EXECUTIVE SUMMARY
Technology Plan

Fisher County, Texas

October 2021

CONNECTED NATION

CELEBRATING 20 YEARS OF SERVICE

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CONNECTED NATION℠

Texas

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 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.

The Connected Nation Texas (CN Texas) Connected Program partnered with the Fisher 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 usage across every sector locally.

Pursuant of this goal, between April and July 2021, Fisher County conducted a comprehensive survey of broadband technology access and adoption across the community. Fisher County collected responses from 136 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.

To highlight key findings, CN Texas created an interactive map. To access the map, please click HERE. The following provides a summary of that assessment, as well as recommendations for improving broadband and technology access, adoption, and usage.

FISHER COUNTY, TEXAS
QUICK FACTS

Population	
3,672	
Households	
1,601	
Median Household Income	
$46,146	
Poverty Rate	
15.1%	
Adults with a Bachelor's Degree or Higher	
18.6%	
Homeownership Rate	
73.6%	
Hispanic or Latino	
26.5%	
Households with Broadband Access[1]	
8.63%	

Source: https://data.census.gov/cedsci/profile?g=0500000US48151
[1] The 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/

CONNECTED NATION℠
Texas

8.63% of households in Fisher County have access to broadband

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

Only **8.33%** of households in Fisher 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.

Fisher County households **pay more** on average for access to the internet **($77.86**) than other Connected communities ($71.59).

About **43% of residents and 66.7% 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 8 out of 10 households **(85.6%)** said they would like to have improved or additional options for home internet service.

81% of businesses said they need employees who are moderate to advanced technology users. Only **27%** of businesses say their employees meet the technologies needs of the

INFRASTRUCTURE
RESULTS
02

According to CN Texas broadband data initially released in July 2021 — followed by additional public feedback, field validation, and provider input — very few households in Fisher County 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 Fisher County is concentrated to the east of the county — toward the Jones County line.

Below is the list of providers in Fisher County.

BROADBAND INFRASTRUCTURE QUICK FACTS

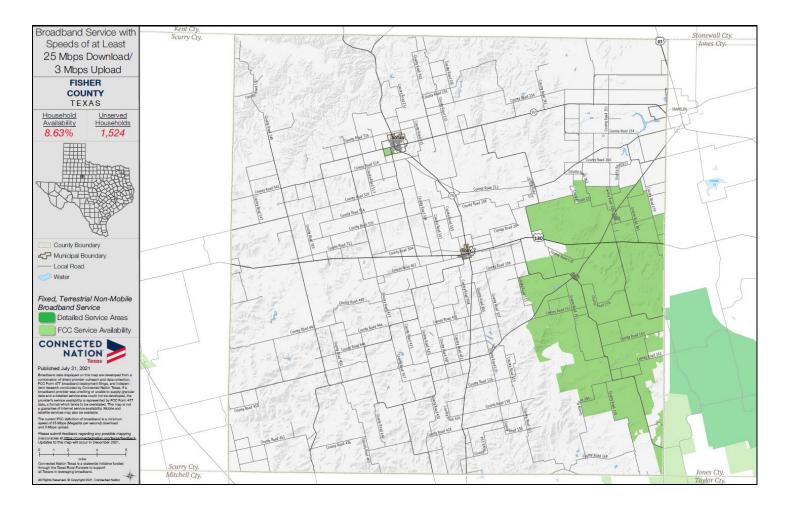| |
|---|
| Unserved Households (25/3 Mbps) **1,524** |
| Households Served (10/1 Mbps) **99.88%** |
| Households Served (25/3 Mbps) **8.63%** |
| Households Served (50/5 Mbps) **8.33%** |
| Households Served (100/10 Mbps) **8.33%** |

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)
ALENCO	Fiber	1000	250
Mid-Plains Communications	Fiber	200	100
AMA TechTel Communications	Fixed Wireless	100	10
AT&T Southwest	DSL	25	2
	Fixed Wireless	10	1
TRANSWORLD NETWORK CORP	Fixed Wireless	15	5

