

# Missouri Digital Inclusion Asset Mapping: Focus Group Study

Community Innovation and Action Center

University of Missouri, St. Louis

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## Introduction

As part of the State Digital Equity and Broadband Equity, Access and Planning Grant, this focus group study was conducted in order to better understand the broadband needs and challenges of Missourians across the state. In order to better use and distribute funding to achieve digital equity in the state of Missouri, it is necessary to understand the barriers Missouri citizens encounter when accessing broadband and how broadband access, or lack thereof, affects their daily lives. These focus groups, along with other data collection methods, allow for a greater understanding of the issues Missourians are facing when it comes to broadband access.

Access to reliable broadband services has increasingly become a necessity, especially as the workforce, student learning environment and face-to-face connection have all evolved in recent years. Previous research has demonstrated the positive impact of reliable broadband access, including a demonstrated growth in income and decrease of unemployment with the adoption of broadband, particularly in rural areas<sup>1</sup>.

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<sup>1</sup> Brian Whitacre, Roberto Gallardo, and Sharon Strover, "Broadband's Contribution to Economic Growth in Rural Areas: Moving towards a Causal Relationship," *Telecommunications Policy* 38, no. 11 (2014): 1011–23, <https://doi.org/10.1016/j.telpol.2014.05.005>.

In Missouri, around 20% of the state's population does not have access to high speed internet, with the majority of that population living in rural areas<sup>2</sup>. This lack of access has significant implications for the quality of daily life of citizens living in these areas.

To better understand Missourians' access, quality issues, and the ways in which they utilize the internet, the Community Innovation and Action Center, at the University of Missouri, St. Louis conducted 20 focus groups, with a total of 169 participants across the state of Missouri. The goal of the project was to understand the needs around, barriers to, and use of broadband in the state to better understand how individual's lives are being impacted by a lack of internet access and ultimately, how best to implement broadband investments across the state.

This report summarizes the results of the twenty focus groups with attention to specific underserved populations and geographical areas of concern. Following the report, there are appendices providing further context on the methods of data collection and demographics of the individuals reached.

## Methods

### Overview

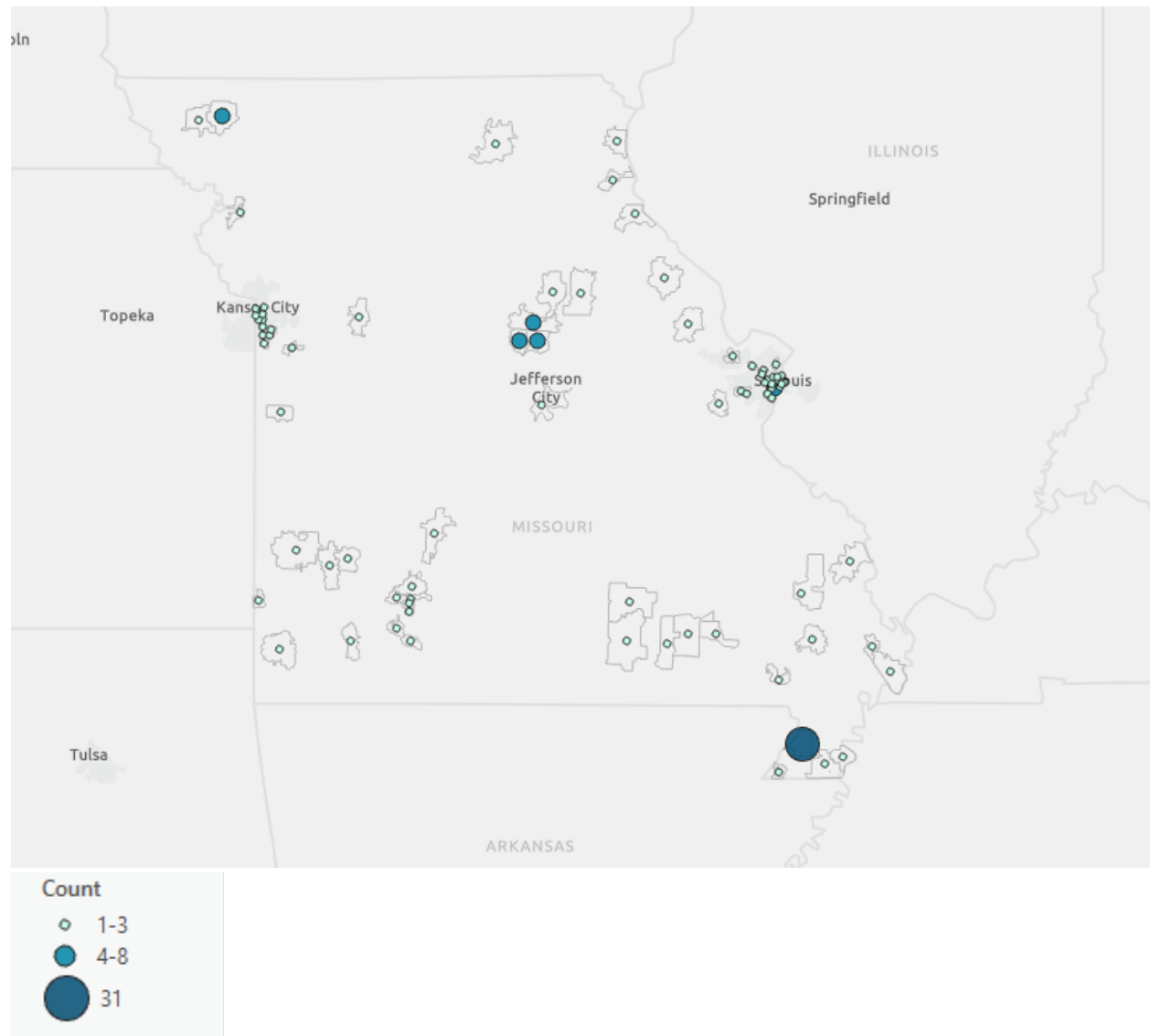
The qualitative portion of the Missouri Broadband Study began in January 2023, after the research team obtained IRB approval for quality improvement research. Fourteen focus groups of up to 12 participants were planned. Census data was used to select locations representing demographic and geographic diversity (see Appendix A). Considerations included the region of Missouri (northeast, northwest, southeast, southwest, east central, or west central), whether the location was urban or rural, overall population demographics, and the feasibility of holding a group in each area. Based on this information, towns were chosen from which to recruit. These included: Eminence, Maryville, Clinton, Edina, Kennett, Kansas City, St. Louis (city and county), Columbia, and Springfield. Participants were offered both in-person and online (Zoom) options, so they could choose the participation method that worked best for them. As data emerged regarding participation rates, the team noted that the online option was preferred by many participants. Therefore, as the number of Zoom options increased, the initial list of locations was expanded to include additional cities and towns across the state of Missouri.

Ultimately, there were 20 focus groups in total with the first occurring on May 16, 2023, and the final focus group taking place on July 6, 2023. Of the 20 focus groups, 11 took place on Zoom with 9 occurring in person. The in-person group locations included St. Louis County, Kansas City, Columbia, Kennett, and Eminence. The Zoom groups featured one Spanish-speaking group and included participants from across the state of Missouri which provided for a more balanced sample. See Figure 1 below to see the geographic spread of the participant locations. The average number of participants in attendance at each focus group was 8 to 9 participants with the smallest focus group containing 4 participants and the

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<sup>2</sup> "Missouri Broadband Access." apps.cares.missouri.edu. Accessed August 1, 2023.  
<https://apps.cares.missouri.edu/portal/apps/MapSeries/index.html?appid=d4a2252250db472e985a6ead1a1d4ed7>.

largest containing 16 participants. Demographics of participants, including race, ethnicity, income level, education, and more can be seen in Appendix A through T.



## Recruitment

Following the choice of locations, a recruitment plan and process was created. Initially, there was a \$50 incentive for participating which was provided in the form of an e-gift card, Venmo, or CashApp payment. The incentive was increased to \$60 over time to attract more participants and increase the sample size. Additionally, snacks and beverages were provided at the in-person locations. Particular effort was made to recruit underserved groups including individuals from low-income households, persons with disabilities, Black, Indigenous People of Color (BIPOC), English language learners (ELL), older persons, and previously incarcerated individuals. Engaging these underserved groups as well as achieving an even sampling of urban and rural populations involved further

consideration and recruitment efforts. Community partners were vital in assisting in the recruitment of these populations and allowed for a richer and more diverse sample.

Primary methods of recruitment included outreach through the University of Missouri Extension offices across the state, connecting with key community leaders through partners, and cold calling and emailing local organizations serving the geographical areas of interest and target populations. As part of the recruitment efforts, a Missouri Broadband Study email account was created that was used to contact organizations and potential participants. Community partners assisted by distributing flyers, forwarding email requests, and speaking to their personal connections about the Broadband focus groups. In both Kennett and Kansas City, a press release was utilized to share the focus group information through local publications (see Appendix B).

Flyers and email templates were created and provided to partners that included a direct link to one of two demographic and interest surveys on Qualtrics (see Appendix C, Appendix D). Potential participants filled out either a Qualtrics interest form for either an in-person or Zoom focus group. The 18-question Qualtrics survey was designed to collect interest in the study, inform them of the parameters of the focus group, including the time commitment and incentive amount, and collect information on race, disability status, age, gender, and more (see Appendix E, Appendix F through S). In both surveys, all potential sign-up dates and times were provided and participants could choose what would work best for them.

### **Facilitating the Focus Groups, Coding, and Analysis**

Before the start of each group, participants were informed of the confidentiality protocol, the purpose of the study, and were informed that they would be recorded. Each group began with introductions before participants were asked a series of 10 questions with follow-up questions given as needed (see Appendix T). The focus groups varied in length with the overall average duration of the focus groups being 59 minutes long. In addition to recording the focus groups, notes were taken to keep track of what was being said. The focus group recordings were then transcribed, coded, and analyzed for themes with key quotes extracted for further consideration. The report was then compiled to include key demographic groups, highlight important findings, document processes, and provide impactful quotes.

## Summary of Findings

### Internet Service Access

Internet access varies widely across the state of Missouri. Participants across all 20 focus groups shared which providers they use, the type of internet access they have, and the general costs associated with internet connectivity. Additionally, participants, particularly in rural areas of Missouri, as well as participants from low-income households disclosed the various barriers they face in accessing reliable, quality internet services, as highlighted below.

#### **Internet Providers**

Across the 20 focus groups, participants access a variety of internet providers. The top providers include AT&T, Spectrum, and Starlink; other providers include: CenturyLink, Cricket, Direct TV, Gateway Fiber, HughesNet, Mediacom, Sparklight, USCellular, Wispernet, Google Fiber. Access to internet providers varies by location, across Missouri. For example, in rural areas, participants commented on the lack of choice in internet providers. Often, rural residents shared that they have only one or two internet providers from which to choose.

- ⇒ *"...there's not a whole lot of options because it's kind of monopolized out in rural areas. The further out you get, the less options you'll have."* - Participant, Zoom, 06.29.23
- ⇒ *"Yeah. Out in the country, you have no choices."* - Participant, Kennett, 06.22.23, 2
- ⇒ *"Well, the access to the internet where we are is pretty pathetic, to be honest. We have to go through AT&T. We have no choice. To me, that's monopolizing the internet..."* -Participant, Zoom, 06.26.23

On the other hand, several participants, in mostly urban and suburban areas of Missouri, commented that they feel overwhelmed by too many internet provider options, and a lack of support in navigating the selection and setup of internet services.

- ⇒ *"Having to try to decide on an internet provider is kind of a nightmare. When I started looking, there were four or five different providers that supposedly provided internet service to my address, but I had to make seven or eight phone calls and try to figure out what was best, and I had no idea what language they were speaking because I'm not very technologically minded. And so they'd be like, "Oh, well we give you 5 megs for \$150." And I'd be like, "I don't even know what that means." And so then I'd have to call somebody else and be like, "Okay, this is what..."* -Participant, Zoom, 06.09.23
- ⇒ *"I think, for me, when I first moved to Maryville, a lot of apartments and housing don't provide internet access, so you're kind of on your own to find an internet provider to come out and hook up your service and everything..."* - Participant, Zoom, 06.09.23

### **Type of Internet**

Similarly, across the 20 focus groups, participants mentioned several different types of internet, including 5G, cell phone hotspots, landlines and ethernet cords, wireless fiber optic internet, satellites, and dish/cable services. The options available, and quality of internet service vary by location. In general, participants from more St. Louis, Kansas City and urban and suburban counties have more consistent coverage and connectivity.

- ⇒ *"I work from home three days a week, two days in the office. And then with the type of mobile coverage we have here, 5G coverage is excellent. So, I'm able to really be connected literally anywhere I go. Along the interstates, if I'm going out-of-state I've got great service, great reliability that way. But just in and around Kansas City, with it being one of the major cities in the state, we've got pretty excellent broadband options and coverage as well."* - Participant, Zoom, 06.20.23

Participants located in rural areas, such as High Ridge, Kennett, Caruthersville and the Bootheel region of Missouri reported fewer internet options and inconsistent connectivity.

- ⇒ *"I live in a really rural area and so far the only option that I have is satellite." And specifically right now I have HughesNet and it's horrible, but nobody else can provide service to my area."* - Participant, Zoom, 06.28.23
- ⇒ *"I thought I would mention that I work out in High Ridge, Missouri. And when I'm out there, I'm luckily if I get phone service, much less internet service, you have to turn on a mobile hotspot and position it just right. I thought that that was enlightening as to how there's such a stark drop-off in service, even on a commute that you might experience if you live in the city."* - Participant, Zoom, 06.15.23

### **Cost of Internet Service**

The price of internet service varies widely, based on numerous factors, such as provider, location, type of service, speed, and number of devices. Participants who reported paying \$50 or less per month, often have the most basic service. Most participants pay between \$50 and \$100 per month, with some participants commenting that this price point offers reliable, fast internet, whereas others pay close to \$100 per month for limited connectivity.

- ⇒ *"Well, I think my hotspot at home is, I think with the hotspot itself and the router, I think it's \$55, \$65 a month, so it's not too ungodly expensive for that."* -Participant, Zoom, 05.16.23
- ⇒ *"Well, with me, for the phone, I'll pay like \$60 a month, but it's unlimited."* - Participant, Zoom, 06.15.23



- ⇒ *"We're paying \$79 a month for 4 gig, which is nothing. We can't run Netflix while my son plays games or anything else like that. Everybody has to stay off the internet while mom's doing her work."*- Participant, Zoom, 06.09.23

About one-third of participants reported paying over \$100 per month for internet service.

- ⇒ *"Ours is over \$100/month...it's the only option we have."* -Participant, Zoom, 05.18.23, 2
- ⇒ *"My internet's 150 a month for the most basic package through Mediacom."*- Participant, Columbia, 05.31.23, 1
- ⇒ *"So I think right now I'm paying for a hundred gigs and it's 160 bucks a month for internet that is, in all honesty, really crappy. But it's my only option, because if I don't, I don't have cell service at my house, so I can't use the mobile Wi-Fi or the LTE options for internet. Satellite is my only option."*- Participant, Zoom, 06.28.23

Most participants commented that the prices of internet services have increased in recent years, and often the costs vary month-to-month and/or without explanation.

- ⇒ *"Mine is high, I pay \$120 for internet. It was \$50 when I first got it, not even two years ago, and it's gone up that much. So when I move, I plan on getting something else"*- Participant, Columbia, 05.31.23, 2
- ⇒ *"Oh, I was just going to say rising costs has been an issue, particularly for me in college, when I was struggling a lot more financially. You start off at one price and then six months later, it's twice as much and that's not an affordable amount of money. That's still an issue now for us, not necessarily that the cost is a huge barrier, but just that you start off at one price and you're like, "Okay, I can fit this into my budget. I can afford this every month," and then six months later it's twice as much and then six months after that, it's another third as much and it just keeps going up, but the service does not improve. It's not any better. It's not like they've added any value. They're just charging you more money because they can, and it's very challenging to try to get them to lower the bill and go back to the original price and that cost just becomes higher and higher for no good reason."*- Participant, Zoom, 06.07.23

### **Barriers to Access**

Participants with more limited access to internet services, including providers and type of internet, highlight several barriers, including cost, lack of cell service to support internet access, difficulties interacting with internet companies to set up internet service.

#### *Cost/Price:*

Participants mentioned that due to the price of internet service, they either had to go without internet at various times, or compromise on speed and quality due to cost.

- ⇒ *"Cost is generally really prohibitive. I mean I work at the library so I help people every day that can't afford to have wifi [inaudible], and you can have a certain amount of cellular data on your phone but then it gets super expensive after a point."* - Participant, Columbia, 05.31.23, 1
- ⇒ *"I had to turn off my internet during COVID. For 3 months we were at home during COVID without internet because it was too expensive for us during that time. My husband was without a job for a bit and it made it hard for us financially."* -Participant, Zoom, 07.06.23, Spanish
- ⇒ *"Financially, yes. I opted for the slowest internet because of cost. Sometimes it freezes, but I can't get faster internet because it's too expensive...."* -Participant, Zoom, 07.06.23, Spanish

Internet costs are a greater barrier for low-income communities and families, as many participants shared.

- ⇒ *"Yeah. So I'm actually a children's minister, and I work with a lot of kids that are low-income. I'd say the majority of the kids we have that come in that are low-income don't have WiFi at home, or something that they can use for watching Netflix, doing whatever. They just have a phone. And oftentimes, when they run out of minutes or whatever they have on their phone, that shuts them down and they have nothing. So we have quite a bit of that, actually, in Lamar."* - Participant, Zoom, 06.20.23

Furthermore, several participants, particularly in rural areas where there are limited internet providers, mentioned that they feel they are locked into a set price to access the internet, whether or not the service is high-quality, as it's their only option for internet service.

- ⇒ *"AT&T is the only option here. And because it's the only option, there's, of course, no competitive pricing there. What you see is what you get, and that varies between where you are in town."* - Participant, Zoom, 06.20.23
- ⇒ *"What I have ran into is in a lot of local little small towns, the internet access is controlled by one company and that company will charge you 80 to \$100 for 100 Meg and there are no lower tiers for it, and people can't afford it when it gets up into that range of cost."* - Participant, Zoom, 06.29.23
- ⇒ *"You just feel like you're completely at the mercy and even though some of these places aren't really monopolies, it feels like it if you're in a rural area. You just feel totally, like you don't have another option, so you have to pretty much deal with whatever they dish out..."* - Participant, Zoom, 06.28.23

#### *Lack of Cell Service:*

Many participants, especially in more rural areas of Missouri, mentioned that their lack of reliable cell service prevented them from accessing the internet, and/or interfered with the reliability and consistency of internet service.

- ⇒ *"Cell service to use mobile data is horrible. I have one bar of cell service at my house, so really, 90% of the time, the only time I can make a phone call is if I do Wi-Fi calling. And even then you got to stand in a specific spot for it to even connect. I would love to be able to use it for my job and work from home, but I can't even do that. I have to go in to town and go to my grandmother's and use her internet to do my job."* - Participant, Zoom, 06.28.23
- ⇒ *"I think a lot of it depends on where we live, the location, and the lay of the land basically. I know we've often had, where I live is kind of in what we used to call the swampy part of Missouri, but it used to be underwater hundreds and hundreds of years ago. We're kind of in the low part of the county and lots of trees and rivers and lots of things to block signals. Even signals of cell phones don't work as well when you get out of a certain area. I also have had to drive a distance to get a signal to get out at some point. Yeah, that's just my thought on that."* - Participant, Zoom, 05.16.23

#### *Difficulties Interacting with Internet Companies:*

Participants mentioned that interacting with internet providers is difficult and impacts their ability to set up affordable internet service at home. Consequently, many participants shared that they feel that they pay more for internet service than they should have to, because reaching internet service technicians is time-consuming, and interacting with providers is both frustrating and complicated.

- ⇒ *"And even though I'm supposed to have the reduced cost, I've never actually gotten that. And so every month, I've continued to pay \$45 to \$50 a month for the internet, [which] I'm supposed to be paying \$10 for. And then I have to call them and spend hours on the phone trying to get them to actually reduce it. And at that point, for the past six months, I've just decided to pay the \$50 a month for the internet rather than try to fight to get the reduced cost."* - Participant, Zoom, 06.09.23
- ⇒ *"Like one of the other participants, I was on CenturyLink and one of the reasons I was on that was because it was one of the few providers in my area and they also offered discounts for individuals that had disabilities or things like that pre-pandemic. But I had numerous problems with them, over billing, overcharging. I filed formal complaints through my state representative and my federal representative's office because they would over bill me, maybe as much as \$200 and then come back and would credit me like \$50 and then act like they were doing me a favor to even do that."* - Participant, Zoom, 06.28.23
- ⇒ *"Also, that sometimes the people that do come out, they speak in technical jargon, they don't keep it simple enough for you to really to understand what's going on."* -Participant, Zoom, 06.29.23

### ***Alternatives to Home Internet/Places to Access the Internet***

Due to a variety of connectivity disruptions, participants, at times, must access internet services outside of the home. As one participant from Kennett commented, “to me it's the school of hard knocks. You just have to learn. I found out that [to get] better access, you have to go to a different area. I've learned the hard way. It's a different area you have to go, and the reception is crystal clear. And then some places, dead zone” (Participant, Kennett, 06.22.23, 1).

Participants may use their cell phones or hotspots through their cell phones to connect to the internet. For example, *"I'd sit in my truck and do my work while my daughter would try to do her schoolwork. Now, like I said, we're using a hotspot right here through our UScellular and sometimes it works, sometimes it doesn't. It's 5G, so sometimes when that wasn't working we have to go into the system and change it to 4G"* (Participant, Zoom, 05.16, 23).

