture producers subscribe, and 91% of businesses subscribe. While these are strong subscription rates, internet adoption is but part of the equation. It's important to understand how a community is using the internet in order to understand if they are making the most of it. Ultimately, if used correctly, broadband should contribute to improved quality of life among all community residents. When embraced as an integral part of life, broadband contributes to a thriving community and promotes greater quality of life for residents.

Objective:

Increase broadband access, adoption, and use across all community sectors though a public education campaign and corresponding outreach and community workshops designed to highlight the quality of life offered by broadband.



Actions:

Action 1 – <u>Promote quality of life offered by broadband access, adoption, and use</u>. The Nacogdoches County Broadband Council should identify key advocates in each of the following areas who can educate the general community about the short- and long-term benefits of broadband adoption and use. Industry leaders can speak to the importance of broadband in their line of work, as well as discuss the myriad of uses. The more residents, businesses, and community institutions understand the positive benefits of broadband, the greater the likelihood of adoption and use.

1. ECONOMIC AND COMMUNITY DEVELOPMENT

<u>Highlight economic and practical advantages of telework:</u> According to survey results, 63% of employed survey respondents telework. Of that group, 24% work remotely every day with an additional 27% teleworking multiple days per week. By teleworking, an employee can reside in Nacogdoches County but be employed by an entity in Dallas, Houston, Lubbock, or another state entirely. 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. The key to telework is adequate digital skills to engage online and a reliable internet connection.

<u>Promote e-commerce</u> as the gateway to the global economy: 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. Fewer than two-thirds of businesses (63%) currently have websites, according to survey feedback. With an active and invested Chamber of Commerce and

EDC, Nacogdoches County businesses can access local resources designed to improve their online presence.

2. HEALTH AND HUMAN SERVICES

Showcase timesaving and health-related (physical and mental) benefits of telehealth services: The future of medicine is online. For communities who lack large hospital chains, surgical attendees, and medical specialists, telehealth is a natural substitute. Online medical services allow residents to speak with top-of-the-line doctors, dentists, surgeons, dermatologists, veterinarians, and medical specialists through the click of a button. These online services are not only important in times of emergency, but they allow residents great flexibility when meeting with medical professionals. Survey results reveal that 100% of the health care facilities that responded to the survey in Nacogdoches are subscribing to internet services and 87.5% are utilizing videoconferencing services in some capacity. It's important to note that telehealth includes teletherapy and related medical care. Telehealth is an important health care option not just for treating physical needs, but also addressing psychological needs.



Telehealth does not have to fit inside a box and is not intended to be a substitute for rural medical providers; if anything, telehealth is meant to enhance the services already offered by hard-working, conscientious rural medical professionals.

3. EMERGENCY MANAGEMENT AND PUBLIC SAFETY

<u>Promote the importance of emergency preparedness in public safety sector (911, interoperable networks)</u>: With reliable broadband comes increased public safety capability for EMS, police, and fire departments. Not only can first responders communicate reliably with each other using mobile devices in the field, but they can communicate with other agencies at the local, state, and federal level. It is paramount for first responders to have full broadband coverage in case of emergency in order to communicate with local and state agencies. More than four out of five public safety respondents (83%) rated current mobile broadband availability in the county as fair or poor.

4. SCHOLASTIC ACHIEVEMENT

<u>Demonstrate scholastic resources and achievements available through **online learning** (K-12 and 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>

Community Advocates to Consider:

- Community and Economic Development → Nacogdoches Chamber of Commerce, Nacogdoches EDC, Nacogdoches County Commissioners Court
- Health and Human Services → Nacogdoches Medical Center, Nacogdoches Memorial Hospital,
 East Texas Health Clinic, Jail Infirmary
- Emergency Management and Public Safety → Emergency Management Staff (Tara Triana), Nacogdoches County Sheriff's Office, Nacogdoches Police Department, Nacogdoches Fire and Rescue, County-Wide VFDs, Cushing ISD PD
- Scholastic Achievement → Superintendents and school principals (K-12: Central Heights ISD, Chireno ISD, Cushing ISD, Douglass ISD, Etoile ISD, Garrison ISD, Martinsville ISD, Nacogdoches ISD, Woden ISD; Higher-Ed: Stephen F. Austin University, Nacogdoches County Career and Technical Center)