Below is Fisher County's (25/3 Mbps) map. To access the full map, go to https://connectednation.org/texas/county-maps/ and select Fisher 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 Fisher County and Texas as a whole 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 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 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, a format that tends to overstate the service territory.
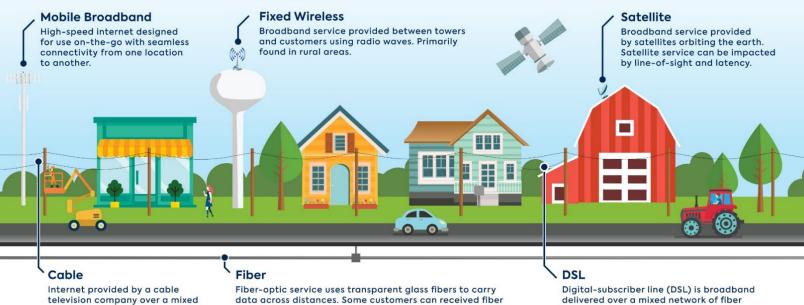
CONNECTED NATION℠
Texas

1,524

Fisher County households cannot access broadband

Mobile Broadband
High-speed internet designed for use on-the-go with seamless connectivity from one location to another.

Fixed Wireless
Broadband service provided between towers and customers using radio waves. Primarily found in rural areas.

Satellite
Broadband service provided by satellites orbiting the earth. Satellite service can be impacted by line-of-sight and latency.

Cable
Internet provided by a cable television company over a mixed coaxial and fiber-optic network.

Fiber
Fiber-optic service uses transparent glass fibers to carry data across distances. Some customers can received fiber connections directly to their home, but fiber is also used to transport data from communities to the broader internet.

DSL
Digital-subscriber line (DSL) is broadband delivered over a mixed network of fiber and traditional copper phone lines.

HOUSEHOLD
SURVEY RESULTS
03

HOUSEHOLD QUICK FACTS

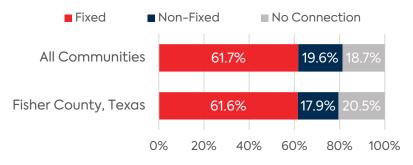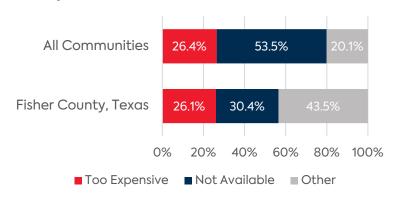|	
Fixed Home Broadband Adoption	**61.6%**
Average Monthly Internet Cost	**$77.86**
Average Download Speed	**12.84 Mbps**
Households Satisfied with Service	**57%**

The following provides an overview of results from a broadband survey conducted in Fisher County between April and July 2021. Altogether, CN Texas received 136 completed surveys from households across the county, and respondents provided insights into their internet connectivity, or lack thereof. Data from Fisher County are compared to data from hundreds of other rural, participating Connected Communities across Michigan, Ohio, Texas, and Pennsylvania to benchmark and identify areas for improvement.

Home Broadband Adoption

Legend: ■ Fixed ■ Non-Fixed ■ No Connection

	Fixed	Non-Fixed	No Connection
All Communities	61.7%	19.6%	18.7%
Fisher County, Texas	61.6%	17.9%	20.5%

Primary Barrier

	Too Expensive	Not Available	Other
All Communities	26.4%	53.5%	20.1%
Fisher County, Texas	26.1%	30.4%	43.5%

Legend: ■ Too Expensive ■ Not Available ■ Other

ADOPTION

In Fisher County, 61.6% of households that took the survey subscribe to fixed broadband service delivered via a cable, DSL, fiber, or fixed wireless technology. Less than one-fifth of respondents (17.9%) indicate they have internet service delivered via dial-up, satellite, or a mobile wireless service. This leaves 1 in 5 (20.5%) survey respondents without internet access at home.
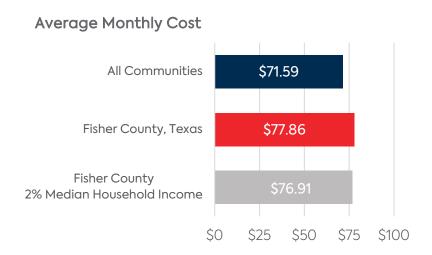
Among those without a home internet connection, 30.4% said they did not have broadband because it was not available to them, while one-quarter (26.1%) indicate that it was too expensive. Like in many communities, cost and availability are the two primary barriers to home broadband adoption.
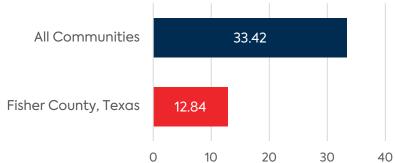
CONNECTION DETAILS

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 $77.86 per month. This is higher than the monthly cost in other communities ($71.59). Two percent of the median household income in Fisher County is $76.91 per month.