Many other participants travel to family or friends' homes to connect to the internet when their service is interrupted or inconsistent.

- ⇒ *"I also like [other participant], have a teenager at home that during the pandemic we had no internet access for him to do school classes. He actually had to stay with my sister who lives in another town that has reliable internet service in order for him to complete his schoolwork."* - Participant, Zoom, 05.16.23
- ⇒ *"So for me, I have one day a week that I get to work from home, so I have to drive 30 minutes into town to my grandmother's house to use her internet to be able to work from home that day. I also have to, I'm still taking college classes, so I have to go to her house to take my online college classes or I have to go into town to my dad's store and steal his Wi-Fi to be able to do anything."* - Participant, Zoom, 06.28.23
- ⇒ *"For a while, when I first moved into this apartment, the internet was super bad, so I wasn't able to do a lot of my homework here in my apartment. So that would require me to either go somewhere in town or go to one of my friend's house and bounce off their Wi-Fi for a while."* - Participant, Zoom, 06.09.23

Other participants rely heavily on using internet services at their school or place of work, although they expressed their preference for better internet connectivity at home.

- ⇒ *"I actually went back to college a few years ago and accessed the library on campus. Also, my sister has reliable internet, so I spend some time over there utilizing hers and sometimes after work I may use the office as well. There are other places and other resources that you can go to, but nothing beats being at home."* -Participant, Zoom, 05.16.23
- ⇒ *"I do use my office a lot at my company's work to use the internet there a lot. Last year I actually ran for Congress and trying to do Zoom meetings just like this was very difficult."* -Participant, Zoom, 05.16.23

Dozens of participants shared that they go to commercial establishments, like McDonald's and Starbucks to access wireless internet.

⇒ *"Now, my reception is real good at Walmart, the parking lot, at Walmart. I'm really... When I'm going to deal with a real important phone call, I go to Walmart, get right there in the middle there, and I'm good."*- Participant, Kennett, 06.22.23, 1

⇒ *"Similar to her brother, I would write a paper at home on Microsoft Word and then I would drive to Starbucks or Burger King, even, the closest place and sit in the parking lot to submit it, because it was due at midnight. I would write it at home and then go drive and just submit it. There was one time when their wifi wasn't working, so I had the three minutes before midnight. Obviously I shouldn't have procrastinated, but I had the three minutes before midnight to go find somewhere else that had wifi to sit in the parking lot and submit my paper."*- Participant, Zoom, 06.07.23

⇒ *"Again, I haven't really experienced this myself, but my brother, in order to access internet, he would walk to McDonald's, because they have free wifi, and he would do his schoolwork, his college work at McDonald's. He didn't really spend money because he walked, but there were nights where they had to kick him out of McDonald's, because he was trying to do his homework."*- Participant, Zoom, 06.07.23

**"You can go to Walmart, sit out in the parking lot on their wifi and do what you need to do. I've done my unemployment out there when I can't get it at home. I go to Walmart parking lot on Sunday morning, and file my unemployment claim."**  
-Participant, Kennett, 06.22.23, 2

Across all focus groups, participants discussed using a public place, such as a library, for internet access. At least two participants separately joined the focus group discussion from the library, due to connectivity issues. *"I'm actually at our public library, the only broadband spot in the county besides one or two businesses"* (Participant, Zoom, 05.18.23, 2).

⇒ *"...if your kids are in school and you're concerned, your internet goes down and you're concerned about your kids getting your homework done then you go to the public library. Even at that, it's not free for everyone ..."*- Participant, Zoom, 06.29.23

Several participants praised libraries as a useful resource for free internet services, as well as related technology support.

⇒ *"I think the library is a good thing. Like she said, the library, because lot of people go to the library that don't have internet at home. They go to the library to download, or do what they have to do at the library."*- Participant, Kennett, 06.22.23, 1

⇒ *"I know a lot of people are scared to talk to librarians, but as for the head librarian, that's their job to help you with any of that stuff you need. If you need to print out your resume, you need help with your phone, the computer, that's their job to help and show you. They will even take*

*you into those side rooms that they have and dedicate some time. You can check out a librarian. I know you probably got to look at how to do it on a computer. But go to the librarian, they will show you how to check out a room so you can just focus on whatever you need with them and they will walk you step by step. I love the library.”- Participant, St. Louis, 05.23.23*

Nevertheless, as helpful as the library may be, participants expressed the inconvenience of having to travel to and accommodate the schedule at libraries.

- ⇒ *“One of the things that I've experienced when you need a hotspot... Or I'm sorry, when you need wifi, is the timing. Having to work out the timing of doing your assignments or doing your life has to go within the timeframe of when that business is open. When you throw in the demands of trying to go to work, or you've got these odds and ends, there's a lot of... I'm a homebody and I like to have my papers spread out, and so it's like you have to pick up everything and take it to the place, and then ensure that you have privacy. I think privacy is the biggest drawback to working in a public area. Among connectivity, because they tend to run slower. But just trying to ensure that you're within the timeframe, it really does cut down the hours that you can work on certain projects or work.”- Participant, Zoom, 05.18.23, 2*
- ⇒ *“As a teacher, I know so many kids that would have an assignment to do in a certain time and then have to go to the library after school and do their research. Now, the public library closes at four o'clock.”- Participant, Eminence, 06.14.23*

### **Aid Programs that Make Internet More Affordable**

Several participants across the different focus groups mentioned that they receive aid and assistance to help with access and/or the cost of internet services at home. One participant (06.28 Zoom FG) shared that they received a \$50 credit from the Emergency Broadcasting Benefit program, through [American Broadband](#). Another opportunity frequently mentioned is the Affordable Connectivity Program, a [Federal Communications Commission](#) (FCC) benefit program that works to ensure that households can afford the broadband they need for work, school, healthcare, and other services. The benefit provides a discount of up to \$30 per month toward internet service for eligible households and is limited to one monthly service. Those participants who were aware of the benefit offered information to other participants. For example,

- ⇒ *“The Affordable Connectivity Program, I think I was alerted to it by my cell phone company. They give you \$30 toward your internet or phone so that you can stay connected. I think it's especially probably something that's occurred after COVID to make sure that people have those connections and those resources and that support. They give you a \$30 credit to keep you connected with people. I'm sure it's part of a mental health initiative and things like that, after COVID, especially.”- Participant, Zoom, 06.26.23*
- ⇒ *“I have wifi at my house and of course I use it on my phone, but I'm a part of the ACP program for my household to get, it's a \$30 a month thing for the internet for our house so the kids can all*

*go to school and I have four kids so they have to get on the internet quite a bit and also they just like to play games and stuff like that.”- Participant, Zoom, 05.31.23, 1*

Participants who benefit from the Affordable Connectivity Program shared that they learned about the benefit from their cell phone or internet provider.

**“We run a beef cattle business, so I rely on the internet for my advertising and stuff and keeping our website up to date.”**

⇒ *“No. It went from \$30, to \$10, to free now. No, I mean they don't just inform you. But there was an event that went on May 17th where Cricket came up to give out new phones to people that were eligible and to help them find out how to connect to the Affordable Connectivity Program. So I wouldn't say that they do it regularly, but it so happens that that may be a way that a person would hear about it.”- Participant, St. Louis, 05.23.23*

However, many participants were unaware of how to apply for the benefit altogether, as one commented, *“I've heard of them, but I wouldn't even know where to even go to find anything like that”* (Participant, Zoom, 06.28.23).

## **Internet Activities and Uses**

During focus group discussions, participants were asked to identify the ways in which they utilize the internet. Roughly 10 themes emerged from the 20 focus groups across Missouri, as highlighted below, in order of frequency.

### **Work**

Most frequently, across all 20 focus groups, participants use the internet to carry out work-related tasks, such as meetings, as well as to apply for jobs. Rural-residing participants who work in the agriculture industry likewise rely on internet services to conduct their work.

⇒ *“In Adrian, we have high speed, but it's slower. We do a lot of things. Our water plant is connected, so we're able to monitor the equipment in our water plant through our internet service. Most of the work that we do in the office, we access the internet pretty regularly.” - Participant, Zoom, 06.09.23*

⇒ *“...And a lot of times I do just freelance work, helping people with digital marketing. So if I can't connect to my clients then... Yeah, I kind of need my internet. Even though I have unlimited on my phone, it's kind of sucks holding a phone, trying to be on a Zoom meeting. So I like to be on my laptop and I need internet on it.”- Participant, St. Louis, 05.23.23*

Many participants across Missouri noted that internet access is essential to seek employment in today's job market.

- ⇒ *"Yeah. I've been looking for a job. There's no paper applications anymore. Everything, you either scan a QR code, go to the website, Indeed.com, Monster, whatever. Without the internet, it would drastically slow down the hiring processes around the board, make things a lot more difficult."* - Participant, Zoom, 05.31.23, 2
- ⇒ *"And also, I used to be a recruiter in a similar role, but it's a lot of the people that I used to work with to help them find jobs were on, we were on public transportation lines and couldn't necessarily make it to the office, but we could do 90% of the work that we needed to do to get them employment, get them back on their feet, just over the phone. So I think that's huge."* - Participant, Zoom, 06.15.23
- ⇒ *"Yes, definitely. It would open up more opportunities for me if I could afford the better speeds. I've applied for jobs where you have to give speed test results, things like that, but because of my situation, I can't really afford the initial layout. Like what she's talking about, to do some of the other options. So it keeps me in that, I don't know, that spot where it's, well, to actually even apply, you have to be able to produce the speed test. It's not even after employment. So it's a barrier, I think."* -Participant, Zoom, 06.28.23

Furthermore, many participants commented that internet access permits them to take on careers they may not have otherwise been able to access, because of the internet. For instance, some participants work remotely for out-of-state employers, which allows them to live in Missouri, near family and with a more affordable cost of living, and/or even consider starting their own small businesses.

- ⇒ *"Yeah. I work remotely. My job is out of state, so if I did not have reliable access to internet, I just would not have this job. I would not be able to do it because where the company is based out of, I could not afford to live there. It's based out of Los Angeles, California. So they don't pay me enough to live there, so that would suck."* -Participant, Zoom, 06.15.23
- ⇒ *"On a personal side, I run a side business and so I use the internet at home to conduct meetings, basically all across the country. I have a financial services business where we do investments, insurance, mortgages, and I have clients all across the country. I could not do that without a reliable internet service. And so for me, it lets me reach customers that I would have never been able to reach before. And so both my day job and the things that I do on the side, highly reliant on the internet service."* - Participant, Zoom, 06.09.23

### **School**

As highlighted throughout this report, participants rely on internet access to engage in online learning, both during and after the COVID-19 pandemic. Participants in all 20 focus groups shared that they use the internet for educational purposes. Post-secondary education programs often have an online component. Additionally, throughout Missouri, elementary and secondary education requires internet connectivity for homework, hybrid learning, and ongoing coursework.



- ⇒ *“That's why some kids now they got the MacBooks here in school, and if they don't have access to internet they can't do their homework or anything like that. And that's a big thing that the kids got to have.”- Participant, Kennett, 06.22.23, 4*
- ⇒ *“It gives you so many opportunities too. I have an unpaid internship, but my boss is a fashion designer and also disabled. I met her through Instagram and there's no way I would've found someone who is accommodating and doesn't want me to pay them much, she lives in Washington, there's no way... It's just like the internet did that.” -Participant, Zoom, 05.31.23, 2*
- ⇒ *“I use it every day. And a lot of times when we want them off of YouTube and stuff, we'll pull up educational apps and stuff like that. So if we didn't have that, they wouldn't be able to access that. And now, well the pandemic is kind of still lingering, but it's over. But when they were going to school virtual, you needed internet. So that was a necessity.” -Participant, St. Louis, 05.23.23*

## Health

Across the state, participants access health services online. Participants shared that they are able to connect with their healthcare provider more regularly, as well as set up appointments or even meet for a telehealth appointment. A few participants mentioned that they need internet access to *“even fill a prescription with [the] doctor's office”* (Participant, St. Louis, 05.23.23). Moreover, many participants rely on the internet for mental health services, such as therapy. Finally, a number of participants commented that they are able to stay healthy and fit with online exercise programs. Generally, participants in rural communities benefit more from internet-based health services than their urban counterparts.

- ⇒ *“Yeah. Y'all have that? And what it does, it relays your information, your medical information. So you can look up that information from the privacy of your own home. Oh yeah, you get your test results and everything. Well, a lot of times if you don't have access to wifi, or hotspot, or whatever, I mean you don't know what's going on, even your own health.”- Participant, Kennett, 06.22.23, 4*
- ⇒ *“as well as we've had several people call in recently that need the internet to relay information to their doctors like if they have a heart monitor thing that just connects through the internet to provide that information. So we've had to find some funds to help. We've just used emergency funds, been able to help, support their internet bill so they're able to get that communication to the doctors.” - Participant, Zoom, 06.15.23*

**“But there are some, especially in rural areas and I'm going to tout the rural areas because that's where I am and where I've grown up, but people can get medical services on the internet now. There might be homebound people who could utilize those services who can't drive or can't have access to transportation. So, anything that would be able to benefit those rural communities as far as healthcare, possibly even access to attorneys and just consultants and therapists and things like that, that would allow those folks to be able to be at home, access those services and improve their quality of life. ”**  
- Participant, Zoom, 05.18.23, 1

### **Social Connectivity and Social Media**

Similarly, participants across all 20 focus groups throughout Missouri discussed how they use internet services to stay connected with family and friends. Specifically, participants mentioned connecting with friends and family members through internet-based apps like WhatsApp, Facebook Messenger, Skype, and Snapchat. Several participants shared the same sentiment, as one participant commented, *“without the internet, the communication would be a little bit different. It would maybe be less accessible in that sense.”* (Participant, Zoom, 06.09.23). Connectivity accessibility was frequently mentioned. Another participant, from Columbia, Missouri, shared *“I just want to connect with one of my best friends, she’s in a wheelchair, and she’s in [inaudible 00:57:14] right now, and I can’t go there every minute of every day”* (Participant, Zoom, 05.31.23, 2).

- ⇒ *“We were able to meet today because of the internet. We’ve met a lot good people online who have been helpful.”*- Participant, Zoom, 07.06.23, Spanish
- ⇒ *“...The world is a much smaller place now because we have internet and because we have social media and because we have access to the world basically through our phones and through our computers.”*- Participant, Zoom, 05.18.23, 1
- ⇒ *“I’ve got my two best friends. One is..in Philadelphia, and all three of us can be on FaceTime at the same time, and then I also FaceTime my girlfriend multiple times a day. Multiple times a day, while I’m driving.”*- Participant, Kansas City, 06.14.23
- ⇒ *“I’ll say that some of the things that I enjoy the most are like I can video call my mom and show her something cute that my kid is doing, or we can ask Google a weird question and Google will answer us.”* -Participant, Zoom, 06.09.23
- ⇒ *“Well, we’re all social people and the internet helps us stay connected. I’ve been in education 54 years and don’t have sense enough to quit yet. But being able to stay in contact with former students and my family.”* Participant, Zoom, 06.15.23

A few participants mentioned that they can participate in church services online, and a handful of other participants mentioned they were able to participate in marriage ceremonies by connecting online during the COVID-19 pandemic.

- ⇒ *“Also, we use it at our church when we doing live service...”*- Participant, Kennett Rachel
- ⇒ *“Yeah. We had a COVID backyard wedding with 30 people, just family, and then about a hundred people streamed it through Zoom.”* -Participant, Zoom, 06.07.23
- ⇒ *“Yes, definitely a COVID thing. Even nowadays, even without COVID, grandma can’t travel or we’re trying for number two and my sister was about to get married. I don’t want to miss my sister’s wedding, but you could stream everything now, which obviously it’s not the same, but nowadays, you could stream everything so that people who aren’t able to be there can be there.”*- Participant, Zoom, 06.07.23

### **News/Staying Connected to the Broader World**

Relatedly, participants frequently use the internet to access local, state, national, and international news, and generally connect with the broader world. Several participants read the newspaper online and connect with communities in different states as well.

- ⇒ *"...Well, as we all know, internet is a very large environment where you learn a lifestyle. So I'll say it is a place you get important information, and navigates the world. As with internet, you can get more information, get more exposure. So I think internet is a global citizen."*- Participant, Zoom, 05.18.23, 1
- ⇒ *"And I'm not meaning to take over this, but it really has become a requirement for living in today's world and today's connected world. And I don't think most of us mind that. We just want to not be left behind because some of us are able to do it and some of us can't. We need the means and the ability to become a part of the connection."*- Participant, Zoom, 06.29.23

### **Entertainment/Games**

Most participants, across all 20 focus groups, utilize internet services for entertainment, including streaming television shows and movies, and for games and exploring new hobbies.

- ⇒ *"I use it a lot for streaming and movies, TV shows, and social media. I have toddlers, so we like to watch a lot of Disney+ and stuff like that. I just like having access to whatever you want at the tip of your finger, honestly, and there's nothing you can't find out."*-Participant, Zoom, 06.07.23
- ⇒ *"For streaming different channels, maybe Netflix and things like that. I use it for streaming and just browsing the internet just on my free time."*- Participant, 06.26 FG
- ⇒ *"I like that, I think probably you've already said this, the social aspect of it, even if it's just having something to play in the background because when you are by yourself 24/7, with a two-year-old, it doesn't matter how sane you are, you're going to start hearing voices, so it's really nice to be able to have it just... And then, even if the kiddo wants to watch the same five things, I can, at least, be like, "Okay, well we can watch Baby Shark, but we're going to watch it in Mandarin and do your Mandarin lessons."*- Participant, Zoom, 05.31.23, 2
- ⇒ *"I don't know what to call this, but, of course, the internet use it for research, and exploring new interests, and hobbies, and just anything you want to know about, but, it's in a way taken the place of a library because it used to be you had to go to the library or find a professional to ask these questions to. I still use my library though, but thinking... So I don't know how to say this, but if somebody... We're always like, oh, what's the name of that person? Oh, let me just look it up."*- Participant, Zoom, 05.31.23, 2

## **Shopping**

Participants across Missouri use the internet for online shopping, and even to access coupons and discounts for in-person shopping. Participants residing in rural areas of Missouri particularly benefit from online shopping, as a means to access a greater diversity of goods and products.

- ⇒ *"I use it for online shopping. I order my groceries for pickup and that kind of thing."* -Participant, Zoom, 06.26.23
- ⇒ *"I mean, I'm a couponer. If I go to Schnucks I have to have my app and I need internet access. So that's how I save the most money."*- Participant, St. Louis, 05.23.23
- ⇒ *"Yeah. What came to my mind was shopping. We live 45 miles from the nearest Walmart, 10 miles from the grocery store. In a rural setting, sometimes the shopping opportunities that you can get online are wonderful."*- Participant, Zoom, 06.09.23

## **Paying Bills**

Similarly, several participants across the different focus groups commented that they rely on internet access to banking, including unemployment insurance, as well as pay their different bills and utilities.

- ⇒ *"Bills. When bills are due, they'll send you a message to Gmail or your account, or whatever. Like, "Okay, I know it's due. Leave me alone."* - Participant, Kennett, 06.22.23, 2
- ⇒ *"Insurance. And it also, I pay, I do my online bill pay and I check my accounts and stuff like that. If I didn't have a way to access that, I wouldn't have never found the checks that these people had wrote on my bank account or cashed in my bank account that I had no idea of while I was incarcerated. And I mean they run it up and it was six accounts opened up in my name unknowingly and about to the tune of 22 checks that someone had cash in my bank account."*- Participant, Zoom, 05.31.23, 1
- ⇒ *"Bill paying. I mean, almost no companies send you bills anymore. They will but they sure don't want to and it is a waste of paper and everything else. But I mean it's just the norm. You have to pay bills for one thing besides work or school."*- Participant, St. Louis, 05.23.23

## **Home Services**

A handful of participants across Missouri highlighted that they access home services, like security systems and heating and cooling devices through the internet. For example, one participant in Kansas City shared that they utilize the internet, *"to see what's going on in my house when I'm away. I turn my furnace and my air on when I'm away."*, *Oh yeah, I like that too. My parents have a Zoom camera in front of their house, and so I like being able to check in on them or see who's coming to the front door as well as..."* (Participant, Kansas City, 06.14.23).

## Searching for Resources

Many participants shared that they rely on internet access to search for various resources, whether they are vital to everyday living, like travel, work and school, or entertainment, or even simply to answer questions they have throughout the day. Participants shared that they access library resources online, and contact information for businesses and services.

⇒ *"And then also I agree with everybody else, it sets you back and you don't have access to the things that the modern world is running on. So it's like, it's very isolating to not have internet access. And it creates a lot of barriers for like, "How do I look up phone numbers or how do I find these resources or how do I contact the people I need to contact it?" It just creates more barriers."*- Participant, Zoom, 06.09.23

⇒ *"When my kid goes outside and he catches a toad, we can come inside and just be like, "Hey, Google, what do toads eat?" And they'll tell us how to feed it and take care of it. So it's just the little things that we are able to do because we have that reliability and the internet connection that just make our lives more fun and more simple and more enjoyable."*- Participant, Zoom, 06.09.23

⇒ *"... I use it too to research summer camps for my daughter, summer activities. No more pamphlets to get information; just search it online. Search for resources too."*-Participant, Zoom, 07.06.23, Spanish

**"Basic human interaction, contact with the outside world, income streams. I feel like those are all things that the internet gives us. Without the internet, we wouldn't have access to that."**

- Participant, Zoom, 05.18.23, 1

## General, Everyday Uses of the Internet

The vast majority of participants across all 20 focus groups utilize the internet each and every day for multiple purposes, as highlighted below.

