Connected℠
A CONNECTED NATION Initiative

Addressing Your Community's Unique Needs

Ellis County, Texas
Connected Survey Results

CONNECTED NATION℠

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Household Survey Results

Ellis County, Texas

CONNECTED NATION

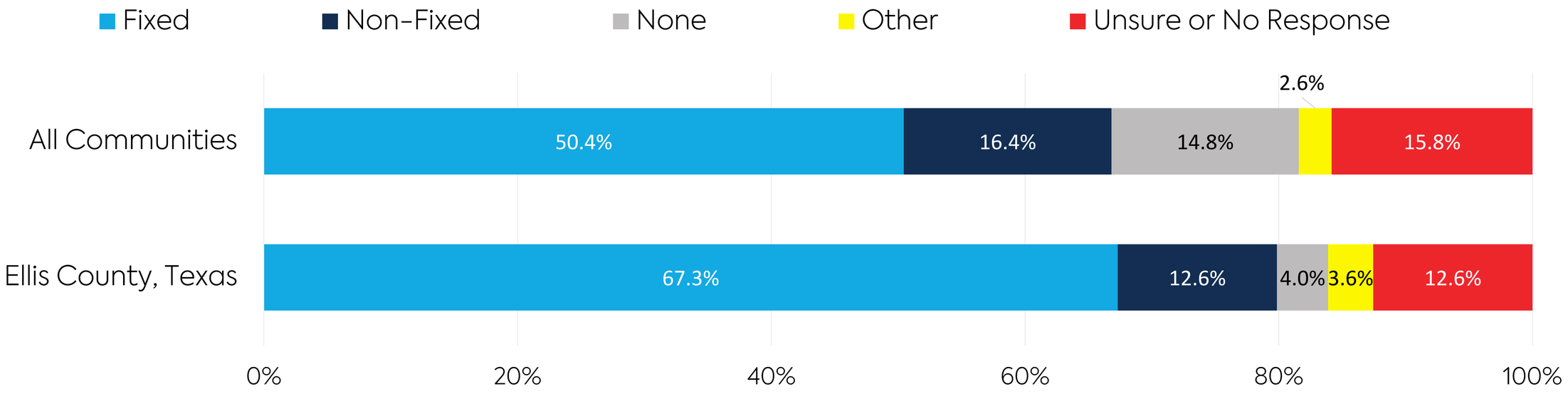
Household Survey Results

Households, and the residents within them, are the lifeblood of a community. Over the past 20 years, technology has transformed how residents interact with their communities, access critical services, and earn a living. A connection to the internet at home is the single-most critical step that families take to participate in the digital economy. Understanding how residents are connected, the barriers to subscribing to internet service if it is available, and the use of that connection is critical to ensuring all homes in the community are connected, and that those connections are leveraged to improve quality of life. The data below show the connectivity and use of technology among households and residents in Ellis County, Texas, compared to those in other communities participating in Connected Nation's Connected program. These data should be used to make informed decisions and implement solutions for improving connectivity. This information was gathered through surveys distributed in the community.

Data from Ellis County represent survey responses collected between August 2022 and December 2022. During this time, 423 Ellis County households responded to the survey, with some households responding more than once. Data from all Connected communities represent survey responses collected between January 1, 2020, and November 30, 2022. As more households and communities participate in the Connected program, these figures are likely to change.

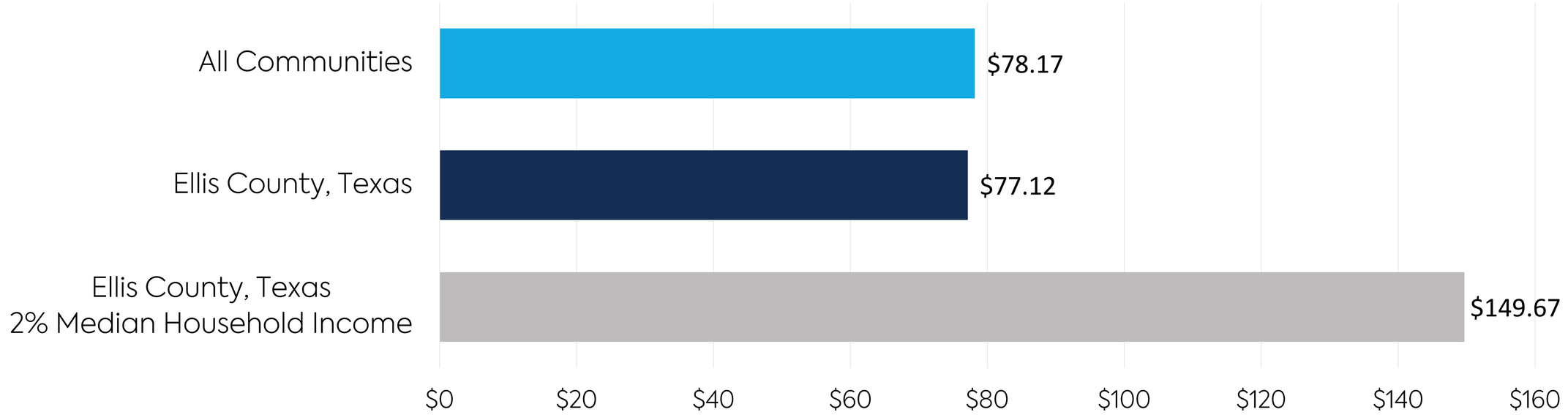
Broadband Adoption

This chart shows the percentage of households that subscribe to various types of broadband services. Fixed connections are those provided by cable, DSL, fiber, or fixed wireless technology, while non-fixed connections include dial-up, satellite, and mobile-only services. These non-fixed types of internet services, while providing basic access, can often be plagued by connection latency, have costly monthly data plans, or can be impacted by weather, terrain, large expanses of open water, and other environmental factors. This chart shows responses from those who know the type of internet service to which they subscribe.



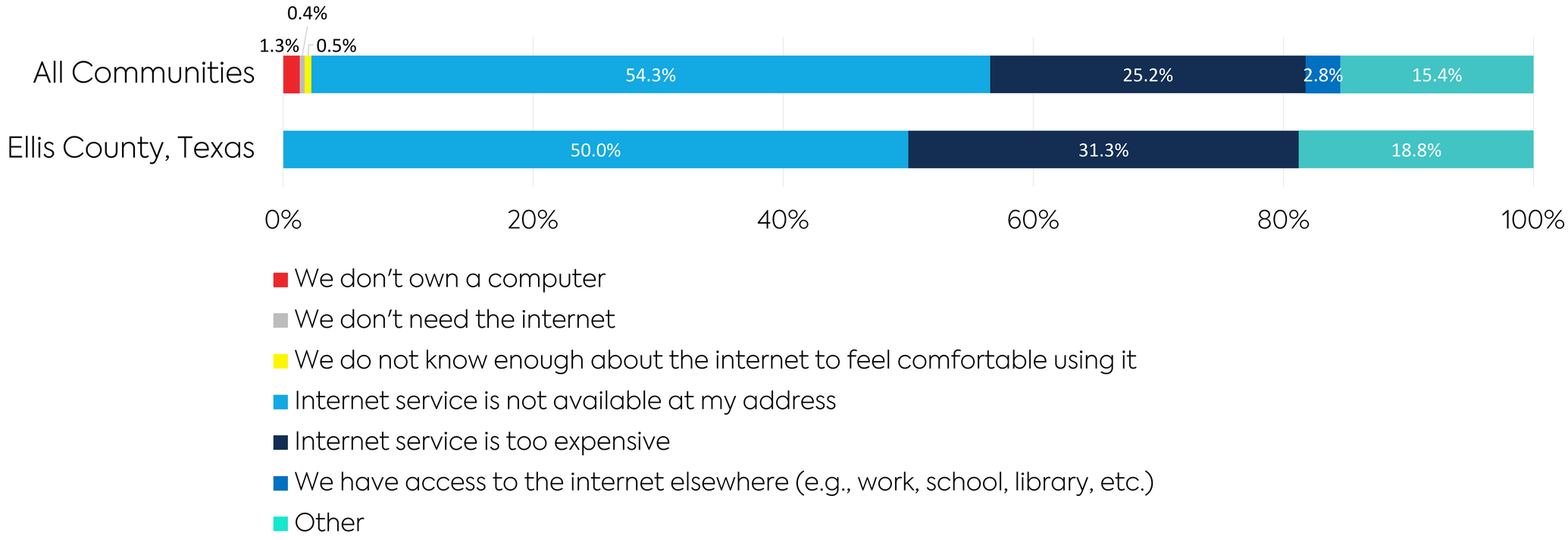
Average Monthly Cost of Internet Service

The cost of service can prevent some residents from getting access to the internet. This chart shows the average reported monthly cost of service among households in the community, compared to those in other Connected communities. Two percent of household income is the benchmark generally used when determining the affordability of home internet service. However, it is important to remember that this benchmark is applied to the community's median income. Half of the households in the community earn less than the median income and thus may find broadband service unaffordable at this price.



Barriers to Broadband Adoption

Households without an internet connection face many barriers to obtaining connectivity. In some cases, the cost of service may be out of reach. In others, the physical infrastructure may not be available. This chart shows the primary reason households without a connection do not or cannot subscribe to broadband service, and compares households in the community with those across other participating communities.

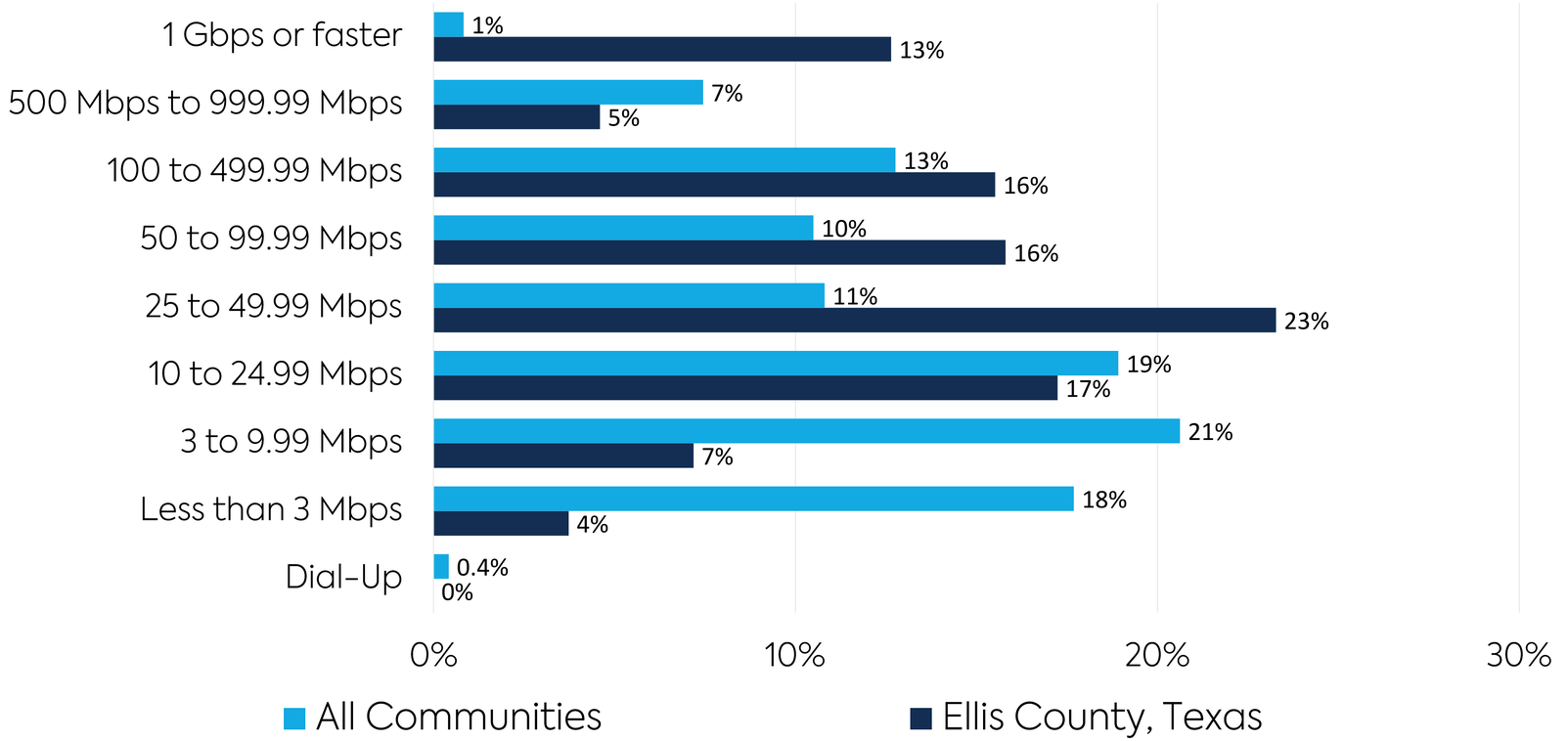


Download Speeds

Connection speeds can have a major impact on how the internet is used. This chart shows the average reported download speed among households in the community, compared to those in other Connected communities.

In Ellis County, 72% of households* subscribe to download speeds faster than 25 Mbps.

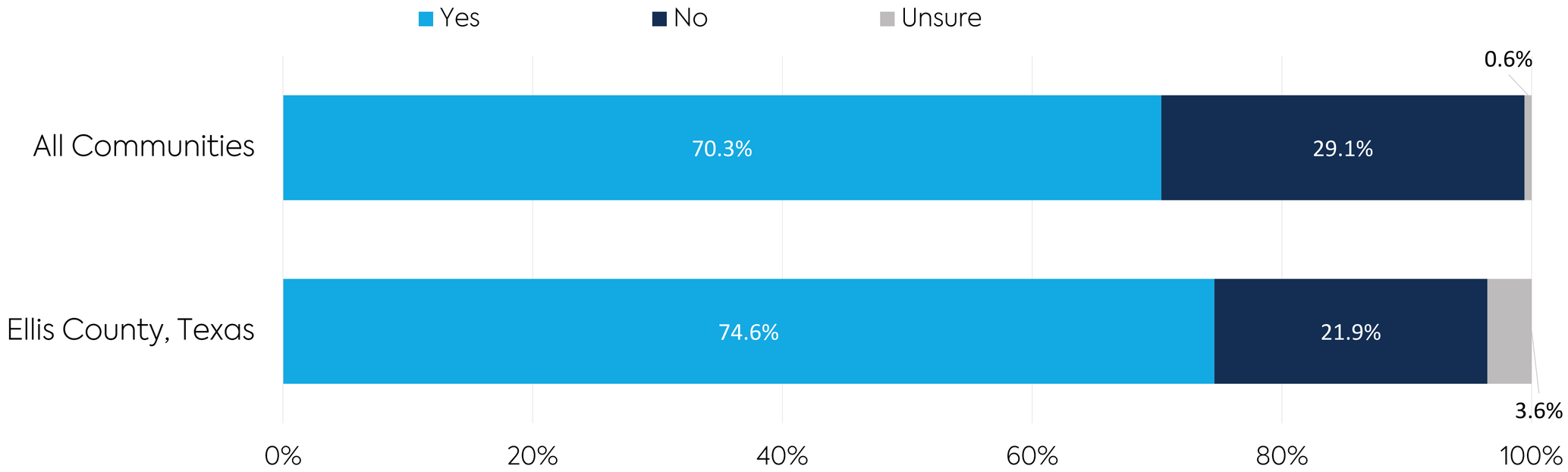
On average, Ellis County households reported an average download speed of 231.6 Mbps.



*Among households that subscribe to home internet service and either know their download speeds or took a speed test as part of this survey.

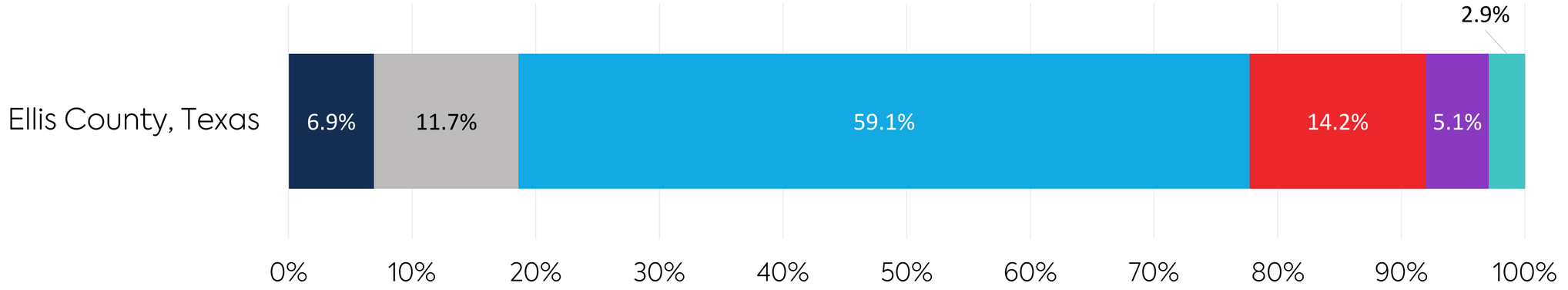
Mobile Usage

Mobile broadband is different from fixed internet service in that it is designed for continuous use on the go. Having both fixed and mobile broadband connections is critical for households to ensure voice and data options are available to users as needed or desired. This chart shows the percentage of households in the community that have a mobile broadband plan and device, compared to other communities.



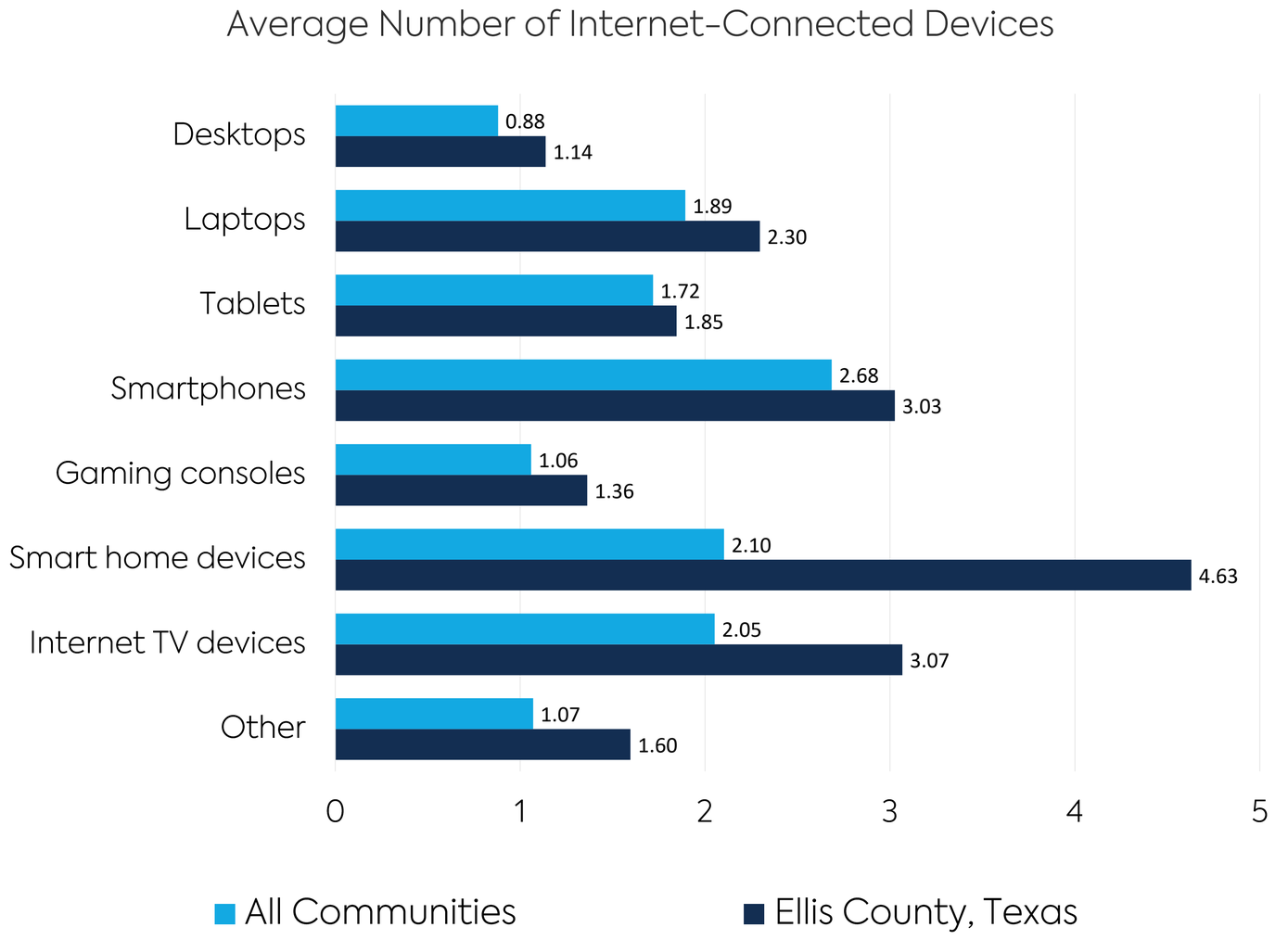
How Mobile Internet is Used

Some households use their mobile internet service as a backup or supplemental way to go online. For others, mobile internet service is the primary (or only) way to access the internet at home. This chart shows how households that subscribe to mobile service use those mobile internet subscriptions.



