



NATIONAL 4-H COUNCIL

Digital Impact Survey

Exploring the economic and social effects of broadband access on teens and their communities

June 2021



DIGITAL IMPACT SURVEY

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4-H Tech Changemakers empowers young people to close the country's widening digital divide by providing them with the training and tools they need to teach digital employability skills to adults in their communities. As this survey indicates, access to broadband Internet and the digital skills required to use it productively are critical factors in helping Americans find educational, social and professional opportunities.

The 4-H Tech Changemakers program recently expanded its commitment to reach more than 50,000 adults across 164 communities nationwide through its coalition of partners—Land O'Lakes, Microsoft, Verizon, and Tractor Supply - and collaboration with 20 Land Grant Universities, including eleven Historically Black Colleges and Universities (HBCUs).



Introduction & Methodology

Background & Objectives

National 4-H Council and The Harris Poll work to identify the intersection between broadband internet access and perceptions of opportunity in teens aged 13-19. The survey's goal seeks to use primary research that spotlights youth voice to generate change and create conversation focused on the effects of broadband internet access and digital skills training.

Hypothesis

Access to broadband and digital skills contribute to young people feeling like the communities they live in offer strong prospects for education, employment, economic advancement and long-term stability, with COVID amplifying these effects.

Key Research Questions

- How do teens feel about their educational options, economic future and job prospects in their hometowns?
- How, if at all, does having reliable access to broadband internet affect their perceptions?
- How, if at all, has COVID changed these perceptions?
- Do demographic factors like urbanicity, ethnicity, family income or gender amplify or mute some of these effects?
- Does participation in positive youth development programming (like 4-H) mitigate some negative effects?



Methodology

This survey was conducted online within the United States by The Harris Poll on behalf of 4-H from June 25 to July 1, 2021, among 1,600 respondents ages 13-19. 100 of these responses were collected via phone among respondents who had little to no broadband internet access.

We collected data on internet reliability, including those in urban areas (n=479), suburban areas (n=657), and rural areas (n=273), and access to Broadband Internet, including those who have access to Broadband somewhere (n=1413) and those who do not have access (n=186), to cut the data by. While we do not capture HH income data for teens, we captured a series of proxies (such as having their own bedroom, going on vacations, getting an allowance, etc.) and have classified those with 3 or more as more likely to be high income.*

Some data are also trended to a similar study conducted from November 1 to 15, 2019, among 1,537 respondents ages 13-19.





Executive Summary

Despite rising need, teens report lower access to reliable broadband

- 89% of teens say their need for high-speed Internet access at home has increased or stayed the same in the last 18 months.
- Yet teens report lower access to broadband at home (-7% from 2019 to 2021) and the percentage who report having access to a reliable connection has also dropped 8% in the last 2 years.

The negative impact of unreliable connectivity on teens' futures is rising

- Teens with unreliable connection report significantly lower digital literacy than those with reliable connection, as well as reduced career aspirations and perceived social mobility. They are much less likely than their counterparts with reliable connection to say, "I can pursue whatever career I want" (-12%), "make more money than my parents" (-12%), and "pursue a different career path than my parents" (-12%).
- Overall confidence to succeed in life is down by a similar margin to broadband access (-9% in the last 2 years, -12% for teens with unreliable connection).

Teens believe better connectivity can level the economic playing field for their communities – especially for those with unreliable connection

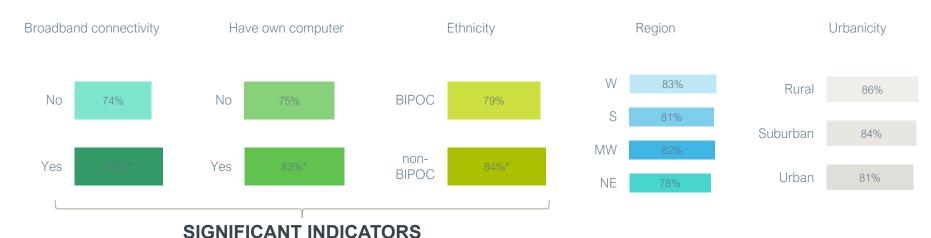
- Teens agree connectivity is critical to the economic success of their communities, especially in the wake of the pandemic. Majorities agree that "during the pandemic access to broadband could have helped my community economically" (64%, 70% rural), and "if my community had better access to high-speed internet, people here would make more money" (63%).
- For teens with with unreliable broadband who are more likely to feel they need to stay in their communities (41%, vs. 36% reliable) improved connection could help provide remote work opportunities for a better future. Those with unreliable connection are especially likely to say, "my top career choice would be to work a remote job that allowed me to stay in my community" (52%* unreliable, vs. 45% reliable), and "I am more likely to stay in my community after this pandemic because it is now easier to learn and work remotely" (57% unreliable, vs. 50% reliable).