⇒ *"So I would say he probably uses it more than I do, because he works from home, and he works in IT, and he plays video games a lot. That requires the internet. But we still use it just for Netflix or our baby monitor. So, I feel like we probably are using internet almost every moment of the day in some capacity."*- Participant, Zoom, 06.20.23

⇒ *"And I like the convenience of things like scheduling a doctor's appointment and being able to check your bank account, I mean, those things were not always available for you to just do. You always had to do in person or call somebody and now, it's just almost anything you want to look at. And another thing I thought of was, I know I just thought about this recently, was how you become more*

**"I also don't have a vehicle, and with the way that the metro and the bus system is always changing their schedules or things break down, I can't trust that I'm just going to arrive on time based on the things that they have listed at the various stations and stops. I have to be able to know, hey, this train is down, or this is running late, and if you need to go here, you have to go to this station instead."**

- Participant, Zoom, 06.15.23

*familiar with other parts of the world that maybe you wouldn't have learned about otherwise."*- Participant, Zoom, 05.31.23, 2 *"Basic human interaction, contact with the outside world, income streams. I feel like those are all things that the internet gives us. Without the internet, we wouldn't have access to that."*- Participant, Zoom, 05.18.23, 1

⇒ *"I do a lot of different things with my internet. I need it for email. I developed a disability due to being in toxic mold, so I have a lot of legal and access stuff that I need to be able to follow up. During the pandemic, I volunteered, and I answered a crisis line from home using my internet service, which was really challenging. I wanted it, in the past, for classes and access for things like that, because of my health I assume my religious services, so I really need my internet for a lot of different things."*-Participant, Zoom, 06.28.23

## Quality of Internet Service

The quality of internet access and connectivity was a frequent topic across all 20 focus group discussions. Participants discussed the plethora of benefits that they are offered with reliable, high-speed internet. Conversely, participants disclosed the impacts they experience when they face unreliable, interrupted connectivity and the consequences that come with the inability to use the internet. Participants residing in rural areas of Missouri were more likely to face internet disruptions, and thus more negative impacts on their ability to work, participate in learning, socialize and connect with family and friends, and find everyday resources and information.

### ***Benefits of Reliable Internet***

During the focus group discussions, participants were asked to share the benefits they experience when they have access to high-quality, reliable internet services. Participants shared several reasons, including the ability to utilize wireless internet to stream television shows and movies, paying for specific subscription services like Netflix and Hulu, instead of paying for a more expensive cable service. Likewise, participants explained that they can easily search for information and resources anytime they want, stay connected with friends using internet-based apps like WhatsApp and Skype, and keep up-to-date on world events, local news, etc., as well as do their shopping and medical appointments online.

Participants across all 20 focus groups shared that one of the greatest benefits of having reliable internet is the ease with which they can do research. *"I do research on just whatever topics"* (Participant, Zoom, 05.18.23, 1). Specifically, participants shared that they use the internet to navigate travel, explore new interests and hobbies, search for home services, and explore interesting topics anytime, anywhere.

⇒ *"And I like the convenience of things like scheduling a doctor's appointment and being able to check your bank account, I mean, those things were not always available for you to just do. You always had to do in person or call somebody and now, it's just almost anything you want to look*

*at. And another thing I thought of was, I know I just thought about this recently, was how you become more familiar with other parts of the world that maybe you wouldn't have learned about otherwise.”* -Participant, Zoom, 05.31.23, 2

- ⇒ *“It's been really helpful having internet access. It can actually give you a wider best information about addresses, maps, and really helps you navigate your way through a lot of difficult areas.”*- Participant, Zoom, 06.07.23
- ⇒ *“...and I think it's really helpful to be able to just look up any recipe for dinner. And I think it's really cool that there's apps that you can look up a recipe, and then it'll say, "Put this in my shopping cart," and then someone can deliver the groceries. So, I think the internet's made my life a lot easier.”*- Participant, Zoom, 06.20.23
- ⇒ *“...Home repairs, how to figure it out and checking prices on things to see where they're cheapest. I used to be in online school too, so I've also done school.”*- Participant, Columbia, 05.31.23, 1

**“Rural healthcare is suffering as hospitals close. Telehealth access is more important than ever.”**  
-Participant, Zoom, 05.18.23, 2

Similarly, participants, especially in rural areas, expressed the convenience of shopping online, as one woman from the June 9th focus group noted: *“Yeah. What came to my mind was shopping. We live 45 miles from the nearest Walmart, 10 miles from the grocery store. In a rural setting, sometimes the shopping opportunities that you can get online are wonderful”* (Participant, Zoom, 06.09.23).

Telemedicine was another frequently mentioned benefit among participants across the different focus groups. Rural-based participants appeared to benefit more from this service, especially during the COVID-19 pandemic. Rural Missourians typically have fewer healthcare providers to choose from, as well. Indeed, a recent report<sup>3</sup> stated that 19 of Missouri’s rural hospitals are at risk of closing, half of them immediately.

- ⇒ *“In this community, I think, the telemed has been a real godsend for people, especially during COVID, traveling and all of that, having internet access to medical advice and how that all works has been really important to a lot of people here.”* -Participant, Zoom, 06.09.23
- ⇒ *“I'm really glad that you mentioned that because that is something that I... It 100% affects me. I do all of my appointments with my doctors. Almost all of them are done online because I moved from Springfield to Neosho. And because of having access to the internet, I didn't have to change doctors.”*- Participant, Zoom, 06.09.23

Another benefit of reliable internet that participants shared was their ability to engage civically. For instance, one participant explained, *“As far as citizenship and being able to be active, I can much more easily reach any of my legislators or anyone that I want to express an opinion to. That can be done by phone, I understand that, but sometimes I just want to write a letter. It's much easier than writing it and*

<sup>3</sup> Center for Healthcare Quality & Payment Reform (2023). *Rural Hospitals at Risk of Closing*.

*sending it through the US mail. So, I think that access is important for people too, to express themselves as a citizen" (Participant, Zoom, 05.18.23, 1).*

Finally, several participants explained that they were able to reduce their entertainment expenses and give up cable for specific subscriptions. For example, one participant from the Spanish language focus group shared, *"...it's cheaper to pay for internet to screen movies and tv for our daughter rather than have cable.."*(Participant, Zoom, 07.06.23, Spanish). Another participant similarly shared, *"I know for me personally, it enabled me to not have to pay for cable anymore, which was really a nice thing for the budget. "* (Participant, Zoom, 05.18.23, 1).

Beyond the conveniences that come with reliable internet service, participants shared two additional significant benefits of high-quality internet connectivity: better awareness of what is happening in the world and strengthened connection through internet-based communication services.

- ⇒ *"It's just made us a smaller world and we understand each other more I think, and we're aware of what's going on in the world more so than we ever have been. I grew up in the seventies as a kid, and we only saw what we saw on TV maybe once a day and at that time, we only got one or two television channels. There was very limited access to what was going on in the entire world. We had no idea. But now we know if there's an earthquake in Bangladesh or if there's a tornado in Louisiana or if there's something going on anywhere. I think that inclusivity and that coming together as a whole is one of the great benefits of that."*- Participant, Zoom, 05.18.23, 1
- ⇒ *"Yeah. [inaudible 00:33:28] I'd love to add how advantage of the internet has been on collaboration and working from home and also access to the global workforce. I really love to say the internet has really made a lot of anonymity and making people equal and it has also given a lot of connectivity to communities and communication and content sharing and lot of stuff as well. The biggest part to these for me would be information, knowledge, and learning. Those are three keys really enjoyable from the internet."*- Participant, Zoom, 06.07.23
- ⇒ *"Yeah. I'd say I really love having the internet, because it's really been strengthening my social ties and the internet has helped me organize a lot and help me collaborate more and share information with larger numbers of people, so that has really been enjoyable to me a lot."*- Participant, Zoom, 06.07.23

**"Seeing your family in Mexico when you talk to them." "It's been 13 years since I've seen family. None of my family members have been able to get a visa. When you're able to see them on video is really special."**  
- Participant, Zoom, 07.06.23, Spanish



## Disruptions to Internet Service

Participants value reliable high-quality internet access. Nevertheless, internet connectivity is prone to disruption due to a variety of causes, including weather. For example,

- ⇒ *"During the wintertime, I have a really hard time using it in the house. I'm not sure why that is, but maybe that's something that can be addressed...Usually, it's really good, but I can tell when we have clouds out and stuff that it affects it."*-Participant, Zoom, 6.26.23
- ⇒ *"When I'm not home though, I work in retail currently, so we strongly rely on the internet there as well. And I don't really know what they have for internet there, but it's really bad some days, and it seems to depend on the weather for us. So if there's any severe weather in our area, it affects our connection at work. So we're not able to process our inventory as fast and sometimes it shuts down our registers as well, so we won't be able to use those to check customers out either. So that's a big issue for us."*- Participant, Zoom, 06.09.23

Participants residing in rural areas of Missouri were, on average, more likely to share connectivity issues and weather-related impacts than their urban-based counterparts. Internet disruptions are unsurprisingly stressful and impact individuals' ability to work, connect with family and friends, and access online services.

- ⇒ *"But when they're doing homework, that's when it's hard during the school year. Because if it snows or something like that, it'll just cut them off and it'll stall. So when we had to be here for COVID-19, I was praying to God, "I hope it works today." – Participant, Kennett, 06.22.23, 2*
- ⇒ *"I have dish cable. Let it be lightening. No rain, or nothing. Or let it rain or miss. Boom. Your service is done for. Until it dries out. Until it's dry. Until the rain stops falling, and stuff. Or lightning, or whatever. Bad service with this."*- Participant, Kennett, 06.22.23, 3
- ⇒ *"Can you expound on the component or the part where you say you studying about weather and the effect for broadband? Because that's the problem we have. As you know, the southeast area has a lot of tornadoes or high winds and sometimes that really impacts internet connections up to days, hours, and so.... But yeah, weather conditions really determine the usage of our internet."*-Participant, Zoom, 06.15.23

**"It's time consuming, its stress stressful, and then you have to deal with extremely low-quality service because they're going through old lines or like I say, satellite is just very unreliable due to weather and wind and everything else."**  
-Participant, Zoom, 06.29.23

Participants across several focus groups, especially those in rural areas of Missouri also shared that physical Infrastructure, such as the type of building or terrain, can negatively affect their internet connectivity.

- ⇒ *"I think a lot of it depends on where we live, the location, and the lay of the land basically. I know we've often had, where I live is kind of in what we used to call the swampy part of Missouri, but it used to be underwater hundreds and hundreds of years ago. We're kind of in the low part of the county and lots of trees and rivers and lots of things to block signals. Even signals of cell phones don't work as well when you get out of a certain area. I also have had to drive a distance to get a signal to get out at some point."* -Participant, Zoom, 05.18.23, 1
- ⇒ *"Especially in bad weather, around metal, or buildings, and different things. Try to get on the internet, and even if you just try to get a little help from Google, it just buffer. Just buffer takes hours, and hours, and hours to-"* -Participant, Kennett, 06.22.23, 1
- ⇒ *"Yeah, and I'm like I ain't got no limit, but apparently I do. And then metal buildings too. We got a lot of people in a lot of metal buildings, so that's doing [inaudible 00:06:54]."* -Participant, Kennett, 06.22.23, 4
- ⇒ *"Well, like I said, I live in a small town. We have a population of just under 200. And during COVID, my husband had to work from home and the local internet service that we had was not good enough, so we ended up getting satellite, which is okay, except if it rains or if the wind blows from the wrong direction or if the sun hits it at the wrong time or if it just decides to go on the blink. So you can be in the middle of a Zoom call and be going [inaudible 00:08:47]... But anyway, so yes, we have some issues in our neck of the woods."* -Participant, Zoom, 06.15.23

In addition to the above-mentioned disruptions, due to weather and physical infrastructure, participants across all 20 focus groups shared how general connectivity issues, such as sudden internet failures and/or slow connections and buffering impact their day-to-day lives. Again, participants residing in rural areas of Missouri face increased connectivity issues.

- ⇒ *"Our barriers have been, especially when we had CenturyLink, the service would cut out continuously, especially when COVID happened. My fiancé or we were both working from home and our daughter was trying to do her schooling as well. CenturyLink kept cutting out on us and it just made that very difficult for us to do anything. My fiancé, we let her do her work. Thank God my truck has a hotspot, so to get a signal I have to go about halfway down my driveway to get a signal in my hotspot."* – Participant, Zoom, 05.18.23, 1
- ⇒ *"I thought I would mention that I work out in High Ridge, Missouri. And when I'm out there, I'm luckily if I get phone service, much less internet service, you have to turn on a mobile hotspot and position it just right. I thought that that was enlightening as to how there's such a stark drop-off in service, even on a commute that you might experience if you live in the city."* -Participant, Zoom, 06.15.23
- ⇒ *"Oh, I agree with what she's saying. I live in Bloomfield. I'm not sure, I don't know if I'm in a rural area or not, but I'm not in the city area or anything like that. And having trouble with the internet is a common thing around Bloomfield also. And with my phone, sometimes living down there, I won't get the service that I normally have. As soon as I leave Bloomfield, then all of a sudden my phone is better. But when I'm down in Bloomfield, I barely can even watch Netflix on it or anything, even with my Wi-Fi, which makes no sense at all. But as soon as I leave*

*Bloomfield, I can go in any other direction, I've got five bars automatically, four bars or whatever it is. But staying in Bloomfield, I've got one to two bars every single day. And, yeah, we've thought about moving to the city. Right now I'm actually in Kansas right now because it's my summer break, I work at the school, and I've got all the bars I've got right now from here. But if I was in Bloomfield, I've only have one or two bars."*-Participant, Zoom, 06.28.23

**"When I did work from home, that's actually one of the reasons I quit my job, is because of the continual disconnecting, losing connection. A lot of it was my work, but a lot of it was, especially here at my mom's with AT&T, was the connection. It cost me my job almost, really."**

*- Participant, Zoom, 06.26.23*

### **Impacts of Unreliable Internet Access**

As highlighted earlier, participants expressed the value of having reliable internet service at home. Likewise, when their internet connectivity is disrupted, participants experience several negative impacts, affecting their ability to work and participate in learning/school, communicate with family and friends, and enjoy entertainment at home.

Indeed, participants across all 20 focus groups shared that weak and/or disrupted internet connectivity interrupts their ability to work remotely, increase their work flexibility, and even apply to jobs. Participants, many of which are women, some of which have a disability, and likewise reside in low-income households in rural areas were more likely to share the negative impacts of their unreliable internet.

- ⇒ *"My job that I have now has the option for me to work at home some days, but that's nearly impossible for me because I have to rely on my cell phone to do so, as I can't get enough internet service at home to access files that I need. So, my work schedule could be more flexible, which might add to a little bit of quality of life I would suppose if I were able to tailor my schedule to what would benefit my home life even more."* - Participant, Zoom, 05.18.23, 1
- ⇒ *"I know in this area, I've come in contact with some people that would like to take a part-time job strictly for... Because childcare is so expensive, they would like to take a part-time job like working from home, but they can't because they don't have a reliable internet connection, and no one will hire them if they can't have that availability, as far as being able to do the job or whatever services that they're doing with their work from home."* - Participant, Zoom, 05.18.23, 1
- ⇒ *"And again, that was affecting opportunities for things that I would be putting on a resume, whether it was volunteer work and you need that consistency there because it becomes a reflection on you. And a lot of it isn't really seen as the logistics of where you live or what's available in a rural area to you. It's seen as a level of responsibility and addressing it was difficult."* -Participant, Zoom, 06.28.23

Moreover, many participants explained that poor internet connectivity adversely impacts their ability to complete their school assignments and participate in online learning, which was required at various stages during the COVID-19 pandemic.

- ⇒ *"Yes. Yes. A lot of times, I can't even complete my school work. I haven't been able to really now. I need to take two tests and I can't because of the internet, it is buffer all the time. It just buffer."- Participant, Kennett, 06.22.23, 1*
- ⇒ *"I forgot about this, but back when I was in school, if the internet quit working, a lot of your schoolwork today is online, so say maybe you're working on discussion board and you're in the middle of typing something and the internet goes out, sometimes you lose everything. It doesn't save what you were typing, you have to redo that assignment, or maybe you're in the middle of a test, because sometimes they do online tests, and the internet goes out, and so it will just drop you. Then the teacher's like, "What happened? Why didn't you take your test?" you have to try and take it again or maybe have to reach out to your instructor to try and get a paper form of the test, so that way you can actually get it done. Also, if the internet's out, it's hard to even email your instructor to let him know, "Hey, our internet went out and I wasn't able to do the test," and so there's a lot of things that could go wrong just for schooling as well. "- Participant, Zoom, 06.07.23*
- ⇒ *"A couple people have mentioned it already, but just it's also instrumental, especially nowadays post pandemic with education. So many kids, my sister's kids all have at least one or two days a week, I think, these days where they just are remoting in. And if they don't have access to that, that's a whole day of learning that they miss that may set them behind weeks or months in the long run." -Participant, Zoom, 06.15.23*
- ⇒ *"Yes, absolutely. Especially when COVID came around and then everybody went in. There were parents in tears, they were crying, "How is my kid going to go to school? How will I do this? [inaudible] afford internet, we don't have access to internet." Then they were talking about you have to drive your kid to meet in a location and they've got nothing, nothing was practical for people when there was COVID. Of course it was but I mean even more so when you add in the education of your child"- Participant, Participant, Eminence, 06.14.23*

As previously mentioned, participants across all 20 focus groups rely on the internet for everyday resources and the ability to search for services, opportunities, and information. As such, when their internet access is interrupted and/or is consistently slow and weak, they shared that they feel they are hindered in their everyday activities. Relatedly, participants were asked to reflect on how they would be impacted if they did not have access to reliable internet. For example,

- ⇒ *"Yes, it would. I wouldn't be able to work from home. I, of course, do my shopping, grocery shopping. Another thing that I do is a lot of medical research, and so I look up medications and different ailments. I'm kind of an advocate for my whole family, and so that's a big thing for me, is trying to access to that kind of information."- Participant, Zoom, 06.27.23*
- ⇒ *"Yeah. So in my work line, there are lots of community events and things like that that need to be put out into the community. And most of the time, the biggest way to get it out is through Facebook. So without internet, people wouldn't know what events are going on in our communities. That's one of the biggest things that I can think of. And I do know people that do*

*counseling and things like that virtually. So, they wouldn't be able to do that if they didn't have internet. There are lots of things that would be cut off.”* -Participant, Zoom, 06.20.23

- ⇒ *“So yeah, I just know that if I don't have it, it is very difficult for me to carry out my normal, everyday activities. To be honest, I use it constantly, all day long and all night long. So, because our life alerts are on it and things like that.”* - Participant, Zoom, 05.31.23, 2
- ⇒ *“We live out in the middle of nowhere, near the fairground, so even just using Messenger to talk to supports that I have or order food because we need food. If the Internet's gone, it's like we're not eating, there better not be an emergency because you can't call anybody.”* - Participant, Zoom, 05.31.23, 2

Importantly, participants frequently mentioned that limited or inconsistent access to reliable internet would impact their ability to access medical providers. Again, this particular issue was more common among participants residing in rural areas of Missouri.

- ⇒ *“Here it is. I always said it's 2023 now and we're all here, especially in the rural areas, are still having, the best way to say it is rough-it. Especially like [other participant] was saying, things like in today's age, just like Teladoc, my parents are retired and they have doctors that want to do Teladoc services over Zoom and they just can't do it. In today's day and age, that's where a lot of people are turning, so we really have a lot of issues that need to be resolved around here.”* - Participant, Zoom, 05.18.23, 1
- ⇒ *“ And so, that impacts a person's health because they can't really access telehealth or if they're having to contact an employer or speak to their employer, or let's say, a child needs access for their school, it makes it really difficult and people are extremely frustrated with their affordability, the low quality of it.”* - Participant, Zoom, 06.15.23
- ⇒ *“For me, I have disabilities, I have issues with my oxygen, and when I talk sometimes, some days are good, some days are bad, but I communicate also to St. Louis as well with my medical providers and it's almost impossible to get a good connection and not have to just do the old-fashioned call.”* - Participant, Zoom, 06.29.23

**“I do some therapy online, so that helps me and that would impact me greatly if I didn't have my internet.”**  
-Participant, Zoom, 06.29.23

Another challenge many participants face when their internet connectivity is disrupted and/or is inconsistent is increased difficulty in communicating with family and loved ones.

- ⇒ *“Well, I wouldn't be able to keep up with my brother and sister, who live a long ways away. My daughter is just a couple towns over, but she and I video chat all the time so I can see the grandbabies and what they're doing.”* - Participant, Zoom, 06.26.23
- ⇒ *“During the pandemic, I made a lot of friends that live in other states or other countries, if I don't have access to internet, I lose a large chunk of my friendships and relationships that I have forged over the last couple of years, which would be a real psychological downside.”* -Participant, Zoom, 06.15.23

- ⇒ *"I think you would lose a lot of contacts, a lot of outreach, because through the internet you could actually reach a diverse group of people, a wide range of people, but I think that access will be taken away."*- Participant, Zoom, 06.07.23
- ⇒ *"But as far as our clientele that we work with, some of them use it to video chat with their family and their children that don't live here. We had a lady in and she was very upset when her phone wasn't working because she was missing chatting with her son who was severely depressed across the states. So that's a huge thing for a lot of our clients and a lot of them are elderly as well. So getting that little bit of connection with their families, I think, is important. "* - Participant, Zoom, 06.15.23

Ultimately, when individuals need to access the internet and their connectivity is disrupted, they often have to travel to a public place, commercial establishment, or someone else's home to connect online. Not only does such travel require time and resources, but it is also a tremendous inconvenience, as many participants reported.