Devices in the Home

In the early days of the internet, a desktop computer was the primary, and virtually the only, way of connecting to the internet. However, with the rise of Wi-Fi, mobile broadband, Bluetooth, and many other revolutionary technologies, residents can access the internet through multiple devices. While a wide variety of devices are available to connect to the internet, sometimes the lack of an internet-enabled device is cited as a barrier to home broadband adoption. This chart shows the average number of internet-enabled devices in households in the community, compared to homes in other Connected communities.



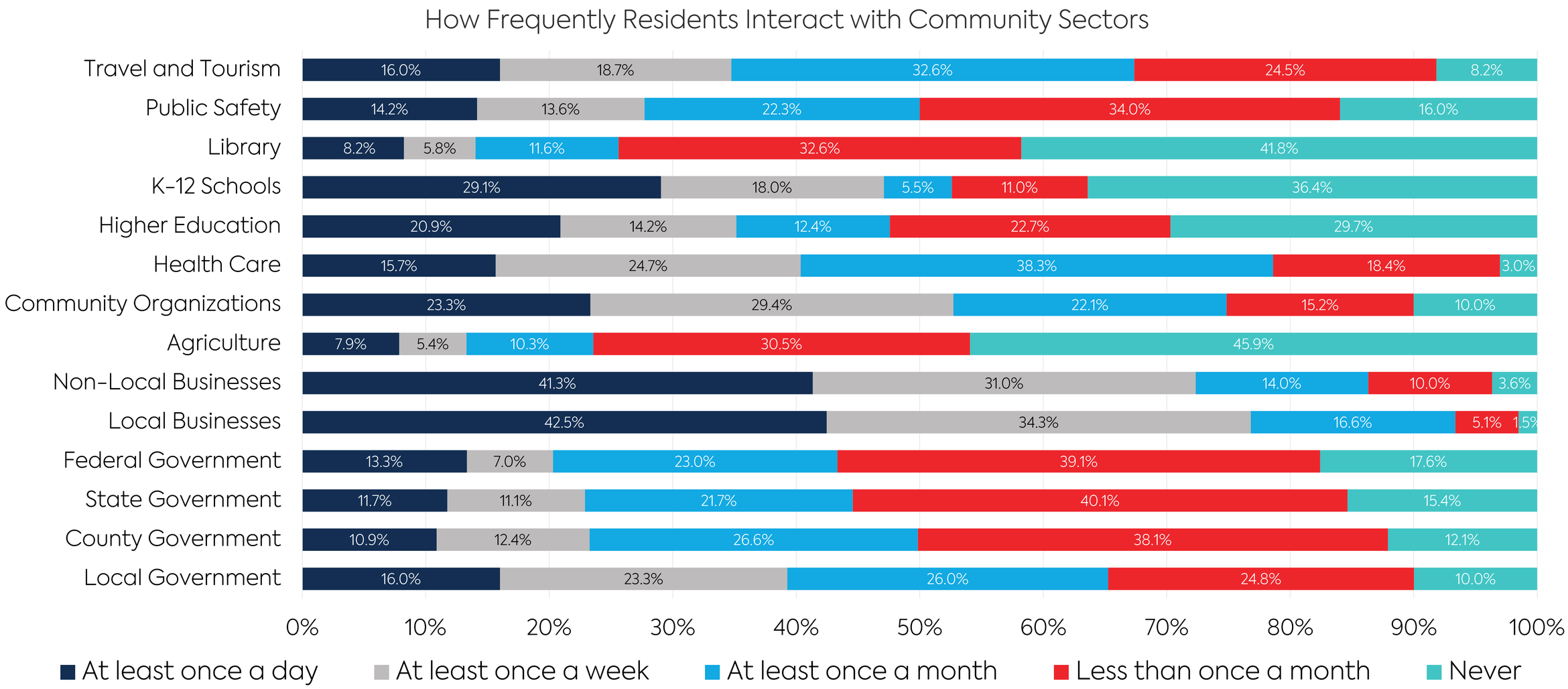
Digital Interactions

The internet has moved from an occasional tool to one of the principal ways we communicate, perform research, work, or participate in leisure activities. Measuring the digital interaction among residents and different community sectors allows a glimpse into the importance of the internet in their lives. More importantly, this analysis can identify the common traits among those who use the internet less frequently and develop solutions for including them in the digital ecosystem.

This digital interaction information explores how residents are (or are not) digitally interacting with various community institutions. This information is helpful for guiding and developing the digital strategy and online presence of these entities. The chart on the following page shows the average frequency with which residents digitally interact with different community sectors.

While digital interaction is a personal choice, for those completely without access to the internet, those with restricted access, those who cannot afford a connection, those without the skills to use the internet, and those with limited awareness of the opportunities afforded by the internet, their chance to make such a personal choice is severely limited.

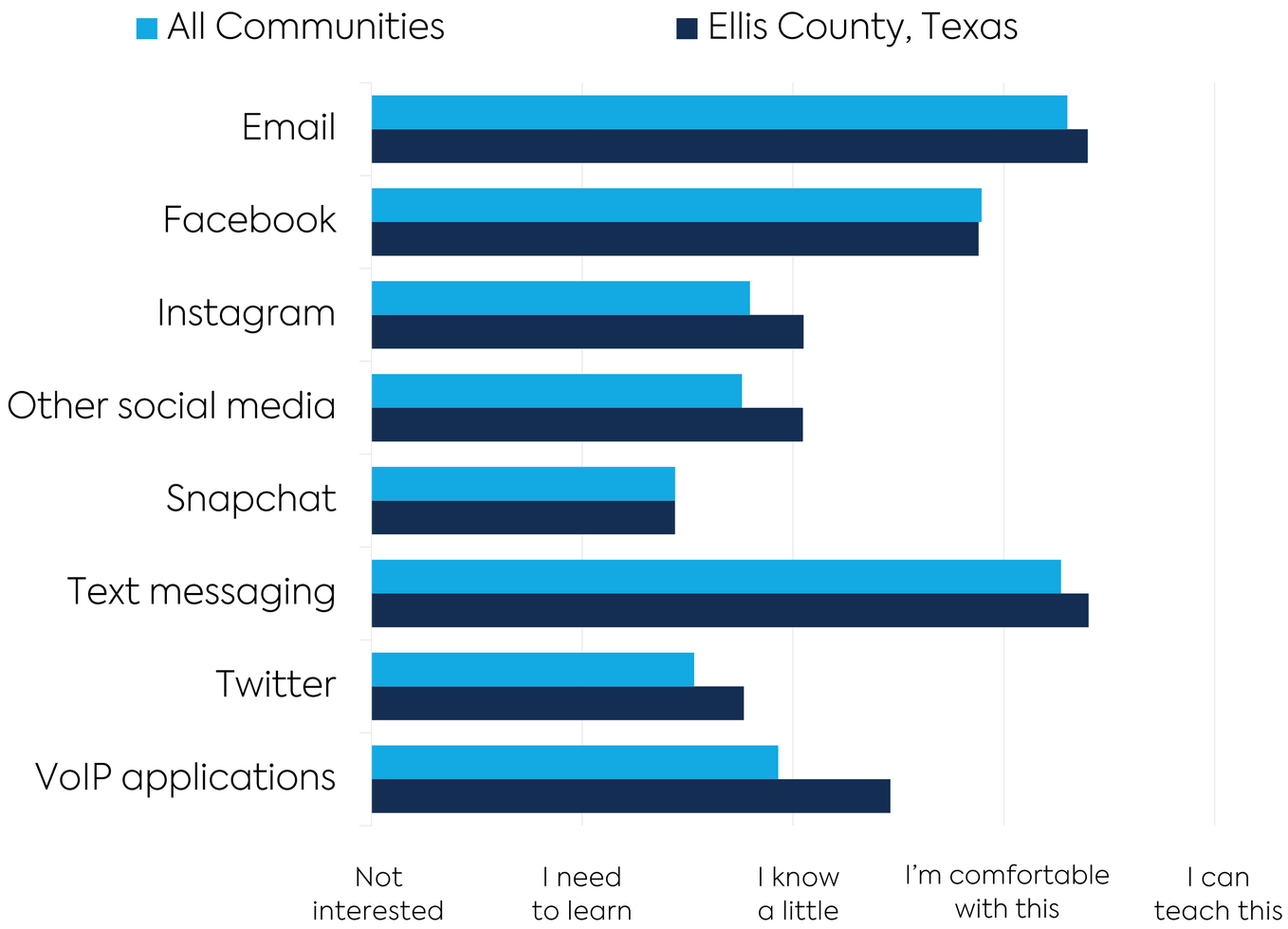
Digital Interactions (Continued)



Digital Literacy: Communications

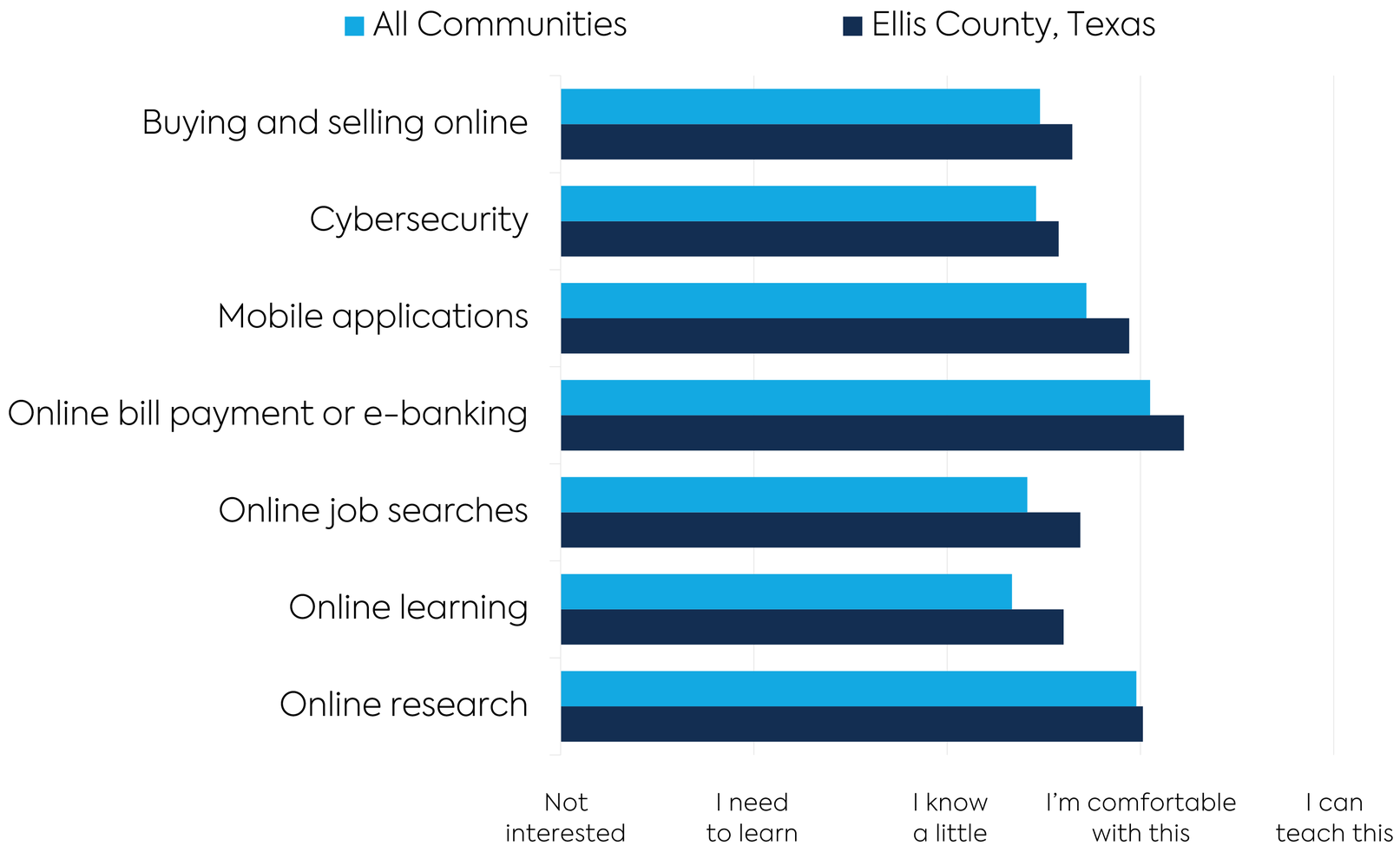
Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills. Technology skills are critical for competing in the global, digital economy, and for fully leveraging internet connectivity for improving quality of life.

This chart compares the average self-reported digital literacy of residents in the community to those in other Connected communities when it comes to using various communications platforms.



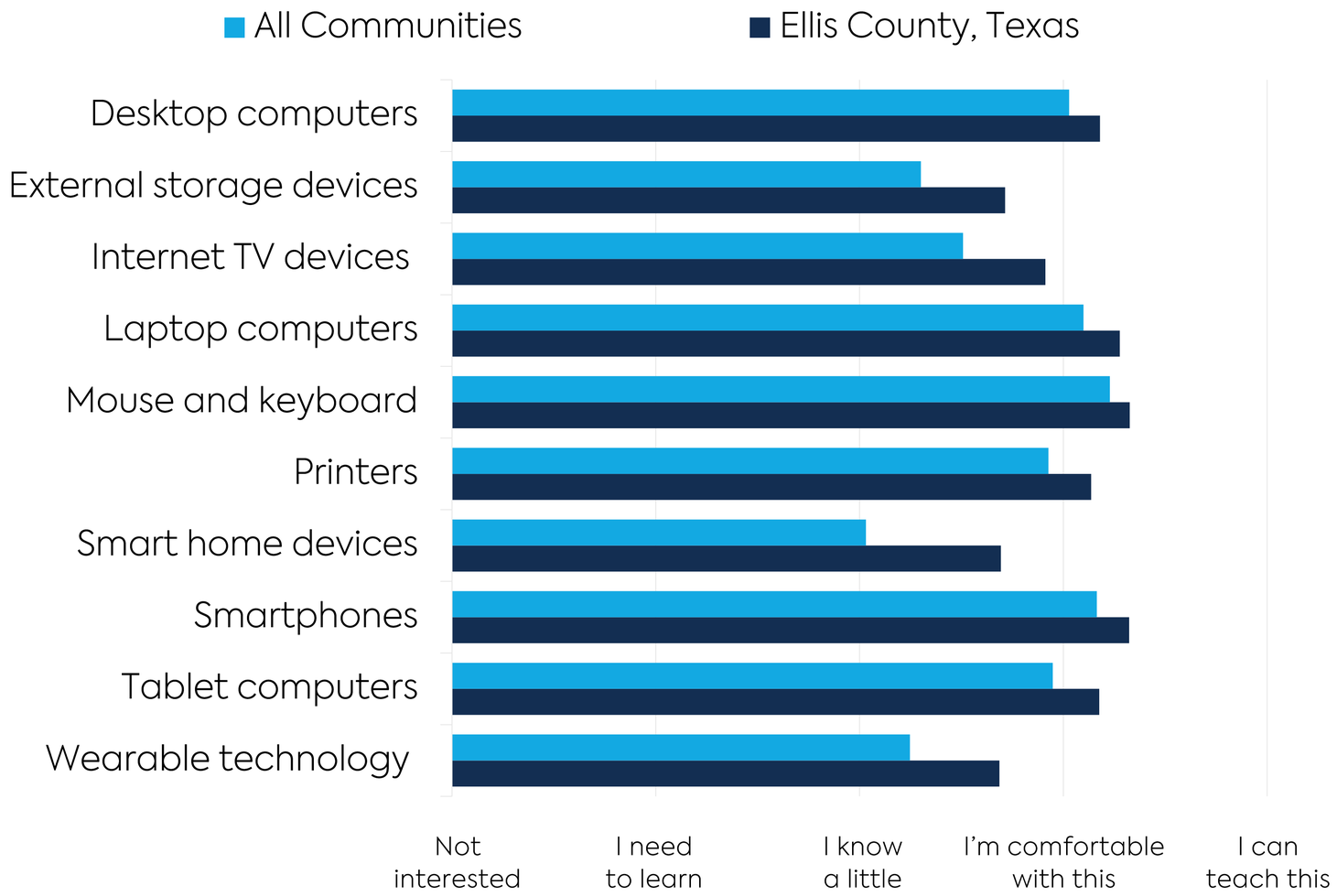
Digital Literacy: Online Activities

This chart compares the average self-reported digital literacy of residents in the community to households in other communities in terms of their online activities.



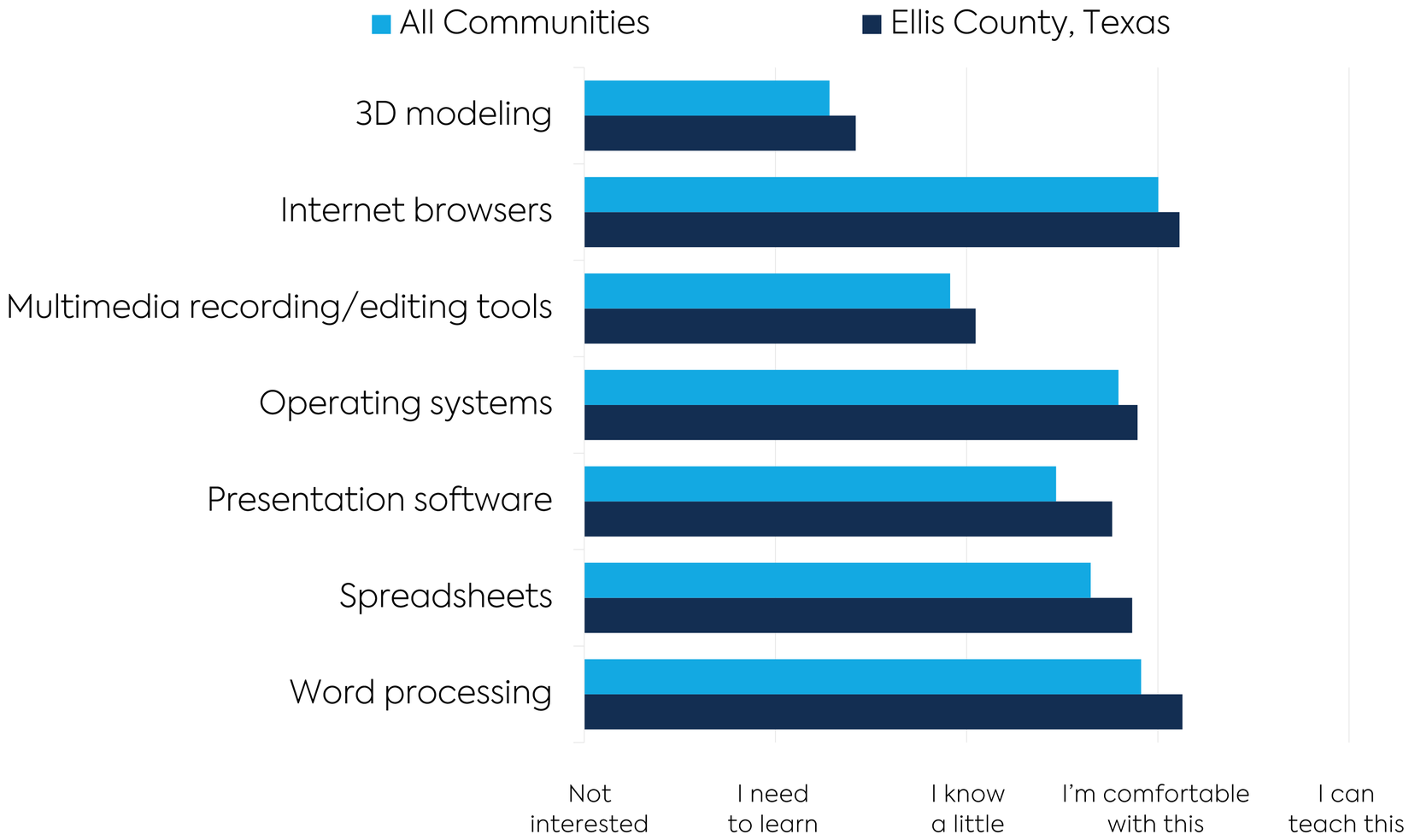
Digital Literacy: Hardware

This chart compares the average self-reported digital literacy of residents in the community to households in other communities when using various types of hardware.



