BROADBAND SURVEY

DOÑA ANA BROADBAND SURVEY REPORT

New Mexico Community Broadband Survey Program

2021 - 2022

NM DEPARTMENT OF INFORMATION TECHNOLOGY

Prepared for:
The New Mexico Broadband Program
State of New Mexico
Department of Information Technology
www.doit.nm.gov/programs/broadband

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BROADBAND SURVEY

Overview

The New Mexico Broadband Program (NMBBP) within the New Mexico Department of Information Technology (NM DoIT) contracted Bohannan Huston Inc. (BHI) and CommUNITY Learning Network (CLN) to work with Doña Ana Broadband (DAB), an informal community coalition, to develop and pilot the Doña Ana Broadband Connectivity Survey. The survey was developed to gather community input on a range of broadband factors including access, performance, costs, and training needs within Doña Ana County. The survey was piloted to provide support for community planning and improvement of broadband access and adoption in the region while also revealing best practices that could inform broadband community planning and survey implementation statewide.

Two survey instruments were developed: one survey instrument for respondents that “DO Have Internet” and a second survey instrument specifically for respondents that “Do NOT Have Internet.” Of the 3,028 survey responses collected during the fall of 2021, 1,553 “Do NOT Have Internet” survey responses were submitted and 1,475 “DO Have internet” survey responses were submitted.

Community Coalition

An informal community coalition called Doña Ana Broadband (DAB) was formed to identify collaborative opportunities for the community to come together to support broadband improvement and inform development of an action plan that community stakeholders could use to apply for funding.

Doña Ana Broadband initially established a vision for the coalition: “Enable fast, reliable broadband networks for our community to understand online access to telehealth, explore new careers, innovate and develop unprecedented opportunities.”

A diverse group of representatives from many sectors came together including local and state government, k-12 and higher education, health providers, service agencies, senior centers, libraries, chambers of commerce, businesses, utilities, Internet service providers, nonprofits, and community organizations.

Local champions and regional organizations provided support, in particular Doña Ana County staff. DAB established a schedule of regular meetings and utilized Basecamp, Google, WebEx, and a variety of technology and communications platforms to support collaboration and track progress.
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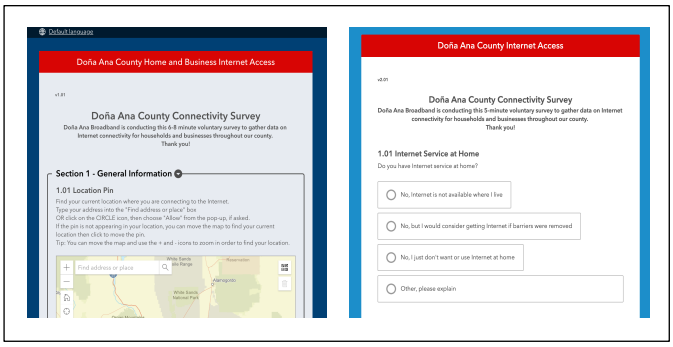
Broadband Survey

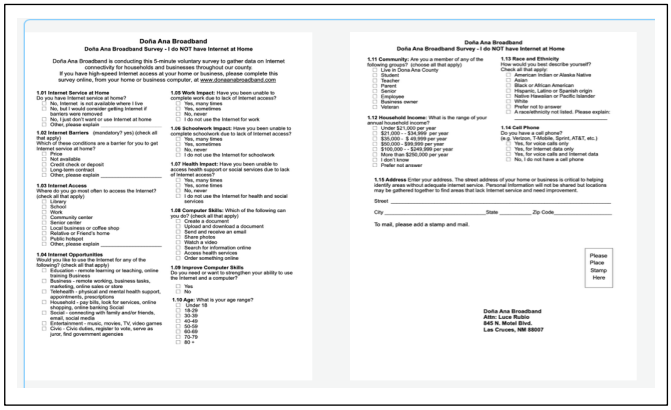
Designed to address target groups that included student/teachers, residents, businesses, and seniors, two surveys were developed: one for community members WITHOUT Internet access at home and one for community members WITH Internet access at home. Both were deployed in English and Spanish. Collaborative development and revision of the survey instruments included: researching national examples, drafting survey questions, securing stakeholder input, building and testing beta versions in both English and Spanish, and securing final approval from stakeholders and the New Mexico Department of Information Technology (NM DoIT).

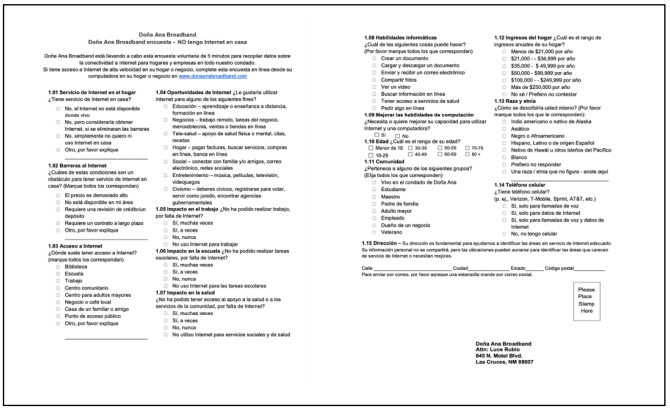
The survey instruments were developed and deployed using geospatial technology for data collection and analysis. The survey for community members WITH Internet was developed to include integration of the NM DoIT's Ookla Speed in order for survey responses to capture live data on the quality and speed of Internet service at the time and location of survey submission.

To support deployment, educational outreach materials were also developed. For community members WITHOUT Internet, printable surveys were created that could be completed by hand and submitted in person at libraries and other community locations or mailed in. A Quick Response (QR) code was also developed to provide access to the survey by smartphone.

Images: Samples of Online and Print Surveys in English and Spanish







A separate version was provided for community outreach workers with directions for use on tablets so community outreach workers could download the survey onto a tablet and record offline responses which were then uploaded later. Promotional flyers, bookmarks, and a printable version of the survey in both English and Spanish were available through libraries and community sites. Flyers and printed surveys were also distributed at events and food distribution sites by the County's Health and Human Services Department.

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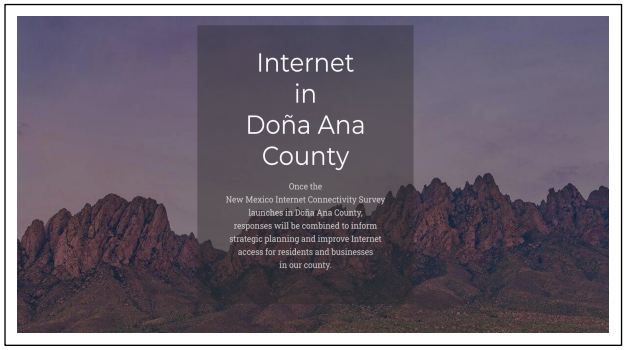
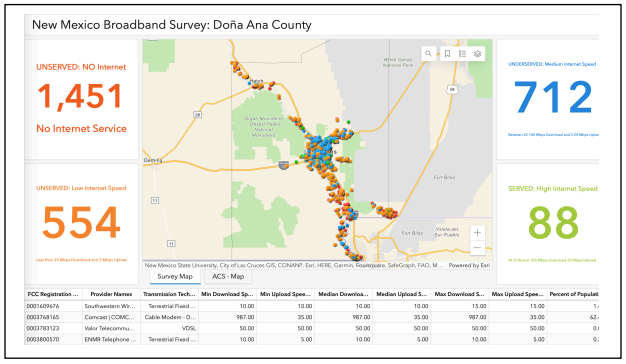
Website Portal and Data Dashboard

A secured website was developed in English and Spanish to support public access and information sharing, while providing easy access to outreach materials, press coverage, and tracking of project progress. Non-public web pages were created to provide directions for the boots-on-the-ground team and instructional information pages for internal use. Non-public pages provided directions for downloading the survey onto tablets so responses could be gathered offline by community outreach workers and uploaded later. Non-public pages were also created to share data and findings with authorized stakeholders and members of the Doña Ana Broadband coalition. An interactive data dashboard was also developed to show visual and dynamic data graphics and assessments.





Website: https://www.DonaAnaBroadband.com

Dashboard: https://www.arcgis.com/apps/dashboards/f569f3d9ce9d476e9a98fe1d4d1eeb18

Outreach Process

Doña Ana Broadband and partners collaborated to support development of a strategic communications and outreach plan that leveraged efforts and assets of members and stakeholders throughout the region to help get the word out about the survey and encourage community members to participate.

The Survey was promoted by Doña Ana County through many channels that included news releases, a banner on the County website's landing page, and social media posts on the County's social media pages, plus weekly Public Service Announcements (PSA's) on the radio. The survey was also promoted through outreach to municipalities and their libraries and through partner food distribution networks.

Images: Data Dashboard and Website Portal in English and Spanish

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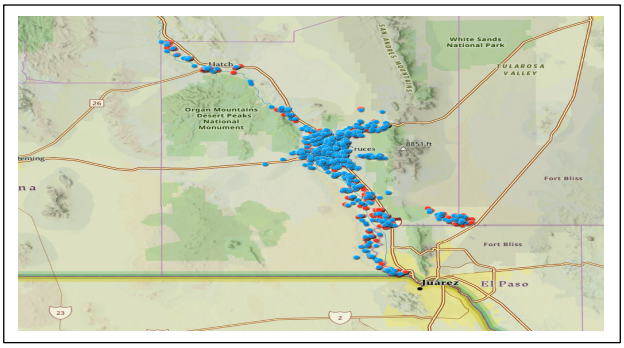
Twelve (12) presentations were made to area non-profits, New Mexico Department of Health, and County and City staff. The City of Las Cruces developed social media graphics and promoted the survey in podcasts, community centers, libraries, and with newsletters from elected officials direct to residents.