Action 2 – <u>Develop curriculum for free community workshops</u>. Once the industry leaders have been identified, the community should develop and host free workshops. Ultimately, the goal is for residents and community institutions (businesses, police departments, clinics, schools, etc.) to increase their online presence and general digital communication. The intention is for residents and community



leaders to understand the importance of digital engagement and to feel comfortable using online platforms. The more the community engages online, the more they will reap the benefits of a digital lifestyle.

1. ECONOMIC AND COMMUNITY DEVELOPMENT

Broadband greatly contributes to economic and community development. Not only does broadband allow businesses to expand and reach new consumers, but it also allows communities to evolve and meet the changing needs of their residential population. Communities do not have to remain stagnant because people and innovation do not remain stagnant. To ensure that businesses, local industries, and the county are keeping pace with our increasingly digital society, workshops should focus on increasing the online presence of community institutions. For example, survey results reveal that only 63% of businesses report having a website, while 78% of residents indicate they interact online with local business at least once a week. Websites are a key marketing tool for businesses and an important resource for updates in times of emergency.

Businesses in Nacogdoches County report that 52.5% of their employees are moderate to advanced technology users. In contrast, businesses indicated only 31% of their current workforce had technology skills that matched the needs of the company "very well or excellently." These disparate numbers are ultimately troubling because it shows workers are not meeting the needs of the companies. An employee's competitiveness in the professional world can be directly linked to their technical skills and abilities, given the increasingly digital nature of the workforce. Workforce development and continuing education are a vital part of economic and community development. Not only will employees benefit from greater, more advanced skillsets, but employers will reap the rewards in Nacogdoches County.

Workshop topics to consider:

- An introduction to Microsoft Office Suite, training employees on the basics of Microsoft Office Suite given its ubiquitous use in companies/industries.
- How to Teleconference, teaching what is telework and why is it appealing for employees and employers
- An introduction to social media and websites, teaching businesses how an online presence can help businesses grow and improve productivity

For reference, the Wichita Falls Chamber of Commerce has a program called Business Owners Sharing Solutions (BOSS). The professional development engagement has quarterly panel discussions on specific topics related to business development. The October feature was all about social media. The website said, "The unwritten rules for using social media platforms for marketing can be daunting. We know how hard it is to keep up with all the social media trends these days... This is why we've gathered four local businesses owners who are making social media work for them and help us have a better idea of the usage and power social platforms can provide."



2. HEALTH AND HUMAN SERVICES

According to the Texas Department of Health and Human Services (HHS), by 2050, it is expected that nearly 20% of all Texans will be 65 and older. HHS says, "This increase of the older adult population will likely mean an increase in the need for all types of health and human services such as health care, home care, personal care and long-term care." Older populations tend to have numerous and important medical needs. Beyond age, it is important that all Texans, specifically those living in Nacogdoches County, have access to quality, timely, and effective medical care. For the purposes of this document, health care encompasses both physical and mental health care services. In 2021, wellbeing is defined as more than one's physical health and with an increase in digital health care service designed to meet a myriad of needs this action plan adopts that health care should encompass all forms of available health care treatment.

For many Texans, especially those living in rural communities, telehealth is foreign. As such, workshops should focus on familiarizing residents with the basics of telemedicine and the multitude of uses and benefits offered by these digital healthcare services.

Workshop topics to consider:

- Telehealth 101, explaining terminology commonly associated with telemedicine and the benefits of virtual health care.
- Just what the doctor ordered, discussing how residents can use free and reduced-cost digital services to improve physical and mental health.