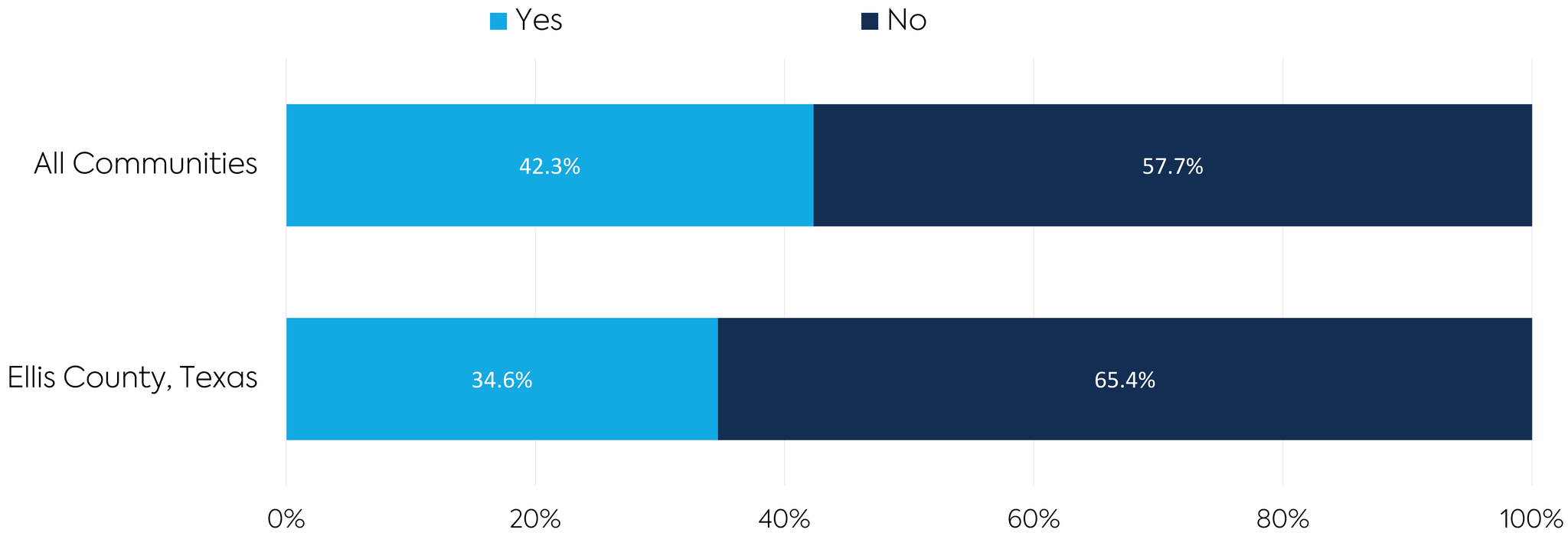
Digital Literacy: Software

This chart compares the average self-reported digital literacy of residents in the community to households in other communities in terms of using various software applications.



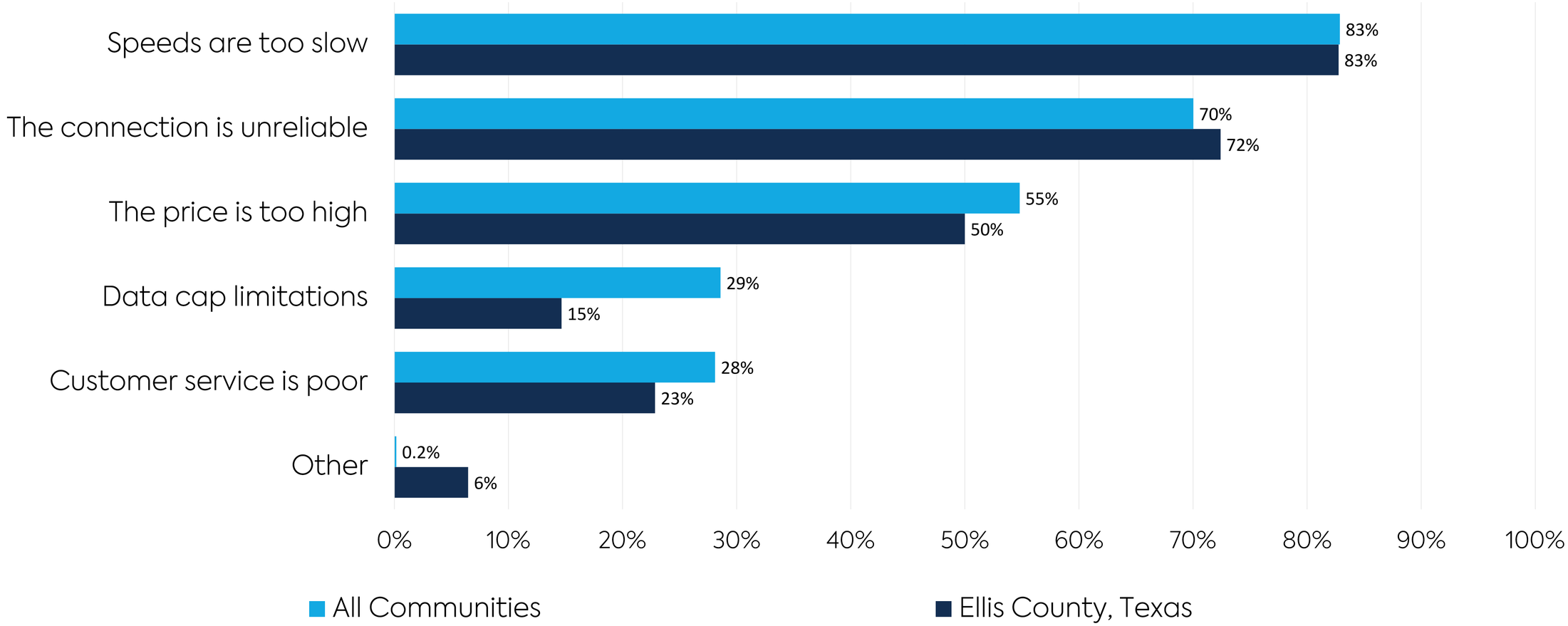
Service Satisfaction

Competition provides residents with choices for service, allowing them the ability to switch providers if their current service does not meet their needs. This chart shows the percentage of households that state their internet service meets or does not meet their needs.



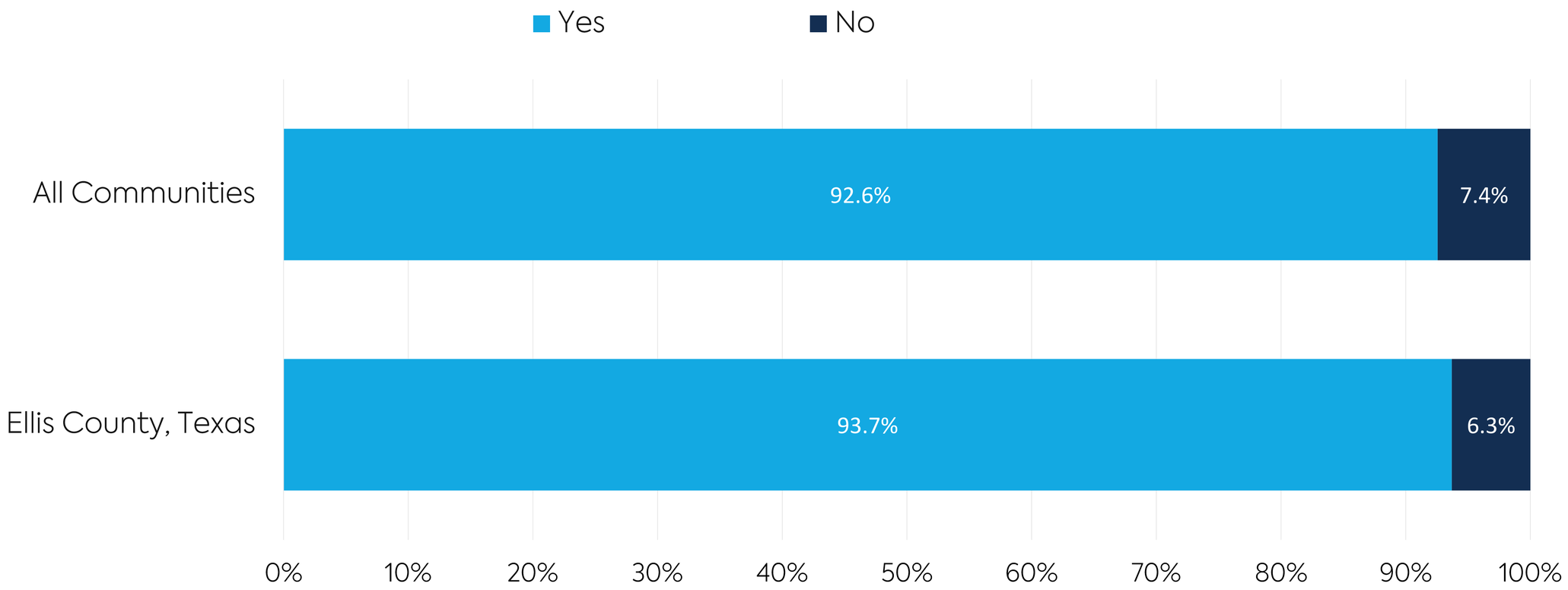
Reasons for Dissatisfaction

This chart shows the various reasons why local households report being dissatisfied with their current internet service.



Interest in Additional Internet Options

This chart shows the percentage of households that would like to have improved or additional options for home internet service.



Agriculture
Survey Results

Ellis County, Texas

CONNECTED NATION

Agriculture Survey Results

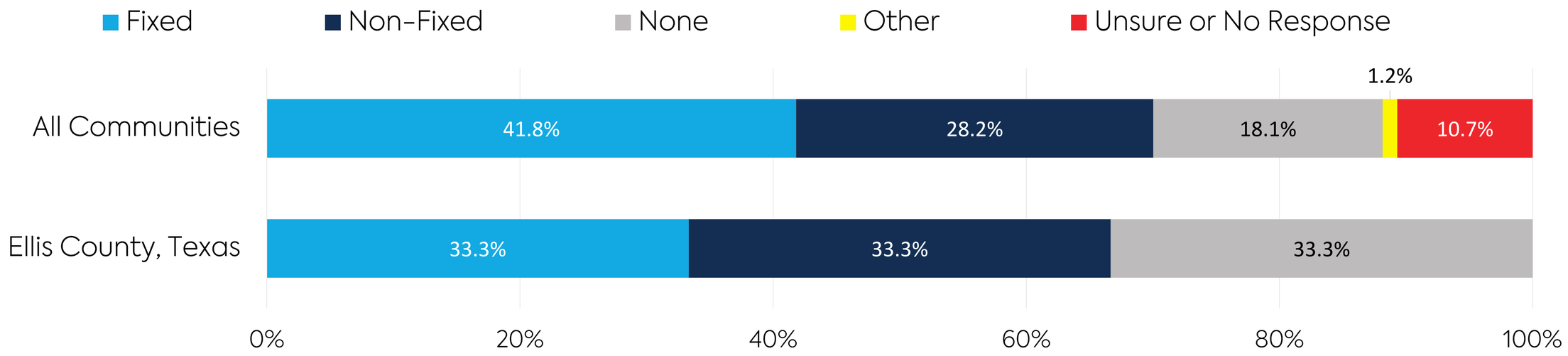
Agriculture, in its many forms, is a critical industry and economic driver for many communities and regions. Internet-connected technology allows agricultural producers to increase yields, reduce expenditures, and access best practices and information impacting the production of America's food. However, producers and value-added agricultural industries are generally located in the most rural areas — areas that are most often disconnected from the global economy. For agricultural producers fortunate enough to have an internet connection, their use of technology has transformed the way they work and allows them to contribute to the economic activity of their communities.

The data below show the connectivity and use of technology among agricultural producers in the community, compared to those in other communities participating in Connected Nation's Connected program. These data should be used to make informed decisions and implement solutions for improving connectivity.

Data from Ellis County represent survey responses collected between August 2022 and December 2022. During this time, three Ellis County facilities from the agricultural sector responded. Data from all Connected communities represent survey responses collected between January 1, 2020, and November 30, 2022. As more communities participate in the Connected program, these figures are likely to change.

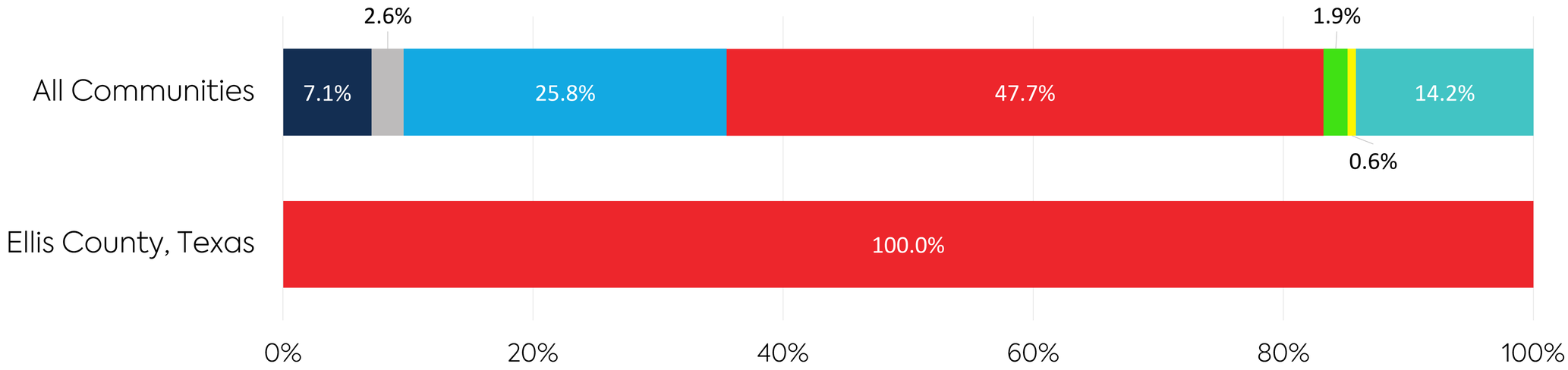
Broadband Adoption in the Agriculture Sector

This chart shows the percentage of agricultural producers that subscribe to various types of broadband services, or that are without a connection. Fixed connections are those provided by cable, DSL, fiber, or fixed wireless technology, while non-fixed connections include dial-up, satellite, and mobile-only services. These types of internet services, while providing basic access, can often be plagued by connection latency, have costly monthly data plans, or can be impacted by weather, terrain, large expanses of open water, and other environmental factors.



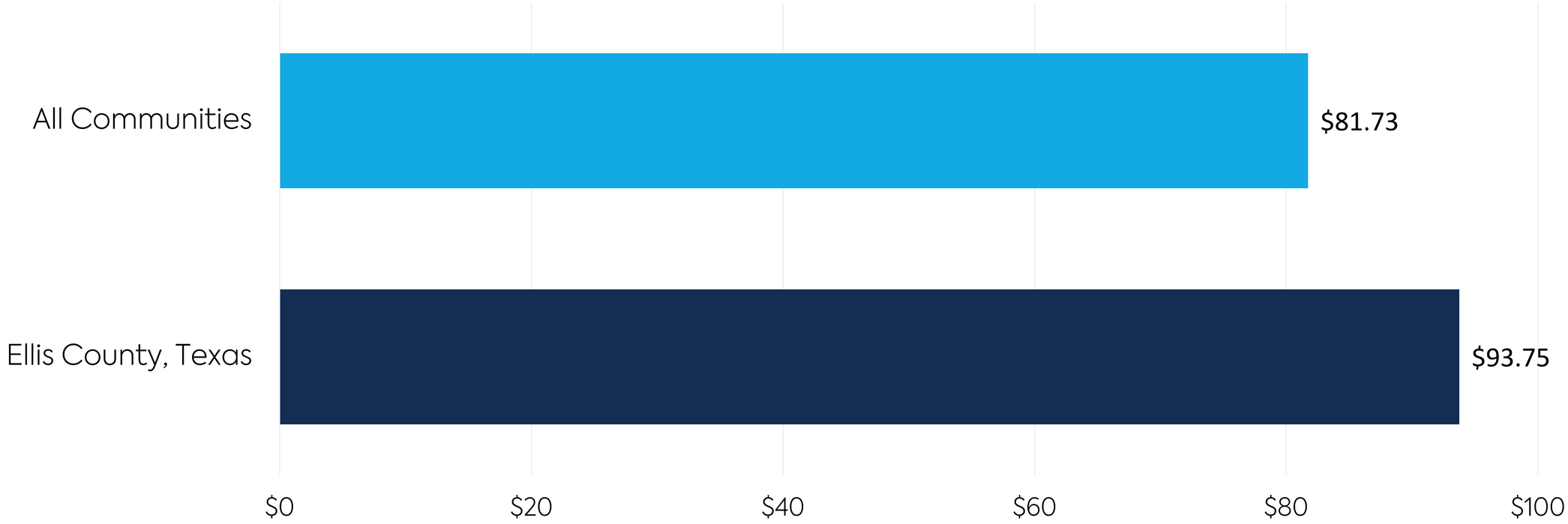
Barriers to Agricultural Broadband Adoption

This chart shows the primary reason agricultural producers do not or cannot subscribe to broadband. The chart compares agriculture operations in the community to those across other participating communities.



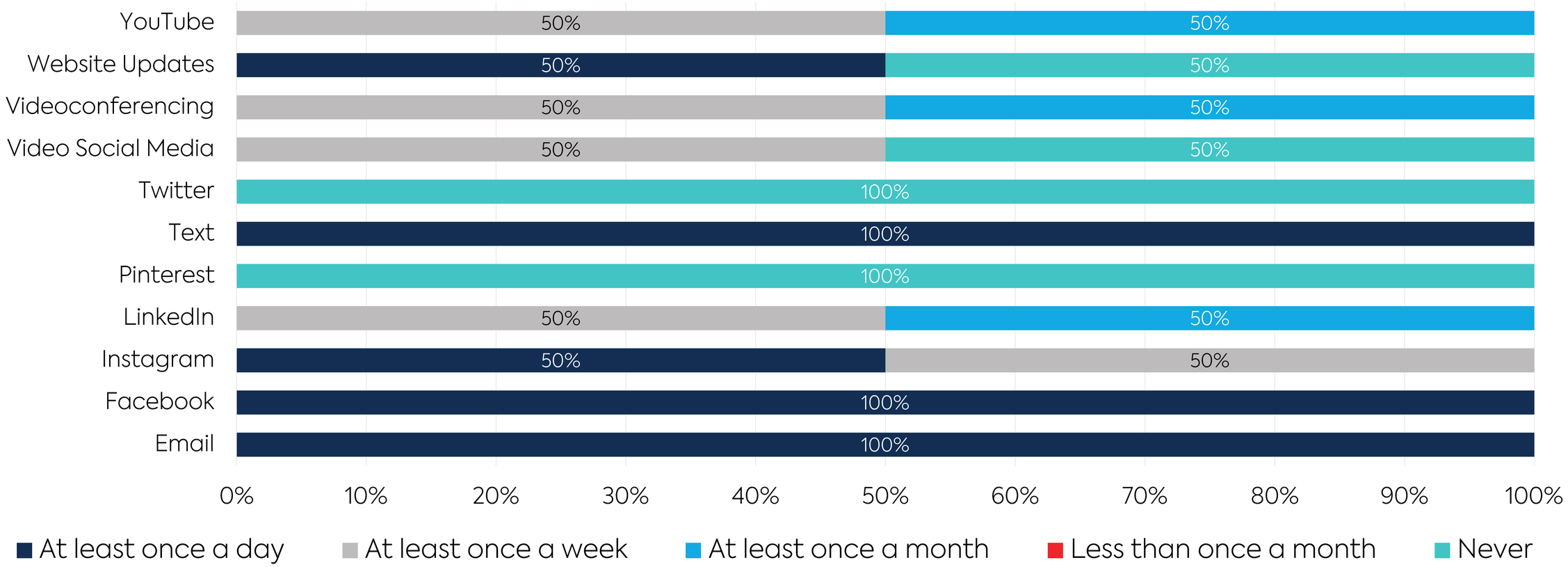
Average Monthly Cost of Internet Service in the Agriculture Sector

The cost of service can prevent some agricultural facilities from getting access to the internet. This chart shows the average reported monthly cost of service among farms in the community, compared to those in other Connected communities.