Doña Ana Community College engaged work-study college students to reach out to small businesses, clinics and no-access groups to help community members without Internet fill out the survey. Partners posted announcements of the survey in newsletters, websites and social media pages.

Based on experience from the census efforts, Doña Ana Broadband deliberately elected to limit printing to prevent waste and minimize environmental impact while strategically avoiding mass distribution in order to focus on targeted outreach that would yield responses from some of the region's hardest-to-connect communities.

Image: Data Dashboard interactive mapping



The Doña Ana Broadband Survey was officially launched on October 1, 2021. 3,028 survey responses were collected including 1,553 responses to the "Do NOT Have Internet" survey and 1,475 responses to the "DO Have Internet" survey.

Thanks to extensive community outreach efforts and the engagement of community outreach workers from the public health sector known as Promotoras, Doña Ana Broadband received a large number of responses from community members WITHOUT Internet at home. The Promotoras were instrumental in reaching unserved community members in Doña Ana County and Las Cruces including some of the most rural and remote communities and colonias including Anthony, Garfield, Hatch, Rincon, Sunland Park, and Vado.

Summary of Survey Results

Broadband (the transmission of a wide bandwidth of data over a highspeed internet connection) provides high speed Internet access using a variety of technologies including: DSL, cable, fiber, wireless, and satellite. Bandwidth (the amount of data that can flow in a given amount of time) is commonly measured in Megabits, or millions of bits, per second (Mbps).

Although the Federal Communications Commission (FCC) initially recommended Broadband speeds of 25/3 Mbps download/upload, current standards across the nation favor 100/20 Mbps download/upload or more.

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Responses from the Doña Ana Broadband Survey are segmented based on the following definitions:

- SERVED = Service is at or above 100/20 Mbps download/upload
- UNDERSERVED = Service is less than 100/20 Mbps download/upload
- UNSERVED (Low Internet) = Service is less than 25/3 Mbps download/upload
- UNSERVED (NO Internet) = No service is available

Fast and reliable Internet connectivity creates opportunities and provides residents with the ability to access education, business, healthcare, household, social, and entertainment resources, as well as shopping and many other quality-of-life services.

Speed test data gathered from community members WITH Internet access revealed the following:

- 8.5% of respondents were SERVED
  (at or above 100/20 Mbps download/upload)
- 37% of respondents were UNDERSERVED
  (above 25/3 Mbps download/upload but below 100/20 Mbps download/upload)
- 54% of respondents were UNSERVED
  (below 25/3 Mbps download/upload)

According to survey respondents in some of the most rural and remote communities and colonias in Doña Ana County:

Anthony		Hatch		Sunland Park	
SERVED	2	SERVED	1	SERVED	2
UNDERSERVED	9	UNDERSERVED	5	UNDERSERVED	!2
UNSERVED – Low Internet	11	UNSERVED – Low Internet	12	UNSERVED - Low Internet	8
UNSERVED - NO Internet	10	UNSERVED - NO Internet	79	UNSERVED - NO Internet	120

Garfield		Rincon		Vado	
SERVED	0	SERVED	0	SERVED	0
UNDERSERVED	0	UNDERSERVED	0	UNDERSERVED	0
UNSERVED - Low Internet	8	UNSERVED - Low Internet	2	UNSERVED - Low Internet	10
UNSERVED - NO Internet	14	UNSERVED - NO Internet	9	UNSERVED - NO Internet	81

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Of respondents **WITH** Internet, over 55% identified as White, and the majority reported a household income of $50,000 or more

Of respondents **WITHOUT** Internet, 75% identified as Hispanic, and the majority reported a household income under $21,000

Of respondents WITHOUT Internet:

- 691 noted that they would consider getting Internet if barriers were removed
- more than 365 noted that Internet was not available where they live
- 1,143 respondents identified price as the most significant barrier
- 143 respondents noted lack of availability as a barrier
- respondents also added comments that identified a credit check, a required deposit, or the need for a contract as barriers
- 421 respondents reported accessing the Internet at the home of a relative or friend
- 200 respondents reported using the library to access the Internet. (Other locations for accessing the Internet mentioned included: school, work, community centers, senior centers, local businesses, and public hotspots)

Respondents WITHOUT Internet also reported significantly lower competencies in digital skills than respondents WITH Internet at home. Broadband adoption, affordability, use, and digital literacy appeared more challenging for rural, lower income, older, and culturally diverse community members. Improving broadband infrastructure and access to the Internet are only the first steps toward digital equity and inclusion.

Of respondents WITH Internet:

- Over 66% reported using the Internet for Business
- Over 72% reported using the Internet for Civic
- Over 75% reported using the Internet for Education
- Over 96% reported using the Internet for Entertainment
- Over 97% reported using the Internet for Household
- Over 95% reported using the Internet for Social
- Over 72% reported using the Internet for Telehealth

Of respondents WITH Internet, 38% reported their Home Internet access as inadequate. Over 50% reported impacts on work from poor Internet, over 33% reported impacts on schoolwork from poor Internet, and over 27% reported impacts on health from poor Internet.

Of respondents WITH Internet:

- more than 51% reported inconsistent video capabilities
- more than 12% reported no video capabilities
- more than 50% reported slow or inconsistent Internet service
- more than 2% reported that the Internet goes out several hours a day
- more than 3% reported that the Internet that goes out for a day or more
- 349 respondents reported an impact on usage from data caps

Of respondents WITH Internet, the type of home Internet reported included:

- 85.59% reported using cell phone for both calls and Internet data
- Over 36% reported Cable
- Over 22% reported Wireless
- Over 16% reported DSL
- Over 4% reported Satellite
- Over 3% reported Fiber
- Over 1% reported Cell Phone
- Over 11% reported “I Don’t Know”

Of respondents with Internet, 83.05% reported no receipt of support for home Internet expenses and only 2.13% reported support from the Emergency Broadband Benefit federal subsidy program. 1.44% reported support from work, 1.3% reported support from school, less than 1% reported support from a family member or aa friend or neighbor. Less than 1% of respondents reported participation in the Lifeline Program.

Survey Results for Businesses

The majority of respondents who completed the business section of the survey indicated access to the Internet via cable and wireless. CenturyLink and Comcast/Xfinity were the primary Internet Service Providers named. Although a significant number of respondents reported not knowing what they spent for Internet access on a monthly basis, the majority noted spending $50 to $199 dollars per month. The majority of respondents also noted that stronger, faster, more reliable internet service would strengthen their business.

Lessons Learned

Respondents with lower incomes and respondents of diverse race or ethnicity were less likely to have Internet service at home. Respondents WITHOUT Internet at home were:

- less likely to own the devices they need to effectively access and use the internet
- less likely to have the digital skills and confidence they need to access and use the internet
- most frequently using the internet on a cell phone or at someone else's home
- less likely to understand how the Internet works or the choices available
- more likely to have a perceived lack of relevance or benefit

Many respondents reported confusion and frustration with poor service, poor choices, and high costs for inadequate and unreliable service. Survey responses also indicated that community members are impacted by a need for digital skills and reliable, affordable devices, as well.

Affordability: A majority of respondents noted price as a primary barrier. Comments also highlighted lack of availability or the high cost for inadequate, unreliable service as key challenges and concerns. A majority of respondents also reported they were not receiving public assistance support for broadband services or devices.

Education: Broadband is a complex topic and the survey process revealed that community members, local organizations, and government officials may need extensive education and support to understand, plan, and implement effective broadband solutions. The survey process also revealed that communities and community members may need extensive education and support to expand broadband adoption and improve broadband use.

Community Mobilization: As local Broadband coalitions and initiatives develop, backbone organizations and staffing support are critical to functioning effectively. Communities cannot rely solely on volunteer efforts alone to succeed. Community partnerships and local champions are essential to broadband mobilization. Coordinated communications, outreach planning, and collaborative promotional materials were also critical for community engagement and project success. The web portal provided a vital tool and central location for sharing resources and materials, deploying the survey, documenting project progress, and providing access to information and data for both the public and stakeholders, as well as coalition members.

Reaching the Underserved and Unserved: Community health workers known as Promotoras, libraries, community centers, teachers, nonprofits, and college students proved helpful in reaching some of the hardest-to-connect community members. Unconnected and non-adopting populations often require one-to-one and face-to-face support for building digital skills, expanding broadband understanding, or responding to community surveys. Support for both online and offline outreach was critical.

Best Practices

A few highlights arising based from the Broadband Survey process include:

- Build a community coalition with a wide and diverse cross-section of representation
- Find and support local champions
- Establish a backbone organization for ongoing support
- Engage underserved and unserved community members without Internet service
- Commit to innovative grassroots outreach and regional partnerships
- Establish systems of communication and information sharing both online and offline
- identify and build on local assets and strengths
- work collectively to bring down costs and provide more affordable, reliable broadband options for the community

Strategies that were effective with the census can also be effective for building local broadband initiatives. Reaching and engaging the unserved and underserved require boots on the ground and connecting with human beings face-to-face. Community members and organizations with deep relationships in and commitments to their own communities, such as libraries and community health workers known as Promotoras, are vital to engaging the hardest-to-connect community members.