Average Monthly Cost

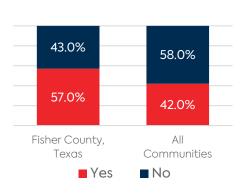|	
All Communities	$71.59
Fisher County, Texas	$77.86
Fisher County 2% Median Household Income	$76.91

$0 $25 $50 $75 $100

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 12.84 Mbps, which is well below the minimum defined speed.
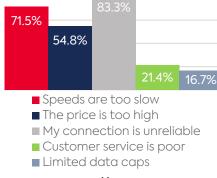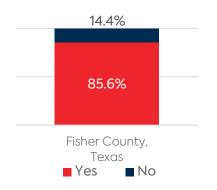
Average Speeds (Mbps)

All Communities	33.42
Fisher County, Texas	12.84

0 10 20 30 40

Does Your Internet Meet Your Needs?

	Fisher County, Texas	All Communities
No	43.0%	58.0%
Yes	57.0%	42.0%

■ Yes ■ No

Why Doesn't Your Internet Meet Your Needs?

- Speeds are too slow: 71.5%
- The price is too high: 54.8%
- My connection is unreliable: 83.3%
- Customer service is poor: 21.4%
- Limited data caps: 16.7%

■ Speeds are too slow
■ The price is too high
■ My connection is unreliable
■ Customer service is poor
■ Limited data caps

Are You Interested in More Choices at Home?

Fisher County, Texas	
No	14.4%
Yes	85.6%

■ Yes ■ No

Competition provides residents with choices for service, allowing households the ability to switch providers if their current service does not meet their needs. Two out of five respondents (43%) indicate that their internet connection does not meet their needs. This is a lower rate of dissatisfaction than among households in other communities (58%).
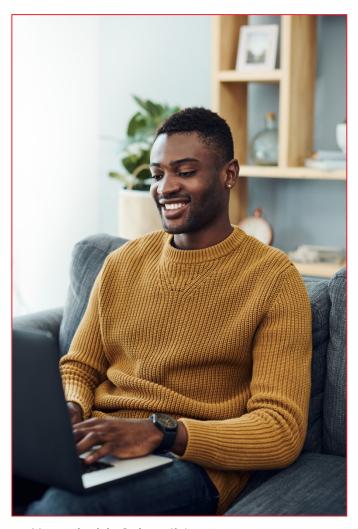
When asked why their connection does not meet their needs, 71.4% of dissatisfied households indicate that their speed is too slow; 54.8% say the price is too high, and over 4 out of 5 (83.3%) indicate that the connection is unreliable. (Respondents could choose more than one reason.)

Finally, 85.6% of all respondents indicate that they are interested in additional internet choices for their home.
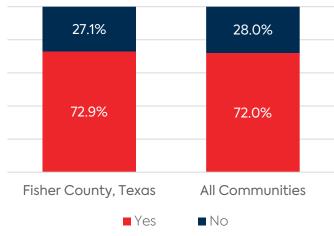
MOBILE CONNECTIVITY

A little more than 7 out of 10 (72.9%) report 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, 37.2% 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

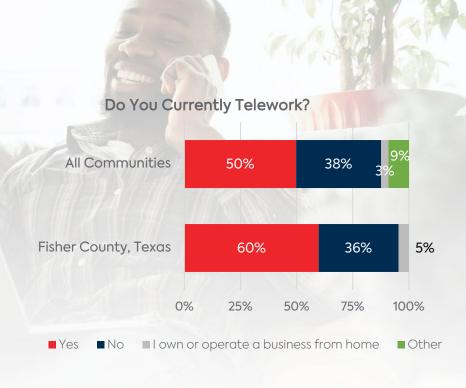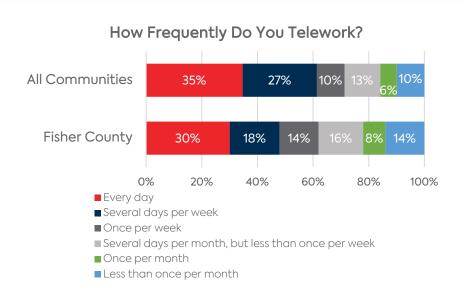|	Fisher County, Texas	All Communities
No	27.1%	28.0%
Yes	72.9%	72.0%

■ Yes ■ No

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 Fisher County, the lack of broadband access was a significant 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 60% of employed respondents in Fisher County telework in some capacity. Three out of ten (30% of this group) telework every day.

