

RESIDENTIAL AND BUSINESS BROADBAND SURVEY RESULTS

Roane, Calhoun, and Clay County, WV



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Disclaimer

The telecommunications business is continually evolving. We have made our best effort to apply our experience and knowledge to the business and technical information contained herein. We believe the data we have presented at this point in time to be accurate and to be representative of the current state of the telecommunications industry.

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ROANE RESIDENTIAL SURVEY RESULTS

In the fall of 2018 and early winter of 2019, a broadband survey was conducted in Roane County as part of a comprehensive broadband study for the larger Clay, Calhoun, and Roane region. Paper surveys were mailed to residential addresses in the County, and the online (Web) version of the survey was publicized on social media. Residents were encouraged to complete the survey online or fill out and return the paper version by surface mail. Businesses were encouraged to complete a separate business-focused survey, and the results of that are included later in this report.

A total of 383 responses were collected in the residential survey. Not all responders answered every question. Note that because of rounding errors, not all percentages sum exactly to 100%. Across the three counties, a combined response rate of 9.3% was achieved, which is statistically robust.

Some of the key findings from the results are listed below.

72% of businesses that responded need employees to be able to work from home.

93% of residents are "not satisfied" or "only somewhat satisfied" with current Internet service.

54% of respondents indicated they have no alternative to their current Internet provider.

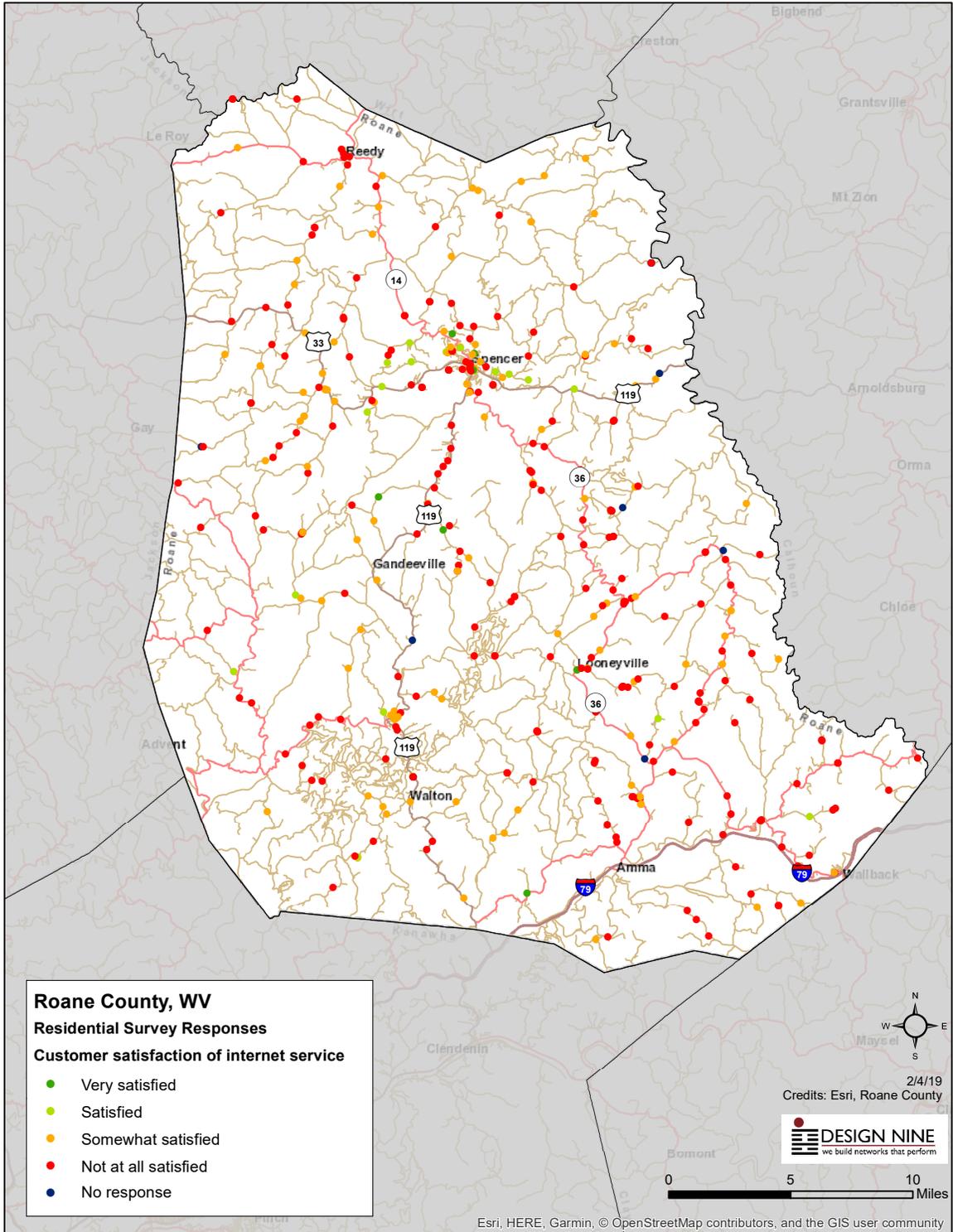
32% of residents have 7 or more Internet-connected devices in their home.

33% of respondents would work from home if they had better Internet.

28% indicate that availability of broadband Internet is affecting where they choose to live.

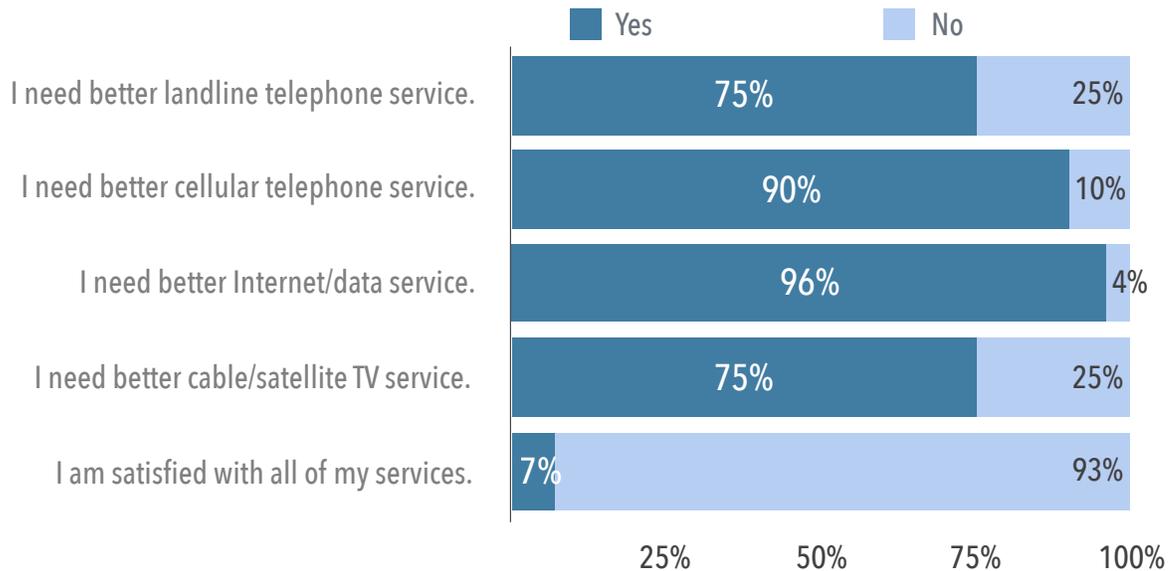
DISTRIBUTION OF SURVEY RESPONSES

The map below shows the geographic distribution of responses to the residential survey, coded according to their satisfaction with their existing Internet service.



RESIDENTIAL SURVEY SUMMARY DATA

1. Select the items you agree with below



2a. Total number of adults in household

1	2	3	4	5	6	+7
67	356	67	21	7	4	0
13%	68%	13%	4%	1%	1%	0%

2b. Total number of Internet users in household

1	2	3	4	5	6	+7
55	192	73	70	32	10	4
13%	44%	17%	16%	7%	2%	1%

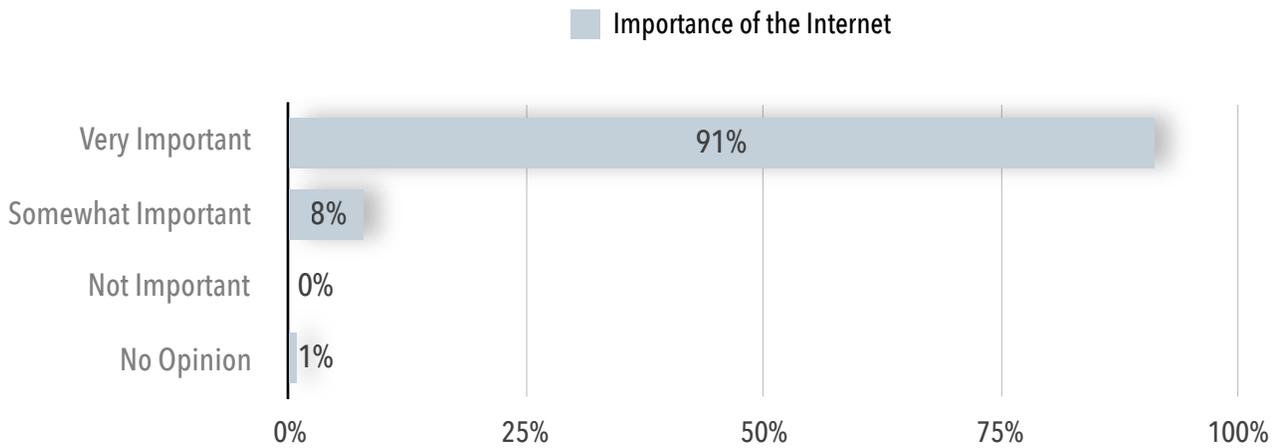
2c. Total number of college students in household

1	2	3	4	5	6	7+	Blank
80	10	1	0	0	0	0	436
15%	2%	0%	0%	0%	0%	0%	83%

2d. Total number of k-12 students in household

1	2	3	4	5	6	+7	Blank
74	59	22	3	1	2	0	366
14%	11%	4%	1%	0%	0%	0%	69%

3. How important is Internet access to you or your household?



4. For your household, how much do you spend each month for local and long distance telephone , TV, and/or Internet? Do NOT include cell phones.

\$50 or less	\$50-75	\$75-100	\$100-150	\$150-200	More than \$200/month
31	35	61	107	119	167
6%	7%	12%	21%	23%	32%

5. How much do you pay now for at home Internet access each month?

No Internet	I only use free hotspots	\$10 to \$20	\$21 to \$40	\$41 to \$60	\$61 to 80	More than \$80/month	I don't know
50	6	15	98	90	83	147	30
10%	1%	3%	19%	17%	16%	28%	6%

6. What type of Internet do you have at home?

Dial-up	12	3%
Cable modem	49	10%
DSL line	185	39%
Fiber	3	1%
Satellite	139	29%
Cellular wireless	38	8%
Broadband WISP	6	1%
I don't know	30	6%
Other	15	3%

Other types of Internet (open ended question)

We are with Frontier and I know we are wired from the road to our house and have a router.
 Phone Data
 We have frontier internet. I'm not sure what the type is..
 We have frontier internet. I'm not sure what the type is..
 the only internet available is over priced sat
 It would be great to have all the available cable, internet, satellite facilities like city has to offer.
 Slow slow slow
 Wifi hotspot
 no internet because when i had it, it was expensive and worked only sometimes
 We use our cell phone hotspots.
 Switched from Frontier to Hughes do to terrible service. Hughes is up and down also.
 Hughesnet

We need other options the only thing available to us is satellite, and it goes out all the time or there is always a transmission problem. We pay twice as much as dsl line users pay and we are only getting 10-15gbs of data each month. It is beyond ridiculous.

Wireless frontier

Suddenlink

Verizon mifi box

Frontier high speed

I work from home and have to use a 4g mobile hotspot from AT&T. For all non-work related internet needs, we use Hughes Net satellite. The satellite internet does not support the work I do.

Hot spot on phone and iPad

I don't handle the bills so I'm not sure of the prices. I think these responses are close, though.

had to get a booster to reach workstation from router from sudden link. weak service should have not had to do this

Bundled through Frontier

Frontier and cell

Hughs Net

satellite, hotspot

only have internet access with satellite but cant afford. husband and i both seniors and disabled but cant afford satellite internet. we have dish network for tv, but is so expensive on a fixed income.

"dial-up, cellular wireless"

data on cell

Hughes Dish Frontier Broadband

broadband max

Frontier broadband

not paying for bad service

searching for high speed internet provider

Frontier

frontier/hooked into phone line?

DSL Line?

hughes net

microcell also

Hughes Net

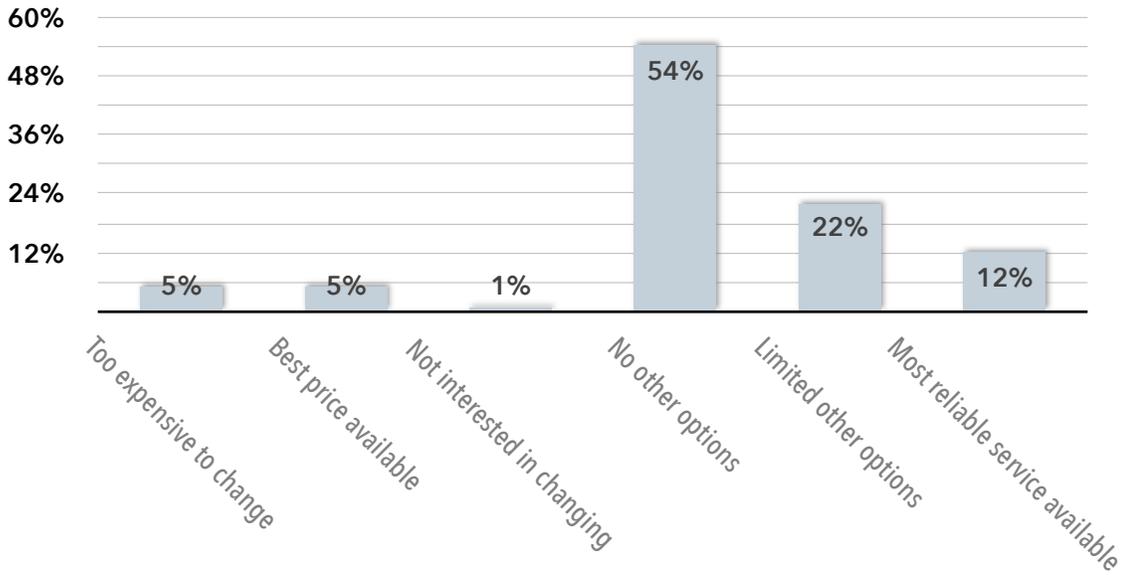
fiber & copper

frontier thru phone line

frontier

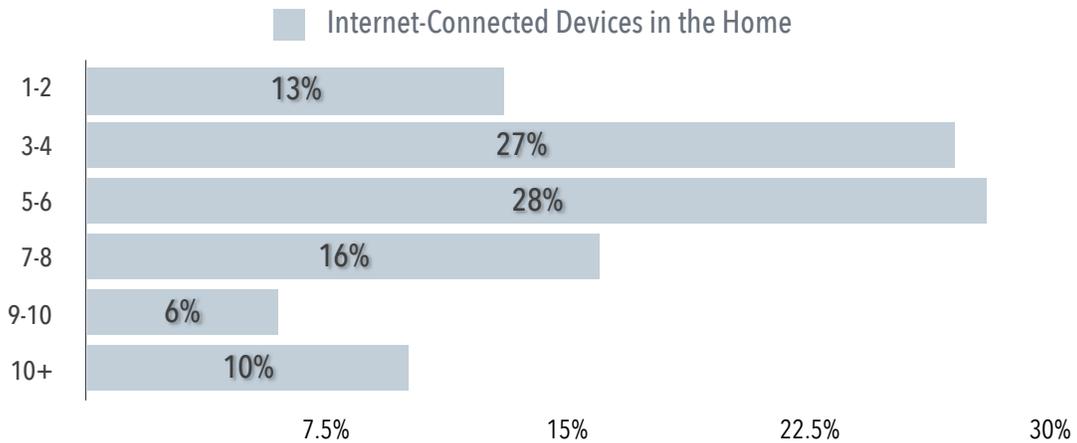
7. Based on the type of Internet connection you selected above, why do you still have it? (select all that apply)

54% of respondents indicated they have no alternative to their current Internet provider



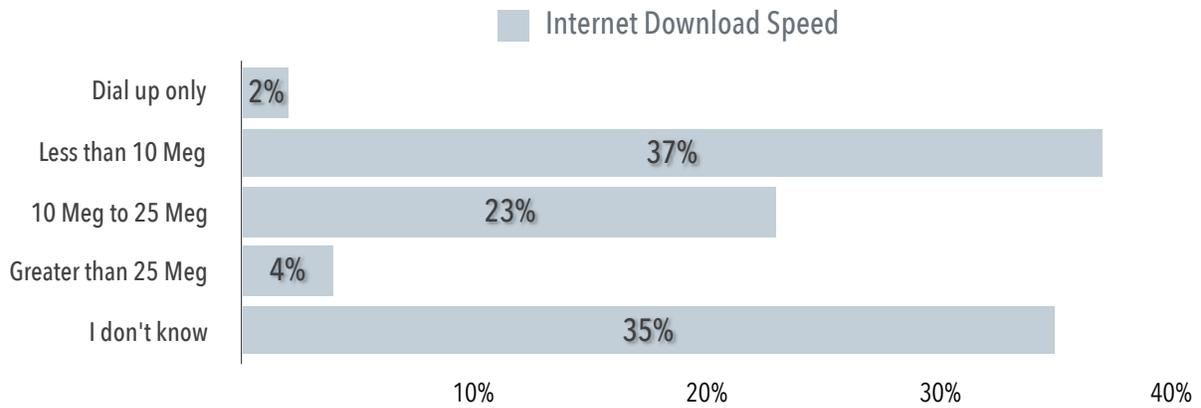
8. How many devices (for example computers, cellphones, smart TVs) connect to the Internet in your household?

16% of residents have 9 or more Internet-connected devices in their home



9. What is the speed of your Internet Connection?

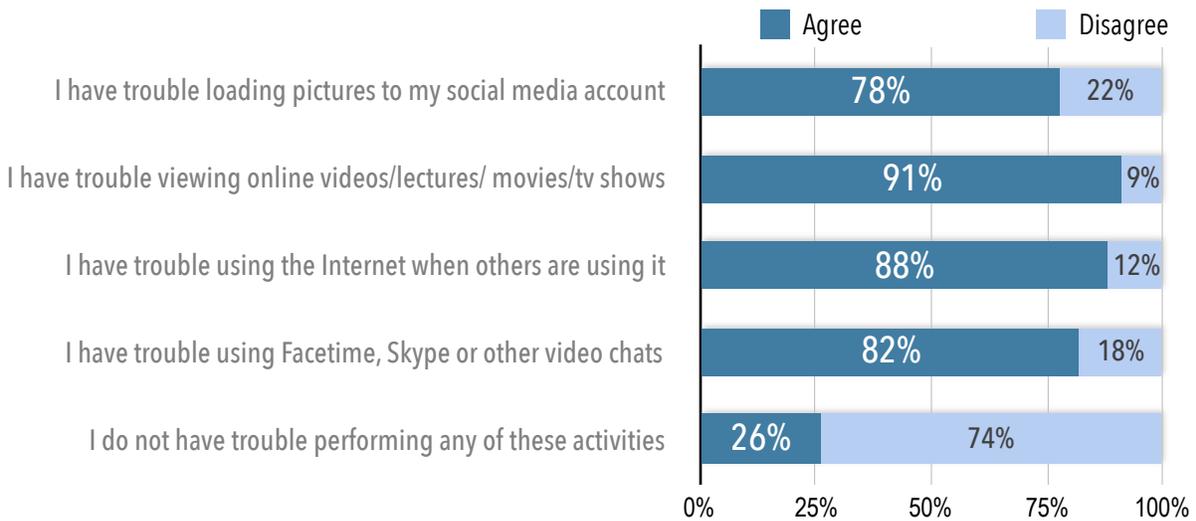
As few as 8% of residents have Internet service that meets the FCC definition of broadband (25



Meg down, 3 Meg up).

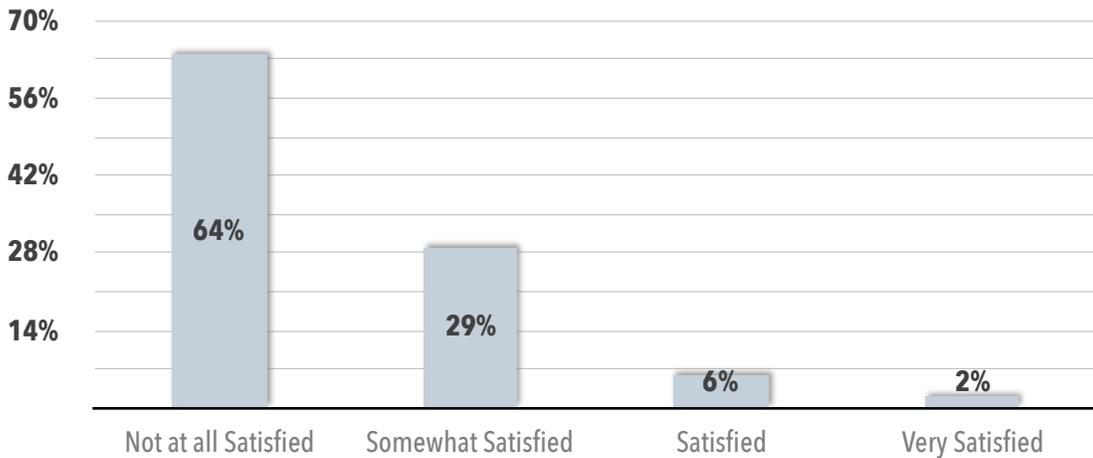
10. Select the items you agree with below

More than 80% of respondents report they have trouble using common Internet services



11. How satisfied are you with the speed and reliability of your Internet Service?

Only 8% of residents are "satisfied" or "very satisfied" with their current Internet service.



12. Select all items you use the Internet for now

Email	485	92%
Access news and current events	430	81%
Homework / Schoolwork	205	39%
Use a VPN (Virtual Private Network) for work or	119	23%
Download or listen to music or audio books	344	65%
VoIP (Vonage, Skype, FaceTime)	186	35%
Online Backup (files, photos, music)	283	54%
Telemedicine, tele-health	79	15%
Online gaming	191	36%
Maintaining a Web presence, blog, or social	247	47%
Shopping	452	86%
Online banking	390	74%
Social networking	387	73%
Smart TV	236	45%
Other	62	12%

Other uses for the Internet

We home school using an online curriculum and my husband works from home certain days, of course all computer and smart phone based work.

Work remotely at least one day a week.

Printer, scanner, etc.

Downloading tax programs for my business; Norton security

Cannot E-file tax returns

Research for my farm

I would certainly, frequently use VoIP/Skype, etc., if I could. I actually drive to town to Skype from a friend's house weekly, because it's that important, and that impossible to do here. Same goes for online education and other things mentioned below -- would do a lot of things like that, if I could.

I use Messenger calling to talk to family.

Making medical appointments, paying bills, and seeking paths to higher education

Work software development. Investment management

Remote working from home.

I work for an insurance company and use VPN daily, at least 8 hours per day to be able to work from home.

We are fortunate to live on a hilltop located fairly near a AT&T tower, but when it is cloudy or trees are in full leaf, we often have a weaker signal. We have a hill between us and the tower that partially blocks the signal here at the house, but we are satisfied with the speed we get unlike when we had a slow Hughes Net satellite service. Our cell phone is not reliable here in the house, but the wireless in house phone service is pretty good if we don't get too far from the router.

I have 4 smart tv's but not enough internet to access

Contact with teachers/school

Stock Quotes and Trading

DATA TRANSFER FROM FIELD-WORK TO OFFICE.

BACK AND FORTH TRANSFER OF DIGITAL DATA.

work

It can seldom be used for anything, web browsing on a good day.

Two people in household are almost entirely housebound, so internet is all of their social interaction including staying in touch with family, shopping (including groceries), news, etc.

Maintaining our church website which includes uploading audio and video files.

There are too many too list...

I work from home and require a reliable and fast internet connection to support my vpn.

Xbox

To run my business

access work email, documents and send and receive work documents

Banking, updating devices, streaming movies, uploading video for my church

Would like to use Skype for home business but internet is way too slow.

Work from home

Only have hot spot. With internet available cannot do movies or streaming. Expensive for what we get.

Keep up with our children's school work/grades/extracurricular activities, and communicate with teachers/school officials.

My wife is a Hospice nurse and needs it to work from home. She's on call and needs to be able to access records but it's difficult because the internet we do have is unreliable and so slow.

Home office for business use

Smart appliances

Security system

Home nurse uses it for medical purposes that comes here

Apps for my daughter who has autism

movies, news

Research for various interests, hobbies, how to do it issues.

professional report writing, documentation, research for work. I also view webcams and professional videos/ lectures to maintain my SLP license.

Work part-time from home. I don't know if it is a VPN.