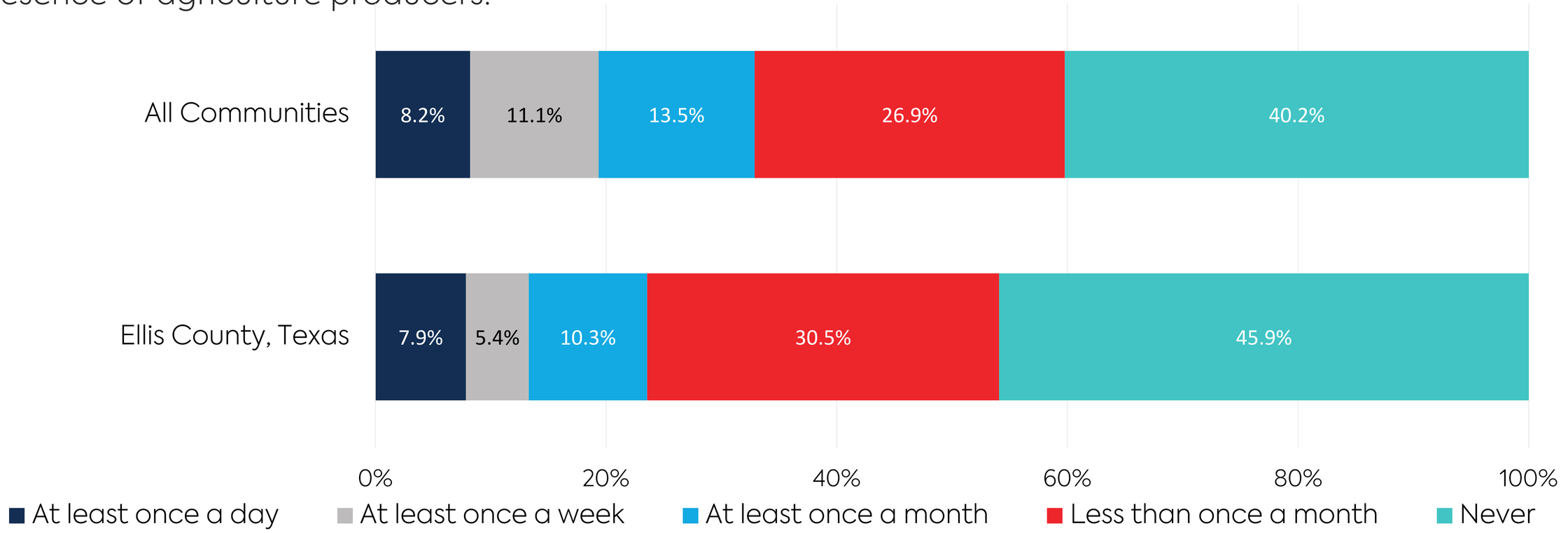
Digital Communications

Technology, coupled with an internet connection, provides myriad ways to digitally interact with the world or even those in one's own community. This chart shows the average frequency with which agricultural producers use digital communications tools.



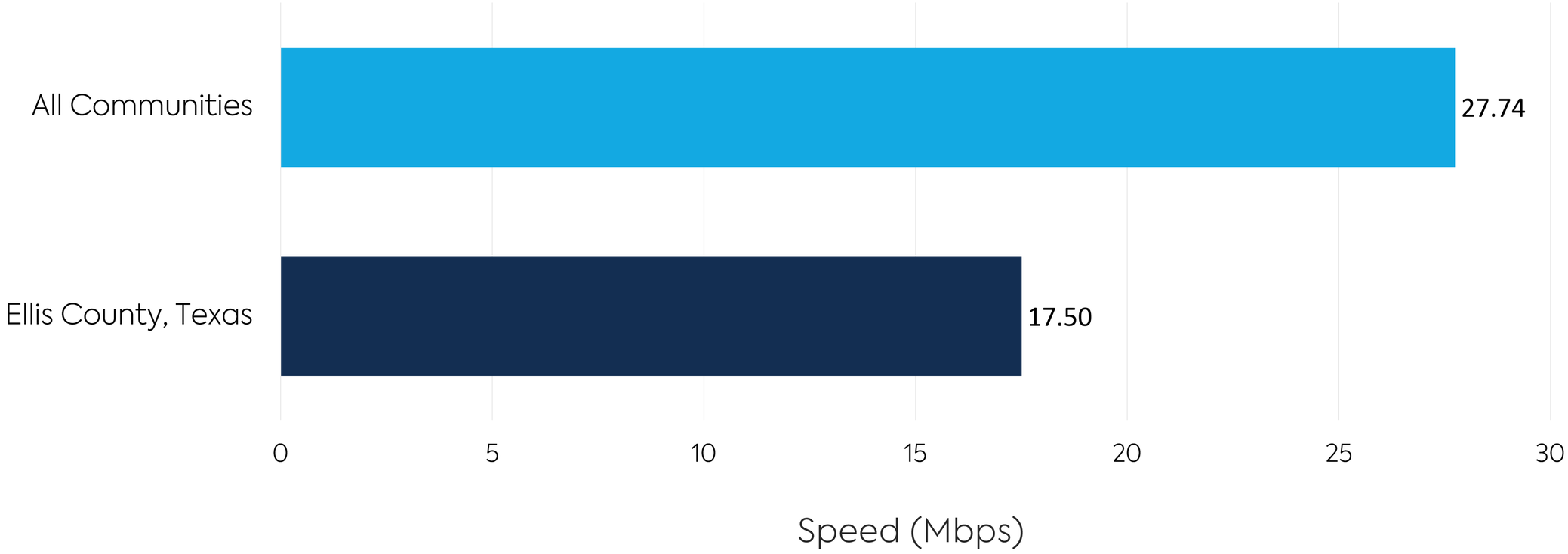
Digital Interaction

This chart shows the frequency with which residents in the community report that they digitally interact with entities in the agriculture sector. Examining the digital interaction of residents, and the digital communications tools used by agriculture producers, can help identify ways to increase the online presence of agriculture producers.



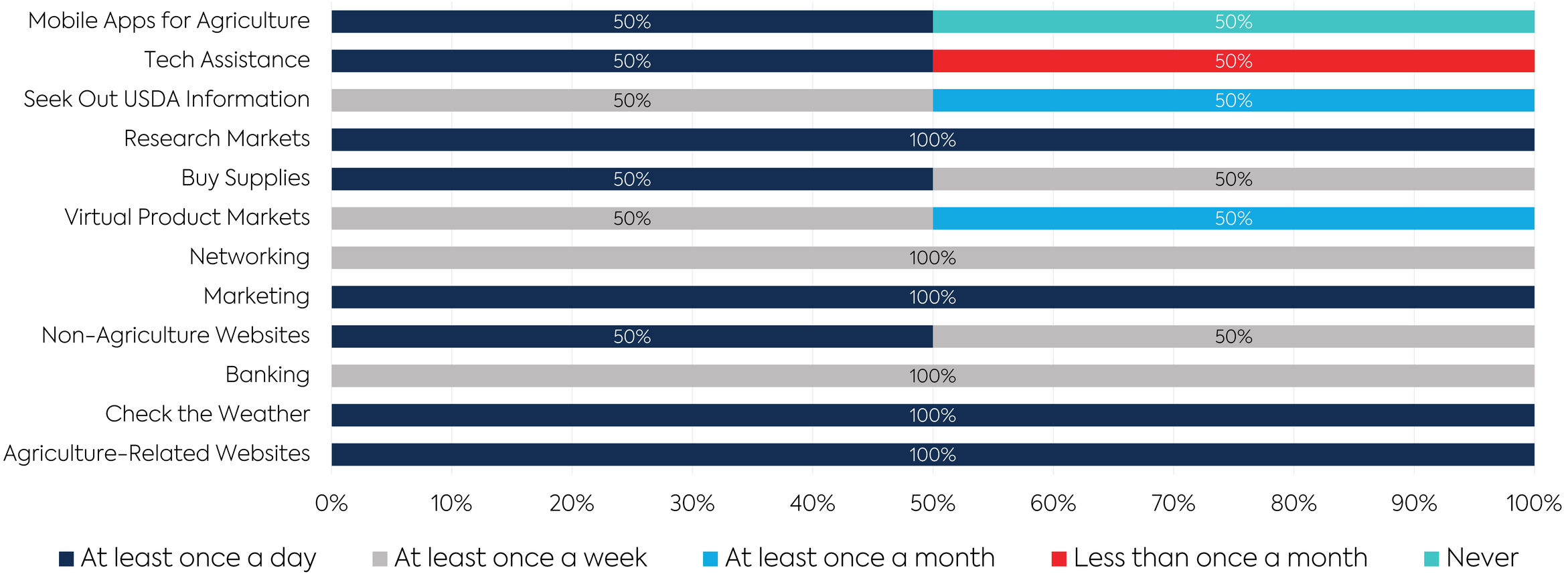
Agriculture Sector Download Speeds

Connection speeds can have a major impact on how the internet is used. This chart shows the average reported download speed among internet-connected facilities in the community's agriculture sector, compared to those in other Connected communities.



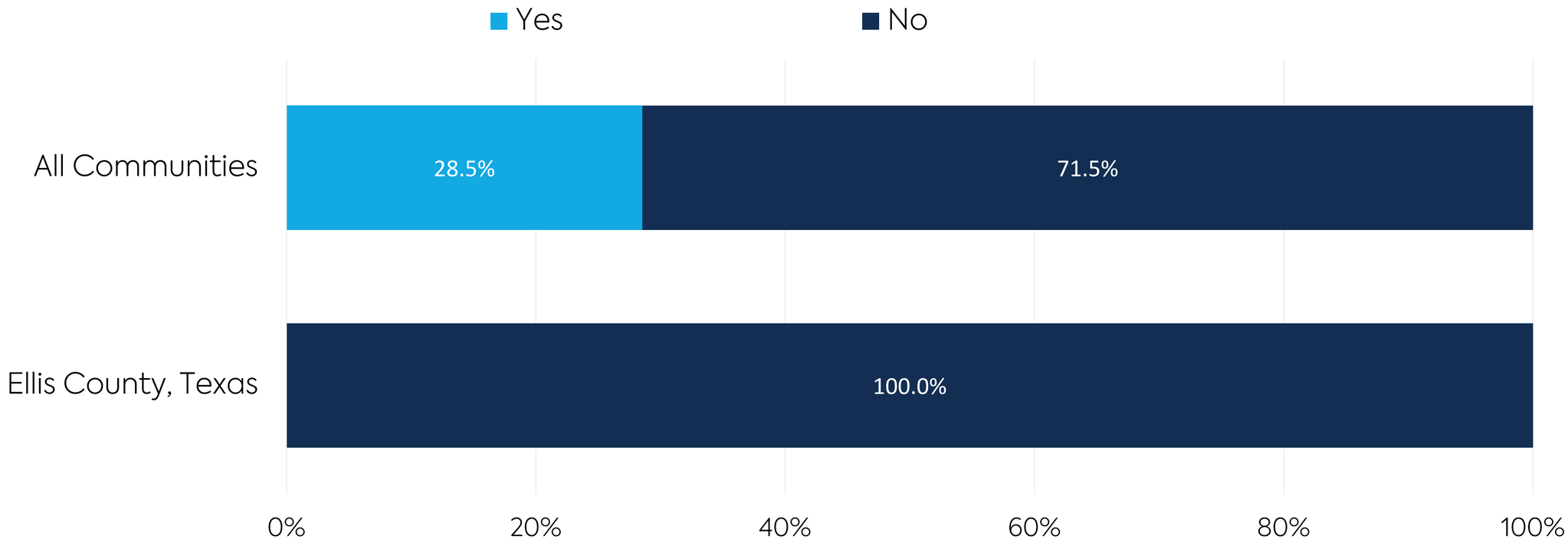
Online Activity in the Agriculture Sector

An internet connection provides unparalleled access to a host of resources and information. This chart shows how frequently agricultural producers use these agriculture-related online activities.



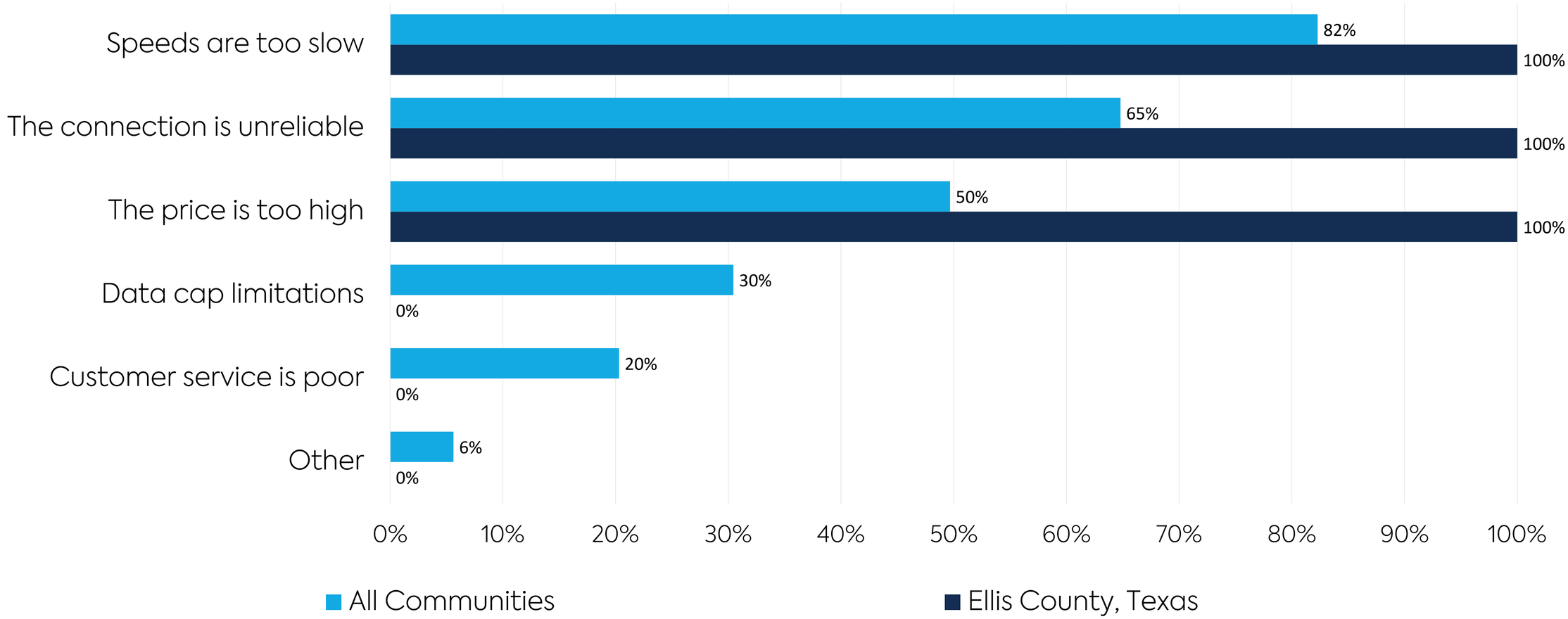
Satisfaction in the Agriculture Sector

Competition provides communities with choices for service, allowing them the ability to switch providers if their current service does not meet their needs. This chart shows the percentage of agricultural producers who state their internet service meets or does not meet their needs.



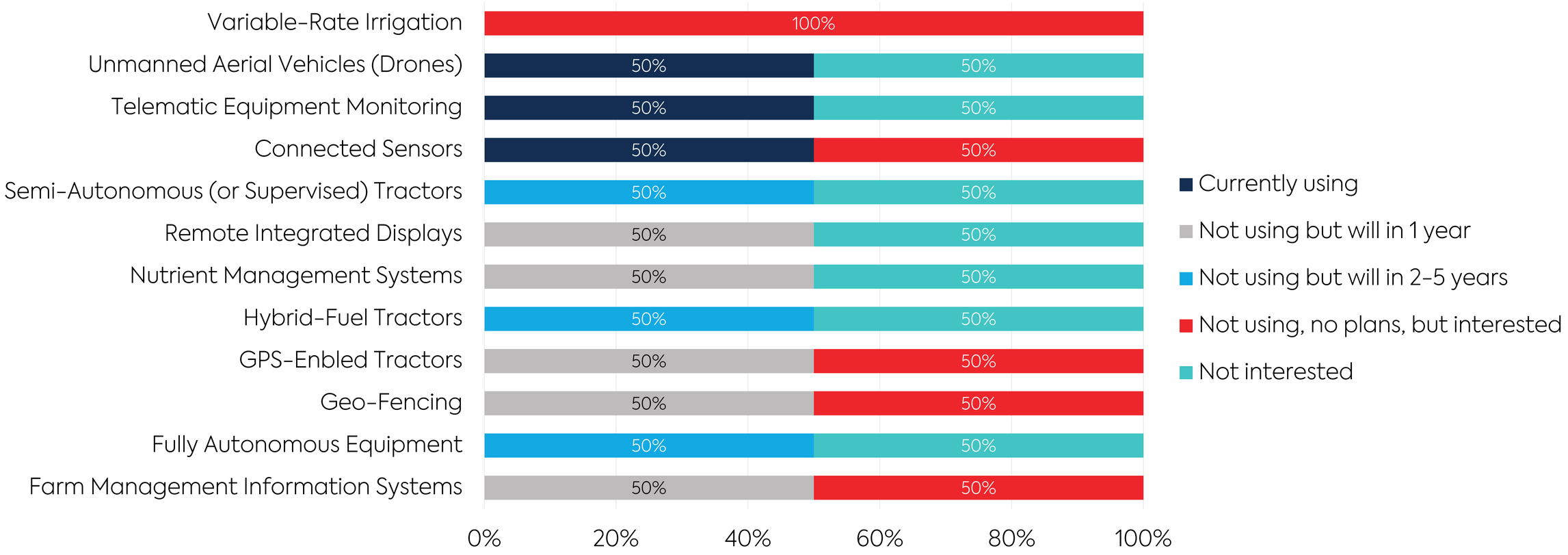
Reasons for Dissatisfaction

This chart shows the various reasons why local agricultural producers report being dissatisfied with their current internet service.



Agriculture Technology Applications

Twenty-first century agriculture operations have many opportunities to use technology to improve efficiency and increase production. This chart shows the usage and interest in the variety of technology-enabled equipment among agricultural producers.



Business Survey Results

Ellis County, Texas

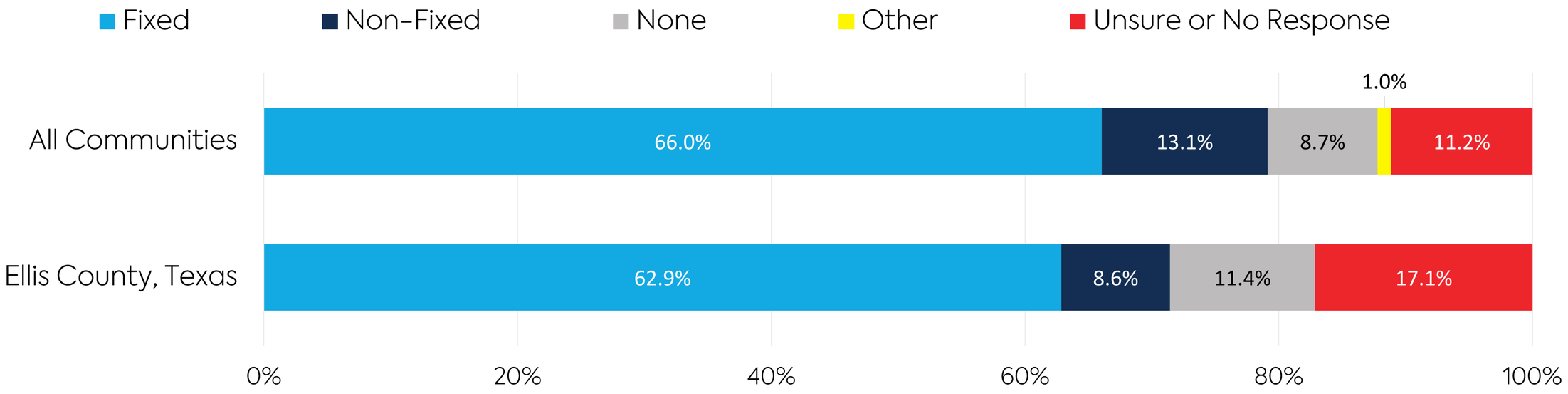
Business Survey Results

Positive economic activity in a community depends on the success of its private-sector businesses to develop new and innovative products, provide services, attract investment, and create jobs. Small-business growth, entrepreneurship, and innovation are hallmarks of the American economic system. Internet connectivity — coupled with new technology, devices, and applications — is perpetuating these ideals in new and exciting ways. The data below show the connectivity and use of technology among businesses in the community, compared to those in other communities participating in Connected Nation's Connected program. These data should be used to make informed decisions and implement solutions for improving connectivity. This information was gathered through surveys distributed in the community.