- ⇒ *"Heck, even going to court proceedings, you can't even, during COVID you couldn't go through, you'd have to be on zoom live. I would have to go to the library and do my court proceedings and my child custody and stuff like that in the private rooms that they have upstairs and that was the wifi. I mean we were able to utilize those services and that made the biggest difference. I mean if we weren't able to make it to court dates then, I mean they'll throw your kid in foster care, a lot of stuff goes round and round. One broken link in the link, the link, it can really screw up a lot of things"*- Participant, Zoom, 05.31.23, 1
- ⇒ *"One of the things that I've experienced when you need a hotspot... Or I'm sorry, when you need wifi, is the timing. Having to work out the timing of doing your assignments or doing your life has to go within the timeframe of when that business is open. When you throw in the demands of trying to go to work, or you've got these odds and ends, there's a lot of... I'm a homebody and I like to have my papers spread out, and so it's like you have to pick up everything and take it to the place, and then ensure that you have privacy. I think privacy is the biggest drawback to working in a public area. Among connectivity, because they tend to run slower. But just trying to ensure that you're within the timeframe, it really does cut down the hours that you can work on certain projects or work."*- Participant, Zoom, 05.16.23, 1
- ⇒ *" However, a lot of our clients up here, if they do have to go to the library to use service, I mean, we have one library in the county that has that. So Maryville's the one that has the main library and people have to drive to that. So it could be anywhere from 30, 40 minutes to get to that, to be able to do that for our clients, that's a strain."*- Participant, Zoom, 06.15.23

In short, internet disruptions or lack of access to internet services altogether negatively impact individuals and communities across Missouri. Later in this report, we examine how limited broadband access adversely impacts specific communities in Missouri, such as rural residents, low-income populations, English Language Learners (ELL), the LGBTQ+ community, and Black, Indigenous People of Color (BIPOC).

## Internet as a Necessity

Across the 20 focus group discussions. Participants discussed internet access as a necessity to daily life in today's society. Quite unanimously, participants view the internet as a vital utility for everyday life. Moreover, participants expressed how essential internet access is, and the need to ensure equitable access to internet connectivity for everyone, especially during and after the COVID-19 pandemic.

- ⇒ *"Yes, I'm really appreciating the comments of people who don't have the good access, even if they can afford it, don't have good access. I was thinking that internet access is way more than and includes what used to be telephone access, which is pretty much an essential as far as a person's life and safety. I think the internet is that in a more expanded way and I'd just like to see more equity. It seems like at least the basic connectivity for people. There should be a level playing field available and we're not there yet."* - Participant, Zoom, 05.16.23
- ⇒ *"I think internet needs to be treated more like a utility and be less in the hands of private companies because as we said, these private companies, they can charge whatever they want and there's not really any motivation for them to make sure that, A, the price is fair or that, B, you actually get the product for the price, that it's actually reliable and works, otherwise, what are we paying for? Versus the electric company and the water companies, they're held to those utility standards, so they can't just charge whatever they want for the utility. They are held to a regulated price and I think internet probably needs to be treated the same way."* - Participant, Zoom, 06.07.23
- ⇒ *"I use it to translate English to Spanish. It's no longer a luxury to have internet, it's a necessity."* – Participant, Zoom, 07.06.23, Spanish
- ⇒ *"And I'm not meaning to take over this, but it really has become a requirement for living in today's world and today's connected world."* - Participant, Zoom, 06.29.23

Participants who are parents especially agreed on the importance of having high-quality internet access.

- ⇒ *"But if you have children at home, [inaudible 00:16:31] basically have to have it."* - Participant, Kennett, 06.22.23, 4
- ⇒ *"You need to have a good access to high quality cable Internet for easy access in learning."* - Participant, Zoom, 05.18.23, 2
- ⇒ *"Yes. Raising children right now and having internet is just you have to have it."* - Participant, Zoom, 06.09.23
- ⇒ *"But it was to the point where it was totally implied that if I did not get it, I was standing in the way of my kids' success in their education."* - Participant, Zoom, 06.29.23

Simply put, participants in every focus group discussion commented that the internet is essential for everything we do in society, including basic safety.

- ⇒ *"The internet now is used for television, for entertainment purposes. Homework, it is so essential to have the internet, almost like having a cell phone nowadays. But you almost have to have those two things together in order to work. And the funds of it can get expensive if you add on streaming or whatever."*- Participant, Zoom, 05.18.23, 2
- ⇒ *"The overall thing is, now, in these last evil days, the internet has us in a position where we bank, we clock in to work, we take pictures, we do this, we do that. We celebrate, we send money. All those things that we do, requires the internet. You can't do any of those things unless you walk in physically doing it, and with your hands. Without the internet. So, without the internet... We'd be lost."*- Participant, Kennett, 06.22.23, 3
- ⇒ *"So internet, having the internet and access to the internet is absolutely a pillar in everyday life I think. And everyone lives, I believe, and I mean unless you're totally off the grid and stuff, but not a lot of people are and I mean not a lot of people can be."*-Participant, Zoom, 05.31.23, 1
- ⇒ *"I mean, essentially internet access is necessary to do almost everything now. So I enjoy having the ability to do those things, make life a little bit easier and less stressful, being able to get things done with having access to it."*- Participant, Zoom, 06.09.23

### **How the COVID-19 Pandemic Exacerbated the Need for Internet Access**

In March 2020, when the world shut down, schools and most office buildings closed, and employees, parents, and children were suddenly forced to participate in work and school from home, access to reliable internet services became more important than ever. Today, many employees continue to work remotely, either full-time or in a hybrid model, and online learning is likewise still preferred in many contexts, particularly for post-secondary education. Consequently, the pandemic has exacerbated the need for reliable broadband access in Missouri, as highlighted by many participants across the 20 focus groups.

- ⇒ *"It was my accessibility for shopping, for religious services, for medical, for classes, everything during the work, during the pandemic, all of that. I didn't see my family for three and a half years, because of my health situation at all. My doctors were not for it because of the exposure that my family had. So it was my complete lifeline and before that, before I had the health issues, it was not that*

**"I think post-COVID, with so many people working remotely for so long, people are seeing internet access more as a utility instead of a luxury now. I've always kind of thought of it as a utility, because, I mean, it's more than just something you can use to play a game or look up information. You can work with it. You can use it to run a baby monitor, security cameras. Stay in touch with friends and family globally with it. The government doesn't really see it as a utility like gas or electricity, unfortunately. So, it allows some providers to kind of have a market cornered. Or if they're the only game in town, just to charge whatever they want, and not really put the effort or investment into improving the infrastructure in the area."**  
- Participant, Zoom, 06.20.23



*in my life. It was a secondary thing and then it became a very primary need."* - Participant, Zoom, 06.28.23

- ⇒ *"For the last four years, I've been going to Northwest Missouri State University to get a degree and a lot of it was online. So I'd go to campus and I'd use their internet and everything. But I would also of course have to bring homework home, and there for a while, when we were during COVID, we would host Zoom meetings like this to have class. So without internet access, we wouldn't have been able to have any of that really."* -Participant, Zoom, 06.09.23
- ⇒ *"A couple people have mentioned it already, but just it's [the internet] also instrumental, especially nowadays post pandemic with education. So many kids, my sister's kids all have at least one or two days a week, I think, these days where they just are remoting in. And if they don't have access to that, that's a whole day of learning that they miss that may set them behind weeks or months in the long run."* - Participant, Zoom, 06.15.23

The COVID-19 pandemic not only proved how vital internet access is in today's society, but it also exacerbated inequities when it comes to reliable broadband access across Missouri.

*"Brutal. Yeah, it's brutal. I mean everything, it seems like over the past three years, four years since COVID began, the beginning things of COVID, if you didn't have internet you were screwed basically, excuse my language, but you were and at that point in time I was struggling, I was homeless, I had four kids living in an apartment that had no running water, no electricity, no nothing. And sometimes I would be without a phone to be able to contact anybody in case there was an emergency or anything. Communication is everything, internet is part of everything in most of our lives today. Whether it's just cruising the internet or if it's legitimately jobs or stuff like that. A lot of things have gone totally web based and it's like, if you don't have access to a cell phone or a laptop or internet device- You're basically in the dark on everything. I mean, there was no way for employers to contact you. There's no way for anyone to keep in touch with you and I mean it's as if you're just in a dark, or at least I was in a very dark place then, so I'm thankful for the things that the internet and everything with, because I mean you'd have to email people back from local organizations that were helping us try to get out of our bad situation."* -Participant, Zoom, 05.31.23, 1

### **Trade Offs**

As illustrated above, most participants across Missouri believe that the internet is a necessity. Indeed, across the different focus groups, many participants shared that they were often confronted with a choice- a financial trade-off- to prioritize internet connectivity at home. Often, participants would choose to keep internet access, at the expense of paying other bills on time, or going without other necessities and amenities, just so that they could continue to work, go to school, or provide resources and entertainment for their children.

- ⇒ *"I've definitely had to not pay bills, or borrow money, or I wouldn't say not pay bills, and then, I just borrow money or go to somebody's house, like hey, we can't live in the middle of nowhere, no internet for days." - Participant, Zoom, 05.31.23, 2*
- ⇒ *"And then also currently, dealing with financial constraints post-divorce, now as a single mother, I have flat out decided to pay my internet bill over some of the other bills that I have because when you have a tight budget and you have to decide what are your priorities, the credit card bills isn't as important as having access to the internet so you can continue to do your work."- Participant, Zoom, 06.09.23*
- ⇒ *"...Sometimes because the internet was so expensive but you had to have it, it was bill roulette to see, "Which one am I going to skip this month or be late on to make sure that the internet bill gets paid on time?" because they will shut it off first thing and with the other utilities, you get a little bit more grace."- Participant, Zoom, 06.07.23*
- ⇒ *"In the summers when all three of my kids were home and I was only working a minimum wage job, so I was paying my sitter more than I made, I used to pay the internet bill and not pay [inaudible], because I figured out that you could go like three months without paying [inaudible] and that was how I got through the summers." –Participant, Zoom, 05.31.23, 1*

## Concerns with the Internet

It is evident that participants across the 20 focus groups throughout Missouri believe that internet access is a vital necessity in today's world. Nevertheless, participants share several concerns about the internet, including what data they believe is collected, to fears around scams, misinformation, theft, and viruses, and specific safety concerns for vulnerable populations, such as children and older persons.

### Data Being Collected

A frequent theme across the 20 focus groups was the concern about what data is being collected when participants utilize the internet. Participants commented that they often receive targeted advertisements on social media platforms like Facebook and Instagram.

**"...I've had to change what my grocery list was going to look like that week because internet [costs] went up."**  
-Participant, Zoom, 05.31.223, 2

- ⇒ *"Has anyone ever been on Facebook and then you Google something and search something and then 10 minutes later you see it again? They're tracking your every move, what you search, and that kind of freaks me out quite a bit. I deleted my Facebook this year because of those concerns. I absolutely have seen it and noticed it. I will even notice it on Instagram, which I have yet to delete them I'm on my way out. If I say, "Oh, well my internet provider is this." All of a sudden I get targeted ads for new internet providers. So it's like they have access to all of this data and they're recording it and you are the product."- Participant, Zoom, 06.09.23*

- ⇒ *"I mean, if you think about all of the data points that exist about you and your family members or your friends and loved ones that exist and how that information can be used, I think, that to me is one of the scariest parts of the internet. How much information is just out there about you that you do not have control over because there is no legislation or regulation that allows you to have control over it, I think, that is the scariest thing for me. It's just like what is out there about you that you cannot take back or control [inaudible 00:57:02]"- Participant, Zoom, 06.15.23*
- ⇒ *"If there's one thing I've learned from watching some TikTok videos is that it does not matter how private you think your stuff is, somebody can find your information." -Participant, Zoom, 06.28.23*
- ⇒ *"You start noticing these little ads, these little popups on things that if you were looking for a computer, a new computer, then on Facebook you'll start noticing little ads pop up about computers. And I know it sounds like a conspiracy theory and stuff, but it's actually true. And as far as being safe with those kind of programs and stuff out there, there's really no way to be absolutely safe."- Participant, Zoom, 06.29.23*

### **Safety Concerns Accessing Internet in Public**

As explained earlier, many participants need to travel and utilize the internet at public places, like the library, or commercial establishments and restaurants, especially when their internet connectivity is disrupted. Participants shared concerns around connecting to free WIFI at commercial establishments.

- ⇒ *"Yeah, I don't even connect to those because I feel like they're not secure."- Participant, St. Louis, 05.23.23*
- ⇒ *"At home I feel like I have a little bit more control, but if you're out and the way people can mirror stuff and if you lost your phone or whatever, you worry more about your phone..."- Participant, Zoom, 06.28.23*
- ⇒ *"Because if you're on wifi, and you're at McDonald's, it could be somebody in the corner watching you. I've seen people like that. They be in the corner there, be watching, you be messing around on your phone, and your PC, and they can be picking up everything you're doing..."- Participant, Kennett, 06.22.23, 1*

### **Scams and Theft on the Internet**

Many participants expressed their wariness about scams on the internet. In fact, many participants have witnessed family and friends experience scams, including identify theft, as highlighted below.

- ⇒ *"Scams.", "The amount of scams right now, like trying to find a place to live in 2022 right now through Zillow where they're presenting theirself to be this top-tier thing, and then you look at the top five things where you can get a rental property and it's all the same rental properties. And then you end up that they get the Google phone number that says, "Oh, this person's in Missouri" and then they have this automated message. It's all the same information that you*

*read about, what the rental property is, but when I finally get ahold of Brenda, who is not from America, but she's in Arizona? I'm like, "Why am I talking to somebody in Arizona about a property in Missouri, that I'm never going to get to the property management?" -Participant, Kansas City, 06.14.23*

- ⇒ *"there's so many scams out here that people will use your information to try to scam somebody that you know. Even like in my own family, like my brother that lives in Seattle, he was saying ... He had texted me or called me about something and he said I had reached out to him. I said, "John, that was not me." You know?" - Participant, Kansas City, 06.14.23*
- ⇒ *"Yes. Well, about six weeks to two months ago my identity was stolen and it was just awful. I had to go to both, I bank with two different banks. It was my fault I guess because I got something that "your identity has been stolen, call this number." And of course I'm going to call that number and of course, that was a no no but retrospect of course it was. But they said no it's okay, we [inaudible]. The [inaudible] had already transferred \$1,700 out my account and I couldn't log onto my account. So he said, "The only way we can fix this" and I talked to two of them, that was all I could [inaudible]. "The only way we can repair this is you have to give me your banking number and transfer the amount that was withdrawn. And then tomorrow we will replace \$3,400."-Participant, Participant, Eminence, 06.14.23*

### **Misinformation**

A related concern that some participants shared was around misinformation, as one participant explained, *"You can find anything online. I could post ideas or information that is incorrect. There's no regulation or way to filter information that is post. It's hard to know what is true. You can upload a Tiktok video quickly that might have misinformation. Social media too. People can post things that are racist or hateful without regulation. The internet has advanced so quickly we can't keep up with regulation. This can result in bullying too"* (Participant, Zoom, 07.06.23, Spanish).

### **Safety Concerns for Vulnerable Populations**

The most frequently mentioned concern that arose in nearly all 20 focus group discussions across Missouri was safety concerns for vulnerable populations, including children and older persons. In fact, the safety concerns for vulnerable populations was a central theme across all 20 focus groups.

Specifically, safety concerns for children and youth centered on social media-related bullying, online predators, and general worries about the collection and misuse of minors' data and personal information.

- ⇒ *"Like I said before, I have two teenagers, two teenage daughters and my youngest one, the internet is a very scary place for me to let her be. Last summer when I was checking her phone, she had told someone she didn't know her location, shared her location. And I'm like trying to get her to understand how scary that really is, I think, is difficult. I have shown her those videos on*

*TikTok where you can take a picture and then that guy will track down and tell you the exact location you're standing at just so that way people are aware that just from any picture that you think is innocent isn't really innocent because people are smart, they know how to work around and figure out where you're at by landmarks and things like that. So just I think educating children about that stuff is a huge issue. But that's a lot of stuff to get when teachers already have a lot of things to do and they don't always listen to their parents either. So it's a scary place."*- Participant, Zoom, 06.15.23

⇒ *"I work with 4-H youth, and majority of them are underserved. But we have this issue a lot. Most of our youth have phones, and they access the internet. They don't have cellular service necessarily, but they do have data through WiFi. So we often have to address messaging online, this constant flow of bullying with the kids. And they're really young, and they're already experiencing this, and so it gets out-of-control. So we really have to try to band cell phones, because they always have it in the back of their mind. Like, "Who is saying this? Or who said this about this at school?" So, I can get concerned about the kids that are home that don't necessarily have anybody monitoring that behavior. And a lot of their parents, they might be working, and so they feel comfortable with them having a phone because that's their touchpoint. Like, "If the kid doesn't have a phone, we can't contact them when we're at work."*- Participant, Zoom, 06.20.23

⇒ *"So they need the phone, but then there is not necessarily any sort of monitoring or restrictions for that kid who is at home by themselves and then are chatting with friends. But also, it's so easy to chat with people you have never met before. I have a Girl Scout troop. They're eighth-graders. But, I mean, they have their best friend that lives in New Orleans that they've never met before, but they have these intense conversations online. And it's like, "This person can be anybody." And they're not my kids, and I'm like, "Do your parents know about this?" Because it's just a different world."*- Participant, Zoom, 06.20.23

**"... I mean, I guess I do worry about unsafe videos if she were to get on YouTube Kids. They say, "Oh, it's safer because it's for kids, and it's safe material." But if you aren't watching over their shoulder, there are really creepy, just weird videos that sneak in there."**

- Participant, Zoom, 06.20.23

⇒ *"I have a 10-year-old. If we're watching youtube, sometimes you come across commercials about subject matter you don't want to discuss with your kids yet. I feel like I lose control during commercials."*-Participant, Zoom, 07.06.23, Spanish

Many participants shared serious concerns about the vulnerability that older persons face, as a result of their typically more limited internet literacy and understanding of safety and privacy controls. Several participants have witnessed older people experience scams and online theft, for example.

⇒ *"Oh yeah. We just found out that my grandmother, through Facebook, got scammed out of \$19,000. I was definitely going to say scams, just privacy of your information, but it goes beyond that. For your kids, you're hearing about people getting in touch with your children in different computer games through the chats, and grooming them and making plans to meet up and*

*different things, sending pictures over the phone or over the internet. It's a scary world we live in. While the internet has its pros, it definitely has its cons, as well, with those types of things."*- Participant, Zoom, 06.26.23

- ⇒ *"I have one concern for elderly people, I guess. For example, my aunt, who I taught her how to use the internet many years ago, and she's now 87 and she still uses it, but at one point when she first was online, she was catfished by a guy who pretended to be this young military guy. They had a whole relationship and she sent him money. I found out about it, she told me about it, and I did some research and found the real person who the photos belonged to. He said, "You're the ninth person who's contacted me about this." -Participant, Zoom, 06.26.23*
- ⇒ *"And then I think about, my parents are older. I think my dad's pretty savvy with this phone, but my mom will be like, "How do you take a picture?" She doesn't know how to do anything on it. So I could see her maybe falling for one of those scams where they'll text you a address and be like, "Your bank account is negative," or whatever, and accidentally giving away information. I don't think that she would've ever had any type of training on that type of safety with the internet."- Participant, Zoom, 06.20.23*

## A Note on Internet Literacy

Internet literacy was another top theme that emerged from focus group discussions across Missouri. Importantly, it should be noted that participants were not asked explicitly about internet literacy, but the topic surfaced over and over, especially during the discussion about safety concerns with the internet, particularly for vulnerable populations. Indeed, participants share concerns about certain populations' understanding of internet safety and security, as well as how to access online materials, applications, and resources in general.

**"I can tell you, this is my first Zoom meeting, so it was an experience logging on."**  
- Participant, Zoom, 06.09.23

- ⇒ *"...I think we're not just talking about access. I think sometimes people don't have anyone or any place where they can learn how to use their phone or a computer for the types of access that could make their lives richer, safer. Telehealth or even therapy that some people do online can be a lifesaver for some people and I would like to see that available to everybody." -Participant, Zoom, 05.18.23, 1*
- ⇒ *"It's just a lack of knowledge. People don't know ...", "But if you don't have someone that can teach you about these things, you're at a loss, you know? You really are. I mean, my mothers would never touch any of this stuff, so I do a lot. But you really have to have someone that's going to take the time to explain to you what this means, how it works, because again, if you're not staying current, you're going to be left behind and it's going to be a sad day because you're going to ... but you need somebody. You really do."- Participant, Kansas City, 06.14.23*
- ⇒ *"Yes. I think from... I'm going to be honest, I'm an idiot when it comes to it. I have very little knowledge, very little experience. I mean, I'm glad my internet works, but when I'm thinking about trying to get our whole county involved, I've just been trying to get with mayors and*

*different partners and people who might have, that's why I'm attending this because I want to find out how we can share more information." -Participant, Zoom, 06.15.23*

## **Equity Implications**

Across the 20 focus groups, with representation from all over Missouri, discussions highlighted the particular, acute, and at times, chronic needs of specific groups, such as rural residents, low-income communities, Black, Indigenous People of Color (BIPOC) and LGBTQ+ populations, and persons with disabilities. Namely, these diverse groups face challenges with accessing internet providers, affordability of broadband access, connectivity issues among others. This section highlights some of the key issues facing those participants residing in rural Missouri and those from minority demographic backgrounds.