Streaming movies

Netflix

Job hunt, Church

Research

Work

Printing

had internet in the past through hughes net, but have had to discontinue. i drive to library to use.

farm related items

webinar training for work

none

cell phones no cell tower near

communication due to profound hearing loss

business research

business

cannot get internet

I turned it off because it was not reliable

would like to use for several others

online job education

what elected overpaid under qualified idiot had this survey sent out?

varies

small personal business

work

work

work

download recipes

Facebook

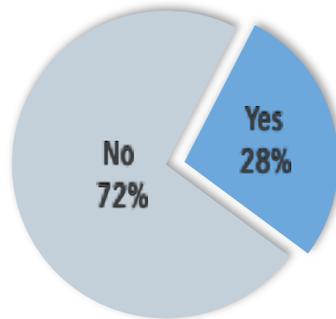
weather

business

don't get service
 microcell for cell phone
 facebook
 no internet
 job hunting

13. High speed, affordable Internet influences where I choose to live?

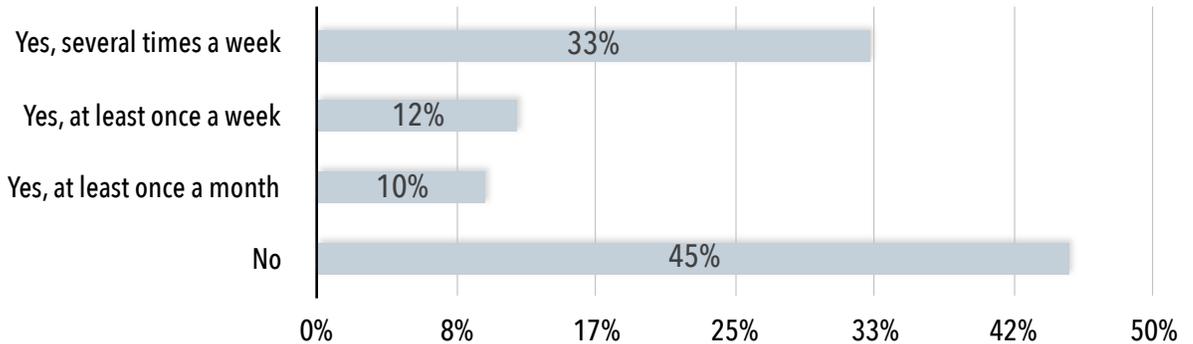
Availability of broadband Internet is affecting where people choose to live.



14. What would you be willing to pay for a faster, higher quality Internet access?

\$10 to 20	\$21 to \$40	\$41 to \$60	\$61 to \$80	More than \$80/month	I don't know
22	79	111	92	70	0
6%	21%	30%	25%	19%	0%

15. Does anyone in your household use / need the Internet to complete school assignments or job training course work?



16. Who is your Internet Service provider?

Some responses included more than one provider.

Frontier	60%
Hughes Net	20%
SuddenLink	7%
AT&T	4%
Exede	2%
Other Satellite	1%
Other	5%

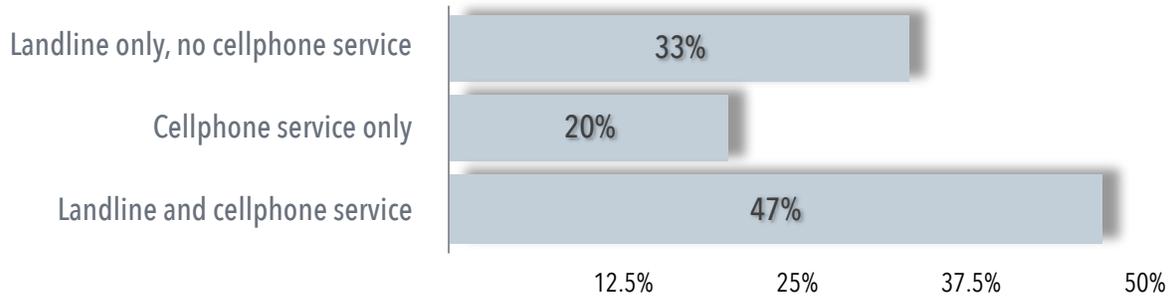
17. Who is your cable/satellite TV provider?

Dish Network	47%
DirecTV	39%
SuddenLink	6%
Other	8%

18. Who is your cellular provider?

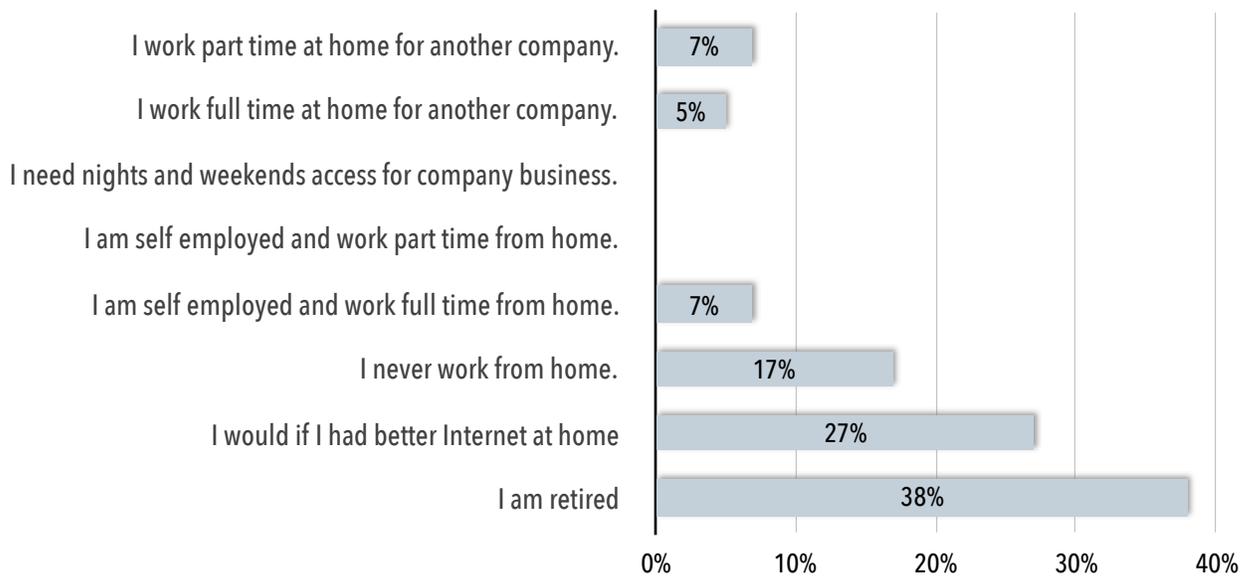
AT&T	48%
Verizon	19%
Straight Talk	6%
Consumer Cellular	3%
TracFone	6%
Sprint	4%
Other	4%
None	6%

19. What kind of telephone service do you have at home?



20. Do you work from home?

43% report working from home part or full time—the Internet has made residential neighborhoods into business districts. Home-based jobs and businesses reduce traffic congestion and reduce road maintenance.



21. ANY OTHER COMMENTS

There was a very large response to this question, and many residents provided detailed answers.

"Frontier Sucks, phone lines old and crackly, don't work half the time. No cable provider here, only satellite services available. We should have better internet service than we do.

PLEASE put better service here."

"No customer service from frontier"

"My wife works from home, we need 2 modems each suppose to provide max 25meg but lucky a lot of times to get 6-8"

"Without Frontier or another internet service, which none is available, I could not use my cell phone. And even then with Frontier it drops calls or there is a break for a couple seconds on All calls. I have no At&t cell service at all where I live. So I would really appreciate better internet service. Actually I changed my AT&T plan to use the wifi calling and like I said it has to many problems."

"My husband works from home a couple days a week. My son is home schooled with a virtual curriculum. Not sure what we will do when our daughter starts school and will need to do school at the same time if no improvements are made with internet speed. We are only able to do one activity at a time that requires the internet. :(Frontier is the only provider at this time in our area. We have no family locally so we FaceTime regularly, but it is very glitchy and connection fails repeatedly. To use our cell phones we have to step outside our home or there is no connection. No fun at all when raining and cold."

"Our only access to cell service is through wireless internet. We lose access frequently due to fluctuating electrical service in this area. Our land line is equipped to operate if the power is off. Otherwise no emergency communication available."

Quality Internet service today is a necessity, as almost all aspects of our lives depend on it. I can't even get what I was promised.

"Need to get what we pay for"

"We do not get AT&T service where we live. Our cell phones have capabilities to make and receive phone calls and text messages over WiFi. It would be great if we could pick up cellular service at home, in case of power outages."

"We are paying more than triple what it would cost for an internet connection that is over a hundred faster and more reliable in other areas, something has to be done.

I have frontier phone service and satellite thru Hughes net which is joke my internet dose not work terrorized wants to charge me monthly for services that don't work"

"Husband works from home via computer during the tax season. Uses the internet to research and order parts for farm equipment during the year."

"Wife is a college professor that has to be connected via internet to the institution (other professionals, Zoom meetings, emails, grade submissions, elearning, etc.) during the semesters."

"We have to pay for a booster from AT&T so that we can get a signal in our home on our cell phones. No one else's cell phones work at our house. We need better and more cell phone towers!"

"Can not get cell phone service at the house. No company says that they cover my address for a landline. To make phone calls i need to drive to the lake or to ripley"

"My landline phone service and internet service through Frontier is very unreliable and I am not able to depend on it for continuous and reliable service to perform important tasks. As a result important tasks are not scheduled, completed or planned for completion on my internet service. Terrible internet service and phone service that Frontier appears not capable of correcting even after my reporting it for several years to the Frontier repair service and the PSC."

"The quality and reliability of Frontier's service are extremely poor. Noise on the line is always loud, making even casual conversation stressful and difficult, and interfering significantly with important and complex conversations. Sometimes the noise on the line is enough to make any conversation impossible. "

"Sometimes people can't reach me because their calls to my number just don't get completed; they may hear a couple of rings, then nothing. On some of these occasions, I hear a couple of rings as well, but not always. There is no Caller ID record of these attempts to reach me. I have had medical bills sent to collections partly because of this inability to reach me by phone."

"Sometimes I dial one number and reach a person at a different number. This is a bizarre, confusing, and sometimes upsetting experience, depending on who it is that I suddenly find myself in conversation with."

"In my attempts to address some of these service issues (most of them I've never addressed, given the costly futility of dealing with even the most basic and important issues), Frontier has consumed countless hours of mine, and of friends and family who've tried to help me get the problems resolved. The problems have never been resolved. Frontier employees are paid for the hours they spend running us in circles, but I don't get compensated -- I just get worn out and frustrated -- and each attempt has ended in my giving up, discouraged, out of energy, and increasingly hopeless that any amount of time and effort from me is sufficient to motivate Frontier to find the source of the trouble and fix it. "

"Neighbors feel similarly baffled and powerless in relation to Frontier; one household I know of, with two elderly people, was without service, strung along by a series of nonsense-spouting Frontier representatives, for a period of two months last year. It's a 45-minute drive to even the nearest pharmacy; managing medications and medication refills, among many other things, was quite an ordeal for them during that time.

When my landline goes completely dead, it has often come to light, over the course of a series of follow-up contacts from me, that false internal reports have been filed repeatedly, each claiming that the trouble has been fixed, leading to a dismissal of the "trouble ticket," with no attempt by Frontier to verify with me that the line has in fact been restored. The result in these cases has been that, when I get a chance to contact Frontier seeking an update on the estimated repair date, I find that my lack of service -- with Frontier's latest word being their assurance that it's being addressed with all possible haste -- has had action, or even intention of action, for some number of preceding days. When my line goes completely dead, it is generally many days, requiring many requests, before service is restored. With internet service also unpredictably out of commission, this is really difficult and time-consuming to manage."

"From my experience, it seems quite likely that nonstop nonsense is the main theme of Frontier's training of their customer service representatives."

"I am disabled and geographically isolated. I am dependent on Frontier for all my communications except paper mail. Frontier's monopoly-enabled lousy service quality, unreliability, and unresponsiveness, especially without even cell service for backup or emergencies, are a significant source of inconvenience and distress. The diverse complications of the poor service -- data and work lost to frequent interruptions to internet connection; phone calls to me attempted but never received by me; hindrance and stress to personal and professional relationships due to the shouting required for phone conversations, and due to others' incomprehension amounting to disbelief that my service is so poor that their occasional inability to reach me at all by phone is a corporate malfunction, and is not a sign of my ineptitude; and the diverse measures I've been driven to take in the attempt to compensate for these and other disruptions -- are hugely depleting of attention and energy that I need badly for managing the non-Frontier-generated challenges of poverty, isolation, and disability. Some of the attention and energy currently consumed by Frontier I would like very much to invest in more positive pursuits than fighting a series of unwinnable battles against a mega corporation."

"In this society, electronic communication has become a basic need. Reliable phone service has been essential to basic functioning for decades. Frontier's competition-free negligence and incompetence leave my neighbors and me really disenfranchised, even functionally handicapped. Please do help. Thank you."

"Our bill raised more than \$20.00 per month but the service has not gotten any better."

"I could not get a couple of your questions to work."

"We have a site on Etsy where we sell our jewelry. We could do better if we had better connections."

"the phone lines in our area are so old they cannot add anymore services to it. the only internet service available is satellite and costly. the only tv service is satellite and costly. seems when frontier took over is was our understanding that they got federal grants to bring better service to rural areas but the only improvements i saw at that time was the upgrades done in cities not rural areas as promised. I cant afford 80 dollars for internet and 80 dollars for tv each month and a lot of other people cant either."

"the phone lines here are dismal, always going out for days at a time. internet is not available except for hughesnet and its overpriced so not worth it. have to get sat to watch any kind of television."

"The internet is only 3 mbps at its highest speed and experiences frequent disconnects. Frontier tech rarely comes to the home when called. The situation with the internet makes it impossible to continue my education and I have to drive to my father's home to submit school work online. My wife frequently has trouble loading web pages just to pay bills. Our family is seriously considering moving out of state due to the poor internet access. The cost of the service we currently have is outrageous for the service they provide but we have no other options at our home."

"NEED another, better internet service provider and telephone service in this area. Frontier is the most pathetic, unreliable service I've ever had. The phone and internet is constantly going out completely. Sometimes for an hour or so, sometimes for a day or so."

"Filling out this questionnaire is a bunch of crap..We do not have good service and never will get better service...If you do have a problem and call Frontier they give you a commitment time of over 2 weeks. We pay \$50.00 a month just for internet service which is no better than dialup. We

are supposed to get 6mg and Frontier says it can be anything below that. Doesn't have to be 6mg."

"I could run a business from my home if it were better connected."

"Internet offline everyday at some point. Telephone echoes when you speak. I don't think anything will be done about this other than a survey and a conversation topic for some politician to run on. But thanks for asking"

"Our internet is absolutely terrible and Frontier don't care at all we pay 169.00 a month for less than 3 mbps of service its down a couple weeks a month well at least"

"We suffer with not having high speed"

"Would be nice to have better internet service and cell phone service because we don't even have a phone line coming up to our house. Took us 2 years to get power so to have something fast would be nice!"

"My home is on the edge of Roane County and Jackson county. It's like being in the stone ages with internet and cell phone. I have something I call a cell camera because I can't get service until I am 5 miles out side of Spencer."

"People have cable internet about 3 miles from here but no one will run it out here because there isn't enough people."

"WE WOULD LIKE AFFORDABLE AND RELIABLE PHONE AND TV SERVICE AT OUR HOME. WE ARE FALLING FURTHER BEHIND THE REST OF THE WORLD EVERY DAY THAT WE DO NOT HAVE CELL SERVICE. IT MAY BECOME A MATTER OF LIFE AND DEATH IF WE HAVE AN EMERGENCY, SINCE FRONTIER LANDLINE SERVICE IS NOT RELIABLE AND WE DO NOT HAVE CELL SERVICE AT OUR HOME. IT WOULD BE NICE TO HAVE THE ABILITY TO STREAM MOVIES AND SPORTS EVENTS, ALSO. WE DO NOT EVEN HAVE THE ABILITY TO REPORT OUR POWER OUTAGES, BECAUSE OF NO CELL SERVICE AND THE LANDLINE DOES NOT WORK WHEN THE ELECTRIC IS OFF.

PLEASE BRING THIS AREA INTO THE 21ST CENTURY!"

"We are severely disappointed in our internet and phone service where we live. We thought that satellite internet was supposed to be the BEST, we were sadly mistaken. I have had to call HughesNet multiple times due to our service being out. Other than basic/simple web surfing, you can NOT do anything with our internet. Pictures and especially videos are almost impossible to load. Anytime the weather is slightly bad we lose our phone service (HughesNet) and then the internet (HughesNet) is shortly behind it. Unfortunately, this is our ONLY option for internet/phone service where we live."

"We have Verizon landline service and it is terrible. There is a constant buzz on the line and it goes out frequently. The satellite service through Hughes Net is not very affordable but it is all we can get and we have to have internet access. You can't tell a difference from when the new data starts and when it done b/c the speed is always the same. It's terrible that we have no other options to other telephone/tv/internet services where we live and pay a lot of money for crappy services."

"I work from home daily connected to a VPN. We also have our own small business. We need reliable, affordable internet access. I would love to be able to cancel the current landline phone we have at this time due to it being mostly unreliable. Satellite internet will not work in this area either for working a job, we have tried it as well. We currently use our cell phone service for internet and this is very expensive and your data is limited. Thank you."

"I had a computer consulting company but had to close it due to insufficient internet service available. My son and his family considered moving near us but could not because they are much too dependent on internet access. I live on disability and find it very frustrating to have to pay almost as much as a mortgage for landline, internet, tv and cell service. If we lived in or near a city we could have the same services for a fraction of the cost."

"Our landline comes and goes. It has been out for more than a week at a time - usually when it rains. My Mom's is the same. She lives near me. We had no problem with phone service until Frontier was bought out by Verizon. Our internet is so slow - there is very little we can do. Yesterday it took 4 hours to upload 75 photos from my desktop to Shutterfly to try and order a photo book for Christmas. Needless to say that did not happen. We have a smart TV but can't use it accordingly because the internet is too slow. Slow internet also causes problems when I am trying to respond to work from home."

"Roane County is in need of internet and cell phone services in rural areas!!!!!!"

"We have traveled the world through the military and have seen many 3rd world countries. West Virginia is a nice one."

"Because we are near a cell tower, we have wireless in-home unlimited phone service for \$20 (not including taxes) from At&T combined with our internet service which is \$60 (not including taxes) for 10 GB LTE, but we maintain a \$15.50 per month (not including taxes) Frontier landline service for 911 purposes (local calls only) to get Dish TV for \$107.05 not including taxes, etc. It's the TV costs that are killing us until we decide if we could do without that particular package or provider. If we did the math and thought we'd get the same type of shows, we would buy more data from our At&T wireless internet service, eliminate the Dish and get TV through the internet on our Smart TV."

"We only use our flip style cell phones for emergencies since we can only get reception from one corner of our house. We also use them when my husband is out on the hilltop farm where he gets excellent reception, or when we travel on the interstate. We pay \$33 a month for two lines for 250 minutes from Consumer Cellular which is more than enough for us. We do not have or want a smart phone, I-pad or any of those devices, because we think they are too expensive and too addictive. We also will not do Facebook because of privacy issues."

"I pay \$100.00 month for internet and it is used up within 3-4 days. I would love to have Suddenlink."

"The only internet service available is dial-up which is too slow to be worth paying for and satellite which is far too expensive. The only internet access we have now is on our phones through At&T which is very unreliable with poor signal. Frontier land-line is also out about once a month."

"We have lived here since 2006 without access to cell service/data even though there is a tower 4 miles away on Vineyard Ridge."

"I cancelled our home land line that was costing 50plus a month the basic plan from frontier about two yrs ago and now we rely on WiFi calling from our cell phones for phone calls which is not the best or reliable esp when download speeds are reduced because the only internet option you have"

"HughesNet has a caps on their monthly download plans and reduce speeds after that is met."

"This also leaves it near impossible to stream but 2-3 movies a month so this forces you to buy satellite TV which is also not cheap."

"We are debating cancelling TV at this time. Frontier bought Verizon out and promised expansion how many years ago?"

"It's extremely frustrating to travel to a family/friends house that pays less for all 2-3 services TV, internet and phone than we pay for one often places further from the main road than we. That being said I would still gladly pay as much for faster no download cap internet service."

"People in our community need better internet and telephone service ...more reliable"

"I think it would be a huge plus for everybody out here on linden and surrounding areas we have to deal with satellite internet which hardly ever works broadband comes into this it would be huge there's things I do for work at home but can't hardly with HughesNet I would sure hope it comes into our town it would be great"

"It honestly can't get much worse than it already is. So any improvement would be much appreciated."

"My internet is so bad here, I had to reload this survey three times before the whole thing loaded without timing out! We need help out here."

"Frontier provides terrible service and I would change if I had any options at all."

"Our family would switch to cable broadband immediately if it can be made available where we live."

"NEED AT LEAST 10Mbps UPLOAD AND DOWNLOAD HERE AT NEWTON, WV NOW."

"Frontier is absolutely deplorable as a provider. Years of promises and lies. Wasted and pocketed money for years for everything but better service. Frontier should ONLY get assistance/grants whatever ONLY of supervised by a state or federal officials."

"The communications services are next to none in my area. The infrastructure is old and not up to date. Satellite is the only option in my area. The landline service is totally unreliable through Frontier. No TV or cable provider in my area. No cell service in my area."

"When the weather is bad I loose my service. I have no cell signal here!!!! I would like to have cable with internet and phone with 50 MB or higher speed. One company instead of Three."

"Unless we treat the internet as a utility, that 20% without broadband will continue to fall farther behind. Remember the rural electrification of America! The postal and telephone were subsidized because the government deemed their services vital to a progressive society."

"HAD FRONTIER INTERNET WHICH WAS ""TERRIBLE""HAD BEEN TOLD FOR YEARS THAT FRONTIER WAS/IS GOING TO UPGRADE LINES TO FIBER OPTICS HOWEVER GOT TIRED OF WAITING LAST YEAR....SO I SWITCHED TO HUGHES NET WHICH IS BETTER BUT NOT BY MUCH. STILL HAVE FRONTIER LANDLINE PHONE & CONSTANTLY HAVING PROBLEMS WITH IT, BUT THERE IS NO OTHER OPTION WHERE I LIVE."

"Are service is sometimes not to be but if we have bad weather at all it goes down hill cod weeks at a time"

"Services in this area are awful."

Nothing Reliable

They suck

We need some kind of improvement in service"

"Frontier sucks"

"We usually have to use a hot spot on one of our cell phones to access the internet with a computer. Some of our bills are paid this way."

"We have renters on our property who have children who need better internet access."

"Here at my home I have two internet providers. Frontier is my DSL provider and that one is terrible. If I can connect to internet I only have a speed of around 386K downloads. Ping times are over 1000ms constantly. And we have a lot of packet loss. Other provider is Hughesnet satellite. It has good speeds of the day (25M downloads), but in the evening it slows down to under 3M. I pay around \$10 a month for the Frontier DSL. I pay almost \$100 a month for Satellite internet from Hughesnet. Hughesnet has a 20 Gig limit on usage a month. What I would like to see is an internet provider that can provide a 10M profile and have a price more affordable than the 2 I am using right now!!"

"We definitely need improved service and more options available to us. Our download speed averages 1.5 Mbps and our upload speed averages 0.8 Mbps. The only option for us other than Frontier DSL is satellite service which is outside our budget level."

"It would be nice if we could get the service that we pay for. I had all the lines from the pole to the house replaced and also inside box which we had to pay over \$300 something for. Our internet is still absolutely horrible, I've called and had them come out and look and every time they say, "It's the main box down the road, that the box itself is over 50 yrs. old and doesn't have fiber lines just the old copper."

"Our landline service is horrible. We have Frontier. There is so much static and noise you can hardly hear. It's like having a party line. I can hear my neighbor talking when I'm on the phone."

"I would use the internet for a wider variety of activities if it was faster and more reliable."

"I am chronically ill and find it difficult to leave the house for work, grocery shopping, and social functions. The internet is the only way I can interact with the world and keep in touch with my peers. I want to start an online business as a way to get off of public assistance and find some independence, but my internet is dead at least once a week and our modem has to be physically reset at least five times a day as our internet consumption overwhelms the minuscule amount of bandwidth we have been given. Frontier technicians have told us that our connection is strong enough to bump us up to 6 mb instead of our measly 2, but no one at the Frontier office cares to look into making that happen and we get ignored when our service bottoms out. As young adults my husband and I rely on the internet to participate in the outside world while living near family in the state we love but we cannot do that with the way things are."

"The only internet we have is when we turn our cell phones into hotspots. Satellite is too unreliable. I operate a feed store and we have a logging business and both require a good internet, this is very frustrating that we live 7 miles from Spencer WV and can't get a good internet here that doesn't cost an arm and leg and that is reliable. It's ridiculous."

"Other options that are more reliable are absolutely necessary. We only have access to Frontier. We cancelled our telephone because for 13 years the static on the line was unbearable. Our internet only works about half of the time and they will not prorate the cost for the days we are unable to use the internet. This causes me to use all of my monthly data and can cause overages or a slowdown in my LTE SPEED. Suddenlink runs past us on the main road but they will not bring service to the 5 houses on our hill. We are paying for barely working service and we need to either fix it or provide other service providers."