Executive Summary (cont'd)

Broadband connectivity, computer access and race are more related to future confidence than geography

Shifts in perceived ability to succeed in life based on....





Teens report rising need for broadband in the wake of the pandemic

89% of teens say their need for high-speed Internet access at home has increased or stayed the same in the last 18 months

Teens are spending more time online for...

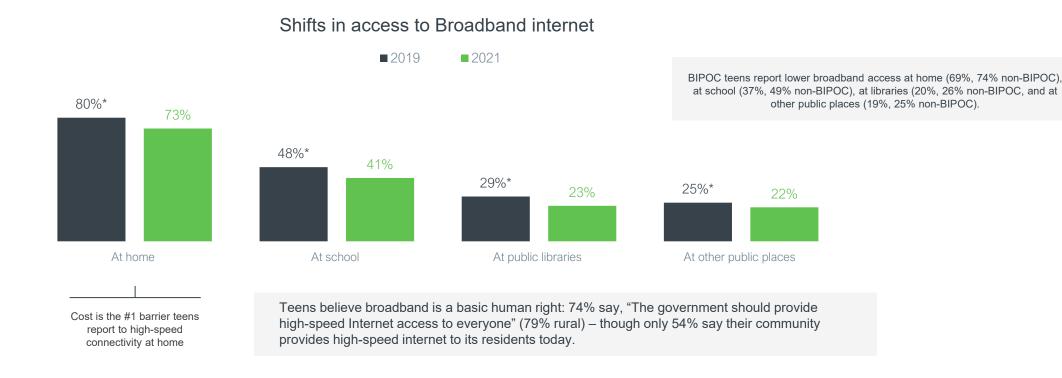


Teens in rural areas more likely to experience impact on education due to connectivity concerns: The percentage of teens living in rural areas who report using the Internet has increased 11% from 2019 to 2021 for homework (from 37% to 48%) and 14% for online learning (from 43% to 57%). They are also 10% more likely to report difficulty getting in touch with teachers and employers in 2021 (30%) compared to 2019 (20%) as a result of this unreliable connection.

BASE: Q101: How, if at all, has your need for high-speed Internet access at home changed in the last 18 months? (n=1500 in 2021, n=1537 in 2019)? I Q3: On average how much time do you spend on the following? (n=1600 | * Indicates statistically significant difference between groups)



Despite rising need, broadband internet access has decreased across environments

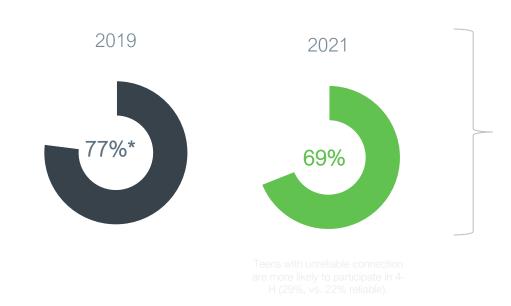


BASE: Q1: Do you have access to the following? (n=1500) | Q213: How much do you agree or disagree with the following statements? (Top 2 box: strongly/somewhat agree n=1500 in 2021 n=1537 in 2019 |* Indicates statistically significant difference between groups



Connection is also less reliable than it was just two years ago — dropping by almost 10%

Percent of teens who have access to reliable broadband



8% decrease in access to reliable broadband in 2 years

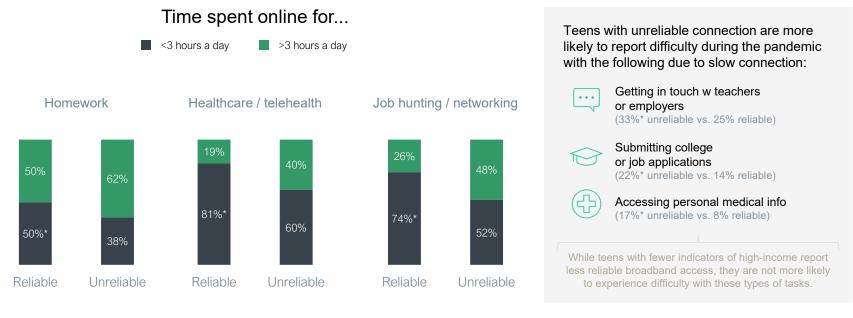
The percentage of teens living in rural areas who report having reliable broadband access has decreased 12% from 2019 to 2021 (from 78% to 69%).