⇒ *"...So I think it's just, the companies need to just really do their part to help bring reliable broadband access to everyone. Because everyone needs it, from school children to business folks."-Participant, Zoom, 06.20.23*

## **Rurality and the Internet in Missouri**

⇒ *"I would just say that having lived in a variety of places within the state, I've definitely noticed that there is always significantly better access and higher quality access in areas with more money, and that I just really think that Missouri broadband access really lacks that equity. Obviously, rural places and just places where the median household income is lower, in my opinion, I've noticed that just tends to go with poor internet access, and I just think that lack of equity is really, really unfortunate and disturbing."- Participant, Zoom, 06.07.23*

As highlighted earlier in this report, participants residing in rural areas of Missouri consistently have fewer options in terms of internet providers and type of internet. Affordability in rural areas, particularly among lower-income households in rural communities is another key issue.

⇒ *"Something that I saw, as I said, I'm a retired teacher and I taught in rural schools, and something that I think maybe urban people never even consider that is an issue for rural students, for rural kids, a lot of people just simply do not have internet service, period. It's just not a thing. They just cannot afford it. They cannot access it, whatsoever."- Participant, Zoom, 06.09.23*

⇒ *"...And for instance, my grandmother lives in Pemiscot County in a small town called Hayti, and we can't even get online. We have to go outside almost to the road to even get a phone call through. And she's really older, about almost 90. So we have family gatherings there. And some of the younger people, I don't want to be out there for long because I cannot get on anything. Can't get on social media. Can't check your phone. You can barely get a text through. So in that*

*particular county, Pemiscot, it's the rural community, rural county, they do have very limited, to say the least, internet service."*- Participant, Zoom, 06.15.23

- ⇒ *"You just feel like you're completely at the mercy and even though some of these places aren't really monopolies, it feels like it if you're in a rural area. You just feel totally, like you don't have another option, so you have to pretty much deal with whatever they dish out. And some of it, even though there might be another option, like the other lady was mentioning, the cost is so high that I can't afford it. And I used to live in a larger city and I didn't have these problems when I lived there with my internet. "I don't know. I wonder that, but I think it might be across the board, but I think it would discriminate against people that are in rural areas. Maybe not intentionally, but indirectly, just because those issues are greater if you're in a rural area or a somewhat rural area. I think you're going to run into more of that than you would in the metropolitan area."*- Participant, Zoom, 06.28.23

Moreover, the quality of internet service in rural areas is more often an issue, with deadzones, slower connections, and service disruptions and outages. As such, participants explained how this limits their ability to work, attend and participate in school, and stay connected with family and friends.

- ⇒ *"And our county is very rural, a lot of farms, three small towns. Lamar is the largest and it has 4,000 people, but the others are much smaller than that. When COVID came through and everybody went online, the kids suffered big time because there wasn't access to... I mean, we had to get hotspots in parking lots at the high school in order for them to get their assignments and to do their work and things like that."*-Participant, Zoom, 06.15.23
- ⇒ *"... not to belabor the point, but we do live in a rural area. So on the outskirts in smaller areas, the quality of the internet service, once again, my grandmother, we go to her home and anytime, we know we're going to be down without internet or any type of access for a few hours." - Participant, Zoom, 06.15.23*
- ⇒ *"Yeah, so part of my job is I push into the schools in our area and work with specifically the juniors and seniors. And it's the same thing, they have internet at school, but for a lot of them, we're so rural, gravel roads, that a lot of them don't even have internet. For part of them it's affordability, they can't afford it. But it causes an issue, especially during COVID, whenever they were doing a lot of alternative at home school, part of those kids had to come in and then download the lessons and then go home and complete. They couldn't just do them as it popped up."*- Participant, Zoom, 06.28.23
- ⇒ *"Oh, I agree with what she's saying. I live in Bloomfield. I'm not sure, I don't know if I'm in a rural area or not, but I'm not in the city area or anything like that. And having trouble with internet is a common thing around Bloomfield also. And with my phone, sometimes living down there, I won't get the service that I normally have. As soon as I leave Bloomfield, then all of a sudden my phone is better. But when I'm down in Bloomfield, I barely can even watch Netflix on it or anything, even with my Wi-Fi, which makes no sense at all. But as soon as I leave Bloomfield, I can go in any other direction, I've got five bars automatically, four bars or whatever it is. But*



*staying in Bloomfield, I've got one to two bars every single day. And, yeah, we've thought about moving to the city. Right now I'm actually in Kansas right now because it's my summer break, I work at the school, and I've got all the bars I've got right now from here. But if I was in Bloomfield, I've only have one or two bars."*- Participant, Zoom, 06.28.23

### *Implications*

Firstly, many participants cited examples when the poor internet connection impacted the safety and wellbeing of themselves, families and community members.

- ⇒ *"I know a friend of mine that lives in Eastwood that her brother has major health issues and [inaudible]. She has health issues and it's a very rural area, all without seven, eight miles from [inaudible]....they called all the ambulance and [inaudible] because they did not have any cell service. And you think of [inaudible] and then you realize you can die while I'm waiting on help for them."*- Participant, Eminence, 06.14.23
- ⇒ *"For me, I have disabilities, I have issues with my oxygen, and when I talk sometimes, some days are good, some days are bad, but I communicate also to St. Louis as well with my medical providers and it's almost impossible to get a good connection and not have to just do the old-fashioned call."*- Participant, Zoom, 06.29.23

Second, several participants shared that they believe the poor internet access and quality in rural areas of Missouri promotes migration and prevents people from remaining and/or moving to rural communities.

- ⇒ *"A lot of communities are having challenges keeping people within the community. There's not a lot of jobs that support people staying in, especially rural communities. Whereas if they had high-speed or access to high-speed internet, they could do more things online, and their capabilities to have a higher paying job in that smaller community goes up dramatically if there's that internet connection. Without it, people have to leave town because they have to be able to sustain themselves. And so there's been a lot of migration out of smaller communities that could probably have been prevented if there was a high-speed internet available to allow those people to stay"* - Participant, Zoom, 06.09.23
- ⇒ *"I don't want to trade living in my rural area in the home I've grown up in for 50 years, in order to get better internet service. I think a lot of times in Missouri, and I know Charles can speak to that as well as living in a rural area, Missouri is full of lots of geography and different terrains. So, when you're talking about the topography of the state, I think sometimes those signals are just not good. Even in the city sometimes they're not even good."* -Participant, Zoom, 05.18.23, 1

Consequently, inaccessible connectivity negatively impacts the rural economy, opportunities for small businesses and modernization as a whole. In addition, Missouri's tourism industry, which provides \$13.5

billion economic impact and creates more than 257,000 jobs<sup>4</sup>, is critical to many rural communities across Missouri, like Eminence.

- ⇒ *"I mean, if you want people to move into your town and to, whether that be shop here or live here, you need access to internet. And if you want to drive any kind of a large business. We used to have a few large businesses here in town that have since shut down in the last 10, 15 years. And if we want anything like that again in this day and age, you need some sort of access to high-speed internet at an affordable rate."*- Participant, Zoom, 06.20.23
- ⇒ *"And again, that was affecting opportunities for things that I would be putting on a resume, whether it was volunteer work and you need that consistency there because it becomes a reflection on you. And a lot of it isn't really seen as the logistics of where you live or what's available in a rural area to you. It's seen as a level of responsibility and addressing it was difficult."*- Participant, Zoom, 06.28.23
- ⇒ *"I think his point about being able to... The whole business aspect, that's another piece that I think is huge, huge, huge. Whether it be Northwest Missouri, Northeast Missouri, Southeast, Southwest doesn't make any... Or in a central part of the state. Being able to work from home or being able to have the internet access, I think, entices people to start small businesses. And I think that's something that we need to definitely have in our state to make our state even more interesting and accessible so that we have people come here who want to live here and be productive."*-Participant, Zoom ,06.15.23
- ⇒ *"... we have an Airbnb less than a mile from our house and we can't get Verizon to come there because they keep saying, "Well, we have too many people." It's always, "We don't want to get too many people on it." So it hurts our business. And again, as I said, if my son would want to live there, they can't get it. T-Mobile could come to us. So it's like we've got in a little window and we got it for our house, but nobody else can get it because we have the window. That's really frustrating. We have a business and we run that business off Verizon."*-Participant, Participant, Eminence, 06.14.23

### **Low-income Communities**

Participants across many of the focus groups are either low-income themselves or work closely with low-income communities. The topic of affordable, accessible, and reliable internet for low-income households was a recurring theme.

- ⇒ *"Yeah. Okay. Let me say something. Because I know some family find it so difficult to afford internet. It might be because of the sometimes financial challenges, and maybe some might not have a proper [inaudible 00:30:01] how to use then internet. And I think in this situation that some people, and I believe because from my own research, I know someone that he can cannot*

<sup>4</sup> Missouri Division of Tourism (nd). *Industry Portal*. Retrieved from: <https://industry.visitmo.com/>.

*afford the internet. He does not have more knowledge about it. So in such situation, what do you think we should do?" -Participant, Zoom, 05.18.23, 2*

- ⇒ *"I wish that maybe there were more access through the cell phone companies that promoted for lower income, or people who may not know. It's not like someone was mentioning, Barbara was mentioning, spending all that time on the phone with Verizon. However, Verizon had a little... If it were a trend for the cell phone companies to really educate on these services for free, then you'd really be able to make a good decision on what is, or in the community somehow." - Participant, Zoom, 05.18.23, 2*
- ⇒ *"I work as a parent educator for the parents as teachers program for our school district and we have several families who don't have any internet access because there are no affordable options." - Participant, Zoom, 05.18.23, 2*

The intersectionality of being low-income *and* residing in a rural area of Missouri arose frequently during focus group discussions. As highlighted earlier, rural Missourians have more limited access to providers and reliable internet services. With limited providers available, participants commented that they are forced to pay more because there is no competition. As such, ensuring equitable access to broadband in rural areas of Missouri is necessary, and affordability must accompany this improved access.

- ⇒ *"It really require something. I'd love to add either majority is in a rural Missouri. They like these accesses to affordable and reliable high speed internet. I feel these more like the broadband access in the rural areas in the Missouri are quite difficult. The access quite difficult to afford and you can't just simply have a reliable high speed internet in a rural Missouri. That's difficult, so it just basically a more the majority aspect in rural Missouri." - Participant, Zoom, 06.07.23*
- ⇒ *"So it is a barrier for multiple people or some of them can't afford, they're barely able to keep their utilities, pay their rent and buy food and our medicine. So they don't have the money to have a luxury such as... I mean, it seems farfetched to some of us because I know I look at the world through [inaudible 00:49:14] glasses, plus everyone can afford internet. I can't get to a larger area. I go to McDonald to use their wifi. So it needs to be expanded to the rural communities in good quality. Also, to make it a little bit more affordable, especially for children who live in a home and their parents may not be able to afford it or may not see it as really a necessity." -Participant, Zoom, 06.15.23*

Moreover, several discussions shed light on how the COVID-19 pandemic exacerbated internet access inequities in Missouri. While some participants noted that they had to sacrifice internet service because their household income was impacted during the pandemic, others experienced major challenges in accessing remote learning and employment because of already weak internet access.

- ⇒ *"Prior to the major that I'm in now, I was in social work. One of the things that I did find during the time of especially Covid, when Covid started, was at the time I was working with youth and community, and there was a lack of access with lower income families that... I don't need to*

*remind anybody about Covid, but how many parents had to actually go to McDonald's, or different restaurants and things like that."*- Participant, Zoom, 05.18.23, 2

- ⇒ *"I had to turn off my internet during COVID. For 3 months we were at home during COVID without internet because it was too expensive for us during that time. My husband was without a job for a bit and it made it hard for us financially."*- Participant, Zoom, 07.06.23, Spanish

Another critical equity issue here is the link between internet literacy and government assistance. For instance, during and since the COVID-19 pandemic, many government services are accessed online, like unemployment, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and even job applications. When individuals are internet-illiterate, they are potentially further disadvantaged when they cannot access government assistance.

- ⇒ *"I'll tell you one thing, I've been trying to access... Which one is it? One of the government's websites, it's either on the WIC or the food stamps or my insurance, I can't remember which one. They want you to download this app to use a QR code, and I'm like, "How do you do a QR code if you're using your phone?" That's been very frustrating. I've spent a week, 30 minutes, an hour at a time, trying to figure out how I'm going to do that. That can be very challenging. I can't imagine these people that have Medicaid, that are 70, 80 years old, understanding that, when here I am 54 and I don't understand it."*- Participant, Zoom, 06.26.23

### **People with Disabilities**

Internet access and quality has specific impacts and implications for the disabled community, as well. Across the 20 focus groups in Missouri, many participants disclosed their disability status and how reliable internet access, or the lack thereof impacts them. Thus, there are essential inclusivity implications for the disabled community in our state.

- ⇒ *"Well, and finding a community, being a lot, a lot, a lot of my friends are also housebound and I don't know how many people I've met who are like, I would be dead if I didn't find other... Like my best friend I never would've met, she's also housebound, but she lives on the other side of town, but we're both disabled and neither of us drive."*- Participant, Zoom, 05.31.23, 2
- ⇒ *"So, we use it [internet] for everything. Doctors, for me and for him, and specialists, since I'm severely isolated, and most of my friends are also chronically and mentally ill, that's how we all talk to each other."*- Participant, Zoom, 05.31.23, 2
- ⇒ *"I didn't know that there was a way that I could advocate for whatever, whether it's... I mean, think it would be a good idea for people with disabilities to have a price break, especially those who are completely immobile because they rely on that. I know my best friend, like I just talked about, she's been a wheelchair, she has CP [cerebral palsy], she has*

**"For me, medical and communication with family. I mean, being disabled, I don't get out much. Even though my family may live close and I'm grateful for that, doesn't mean that I can't communicate with them, vice versa, they check in on me."**

- Participant, Zoom, 06.29.23

*to use her phone and internet for everything. And on top of that, she's a social worker, so she only does telehealth because she can't drive, and she can't afford to have aides 24 hours a day to help her with all that. So, I think it would be nice if the way to advocate would be accessible, I just didn't know that that was a thing."* - Participant, Zoom, 05.31.23, 2

- ⇒ *"I think it would be easier if there was a chat or a way for people to be taught their personal responsibilities in using the internet and all that comes with it, or a place or a way for people to access questions other than a forum type, especially accessibilities for disability and disabled people that really, or elderly, that really need the generation gap closed for whatever their comfort level is."* -Participant, Zoom, 06.29.23

### **Black, Indigenous People of Color (BIPOC)**

Several participants across different focus group discussions highlighted how the BIPOC community is impacted by the lack of affordable, reliable, and consistent internet access. Intersectionality resurfaces here, especially as many BIPOC neighborhoods in Missouri are also often lower income.

- ⇒ *"Yeah. I live in the Bolivar neighborhood, which is right on the Delmar Divide, if you guys are familiar with that. I'm assuming that some of you may be, some of you may not be. I mean, to be honest with you, where I live and northern of where I live, it's predominantly people of color, Black people and people that are low income. So as a result of redlining and racist housing and infrastructure practices, there are a lot of neighborhoods in areas of St. Louis City, not just limited to internet connection or broadband connection specifically, that are not equitable or they don't have parity to what wealthier, more White, wealthy occupants of sections of the city may have."* - Participant, Zoom, 06.15.23

### **LGBTQA+**

Access to reliable internet service among the LGBTQA+ community was discussed in a couple of focus groups. Specifically, the importance of social connectivity and access to mental health resources among this community was raised.

- ⇒ *"I was going to bring up something that we haven't talked about yet, and that is for people in my community, like the LGBT community. I was raised in a fairly rural area. I'm from Nixa, Missouri. My sister lives in Marceline, Missouri. So I'm like... For a long, long time, the internet was the only way that I had to connect with people that were in my community or [inaudible 00:41:33] people like me. So I think when you don't have that access, it's incredibly isolating."* - Participant, Zoom, 06.15.23
- ⇒ *"And I truly think that access to those online communities and spaces is a big reason why teenage or younger, like LGBT, suicide rates are decreasing because there is that access to communities that are also [inaudible 00:41:55] people that are like you. And it's not just you alone in a rural community that does not necessarily align with or like you or respects you and*

*your identity. So I think that is a really hard part and I'm glad that I didn't have to grow up in the world, that we didn't have that internet connection, so I could have access to those communities."*-Participant, Zoom, 06.15.23

## Conclusion

Aside from the fact that, today, many jobs require the internet, either to connect by phone and check email, or to operate agricultural businesses and small businesses, the vast majority of Missourians need the internet to access assistive technologies, physical and mental health services, public transportation schedules, language translation services, unemployment benefits, job applications, bills and more. Given this, internet access has become a basic necessity.

Internet access is not only necessary, but it is critical to achieving equity and inclusivity in Missouri's community, economy, and culture. As illustrated in the previous section, historically disadvantaged groups, too, rely on high-quality and affordable internet access, and need it for all the same reasons mentioned in the previous paragraph. Findings from the 20 focus group discussions across Missouri suggest that rural communities, low-income households, BIPOC and disabled people are disproportionately impacted by weak, costly, and unreliable internet access.

As this analysis reveals, many participants across the state of Missouri have lost jobs, or missed out on new professional opportunities because their internet access is unreliable and inconsistent. As a result, families and households suffer, small businesses and large ones are hindered, the tourism sector slows, and the Missourian economy slows. Students fell behind during and after the COVID-19 pandemic because they were unable to access their learning materials at home.

On the contrary, when individuals and communities have access to reliable, high-speed internet, the benefits are innumerable. Communities can connect with and support each other, individuals in need can find the resources they need, children and youth can learn and grow up to become educated, civically-engaged, and impactful members of the Missouri workforce and economy.

These focus groups demonstrate the need for improved internet access across Missouri, particularly for underserved populations. Below, we highlight a few recommendations to address this issue.

## Recommendations

The following recommendations are based on the recurring themes that emerged during the 20 focus group discussions across Missouri and include several participants' own requests and suggestions. These three recommendations are essential to ensuring more equitable access to high-quality broadband connectivity in Missouri.

### 1. Prioritize internet access in rural communities in Missouri.

Internet access varies widely across the state of Missouri. Rural communities have disproportionately limited access, with fewer providers to choose from, physical infrastructure barriers, and less reliable and consistent coverage and connectivity. Furthermore, internet costs can be a key barrier to rural Missourians' internet access, and many participants were confronted with financial trade-offs to maintain internet connectivity in their homes.

With rural hospitals closing, constantly evolving workforce and training needs, increasing tourism, and perhaps most importantly, climate change and more frequent natural disasters<sup>5</sup>, rural areas of Missouri need better and more affordable access to reliable broadband.

⇒ *"One other thing, if I could mention is [participant name] mentioned something about during the tornado. And I personally, there should be more access when there is a natural disaster. In Missouri, we worry about tornadoes. So when there is a tornado, where do people go if they cannot access it through their phone or something like that? It's really essential in those times to be able to connect us with areas of the world that are not harmed, or family members and things like that."* -Participant, Zoom, 05.18.23, 2

We recommend engaging with internet providers, and exploring public-private partnerships to devise need-based and context-specific approaches to communal hot spots, as well as emergency-based connectivity support services in the hardest-to-reach communities. While public wifi is not a replacement for home internet connectivity, it can be a useful resource for those needing connectivity for work, education, and healthcare, as these sectors increasingly utilize online platforms to deliver their services. We also need to ensure that communities and their residents know where they can access free internet in Missouri. The University of Missouri Broadband Resource Rail offers this [Digital Asset Map](#), for example.

Throughout the process, include rural communities and their leaders, as they have creative ideas and practical solutions to many of these challenges. We recommend working in partnership with organizations, internet providers, universities, and other key stakeholders, with representation from

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<sup>5</sup> Missouri Business Alert (14 April, 2023). *"Billion-dollar' natural disasters are on the rise in Missouri"* Retrieved from: [https://www.missouribusinessalert.com/economy/billion-dollar-natural-disasters-are-on-the-rise-in-missouri/article\\_2b9b37e8-da4f-11ed-b5e3-9b9cdaa6c4a2.html](https://www.missouribusinessalert.com/economy/billion-dollar-natural-disasters-are-on-the-rise-in-missouri/article_2b9b37e8-da4f-11ed-b5e3-9b9cdaa6c4a2.html)

communities and disadvantaged groups. [Studies](#) show that participatory approaches to tackling community-based challenges can be highly effective. Thus, we recommend creating and working through community-based work groups and task teams can be a cost-effective, action-oriented and effective approach to addressing broadband access and quality issues in Missouri.

## **2. Ensure internet assistance programs and benefits reach those in need.**

Many participants visit public spaces and commercial establishments when they need to access the internet, as illustrated in this report. Participants noted the resources specifically available at the library, including device support, printing services, and computer access, among others.

Furthermore, numerous participants are benefiting from the Affordable Connectivity Program and Lifeline, and other internet assistance resources. Yet, even more were unaware that these resources existed, or were unsure how to access the benefits. Additionally, we recommend updating eligibility requirements for internet assistance programs to expand eligibility and participation, based on recent economic events, like increased inflation.

⇒ *"We would give them referrals to things like affordable connectivity or different resources that might help them if they were facing various challenges, financial or otherwise related to the pandemic. And it was amazing to me how many people didn't even know what was available to them. To me it was very under advertised or whatever. There were a lot of people that really needed those services that had not ever, they didn't even know that they could get a discount or any of that kind of stuff." -Participant, Zoom, 06.28.23*

We recommend collating and sharing the available broadband support resources and eligibility with partners, like food banks, nonprofit organizations, community groups, and local media to ensure information, updates, and opportunities are widely disseminated and reaching the right audiences.

We also recommend partnering with public places, like the library, recreational and community centers, and local, educational organizations to better reach those in need of free or affordable access to broadband and/or devices.