"I do some work for my church as a volunteer"

"Yes My Phone, internet, and Satellite is costing me around \$200 to \$300 a month. I have no choice but to keep it because we are limited to services and we are limited to how fast our internet goes to 12, we need faster internet service in this area and also cell phone service. Thank You"

"We have constant outages where we have no services. I would love cell service from home. I would love broadband cable."

"Where we lived before, we had DSL. What we have now is so much less. We are limited to data download unless we want to pay way too much and subjected to slow, slow speeds when we reach our limit. We are so frustrated with our only options. We so hope improvements can be made."

"I live at the top of Steele hollow and have room for a tower. This would benefit Calhoun and Roane county. 3045319592"

"Suddenlink has me paying \$117.00 for 200 m, but I am lucky to get 50m."

"We really need to improve our broadband access for our county to succeed. Our internet is absolutely horrible. They say we live "too far" from the main line.. We literally live 5 minutes from Spencer."

"Not only is the service minimal at best, the customer service is despicable. They are rude and not helpful. Frontier is one of the worst telephone and Internet operations in the state of WV. I believe the only reason they are operational is due to the lack of choices for telephone and Internet in our area. Where I was raised, we had Armstrong Telephone and Internet Services in Wirt/Ritchie County. Their services today are much better than what we receive with Frontier."

"I've just about given up on dependable services in my lifetime where I live"

"All my neighbors have fast internet like suddenlink they will not give it to us unless we pay them 4500\$ up front so stupid"

"When I work in Calhoun County, as required by my job, I have NO cell service, which is dangerous. Additionally, because of limited broadband, it was the county assessor's decision to turn off the courthouse security system, including cameras in my courtroom, in order to run his necessary computer system. This caused a very bad situation, endangering all litigants, court employees and the general public. As a judge, I recognize that we could provide a number of services not otherwise available in our rural area if we only had sufficient broadband service."

"Would like higher speed internet to stream tv shows ,etc. that is affordable."

"tired of having dropped calls and internet going out on sunny days"

"Thank you."

"Land line is often down. We count on email to communicate at those times. We are a healthy retired couple... for now, but at our ages we need some security that we can get help when needed."

"When we moved to Spencer, WV in 2000, I never imagined that the internet, phone and TV would be so far behind the times. We were already committed to our house purchase and had no options. My husband and I plan on moving in the next 5 years and we will choose a location that has high-speed internet and NON-SATELLITE tv options. When we move, I will likely NOT have landline service but will use my cell only. Several times a year my landline stops working....why do I have to put up with that? In the 21st century why are residents of rural areas subjected to the

"dark ages" regarding internet, TV and cell service? These items are no longer luxuries but have become necessities. Question 14 is unfair...are you using answers to determine what to charge people? If we're desperate for reliable services and say "more than \$80" is that what we'll be charged? If the time comes that modern services are offered in this area I will consider what I'm getting for the price you're charging and will then decide if I'll pay it."

"It would be simply fantastic to have broadband internet out of town .cell service is basically poor ...but that's all i have that I can afford ..satellite internet is plain n simple joke a big rip offI hope that in my lifetime I can have good dependable internet at my home"

"Tired of paying three times more for internet than others but cannot have Netflix or stream movies, etc."

Suddenlink is the only one available to me. they keep raising prices. service is getting worse. tv freezing and pixilating. they charged me more than \$60. for an appointment for 10 minutes to change a splitter but it didn't fix it. didn't show up for next appointment. didn't call. sent an email for satisfaction and responded with "sorry" Totally dissatisfied with suddenlink"

"I work for another company as well as need nights and weekends for my job Suddenlink is unreliable and continues to increase my price every year for less reliable service"

"I am 4 miles from Spencer on US 119 south. Myself and my neighbors are in a dead spot between 2 feeds. There are roughly 60 to 100 customers that would benefit from a booster for the dead spot but when I ask anyone the general consensus is we probably will not see it. I don't understand where all the public funds went when I am this close to the county seat on a major thoroughfare and can't get it."

"I would be willing to pay a little more in property taxes to improve the telecom infrastructure!"

"Roane Co. most definitely needs a better, more reliable Internet service than Frontier. They have been promising faster speeds for years and have yet improve any of their services."

"I have AT and T for my cell carrier and my husband has Verizon - both of us have problems in different areas of the county and surrounding area."

"Phone goes out often. Several times a week internet needs reset or stops working. Cell service does not work here for Verizon or Tracphone or free Obama phones or ANY cell service. I have offered to let Verizon Place a tower on my 65 acres never got a response. I am still open to this - I own the land free and clear with no loan owed. Have deed and survey. There are MANY trees on the lines between here and town which I have reported to Frontier many times, to no avail. None have ever been removed. It's like they just don't care, they KNOW awe have no options for any other providers. Thank you"

"My service with Suddenlink is faster and more reliable than I previously had in a large western city."

"The phone lines here are old. They're constantly breaking or down from storms. The service to repair them takes weeks which is hard to deal with. My wife's work requires her to have access, but that's just about impossible. Good phones and better internet would allow more people to work from home if they needed and improve the unemployment rate here."

"It is extremely difficult living where you have No cell service or reliable internet service, when you are older and need to be in touch with the outside world!"

"Our area would truly benefit from broadband I have had frontier and now Hughes net for internet and both is so lacking. Most days opening a page is a struggle. I can't imagine as my son gets older and requires more online services for school how bad it will be."

"Cable (broadband) & DSL (non-broadband) are available at my residence, but I have no cellular coverage available unless leasing & utilizing a cellular extender from Verizon Wireless which uses my cable internet to broadcast a short range cellular signal to my house to make/receive calls & adding an additional monthly fee."

"We are not offered an internet service here... There's nothing available via satellite or a wire. We only hotspot from our cell phones and use our data until it's too slow to be worth it."

"I need better internet to access training modules and genealogy research"

"Suddenlink's delivery system seems to be insufficient for the number of customers using their services. TV cable problems crop up frequently and technicians are available only 1 or 2 days per week in this geographic area. They are the only cable service provider authorized in this area (exclusive contract with City of Spencer). Satellite services in this area reportedly are not much more reliable (subject to weather conditions, etc.) and their internet services are less desirable than Suddenlink's cable internet access."

"I will be moving in full time in a month ,then I will need a tv service as well"

"When phone and internet services go out we have no way of calling out if there is an emergency there is no cell phone service here. My mom has medical issues that needs to be cared for."

"I have a son who works from his home in northern Virginia. If there were better internet access in Roane County, he could return home."

"Our internet service is horrible.. Constant drops.. Resetting itself.. Going out for no reason.. We have called about getting someone out here.. 6 months later and no one has still showed up"

"We would like to have a high speed Internet option as none is available in our area."

"Couldn't find link for survey on FB site"

I'm moving out of WV for that reason.

WV has worse reception than when I was in Sudan, Africa!"

"Yes, internet strong enough to take surveys like this online"

"My son is about to start online college courses and, as bad as my internet is, his is worse so he may frequently have to complete work from my home instead of his."

"Internet service is very unreliable in Spencer, WV. I tried SuddenLink and it was pathetic at my home. Modem was within 5 feet of my laptop and it frequently failed to load. I had to view my WVU lectures at the laundry. I have Frontier now and it is bad, too. Video streaming frequently fails. Frontier agent says it would cost another \$50/ month to increase speed - but not guarantee it would fix problem. Plus that would not be affordable for me."

"I work part time at home for another company but my husband is self employed and works full time at home."

"Internet is very important and useful in today's society and it is very disappointing to not have access to reliable high speed internet"

"We are supposed to be getting 6MBPS and pay for 6 but only get three and we're told if we lower our service to three like we get it would cost us more"

"We have to call several times a year for issues with our phone and internet. It goes down several times a day. We have been told the lines are old and will not be replaced. It is worst when it has been raining. It usually takes 2 weeks on average to for a tech to look into our problem. I would not have a land line but my husband is a quadriplegic and we keep it for 911 emergency use and if the electric is out our cell tower goes down within a couple of hours."

"Our service is very slow. Not consistent"

"Please help us."

"Frontier internet and phone services are unreliable and of extremely poor quality."

"Internet is very unreliable."

"The main problem in the Roane County area where I live is that the local cable company is HORRIBLE and will not upgrade or sell to another provider hence there is no competition, combined with the fact the Cellular service providers don't care about the area due to low population density and difficulty of coverage because of hilly terrain means that DSL is the only option and Frontier, while doing an OK job of maintaining the area, hasn't put a lot of money into improving the service capacity or implementing newer technologies like G.fast to provide faster speeds over existing copper telephone wires. If the cable company would either sell to a local provider like Suddenlink or be forced to improve their television and Internet service offerings it would improve the overall availability of TV and Internet services. The landline services are not great, we dropped landline service over a year ago due to numerous issues line static on the line, dropped calls or calls that don't even ring in and only go to voicemail, which was odd because Internet from Frontier is fine, only the phone service had intermittent issues."

"Our Wireless service is barely existent with a booster we can't use VoIP due to the jitter in the connection, our internet is very expensive and limited due to weather conditions. We have an unlimited plan that is capped at 150 GB so if we are over that (and we frequently are with 3 Families living here) we can no longer use the internet without slow speeds or constant interruptions. It is unreliable and frustrating because I lived in Columbus OH and paid about \$37 for DSL and it was not capped and more reliable. I used to have a home business but I can not do it anymore due to these conditions."

"Do not have cell phone service until we get out of holler"

"Received this request for survey info. in the mail on 1/5/19 and it said to return by December 28th. Just another example of how poor all services in outlying areas are (Ex. Mail, Government, Roads, Internet, Telephone etc.)."

"Just received the survey on 1/5/2019. Cable access would be great. Additional cellular towers in rural areas are needed. Because cellular service is unreliable I have to have both cell and landline. Other than satellite internet, Frontier is the only other option. Frontier is very unreliable and slow to address customer issues. Frontier would not be used if I could have access to cable. If cable was available, I would use cable for internet access, VoIP telephone and television."

"we need broadband now!!"

"broadband out river road would be wonderful. I would like to go back to work."

"We have high speed Internet, but have lots of trouble with it really being high speed. Lots of ups and downs. Landline service is down more than not."

"We need faster internet, but at a good price for people"

"should have more options and better service"

internet needs to be faster, more reliable and less expensive
frontier is slow or nonexistent when it comes to service
would love some kind of service in my area other than cell data
I have pacemaker scanner and it connects to phone line
my service is poor
Need better cell service can not use cell phone from house. Landline doesn't work all the time.
15. but I can't due to slow speed. I go to my office in town to take classes.
we desperately need better TV, internet, and phone! PLEASE HELP!!
Data allowance 10 GB per month bonus bytes 10 GB 2 am to 8am
the internet is worse on Hollywood rd
need better service (internet)
we have no cell phone service here
"Direct TV doesn't work from here
Dish is a little better
I lose internet @ least 8-15 times a day, sometimes more"
"18. unable to get service @ this address- have tracfone when away from home
19. none @ this time
20. disabled
21. Would like to have better Internet Service, computer will not check speed of internet connection"
"Landline goes out when it rains! I need internet svc. to be able to work from home. Only have 1 choice as of now- Hughes Net."
"anything internet based we are at a disadvantage (help)"
"Please! Light a fire under their rears"
"for some reason high speed can be a few roads over but we can't get it; same with cable service; would increase work & school production if available"
"Internet is a must today and I cannot afford Satellite internet"
Frontier is a lumbering dinosaur, very poor service!
Phone only. All other service in our area are cost prohibitive, available by satellite only Not even dial up is available to us thru Frontier, our only option. Satellite only. Have several, but no connection. Frontier says not even dial up is available in our area. Have no service. These are all the services that I use the internet for away from home! Umm.. to late to change our minds... here for 23 years... would be able to work several hours a week from home with my current job. Many of my peers complete CPE from home. Cell phone thru tracphone only"
"please bring better internet"
"please get internet and cell service soon."
"I go about 3 miles up the road to get a signal. Get internet as soon as possible, thank you, Sharon"

"Would like to have cellular service and better internet options at home, depends on the day, depends on if its faster, when grandchildren are here, Just needs fixed"

I would bet they don't even know how to pay a phone or TV bill"

Frontier bit off more than the feds are willing to pay for. My tax dollars are being wasted, because I live in the country therefore I don't exist!!! If the fed. govt. would get off their asses and let things be we would be better off. No law they have passed has helped phone or TV or Internet. Thats why they throw money away at the wrong fix. Its plain to see. Call me or come see me in person, then I will believe this matters! we have to take turns using internet so it doesn't crash

All Frontier cares about is \$\$ I have been over billed for years b4 it was fixed. Of coarse, no refund. We live less than 1500' from phone bldg & have horrible service. If 2 of use get online the internet crashes. Both my boys have to take their PS4s to Spencer to download games & it takes less than 20 minutes & our stupid internet will say 99+ hours. Frontier is a rip off! The last time I called to complain about slow internet, I was told to move & hung up on!"

We have had a lot of trouble with Frontier. It we could afford to move we would to get better internet service. With better internet we would be able to stay in touch with Dish.

what I pay for but get less!-Robbery

Double payment!! because of no cell tower

I have a great place for a tower on our property, for a fee. ""When power is out we have no communication outside. God forbid we need 911 services at the time! None!! Get it together West Virginia!"

please get a faster source!!!

need service for cell phone

Can't get cell service, need when electric goes out

Cell service is needed for heart monitors. Cannot get heart monitors to work in my area. Need cell coverage!"

frontier telephone is very poor service. Not dependable.

we really want other options other than Frontier for all services. They are high cost & poor quality!

"help us! our internet is so slow"

"frontier is bad"

"to work from home need the use of VPN support"

"frontier is TERRIBLE!"

It was faster with Dial Up"

"would like faster internet to have the option to work from home."

no cell service @ my residence

Need faster service!"

"Internet has been out most of 2 mos. will not even give trouble #, see few photos morn & eve"

get signal on the road and in town"

"I need more affordable internet service. Internet is slow to load.

Help"

Please get something else out here besides Hughes Net. Thank You!"

frontier only 12 Mbps they won't add more"

we use microcell & wifi calling"

"The Frontier linesman won't upgrade us, they say its to expensive"

"please ask why slate rd has no high speed or cable??"

"we need better options"

"Frontier is available at 1 business at Slate Rd and refuses to offer to anyone else"

can't use cellphone at home, no service

We need cellphone service and good internet services. We have no access to what is basic service in other areas." Neither works

Frontier service does not work here half the time. Verizon cell phone can't get signal"

"wifi not available"

"thank you for doing this, good luck."

"Volunteers for Red Cross need better service"

"thank you"

"We were told that we live in a dead zone and are limited to Internet service"

I can not get service at home

I have subscribed to and paid large sums for internet that was not fast enough to conduct business"

"need better internet"

"we are limited to ANY kind of internet service."

"we are not literate in computers. Use cellphones for emergency only. We are willing to learn. Go progress!"

"no internet service available at my residence"

"we run a full time business (fair winds farm, llc) I will be filling out the business questionnaire as well. Business and personal at same address"

"quality service would open up my farm production to expand my sale opportunity."

"would do so much more if the services were available"

"These companies say the will deliver high speed. Reliable serve and DO NOT! These companies need held accountable. We deserve reliable internet & cell service. They need to need booted out of WV if they don't deliver!

I operate a home business in addition to working full time, and can't operate due to slow internet & lack of cell service."

"dissatisfied with all"

"my son is homeschooled and sometimes cannot complete his online assignments"

"My landline doesn't work every time it rains and that is quite often. It has been off 6 days this month so far."

"landline service seldom works"

"to much to list on here!"

"I live 3.5 miles from Spencer and my Frontier internet speed is similar to dial up."

"dish network has dropped channels & everything buffers, no cell service at all. Costs me a lot & I have limited income. It is my biggest bill."

"thank you for what you are doing!"

"have cell phones. cannot use at home/no service"

"I take online classes and the internet is terrible"

"frontier has poor product & service"

"Internet comes & goes especially at night. Could not get online to complete."

CALHOUN RESIDENTIAL SURVEY RESULTS

In the fall of 2018 and early winter of 2019, a broadband survey was conducted in Calhoun County as part of a comprehensive broadband study for the larger Clay, Calhoun, and Roane region. Paper surveys were mailed to residential addresses in the County, and the online (Web) version of the survey was publicized on social media. Residents were encouraged to complete the survey online or fill out and return the paper version by surface mail. Businesses were encouraged to complete a separate business-focused survey, and the results of that are included later in this report.

A total of 433 responses were collected in the residential survey. Not all responders answered every question. Note that because of rounding errors, not all percentages sum exactly to 100%.

Some of the key findings from the results are listed below.

98% of respondents want better Internet service.

94% of residents are "not satisfied" or "only somewhat satisfied" with current Internet service.

50% of respondents indicated they have no alternative to their current Internet provider.

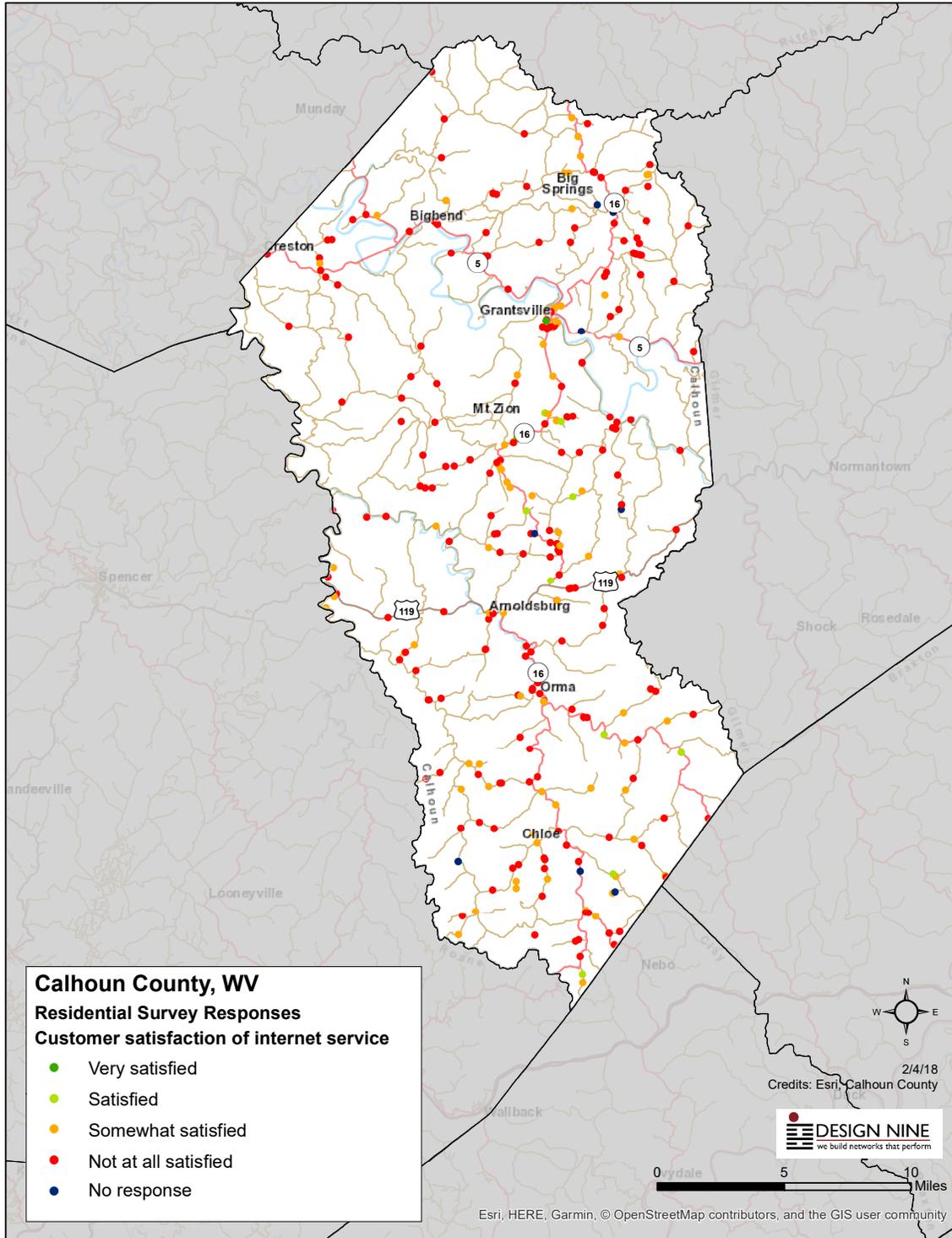
28% of residents have 7 or more Internet-connected devices in their home.

34% of respondents would like to work from home if they had better Internet.

22% indicate that availability of broadband Internet is affecting where they choose to live.

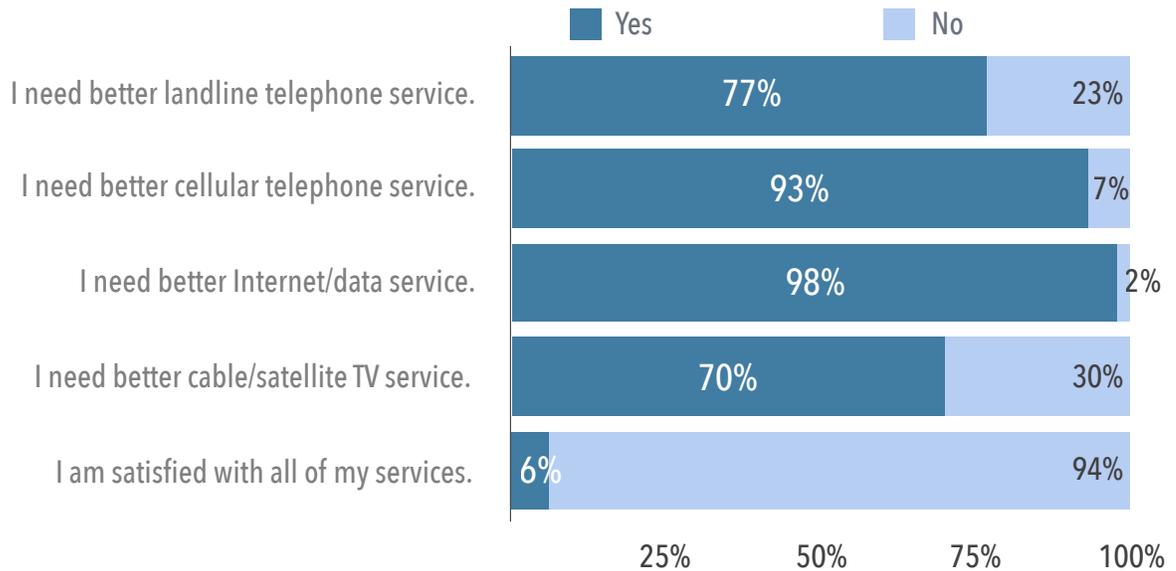
DISTRIBUTION OF SURVEY RESPONSES

The map below shows the geographic distribution of responses to the residential survey, coded according to their satisfaction with their existing Internet service.



RESIDENTIAL SURVEY SUMMARY DATA

1. Select the items you agree with below



2a. Total number of adults in household

1	2	3	4	5	6	+7
49	292	82	16	7	2	0
11%	65%	18%	4%	2%	0%	0%

2b. Total number of Internet users in household

1	2	3	4	5	6	+7
33	121	96	63	31	11	5
9%	34%	27%	18%	9%	3%	1%

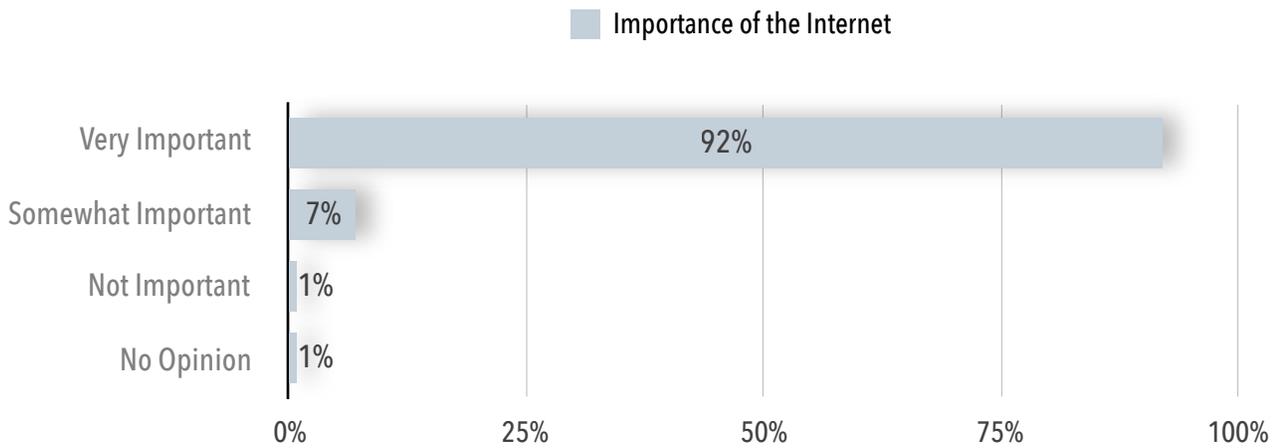
2c. Total number of college students in household

1	2	3	4	5	6	7+	Blank
70	20	3	0	0	0	0	340
16%	5%	1%	0%	0%	0%	0%	79%

2d. Total number of k-12 students in household

1	2	3	4	5	6	+7	Blank
88	56	26	4	4	5	0	250
20%	13%	6%	1%	1%	1%	0%	58%

3. How important is Internet access to you or your household?



4. For your household, how much do you spend each month for local and long distance telephone , TV, and/or Internet? Do NOT include cell phones.