Improving broadband awareness and digital skills is often a very individual experience driven by specific personal interests or needs. The process can be complicated by misperceptions, fear, or feelings of overwhelm or inadequacy. Adoption and use is often driven by task-oriented needs, such as the desire to look for a job or accessing health services or the desire to connect with family and friends. Promising practices include Digital Navigators, tutorial programs, individual coaching, intergenerational mentoring, and very individualized point-of-contact support and grassroots outreach to community members where they already work, live, and play. With reports of feeling uncomfortable, daunted, and overwhelmed by technology at times, non-adopting community members may require and respond best to very individual, one-to-one support and to opportunities for private coaching or training provided in a convenient, familiar space or even in their own home or place of work. Removal of barriers such as data caps and hidden fees or contracts, as well as easy access technical support and help desk intervention, plus adequate and reliable equipment and devices would also be helpful for the hardest-to-connect community members.

As noted by the National Digital Inclusion Alliance (NDIA) an effective broadband initiative works to ensure for all community members “daily access to the Internet for all at speeds, quality, and capacity necessary to accomplish common tasks; with the digital skills (training, digital literacy) necessary to fully participate online; AND on a personal device and secure convenient network.”

Recommendations

Based on survey responses and lessons learned, regional efforts will need to address:

- cost of service
- cost of device
- access to service
- quality of service
- public awareness
- digital skills

Additional recommendations include:

Affordability

- support low-cost options and affordability initiatives for broadband access
- support low-cost options and affordability initiatives for devices

Community Mobilization

- provide regional coordination
- support development of local coalitions
- build local coalitions with a wide and diverse cross-section of representation
- promote and support engagement of unserved and underserved communities
- support local and regional broadband leadership and staffing
- support community broadband planning, goal-setting, and capacity-building
- support local asset mapping and data-gathering
- support coalition and stakeholder education on broadband and infrastructure options
- support broadband solutions and community networks that are driven by meeting the community service and resiliency needs over maximization of corporate or shareholder profit

Assessment

- support expansion of broadband survey and gathering of results statewide
- promote speed testing and support statewide speed test campaign
- develop and deploy a survey for businesses and institutions independently
- deploy a survey to gather input from community members WITHOUT Internet
- include those most impacted by lack of connectivity in the assessment process
- support boots-on-the-ground, grassroots outreach and engagement
- integrate the process for gathering broadband information into as many pre-existing points of contact as possible including k-12 and college student registration processes and student enrollment forms at the beginning of the semester or school year
- integrate and align local data collection with regional, state, and national requirements
- create and share a Community Survey Playbook

Education and Outreach

- support community outreach and public education on broadband basics
- support educational outreach for government agencies and representatives
- include both offline and online materials and strategies for public education and engagement
- support development and deployment of user-friendly tools and systems for simplifying and sharing information with the public, with stakeholders, and with coalition members
- build inter-agency systems to support communications and cross-promotions
- build a broadband ecosystem database and network of support
- include the needs of unserved and underserved community members in outreach and communications planning and materials development
- provide educational support for communities as funding opportunities arise
- provide technical support for communities and coalitions as local and regional initiatives evolve and funding opportunities arise
- provide materials and mapping support to communities that are mobilizing
- share the New Mexico Local Broadband Planning Guide, Broadband Ready handbook, and other educational resources, trainings, and materials with communities of all sizes
- Look for best practices from other states and programs and pilot locally as appropriate
- Identify, develop, and support effective digital skills training programs

Local and Regional Strategies

- mobilize locally and regionally to address short-term basic broadband needs while building for robust long-term infrastructure
- work collectively to leverage state and non-state funding to support broadband infrastructure improvements and digital equity and inclusion efforts
- prioritize and address connectivity for unserved and underserved areas
- support digital equity and inclusion planning and initiatives that strengthen digital skills and expand broadband adoption and use in addition to improving access and infrastructure

Resource Link

For more information and access to additional project details online, visit:
www.donaanabroadband.com

Acknowledgements

Special thanks to the all of the community members whose efforts and support were instrumental, including:

- Bob Bunting, Doña Ana County. IT Director, Doña Ana County
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- John Di Ruggiero, CommUNITY Learning Network, GIS Director
- Gar Clarke, NM DoIT, New Mexico Geospatial Information Officer
- Rand Tilton, NM DoIT, State Program Manager for Broadband
- Dennis Sandin, Bohannan Huston Inc., SVP Digital Mapping Principal
- Educators at Las Cruces Public Schools
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- Karla Walton, Community Engagement Marketing Coordinator, City of Las Cruces
- Tessa Abeyta, City of Las Cruces Councilor
- Kassandra Gandara, City of Las Cruces Councilor
- Manuel Sanchez, Board of County Commissioners, Chair
- Melanie Goodman, Office of U.S. Senator Ben Ray Luján (N.M.), Field Representative
- Corrie Stone-Fielder, Doña Ana County, Social Media Technician Public Information Office
- Joseph Vargas, Multi-Media Coordinator; Public Information Office
- Monica Torres, President, Doña Ana Community College

- Organizations and Agencies including:

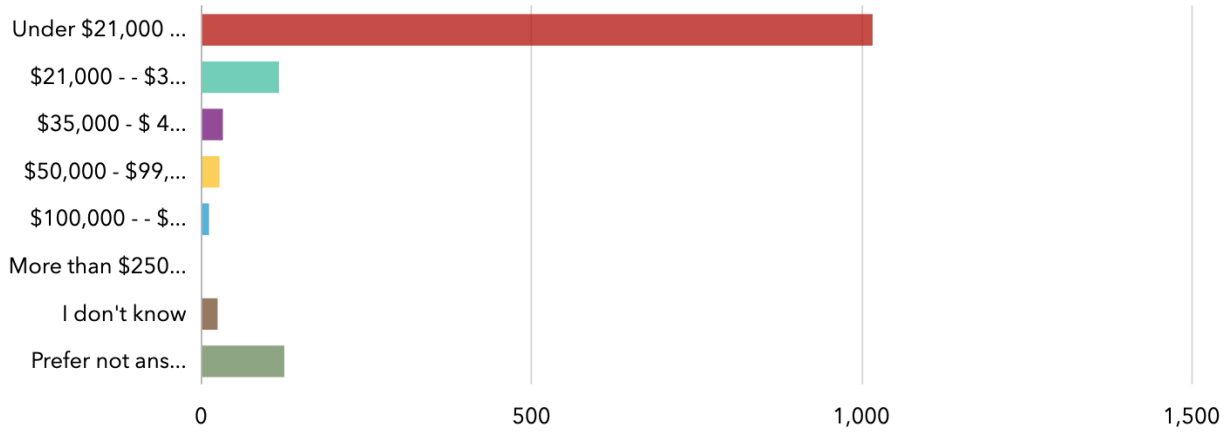
  Arrowhead Center at New Mexico State University (NMSU), Bohannan Huston Inc., BorderPlex Economic Alliance, Cirrus Consulting, City of Anthony, City of Las Cruces, City of Sunland Park, Community Foundation of Southern New Mexico, CommUNITY Learning Network, Doña Ana Community College, Doña Ana County, El Paso Electric, Federal Deposit Insurance Corporation (FDIC) and the Federal Bank of Dallas El Paso Office, Gadsden Independent School District, Hatch Valley Public Schools, New Mexico Homework Gap Team, Las Cruces Chamber of Commerce, Las Cruces Public Schools, Local Libraries, Mesilla Valley Economic Development Alliance, New Mexico State University, Ngage New Mexico, New Mexico Department of Information Technology (NM DoIT), Office of U.S. Senator Martin Heinrich, Office of U.S. Senator Ben Ray Lujan, the Bridge of Southern New Mexico, Town of Mesilla, Village of Hatch, and more.