Of note, there are communities across Texas who have adopted unique telehealth practices to bring specialized health care directly to residents. Two such examples include Milam County and Grayson County. A prime example of using telehealth for preventive and primary care can be seen in Milam County. Texas A&M Health and Science Center partnered with OnMed to install a medical pod at the Milam County Sheriff's Office. The pod gives residents real-time access to licensed clinicians such as Certified Nursing Assistants and Nurse Practitioners. The pod is outfitted with equipment that can measure vitals and temperature. Prescriptions are available through the pod as well. Another example of a rural community bridging the telehealth gap is Pottsboro, Texas, in Grayson County. The Pottsboro Library partnered with University of North Texas Health Science Center to create a special telemedicine room within the local library. Residents can schedule an appointment though UNT Health Science Center and then attend the appointment virtually from the privacy of a quiet room in the library. According to the library website, "Starting January 2021, Pottsboro Area Library will offer a dedicated, private appointment space for community members to connect with healthcare providers from HSC... our providers can help manage chronic conditions, such as diabetes or high blood pressure, conduct wellness screenings and offer acute visits for issues such as allergies, sinus infection, and other illnesses and minor injuries."



3. EMERGENCY MANAGEMENT AND PUBLIC SAFETY

A Pew Research article was published earlier this year (2021) with the following headline, "More than eight-in-ten Americans get news from digital devices." The article went on to say, "More than eight-in-ten U.S. adults (86%) say they get news from a smartphone, computer or tablet 'often' or 'sometimes,' including 60% who say they do so often...When asked which of these platforms they *prefer* to get news on, roughly half (52%) of Americans say they prefer a digital platform."

According to Nacogdoches County survey results, 33% of public safety respondents have a website; of that group, 50% update their website daily or weekly. All public safety respondents indicate using Facebook daily or weekly, while 0% indicate using Twitter with the same frequency. In times of emergency, it is important for public officials to provide information, updates, data, and resources to residents via platform that will have the most far-reaching effect. This includes using varied platform with the understanding that not everyone uses one and only one social media platform (if they use social media or the internet at all). For example, 21% of Nacogdoches County residents report interacting with public safety agencies digitally on a daily and weekly basis.

Workshop topics to consider:

- Online safety tips and tricks, discussing how to keep yourself, your family, and your information safe online
- Updates about new online risks, scams, and other online threats

4. SCHOLASTIC ACHIEVEMENT

According to survey results, Nacogdoches County K-12 schools report owning an average of 1.59 computers per student, indicating students have access to internet-enabled devices. With access to these devices comes the opportunity to learn online. While online learning offers new resources, new platforms, and new opportunities, it also brings new challenges for teachers, students, and even parents. Broadband is certainly a tool that can facilitate greater academic achievement and educational exposure, but it's important for educators and students alike to be fully apprised of the resources available at their fingertips through the internet. Students can be dually-enrolled in college courses, reading advanced textbooks online, or even attending webinars. However, these advantages are only possible when a student or teacher is aware they exist, have the device and internet access to view it, and the knowledge/skillset necessary to navigate the web.

Workshop topics to consider:

- Effective online learning and teaching strategies, discussing what teachers and students can do to maximize the benefits of online learning.
- Continuing education opportunities where parents and teachers can learn about programs, courses, and classes available for students who would like to continue learning beyond the classroom. These sessions could cover the resources available for children and adults who



would like to return to college, obtain a certification or GED, or complete continuing education courses. They could also cover supplemental educational opportunities for students who are struggling with school.

Action 2A – <u>Provide varied formats for greater community involvement</u>. In addition to hosting inperson workshops, the general curriculum should be available for pick-up at frequently accessed public locations in the form of paper handouts. Not all residents have the availability to attend inperson workshops nor do they feel comfortable attending hands-on training exercises. Handouts function as a "grab and go" resource for residents to pick up and take with them to review later. In this way, everyone can benefit from the content in whatever way is most compatible with their schedule and preferred learning method.

Action 2B – <u>Use local resources to ensure success</u>. Ask local community members, stakeholders, and businesses to lead the workshops based on their expertise and skillset. It is important for the community to feel this is a collective effort and an open forum for discussion and questions. The more people share their knowledge on a topic, the more other people can learn. Nacogdoches County boasts experts in all of the above topics making local residents, business owners, and community leaders the natural choice to lead workshops and continuing education opportunities.