\$50 or less	\$50-75	\$75-100	\$100-150	\$150-200	More than \$200/month
31	41	49	82	88	133
7%	10%	12%	19%	21%	31%

5. How much do you pay now for at home Internet access each month?

No Internet	I only use free hotspots	\$10 to \$20	\$21 to \$40	\$41 to \$60	\$61 to 80	More than \$80/month	I don't know
35	1	34	84	78	78	93	21
8%	0%	8%	20%	18%	18%	22%	5%

6. What type of Internet do you have at home?

Dial-up	9	2%
Cable modem	23	6%
DSL line	184	47%
Fiber	3	1%
Satellite	98	25%
Cellular wireless	15	4%
Broadband WISP	15	4%
I don't know	31	8%
Other	17	4%
No Response	8	2%

Other types of Internet (open ended question)

Verizon

Frontier broadband.

"We have frontier DSL. Had to purchase satellite because the DSL was so slow and I couldn't work from home when I needed to."

Frontier wireless

Frontier hi speed broadband. Slower than dial up. 20kb sucks. So bad that Frontier only charges us \$9.99 per month!

Hughes Net

Hughesnet

Frontier

Broadband through Frontier

"Was told by frontier that my internet wasn't fast enough to be considered DSL. So I get it at a discounted rate

It's the best they can offer"

frontier

hughes net

5g

"It's Frontier. It's terrible. I don't know what type it is other than that but it was the best we could get at our address."

"DSL - way to slow for anything other than emails

Satellite - for everything else but limited data - no movies or streaming

I have to split my household into sections for connectivity depending on what we want to do

No way to watch Netflix, Amazon movie, or anything else of this type"

"What ever it is it is very close to useless drops in and out daily"

"We have both frontier internet and HughesNet satellite. Frontier is barely dial up speeds and HughesNet is no where near advertised speeds."

"I get timed out on my online banking always have to call and get reset unless do it at 5 am"

"This is a place of business. it is a restaurant and frontier wont or cant give us internet. it is not a option for us. I have heard that satellite internet is a scam and not good at all. it would be nice we could do all of our ordering over the internet and keep up with all of the health requirements. Not to mention our customers would benefit from it."

Hot spot

"Frontier down graded me few yrs ago to broad ban ,it suck cant watch simple videos ,,or download nothing."

"Normally no internet! Frontier is awful"

was told not able to get internet last time I checked

broadband lite loop, broadband light port

Frontier

DSL Line and satellite, I have both Frontier & Hughes Net

hughes net

none, cost too much, we tried

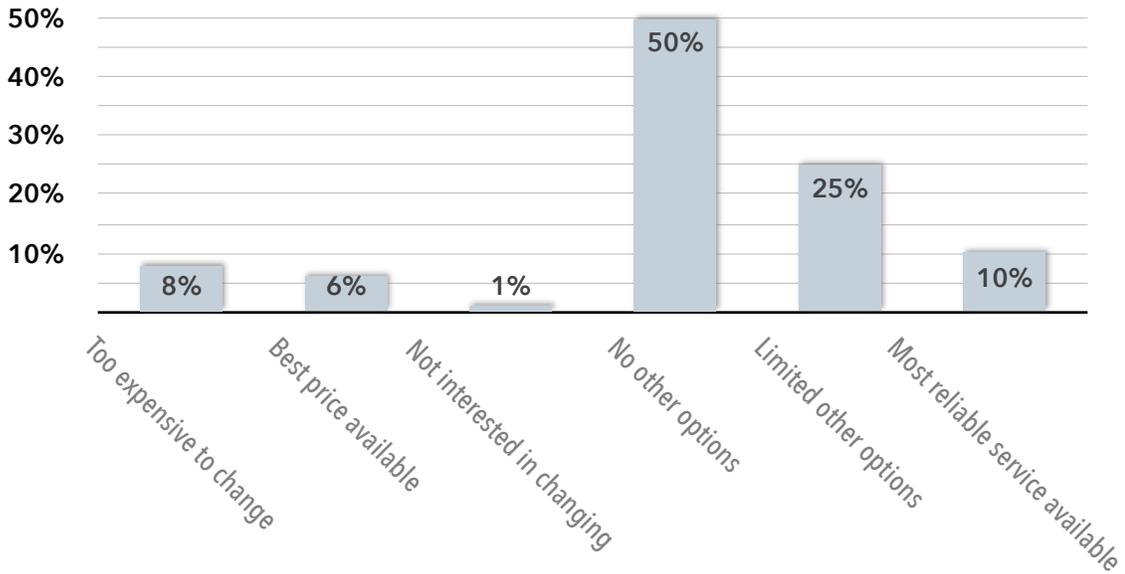
Wifi

Verizon jet pack

frontier

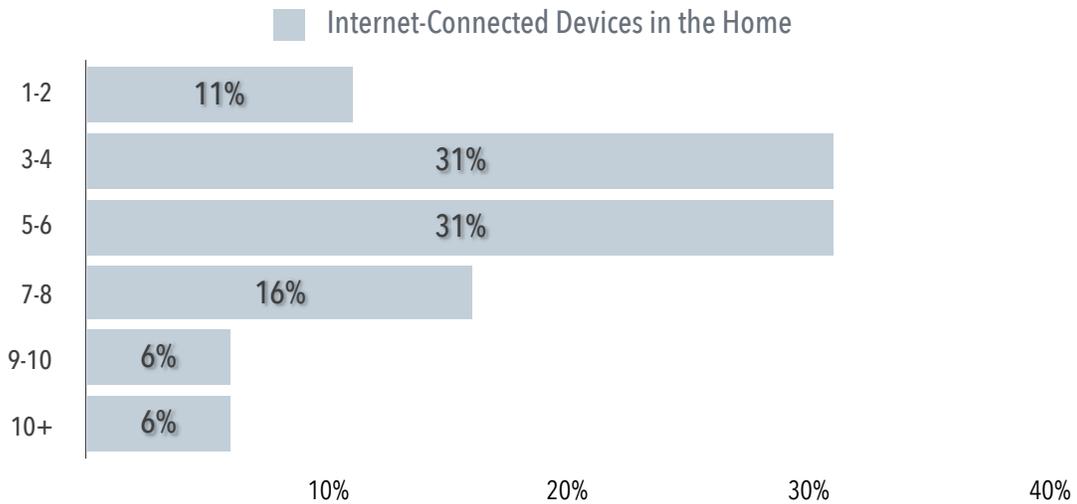
7. Based on the type of Internet connection you selected above, why do you still have it? (select all that apply)

50% of respondents indicated they have no alternative to their current Internet provider



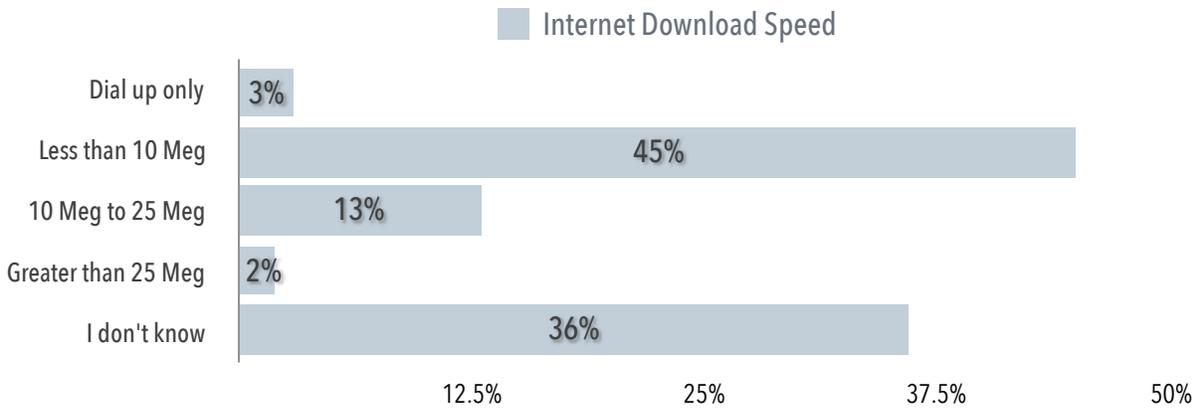
8. How many devices (for example computers, cellphones, smart TVs) connect to the Internet in your household?

12% of residents have 9 or more Internet-connected devices in their home



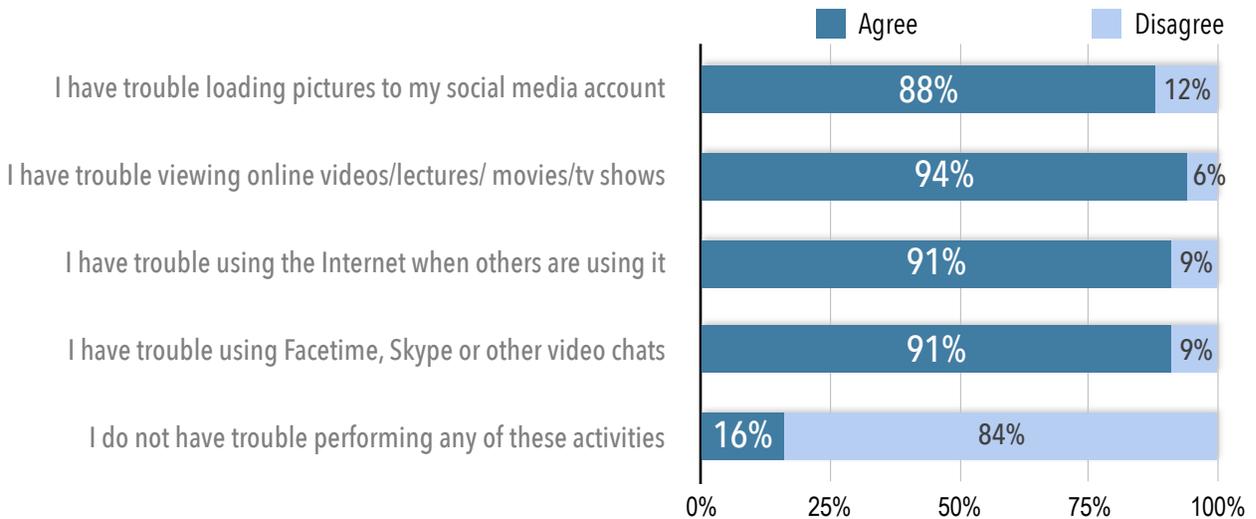
9. What is the speed of your Internet Connection?

As few as 8% of residents have Internet service that meets the FCC definition of broadband (25 Meg down, 3 Meg up).



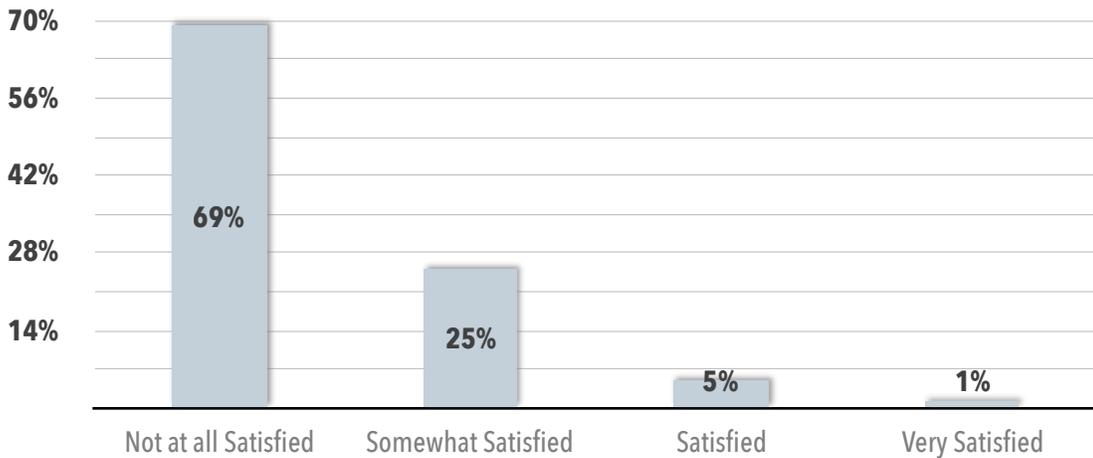
10. Select the items you agree with below

More than 85% of respondents report they have trouble using common Internet services



11. How satisfied are you with the speed and reliability of your Internet Service?

Only 6% of residents are "satisfied" or "very satisfied" with their current Internet service.



12. Select all items you use the Internet for now

Email	396	91%
Access news and current events	343	79%
Homework / Schoolwork	228	53%
Use a VPN (Virtual Private Network) for work or	96	22%
Download or listen to music or audio books	289	67%
VoIP (Vonage, Skype, FaceTime)	180	42%
Online Backup (files, photos, music)	253	58%
Telemedicine, tele-health	64	15%
Online gaming	186	43%
Maintaining a Web presence, blog, or social	197	45%
Shopping	365	84%
Online banking	325	75%
Social networking	330	76%
Smart TV	185	43%
Other	34	8%

Other uses for the Internet

Daughter online class.

Occasionally work from home

Work research

"husband has cancer need internet to keep up with patient portal and ect. with medical stuff email back and forth"

I want to work from home but my internet service is to slow.

We would use the smart tv also if it would work.

Dish network is connected to the internet. However it gets kicked off and we have to reconnected.

"Was using mi fi and cancelled due to high cost and low service. Nothing else dependable is available at a reasonable cost."

My Alexa and smart home devices

Can't use the smart TV

"We use or try to use for work, there has been many times my husband has had to go to Brooksville to obtain service"

"Can only do these things if and when net works. It is rare. Can't use it for my college. Or I would. Can't see Facebook posts. Can't FaceTime. Can't upload pics. Can't download music. Can't streamline videos."

Would like to do the above if we had internet

Virtual Textbooks for school

Look up items

Business

Smart multi temp. & humidity monitoring.

School

"I need a VPN for a job offer, but I cannot get enough data per month or fast enough speeds to do that with Dish internet. I really need that job because I am unemployed right now!!!

Also, I have tried to get a landline phone and Frontier phone company refuses to connect me. Frontier's line runs right through my property to my house and way down the holler to my neighbor's house, yet they refuse to just turn on a phone for me. Frontier's pedestals are in my yard as well."

"I am disabled. But work on Computers as a hobby and also small source of income. I am very good at it. And I need internet to facilitate this endeavor.

I try to use it for work but consistently have to revert to phone in for meetings due to constant drops and freezing - Frontier should be forced to refund at minimum 1/2 of all paid over last 2 years that i have been forced to travel to another location to have reliable connections.

I'm a school administrator and I bring work home to complete that requires reliable, high-speed internet connection."

so slow they could not complete a time test!! I always call and bitch but nothing ever happens. don't feel that you should be able to buy other companies unless improve your lines!!

Would use VPN for online employment if speed and reliability were truly high speed internet.

access to medical records, medical research

work

web comic artist

I do not have internet

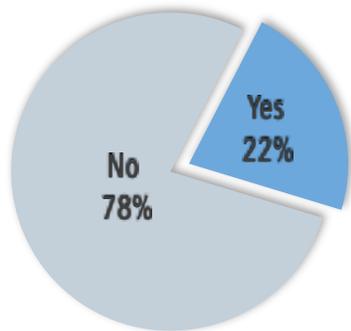
we when had it

dial-up prevents any other options

connect to home office
 don't have none
 "keeping in touch with family & friends
 can barely download at all"
 state tax department-tax filings
 I try to watch netflix, goes off extremely too much!!
 no internet, would work for job if had it

13. High speed, affordable Internet influences where I choose to live?

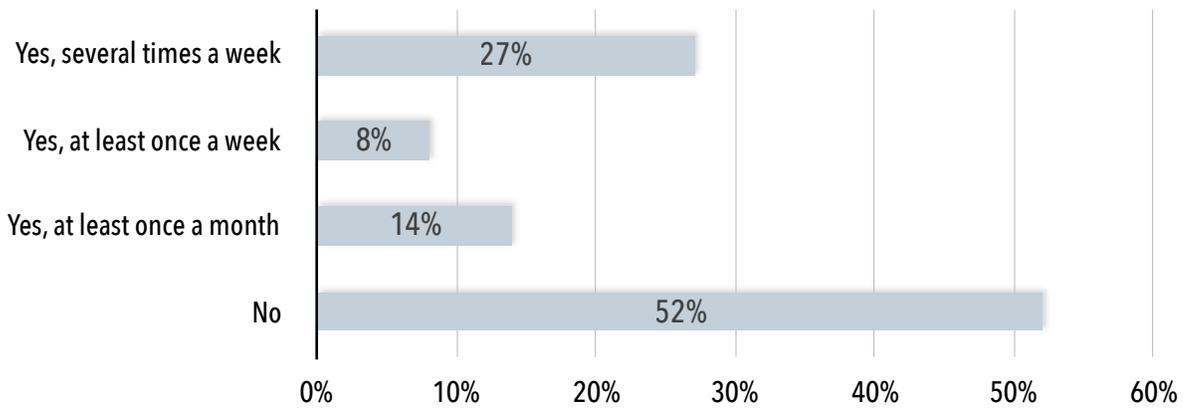
Availability of broadband Internet is affecting where people choose to live.



14. What would you be willing to pay for a faster, higher quality Internet access?

\$10 to 20	\$21 to \$40	\$41 to \$60	\$61 to \$80	More than \$80/month	I don't know
25	70	94	75	52	0
8%	22%	30%	24%	16%	0%

15. Does anyone in your household use / need the Internet to complete school assignments or job training course work?



16. Who is your Internet Service provider?

Some responses included more than one provider.

Frontier	69%
HughesNet	17%
Verizon	4%
Shentel	3%
Exede	2%
AT&T	1%
Other Satellite	2%
Other	2%

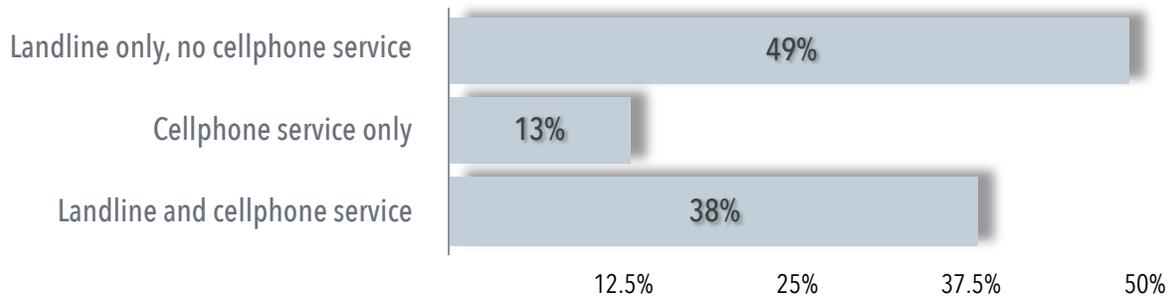
17. Who is your cable/satellite TV provider?

Dish Network	49%
DirecTV	32%
Other	4%
No response	14%

18. Who is your cellular provider?

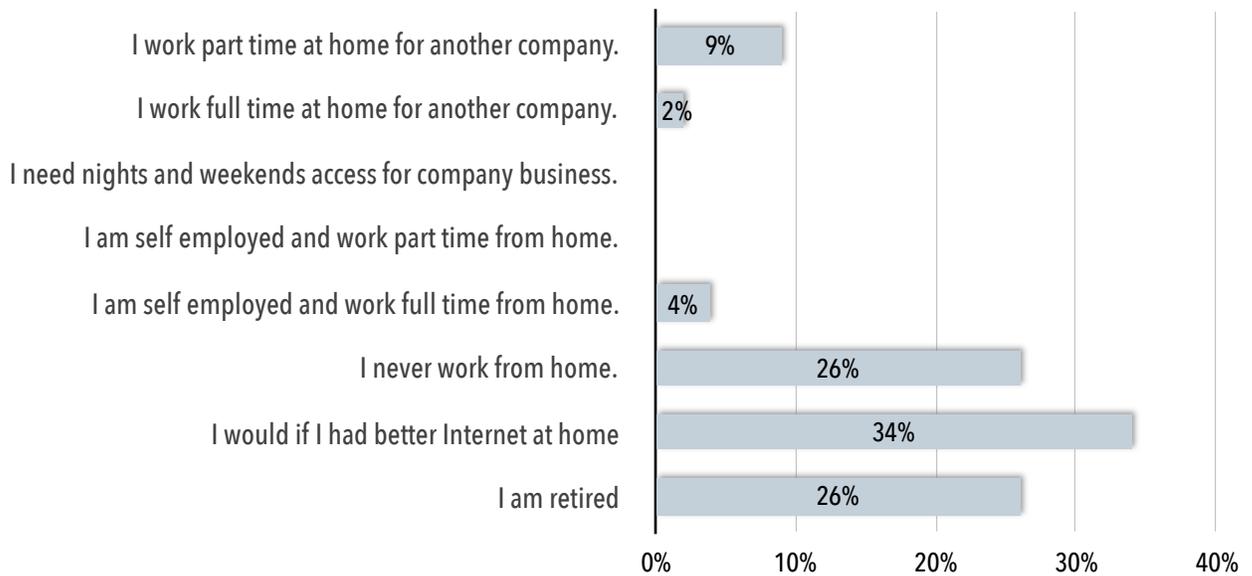
Verizon	38%
AT&T	32%
Straight Talk	8%
TracFone	4%
Sprint	3%
Other	2%
None	12%

19. What kind of telephone service do you have at home?



20. Do you work from home?

43% report working from home part or full time—the Internet has made residential neighborhoods into business districts. Home-based jobs and businesses reduce traffic congestion and reduce road maintenance.



21. ANY OTHER COMMENTS

There was a very large response to this question, and many residents provided detailed answers.

"They need to upgrade stuff so internet and phones work better."

"Please please please get us better internet!!! We're all begging you!!!"

"Half the time frontier doesn't even work with the internet we do pay for. It comes & goes, some days it works & some days it does not. You cannot watch videos, play online with PlayStation or barely anything with internet service."

"Ours isn't as bad as most, but the problem other people face is really bad. It's effecting this state dramatically."

"Cellular or satellite internet is our only hope. We are all tired of life on the "Frontier"

Also, questions 1 and 10 cannot be answered in this survey"

"i lose my internet connection all the time phone service isn't good either phone goes out when it rains and so does my internet"

"We need Xfinity or fiber optic or something. We are paying \$150 a month just for internet that we can't do much with. Limitation in GB per month disrupts what we can do each day. I like Dish, but the channel packages are stupid."

"Rural WV needs more cell towers and more competition with try high speed internet. I would love to see suddenlink in Calhoun County."

"We live in a rural county Calhoun the landline phone is only Frontier-- internet is mostly Frontier the only thing we have here, the cell service is terrible for the most part for people with health problems it is really scary at time we need another option for service in this county besides Frontier"

"I could not answer the questions that did not have a circle or box in front of them. My Internet is almost nothing there. I tried to do this on my tablet and it wouldn't work, so I had to do it on the phone away from home. FRONTIER SUCKS. I have contacted them about many problems and they tell me they have no intention of improving it. ONE guy told me if I didn't like it MOVE"

"I currently don't have a landline phone but use my cellphone through my wireless connection. It isn't very reliable though."

"Can not watch movie or go paperless because internet is so slow"

"We need better internet that will not keep going off and on. My kids are getting ready to do projects that they will have to do research."

"Some answers were given based on previous mi fi Verizon internet which is no longer being used."

"In reference to number 9, our connection is virtually never up to ONE Mbps.

I tried to work from home in the past, but unreliable and painfully slow internet options made it impossible.

Having cell phone coverage would be good, as landlines are not totally reliable. Having health issues in the household - as do many in our dense elderly population in this area - causes concerns over potential inability to communicate with the outside world, in a moment of need..."

"I cannot get Frontier where I am, although if I could I wouldn't. I've had Frontier before and both the internet and phone service is the worst I've ever had (I've lived in Ohio, WV, KY and IL, and I've never had service as horrible as Frontier.)"

"IE to number 19...we use VOIP through magic jack."

"We need better access to the internet for myself because I am taking online college courses and sometimes I have to go to the Elementary school to complete them. And also for the kids because their school work that they do often requires them to have access to the internet to watch videos which we can't do because the internet is so slow."

"Our upload speed is 11.9 (just over 10 Mbps). Download is only 0.52. There is no cell service here. Our Frontier landline is frequently out for days at a time. Right now it's been out since 12/12 and will be repaired (promised) on 12/28. This is not unusual. It has gotten worse. Thanks for doing the survey!"