Appendix

Household Income

Respondents WITHOUT Internet

1.12 Household Income Column Bar Pie Map

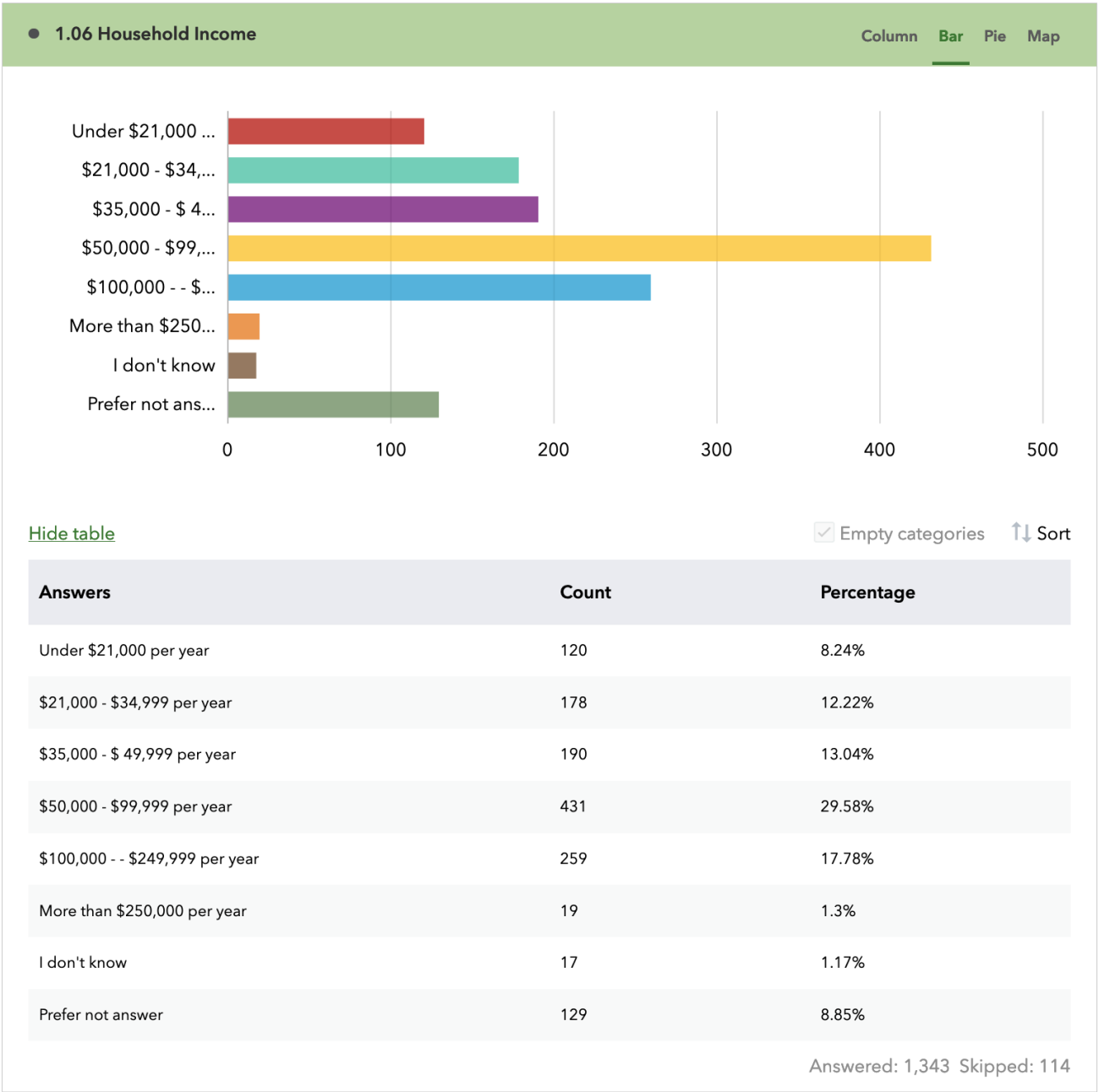


Hide table Empty categories Sort

Answers	Count	Percentage
Under $21,000 per year	1,015	65.57%
$21,000 - - $34,999 per year	116	7.49%
$35,000 - $ 49,999 per year	31	2%
$50,000 - $99,999 per year	26	1.68%
$100,000 - - $249,999 per year	10	0.65%
More than $250,000 per year	0	0%
I don't know	23	1.49%
Prefer not answer	124	8.01%

Answered: 1,345 Skipped: 203

Household Income
Respondents WITH Internet



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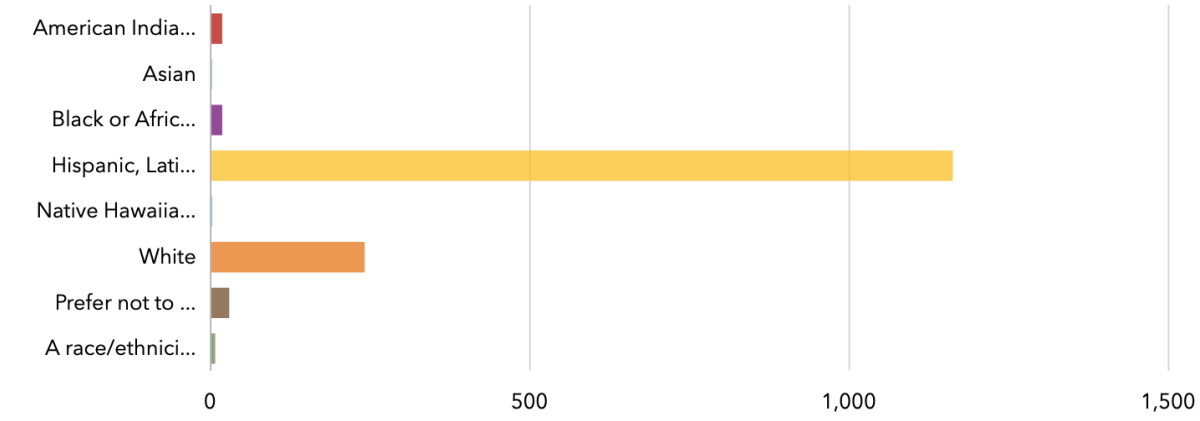
Answers	Count	Percentage
Under $21,000 per year	120	8.24%
$21,000 - $34,999 per year	178	12.22%
$35,000 - $ 49,999 per year	190	13.04%
$50,000 - $99,999 per year	431	29.58%
$100,000 - - $249,999 per year	259	17.78%
More than $250,000 per year	19	1.3%
I don't know	17	1.17%
Prefer not answer	129	8.85%

Answered: 1,343 Skipped: 114

Race and Ethnicity
Respondents WITHOUT Internet

1.13 Race and Ethnicity Column Bar



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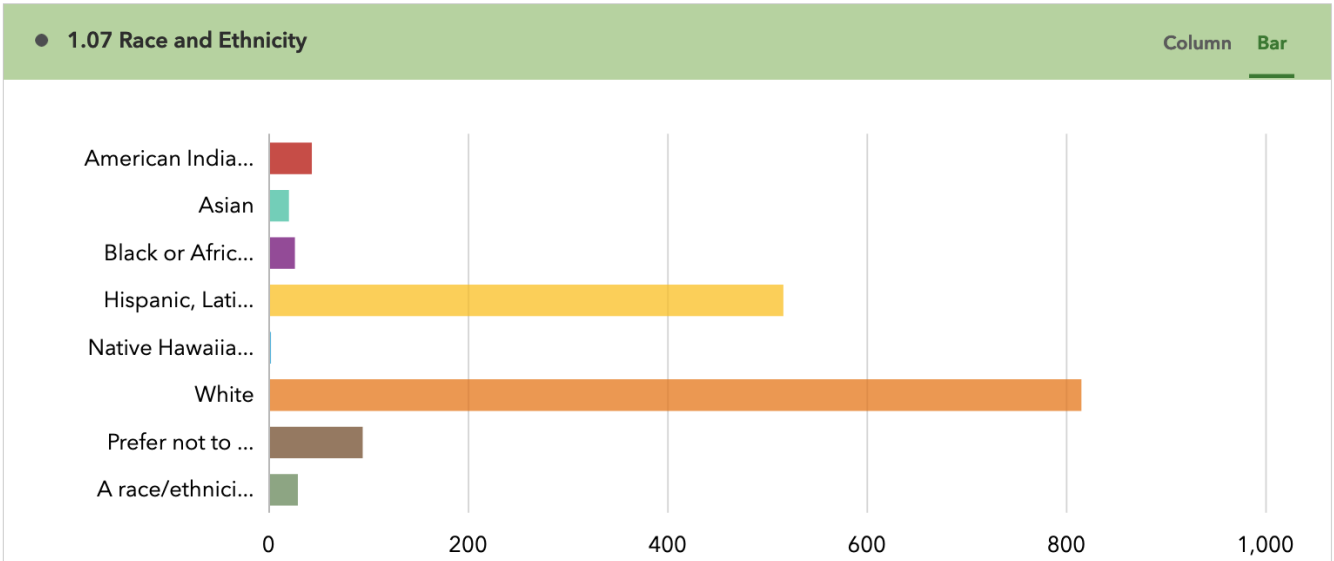
Answers	Count	Percentage
American Indian or Alaskan Native	17	1.1%
Asian	1	0.06%
Black or African American	17	1.1%
Hispanic, Latino, or Spanish Origin	1,161	75%
Native Hawaiian	1	0.06%
White	240	15.5%
Prefer not to answer	28	1.81%
A race/ethnicity not listed	6	0.39%

Answered: 1,422 Skipped: 126

Race and Ethnicity
Respondents WITH Internet



Hide table

Empty categories Sort

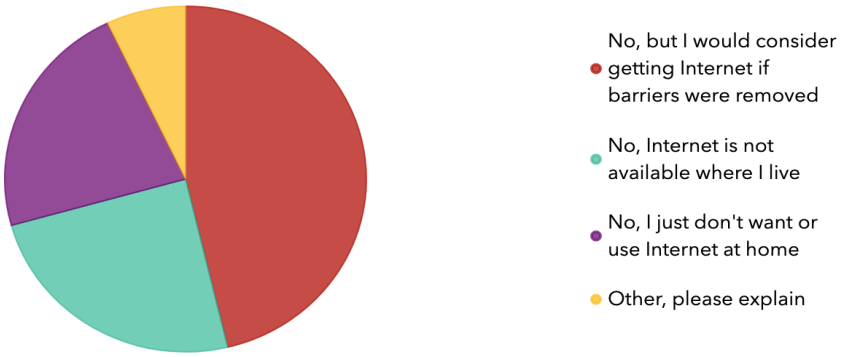
Answers	Count	Percentage
American Indian or Alaskan Native	42	2.88%
Asian	19	1.3%
Black or African American	25	1.72%
Hispanic, Latino, or Spanish Origin	515	35.35%
Native Hawaiian	1	0.07%
White	814	55.87%
Prefer not to answer	93	6.38%
A race/ethnicity not listed	28	1.92%