For example, 13% of public safety respondents are already training staff on "the basics of cybersecurity and cybercrime." In this sense, public safety officials are a natural choice to lead online safety trainings for the community because they already have the curriculum and the knowledge necessary to begin. Furthermore, the local library reports providing basic technology training and educational tutoring services. Workshops can build upon the skills and programs that already exist in the community by allowing more residents to take part and benefit from the services.

Action 2C – <u>Produce English and Spanish materials.</u> It is important to take into account that 21% of the Nacogdoches County population is Hispanic or Latino and 15.3% of all households speak Spanish at home, according to the US Census. Therefore, all materials pertaining to broadband workshops, affordability, and accessibility should be available in English and Spanish. Promotional materials about upcoming workshops classes should also be available in English and Spanish.

Action 3 – <u>Utilize media partnerships to publicize upcoming workshops</u>. Information about upcoming workshops should be readily accessible and widely publicized. This includes advertising through social media, on government websites, in local newspapers, and other local outlets (i.e., advertisements in the water bill, flyers at the local park, and school announcements). General discussion about the benefits of broadband should become commonplace in Nacogdoches County, with elected officials and local stakeholders openly highlighting the importance of internet access, adoption, and use.



Local media outlets who can advertise workshop events:

- Newspapers: The Daily Sentinel, The Pine Log, La Lengua,
- Radio: KLDN 88.9FM "Red River Radio," KSAU 90.1FM, KSWP 90.9FM, KAVX 91.9FM, KFOX 95.9FM, KJCS 103.3FM "The Bull," KYKS 105.1FM, KTBQ 107.7FM, KSFA 860AM
- Television: KTRE-TV (ABC), KFXK and KFXL (FOX), KLSB-TV (NBC)

Frequently accessed locations to consider:

- Nacogdoches Public Library: Late-night hours during the school and workweek make this a
 prime location for students and employed residents who are looking to capitalize on free
 computing services.
- Government buildings: Courthouse and city halls
- Nacogdoches Senior Center
- Schools: K-12 and Higher Education
- Nacogdoches Chamber of Commerce and EDC
- Local businesses and community institutions: churches, grocery stores, banks, food pantries
- Local healthcare providers

Responsible Parties:

Residents; Local government; Community organizations; Businesses; Internet service providers.

Timeline:

Community workshops should be available no later than the end of Q2 2022. Curriculum should be reviewed and updated every 3-4 months.

Resources:

Improving the Quality of Life in Rural America with Broadband Internet

https://bonfire-ec.com/improving-the-quality-of-life-in-rural-america-with-broadband-internet/

Implementing Productive Teleworking with Business-Quality Mobile Communications

https://tango-networks.com/wp-

<u>content/uploads/2021/01/Tango-Networks-Trend-</u> Advisor-Productive-Teleworking-with-Mobile-

Communications-v15May2020.pdf

How Better Broadband Access Will Help Telemedicine Reach Its Fill Potential

https://intouchhealth.com/how-broadband-will-help-telemedicine-reach-its-full-potential/

The Benefit that Broadband Internet Offers for Ecommerce

https://www.newsanyway.com/2020/02/26/the-benefits-that-broadband-internet-offers-for-ecommerce/

The complete guide to digital skills

https://www.futurelearn.com/info/blog/the-complete-guide-to-digital-skills

AARP Joins with Nonprofit to Teach Tech to Older Adults

https://www.aarp.org/about-aarp/info-2021/oatssenior-planet.html

Digital Learn: Use a computer to do almost anything! https://www.digitallearn.org/



Grow with Google https://grow.google/

GCFLearnFree.org® program GCFLEanfree.org

BOSS: Business Owners Sharing Solutions https://wichitafallschamber.com/boss/

Texas Department of Health and Human Services: Aging https://www.hhs.texas.gov/services/aging

Telehealth for behavioral health care https://telehealth.hhs.gov/providers/telehealth-for-behavioral-health/