"We both work in the telecom business installing for AT&T and Verizon and the access here is the worst ever of any where we have worked over the years. Something needs to be done to get West Virginia out of the dark ages."

"We pay enough for Internet , my speed test is 2.70 maps download and 0.40 maps upload"

"If I had cell service or any other option, like other internet. Frontier would be dropped. Satellite is too expensive and too limiting. Frontier DSL is a joke. I do many things at library, work, or cell away from home. Almost non-existent speeds."

"I am earning my doctorate from Liberty University, and I have many deadlines to meet. Often I struggle with the internet functioning at all for me to complete my work. There is also a university

"We need faster and better internet. I am a high school student who needs to be able to do my online work at home instead of being in a teachers classroom during my lunch because my internet is so slow to do the work at home. We defiantly need better internet at home and for the school."

"Minister work school"

"Where I live there is no cable or DSL

The only tv available is satellite

The only internet is dial up(not high speed) or satellite"

"We had frontier before but was constantly down and when it wasn't it was very slow about as equal as dial up that is why we switched to HughesNet!! Which is a lot better for our smart tv but to have enough gb's all month is very expensive and being it's satellite internet you can't do any live streaming so we also pay to have unlimited data on our cellphones so all together we pay well over \$200 a month for internet!!"

"Frontier does NOT care about their customers, they do no fix anything & it is always your device when you call about an outage. When my other kids come to visit, it is more devices connected & the internet often goes out. They have a monopoly in the area which is unfair. Im stuck with sprint for cells right now & i hate them, they have lied from day one when i switched from at&t & they told me sprint was in this area & it is NOT. The only reason i can use my phone here is because it is connected to the internet! I get no cell coverage once i leave the house until i get into Spencer & there is no coverage at all if i am going into Grantsville. There is NO cable here so the only options are the 2 satellite companies & direct tv said the internet available through them is worse than the dsl through Frontier. I moved here a few years ago from Ohio, where we had whole house (tv, phone, internet) bundled in one bill with Time Warner Cable (i think it is Spectrum now). Had we thought to check on available utilities before buying this house, we would have never moved here to this area at all. We are looking into moving into another part of WV where there is some kind of normal cable & internet services. It would be nice if you all did something real soon because i do like my house but I'm done being frustrated with these uncaring companies & no authorities doing anything about them. When we opened our bank account, she couldn't connect to the internet to finish processing it & we was there for hours! That is unacceptable! If we use our bank card at the gas station, i could walk over to the ATM & pull the money out faster than it processes through the machine. INSANE!! Im not sure of my DSL speed but i was told we could get the highest speed they had, they actually was charging us for it, then we found out on one of the many trips from the service tech trying to figure out why our internet wasn't working, that we only had the basic here! He said some kind of lines needed ran in this area for the higher speed, Frontier told me they put the order in for the lines to be ran, the tech said it wasn't as easy as that so here we sit, still with the basic slow DSL & nothing has been done!!!! I don't understand how this company is in business, no one seems to know anything! My daughter was a senior when we moved here & did online schooling, she couldn't do it here because of the internet. She would like to take some courses but its not an option with the poor quality service here. We have just left Direct Tv too & have just a Roku device for tv. I am done paying for bad services."

"I'm a caregiver my company needs to get ahold of me to let me know if I'm needed at a another clients house. I went without a phone for 10 days got such a run around from Frontier. Didn't even try to come out fix phone lines until the the tenth day just lie is all they do. And I have step daughter that comes and visits she brings her work with her so she can stay for 2 weeks at a time

so it's very important that I have high speed internet or she can't come for that long she just promoted to Vice President of the company. And my daughter and grandson uses the internet for there work and schooling when the are so it's very important to me. And my city might say Shock that's Gilmer County but I live in Calhoun County it got changed from where they have closed the post offices. Thank you!!"

"I own my own business, and also work for a technology firm in Charleston. In both I have the ability to work from home, but since my internet is not stable enough, I don't work from home very often. I would love to be able to do this, but currently that is not the case. Also my son is starting to get assignments that would be easier to complete if we had better speeds and stability. When our internet is working correctly it seems decent enough to stream video and complete whatever we need, but frequently it drops off, and resets. This makes it very difficult to do anything productive. I know other rural areas are looking to radio and cellular to provide data infrastructure, even in WV there are a couple counties participating in radio data...might be worth it?"

"Our internet is not reliable. It cycles on and off frequently. The speed isn't horrible (I've seen worse, and I've seen better.) when it is working. But, it stinks to pay such a high price for something that we can't depend on. It is really infuriating when the internet goes out in the middle of trying to upload important documents for my work."

"I pay for 12mbps but I am lucky if I get 6mbps on goods days I have complained to frontier about it but they want me to pay more for higher service but I already pay for more than they seem to be able to provide in order to run my device's"

"I can't afford to have internet or phone service due to frontier being only available services and their way to expensive for I am on limited income due to being disabled"

"Please bring broadband here so my neighbor and I can get a job and parts (auto parts, large equipment parts, other specialty parts) that are only available online."

"DSL - way to slow for anything other than emails

Satellite - for everything else but limited data - no movies or streaming

I have to split my household into sections for connectivity depending on what we want to do"

"No way to watch Netflix, Amazon movie, or anything else of this type, we stream Nothing because we cant!!!!

It is absurd that there is not enough internet services in our areas in this day and age. With all the technology out there, no-one should be without TRUE high speed connectivity. The providers charge us a fee, a high fee at that for piece of crap connection, yet never do anything to better their services to the people that pay the salaries and profitability of said provider. I have been paying Frontier for approximately 18 years for the same crappy service as day one. Why is that?!! 18 years and no upgrades to service at all!! Really?!!! In fact, at times its worse that ever before. Again, why is that? How do they get away with this? My opinion is that Frontier cares none for their customers in our areas since their the only one around. We have to pay for their crappy because their the only ones around. Satellite is a decent alternative but their limitations are too great to be considered a viable alternative for most people these days. Streaming has become the norm, and the people in our tri-county area, more specifically Calhoun and Clay, (at least Roane has cable tv i believe) have no ability to stream anything that requires any kind of bandwidth at all. Heck, even

just trying to stream music is a chore and about 25% chance that it will work without buffer pauses. End Rant.."

"I live in Calhoun not by choice. I am from Braxton. Lived in Rosedale. Currently me and my Wife live separate due to reasons beyond the scope of this survey. However she lives in Gilmer County and as such the internet sucks just as bad there. And I DO have 3 school age children that NEED the internet for school work at least once a week and my Wife runs a small business from home. All in Gilmer County and its from Frontier as well. We both experience the same problems with Frontier in both homes. Me and my Brother both work on Computers. He lives in Chloe WV and we both have had tremendous problems with Frontier. From Over Billing. To Miss Billing. To line drops. The D2200 and the older 7550 modems sucked and would drop WIFI at random. DHCP leasing is screwed up half the time due to the modems inability to run a proper DNS thru the DSLAM. And then if you call Frontier for line issues they tell you to run a New Home Run line from the NID/Grey Box outside your house. I also used to run Beta Testing on Hughesnet. And I and my Brother both know our way around this stuff. Frontier will try to blame the in home wiring, I currently have 3 home run lines in this house. One of which is cat5 wire for network because they pissed me off and I said fine. The others are Cat3. The speeds to the DSLAM are always 5mbps but if you test at my house most times its a third 1/3 of that. Due to connection sharing in the Arnoldsburg area. The more homes that download and use, the worse the speeds for the individual. And on Holiday Weekends....its terrible at times.

If you people need boots on the ground contact me (Argyle K Dobbins III 304-373-5631)or my Brother William Dobbins (304-655-7442) We both have went round and round with Frontier. I will also add that since I was a Beta Tester for Hughesnet Satellite, we got Fiber installed in Rosedale, some years back 2010 I believe. During the Obama Stim fund. When all the allegations for Frontier was made about them miss spending the money. (I currently live on Rt 16 at the mouth of Crummis Creek in Calhoun) Fiber is fine but Frontier immediately started over selling the area and now the speeds have suffered in Rosedale. They WILL do the same in other areas. If not Bird Dogged."

"Not interested in 5G"

"I would like to see other companies that provide better internet service to my area than Frontier. I would also like to see better cell phone service in our county."

"FRONTIER SUCKS - Coincidentally this is the third time I've tried to send but I keep losing connection...."

"When my kids and grandkids comes for a visit they use the internet for there jobs and schooling or they can't come as often to visit it's a shame that once you vote for they elected politicians and they get in office they just quit fighting for what they ran on I will never vote for another one that says they are for broadband again!!!"

"increased cellular access makes most sense"

"Please get us better internet"

"Our Frontier internet service has been poor since purchasing the home in 2012. The signal is weak and does not support the internet based work needed on evenings and weekends for the adults in home needing the access. The service goes off and on literally several times daily (day and evening) interrupting both work, classes and non work related access

We have ATT cell phones and have no signal at all. I had attempted to contact ATT about a lease because I own about 200 acres of farm land with geographic elevations that would likely support a tower to serve portions of approximately 3 counties but have had no response.

We attempted to reach out to Dish for other internet options because we have tv service though them. Their representative said that there would be no improvement if we switched so we did not proceed. For the money paid for Dish, Frontier, and ATT by our entire family (over \$600 monthly collectively) the internet and cell service are extremely poor."

"We have frontier as a backup at a reduced rate because even they admit their dsl speeds are dial up as we have old copper landlines only to our home, our phone service is also subpar with interference, etc due to the age of the underground lines. Satellite is slightly faster but we cannot stream movies, use any of the online services for Amazon prime, etc, or have our tv connected to the internet, we are also limited to the amt of data or the speeds reduce eleven more.. I have to use the wifi at my work to do computer updates and back up files as we cannot do this at our home. We do not have a strong enough cell signal at our house to use our cell phones, well, unless we stand on the roof, which I don't recommend."

"I had frontier internet but I cancelled it as the speeds were so slow I could not log on to do internet banking or even use email. I only have a land line as there is no cell signal at my house. The landline I do have with frontier is frequently poor in voice quality with static/noise, and has gone out on more than one occasion which is concerning as I am a senior and live alone."

"our internet and phone services are properly the worst in the country."

"Currently, satellite cable and internet access is the only option for my location. Dish, Frontier, and Direct TV are all overpriced when compared with other other markets they service."

"Fix our internet, bring it to nation's current standard."

"MY INTERNET SUCKS REALLY BAD. I WOULD DO ANYTHING TO HAVE BETTER INTERNET IN MY HOME."

"please improve your lines we pay for the service which we half ass can use at weird times in the morning. when the kids out of school forget to be able to use it at all!"

"We could do so much more if we had decent Internet service. but sometimes there is no use in trying. the kids cant even play there game systems because they need good internet service to down load there games."

"I didn't finish this survey. because it didn't apply to me I want internet and cant get it. But it would benefit us"

"There are lots of work from home job opportunities out there if we only had internet service in our area to support this. It would be nice to have the simple conveniences and advantages as other parts of our state."

"Connection to Internet frequently, have to reset router a lot, sometimes 4 or 5 times a day, then not at all for a couple days.

Frustrated that Verizon does not work for cell service in our area (Grantsville)."

"Also work for Board of Ed have to do some online training"

"Please fix this problem. To much Money to pay and and not have. Thanks"

"Frontier is the absolute worst phone/internet service! When the wind blows, no service . When it rains. No service. Dog pees. No service. You get the drift"

"Our internet runs 1mbps or less with 0 upload"

"We need better internet....I can't even watch Netflix or get internet radio it is so bad."

"I use my internet mostly for online college. There has been times that I had no internet. I had no internet for 2 weeks and had to go and buy a hotspot to do my schoolwork. It was ridiculous."

"I do not have cell service at work in Grantsville. I live in Mt. Zion, so I chose to get a Verizon phone so it would work at home. It is essential that I have cell service at work so that I can communicate with colleagues. We have been using mobile data for internet at home over the hotspot because of the unreliability of our broadband in the area."

"every time it rains the line is very static and sometimes just goes out i have called about this over and over in the last 3 years but when they come the line has had time to dry out and is quite they need to replace the line and put in a new box outside its very very old but it doesn't happen repairman says its all good and leaves and tells frontier there is no problem but there is trust me. thank you"

"Our internet sucks!"

I have the best, no need for faster

I love Frontier, I feel they are the best, people just are not..... (rest of comment cut off)"

"my phone line is still under old copper would like to have it upgraded"

"I was told that having 2 lines to my home would help I have 2 lines with 6 on each line. My speed hardly ever is 12 and still get disconnected."

On evenings & week ends I have no internet at all

sometimes the internet just goes out. constant trouble with landline. can hear other people's calls on our phone.

frontier sucks

too slow

need better services for my area and home

very interested signing up for DSL in my area

For the most part our internet is pretty reliable, but I don't use it a lot so it works for me. Cell service is down more than my internet is.

we so need this!

I have limited data- I hate it!

hurry, our internet sucks

Internet works part time but a lot of time when you really need it, it don't work

my job requires internet that works

no competition for frontier

Frontier is Terrible, service is a disaster!

Our whole system us terrible, our of date, unreliable

"NEED better service (faster) makes people move away from this community when their jobs requires work done on computer

faster internet would help bring work & businesses.

I need faster internet service"

disabled

Affordable internet would be great!"

we need fast affordable internet in this area- that is unlimited for a good price!

couldn't even load survey on my internet

"cell phone doesn't work at home- only when we go out"

"please resolve our internet issues ASAP!

No internet because satellite only to expensive

bring it on"

"if we had good internet cell service would be all we needed/no landline"

"We have had dial-up internet from the time that it was first available. Since then, the service has only declined. Yet we pay more than people in our area that get broadband. Also, since January 2018, we pay an additional fee (now \$3.98/month) for ""internet infrastructure surcharge"" with NO benefits to us.

One child had moved since he was not able to access online educational services. He moved to Maine where he now works, and excels, in the computer/IT field. His presence there is Maine's gain and West Virginia's loss.

Other in our household would like to access on-line courses, but with dial-up that is impossible.

Most days our service is 24 Kbs, sometimes 19.6 Kbs. It has even hit 4 kbs; shortly thereafter we lost service for close to 2 weeks. We do not use the internet as much as we would like to because of the lousy service. The service is so poor that we cannot do online bill pay with Frontier itself because their site times out before the pages load.

Please note that we had been promised numerous times that the broadband fiber optics would improve out internet service- but it has never been made available.

If we want to access high speed internet we must travel to Spencer (50 mile round trip), or to the library in Grantsville (52 mile round trip), or to the library in Elkview (92 mile roundtrip), or impose on a friend who has satellite or broadband service (though they usually apologize for the internet being slow).

Frontier is the only service available to us. We would change providers if we could. Frontier is not a consumer friendly company.

Many promises have been made to those of us living in rural areas, but few, if any, have been fulfilled.

Thank you for your efforts to remedy the situation to provide better service. We hope that they come to fruition. Sincerely, Mary

need DSL internet ASAP

when it rains or cloudy our internet goes out. There needs to be more and better options.

my landline service stinks

help fix my road on pine
Need more access to high speed internet
Insane-overpriced
Dish network sucks! Over priced, TV-bad/Internet-BAD"
very very slow
Please help our area with better internet/cell options"
no internet available where we live
telephone service sticks
our internet service is very slow
Frontier service is not worth having, No cellphone service @ all.
Please help us with better broadband. Thank you!
Worst company ever! They don't care about the customer at all. Only time it can be used is 1am-6am maybe 2-3 weeks a month. Its been out since Dec 18th and they said they can have someone come out Jan 4th 2019 can't order presents or talk to family members. They said they were upgrading service 15 years ago and it's only got worse Frontier has no business having a business. Rude, thoughtless company. Never had a worse company in my entire life.
frontier suck
Nothing internet should be free
Phone & internet should be free or no less than \$40 a month"
Not at all happy with internet
when I get company it matters very much to them!! (their jobs)
Verizon, my cell phone doesn't work. (2-3 phone calls rec'd in 3 years!)
Wifi fades in-out a lot!! I have family who ""depend"" on high speed internet service, cell phone service here when they visit. Comment- I was told by Telephone repair man ""there is a lot of ""congestion"". It cannot be improved in Rural Area Valley."
we pay 9.99 a month because our internet us not satisfactory
"would love more reliable/faster internet"
"I have no internet at all. All satellite and companies won't accept for jobs online. I will not accept satellite internet. I sure hope we can get cable here. I want to do computer classes online. Also I have a job if I can get internet. Lots of people live in these rural areas and have very poor service and very expensive!"
"Good luck.
I would trade stocks if I were connected."

CLAY RESIDENTIAL SURVEY RESULTS

In the fall of 2018 and early winter of 2019, a broadband survey was conducted in Clay County as part of a comprehensive broadband study for the larger Clay, Calhoun, and Roane region. Paper surveys were mailed to residential addresses in the County, and the online (Web) version of the survey was publicized on social media. Residents were encouraged to complete the survey online or fill out and return the paper version by surface mail. Businesses were encouraged to complete a separate business-focused survey, and the results of that are included later in this report.

A total of 407 responses were collected in the residential survey. Not all responders answered every question. Note that because of rounding errors, not all percentages sum exactly to 100%.

Some of the key findings from the results are listed below.

98% of respondents want better Internet service.

95% of residents are "not satisfied" or "only somewhat satisfied" with current Internet service.

62% of respondents indicated they have no alternative to their current Internet provider.

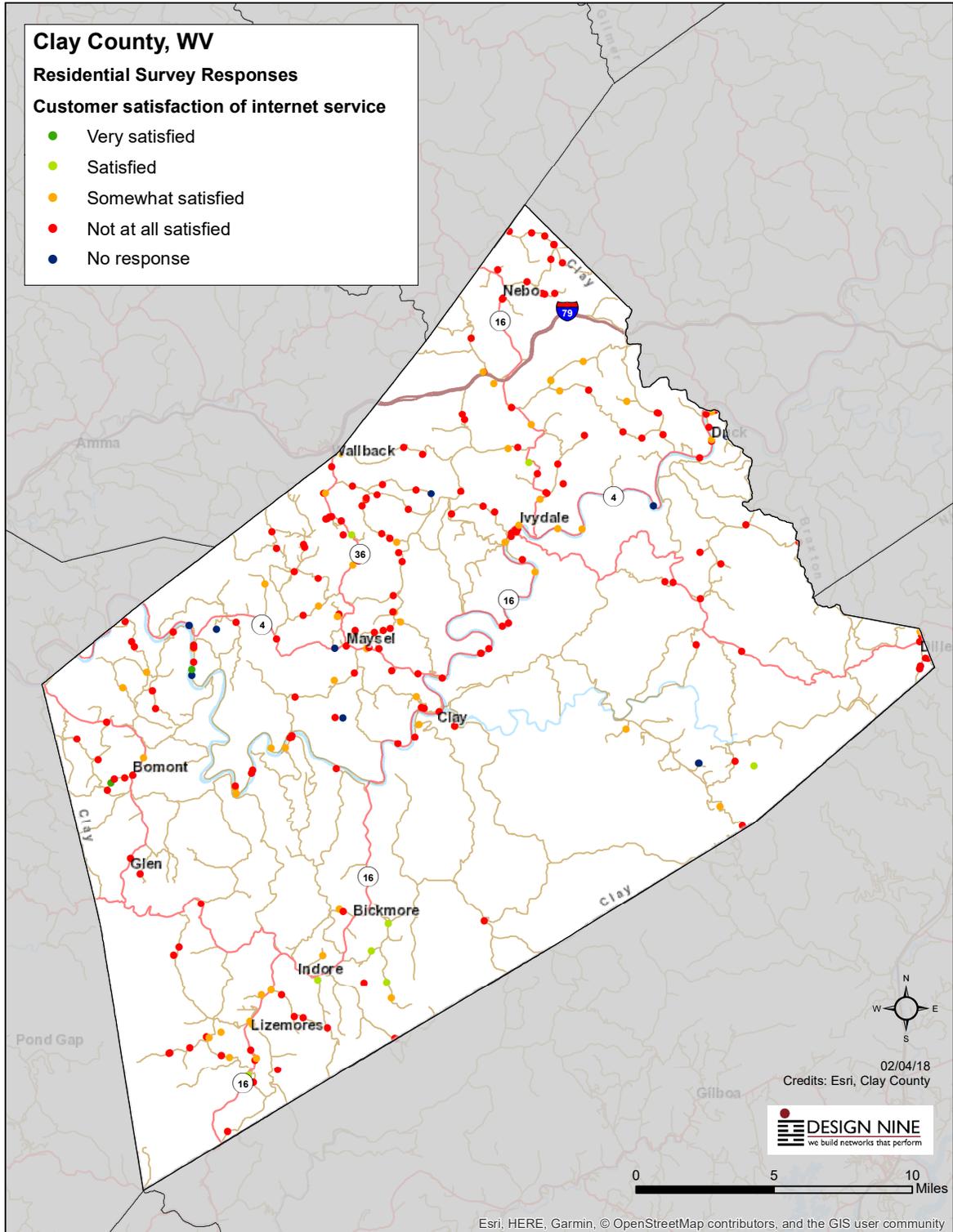
27% of residents have 7 or more Internet-connected devices in their home.

33% of respondents would work from home if they had better Internet

29% indicate that availability of broadband Internet is affecting where they choose to live.

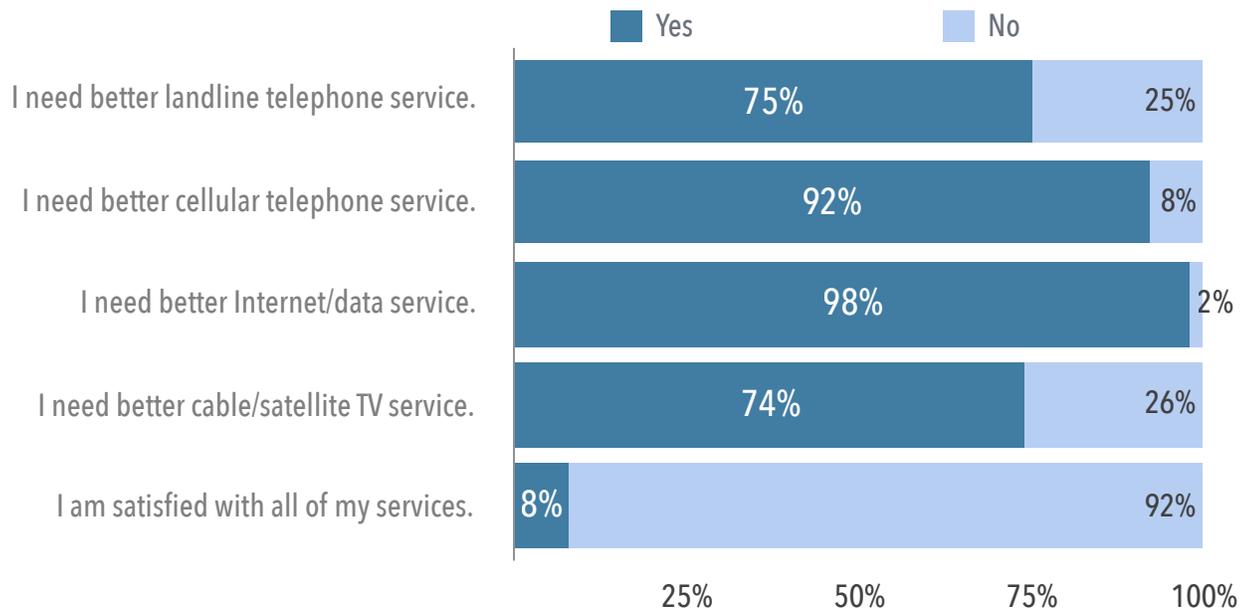
DISTRIBUTION OF SURVEY RESPONSES

The map below shows the geographic distribution of responses to the residential survey, coded according to their satisfaction with their existing Internet service.



RESIDENTIAL SURVEY SUMMARY DATA

1. Select the items you agree with below



2a. Total number of adults in household

1	2	3	4	5	6	+7
39	281	57	13	4	2	1
10%	71%	14%	3%	1%	1%	0%

2b. Total number of Internet users in household

1	2	3	4	5	6	+7
96	371	86	66	27	16	8
14%	55%	13%	10%	4%	2%	1%

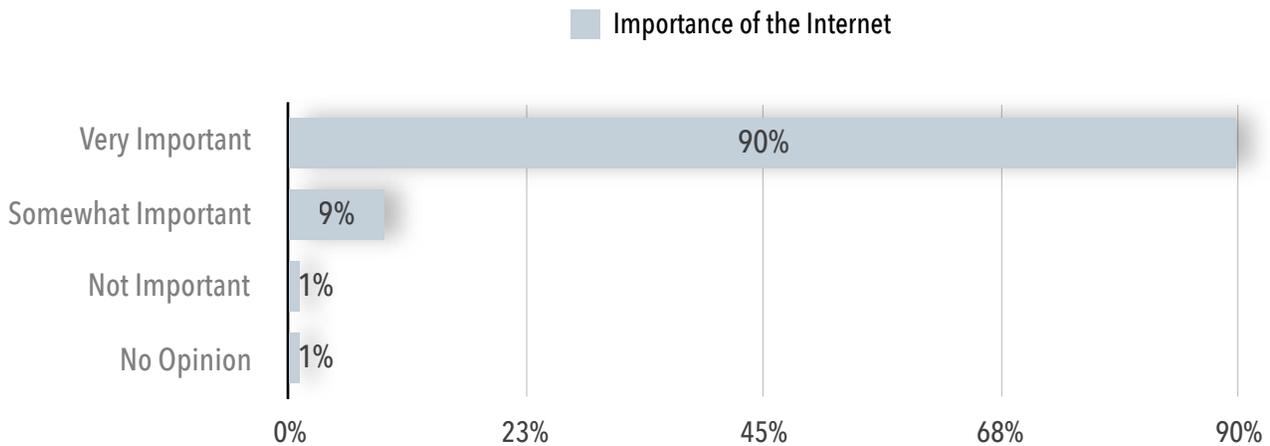
2c. Total number of college students in household

1	2	3	4	5	6	7+	Blank
65	8	1	1	0	0	0	332
16%	2%	0%	0%	0%	0%	0%	82%

2d. Total number of k-12 students in household

1	2	3	4	5	6	+7	Blank
62	48	24	6	2	0	0	265
15%	12%	6%	1%	0%	0%	0%	65%

3. How important is Internet access to you or your household?



4. For your household, how much do you spend each month for local and long distance telephone , TV, and/or Internet? Do NOT include cell phones.