Answered: 1,388 Skipped: 69

Respondents WITHOUT Internet
Internet Service

1.01 Internet Service at Home

Column Bar Pie Map



Hide table

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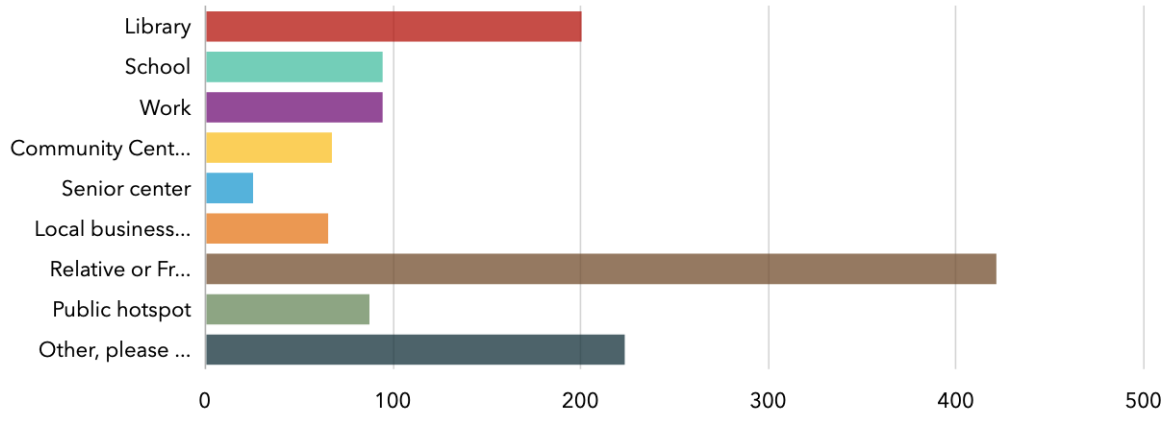
Answers	Count	Percentage
No, but I would consider getting Internet if barriers were removed	691	44.64%
No, Internet is not available where I live	365	23.58%
No, I just don't want or use Internet at home	332	21.45%
Other, please explain	106	6.85%

Answered: 1,494 Skipped: 54

Respondents WITHOUT Internet
Internet Access

1.03 Internet Access Column Bar



Hide table Empty categories Sort

Answers	Count	Percentage
Library	200	12.92%
School	94	6.07%
Work	94	6.07%
Community Center	67	4.33%
Senior center	25	1.61%
Local business or coffee shop	65	4.2%
Relative or Friend's home	421	27.2%
Public hotspot	87	5.62%
Other, please explain	223	14.41%

Answered: 943 Skipped: 605

Respondents WITHOUT Internet

Comments on Home Internet Service and Barriers

In the "Other" section, respondents added comments as noted below.

Comments Regarding Affordability

- "I recently canceled my home-based internet because it cost more than I was willing to pay."
- "I'm on fixed income."
- "No money."
- "Not worth the price where I live."
- "ISPs charge an arm and a leg."
- "I do not need another bill."
- "Too expensive."
- "Slow service and expensive."
- "I cannot afford to have another bill."
- "Slow and expensive."
- "Very expensive and bad quality."
- "Not worth having."
- "Lost my job. Could not keep payments."
- "Dont have the money for it."
- "Unable to pay for Internet."
- "They place expensive limits on Internet use."
- "Back up in bills and needed to disconnect."
- "Live here only 5 months per year and the XXX ISP only allows for 1-year contracts and it is too expensive for us."

Comments Regarding Lack of Availability

- "XXX ISP is the only option in zip code 88048 and they said we would need to pay for an additional pole out of pocket."
- XXX ISP says they cannot add anymore internet service in the area (Chamberino 88027).
- "Waiting list with XXX ISP."
- "XXX ISP cannot add anymore."
- "Only microwave or satellite is available."
- "Satellite Internet is available, but far more expensive and at lower speeds and limitations on GB than cable or DSL lines."
- "Only one company and only microwave Internet is available and is expensive."
- "The Internet that is available is not enough."
- "Apartment complex doesn't have the capability to support Internet access."
- "No service"
- "No service or company is available in the area."
- Apartment complex doesn't have the capability to support Internet access."

Comments Regarding Poor Service

- “It’s so bad, why bother.”
- “Service is horrible for the price.“
- “The speed is very slow. I can’t load the web pages.”
- “Service extremely slow, lines are constantly damaged, no upgrades to service in 20+ years.”
- ”Very bad service.”
- “Very weak.”
- “HORRIBLE SERVICE.”
- “Very spotty.“
- “Yes, but internet service isn’t good where I live.”
- “Horrible service and lines. Extremely slow speed.”
- “Not great service. In and out, Very unreliable…why use if you can use a phone.”
- “Service is expensive and slow compared to other parts of Las Cruces.”
- “The only service offered where I live is 1.5 Mbps, which is way too slow for me to have any use of.”
- “I use my phones data to access the Internet at home. I would have to pay $90/month for unusable internet.”
- “Only able to get monopolies service” “During covid, it was horrible service.”
- “Too slow.”
- “I have XXX ISP and the service sucks.”
- “I have XXX ISP but the service is unstable due to my rural location.”
- “Had XXX ISP - bad service. Dad died, they took it off.”
- “XXX ISP is not a reliable internet service provider. Like to throttle bandwidth to get more customers on board. And it's the only company with more affordable rates.”
- “I have XXX ISP. it does not work. I need something else.”
- “Internet speeds are not consistent with XXX ISP claims.”
- “XXX ISP SUCKS.”
- “Currently have service via satellite which is not very good.”
- “Only satellite and radio are available and are expensive and unreliable”
- “Had XXX ISP. Was too slow and expensive. I got rid of it, It was too slow.”
- “My house is surrounded by mature pecan trees and I’m on a rural road requiring ongoing endless requests for repair which last about 24 hours and then it’s gone. Unstable is the term that pops up on my smart TV as it quits.”
- “School supplied it, but it was very bad.”
- “Reliability & speed for residential use and no competitive internet providers are barriers.”

Comments Regarding Devices

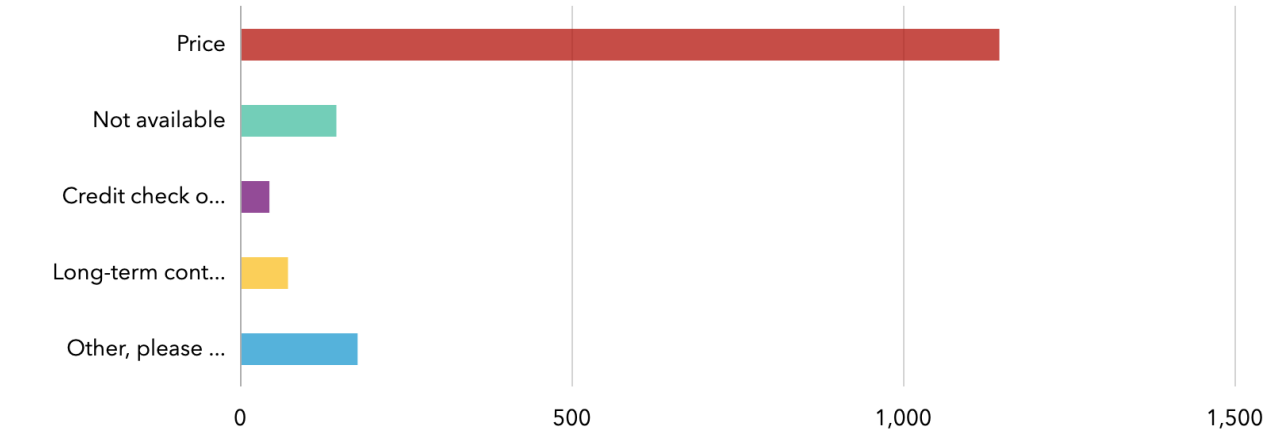
- “I use the hotspot on my cell phone for internet access.”
- “I just use cell.”
- “Depend on a device checked out of our public library.”
- “No computer.”
- “Do not have a home computer.”

Other Comments

- “I use the Internet at work.”
- “Grandkids need it when visiting.”
- “I never learned.”
- “I don’t understand it,”
- “I don't know how to use it.”
- “I really don’t understand how the Internet works.”
- “I don’t need it.”
- “I don’t really know what to do”
- “Don't like things come out in the internet”
- “Need a mobile type with adequate GB to work and stay informed.”
- “Need Help.”