Do You Currently Telework?

	Yes	No	I own or operate a business from home	Other
All Communities	50%	38%	3%	9%
Fisher County, Texas	60%	36%	5%	

How Frequently Do You Telework?

	Every day	Several days per week	Once per week	Several days per month, but less than once per week	Once per month	Less than once per month
All Communities	35%	27%	10%	13%	6%	10%
Fisher County	30%	18%	14%	16%	8%	14%

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RECOMMENDATIONS
04

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

Goal 1: Increase broadband availability and speeds in Fisher County through strategic partnerships.

To understand what broadband looks like in a community, it is important to properly define it. In the simplest terms, broadband is high-speed internet that is always on. Broadband is understood to be faster than traditional dial-up service and includes several high-speed transmission technologies, such as fiber and cable. According to the Federal Communications Commission (FCC), broadband capability requires consumers to have access to actual download speeds of at least 25 Mbps and actual upload speeds of at least 3 Mbps. This is often written simply as 25/3 Mbps. According to Connected Nation Texas broadband data collected in July 2021, only 8.6% of homes in Fisher County have access to broadband at this speed tier. This leaves more than 1,500 homes unserved at the minimum threshold.

To better understand the technology landscape of its community, Fisher County undertook a broadband initiative in partnership with CN Texas. The initiative included a communitywide survey, which collected information on the access, adoption, and usage of broadband among residents, businesses, and community institutions. The results pointed to a distinct need for improved and reliable internet connections in the community. Three out of ten households without an internet connection (30%) stated, "Internet service is not available at my address." In addition, 33% of agriculture producers and businesses without internet subscriptions indicated broadband was not available at their locations.

Objective:

Promote greater broadband access, adoption, and usage in Fisher County through broadband infrastructure projects (improvements and expansions).

Actions:

Action 1 – To effectively understand the broadband funding landscape in Fisher County, community leaders should meet with internet service providers (ISPs) that have already been allocated federal money, including recipients of funding through the Rural Digital Opportunity Fund (RDOF). The community should meet with local (ISPs) to assess the **status** and **viability** of ongoing or upcoming infrastructure improvement and expansion projects. As community leaders consider

expanding and improving broadband infrastructure, the goal should be to pursue strategic projects that are not needlessly redundant (i.e., expand access where RDOF winners are already working).

RDOF Phase I Auction Winning Bids:
Resound Networks (1,361 locations, $1,325,536.40)

ISPs:

Alenco Communications. AMA TechTel Communications, AT&T, Mid-Plains Communications, Transworld Network Corp.

Action 2 – During meetings with providers, community leaders should discuss the role the county could play (through financial backing or strategic partnerships) in a project to ensure ultimate completion, or discuss starting a new project altogether. Ultimately, Fisher County should play a strategic role in ongoing or planned projects that will widely benefit the most residents. It is important for county leadership to be informed of ongoing infrastructure improvement and expansion projects such that the community can be involved in necessary decisions.

Fisher County has been allocated $743,933.00 in Coronavirus State and Local Fiscal Recovery Funds. Should Fisher County choose to spend any of these federal funds on broadband, leaders must be prepared, informed, and readily equipped to begin working with reliable partners.

Action 3 – After taking stock of broadband initiatives in the county, Fisher County should identify applicable grants to expand broadband access, adoption, and usage. Grants may provide funding for broadband infrastructure or digital literacy and digital skills expansion. Current grant openings can be found on the Connected Nation and BroadbandUSA websites. Links can be found in the resources section below.

Action 4 – Fisher County should establish and maintain relationships with regional organizations and elected officials. Elected officials may be able to provide letters of support or additional resources when submitting grant applications. Additionally, the county should engage neighboring communities in discussion about broadband development. Communities around Fisher County have recently engaged in broadband development endeavors and can share insights, dos and don'ts, and potential partnership opportunities.