\$50 or less	\$50-75	\$75-100	\$100-150	\$150-200	More than \$200/month
17	21	45	87	109	116
4%	5%	11%	22%	28%	29%

5. How much do you pay now for at home Internet access each month?

No Internet	I only use free hotspots	\$10 to \$20	\$21 to \$40	\$41 to \$60	\$61 to 80	More than \$80/month	I don't know
20	3	39	75	99	62	75	21
5%	1%	10%	19%	25%	16%	19%	5%

6. What type of Internet do you have at home?

DSL is the most common type of Internet connection, with more than half of respondents using it.

Dial-up	6	2%
Cable modem	33	9%
DSL line	204	54%
Fiber	6	2%
Satellite	48	13%
Cellular wireless	20	5%
Broadband WISP	16	4%
I don't know	32	9%
Other	11	3%
No response	14	4%

Other types of Internet (open ended question)

"It's frontier and I have a phone line and modem"

"My internet is thru frontier. I am retired but. Outdoor work from home, but that is not feasible when you get less than 1 MB's download when it even works."

"I have both dsl line and satellite internet. Satellite internet is a back up for the dsl line which goes down every day"

Cellular

"i have 2 internet services and they both are not worth what we pay but with a business and 3 kids on homeschool we need better service

hughes net (\$80 a month) and us cellular (\$100a month)"

"I am not sure, u only know the lines are copper not fiber. My internet service is extremely slow, I cannot stream netflix or YouTube."

Frontier

broadband max with Frontier

Frontier they call it dsl but its like dail up

Hughes net

"DSL - way to slow for anything other than emails

Satellite - for everything else but limited data - no movies or streaming

I have to split my household into sections for connectivity depending on what we want to do

No way to watch Netflix, Amazon movie, or anything else of this type"

"Just put in Hughes Net satellite because the Frontier DSL is so bad. I still have the DSL service and I am paying only 20.00/mth. for it due to the judgement by the WV Attorney General to charge only 20.00/mth. until the internet speed advertised could be achieved. Frontier has chosen to just accept the 20.00/mth and not do anything to fix the existing internet. I had to fight with Frontier to even get that. The decision from the Attorney General was 20.00/mth for all customers provisioned at 1.6 mb or down. I was provisioned at 1.5 mb so Frontier tried to change my provisioning to a higher number to avoid selling to me at 20.00/mth. The system won't actually do even 25% of 1.5mb when it works. Frontier is a very dishonest company."

Hughesnet Satellite

Have have no reliable internet

Frontier

"2 connections 1 dsl frontier and 1 work connection from att"

Frontier

Frontier

"When we had it, it was DSL"

Suddenlink

Frontier (it sucks!)

basically nothing!!

couldn't get

more like dial up

no longer due to it working only 4 days

broadband max

Frontier

frontier

had dsl, can't afford now

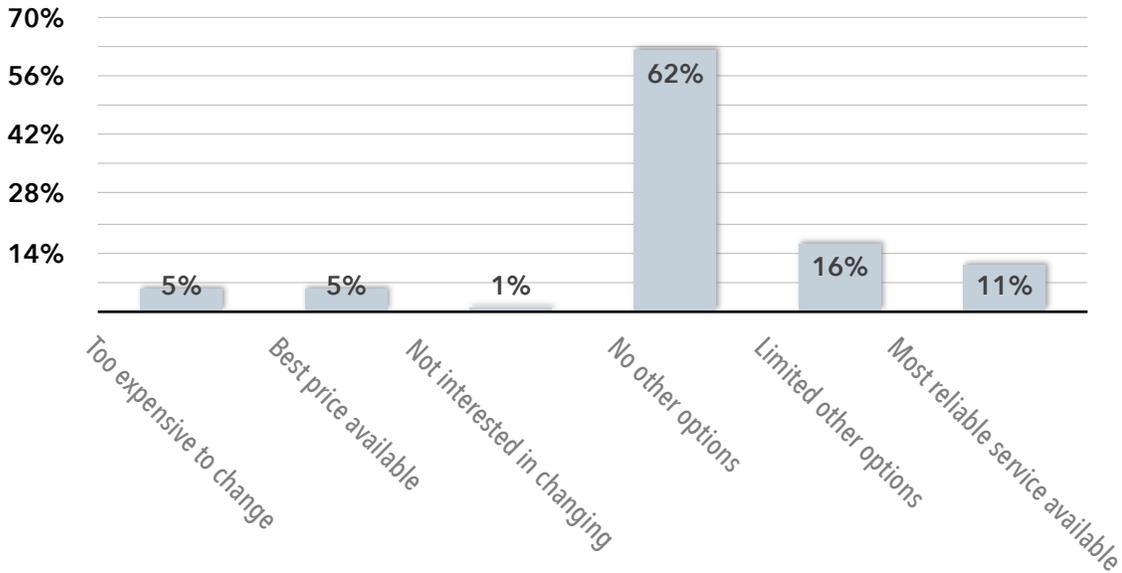
less than 1 download speed

Hughes Net

frontier

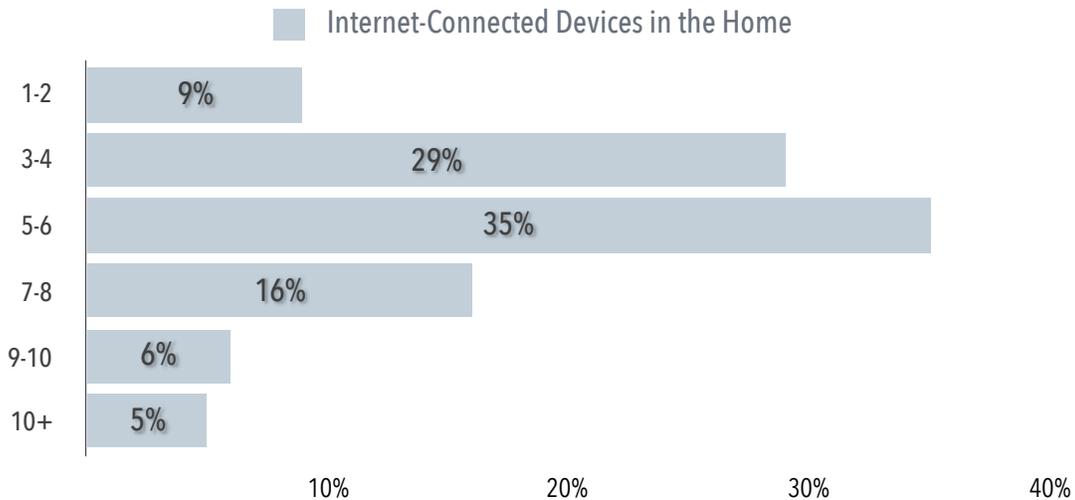
7. Based on the type of Internet connection you selected above, why do you still have it? (select all that apply)

62% of respondents indicated they have no alternative to their current Internet provider



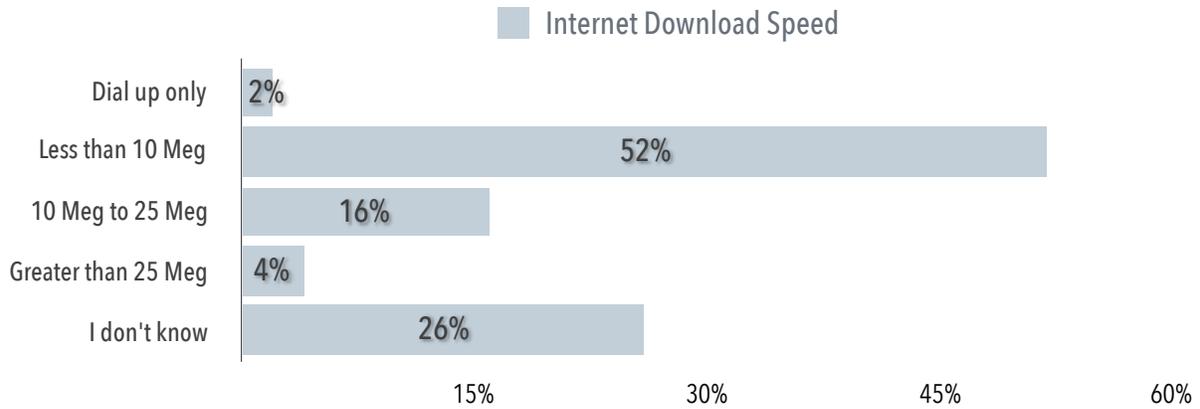
8. How many devices (for example computers, cellphones, smart TVs) connect to the Internet in your household?

14% of residents have 9 or more Internet-connected devices in their home



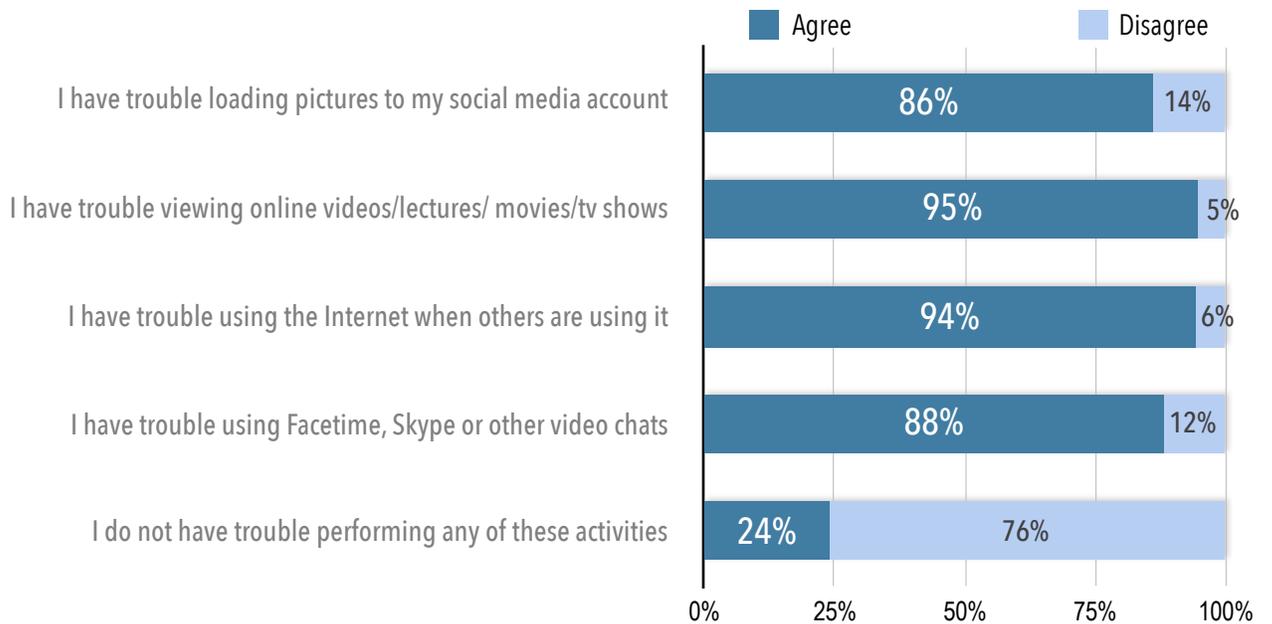
9. What is the speed of your Internet Connection?

As few as 4% of residents have Internet service that meets the FCC definition of broadband (25 Meg down, 3 Meg up).



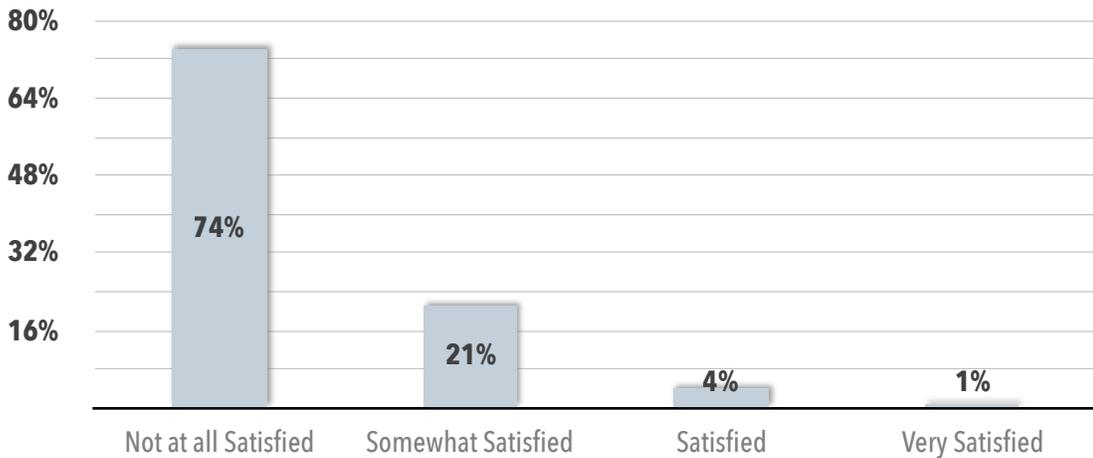
10. Select the items you agree with below

More than 85% of respondents report they have trouble using common Internet services



11. How satisfied are you with the speed and reliability of your Internet Service?

Only 5% of residents are "satisfied" or "very satisfied" with their current Internet service.



12. Select all items you use the Internet for now

Email	379	93%
Access news and current events	322	79%
Homework / Schoolwork	176	43%
Use a VPN (Virtual Private Network) for work or	79	19%
Download or listen to music or audio books	271	67%
VoIP (Vonage, Skype, FaceTime)	176	43%
Online Backup (files, photos, music)	236	58%
Telemedicine, tele-health	69	17%
Online gaming	152	37%
Maintaining a Web presence, blog, or social	204	50%
Shopping	357	88%
Online banking	310	76%
Social networking	300	74%
Smart TV	224	55%
Other	32	8%

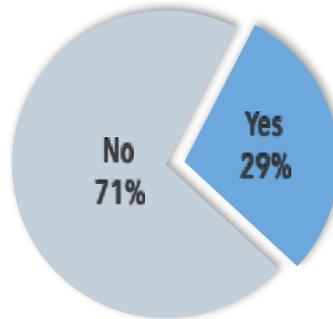
Other uses for the Internet

Alexa
 work, lesson plans
 investing
 try to, can't use it!

work
keep in touch with my husband driving
well I try to use for the above
Alexa, smart thermostat
not have any luck with frontier service discontinued it
security cameras
search different topics
system to slow for any of them
work from home
can't not available for me b/c at capacity
job training, keeping in touch with family, unemployment management
Netflix
Security cameras
Tv subscription services
Business
"Use it to receive phone calls on my cell phone and texting to others that done have an iPhone"
Watching movies
When internet is useable
work
"We had Frontier internet a long time ago. We canceled the service because it never worked half the time. Not worth a cramp!"
DSL and Satellite. You should have anticipated that some people might have more than one.
"I am deaf man and use videophone relay everyday. The Sorenson with interpreters who are interpreting for deaf people who make the calls to hearing people. It is very very important that must have a good high speed that video run smooth moving.."
Run a home business
"can't work from home because the internet going in and out so much. grandson turn wi-fi off all other devices when gaming or watching Youtube so it's run smoother."
Paying bills
"We have a smart TV but the internet won't work on it because it is too slow. Most of these functions have to be utilized on our cell phones. We have to turn off our wi-fi connection on our phones many times to get internet."
Ebay, Trading of goods and services
security and surveillance is impossible without reliable internet connect
"I visit my parents at this address. I am not able to visit as often as I prefer because I have to be on call for work and neither the wireless service or the internet service allows me to be available Both are terrible in this area!"
We are only able to use internet thru our cellular services
I work from a home office so having dependable internet is a must.
Kindle books
"don't have now, but when did, most of the above."
trade stocks
when internet is usable

13. High speed, affordable Internet influences where I choose to live?

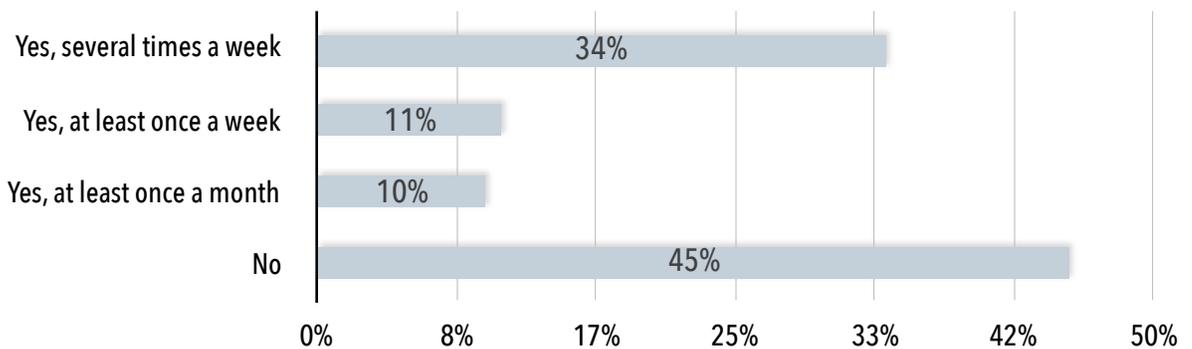
Availability of broadband Internet is affecting where people choose to live.



14. What would you be willing to pay for a faster, higher quality Internet access?

\$10 to 20	\$21 to \$40	\$41 to \$60	\$61 to \$80	More than \$80/month	I don't know
19	60	104	71	42	0
6%	20%	35%	24%	14%	0%

15. Does anyone in your household use / need the Internet to complete school assignments or job training course work?



16. Who is your Internet Service provider?

Some responses included more than one provider.

Frontier	70%
HughesNet	16%
Verizon	3%
Shentel	3%
Exede	2%
AT&T	1%
Satellite (unspecified)	3%
Other	2%

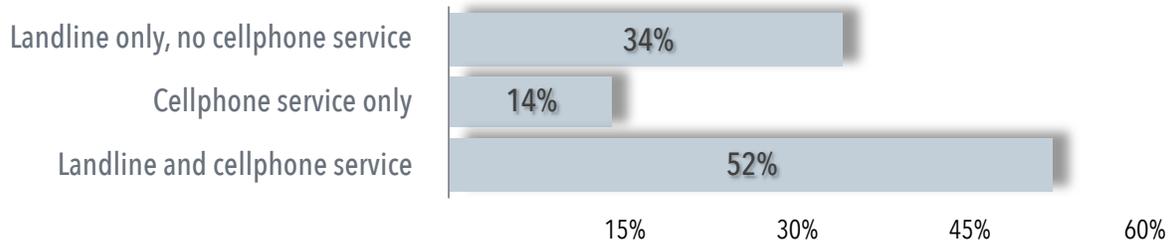
17. Who is your cable/satellite TV provider?

Dish Network	43%
AT&T/DirectTV	37%
SuddenLink	5%
Other	22%
None	13%

18. Who is your cellular provider?

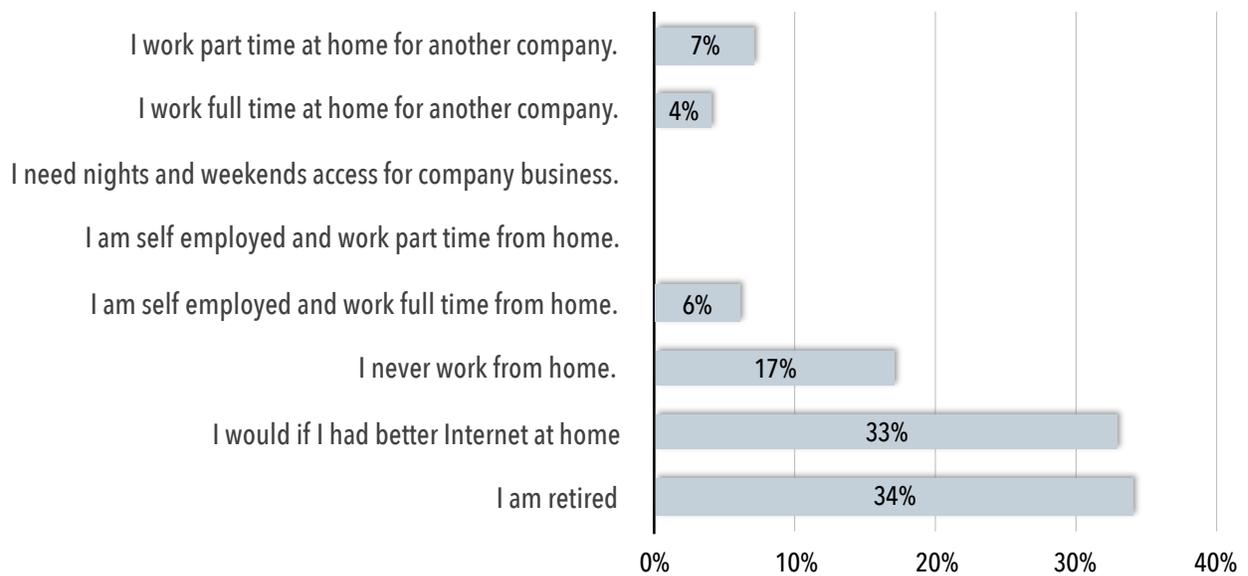
US Cellular	15%
AT&T	33%
Verizon/FIOS	12%
Sprint	9%
TracFone	7%
Consumer Cellular	5%
Other	7%
None	11%

19. What kind of telephone service do you have at home?



20. Do you work from home?

17% report working from home part or full time—the Internet has made residential neighborhoods and rural roads into business districts. Home-based jobs and businesses reduce traffic congestion and reduce road maintenance. 33% would like to work from home—the highest number Design Nine has seen for that response.



21. ANY OTHER COMMENTS

There was a very large response to this question, and many residents provided detailed answers.

“The only other option for me is Frontier and their internet is too slow although they say they have fast internet service it is not. Pricing is way too high for my current services but I have to pay for it because there isn’t anything else to choose from. Most of the time I have good service but I have

had to call them out 2-3 times before to get issues resolved. Cell phone service is not real great here at my house but I can at least make a phone call if my cable goes out and I lose my landline. But most of the time I can't get onto the internet on my cell phone."

"Better cell service would be helpful as the frontier landlines are not reliable At all. Our landline goes out either completely or partially to where we can only call local numbers at least one time a month. And for what we pay for phone and internet together it should always work for us."

"We must have a min of 20mps to be relevant in west virginia. The kids need it, I need it for work. I have to leave wv just to do my job. We are always 20 years behind here. This bbn is such an easy fix. Help wv"

"My internet is so slow its hard to watch movies it kicks off everyday and kicks me off everyday numerous times a day I have to reset it"

"Landline 3.3 miles into Elkhurst is +70 years old, bare in most spots (list insulation years ago and Frontier ha No plans to replace. We are across Elk River (the dividing line for Suddenlink Service) and while we have +25 people in the hollow and suddenlink Service is four mikes away, they have no interest in coming here."

"I home school my two kids and it makes it very hard when I don't have good internet connection."

"Service cuts out and I have to restart modem several times a day."

"Our internet goes out at least 15-20 times a day. At night it goes out and stays off until we reboot the modem of the morning."

"Would love to have access to better internet that is more affordable. Would also like having the option to have a cable provider for tv, such as suddenlink. My parents are only 30 minutes from me and have suddenlink services and it is so much better. Someone needs to do something to help out our community with this internet problem! Thanks"

"Internet drops at least once a day, speed has never exceeded 1.6 mbps and usually is as slow as dial up"

"We did away with our house phone. It never worked and got tired of having to wait a week or long to get it fixed. It is sad that the only option we have for Internet where I live is through Frontier. I thought they received money a long time ago to update the lines.

I have to have internet to work at home and it disconnects a lot and it should be disconnecting so many times a day. It is sad."

"For what we pay, this shouldn't be an issue."

"Our internet will drop or lose connection several times a week sometimes several times a day and takes hours to reconnect."

"I would love to do away with my landline phone but I need it because my Internet is through my phone company."