Respondents WITH Internet
Internet Barriers

1.02 Internet Barriers Column Bar



Hide table Empty categories Sort

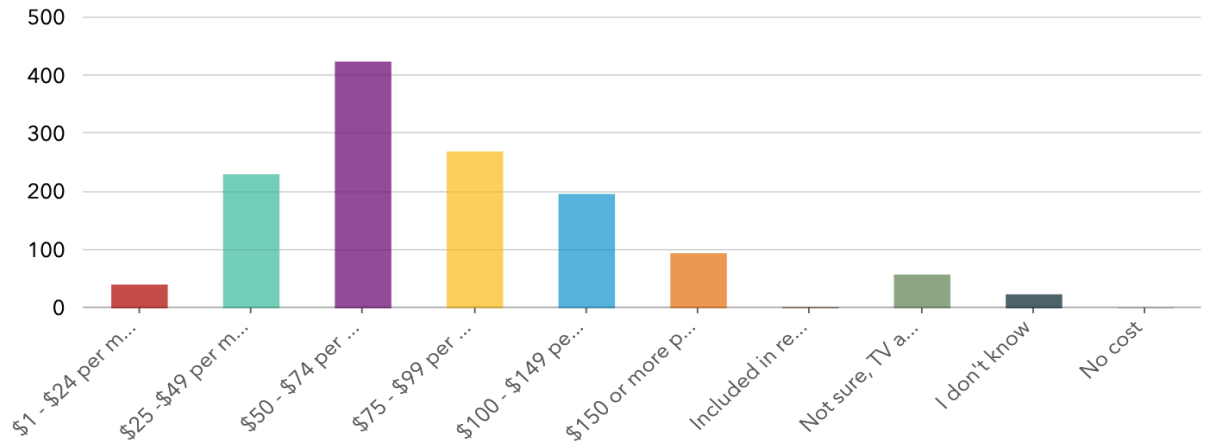
Answers	Count	Percentage
Price	1,143	73.84%
Not available	143	9.24%
Credit check or deposit	42	2.71%
Long-term contract	70	4.52%
Other, please explain	175	11.3%

Answered: 1,377 Skipped: 171

Respondents WITH Internet
Home Internet Cost

● 2.07 Home Internet Cost

Column | Bar | Pie | Map



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Empty categories | Sort

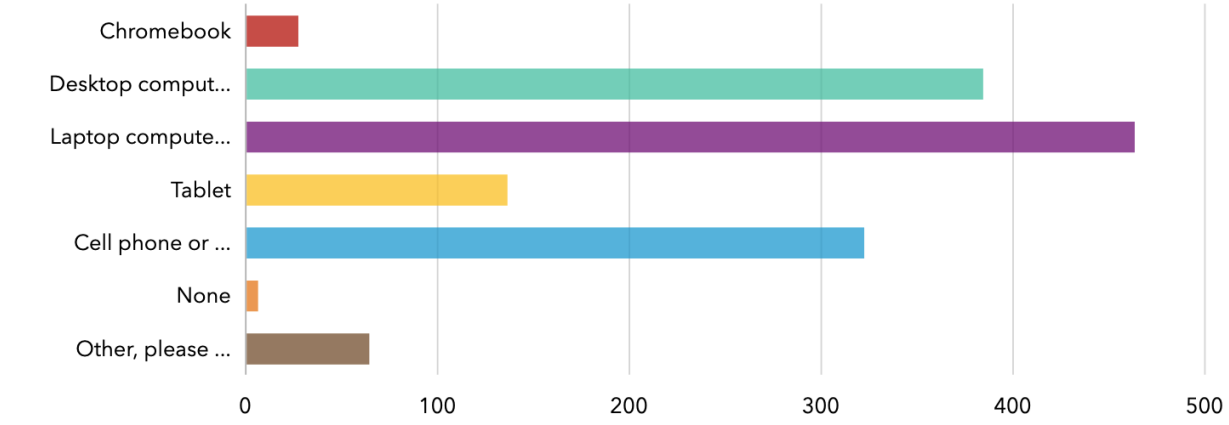
Answers	Count	Percentage
$1 - $24 per month	41	2.81%
$25 -$49 per month	231	15.85%
$50 - $74 per month	425	29.17%
$75 - $99 per month	270	18.53%
$100 - $149 per month	197	13.52%
$150 or more per month	95	6.52%
Included in rent or association fees	2	0.14%
Not sure, TV and Internet bundle	58	3.98%
I don't know	24	1.65%
No cost	1	0.07%

Answered: 1,344 Skipped: 113

Respondents WITH Internet
Home Devices

● 4.01 Home Device

Column | Bar | Pie | Map



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Empty categories | Sort

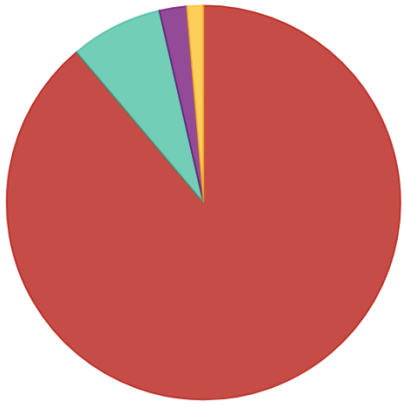
Answers	Count	Percentage
Chromebook	27	1.85%
Desktop computer	384	26.36%
Laptop computer	463	31.78%
Tablet	136	9.33%
Cell phone or Smartphone	322	22.1%
None	6	0.41%
Other, please explain	64	4.39%

Answered: 1,402 Skipped: 55

Respondents WITH Internet
Home Device Provider

● 4.02 Home Device Provider

Column Bar Pie Map



- A personal device (I own or my family owns)
- Provided by work
- Other, please explain
- Provided by school

Hide table

Empty categories Sort

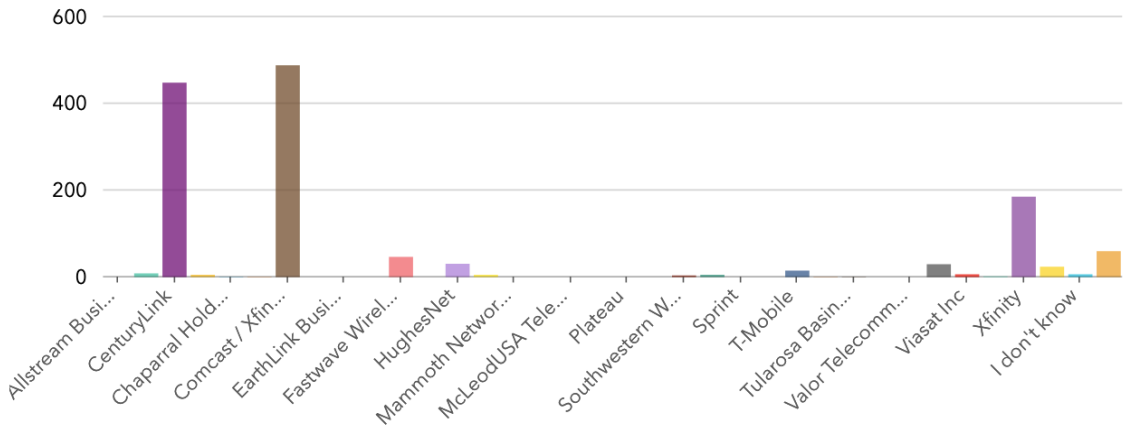
Answers	Count	Percentage
A personal device (I own or my family owns)	1,233	84.63%
Provided by work	105	7.21%
Other, please explain	31	2.13%
Provided by school	19	1.3%

Answered: 1,388 Skipped: 69

Respondents WITH Internet
Home Internet Providers

2.06 Home Internet Provider

Column Bar Pie Map



Hide table

Empty categories Sort

Answers	Count	Percentage
Allstream Business US, LLC	0	0%
AT&T Mobility	9	0.62%
CenturyLink	449	30.82%
Chaparral CableVision	6	0.41%
Chaparral Holding Co. Inc.	1	0.07%
Charter Communications Inc	1	0.07%
Comcast / Xfinity	489	33.56%
Conterra	0	0%
EarthLink Business, LLC	0	0%
FastTrack Communications, Inc	0	0%
Fastwave Wireless	47	3.23%

Answered: 1,382 Skipped: 75

Internet Service Providers (ISPs) in Doña Ana County – 31

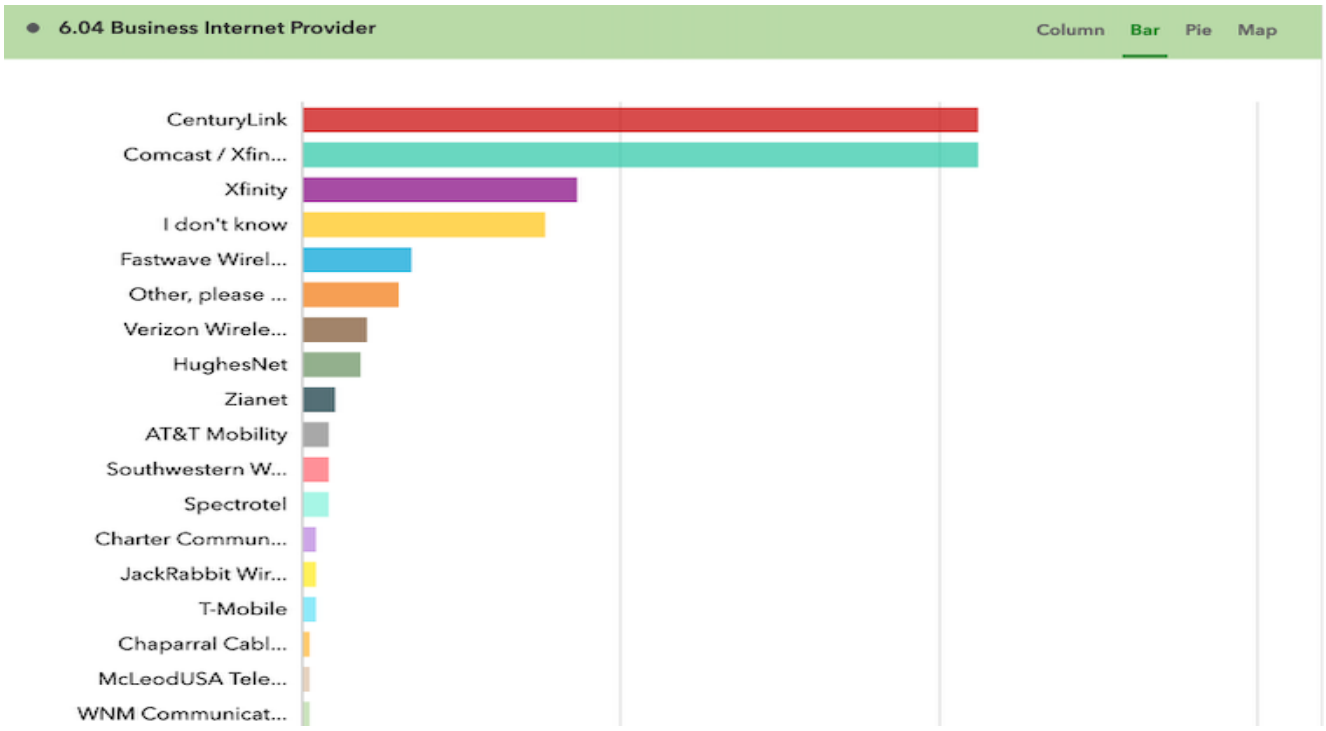
PROVIDER NAME	TECHNOLOGY TYPE	PROVIDER NAME	TECHNOLOGY TYPE
Allstream Business US, LLC	Other Copper Wireline	**PAETEC Business Services**	Fiber, DSL
AT&T Mobility	Mobile Wireless (LTE, GSM-based 2G/3G)	**Plateau**	Fixed Wireless
CenturyLink	Fiber, DSL, Copper	**Skycasters**	Satellite
Chaparral Cable Vision	Cable	**Southwestern Wireless Inc**	Fixed Wireless
Chaparral Holding Co. Inc.	Fixed Wireless	**Spectrotel**	Fiber
Charter Communications Inc	Fiber, Cable	**Sprint**	Mobile Wireless (LTE, CDMA-based 3G/4G)
Comcast	Cable	**Tailwind Voice and Data**	Cable
Conterra	Fiber	**T-Mobile**	Mobile Wireless (LTE, 5G-NR, GSM-based 2G/3G)
EarthLink Business, LLC	Fiber, DSL	**TRANSWORLD NETWORK CORP**	Fixed Wireless
FastTrack Communications, Inc	Fiber	**Tularosa Basin Telephone Company, Inc.**	Fiber, DSL, Fixed Wireless
GCI Communication Corp.	Satellite	**Unite Private Networks**	Fiber
HughesNet	Satellite	**Valor Telecommunications of Texas LP**	DSL
Mammoth Networks	Fiber	**Verizon Wireless**	Mobile Wireless (LTE, CDMA-based 3G/4G)
MCI	Other Copper Wireline	**Viasat Inc**	Satellite
McLeodUSA Telecommunications Services, LLC	Fiber, DSL		