Data from Ellis County represent survey responses collected between August 2022 and December 2022. During this time, 36 Ellis County businesses responded. Data from all Connected communities represent survey responses collected between January 1, 2020, and November 30, 2022. As more communities participate in the Connected program, these figures are likely to change.

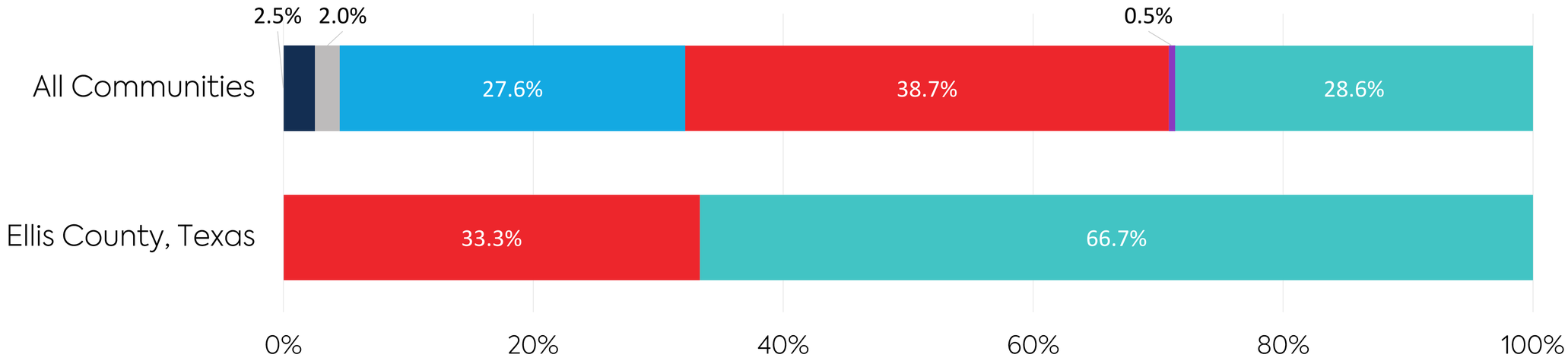
Business Broadband Adoption

This chart shows the percentage of businesses that subscribe to various types of broadband services or that are without a connection. Fixed connections are those provided by cable, DSL, fiber, or fixed wireless technology, while non-fixed connections include dial-up, satellite, and mobile-only services. These types of internet services, while providing basic access, can often be plagued by connection latency, have costly monthly data plans, or can be impacted by weather, terrain, large expanses of open water, and other environmental factors.



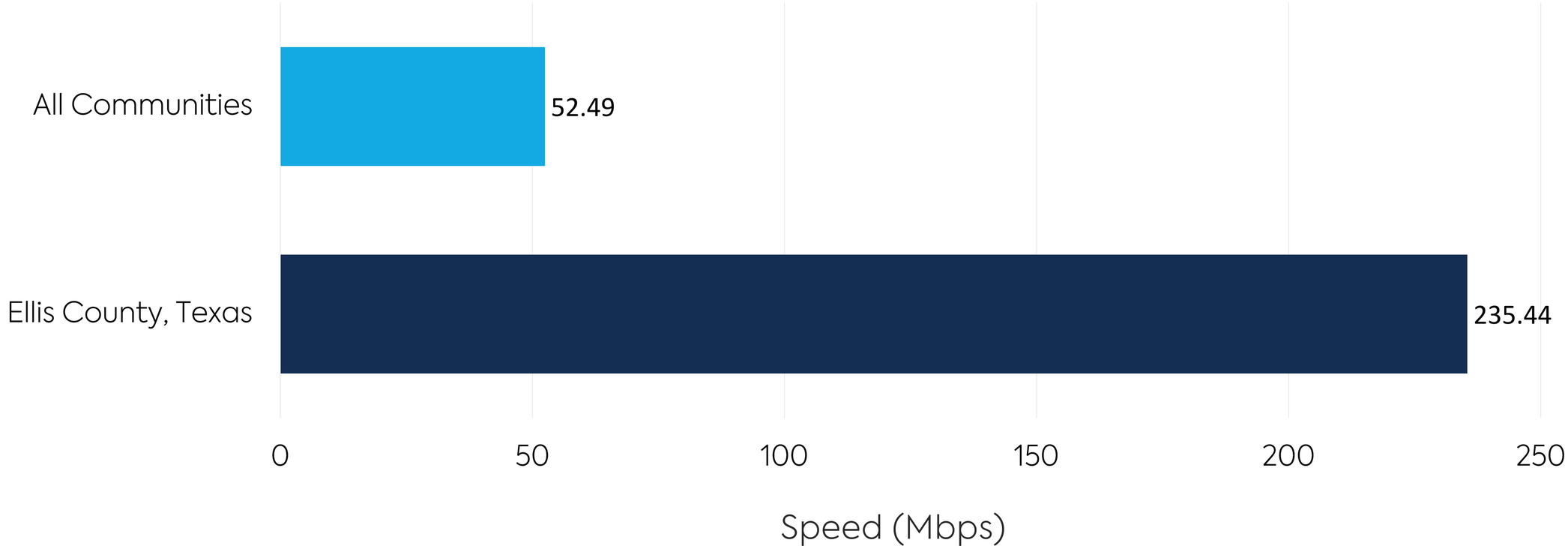
Barriers to Business Broadband Adoption

This chart shows the primary reason businesses do not or cannot subscribe to broadband. The chart compares businesses in the community to those across other participating communities.



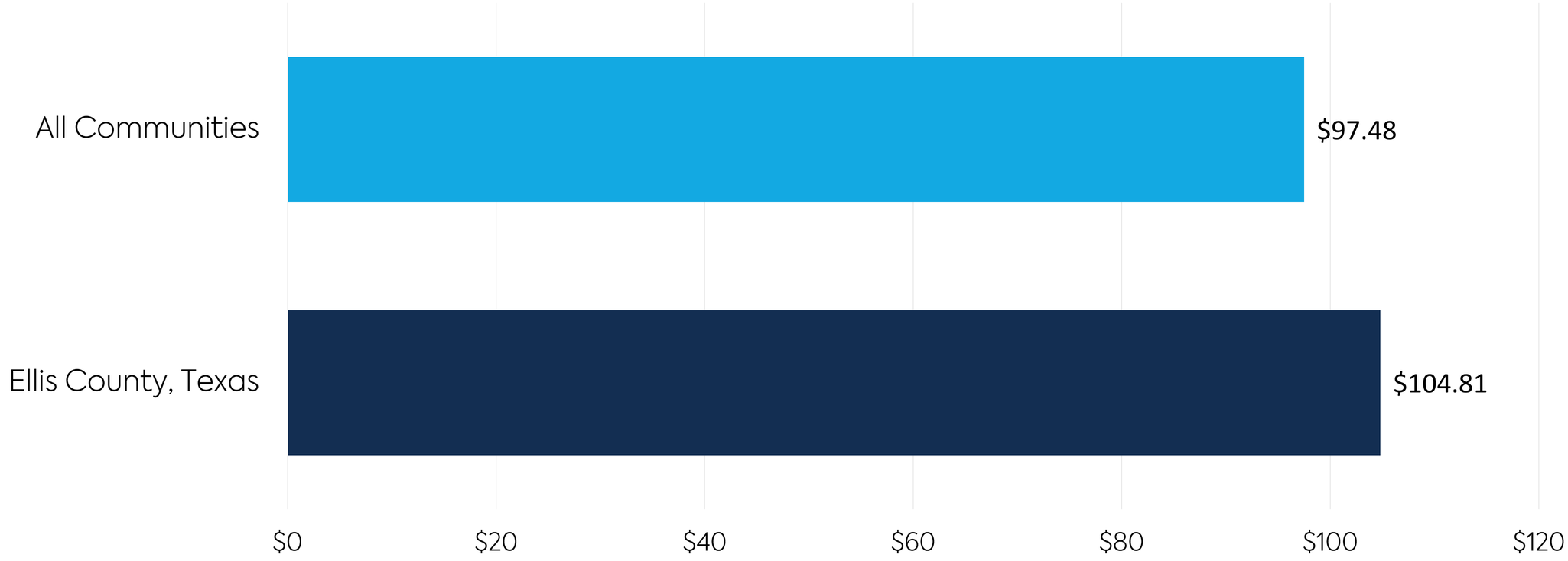
Business Download Speeds

Connection speeds can have a major impact on how the internet is used. This chart shows the average reported download speed among businesses with a connection in the community, compared to those in other Connected communities.



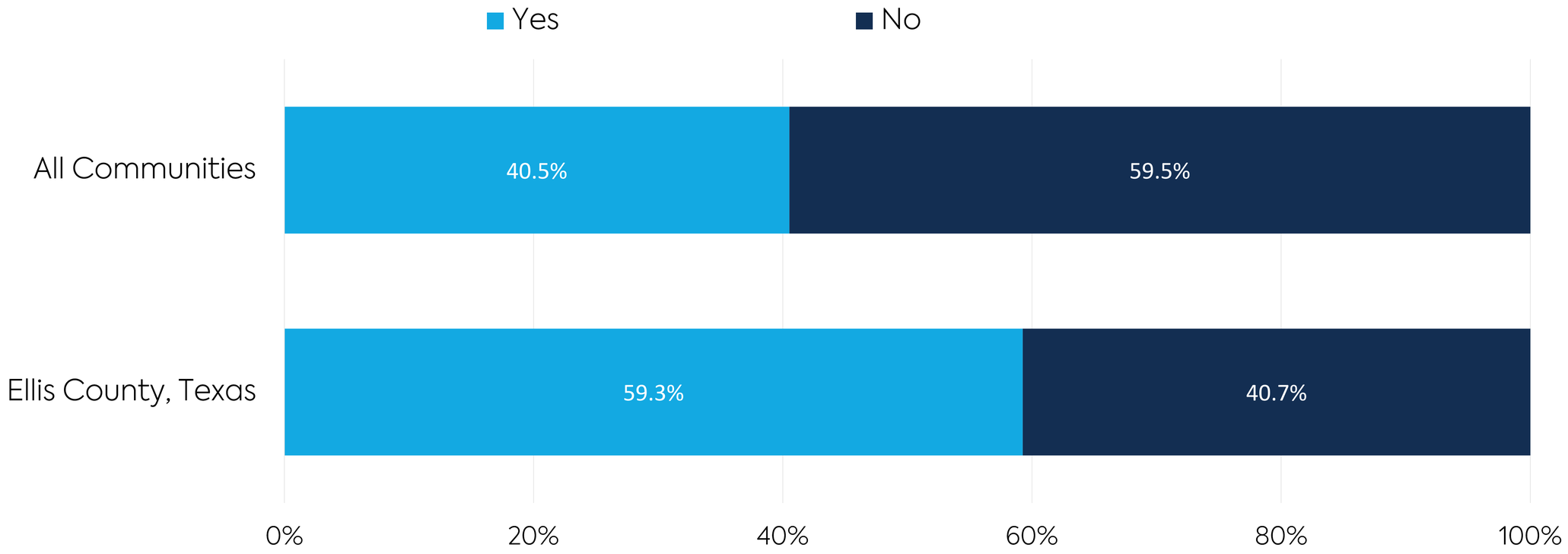
Average Monthly Cost of Business Internet Service

The cost of service can prevent some businesses from getting access to the internet. This chart shows the average reported monthly cost of service among businesses in the community, compared to those in other Connected communities.



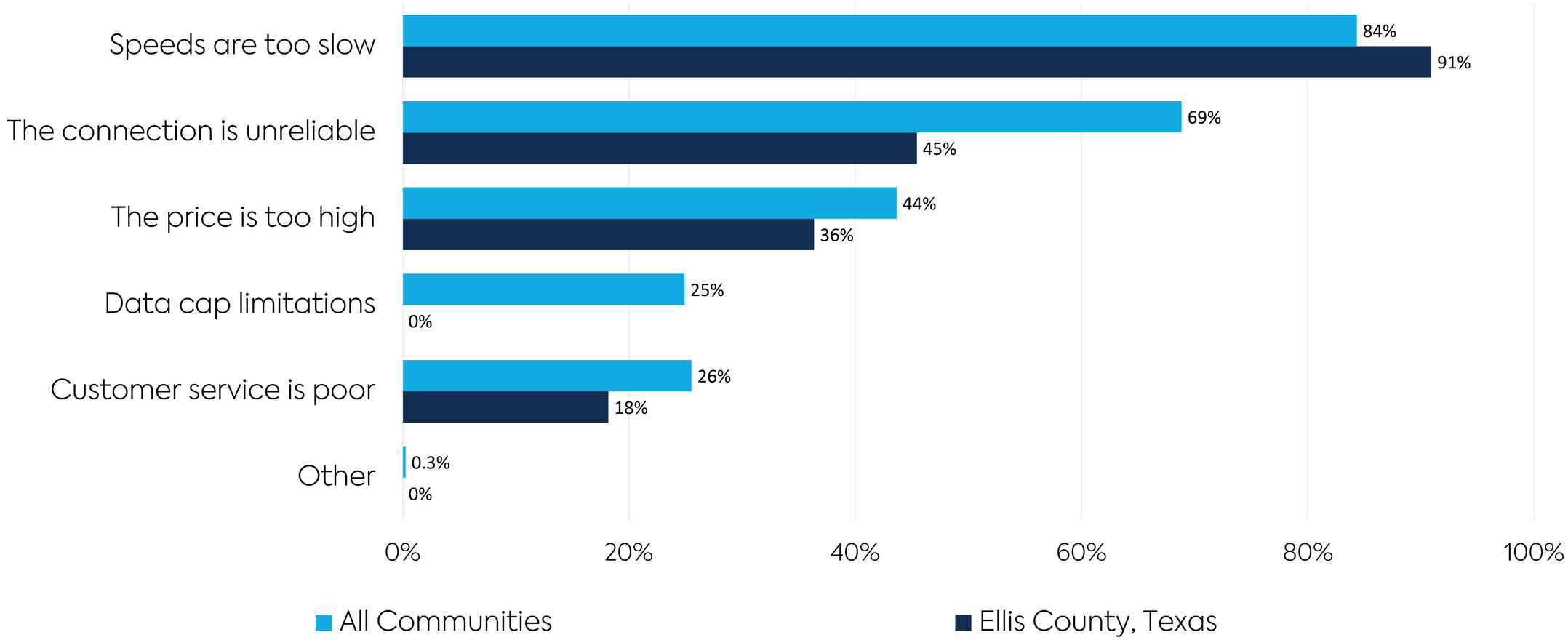
Satisfaction Among Businesses

Competition provides businesses with choices for service, allowing them the ability to switch providers if their current service does not meet their needs. This chart shows the percentage of businesses that state their internet service meets or does not meet their needs.



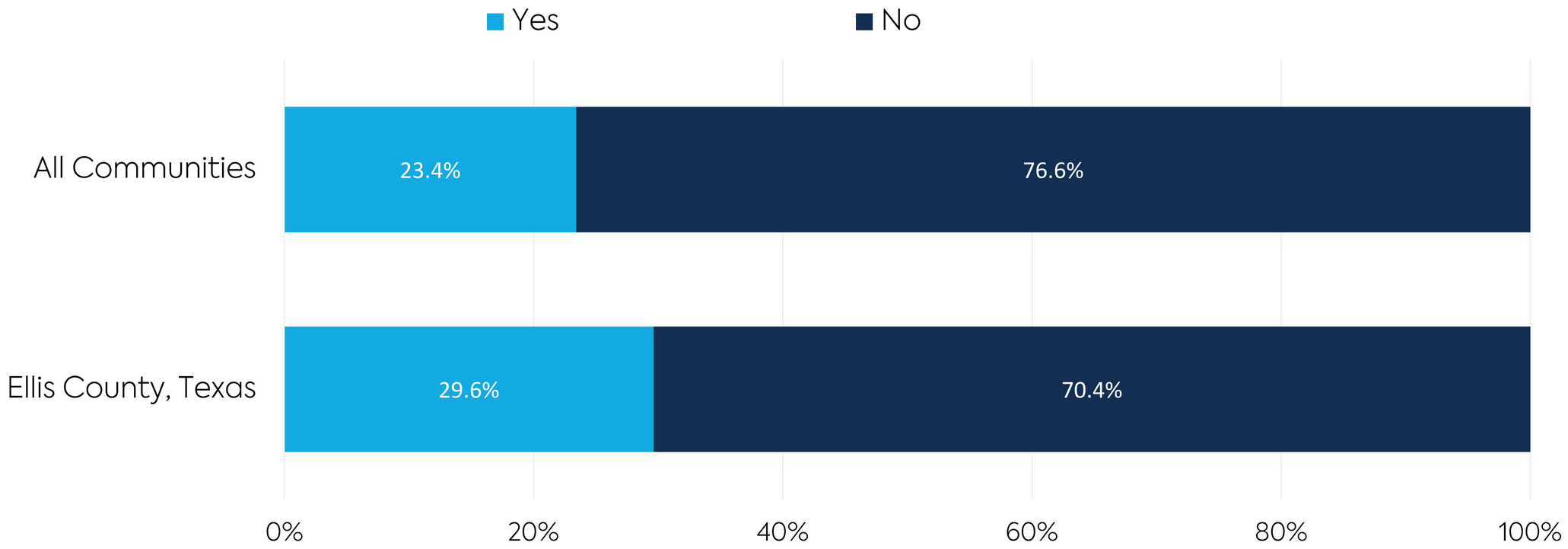
Reasons for Dissatisfaction

This chart shows the various reasons why local businesses report being dissatisfied with their current internet service.



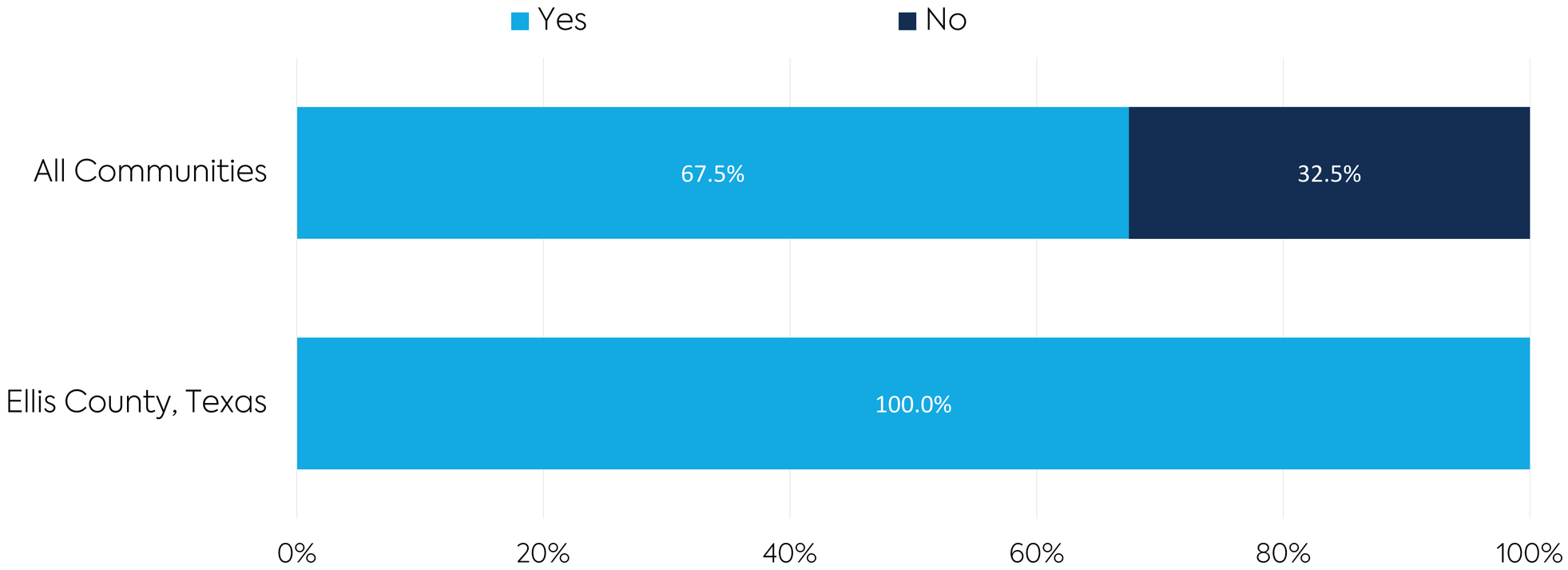
Businesses Offering Public Wi-Fi

Public Wi-Fi can help create a better-connected community by providing additional access points for those with devices limited by mobile data plans, or those without mobile broadband capability. This chart shows the percentage of businesses in the community that offer free Wi-Fi to the public.