"Frontier is awful...nothing ever works and no one shows up to fix it"

"our Internet goes out approximately 20-25 times per DAY. Frontier needs to step up and replace the antiquated equipment in the substation that is 1-1/2

miles from our home. We call and complain continuously but never get results. This has been an ongoing issue for at least 5 years. The reason we only pay \$9.99 plus tax is because our area gets less than 1 Meg download and approximately half that in upload. We would gladly pay more but there are no other options in our area. Please help in getting this issue resolved."

"Need better internet"

"The lack of availability of other internet or television options is tremendously disheartening. When I visit relatives in other states I am amazed at the OPTIONS.AVAILABLE to them. It seems in WV we are limited to 1 or 2 expensive options. In my community there are ZERO cable providers.....yeah, ZERO. Your ONLY option for television is satellite. I've attempted to capture the on air signals with an in home antenna.....I received ZERO stations. I'm sure that many households would be more than willing to pay for better/more options. As it exists currently, we in this area of WV are stuck in the 1960s"

"Would love to have a more reliable and faster internet service."

"We only get download speed of 3.1 Mbps. Frontier told us they will never upgrade to faster because there are only a few customers on the slick that serves that section of Route 4 between Maysel and Clay."

"Frontier sucks. It promises high speed internet, but in actuality you get less than 1 Mbps. Of another provider was to come in the picture, I'd switch in a heartbeat. Their phone service doesn't work have the time but they still want paid for it. That's the only real means of communication in have out here and it doesn't work. Something needs to give."

"Disgusted with frontier,,they are thieves and care less about their customers"

"Once my schooling is complete, I will eventually be working from home."

"Frontier download speeds in my area rarely exceed 700KBPS. Usually it's even less than that. It goes out several times per day. I cannot utilize any of my network devices for streaming or home security services because of extremely slow speeds. I have contacted Frontier numerous times over the past decade and am always told our area is scheduled for upgrade but have yet to see or experience any SIGNIFICANT improvements in speed or dependability. I've had opportunities to work from home but again Frontier internet in our area does not provide the speed or dependability to sustain any type of online employment....a very sad state of affairs for this area. I will be watching this multi county effort to improve internet to true broadband speeds (in accordance with federal standards and definitions) in ALL AREAS INCLUSIVE OF RURAL CUSTOMERS; or if any improvements are only seen in the county seats only as was the case when Frontier was given \$40+ million dollars by the state years ago. They are currently under court order to improve services to at least 5-10 MBPS down and have failed to comply. Many of their techs in this area have told me that Frontier simply refuses to permit them to purchase and install the equipment that would enable everyone to enjoy 10 MBPS with the current lines. I hope your development committee doesn't simply hand over millions of dollars to this fraudulent and incapable company."

"Please find a way to provide faster, more reliable internet service..my DSL service from Frontier goes down quite often..the service personnel are always helpful but the system is only as good as the equipment..I have been told several times that the DSL equipment in use in Clay County is old and in need of replacement.."

"Frontier is worthless!"

"The speed is always less than 2. Sometimes less than one. It takes forever to download pictures or videos."

"Frontier is the worst company that is in WV. We need true Broadband in ALL of clay county. I quit Frontier because dialup was faster. It rains and landlines and internet is out and it could be weeks

before the fix a simple issue. I see all the time how they treat people. It's the only company in our county so people have to have landline through them if no cell service in their area. I pay 260.00 a month for 3 cells, land line and internet from my cell carrier. It's worth it to not have Frontier who are thieves stealing from the poor of clay county."

"We live at the junction of Clay, Braxton and Calhoun counties . Our adult children say they would never move to our area of WV primarily because of the lack of high speed internet"

"Frontier should be made pay back the money the government gave them to upgrade rural WV"

"Frontier is very slow internet."

"lots of outages and takes 2 to 3 weeks for repair. speed is often as slow as dial up."

"We have to use a microcell tower for att. However it is not reliable in picking up a signal."

"Would love to have another affordable option besides frontier."

"this address real need the tower for cellphone and data so badly."

"DSL - way to slow for anything other than emails

Satellite - for everything else but limited data - no movies or streaming

I have to split my household into sections for connectivity depending on what we want to do

No way to watch Netflix, Amazon movie, or anything else of this type, we stream Nothing because we cant!!!!

It is absurd that there is not enough internet services in our areas in this day and age. With all the technology out there, no-one should be without TRUE high speed connectivity. The providers charge us a fee, a high fee at that for piece of crap connection, yet never do anything to better their services to the people that pay the salaries and profitability of said provider. I have been paying Frontier for approximately 18 years for the same crappy service as day one. Why is that?!! 18 years and no upgrades to service at all!! Really?!!! In fact, at times its worse that ever before. Again, why is that? How do they get away with this? My opinion is that Frontier cares none for their customers in our areas since their the only one around. We have to pay for their crappy because their the only ones around. Satellite is a decent alternative but their limitations are too great to be considered a viable alternative for most people these days. Streaming has become the norm, and the people in our tri-county area, more specifically Calhoun and Clay, (at least Roane has cable tv i believe) have no ability to stream anything that requires any kind of bandwidth at all. Heck, even just trying to stream music is a chore and about 25% chance that it will work without buffer pauses. End Rant..."

"Please help get better service, we have no other options and it is so expensive to have .."

"My internet service is very slow and is always going out. Also, where I live I do not have cell service, and rely on the internet to even use my phone, so it is very important."

"Internet is slow and cant watch movies or videos satellite is the only option and there are 9 other households on riptoe"

"use a microcell tower for cell service with is not reliable because there is not a good signal"

"needed unlimited internet in area"

"it would be wonderful if we got better internet service!"

"We get less than 1 Meg down load. Upload does not register"

"Our phones and internet are junk. Phones are static"

"My internet is totally unreliable and so SLOW. I have to call them several times a month. It would be great if we had something like Verizon."

"I had internet. It was so slow that I canceled it. It was with Frontier"

"Am currently checking to see what other options there is besides Frontier and canceling dish."

"The internet is not even considered high speed. Provisioned at 1.5mb max and that is only if nobody else is using it. Normally a speed check will lock up. Frontier will not invest the money to fix this. We have not been able to apply for jobs online very often, and my daughter had to even go somewhere else to use the internet to take online tests for college. She realized that after failing an online test due to the system timing out. Pretty sad. Frontier is willing to take 20.00/mth from customers for nothing instead of fixing the internet. The decision by the attorney general did not help us much because they still won't fix the internet."

"When the weather is bad and I cannot travel to my job which is over an hour away with relative safety. I VPN from home via my work laptop. However this is usually a chore in of itself. Satellite is an option here but it is too expensive. Cellular is the only other option and its poor at best. My family and I have been wishing for a cable company to come into the area that could provide the very thing this survey is about. High Speed Internet access. This topic has come up with my neighbors and all of them agree that if a cable company were to come in and offer services that it would be a welcome change. Not to mention a cheaper alternative than cellular or satellite services both of which are notorious for being outrageous and poor quality, for product and customer service."

"Our "landline" phone is bundled with our internet provider. Its technically Satellite phone and drops calls more often especially when using the internet while on the phone. We have no cell service except for in windows but the phone has to stay stationary and it is iffy even then."

"As for cellphone service, I have limited access. I can mostly send or receive texts."

"Internet sucks!!"

"Cell phone service is patchy or not at all! Internet is slow and when school kids our home it goes way down

Sometimes not useable at all. Also some answers could not be answered, for it would not take my respond."

"Need better land line and cell service."

I am not pleased with all of the computer services. Have trouble accessing sometimes. I do not have cell phone service at all in this area."

"internet stability is bad/ no cell coverage in ivydale, wv"

"We have Frontier. We are also among the customers that the FCC forced this company to reduce our internet charges because of the terrible service. Frontier maintains that this has improved - but that is not the case in our household. I routinely check my internet speed with the Geed Squad service (Frontier also offers this, but I find that the numbers are significantly higher when I use Frontier's app) and according to them, I have never reached 4Mbps on either upload or download. This is horrible. Also when it rains, our telephone service is spotty. We have no cellular signal at my home, and so - very often - we have no phone service at all. In a rural area where medical and emergency services are a distance away, this is not acceptable. When Frontier is contacted about these problems, it often takes three to four visits and sometimes several weeks to even begin to restore this service. On the whole, none of their services are reliable or acceptable."

"We are lucky to achieve a solid 1mbps download speed where we live. More often than not, it is around the .5 mbps range and not consistent at all. Next in line would be satellite internet which I refuse to use due to 1) it's outrageously expense (\$90+), and 2) they cap your download."

"frontier is our internet and phone service provider, dsl and landline, we experience constant service interruptions with a bad response time, frontier management is the fault of this, not service field techs, also we experience constant user fees, taxes, etc. levied on us from frontier, for example our bundled service (tv, phone, internet) bill was \$92.00 and some change a year ago, now it is \$105.00, it keeps going up every couple of months, I have kept all my frontier bills for over three years just in case I need them to prove my point."

"I would like to have reliable internet and cell service at my location I may have to move if it does not improve do to my job responsibilities there are no excuses for service to be a poor as it is only 45 minutes form the state capitol dome! If West Virginia wants to move forward then this is the first step get better communications so more education can take place. We no longer take pictures with film so why are we in the 1990's with technology!"

"Would be interested in working with a cell phone company to install a cell phone tower on our property to provide signal in the Ivydale area.

If I had cell phone service I could cancel my land line but I have to use wifi calling."

"no cell phone service available to me"

"Stability of connections is always bad"

"If I could better internet. I could improve my families income and I feel that is very important."

"When we decided to build a house in Clay County in 2013, we knew internet access would be an issue. At first we had both Frontier DSL and Exede/Viasat with Frontier as the primary and a low-bandwidth (low-price) Exede as a backup. However, the Frontier was all but unusable, so we discontinued it and upgraded our Exede/Viasat, and it works pretty well. But it costs \$150 a month and still has issues occasionally. We're fortunate that my work will help foot the bill for it but few people want to shell out that much money and instead suffer along with Frontier service that's pretty bad. This is a big impediment to small businesses developing here, since without access to the internet to market goods and services, it's pretty hard to get off the ground.

BTW, some of the issues listed above, like difficulty using FaceTime, are due to the latency inherent in satellite internet. If Frontier or another company offered better/faster service, I'd sign up in a heartbeat."

"Latency and multiple internet outages per day has been some of the most consistent issues. Ping rates goes from a standard 22ms to rates exceeding 1000ms. We have no cable option that is more secure."

"We cannot get good service for internet where we live. The local company is horrible so we went with a satellite internet and phone. I would be glad to have a service available that was cheaper than what we pay now."

"High Speed internet would have such a great impact for our community in Clay County. It has hindered businesses coming to the area, it is causing people to move from the area that require it for work, and it prevents our students from achieving their full potential because they do not have access to the internet speeds that would allow them to do their school work."

"Our internet is so slow it is impossible to do anything.

We would love to do more however just downloading a simple picture or paying bills can sometimes take several hours. I did have two jobs at one point but had to quit one when they started doing more online video conferencing because I could not do the conference calls. It is sad to pay for service because that is the only thing available. We can't even use our cell phones at our house since we do not have enough signal for that either. It should not take hours just to complete one upload or download.

My job also requires I work from home during certain times and I really have difficulty doing that with the current speeds.

As my children age they will be required to do more for school. With the current speeds that will be impossible."

"good luck! I hope West Virginia can finally crawl out of the hyperinflation isp market! this is so devastating to so many families."

"We need better and faster internet capabilities for the amount of users in our area"

"Glad to see this survey. I hope something constructive comes of it. The frontier connections are so unreliable and poor I maintain an att connection from work for secure consistently connectivity. Please help this community with this needed economic building block."

"Please we need better internet service"

"Not only is the internet slow, reliability is an issue as well. Most likely an old infrastructure. Needs to be better to live up to the Governors agenda to have high speed internet available to all areas of the state."

"I moved to this area about a year ago. I would like to work from home but all of the online jobs I looked at will not accept using satellite internet. I do not have internet through the phone company (Frontier) because it is not reliable, goes out quite often and they do not maintain the phone lines. That being said, Hughes Net is okay but I cannot utilize some of the services such as streaming movies (cell phone and Directv), etc. because you have to pay for data. Streaming movies eats up your monthly allowance of data and it is quite expensive. Hughes Net can also be quite slow at times. When i do decide to watch a movie through Directv which is hooked to the Hughes Net internet I have to download the movie first. I cannot just stream it because the internet is too slow. Also, my granddaughter just moved in with me and uses social media also (teen). She had to turn off Instagram and Snap Chat because of it eating data. Even so, I just had to upgrade to 50G of monthly data on Hughes Net because with the extra smart phone being utilized it was eating up the data quickly. It was also very expensive. This area absolutely needs a reliable and affordable landline based internet!"

"only have cellphones, landline w/ frontier always out of service"

"Frontier is AWFUL"

"Frontier is the worst!"

"Service is terrible in our area! Hope it can be improved!"

"Our phone & internet is out several times a month!! Sick of it!"

"A lot of times we have no internet if weather bad its very unreliable here."

suddenlink

I need it for classes I am taking"

"There are jobs available for people who have internet. Our internet is so bad."

less than 1 Mbps
would love more reliable, faster internet"
"Need Faster Internet (Please Hurry)"
we NEED better internet!
I only have cell service because I use a microcell. Frontier very slow to respond to repair requests
1-2 wks! Ridiculous!
bring it on
hit and miss!! Basically nothing!!
Price and internet suck!!!"
sad no lines available
stuck with it
no signal at residence
We pay same as other customers yet no service half the time its not fair"
frontier has frauded this area too long
Frontier terrible! Please help us!!!
help
we cancelled frontier because they were overpriced and unreliable. Very poor service.
unreliable internet service, will have no satellite service after April 1, 2019. No line of sight for new
Direct TV services.
please give us better internet options
Frontier is a joke & crappy. I am sick of the internet and phone service from Frontier. They are a
joke. My phone hasn't worked right since derecho.
frontier service people don't respond when you loose service I was w/o service for most of a
month
too many outages
Except cost
Wanted Shentel but not available at my house, neighbors love it, bit I can't."
Really needs better service out here.
cellphone doesn't work here
How come Facebook is easier to use on a smart phone than home internet on laptop
slow, satellite is the only things available
can't afford to live elsewhere but would prefer better internet
landline service was horrible so I had it disconnected
we are in big demand area to have access to something other than satellite internet"
Frontiers' lines need upgraded. Have experience multiple disconnects on a daily basis for years.
I'm trapped - help
please correct our service. it's almost 0-none. why?
This was in my mailbox- I live in Braxton Country. But, I still have problems with my internet, cell,
and landline.

We need better internet we only have the option of satellite internet here and it cost too much.

We need decent internet! HELP!

I HATE FRONTIER!!

lost employment due to slow internet.

fix it!!!!

Cable and Int is 1/2 mile from us there 10 family here need it, we don't have city water why

My services are adequate but most in this area are terrible!

9. less than 1

Need internet for online college.

frontier internet service is very unreliable

"Clay needs better internet and phone service period"

"internet and TV is awful in Clay Co"

"we need faster, reliable internet"

Fiber 3 miles away

"we need cheaper and better Internet service"

My internet goes off and on constantly and is slow

"Frontier sucks- no other provider in Clay County!"

"better internet please"

"Broadband is much needed in Clay Co for economic development"

faster internet would improve our income

"we need faster internet for school

need more choices"

All services are awful Tv, land, cell and internet- it can be cloudy and nothing will work

"I just wrote a letter to the Braxton Citizens News to tell them how dissatisfied the people on this side of Clay County are from not knowing from day to day if we are going to have phone service-it is so bad, its off more than its on."

"need better phone- no phone afford days and noises can't even hear half the time"

Internet out of service several times per month

"Cellular service would be great"

Frontier is the biggest scam there is. They should be shut down.

We can't get good cell coverage here and the landline won't work half the time for long distance calls.

"glad to have what I have, could be better"

TRI-COUNTY BUSINESS SURVEY RESULTS

A total of 38 responses were collected from businesses in the three counties. Not all responders answered every question.

Some key findings from the results are listed below.

97% of business respondents want better Internet access.

97% of businesses indicated that the Internet is essential to their business.

100% indicated that the Internet is important to the success of their business over the next five years.

Only 6% of businesses are "satisfied" or "very satisfied" with their current Internet service.

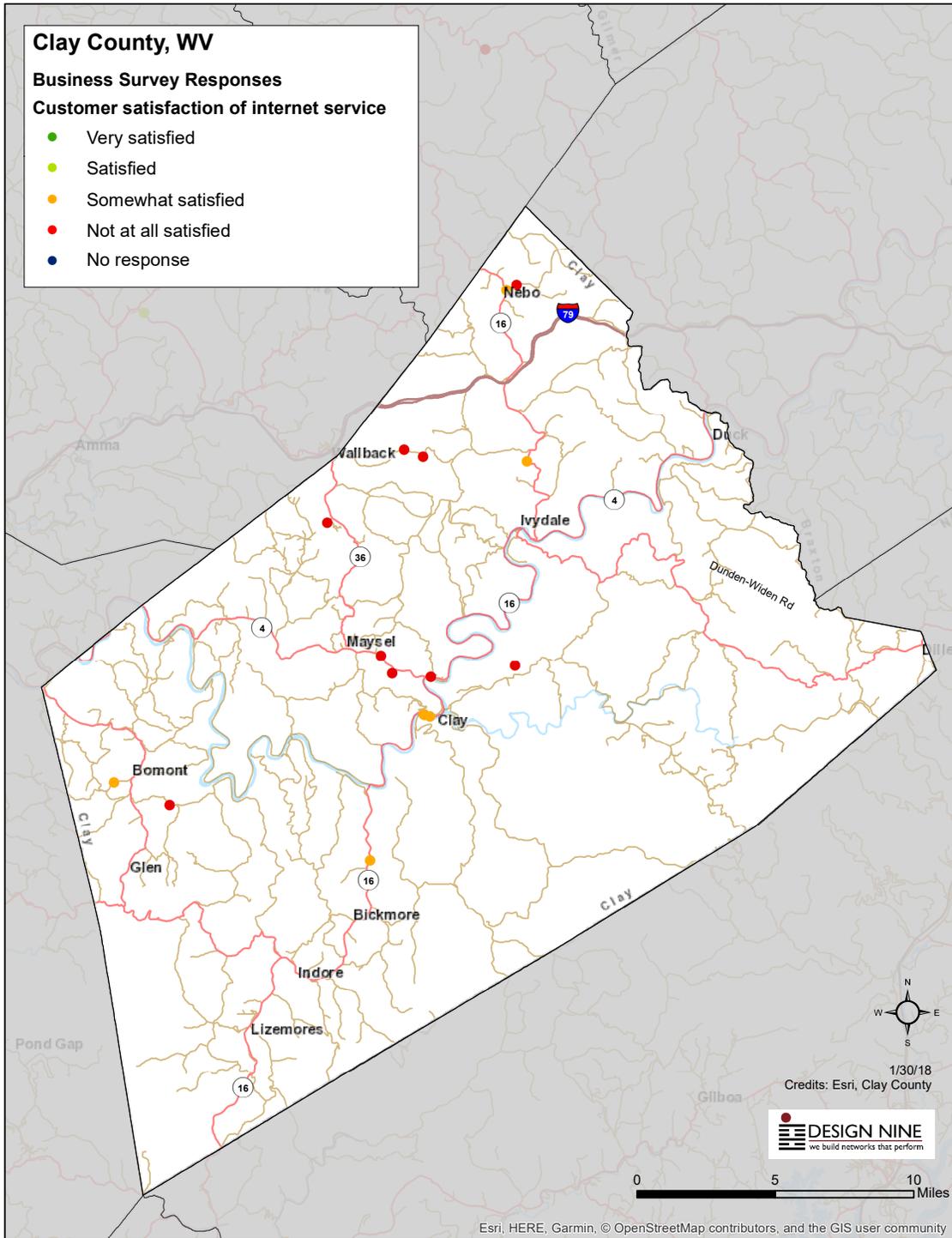
46% of the businesses that responded are home-based.

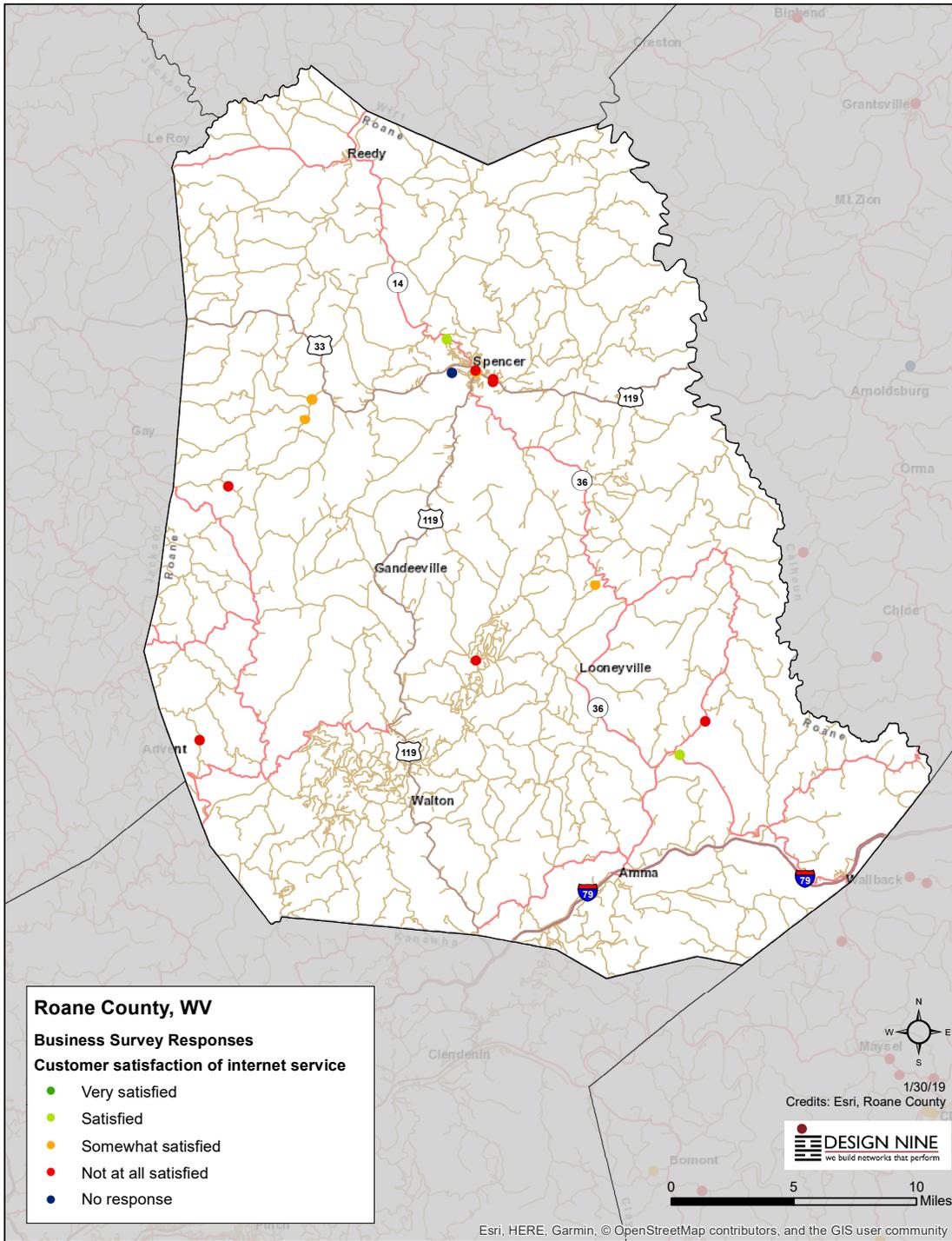
72% of businesses that responded need employees to be able to work from home.

Rural areas of the region are business districts, and home-based workers and businesses need affordable Internet access

DISTRIBUTION OF SURVEY RESPONSES

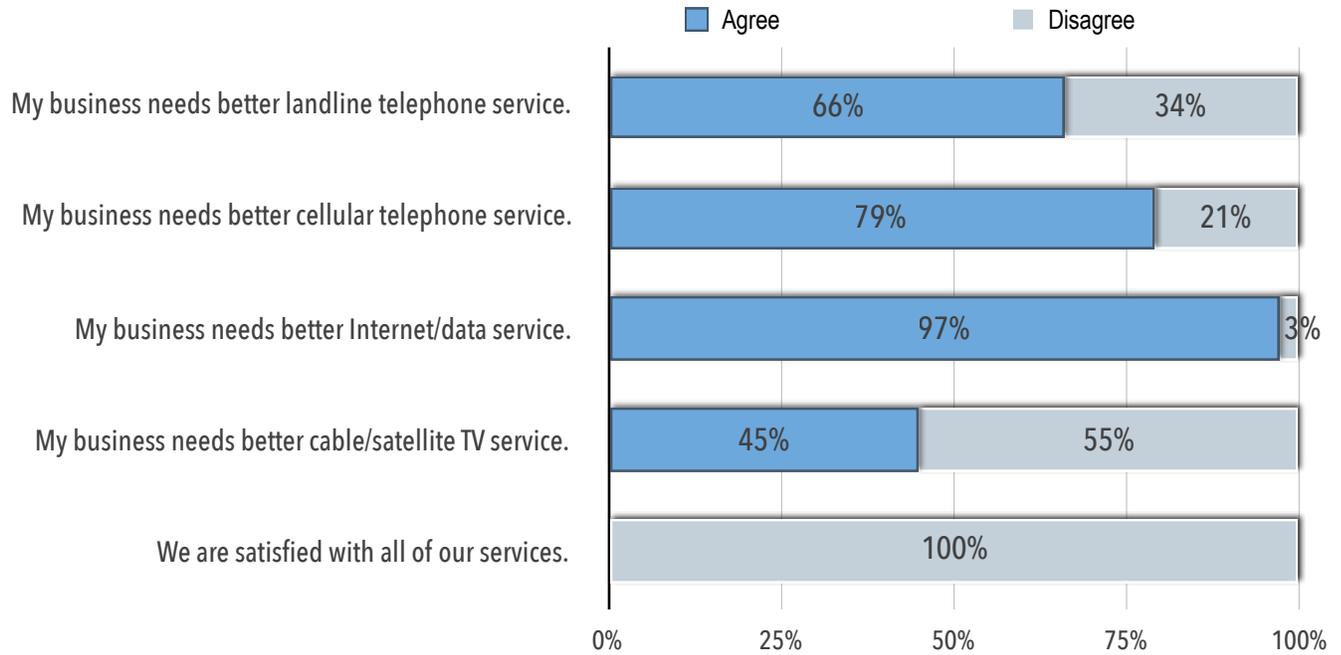
The map below shows the geographic distribution of responses to the business survey, coded according to their satisfaction with their existing Internet service.