Black teens are also especially likely to say they have unreliable connection (41%, compared to 31% overall), as are those with fewer indicators of high income (37%, vs. 25% who have more).



This slow down comes at a cost: teens with unreliable connection must invest greater time to accomplish necessary tasks

While teens report spending similar time online for gaming, videos and social media regardless of broadband access, those with unreliable connection are more likely to need more time for education and professional development.

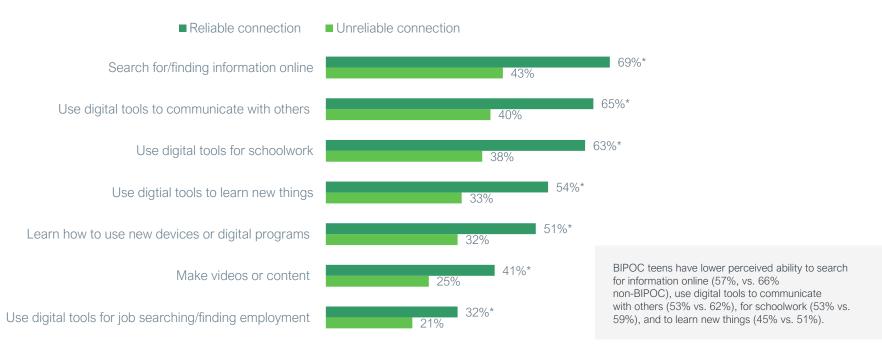


Q3: On average, how much time do you spend on the Internet for the following ?(n=1413)| Q7: Have any of the following happened to you because of slow Internet connection? (n=1600)| * Indicates statistically significant difference between groups



Teens with unreliable connection also report significantly lower digital literacy

Perceived ability surrounding digital skills



BASE: Q103: Please rate your ability to do each of the following... (n=1600) I * Indicates statistically significant difference between groups



Despite agreeing these digital skills are critical for their future advancement

TEENS AGREE ON THE VALUE OF DIGITAL SKILLS FOR THEIR FUTURE

73% say, "Digital skills will be the key to getting the best jobs for my generation"

BUT THOSE WITH RELIABLE CONNECTION ARE MORE LIKELY TO FEEL PREPARED TO SUCCEED...

"I have all the digital skills I need to be successful in whatever career I want to pursue"



"Access to high-speed internet makes it easier for me to excel at school"



"Access to high-speed internet Allows me to access more career opportunities available in my hometown"



BASE: Q212: How much do you agree or disagree with the following statements? :(n=1600) Top 2 box: strongly/somewhat agree n=1600) I Q213: How much do you agree or disagree with the following statements? (n=1600) | * Indicates statistically significant difference between groups

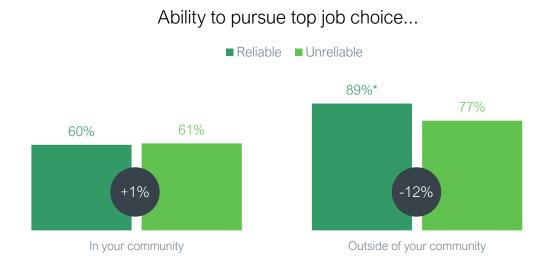


Teens with unreliable connection feel less empowered to pursue their dream jobs and see less potential in the world outside of their community

"I can pursue whatever career I want"

78%* reliable
67% unreliable

Those with reliable connection are more likely to say they plan to pursue white collar careers, especially in the Arts, while those with unreliable connections are more likely to be interested in blue collar professions, especially the military.

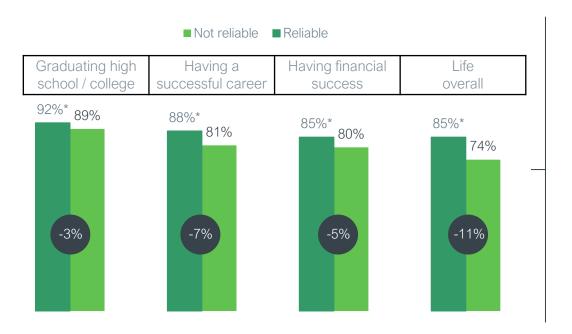


Q211: Do you feel like you could pursue your top job choice in your community? (n=1600) I Q211B: Do you feel like you could pursue your top job choice outside of your community? (n=1600) I Q212: How much do you agree or disagree with the following statements? (n=1600) I Q209: What type of full-time career are you most interested in pursuing? (n=1600) I * Indicates statistically significant difference between groups



As a result, unreliable broadband connection ultimately drives lower teen confidence both academically and professionally

Percent who are somewhat or very confident in...