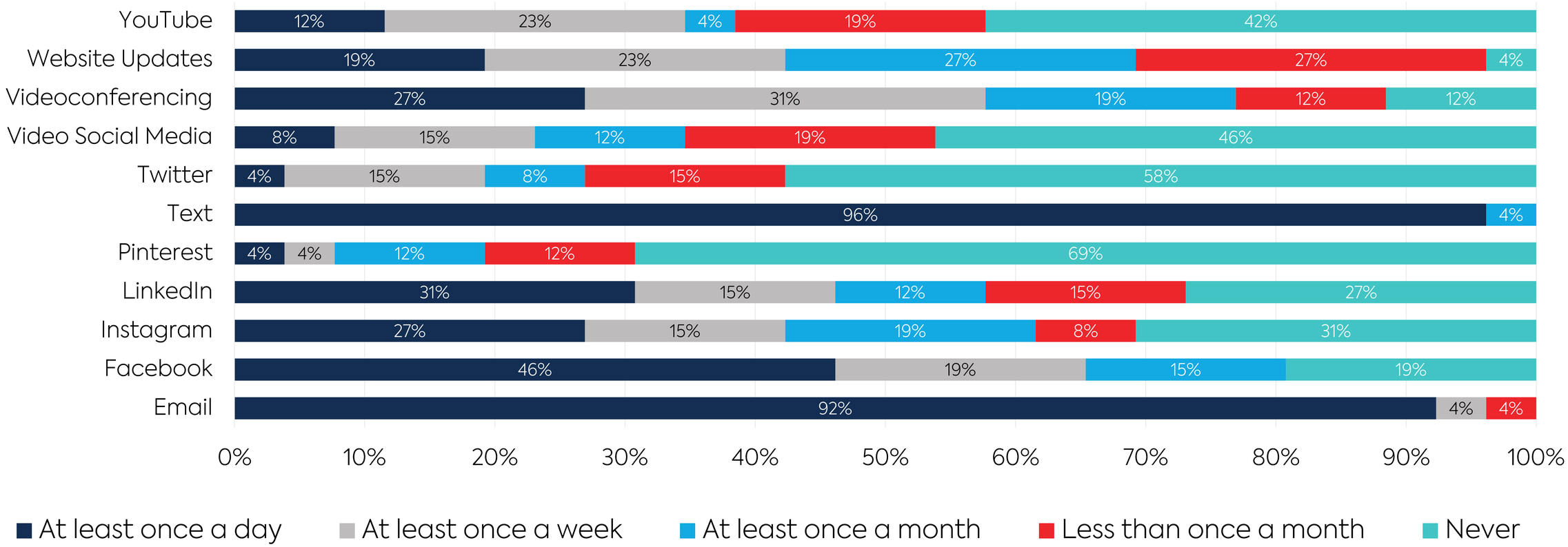
Businesses with Websites

A website is one of the most basic ways through which a business establishes an online presence, providing it with a "virtual face." This chart shows the percentage of businesses in the community that have a website.



Digital Communications

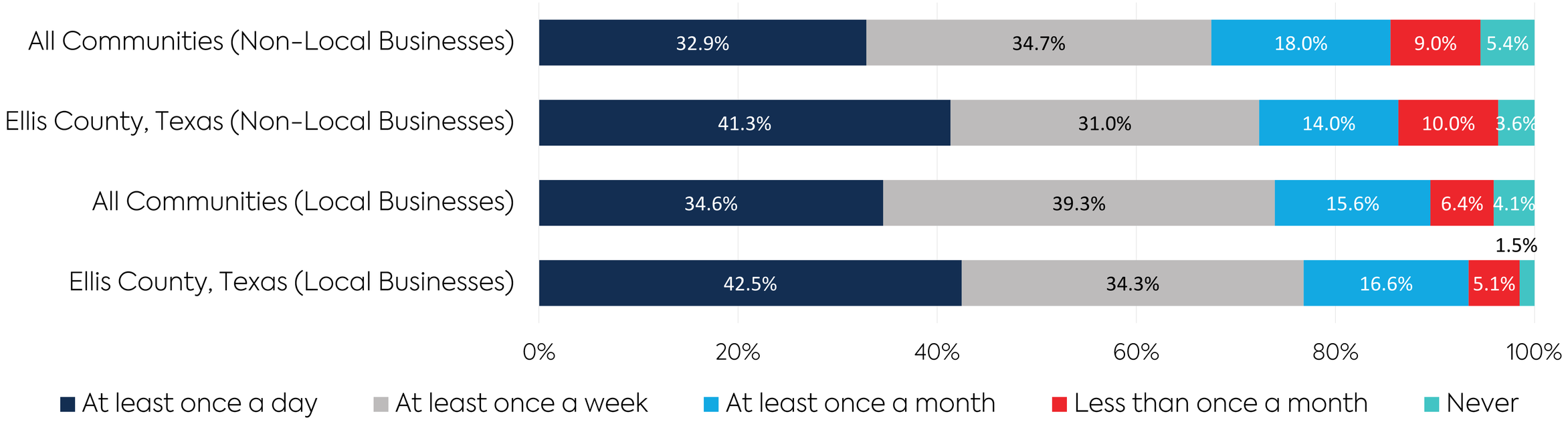
Technology, coupled with an internet connection, provides myriad ways to digitally interact with the world or even those in one's own community. This chart shows the average frequency with which businesses use various digital communications tools.



Digital Communications (Continued)

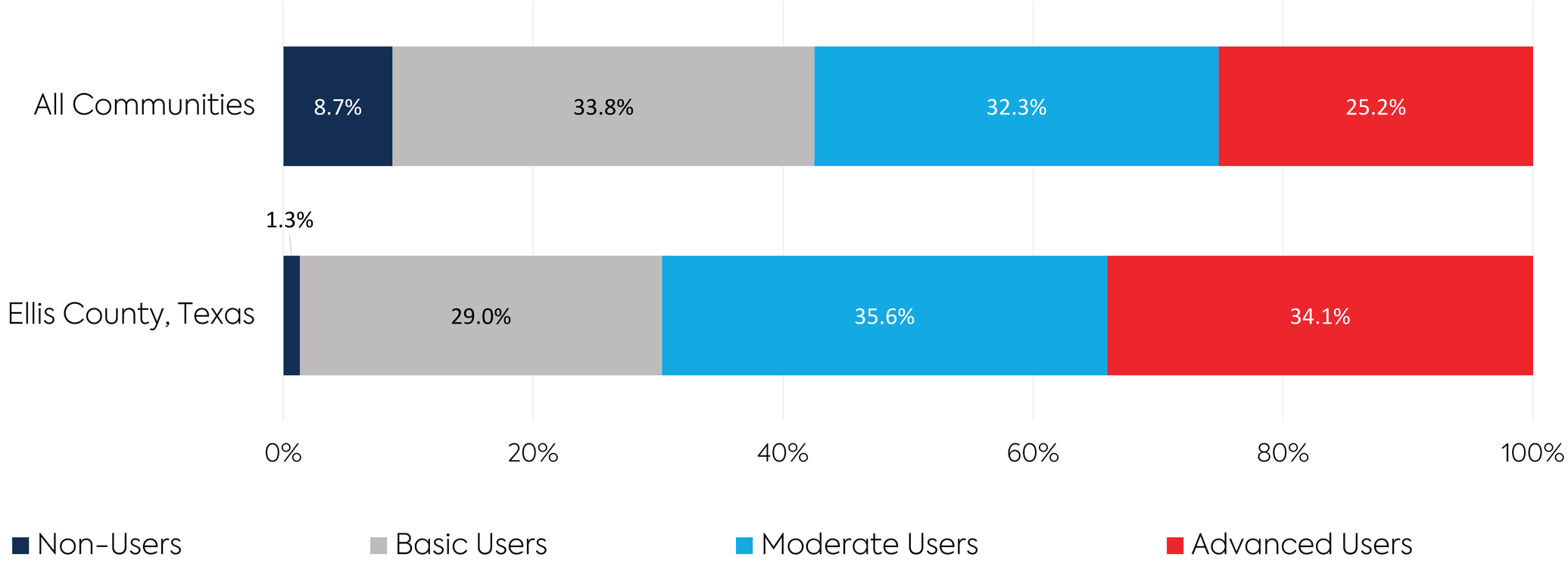
The chart below shows the frequency with which residents in the community report that they digitally interact with local and non-local businesses (i.e., those within 50 miles of the community and those farther than 50 miles, respectively). Examining the digital interaction of residents, and the digital communications tools used by local businesses, can help identify ways to increase the online presence of businesses in the community.

How Frequently Residents Interact with Businesses via the Internet



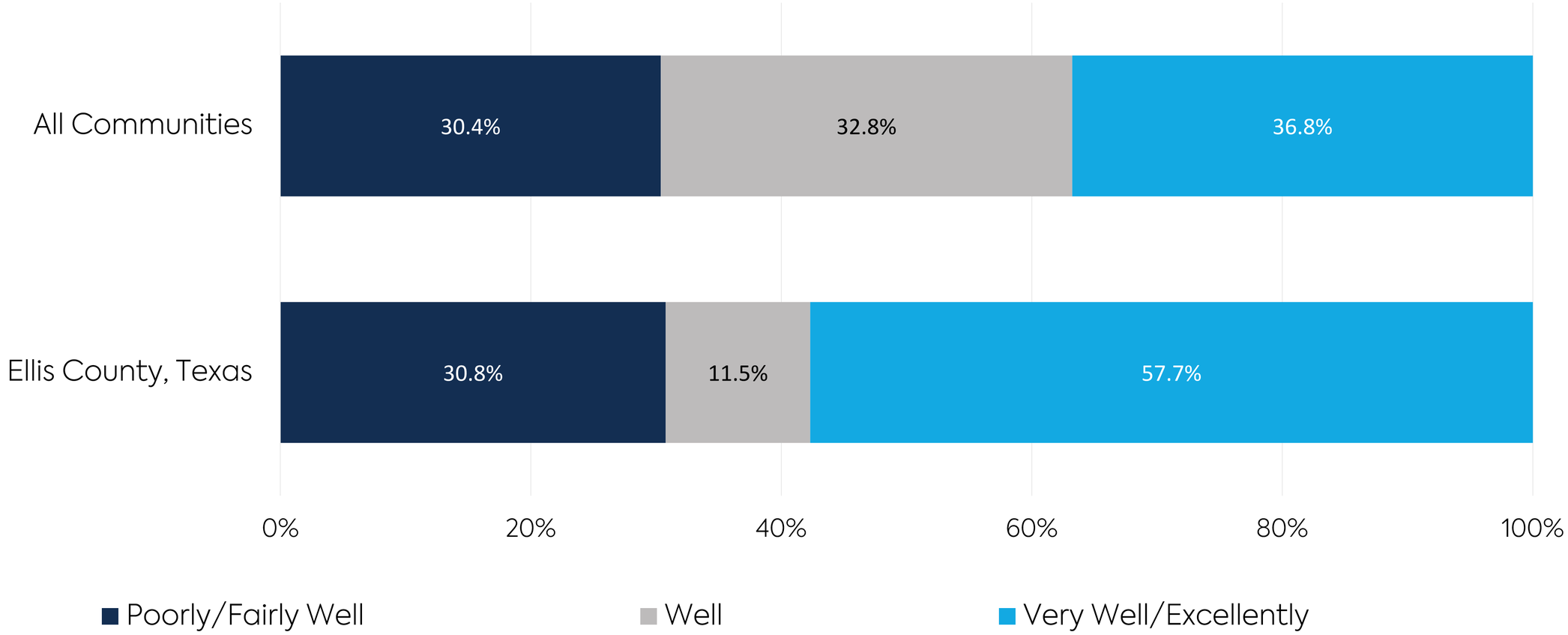
Employer Technology Needs

The technology-related skills necessary to be successful on the job are changing to keep pace with new innovations, tools, and applications that make production and services more efficient. The skills of the workforce should match the needed skills of employers to allow businesses and organizations to take advantage of new technologies. This chart shows the mix of employee technology skills (as indicated by employers).



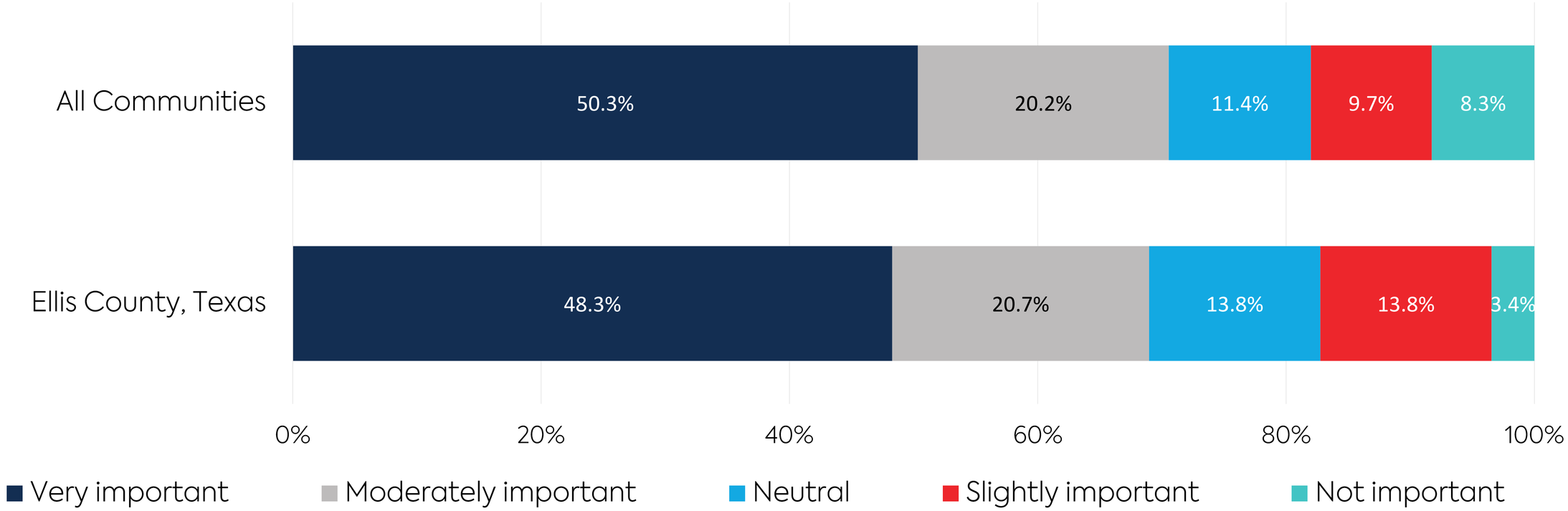
Employee Technology Skills

This chart shows how well employers believe the current technology skills of their workers match the technology needs of their organization.



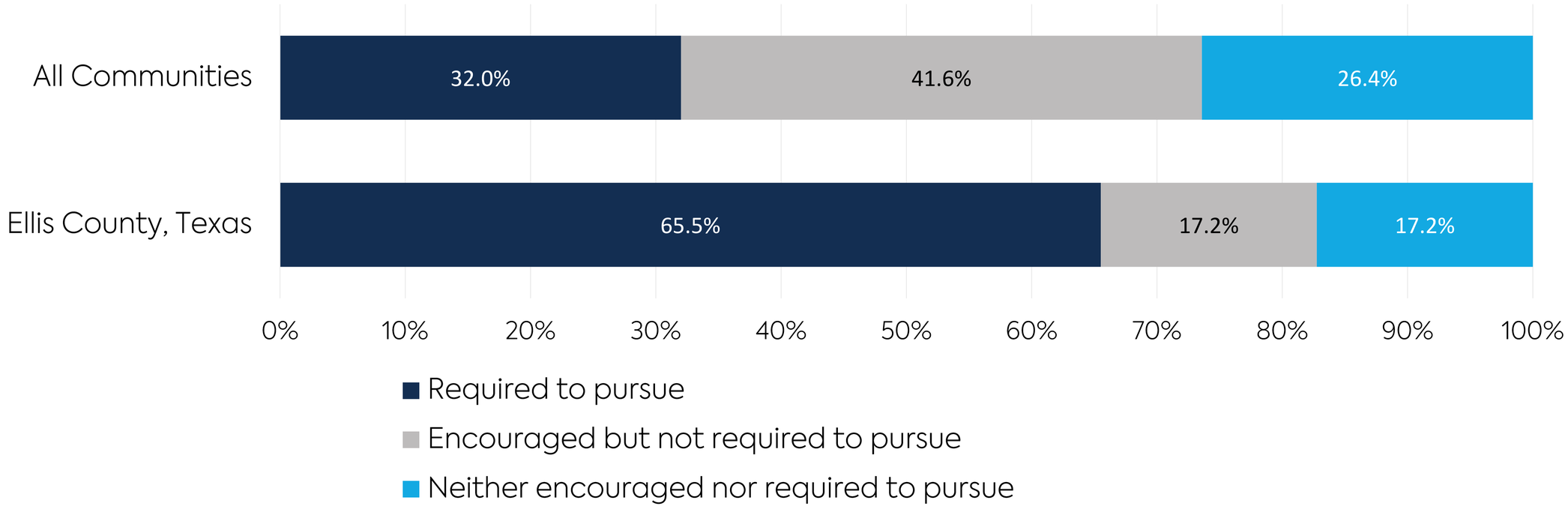
The Importance of Technology Training

If technology is ever-changing, and employee technology skills are important to meeting the needs of local businesses, then technology-related training is essential for ensuring employees keep up with the latest technology tools, devices, and applications. This chart examines the importance of technology-related training for employees among local businesses.



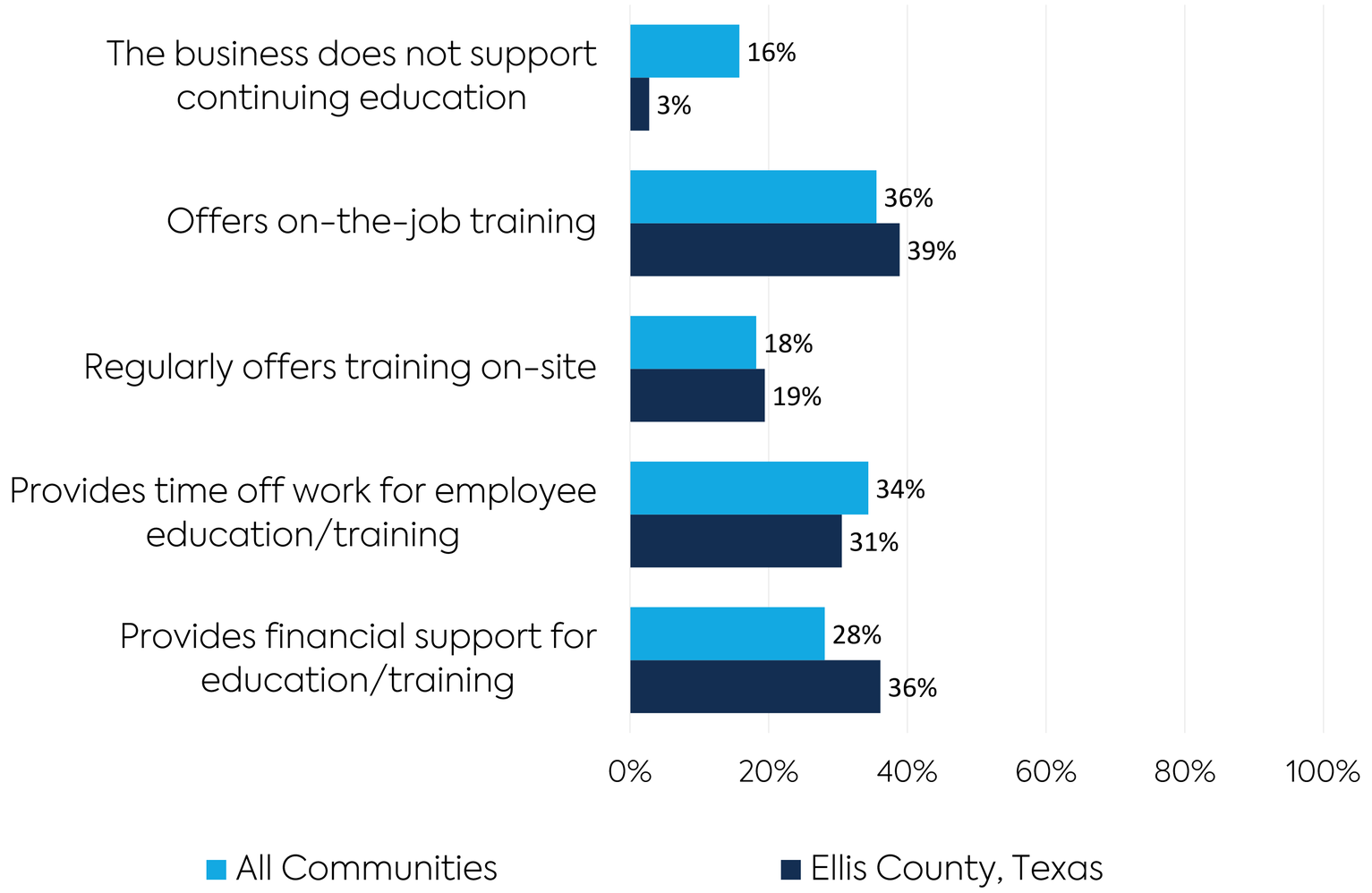
Continuing Education Policy

Growing the technology skills of the workforce is critical to ensuring employers have the talent they need to expand and sustain their operations. This chart shows the overall technology-related, continuing-education policies of local businesses. Businesses were asked to indicate if they require, encourage but don't require, or neither encourage nor require employees to participate in continuing-education or training activities.