Regional Organizations and Elected Officials to Partner With:
- West Central Texas Council of Governments
- Other Connected Communities: Throckmorton, Shackelford, Jones, others to come
- Texas Rep. David Spiller

- o   Chief of Staff Susanna Feather
- U.S. Congressman Jodey Arrington
  - o   Staffer Kaley Mathis
- Fisher County Chamber of Commerce
- Roby and Rotan municipal leaders

Action 5 – As community leaders meet with broadband providers to discuss federal grant monies and community infrastructure, they should consider the value of public-private partnerships. These partnerships take many forms and allow both parties (in this case the county and a broadband provider) to leverage an asset that the other does not have or cannot easily acquire. The community can offer infrastructure (publicly owned building rooftops, light poles, towers, and other vertical assets for mounting infrastructure) for network deployment, as well as committed anchor tenants. Private-sector partners bring network-building and operations experience. Elements to consider include competition, enhanced service, risk avoidance, redundancy, etc. The community should consider all legal obligations when considering partnership negotiations.

Examples of PPPs
- Model 1: Private Investment, Public Facilitation — Make available public assets such as fiber and conduit, share geographic information systems data, streamline permitting and inspection processes, offer economic development incentives to attract private broadband investment.
- Model 2: Private Execution, Public Funding — Identify revenue streams that can be directed to a private partner, issue RFP for private turnkey execution.
- Model 3: Shared Investment and Risk — Evaluate the use of community assets to attract private investment, evaluate the costs and benefits of funding new assets that could attract private investment, evaluate building new broadband assets to businesses and/or homes for leasing to private ISPs.

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 Fisher 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:
Glossary of Terms (CN Texas)
https://cn-maps.hatfieldmedia.com/US/TX/v4/tx_throckmorton-county_25x3.pdf

Connected Nation Texas: Fisher County Map
https://cn-maps.hatfield.marketing/US/TX/v4/tx_fisher-county_25x3.pdf

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

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

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

An introduction to effective public-private partnerships for broadband investments
https://broadbandusa.ntia.doc.gov/sites/default/files/publication-pdfs/bbusa_effective_public_private_partnerships.pdf

Goal 2: Improve the digital skillset of the Fisher County workforce.

The technology-related skills necessary to be successful on the job are changing to keep pace with new innovations, tools, and applications that make production and services more efficient. Workforce skills should match the needed skills of the employer to ensure organizations can take advantage of new technologies. According to the Connected Nation Texas survey conducted in Fisher County in 2021, 81% of businesses said they need employees who are moderate to advanced technology users. When asked how well the current technology skills of their workers matched the needs of the

organization/company, only 27% said "very well/excellently." These disparate numbers are troubling because if the skills of the worker do not meet the needs of the company, the worker serves no purpose for the employer. An employee's competitiveness in the professional world can be linked to their technical skills and abilities, especially given the increasingly digital nature of the workforce. Of note, 25% of businesses indicated they require employees to pursue continuing education or training, while an additional 50% of businesses indicated they encourage employees, but do not require, continuing education and training courses.

Objective:
Plan and host community workshops designed to equip residents with skills necessary for engagement in the local workforce.

Actions:

Action 1 – Community leaders should partner with local and regional organizations to facilitate free digital skills workshops. These workshops should function as continuing education opportunities for those participants who are employed in jobs that require them to use a computer or access the internet. For those who are not employed, or for those who do not use the internet regularly, these workshops will serve an important digital literacy role, ensuring residents have the necessary skills to engage online and use digital services.

Workshop curriculum should be curated using material created by the county and publicly available programs, such as AARP, Digital Learn, and Grow with Google (resources linked below). Classes should be offered at local facilities, such as a school gym or the community center, and be advertised through local media. The intention is for residents (and community leaders) to learn digital skills that will prove beneficial in the workplace and lead to success in their professional endeavors. These workshops should highlight the importance of continued education and provide participants with community and online resources for future reference.

Community partners can include:
- West Texas Central Council of Governments
- Fisher County Chamber of Commerce
- Schools: Rotan ISD and Roby CISD
- Institutions and businesses who would directly benefit from a more digitally savvy workforce

Workshop topics can include:
- How-to teleconference
- Cybersecurity 101
- Microsoft Office skills
- Email etiquette

Action 1A – For broadband to be accessible to the masses, it needs to be presented in a way that

everyone understands. Because 32.7% of the Fisher County population is Hispanic or Latino and 20.1% of residents speak a language other than English at home, all materials pertaining to broadband workshops and digital skills should be available in English and Spanish.