## **3. Increase community knowledge through education and training programs to strengthen internet literacy and address safety concerns for vulnerable populations.**

Internet literacy, and by association, concerns for safety and security with internet use were two central findings in this focus group study. Older people, parents, especially from low-income households, and children want and need more support to safely access and benefit from the countless opportunities that come with internet connectivity.



- ⇒ *"...I'd like to know more about my router and my modem, just the basics of that and how to set up better security with my wifi and stuff like that." "Yeah, elderly, they don't know how to text, and they get frustrated and stuff like that. A lot of the elderly, my grandma especially, she would get frustrated and she would just get frustrated along with my dad. They didn't have the patience for it, so they would say to hell with it." "... the older generation that I think that they kind of get a little frustrated with it because it's hard to keep up with."- Participant, Zoom, 06.29.23*
- ⇒ *"Because I can tell her, get on Google Classroom so I can see your work. But most parents don't know how to do that or, "What?" So if the school could offer some type of training, that would be very beneficial."- Participant, Kennett, 06.22.23, 2*
- ⇒ *"I've shied away from internet completely right now, unless I got to, I use it to just kind of keep up with it. I don't mess with it much anymore. I just... Because I'm not up on protecting myself. Now, if I can learn, and go somewhere where I can learn how to protect myself, fine. But just grabbing something, and looking at a video, my experience with them videos is they can come in there and hack your phone..."- Participant, Zoom, 06.26.23*

In partnership with the organizations mentioned in Recommendation #2, develop new, and strengthen existing internet literacy training and resources. Parents, caregivers, and older residents in Missouri shared many requests for more resources and support with internet safety and security, especially for vulnerable populations, like children and older people:

- ⇒ *"Okay. I want to ask a question. Is there any way that we can maybe have a symposium in order to train maybe the children of, let me say from five to 15, years in order to have a proper knowledge of how to use the internet? Because I believe those are the next generation that will rule the society, and if they have an intellectual knowledge or a pre-knowledge about the internet design, I believe everything will be easy. So is there anyway that we can have a symposium for these children, maybe provide a particular place and create awareness for them to access?"- Participant, Zoom, 05.18.23, 2*
- ⇒ *"Yes. If I may piggyback off of that, my mother is older and she, upon understanding that you can play games, there have been some marketing things put out there. If there were some sort of, I don't know, a community mentor for internet access, and for let's say just seniors even, somebody who they could call or something. Also, I want to mention younger children who... Or not younger, but teens who may know a little bit more than their parents or their, let's say older parents. If there were some kind of liaison for that as well. Because a lot of times the kids will come home and know how to get on the wifi, and the parents won't know how to shield them from that, or all those things. If there were some sort of person to mentor with that as well." – Participant, Zoom, 05.18.23, 2*
- ⇒ *"I feel like there is very little training as far as internet safety, or a lot of times I think about older citizens. Most people are accessing internet on their phone. So their phone provider handing them a phone, but there's no training on that initial setup. So if they don't have somebody in their family that teaches them how to access information, even downloading apps and getting*

*connected, I think that's something that is lacking, that population. But I think any sort of programming, any sort of training that would focus on even safety for parents on how to set up controls, what is appropriate, what are risks, would be beneficial. Because as far as I know, there's nothing like that in the Bootheel.”- Participant, Zoom, 06.20.23*

To maximize the investments in improved, and more equitable access to broadband, and ensure Missourians are safely using the internet, internet literacy must be strengthened.

Appendix A: Census Data

CITIES SELECTED	0	1	1	1	1	1	1	1	1	2	2
TYPE	0	1	2	2	2	1	1	1	2	2	1
TYPE2	ALL	Urban	Rural	Rural	Rural	Urban	Urban	Urban	Rural	Rural	Urban
REGION	.	2	2	3	4	5	6	7	8	4	6
REGION2	.	NORTHEAST	NORTHEAST	NORTHWEST	SOUTHEAST	SOUTHWEST	URBAN EAST	URBAN WEST	WEST CENTRAL	SOUTHEAST	URBAN EAST
RURAL URBAN COUNTY	0	4	2	3	2	4	4	4	3	3	4
CITY	STATE OF MO	Columbia	Edina	Maryville	Eminence	Springfield	St. Louis County	Kansas City	Clinton	Kennett	St. Louis City
COUNTY	#STATE OF MO	BOONE	KNOX	NODAWAY	SHANNON	GREENE	ST LOUIS	JACKSON	HENRY	DUNKLIN	CITY OF ST LOUIS
COUNTY2	.							CLAY, CASS, PLATTE			
CITY UM EXTENSION	.	Columbia	Edina	Maryville	Eminence	Springfield	Kirkwood	Kansas City	Clinton	Kennett	.
UM IN THE TOWN	.	1	1	1	1	1	1	1	1	1	0
COUNTY POP2020	6,154,913	183,610	3,744	21,241	7,031	298,915	1,004,125	717,204	21,946	28,283	301,578
UNSERVED	319,991	3,459	127	919	2,577	5,074	1,547	3,462	4,952	1,361	118
UNDERSERVED	176,975	3,598	2,633	640	1,938	1,298	1,662	2,761	1,462	74	182
SERVED	1,989,985	51,370	456	9,484	22	103,685	347,660	245,410	5,041	13,315	103,564
PERCENT_SERVED	0.8001705703	0.8792168005	0.1417910448	0.8588245948	0.004849019176	0.9421027286	0.9908541364	0.9752695394	0.4400698385	0.9027118644	0.9971116075
% 65 AND OLDER COUNTY	17.6%	13.4%	21.9%	15.9%	22.8%	16.9%	18.8%	15.7%	22.2%	18.5%	13.9%
% ESL COUNTY	6.2%	7.9%	5.4%	2.3%	0.5%	5.3%	9.5%	9.4%	2.2%	7.2%	9.5%
% DISABILITY STATUS	10.2%	9.5%	9.9%	7.4%	17.1%	10.5%	7.9%	9.2%	15.0%	14.2%	11.7%
% HH WITH COMPUTERS	92.1%	95.3%	73.1%	90.6%	84.1%	91.9%	94.0%	93.5%	89.3%	86.6%	88.6%
% HH WITH BROADBAND	85.1%	87.1%	63.7%	84.5%	71.4%	81.0%	90.2%	86.7%	81.8%	82.2%	81.1%
MEDIAN HH INCOME	\$61,043	\$62,653	\$40,814	\$47,669	\$41,176	\$60,682	\$72,562	\$60,800	\$49,682	\$42,194	\$48,751
CENSUS COUNTY RANK	.	8	113	52	101	5	1	2	51	40	4
COUNTY POP PER SQ MILE	89.5	267.8	7.4	24.2	7.0	442.6	1,977.1	1,186.4	31.5	52.2	4,885.0
COUNTY DIVERSITY INDEX	40.8%	42.0%	8.8%	17.3%	15.5%	31.3%	54.8%	59.5%	18.3%	39.5%	62.7%
WHITE COUNTY	4,740,335	137,771	3,573	19,290	6,451	246,368	624,703	419,542	19,800	21,629	129,368
% WHITE COUNTY	77.0%	75.0%	95.4%	90.8%	91.8%	82.4%	62.2%	58.5%	90.2%	76.5%	42.9%
BLACK COUNTY	699,840	17,882	.	.	.	.	245,168	156,542	.	3,176	128,993
% BLACK COUNTY	11.4%	9.7%	.	.	.	.	24.4%	21.8%	.	11.2%	42.8%
HISPANIC COUNTY	303,068	.	23	427	141	14,392	.	77,785	573	2,042	15,405
% HISPANIC COUNTY	4.9%	.	0.6%	2.0%	2.0%	4.8%	.	10.8%	2.6%	7.2%	5.1%
2+ RACES COUNTY	413,171	10,571	99	692	383	18,775	.	.	1,143	.	.
% 2+ RACES COUNTY	6.7%	5.8%	1.0%	3.3%	5.4%	6.3%	.	.	5.2%	.	.
ASIAN* COUNTY	133,377	.	.	.	.	.	48,552	.	.	.	.
% ASIAN* COUNTY	2.2%	.	.	.	.	.	4.8%	.	.	.	.

## Appendix B: Press Release

Kennett volunteers needed for June 22 focus group on challenges with broadband access in Missouri

Researchers from the Community Innovation and Action Center at the University of Missouri–St. Louis are working with colleagues from MU Extension to study the challenges Missourians face with broadband access across the state.

They are seeking volunteers in or near Kennett to participate in the latest in a series of focus groups discussing broadband usage, connectivity and affordability. The focus group will last between 60 and 90 minutes beginning at 5 p.m. Thursday, June 22, at the MU Extension in Dunklin County (102 Slicer Street, Kennett, MO 63857-0160).

Interested volunteers can register at [Qualtrics Experience Management](#) and will receive further instructions on when, where and how to participate. They will receive \$60 in compensation via a payment app for their time.

“In the modern world, particularly since the start of the COVID-19 pandemic, broadband access is a necessity,” said Sara Mohamed, the engagement and equity lead in UMSL’s Community Innovation and Action Center. “This project aims to understand the barriers to accessing reliable internet and how that affects Missourians’ everyday life.”

The work is being done in collaboration with Missouri’s Department of Economic Development. To date, they’ve conducted one in-person focus group in St. Louis and two more in Columbia. Future focus groups are planned in Kansas City, Missouri and in Eminence in Southern Missouri.

The researchers have also held several focus groups via Zoom as they try to gather feedback and opinions from people around the state.

The goal is to get a clear picture of what broadband access looks like for Missouri’s citizens. The researchers have been tasked with reaching out to both rural and urban populations, and they’re particularly interested in hearing from underserved populations, who have a harder time getting connected to broadband or the internet more generally. That includes English language learners, people with disabilities, people of color, lower-income individuals and previously incarcerated people.

Once they have completed the focus groups, they will prepare a report and submit it to the Department of Economic Development in late August or early September.

The research is part of the [UM System’s Broadband Initiative](#).

## Appendix C: Recruitment Flier

# Focus Group Volunteers Needed



**\$60  
INCENTIVE  
PROVIDED IF  
CHOSEN TO  
PARTICIPATE**

## WHAT THIS ENTAILS:

- Participants who want to discuss the use of and access to broadband in Missouri
- Participants will be given a \$60 compensation via venmo or CashApp as a thank you for their time
- Focus groups will take between 60-90 minutes
- Light refreshments will be provided



To express interest in participating, please reach out at the following number or email and leave your name, a good call back number, and what city/town you reside in:

(314) 514-5744, missouribroadband@gmail.com

OR

fill out the survey at the following link or QR code above:

[https://umsl.az1.qualtrics.com/jfe/form/SV\\_0x3G3rteuVcF9dA](https://umsl.az1.qualtrics.com/jfe/form/SV_0x3G3rteuVcF9dA)

**UMSL** | Community Innovation  
and Action Center

**U** Extension  
University of Missouri  
an equal opportunity/ADA institution

**UMSL** | Community Innovation  
and Action Center

## Appendix D: Email Recruitment Template

Hello (insert contact name).

My name is \_\_\_\_\_ and I am from the Community Innovation and Action Center at UMSL. We are currently setting up focus groups to understand access to and use of broadband in the state of Missouri. This is a project being done in collaboration with the department of economic development for the state of Missouri.

Currently, we are recruiting folks to participate in the focus groups which are scheduled to take place in June of this year. Focus groups would be 60-90 minutes and would be in person at a convenient location, including local MU- extension offices. Participants will receive a \$50 payment as a thank you for their time. We are looking for anyone who would be interested in discussing broadband access but are also specifically interested in people of color, individuals with disabilities, individuals on a low-income, older adults, people who have been incarcerated, and people whose primary language is not English.

If you have anyone you think would be interested in participating we would appreciate if you could forward them information about the project. To make this process as simple as possible for you, we have drafted an email template below for you to use and have attached a recruitment flier to this email. Please let us know if there are any other materials you might need and if you would like to further discuss the project, feel free to respond to this email.

Best,  
Name

Email template:

Hello \_\_\_\_\_,

I hope you are doing well! I have recently been made aware of a project that is being conducted by the state's Department of Economic Development in conjunction with the University of Missouri. They are conducting focus groups to understand use of and access to broadband in Missouri. Focus groups would be 60-90 minutes and participants will receive a \$50 payment via venmo or cashapp as a thank you for their participation.

I thought you might be interested in participating or would know folks who would be interested. If you are interested and would like more information, please either fill out the information at this link: [https://umsl.az1.qualtrics.com/jfe/form/SV\\_0x3G3rteuVcF9dA](https://umsl.az1.qualtrics.com/jfe/form/SV_0x3G3rteuVcF9dA) or call the following number and leave a voicemail stating your name and a good call back number: (314) 514-5744.

All the best,

Name

Appendix E: Qualtrics Sign-Up Form

### Broadband Focus Group Registration

Q2 Thank you so much for your interest in participating in a focus group to understand broadband use and access in Missouri. The focus groups will take between 60-90 minutes and you will receive a \$50 compensation as a thank you for participating. This is a project by the University of Missouri- St. Louis and the Missouri Department of Economic Development in order to understand individuals use of and access to broadband internet. Please fill out the below information to register for a specific focus group taking place near you. Please note that registration does not guarantee a spot in the focus group. We will reach out to you to confirm your registration.

¡Hola! Gracias por expresar su interés en participar en un grupo de discusión. Los grupos de discusión durarán entre 60 y 90 minutos y recibirá una compensación de 50 dólares como agradecimiento por participar. Se trata de un proyecto de la Universidad de Missouri- St. Louis y el Departamento de Desarrollo Económico de Missouri para entender el uso y el acceso de las personas a Internet de banda ancha. Por favor, rellene la siguiente información para registrar a un grupo cerca de usted. Para completar la encuesta en español, haga clic en el botón de la esquina superior derecha que dice "Inglés"

Q3 What is your name?

---

Q4 What is a good email address to reach you?

---

Q15 What is a good phone number to reach you?

---

Q13 What city/town do you live in? (Please note that you must live in Missouri to participate in this study!)

---

Q14 What is your zip code? (Please note that you must live in Missouri to participate in this study!)

---

Q6 I identify as... (Select all that apply) \*

- African American/Black (1)
- Asian (2)
- White (3)
- American Indian/Alaskan Native (4)
- Native Hawaiian (5)
- Pacific Islander (6)
- Other (7) \_\_\_\_\_

Q7 Are you of Hispanic, Latinx, or of Spanish origin?

- Yes (1)
- No (2)



Q8 To which gender identity do you most closely identify?

- Male (1)
- Female (2)
- Trans female/trans woman (3)
- Trans male/trans man (4)
- Gender queer/gender non conforming (5)
- Two spirit (6)
- Other (7) \_\_\_\_\_

Q9 What is your highest education level?

- Some high school (1)
- High school diploma/GED (2)
- Associate's/technical degree (3)
- College degree (4)
- Graduate degree (5)
- Other (6) \_\_\_\_\_

Q10 What category best represents your total annual household income for all members of the household, including income, retirement, social security, etc.?

- Less than \$10,000 (1)
- \$10,000 - \$19,999 (2)
- \$20,000 - \$29,999 (3)
- \$30,000 - \$39,999 (4)
- \$40,000 - \$49,999 (5)
- \$50,000 - \$59,999 (6)
- \$60,000 - \$69,999 (7)
- \$70,000 - \$79,999 (8)
- \$80,000 - \$89,999 (9)
- \$90,000 - \$99,999 (10)
- \$100,000 - \$149,999 (11)
- More than \$150,000 (12)
- Prefer not to answer (13)

Q11 How old are you? (Please note: You must be 18 years old or older to participate in a focus group)

- Under 18 (1)
- 18 - 24 (2)

25 - 34 (3)

35 - 44 (4)

45 - 54 (5)

55 - 64 (6)

65 or over (7)

Q12 Are any of the following groups in your household? (including yourself)

A child under 18 years in age (1)

A current or former U.S. armed forces service member (2)

A person with a disability (3)

A person with limited English speaking or reading ability (4)

A person that has been incarcerated at times (5)

A person that has been homeless at times (6)

No one in household meets these criteria (7)

A person who would be interested in participating in a Spanish speaking Zoom focus group (8)

Prefer not to answer (9)

Q16 Do you have Cashapp or Venmo?

Yes (1)

No (2)

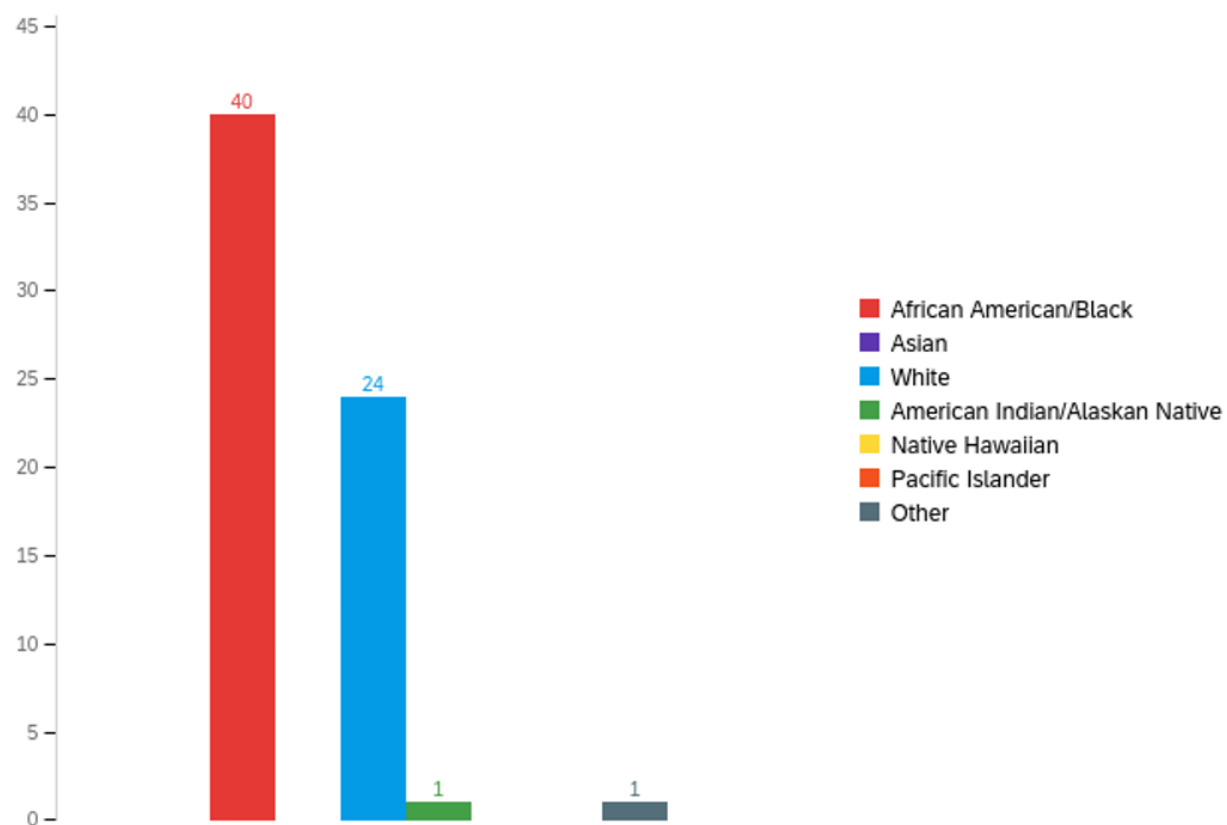
Q17 Which app would you like to receive compensation on?

Venmo (1)

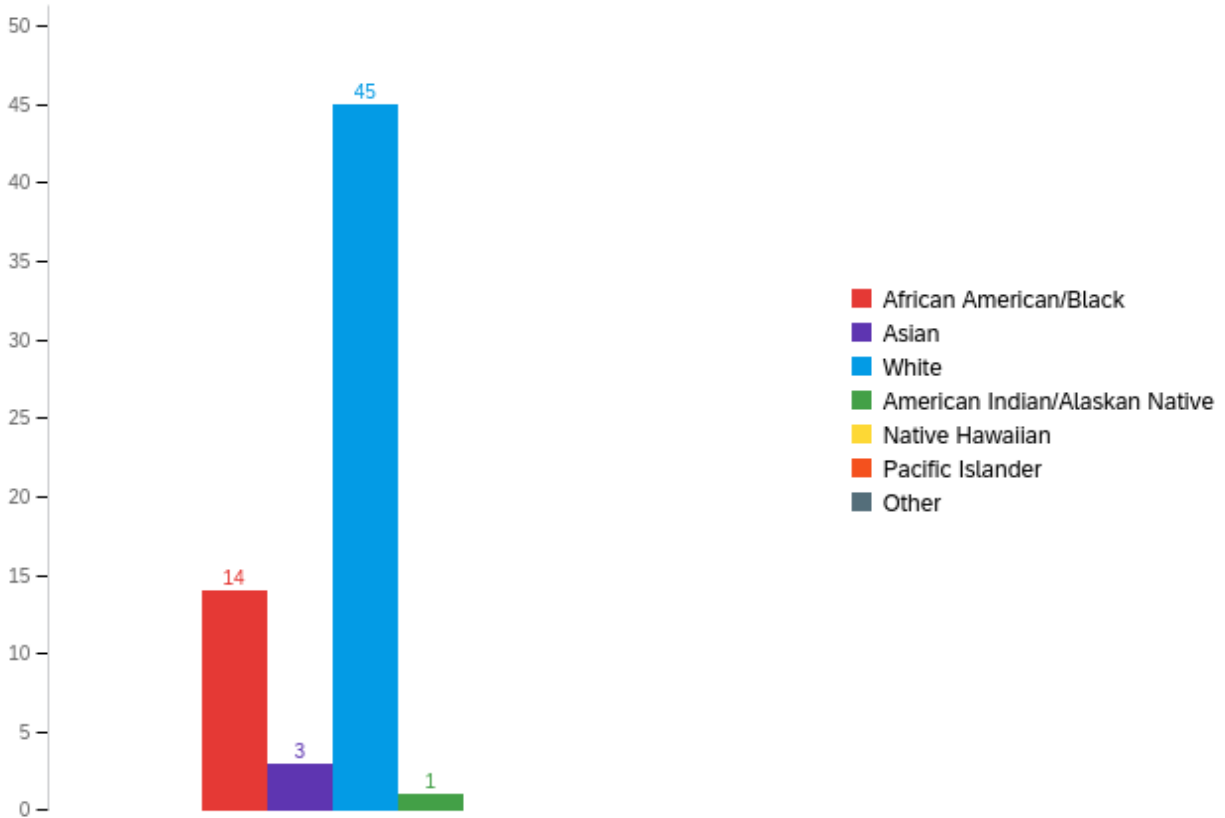
Cashapp (2)

Q18 What is your Venmo/Cashapp handle?