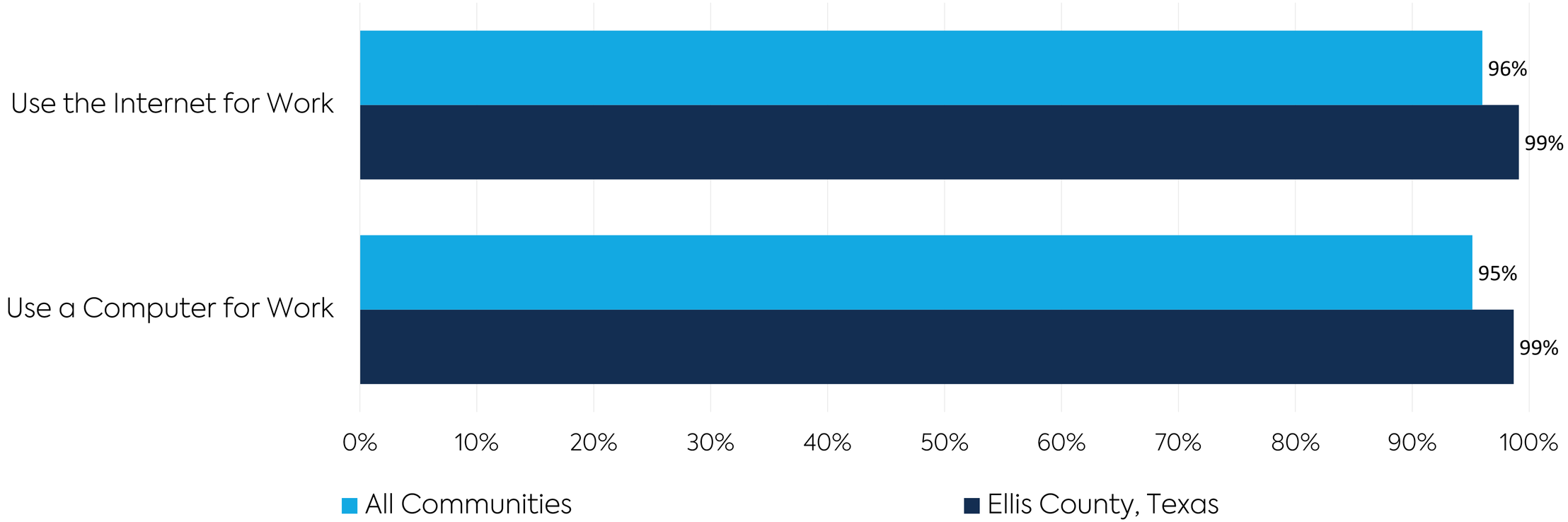
Continuing Education Support

Employers were asked about the policies they have in place to support continuing education among their employees, including time off work, financial support, on-site training by outside experts, and on-the-job training. Employers could also indicate if they did not support employee continuing education in any way. This chart shows the percentage of employers in the community that indicate they have each of the four policies in place.



Computer and Internet Use at Work

Technology on the job is ever-changing as more internet-enabled devices and applications are developed to improve production and efficiency. The charts show the percentage of residents in the community who use 1) a computer at work, and 2) use the internet for work, compared to residents of other Connected communities.



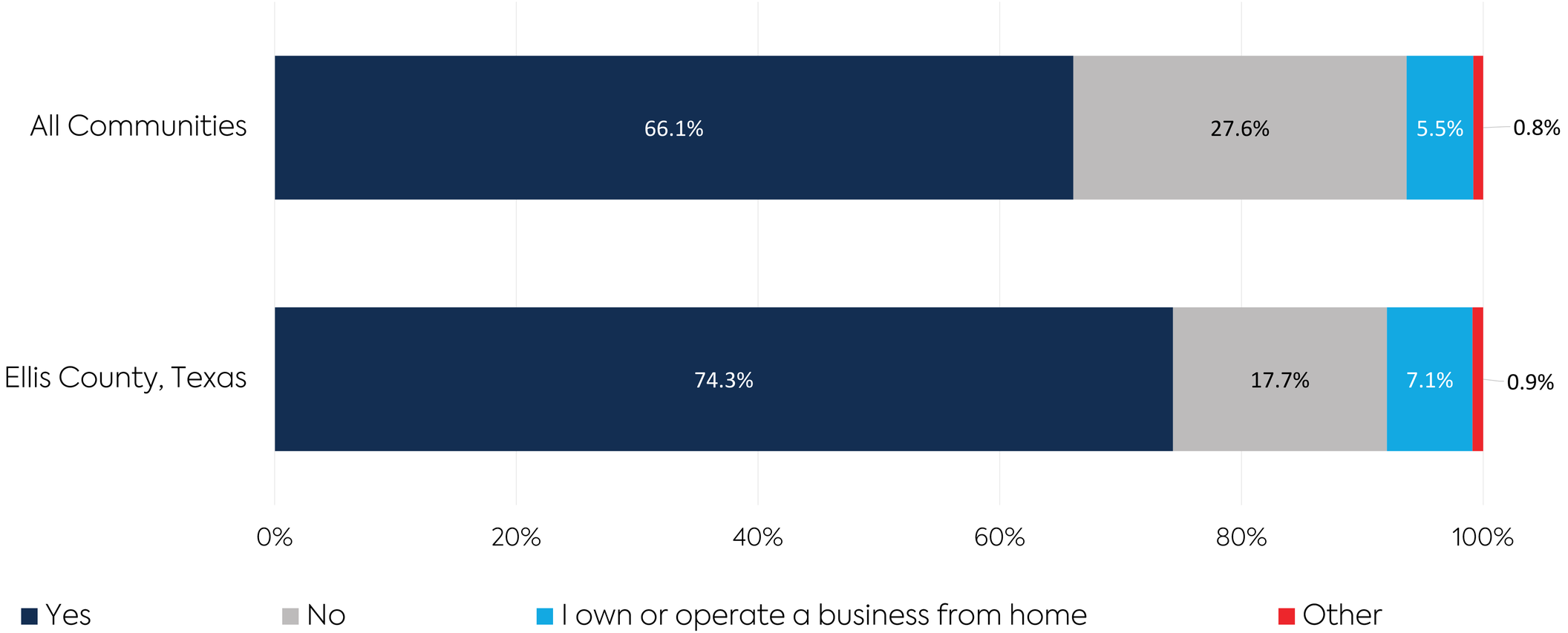
Teleworking

Teleworking, or telecommuting, refers to working outside of the conventional workplace by way of telecommunications or computer-based technology. Further, telework is a form of organizing and/or performing work, where work, which could be performed at the employer's premises, is carried out away from those premises. Teleworking is a spatially flexible work style that also typically involves greater flexibility in one's daily routine. Teleworkers typically have higher incomes and higher rates of advanced degree attainment. While traditional teleworkers are often thought of as those in management occupations or professional service industries, technology has recently enabled new opportunities for teleworkers across the occupational and industry sector spectrum. Teleworkers often are not included in typical measures of economic or workforce activity. Economic development strategies traditionally involve the attraction or retention of employers. While this is a critical part of growing a local economy, telework represents an opportunity to attract or retain employees even though their employers may not be located within the community, but only if those employees have access to advanced broadband infrastructure.

The following charts show the percentage of residents in the community who telework and from where they typically work, compared to residents of other Connected communities. The charts also show how frequently residents of the community telework.

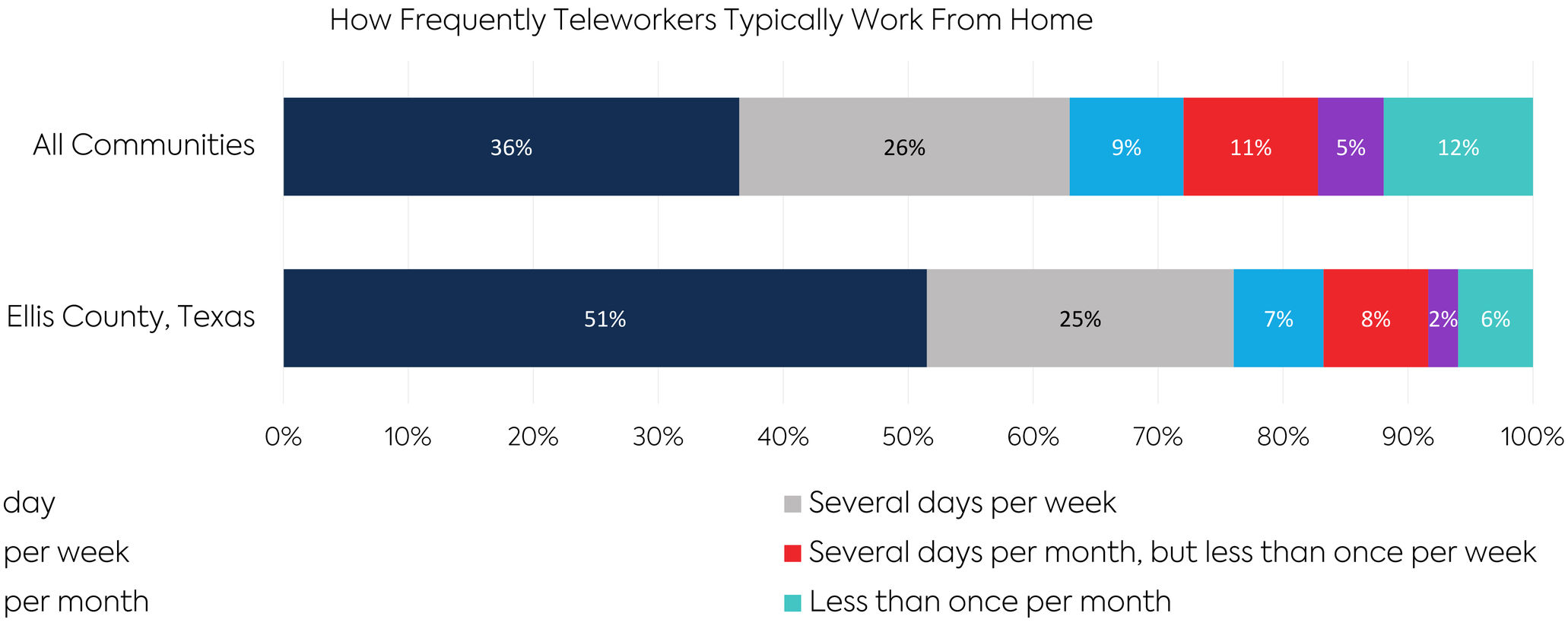
Teleworking Rates

This chart shows how many employed survey respondents telework, compared to other Connected communities.



Teleworking Frequency

This chart shows how often teleworkers or telecommuters work from home instead of traveling to a central location for work. More teleworking days translates into fewer hours on the road, more time saved, and fewer greenhouse gasses released into the atmosphere.



Government Survey Results

Ellis County, Texas

Government Survey Results

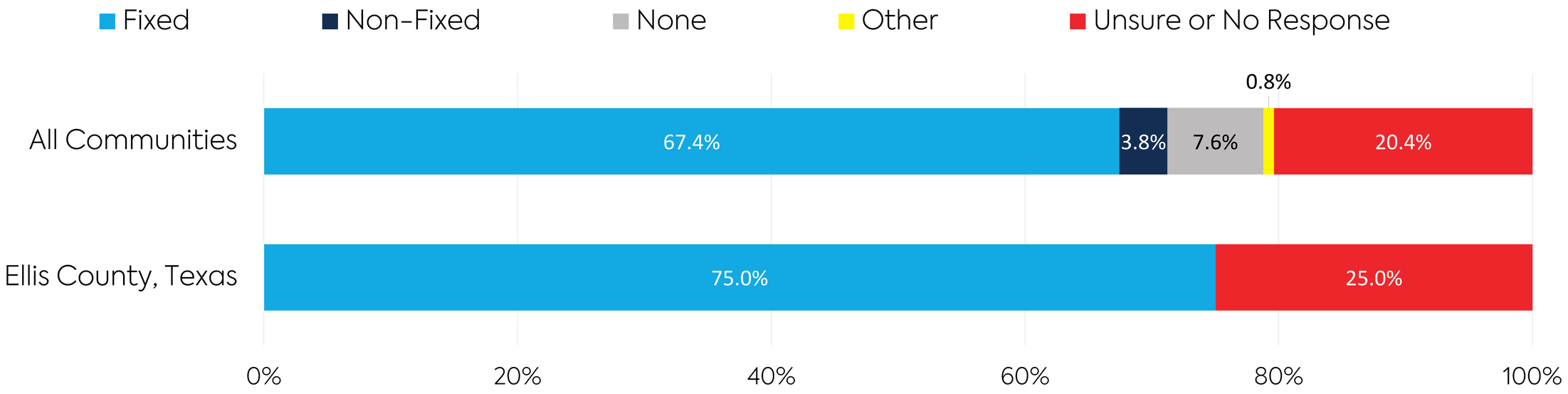
Communities, residents, and businesses are served by several political subdivisions. These overlapping jurisdictions, all with varying responsibilities, include municipalities such as cities, villages, townships, boroughs, counties, regional development groups, utility districts, local expressions of state and federal agencies, and many others. Internet connectivity and related broadband-enabled applications allow these political subdivisions to take advantage of new and innovative ways to deliver existing or additional services to the public.

E-government services enable citizens to conduct business and communicate with their local units of government and political subdivisions more efficiently and conveniently, allowing for greater civic participation and efficient use of public resources. These data show the connectivity and use of technology among political subdivisions in the community, compared to those in other communities participating in Connected Nation's Connected program. These data should be used to make informed decisions and implement solutions for improving connectivity.

Data from Ellis County represent survey responses collected between August 2022 and December 2022. During this time, four Ellis County government agencies responded. Data from all Connected communities represent survey responses collected between January 1, 2020, and November 30, 2022. As more communities participate in the Connected program, these figures are likely to change.

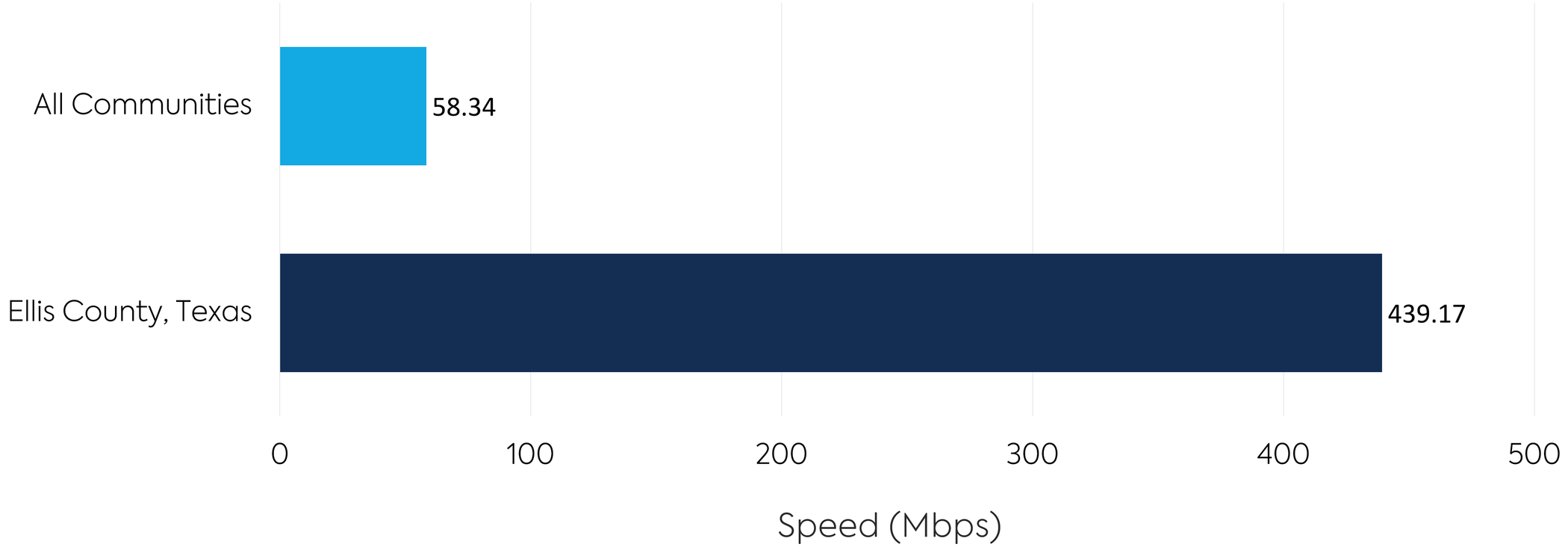
Broadband Adoption in the Government Sector

This chart shows the percentage of political subdivisions that subscribe to various types of broadband services or that are without a connection. Fixed connections are those provided by cable, DSL, fiber, or fixed wireless technology, while non-fixed connections include dial-up, satellite, and mobile-only services. These types of internet services, while providing basic access, can often be plagued by connection latency, have costly monthly data plans, or can be impacted by weather, terrain, large expanses of open water, and other environmental factors.



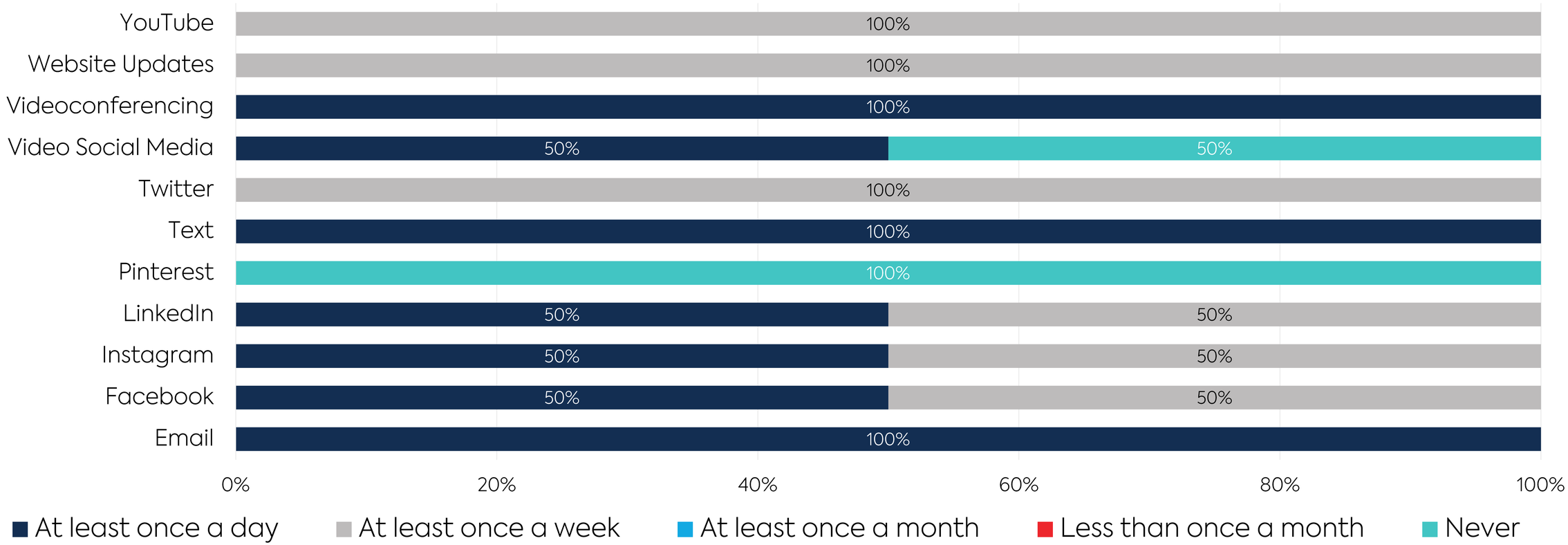
Government Sector Download Speeds

Connection speeds can have a major impact on how the internet is used. This chart shows the average reported download speed among political subdivisions in the community, compared to those in other Connected communities.