Action 2 – Community leaders should work with local schools in Fisher County to integrate digital skills and digital literacy into classroom curriculum. According to survey results, the average device-to-student ratio is 1.27, indicating students have access to internet-enabled devices. With access to internet-enabled devices comes the opportunity to learn online skills that will prove beneficial to students academically, professionally, and socially. However, a device is only as useful as the user's skillset. If someone cannot utilize Microsoft Word, answer emails, or surf the web, the perks of a laptop will largely be lost on them. Among school-aged children, digital skills training should focus on equipping students with tools to help them further educational attainment (i.e., college applications, SAT prep) and professional development (i.e., resume writing, online portals). This solution considers that high-school students often hold jobs outside of school. Student workers should be equipped with the necessary digital skills for success, regardless of age or occupation.

Action 2A – According to the U.S. Census, only 18.6% of Fisher County residents have a bachelor's degree, an average of 1 in 5 people. In Texas, the average is almost double, with 30.8% of the population having a bachelor's degree or higher. If high school is the highest level of guaranteed educational attainment for many Fisher County residents, it is important for K-12 curriculum to equip residents with skills necessary for social and professional success. If these skills are not likely to be learned at institutions of higher education, then local high schools must serve as the last line of defense.

Action 3 – According to the U.S. Census, the average commute in Fisher County is 20 minutes. Eighty percent of residents commuted to work alone, while another 13% carpooled. While this is shorter than the average commute in Texas (27.2 minutes), the past year has showcased the need — and society's ability — to successfully telework, which could cut out commuting altogether. Telework is a viable work option in a digitally inclusive society, but it requires a stable internet connection and requisite digital skills in order to be successful. With this in mind, community workshops should highlight the skills necessary for telework. In turn, businesses should be an integral part of the conversation as they, too, could benefit from a teleworking staff. The Fisher County Chamber of Commerce and local businesses can lead the conversation on teleworking dos and don'ts, best practices, and personal success stories.

Responsible Parties:
Local businesses and business organizations (chamber of commerce); local units of government, community residents; community anchor institutions (schools, libraries, healthcare clinics)

Timeline:
Digital skills workshops and continuing education curriculum should be available no later than the end of Q2 2022. Curriculum should be reviewed and updated every 3-4 months.

Resources:

        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/oats-senior-planet.html

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

        U.S. Census: Fisher County
https://data.census.gov/cedsci/profile?g=0500000US48151

        Grow with Google
https://grow.google/

        GCFLearnFree.org® program
GCFLEanfree.org

Goal 3: Expand public computer access in Fisher County.

According to survey results, 20.5% of residents have no internet connection at their home. Thirty percent of these residents cited lack of availability as a barrier to adoption, while an additional 26% stated the cost of internet service was a barrier. Ultimately, these residents will be unable to take part in digital activities or benefit from the conveniences provided by online banking, telework, telehealth, and general online resources. It is paramount that these residents have locations throughout the community where they can access public computers, laptops, and tablets in order to engage digitally with peers, coworkers, and society as a whole. Ultimately, internet-enabled public computers offer those unable to connect to the internet at home with access to technology and online resources.

Objective: Expand the availability of existing public computer centers and identify opportunities to provide additional workstations at locations accessible to vulnerable populations.

Actions:

Action 1 – Identify frequently accessed community locations where public computers/laptops/tablets would serve the largest amount of people with the greatest need. Catalog community sites, indicting how many computers are currently available and how many are needed to serve the needs of guests. The community should focus on locations frequently visited by students, teleworkers, the elderly, and other

vulnerable populations.

Locations to consider:
- Schools, libraries, community organizations
- Chambers of commerce
- Government buildings such as city hall, courthouses

Action 2 – The community should identify funding sources and partners that can be used to increase the number of computing devices or improve devices that are currently available. A list of broadband grants has been linked in the below resources. Local broadband providers may be willing to provide/sponsor new devices in partnership with the community or local institutions.

Action 3 – Once new and improved devices are available for use by the public, information about the public computing centers should be promoted far and wide. Notices with information about how to access the centers can be sent out in the water bill, posted in the newspaper, circulated in monthly school newsletters, discussed at commissioners court and city hall meetings, or advertised at frequently visited community buildings and businesses.

Responsible Parties:

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

Timeline:
For residents who cannot access the internet at home, public computers are the next option for accessing the digital world. In order to meet the needs of these residents, Fisher County should increase the number of free, public computing stations by the summer of 2022.

Resources:

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/

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

BroadbandUSA: Federal Funding Guide

RECOMMENDATIONS

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/media-center/press-releases/2010/03/millions-of-people-rely-on-library-computers-for-employment-health-and-education