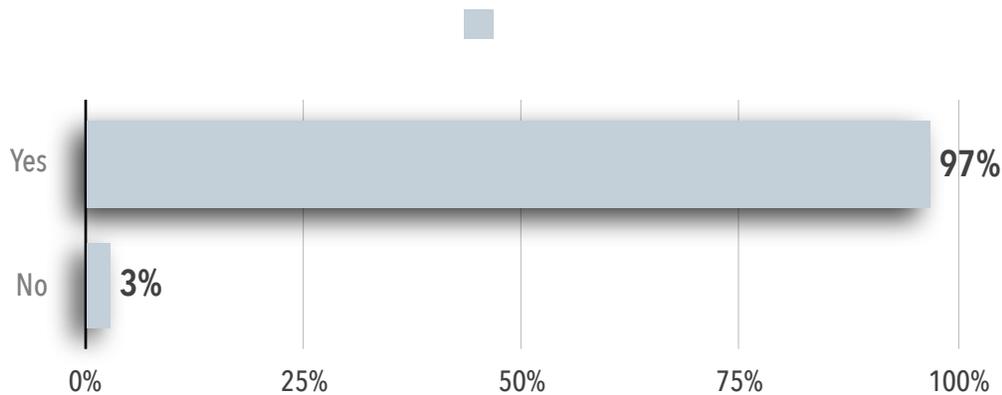


BUSINESS SURVEY SUMMARY DATA

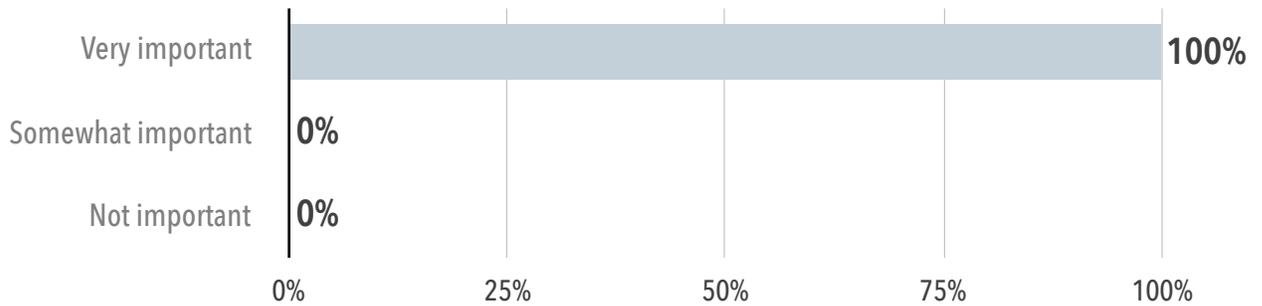
1. Select the items you agree with below



2. Is the Internet essential to your business?



3. How important do you think Internet technology will be for the success of your business over the next five years?



4a. Total number of employees

1 to 10	85%
11 to 40	12%
41 to 80	0%
81 to 150	3%
Over 150	0%

4b. Total number of Internet users

1 to 10	94%
11 to 40	6%
41 to 80	0%
81 to 150	0%
Over 150	0%

5. If you are a business, what type? (select all that apply)

Agriculture / Forestry	5	11%
Retail / Wholesale	9	20%
Professional / Office	4	9%

Government	0	0%
Educational	0	0%
Medical	3	7%
Non-Profit	2	5%
Manufacturing	3	7%
Restaurant/Food Service	2	5%
Communications/Technology	3	7%
Construction / Maintenance/ Repair	4	9%
Other	9	20%

Other types of businesses

Wedding Venue, Inn

Software development and sales

Garden Center

Personal service

Home- entertainment, school work, many people in house use it

Rental and oil well

Banking

Art

OIL AND NATURAL GAS EXPLORATION AND PRODUCTION

We are a multi-faceted photography business. We shoot assignments for newspapers, magazines and businesses. We sell art prints to collectors around the world.

Transportation

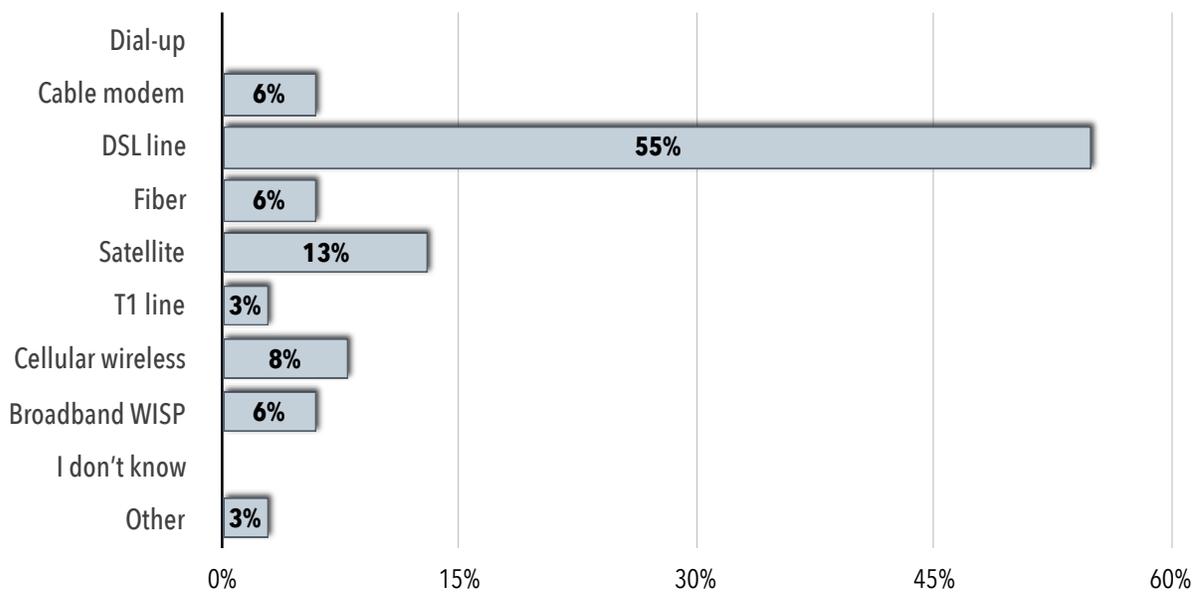
6. Is this a home-based business?

46% of the area businesses
that responded are home-
based

7. How much do you pay now for Internet access each month? If you select 'No Internet', please skip to question 13.

No Internet	\$0 to \$50	\$51 to \$100	\$101 to \$150	\$151 to \$300	\$301 to \$500	\$501 to \$1000	\$1001 to \$5000	\$5000+	I don't know
2	7	16	4	4	1	0	3	0	0
5%	19%	43%	11%	11%	3%	0%	8%	0%	0%

8. What type of Internet do you have?

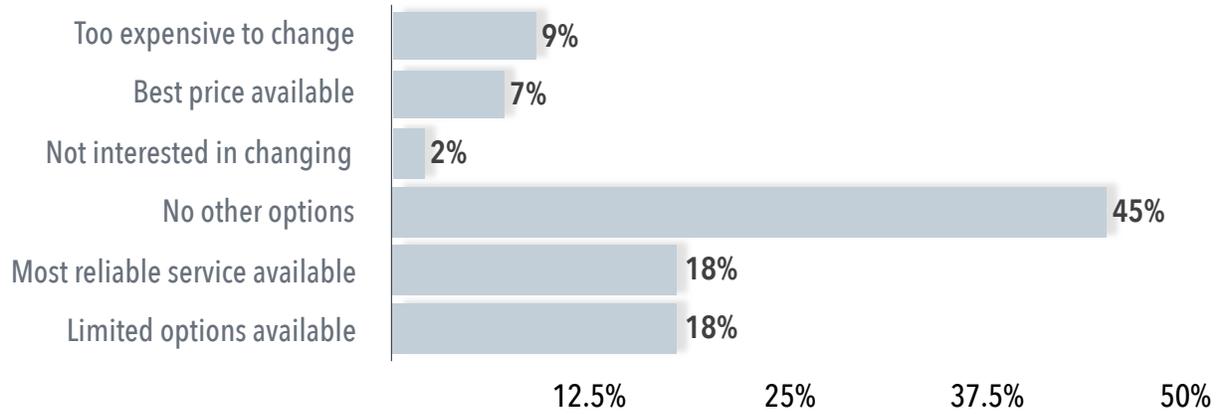


Other Types of Internet (open ended question)

DSL backup - not reliable though

9. Based on the type of Internet you selected above, why do you still have it?

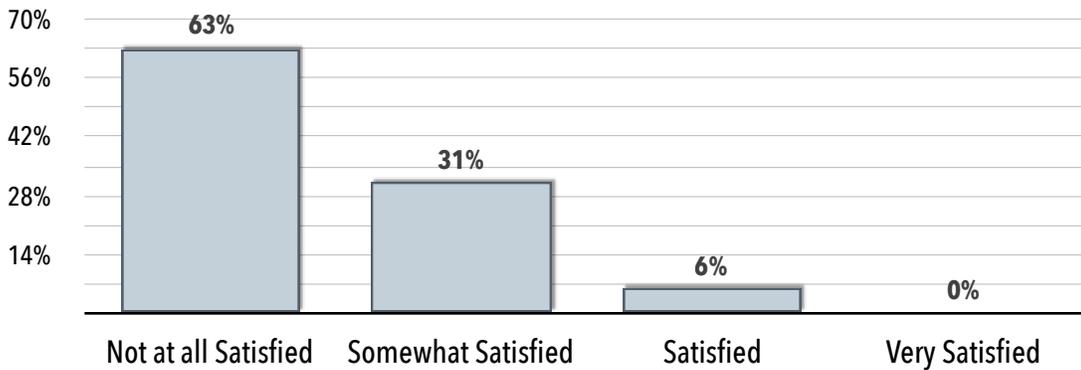
Respondents could choose more than one option.



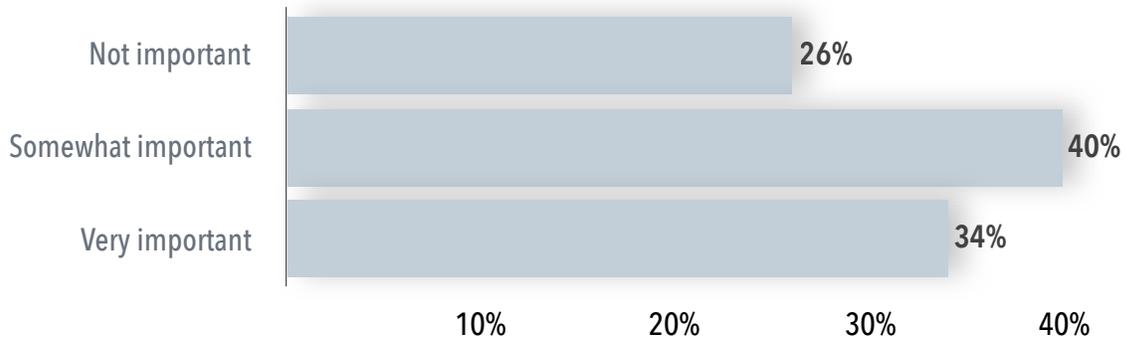
10. What is the speed of your Internet connection? (A Gigabit is 1000 Megabits (Mbps))

Dial-up Only	56-512K	512 k -1Mbps	1-5 Mbps	5-10 Mbps	10-50 Mbps	50-100 Mbps	100+ Mbps	Gigabit	I don't Know
0	1	3	7	3	4	12	1	0	14
0%	2%	7%	16%	7%	9%	27%	2%	0%	31%

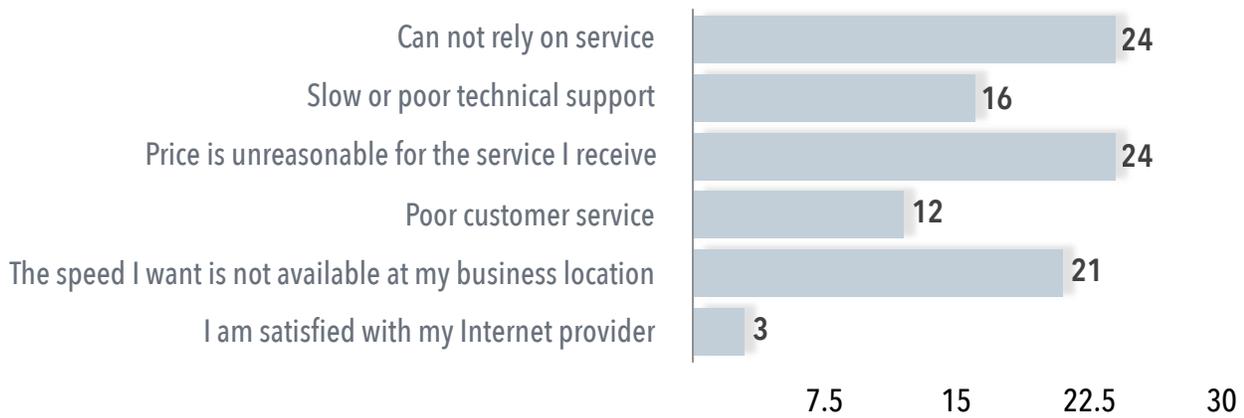
11. How Satisfied are you with the speed and reliability of your Internet service?



12. How important is a redundant or second Internet connection to your business?



13. Please select all that apply to your current Internet provider



14 . Select all the items you use the Internet for now

Email	37	86%
Communication between headquarters and remote sites	14	33%
VoIP Internet phone (Vonage, Skype, etc.)	7	16%
Online Backup (files, photos, music)	26	60%
Transfer large files	24	56%
Monitor / control security, alarms, health, processes, etc.	15	35%

Processing credit card / debit card transactions	20	47%
Ordering / managing inventory	29	67%
Maintaining a Web presence, or blog	23	53%
Social media (Facebook, LinkedIn, Google+, Instagram)	28	65%
Receiving and processing online orders	14	33%
Cloud-based business, accounting or other services	6	14%
Smart TV	7	16%
Other	5	12%

Other Uses for the Internet

I would use the internet for most of these except I have a data limit and the speed is too slow anyway.

Frontier is too slow and unreliable to use it for anything else.

Our inventory system must update daily to the main server to keep our inventory accurate.

School work slow and image sometimes doesn't load

Downloading plans for projects to bid for the States of WV and VA, submitting bids; communicating, transferring documents, and invoicing Customers

Electronic Insurance quoting and application submissions to insurance carriers.

15. Briefly state what you think is a affordable monthly payment for 1 Gigabit Internet speed for a business?

\$60

100

\$50

\$100-150

100

\$50

\$50

\$2.00

50

\$40

60

\$300

100

A gig? We will never have that in this area. I would be happy with 30-50Mbps. Not sure if my home business could ever afford a GB.

NO IDEA. I WOULDN'T PAY MUCH MORE THAN I AM FOR WHAT I CURRENTLY AS INTERNET SPEED IS RARELY AN ISSUE

1000

\$150 - \$200

\$25

\$100 -150

Approximately \$200 per month

75

\$40

\$250 per month for gig up and gig down.

16. Who is your Internet Service provider?

Some responses included more than one provider.

AT&T/DirecTV	3	9%
Hughes/Dish/Viasat/Excede	2	6%
Frontier	25	76%
Lumos	1	3%
SuddenLink	1	3%
CityNet	1	3%

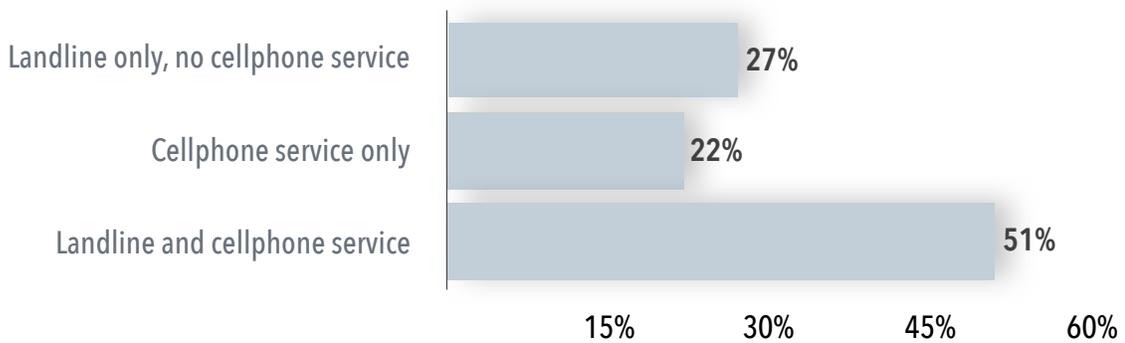
17. Who is your cable/satellite TV service provider?

Frontier	Comcast/ Xfinity	DirecTV	Dish Network	None or Blank	YouTube	Shentel	Sudden Link
2	7	9	12	19	1	1	1
4%	13%	17%	23%	37%	2%	2%	2%

18. Who is your cellular telephone provider?

AT&T	20	51%
Boost Mobile	1	3%
Sprint	1	3%
TracPhone	1	3%
US Cellular	1	3%
Verizon	6	15%
StraightTalk	2	5%
None	7	18%

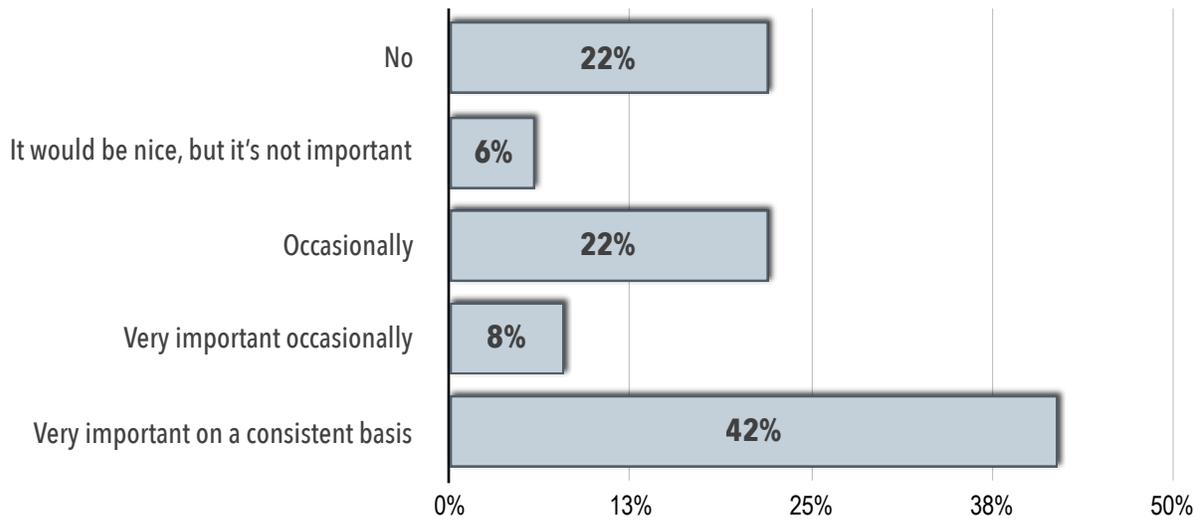
19. What kind of telephone service do you have?



20. Do you or your employees use a VPN (Virtual Private Network) to obtain remote access for your work or to a company network?

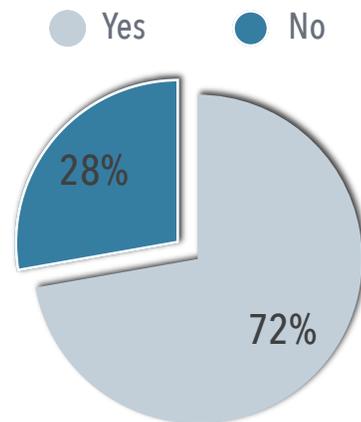
Yes	No	I Don't Know
11	23	2
31%	64%	6%

21. Do you or your employees need or want to work from home?

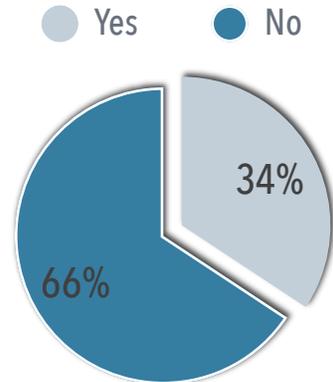


72% of businesses that responded need employees to be able to work from home

22. Does limited Internet access at employees' residences impact your business?



22. Do the existing Internet service options impact your business's decision to relocate or stay in the County?



If yes, briefly state why:

Currently, having problems finding a internet provider that does not charge a large installation fee. Some will not even install in our area.

When relocated to West Virginia from out of state and wanted to live in the Loonveyville area of Roane County, specifically on Flat Fork Road where my family owns a farm and house. We were not able to because there is no Internet available there, other than Dish Network and it is not suitable to our business needs. Not having cell or Internet coverage in the areas we want/need to be definitely negatively impacts our business as well as our quality of life and satisfaction. We are strongly considering moving out of state again if Internet does not become available in that area of the county within the next 3-5 years.

It is hard to move the type of business we have. Otherwise we would have already moved.

Limit expansion.

I started working full-time in Charleston because my business could not compete in this area, mainly because the internet issues.

I was unable to complete this survey at our business location due to loss of connectivity. I had to travel over an hour to a location that had reliable WiFi. We are unable to adequately utilize the internet, and have to constantly travel to find better service.

We will stay in Roane County. However, I know of several cases of friends/businesses who will NOT relocate TO this area because of lack of dependable high speed internet. Most of the rest of the country has dependable high speed internet, so why would anyone come here.

If service is not improved, we will be forced to move.

It only seems to be getting worse as more devices are brought into homes they suck the available bandwidth leaving little by the time it gets to us. If this continues I will need to make serious decisions regarding my business!

23. ANY OTHER COMMENTS

Frontier sucks as does Joe Manchin for allowing Frontier to have a monopoly in rural WV. Shame on WV for voting that scallywag back in office.

Frontier will never change what is in our county unless they are made to do so. They received money to upgrade the system here and then used it somewhere else.

Frontier will not connect home to network, even though adjacent neighbor has service.

Slow internet and poor cell service!!! Would love cell phone only

Our office is located only 3 miles off Interstate 79, yet has limited cell phone service (regardless of carrier) and only one option, Frontier, for internet

Our current system is "barbaric" and "frustrating". Business IT is advancing and I can not keep myself in the game. I hope you can advance this issue so we can be helped.

While I can dream of a day where we can both afford and are able to get a GB internet connection, more realistically...it would be nice to have 30-50Mbps. Heck, it would be swell to have a solid 12Mbps bonded DSL connection. I work everyday within the realm of technology, servers, data...I do not see how we would ever have a 1Gb connection, but if they were to work on the infrastructure in this area we could see a solid 12Mbps connection.

HughesNet has been excellent with customer service and tech support, but are unable to guarantee connectivity (i.e. it constantly goes out due to weather) and the speed available isn't adequate to utilize the services our business needs. We relocated to WV from CA (for family), and cannot believe the lack of connectivity in this state.

The lack of reliable high speed internet is such a big deterrent to economic growth, student education and in home entertainment. We are losing out on a tool that the rest of the country takes for granted.

Please get us reliable internet and phone service. We would love to have cellular service, especially since the land line goes out every time it rains. Internet goes out every weekend and evenings as more people down the line begin using their devices. It is inconsistent every day. We are so frustrated!

I had satellite internet but it only worked half time now I just use a hot spot off my iPad for internet at my business

We us to have satellite internet but it only worked part time , very hard to get payroll updates and process government forms and payments , only internet we have now is using hot spots off iPads and smartphones, and only get some much of that a month. It's ridiculous that this day and age I live 2 miles from a major highway and 7 miles from Spencer and I can't get a good reliable decent priced internet!