New telehealth station launching in Milam County https://www.kbtx.com/2020/07/07/new-telehealth-station-launching-in-milam-county/

Telehealth station in Milam County first of its kind in Texas, bridging accessibility gap in rural areas https://www.kxxv.com/brazos/telehealth-station-in-milam-county-first-of-its-kind-in-texas-bridging-accessibility-gap-in-rural-areas

Pottsboro Library teaming with UNT medical school for telemedicine program

https://www.kxii.com/2020/12/23/pottsboro-library-teaming-with-unt-medical-school-for-telemedicine-program/

Pottsboro Area Library: Check out telehealth at your local library!

https://pottsborolibrary.com/health/

Getting Started with Telemedicine
https://connectednation.org/wpcontent/uploads/2020/11/Getting-Started-withTelemedicine.pdf

Common Terms Associated with Telehealth and Telemedicine

https://connectednation.org/wpcontent/uploads/2020/11/Common-Terms-Associated-with-Telehealth-and-Telemedicine.pdf

5 Tips for Securing your Mobile Device for Telehealth https://connectednation.org/wp-content/uploads/2020/11/Tips-for-Securing-your-Mobile_updated.pdf

Connecting Seniors in Central Texas

https://www.communitytechnetwork.org/blog/connecting-seniors-in-central-texas-with-senior-connect/



Vexus FiberTM Announces New Build Plans in Nacogdoches: \$20 Million 100% Fiber Optic Network to Go Live in 2022

Lubbock, **TX** – Vexus Fiber, a leading fiber service provider in Texas and Louisiana, announced plans to build in Nacogdoches and surrounding areas. The network will be privately funded by Vexus, introducing more than 15,000 residences and businesses to symmetrical multi-gigabit speed internet service.

"We are excited to continue our network expansion in Texas with our new 100% fiber optic network plans in Nacogdoches," said Jim Gleason, CEO. "Vexus' fiber network will provide homes and businesses with a new, competitive choice for internet and entertainment. This expansion brings reliable internet to families and businesses in the area, allowing them access to our future-proof fiber technology."

Vexus Fiber plans to begin construction in the spring, with availability to some neighborhoods and businesses before the end of 2022. Full completion of the network, throughout most of Nacogdoches, will take approximately 18 months.

Vexus understands customers need internet that can keep up with their everyday lives. This new 100% fiber optic network can increase employment opportunities, make the area more attractive to businesses, and increase overall property values. From work to play, Vexus is there to back Nacogdoches businesses and homes.

"With the average amount of devices in homes continuing to rise, it is important that we supply our residents with the speeds that fit their family's needs," said Nacogdoches Mayor Jimmy Mize. "We believe fiber optic broadband connections are critical to a modern city's infrastructure. We are excited to work with Vexus Fiber to begin the process of making Nacogdoches a thriving Gigacity."

This network extension is part of an ongoing construction plan financed by existing investors, Pamlico Capital and Oak Hill Capital, who have agreed to invest additional equity toward the expansion in Nacogdoches.

"The opportunity to grow with Vexus and new communities in Texas is very rewarding. We are extremely pleased with the progress the team at Vexus Fiber is delivering by building a quality fiber network at a fast pace to residents and businesses that need this network of the future," added Art Roselle of Pamlico Capital.

Fiber internet service is more reliable because it has a higher data capacity and bandwidth, is less susceptible to outside interference and has a much lower latency than a traditional copper connection. Vexus Fiber service will deliver up to 10 Gig internet speeds along with all-digital TV and phone service for residential customers. Business customers will have access to data connections scalable up to 10 Gigs, TeleCloud-hosted voice solutions as well as TV channel packages tailored for all business types.

Vexus Fiber currently operates fiber-to-the-home networks in Lubbock, Amarillo, Wichita Falls, Abilene, and surrounding areas in Texas, as well as Hammond, Covington and Mandeville in Louisiana. The company is also building new networks in the Rio Grande Valley, Tyler and San Angelo, Texas. They are also expanding in Lake Charles, Louisiana and Albuquerque and Santa Fe, New Mexico. Vexus is headquartered in Lubbock, Texas.