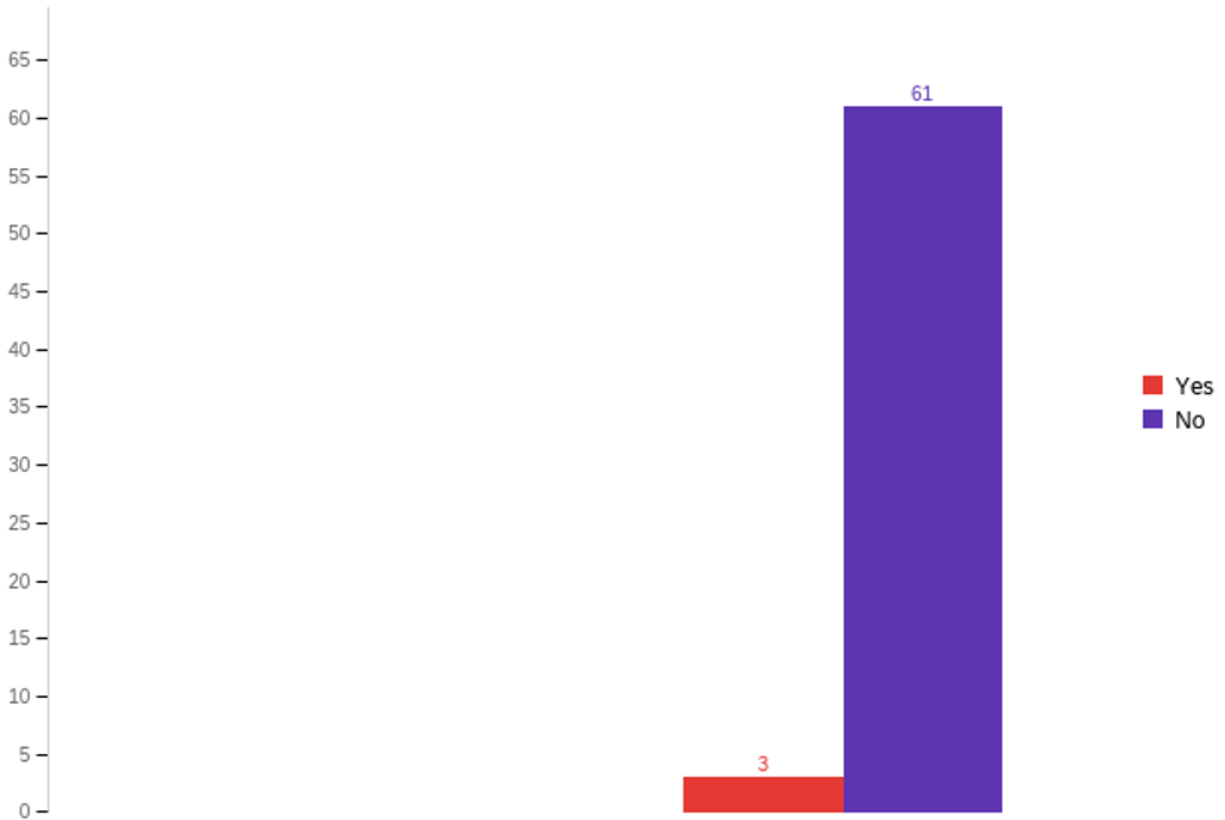
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**Appendix F: Racial Demographics (In-person)**

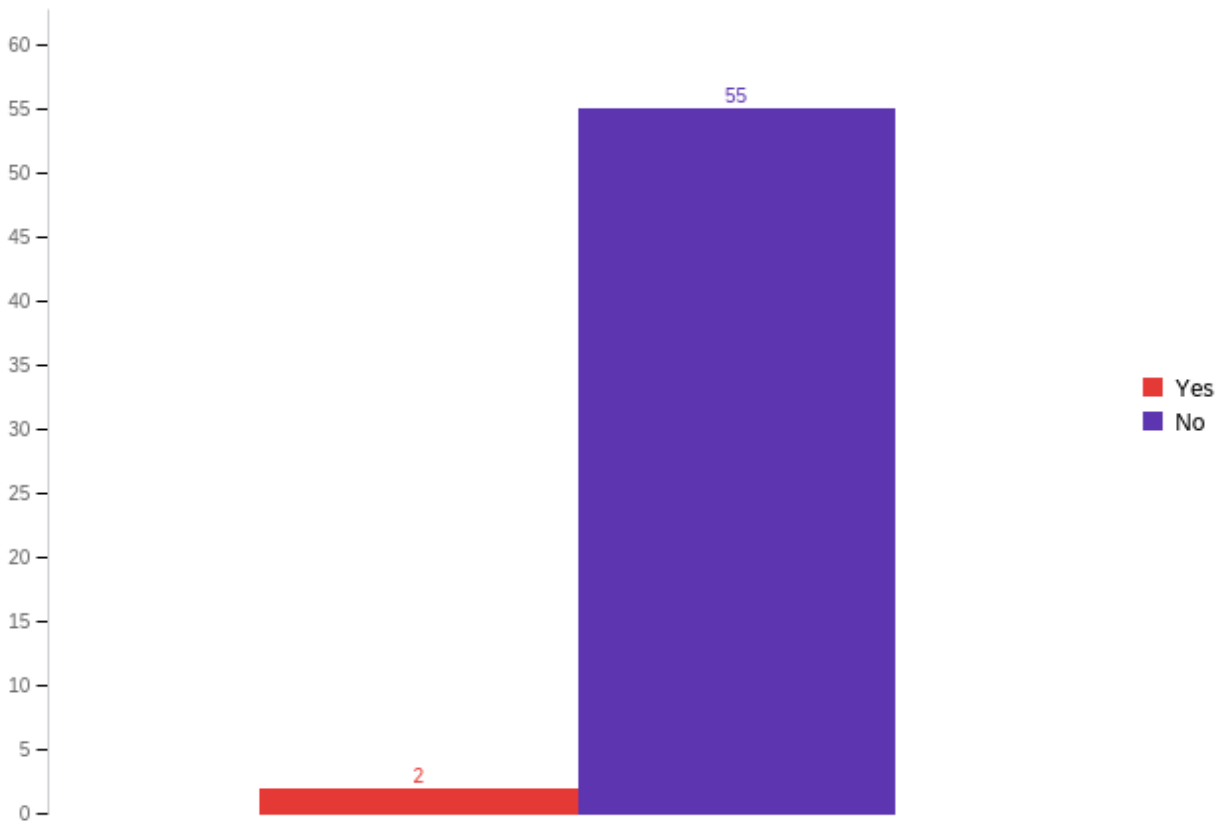
### Appendix G: Racial Demographics (Zoom)



**Appendix H: Hispanic, LatinX, or Spanish Origin (In-person)**

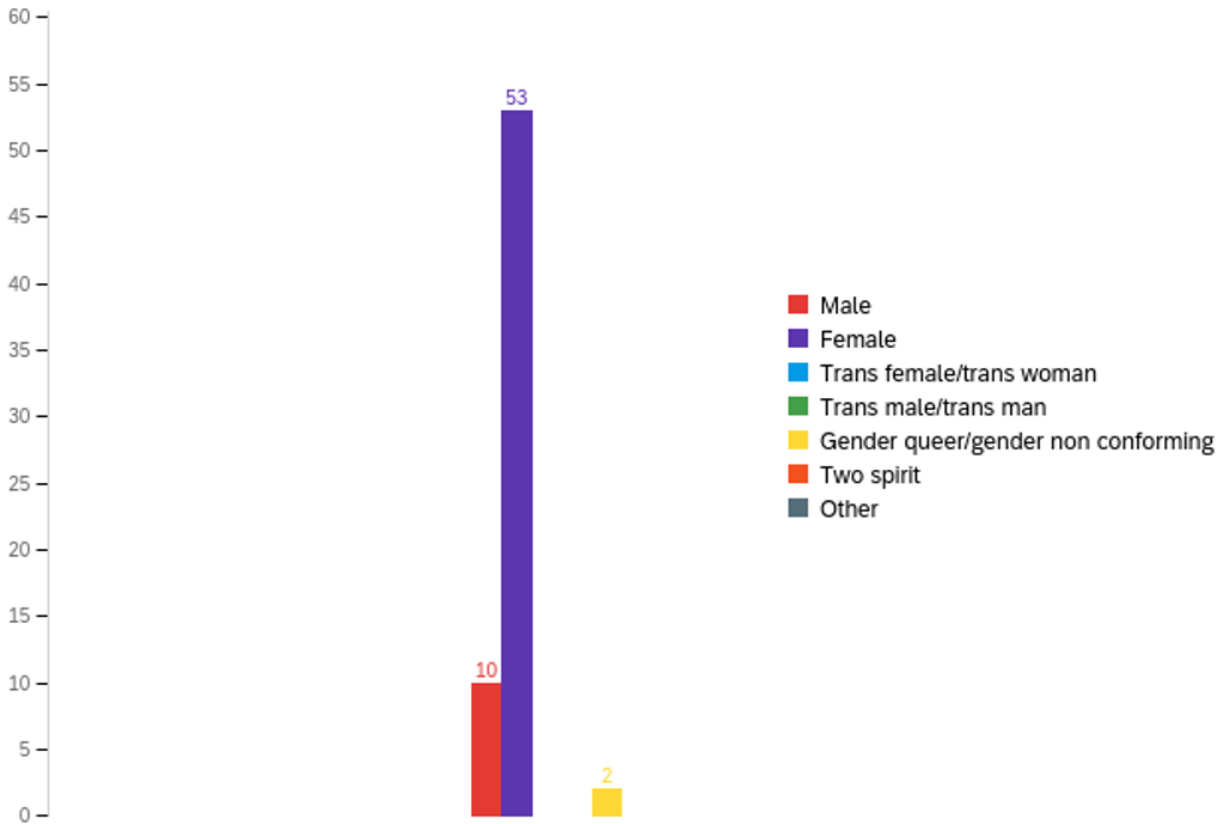


**Appendix I: Hispanic, LatinX, or Spanish Origin (Zoom)**

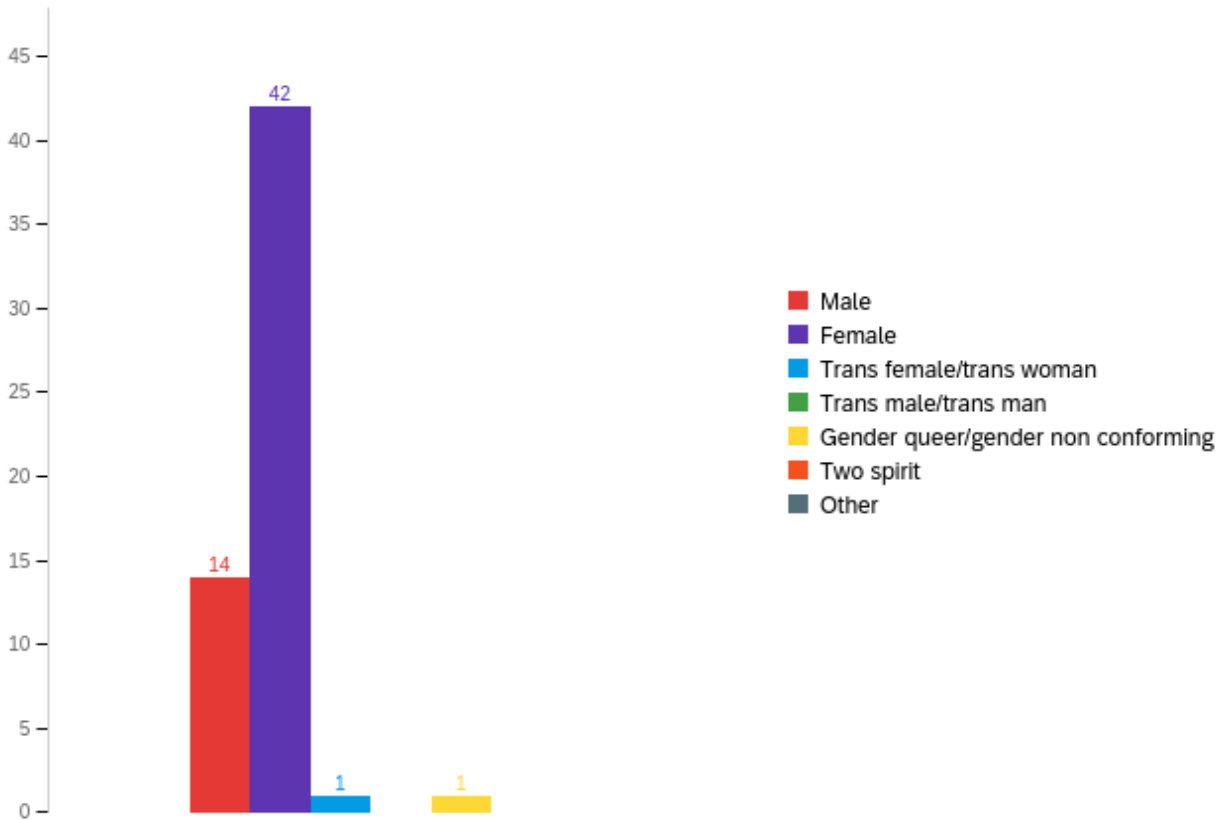




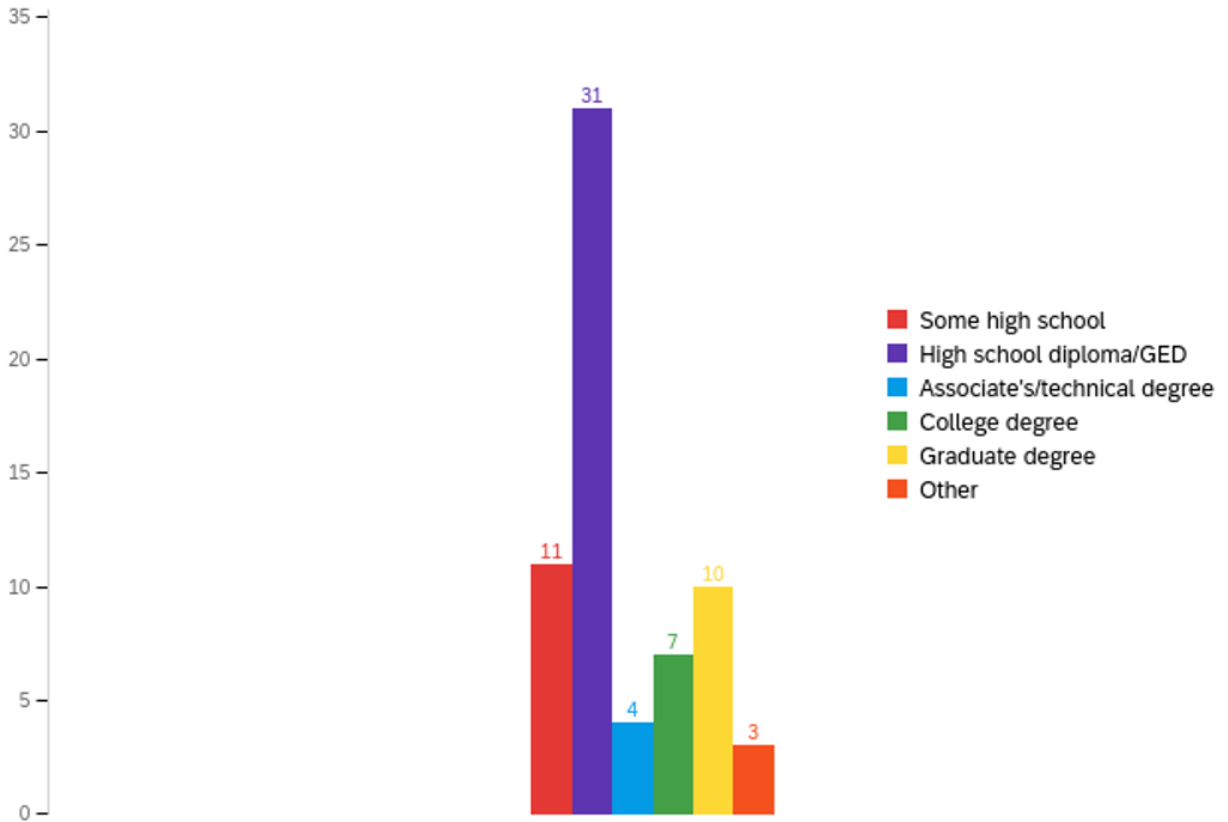
### Appendix J: Gender Identity (In-person)



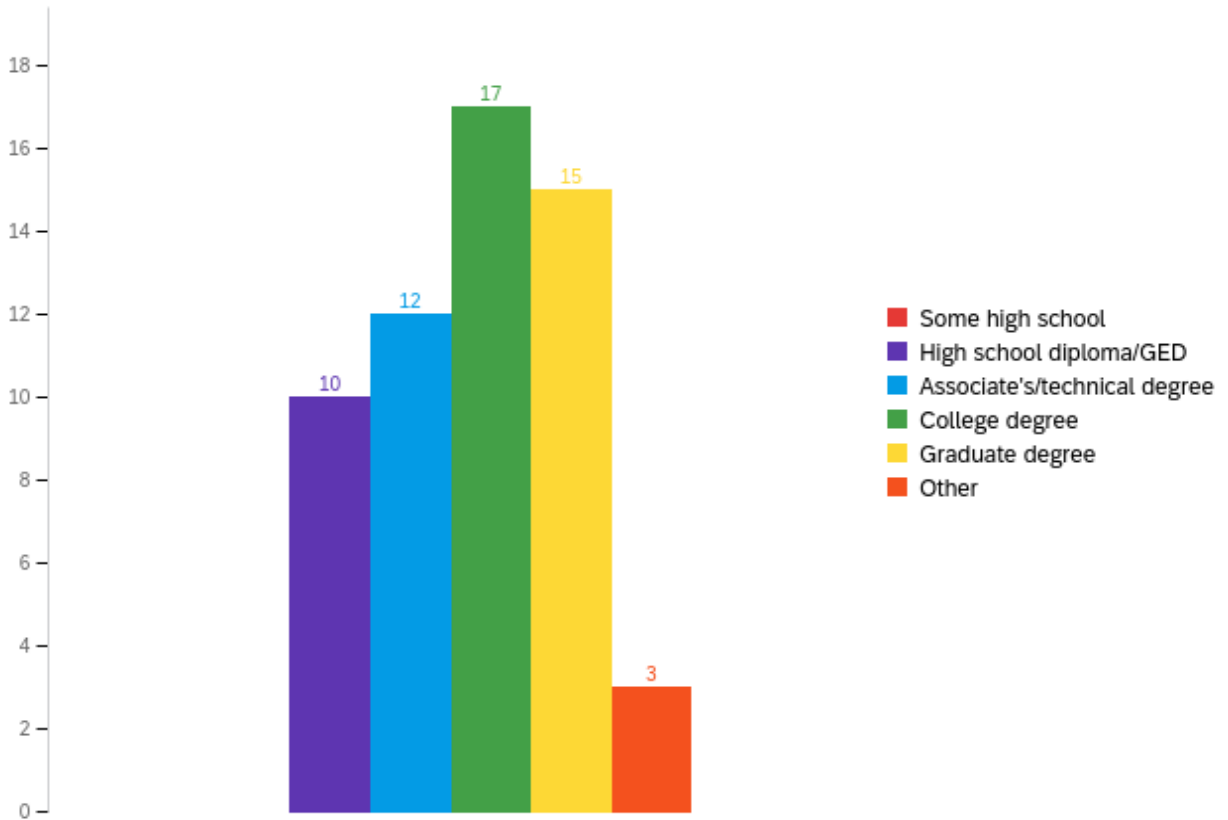
### Appendix K: Gender Identity (Zoom)