Confidence to succeed in life overall has dropped 9% among all teens from 2019 (89%) to 2021 (80% - a statistically significant change.

Among those with unreliable connection, this confidence has dropped 12% in the last 2 years.

BASE: Q8: Overall, how confident are you in your ability to succeed in the following areas? (n=1600) I* Indicates statistically significant difference between groups



PART 3:

Role of broadband in the community and its impact on perceived social mobility

Teens with unreliable connection report reduced access to education and job opportunities across their communities

Percent of teens who feel people in their community have access to...



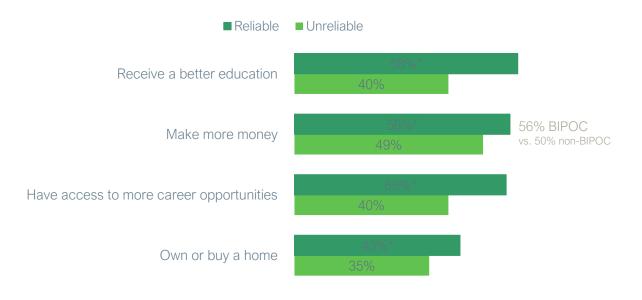
Teens with unreliable connection are more likely to plan to attend an online or out-of-state 2-year college (29% unreliable vs 16% reliable) or go into military service (12% unreliable vs 6% reliable), while those with reliable connections are more likely to plan to attend an in-state 4-year college (38% reliable vs 25% unreliable) or advanced degree (18% reliable vs 13% unreliable).

BASE: Q8: Q203: Do you feel like people your age in your community have access to the following? (n=1600) | 1 Q205: Which of the following, if any, do you plan to attend after high school? (n=1600) | * Indicates statistically significant difference between groups



Perceived social mobility is also notably lower among teens with unreliable connection

Ability of people in your community to do the following, compared to their parents



"It is possible for me to make more money than my parents."

78%* reliable 67% unreliable

"I am able to pursue a different career than my parents."

83%* reliable 71% unreliable

Q201: Do you feel like people in your community are able to do any of the following, compared to their parents? (n=1600) I Q212: How much do you agree or disagree with the following statements? (n=1600) (Top 2 box strongly/somewhat agree n=1600) I * Indicates statistically significant difference between groups



The issue is systemic, as teens with unreliable connection have lower perceived job potential across generations

Perceived access to top quality jobs among...



Teens in rural areas are notably less likely to feel adults in their communities have access to top quality jobs (49%), compared to suburban (68%) and urban (63%) teens.

Q202: Do you feel like adults in your community have access to top quality jobs? (n=1600) I Q204: Do you feel like people your age in your community have or will have access to top quality jobs after completing their education? (i.e., do people who return to your community after completing their education have the same opportunities as elsewhere?) (n=1600) I * Indicates statistically significant difference between groups



While all teens agree they would have greater opportunity elsewhere, those with unreliable connection are more likely to plan to stay in their communities

70% 72%* reliable 66% unreliable

"I would have more opportunities in life if I moved away from my community"

59% of teens say, "I feel less prepared for my next step (e.g., college, career, etc.) due to the pandemic and changes in my school environment"

Plans after college

Reliable Unreliable

Looking forward to leaving

Want to stay, but will likely need to leave

18%

22%

Non-BIPOC teens are more likely to say they "look forward to staying in their communities (21%, 16% BIPOC),

Q207: Do you plan to stay in your community during any of the following timeframes? (n=1171) I Q212: How much do you agree or disagree with the following statements? (n=1600)* Top 2 box: strongly/somewhat agree n=1600) I * Indicates statistically significant difference between groups

Want to leave, but will likely need to stay

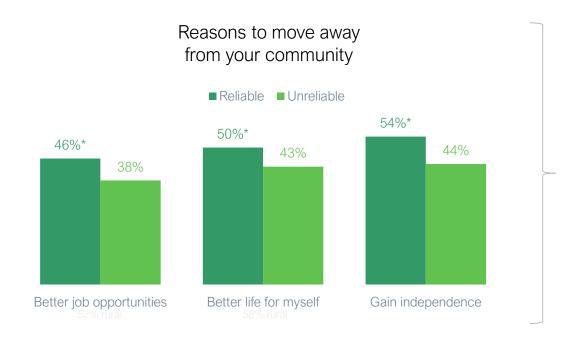
Looking forward to staying

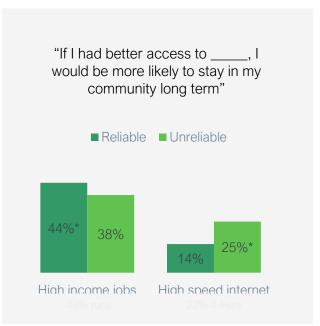


Plan to stay: 36% reliable 41% unreliable

Part 3: Role of broadband in the community and its impact on perceived social mobility