Residents and businesses that are interested in Vexus Fiber services can visit connect.vexusfiber.com to receive updates on construction. Typically, residents will receive communication via email and mail about activity in their neighborhood 30 days prior to construction. Those interested in joining the Vexus Fiber team can visit vexusfiber.com/jobs.

APPENDIX



About Vexus FiberTM

Vexus Fiber is a leading provider of fiber-based communications solutions for both residential and business customers across Texas, Louisiana and New Mexico. As a technology leader in the industry, Vexus offers an extensive range of internet connectivity over a true fiber-to-the-premise network. Services also include a robust HD Video platform, Voice, TeleCloud services and more. For more information, please visit vexusfiber.com.

Vexus Fiber Contact: Kyle Alcorn 573-481-2732

Link: https://www.vexusfiber.com/press-releases/10925/

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Vexus Fiber™ Announces New Build Plans in Nacogdoches: \$20 Million 100% Fiber Optic Network to Go Live in 2022

Lubbock, TX – Vexus Fiber, a leading fiber service provider in Texas and Louisiana, announced plans to build in Nacogdoches and surrounding areas. The network will be privately funded by Vexus, introducing more than 15,000 residences and businesses to symmetrical multi-gigabit speed internet service.

"We are excited to continue our network expansion in Texas with our new 100% fiber optic network plans in Nacogdoches," said Jim Gleason, CEO. "Vexus" fiber network will provide homes and businesses with a new, competitive choice for internet and entertainment. This expansion brings reliable internet to families and businesses in the area, allowing them access to our futureproof fiber technology."

Vexus Fiber plans to begin construction in the spring, with availability to some neighborhoods and businesses before the end of 2022. Full completion of the network, throughout most of Nacogdoches, will take approximately 18 months.

Vexus understands customers need internet that can keep up with their everyday lives. This new 100% fiber optic network can increase employment opportunities, make the area more attractive to businesses, and increase overall property values. From work to play, Vexus is there to back Nacogdoches businesses and homes.

"With the average amount of devices in homes continuing to rise, it is important that we supply our residents with the speeds that fit their family's needs," said Nacogdoches Mayor Jimmy Mize. "We believe fiber optic broadband connections are critical to a modern city's infrastructure. We are excited to work with Vesus Fiber to begin the process of making Nacogdoches a thriving Gigacity."

This network extension is part of an engoing construction plan financed by existing investors, Pamlico Capital and Oak Hill Capital, who have agreed to invest additional equity toward the expansion in Nacogdoches.

"The opportunity to grow with Vexus and new communities in Texas is very rewarding. We are extremely pleased with the progress the team at Vexus Fiber is delivering by building a quality fiber network at a fast pace to residents and businesses that need this network of the future," added Art Reselle of Pamilco Capital.

Fiber informet service is more reliable because it has a higher data capacity and bandwidth, is less susceptible to outside interference and has a much lower talency than a traditional copper connection. Vesus Fiber service will deliver up to 10 Gig internet speeds along with all-digital TV and phone service for residential customers. Business customers will have access to data connections scalable up to 10 Gigs, TeleCloud-hosted voice solutions as well as TV channel packages tallored for all business types.

Vexus Fiber currently operates fiber-to-the-home networks in Lubbock, Amarillo, Wichita Falls, Abilene, and surrounding areas in Toxas, as well as Hammond, Covington and Mandeville in Louistana. The company is also building new networks in the Rio Grande Valley, Tyler and San Angelo, Texas. They are also expanding in Lake Charles, Louisiana and Albuquerque and Santa Fe, New Mexico. Vexus is headquartered in Lubbock, Toxas.

Residents and businesses that are interested in Vexus Fiber services can visit connect/vexus/fiber.com to receive updates on construction. Typically, residents will receive communication via email and mail about activity in their neighborhood 30 days prior to construction. Those interested in joining the Vexus Fiber team can visit vexus/fiber.com/jobs.

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