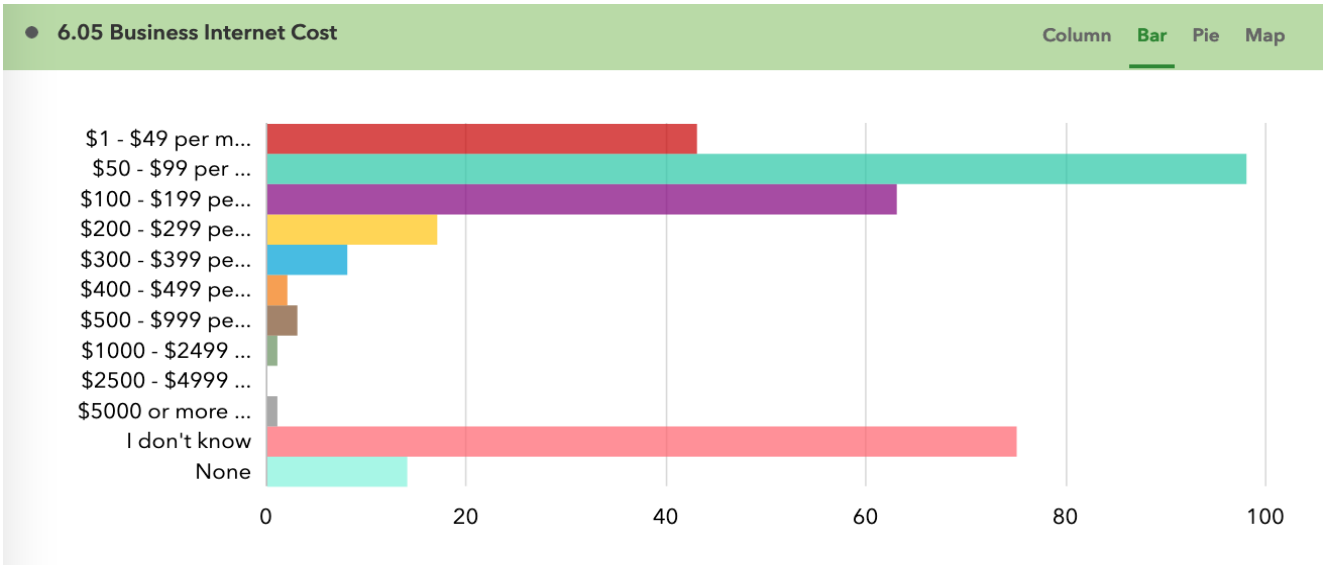
Digital Skills

Skills Reported	Do NOT have Internet		HAVE Internet	
Answers	**Count**	**Percentage**	**Count**	**Percentage**
Create a document	328	21.19%	1,314	90.19%
Send and receive an email	279	18.02%	1,379	94.65%
Upload and download a document	378	24.42%	1,338	91.83%
Share photos	300	19.38%	1,276	87.58%
Watch a video	318	20.54%	1,321	90.67%
Search for information	389	25.13%	1,378	94.58%
Access health services	332	21.45%	1,207	82.84%
Order something online	266	17.18%	1,319	90.53%
	Answered: 655 Skipped: 893		Answered: 1,399 Skipped: 58	

Business Responses

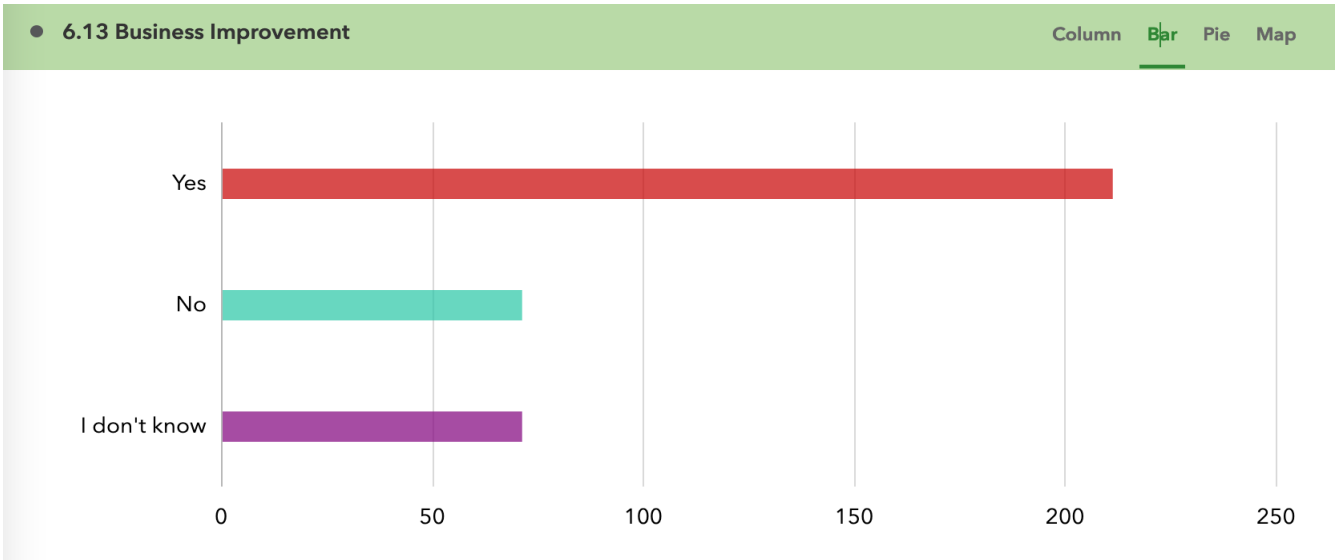
Business Internet Providers and Costs





Business Responses

Business Improvement



Empowerment Congress / Congreso de Empoderamiento

Reaching the hardest to connect communities is a huge undertaking. The Empowerment Congress of Doña Ana County was contracted to support outreach and conduct surveys of households in Doña Ana County that did not have access to the Internet in a six-week period between October 11 and November 19, 2021. Promotores de salud, also known as Community Health Workers (CHWs) or Promotores, were trained to collect No-Internet survey responses and gathered 1,164 by November 19, 2021 from the target audience of persons in households that did NOT have internet access. The survey contained 14 questions and took an average of 6- 8 minutes to complete. Surveys were available in English and Spanish.

The Empowerment Congress of Doña Ana is a strong believer of the value that Promotores bring to the healthcare system and seven Community Health Workers were contracted. The Promotores contracted live mainly in Sunland Park, Anthony, Vado and Las Cruces, which facilitated their ability to reach and connect with residents in these communities. Promotores are known locally and understand their community's culture, concerns and opportunities. Empowerment Congress staff and Promotores received Broadband Survey training from Doña Ana County staff on October 6, 2021, and received training on program implementation on October 9, 2021 from the Empowerment Congress. Promotoras collected data Mondays through Thursdays, and on Saturdays visiting homes and public spaces. Promotoras observed all social distancing policies when approaching community members as well as safety policies while in the field.