Teens who plan to leave are motivated by independence and advancement – though greater connectivity could motivate those with unreliable connections to stay





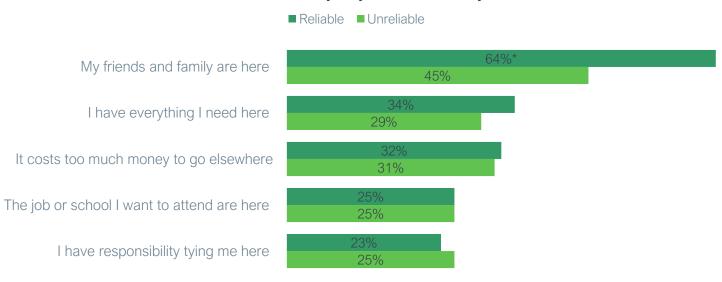
Q208: Why do you plan to move away from your community? (n=1066) I Q208b: Fill in the blank in the follow sentence: "If I had better access to ______, I would be more likely to stay in my community long term." (n=1500) I "Indicates statistically significant difference between groups



Part 3: Role of broadband in the community and its impact on perceived social mobility

On the other hand, community is what keeps teens who plan to stay close to home

Reasons to stay in your community



Q208a: Why do you plan to stay in your community? (n=1100) I* Indicates statistically significant difference between groups



57% 4-Hers

Staying home comes at less professional cost today, as the pandemic opens doors for career aspirations without relocation – with remote work particularly appealing to teens with unreliable broadband

67% G9% reliable 64% unreliable

"Career success today is more about accessing information than being in an office" 52% | 50% reliable 57%* unreliable

"I am more likely to stay in my community after this pandemic because it is now easier to learn and work remotely" "My top career choice would be to work a remote job that allowed me to stay in my

community"

Q212: How much do you agree or disagree with the following statements? (n=1600) | * Indicates statistically significant difference between groups



Ultimately, teens agree broadband access is critical for leveling the playing field in both pandemic recovery and future economic development of their communities

68% reliable 65% unreliable

"If my community had better access to digital skills, people here would make more money" 64% $\left.\right\}$ 66% reliable 61% unreliable

"Access to broadband could have helped my community economically during the pandemic"

70% rural

63% | 64% reliable 61% unreliable

"If my community had better access to high-speed internet, people here would make more money"

Q213: How much do you agree or disagree with the following statements? During the pandemic... (n=1600) I Q213: How much do you agree or disagree with the following statements? (n=1600))

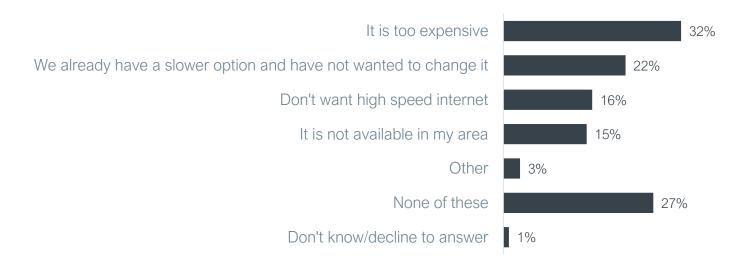


Appendix

Part 4: Appendix

Cost of high-speed internet is a big reason why teens don't have access at home

Reasons you don't have high speed internet at home



Q102: Which of the following, if any, are reasons you don't have high-speed Internet connectivity at your home? (n=1600)



Part 4: Appendix

If I had better access to_____

"If I had better access to _____, I would be more likely to stay in my community long term"

		Total	Reliable	Unreliable
	High income jobs	42%	44%	38%
3	High quality of life	37%	37%	35%
	High quality jobs	35%	36%	33%
	Top quality education	26%	26%	26%
	High speed internet	17%	14%	25%
200	Networking or professional communities	16%	16%	16%
	None of these	17%	18%	15%

Q208b: Fill in the blank in the follow sentence: "If I had better access to ______, I would be more likely to stay in my community long term." (n=1600)



Thank You.

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