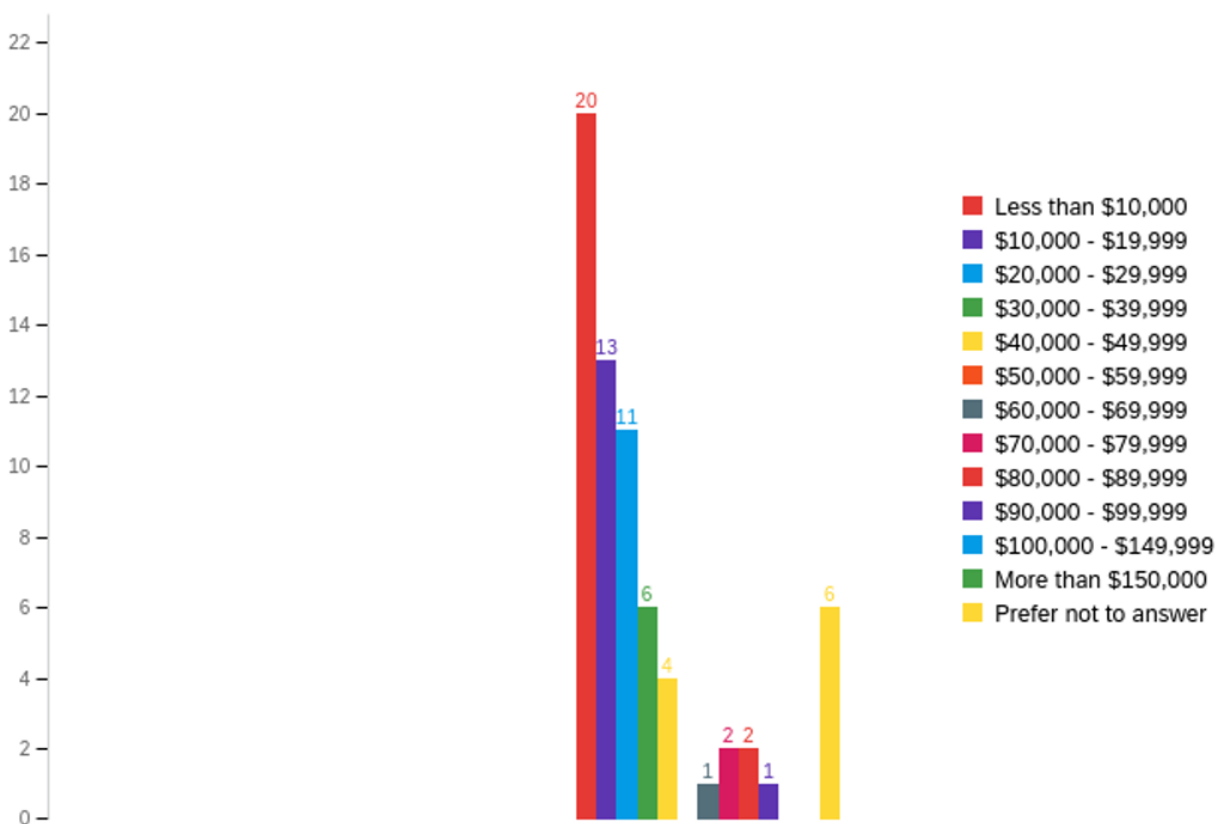
### Appendix L: Highest Education Level (In-person)



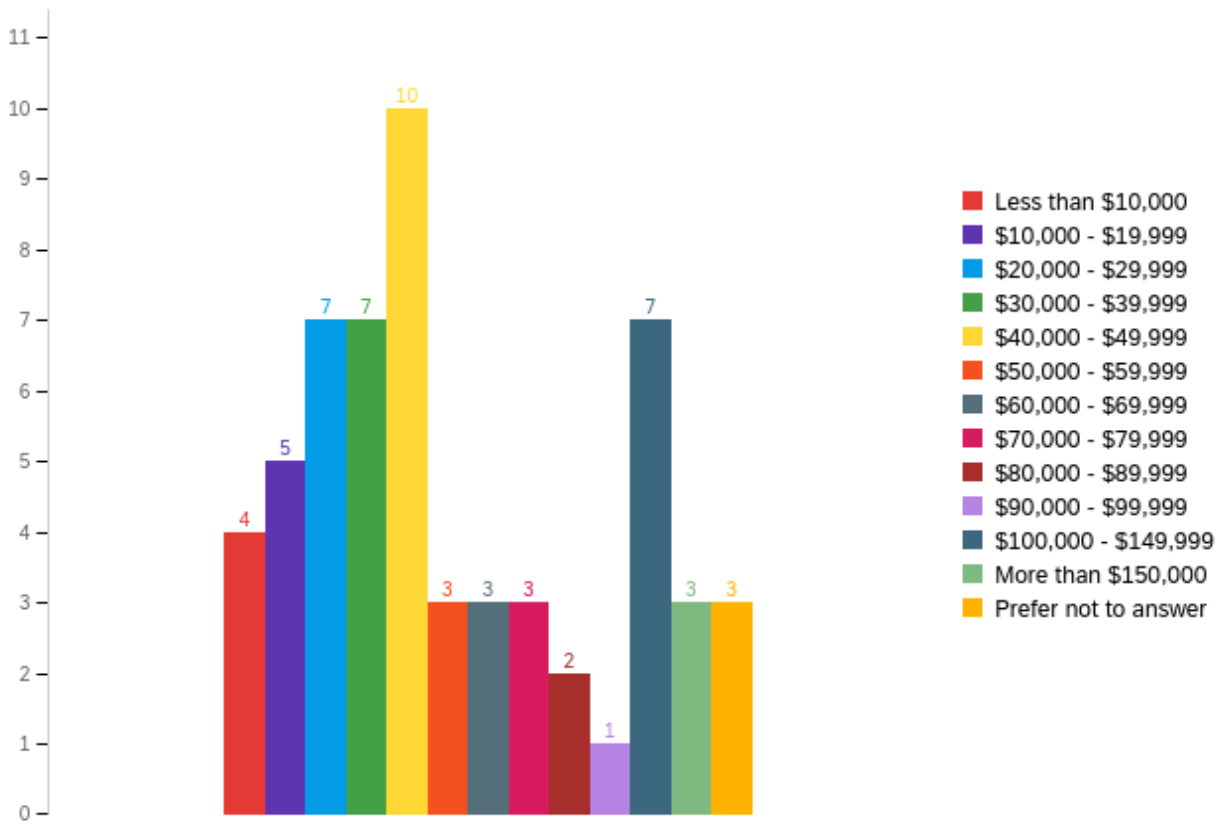
### Appendix M: Highest Education Level (Zoom)



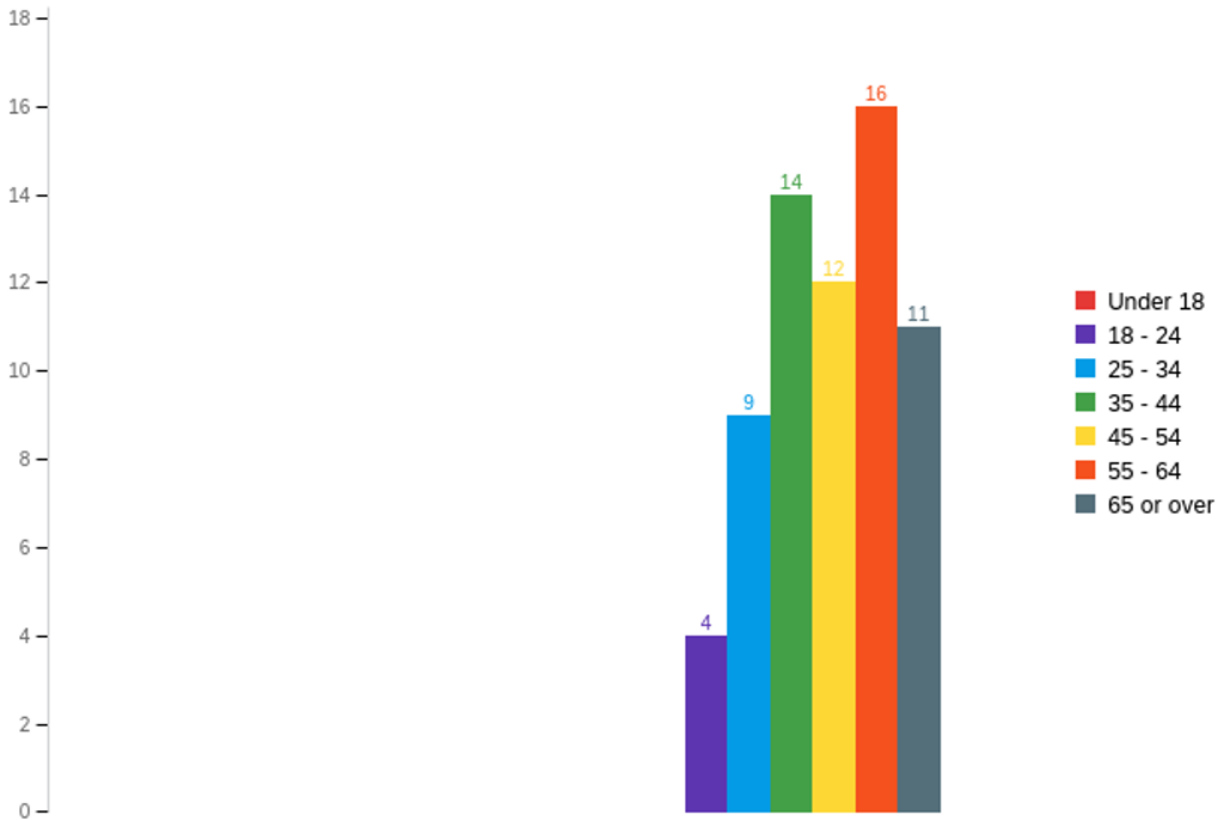
### Appendix N: Total Annual Household Income (In-person)



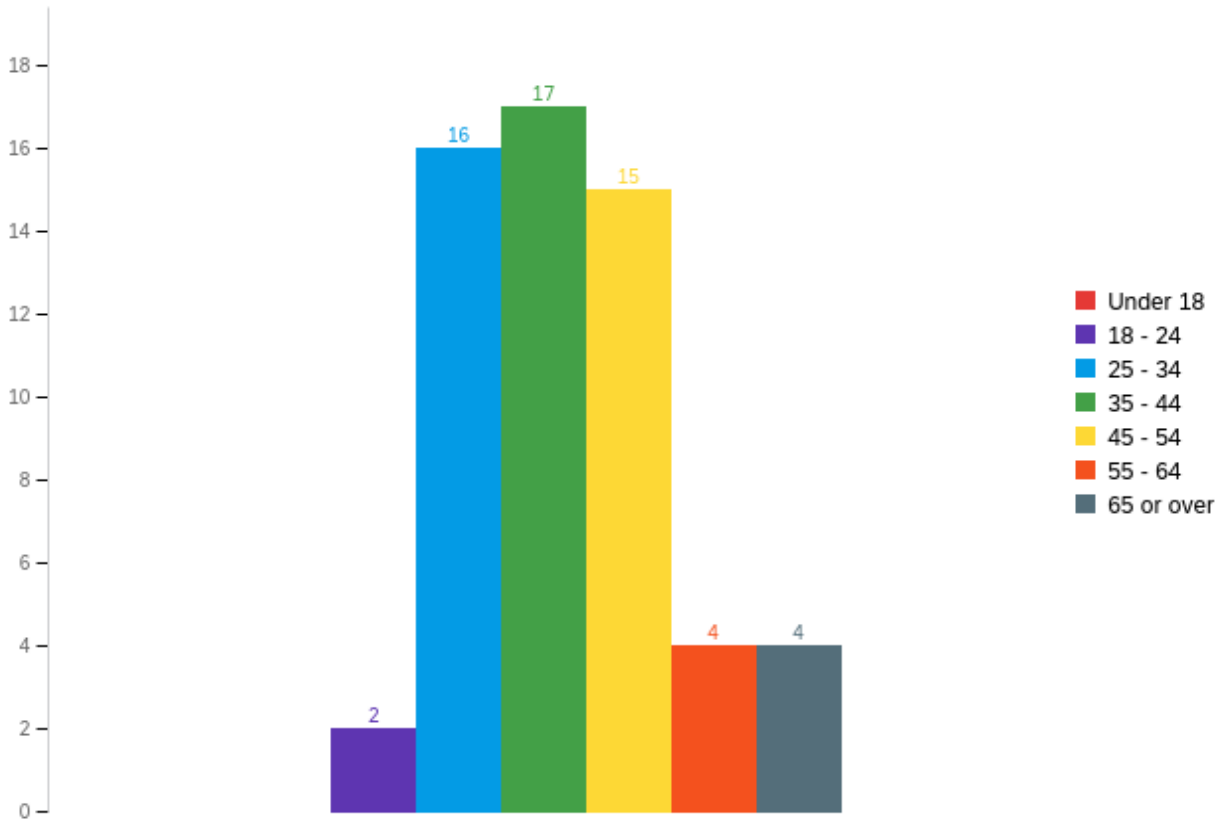
### Appendix O: Annual Household Income



### Appendix P: Age Demographics (In-person)

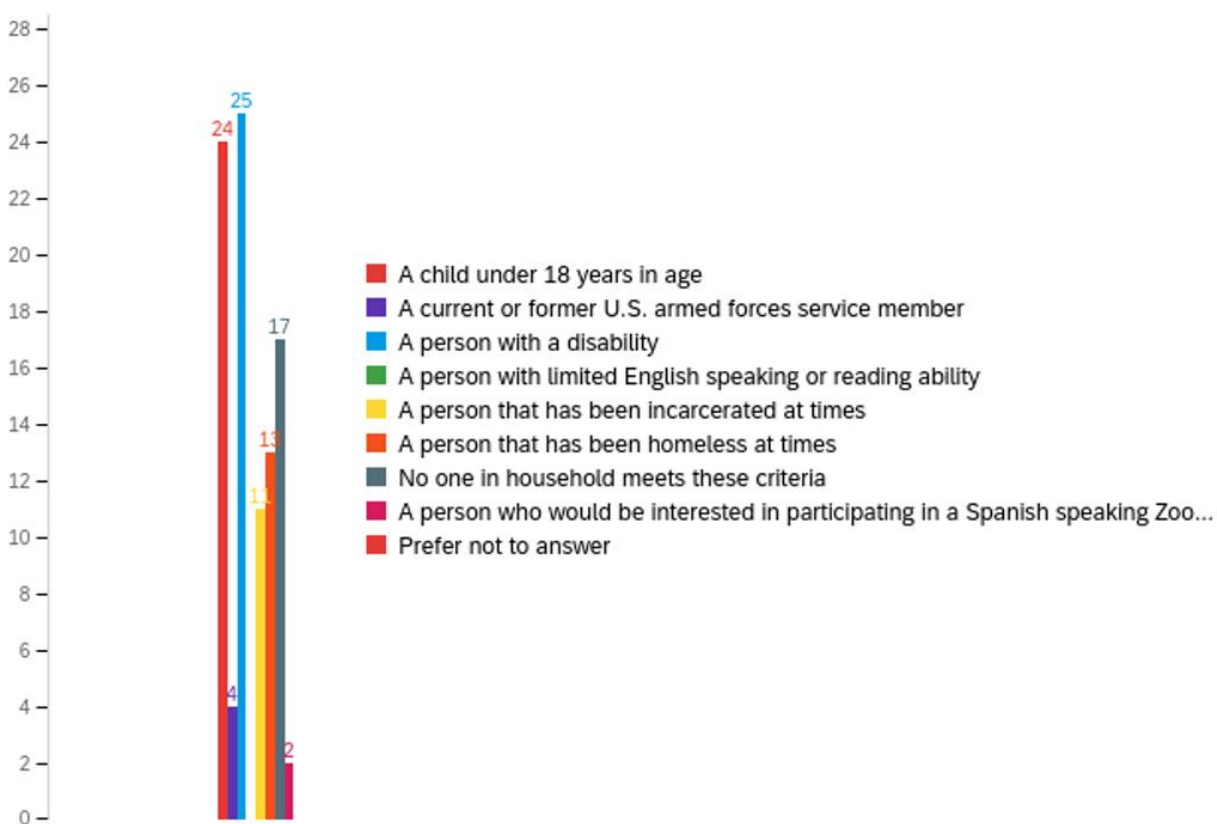


### Appendix Q: Age Demographics (Zoom)

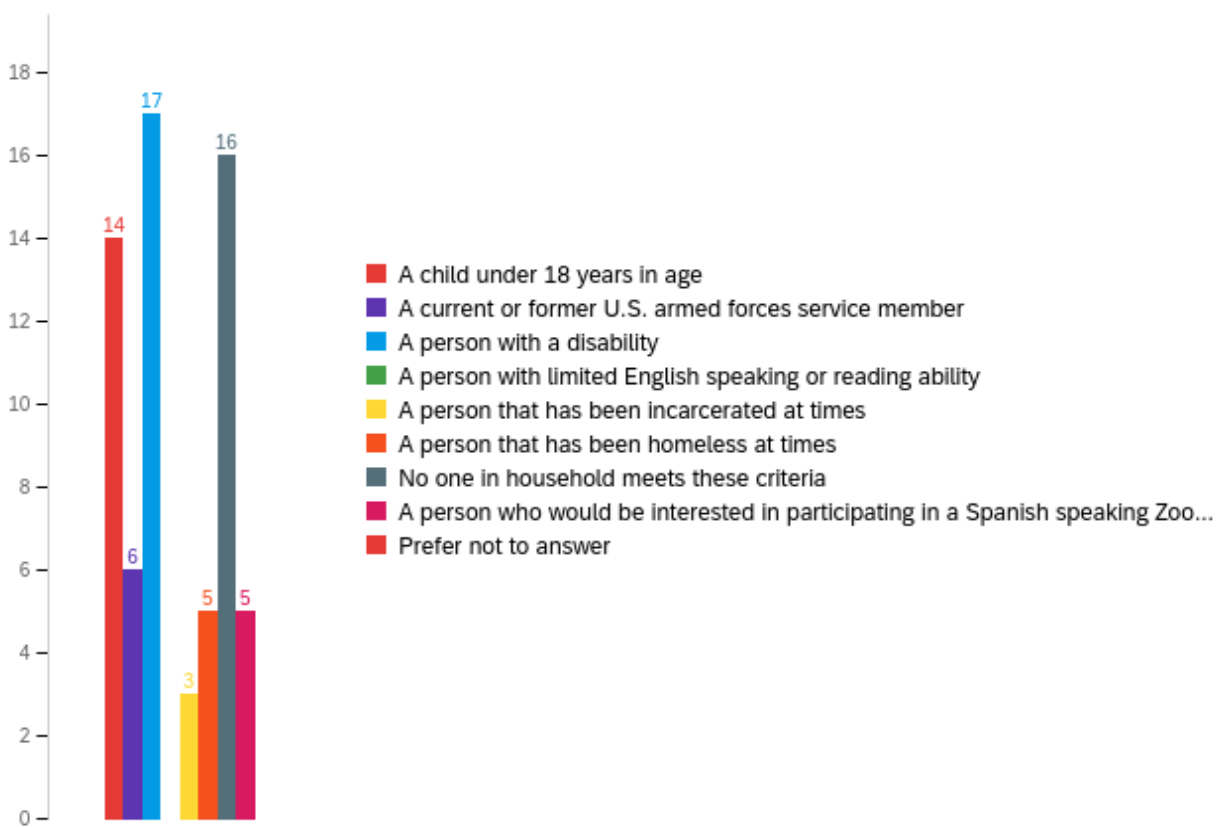




## Appendix R: Participant Demographics (In-person)



### Appendix S: Participant Demographics (Zoom)



## Appendix T: Focus Group Guide

Note: Incentives will take 1-3 weeks. We will want to remind participants of this.

Remind the group to put cameras on if they can.  
We would like to hear from everyone if possible  
Must be from Missouri to be part of this group today

### Introduction

Good afternoon and welcome to our session. Thanks for taking the time to join us to talk about broadband access in Missouri. My name is \_\_\_\_\_ and assisting me is \_\_\_\_\_. You were invited today to help us understand your access to and how you use internet.

We work for a center at the University of Missouri- St. Louis called the Community Innovation and action Center. We are conducting these focus groups in partnership with the MU extension offices and the state department of Economic Development. The goal of this project is to better understand internet access and barriers in order to improve access across the state.

There are no wrong answers but rather differing points of view. Please feel free to share your point of view even if it differs from what others have said. Keep in mind that we're just as interested in negative comments as positive comments.

So first, let's cover a few logistics. While \_\_\_\_\_ will be taking notes, we will also be recording this session in order to transcribe what's been said. Anything you say will be kept anonymous. If you are not comfortable with being recorded, you may leave now.

FOR ZOOM SESSIONS: Please remain on mute until others have finished speaking. While you may go off camera if you so choose, if you are able, please leave the camera on to encourage engagement.

With all that being said, let's go ahead and get started. Let's do a quick round of introductions. Briefly state your name and your pronouns if you so choose.

Introductions take place

Great, thanks for those introductions. Let's go ahead and begin our discussion.

First, we'd like to set a few ground rules:

Ground Rules

### Respect others and their opinions

You are in control of what you share and how much; if you need to take a break, feel free to do so

WAIT/WAINT - Why am I talking? Why am I not talking?

Speak one at a time.

Minimize side conversations.

Anything else?

Okay, we will now start recording. Press Record (for Zoom, record to cloud) on both recorders

To start, we would like to understand what everyone's access to internet looks like. Please start by describing whether you have access to the internet and how and where you use the internet.

Are you able to access it in your home, is it slow/fast etc.

On what type of device do you access the internet? (e.g. smartphone computer etc)

If you've had difficulty accessing the internet, what have been some of the barriers to accessing it?

For what purposes do you use the internet?

Do you work from home?

Exclusively for fun/pleasure?

Education?

What do you enjoy about having broadband/internet access?

How would a lack of internet access affect your day to day life?

Have you ever had to not pay for a bill in order to keep your internet?

Please tell us about the time and money you spend trying to access the internet? (i.e. traveling to places where you will have reception, paying for wi-fi, etc)

What if any concerns do you have about using the internet?

Prompt on safety, surveillance etc if needed

Are there ways that you would like to use the internet that you are unable to due to a lack of training or assistance?

What has been done to advocate for better internet access in your area?

Those are all the questions we have for you today. Do you have any questions or concerns for us?