Surveys collected focused on zip codes identified by the 2020 Census as having lower rate of access to broadband and included the following Colonias: Garfield, Salem, Hatch, Rincon, Organ, Mesilla, Mesquite, Vado, Chamberino, La Mesa, San Miguel, Anthony, Sunland Park, La Union, Berino, Chaparral and Las Cruces.

Observations gathered from the Promotora experience in the field

- Internet providers that participants mentioned by name included: Xfinity, Hughes, Comcast, Spectrum, CenturyLink.
- Individuals that have had the internet in the past and do not have it now, feel that not having it is bad. They feel they need it.
- People that have never used the internet... feel they don't need it.
- Many individuals do not have internet access in their homes and use their internet cell phone service.
- Individuals in apartments have internet because the owner doesn't let their residents have it due to making holes in the wall.
- Many individuals expressed dissatisfaction with internet service, they said it was too slow, unreliable and would go away when they most needed it.
- Some households have the internet because of government funded programs, but they say they are also poor quality.
- When approaching some households, families went inside and did not open the door.
- If elderly people had a caregiver with them, individuals were more likely to participate in the survey.
- Community members with a disability and elderly populations are on a fixed income and cannot afford the internet.
- When residents that did have the internet conducted the broadband survey and speed test in front of us, they often had speeds between 17 and 40, no more.
- Many of the residents that do have internet said it was very expensive and the service was horrible.
- Households with school age children had many issues during pandemic shutdown. The Internet was too slow, and in some cases, within the Colonias, children were sent to Las Cruces with family members so they could attend online classes.
- There were instances that families could not afford Internet for their children's schooling and the law enforcement had to intervene, because the family was not providing education for the children. Schools issued mobile hotspots to provide internet access to children but this was also useless.
- There was a case that the school provided the mobile hotspot and the school charged the parents to replace it because it did not work.
- Some children in families that do have internet access could only access the Internet because the school provided jetpacks for students.
- Some people thanked us for doing this because they really need the Internet.

Comments made by community members to Promotoras

- “They tell me my home has access to Internet
  but because I don’t have a smart phone or TV, I can’t use it”
- “I did have Internet but it’s so expensive I had to cancel it”
- “I have no need for it”
- “I have Internet, but I don’t know how to use it”
- “Internet sucks here”
- An elderly lady said:
  “The government wants me to go to back to work again in order to pay for Internet”
- Students mentioned that they left the University
  because they could not afford the Internet to attend classes.

Recommendations from Promotora experience in the field:

- When Broadband is made accessible to all, training must be included on how to use the internet.
- There is great limitation in the quality and service of the internet providers.
- It is vital that these companies are regulated to provide good quality service in all the communities to eliminate broadband inequities.
- Internet access needs to be available in rural communities and made affordable for all.

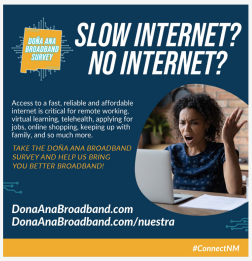
Outreach Materials

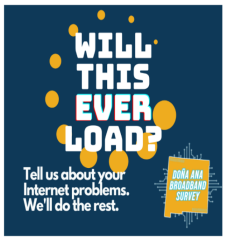
Outreach materials in English and Spanish were developed and shared among partners and with the public. Outreach materials included social media posts, video posts, flyers, bookmarks, infographics, utility inserts, and press releases.

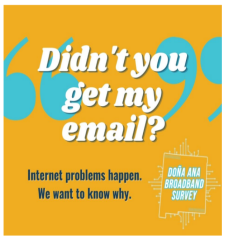
Social Media ~ Medios de comunicación social

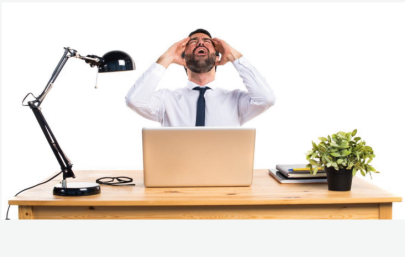
POST #1

POST #2



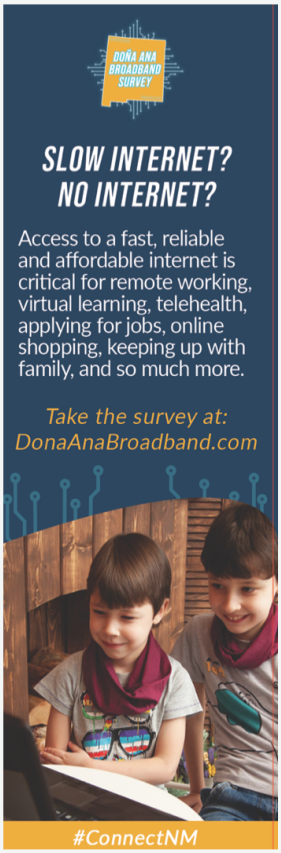


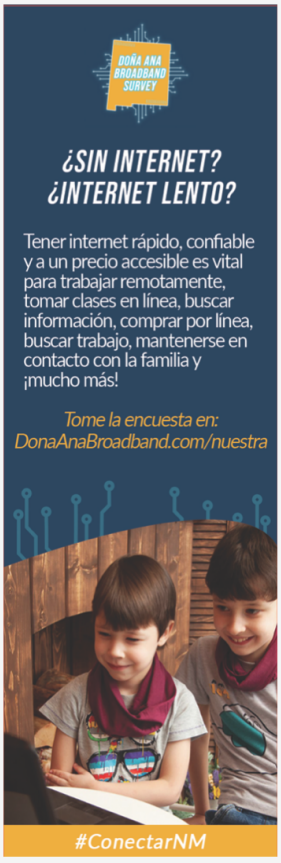




BROADBAND SURVEY

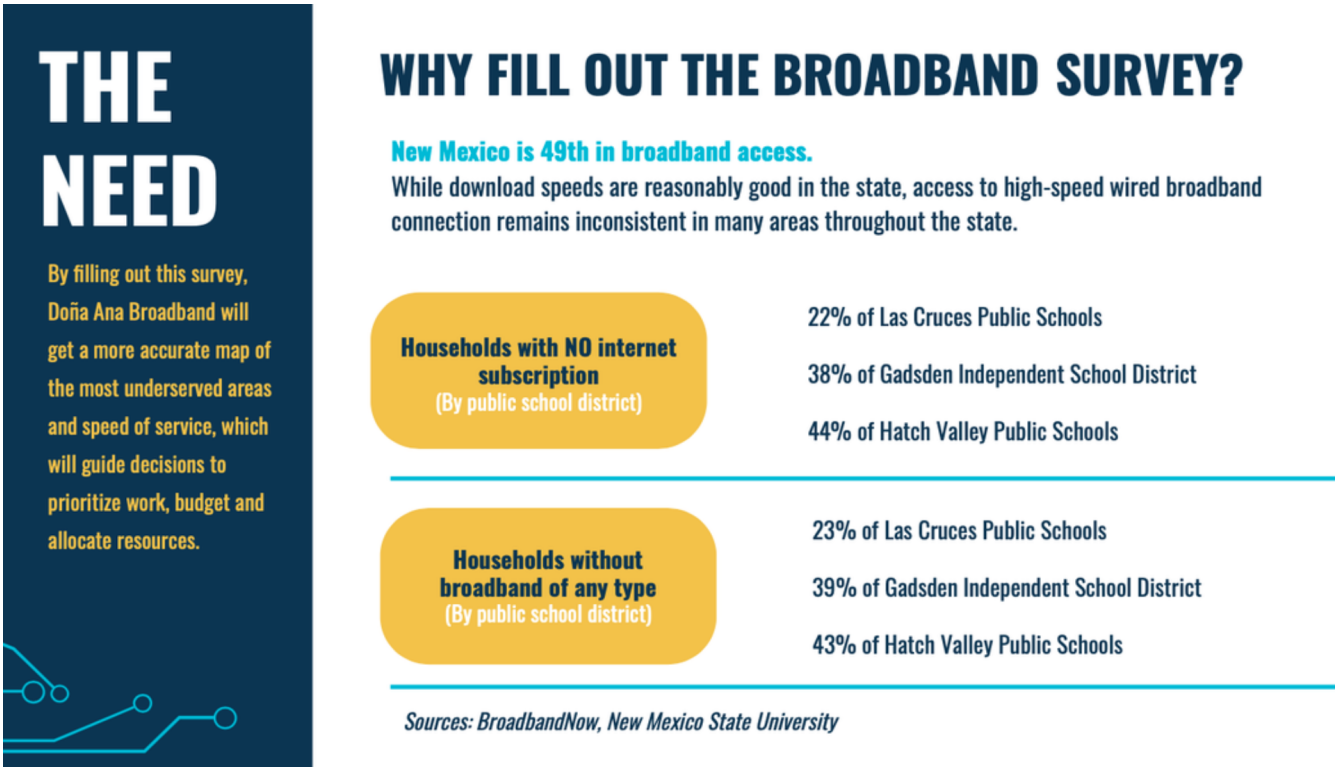
Press Release





BROADBAND SURVEY

Doña Ana Broadband- Summer 2021



Doña Ana County - Census Data

According to US Census Data for New Mexico, an estimated 165,691 households in New Mexico have no internet connection, which is approximately 21.2% of all households.

According to US Census Data for Doña Ana County, an estimated 17,602 households in Doña Ana County have no internet connection, which is approximately 22.6% of all households.

Source: US Census Bureau, December 2020 https://www.census.gov 2020 Census Demographic Data Map Viewer created with ESRI https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=2566121a73de463995ed2b2fd7ff6eb7