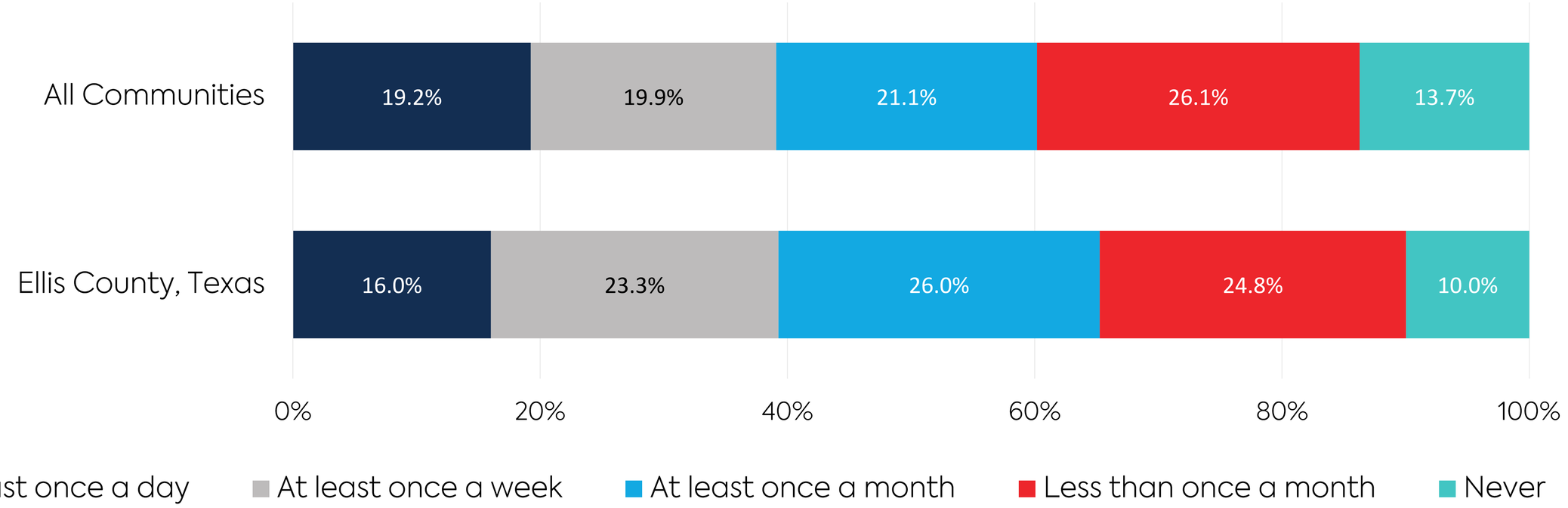
Digital Communications

Digital communications tools are critical for political subdivisions to communicate with the public and encourage public participation in all matters of community development. This chart shows the average frequency with which political subdivisions use various digital communications tools.



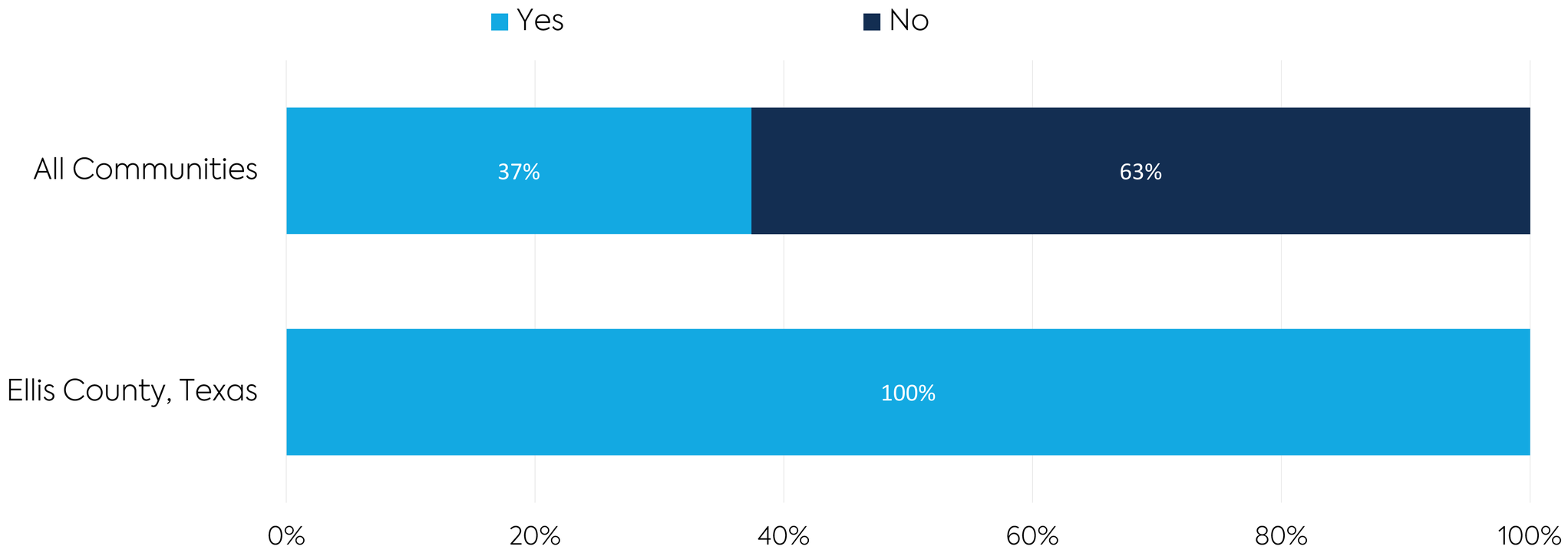
Digital Interaction

This chart shows the frequency with which residents in the community report that they digitally interact with their local government offices. Examining the digital interaction of residents, and the digital communications tools used by government agencies, can help identify ways to increase the online presence of the government sector.



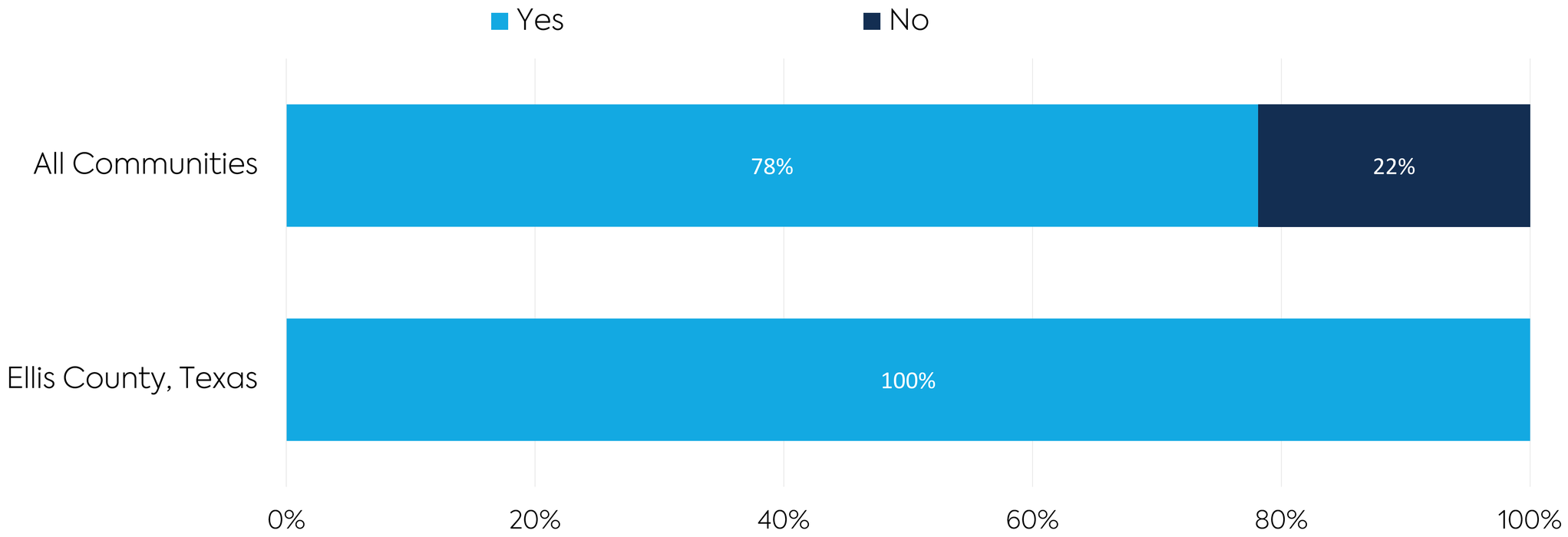
Public Wi-Fi

Public Wi-Fi can help create a better-connected community by providing additional access points for those with devices limited by mobile data plans or those without mobile broadband capability. This chart shows the percentage of political subdivisions that offer free Wi-Fi to the public.



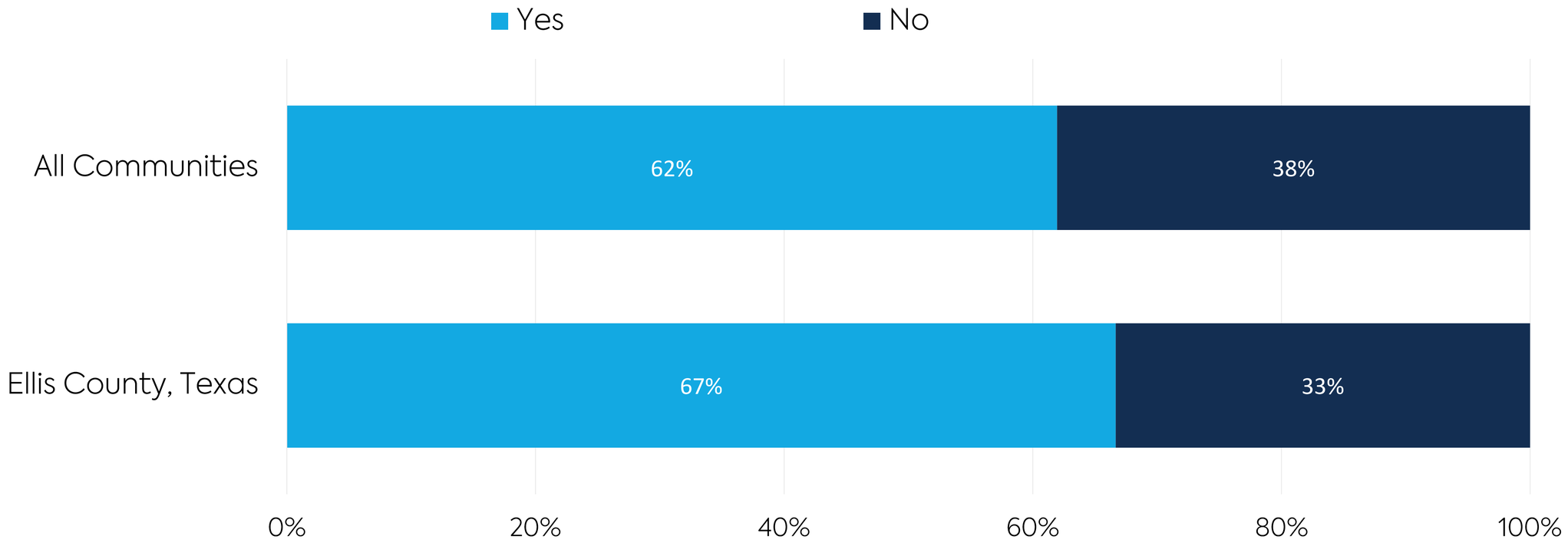
Presence of a Website

The website of a political subdivision may be the first point of contact a resident or business has with local government when an issue arises or information is required. This chart shows the percentage of political subdivisions in the community that have a website, compared to those in other Connected communities.



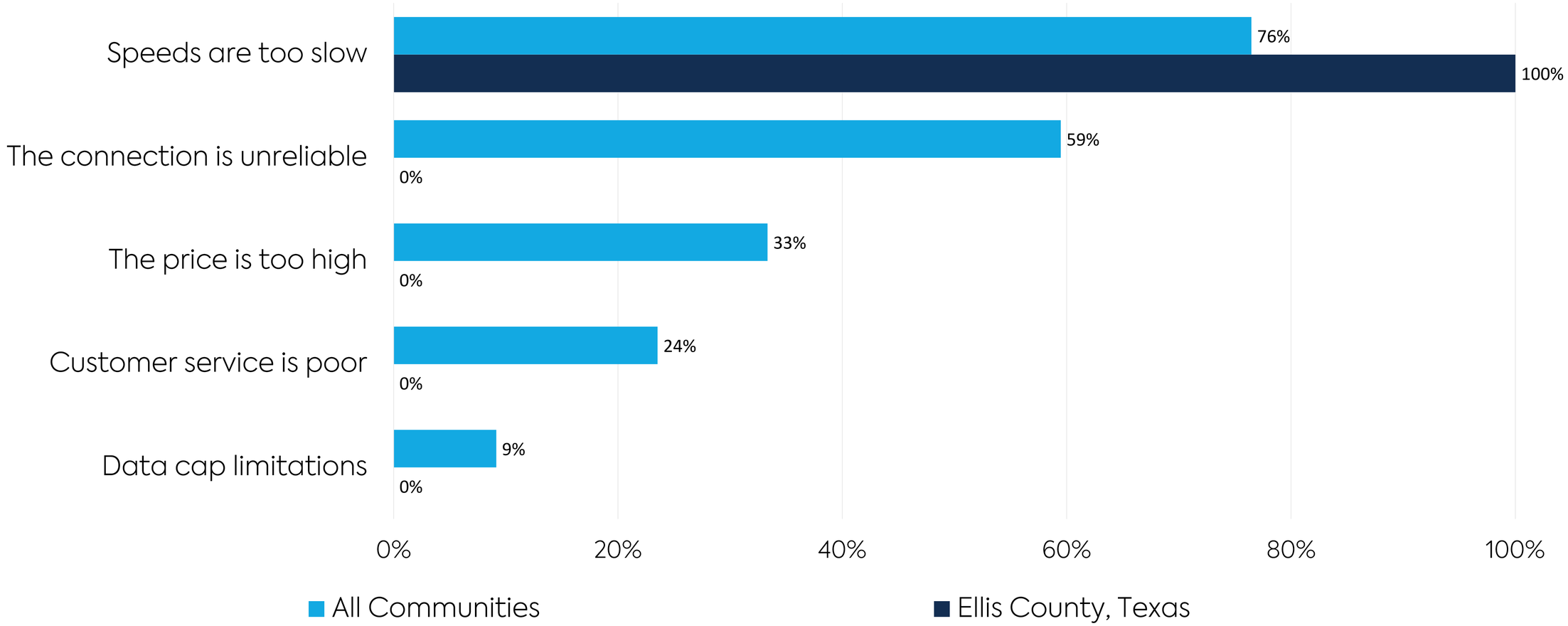
Satisfaction in the Government Sector

Competition provides communities with choices for service, allowing them the ability to switch providers if their current service does not meet their needs. This chart shows the percentage of political subdivisions that state their internet service meets or does not meet their needs.



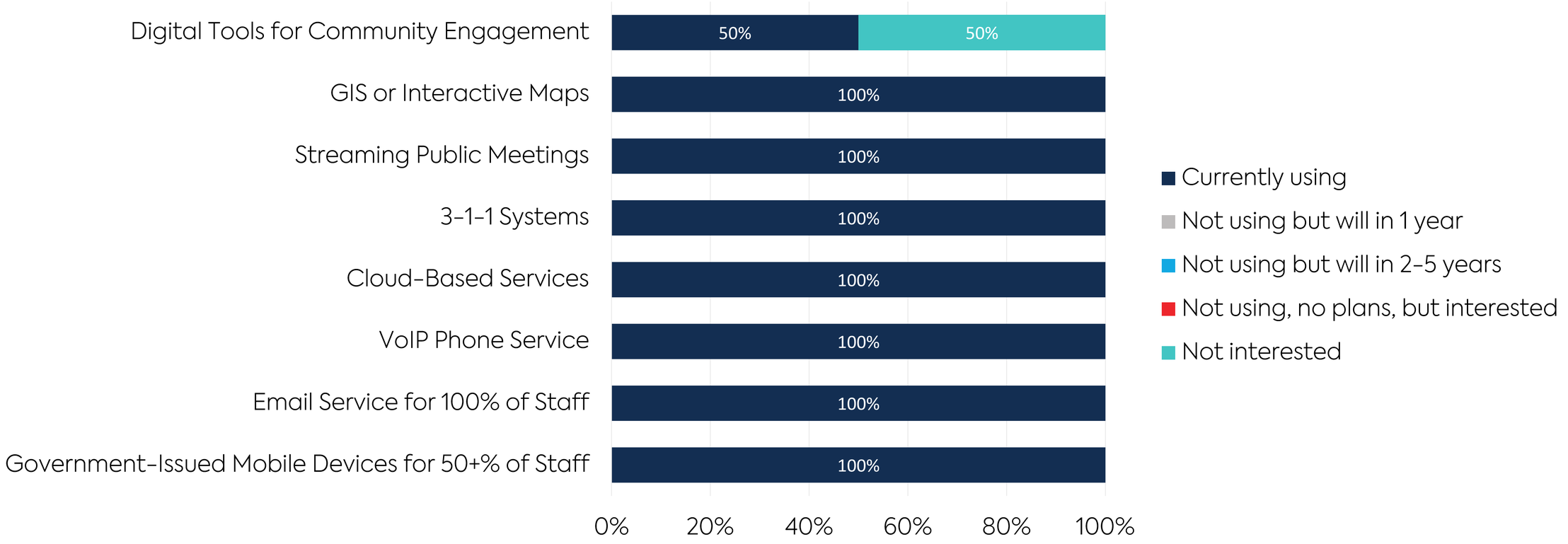
Reasons for Dissatisfaction

This chart shows the various reasons why government subdivisions report being dissatisfied with their current internet service.



Government Sector Technology Applications

Beyond a website and the many forms of digital communications, there are more advanced ways in which a political subdivision can leverage technology to improve civic participation. This chart shows the usage and interest in various technologies among local political subdivisions.



Health Care Survey Results

Ellis County, Texas

Health Care Sector Survey Results

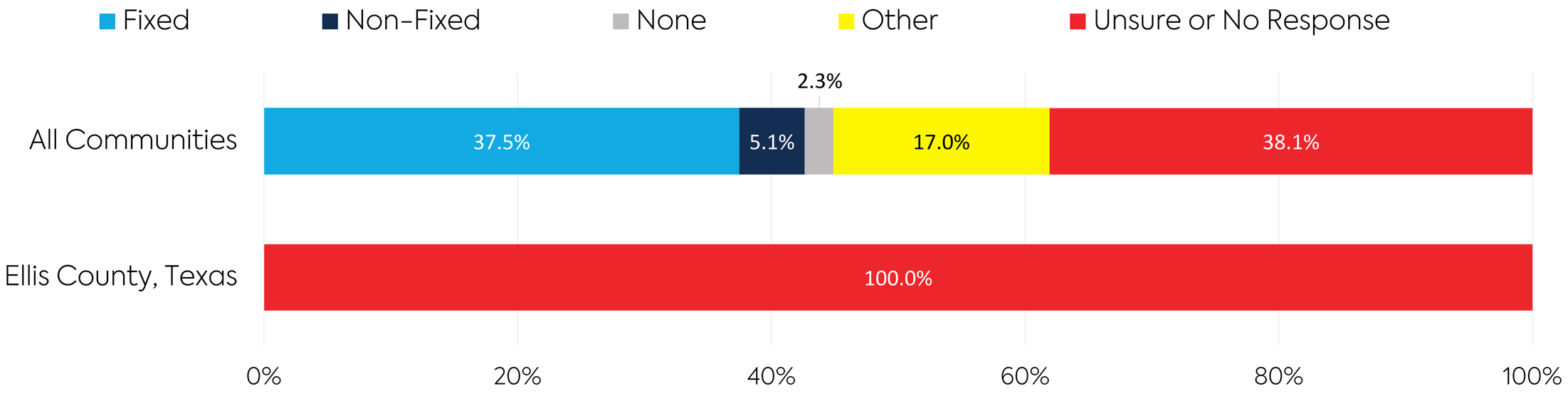
Access to quality health care is essential for quality of life in any community. From emergency services and family practitioners to specialists, laboratories, and mental health services, access to health care provides opportunities for all to live healthy, fulfilling lives. New health care technology developments offer not only new treatments and methods of diagnosis, but also greater access to health care providers via the internet. This is especially critical for two primary groups: 1) those living in rural communities who may not have local options for various specialty health care providers, and 2) those unable to physically visit a doctor's office due to medical conditions or other issues.

The data in the following charts show the connectivity and use of technology among health care facilities in the community, compared to those in other communities participating in Connected Nation's Connected program. These data should be used to make informed decisions and implement solutions for improving connectivity in the community.

Data from Ellis County represent survey responses collected between August 2022 and December 2022. During this time, one Ellis County health care facility answered this survey. Data from all Connected communities represent survey responses collected between January 1, 2020, and November 30, 2022. As more communities participate in the Connected program, these figures are likely to change.

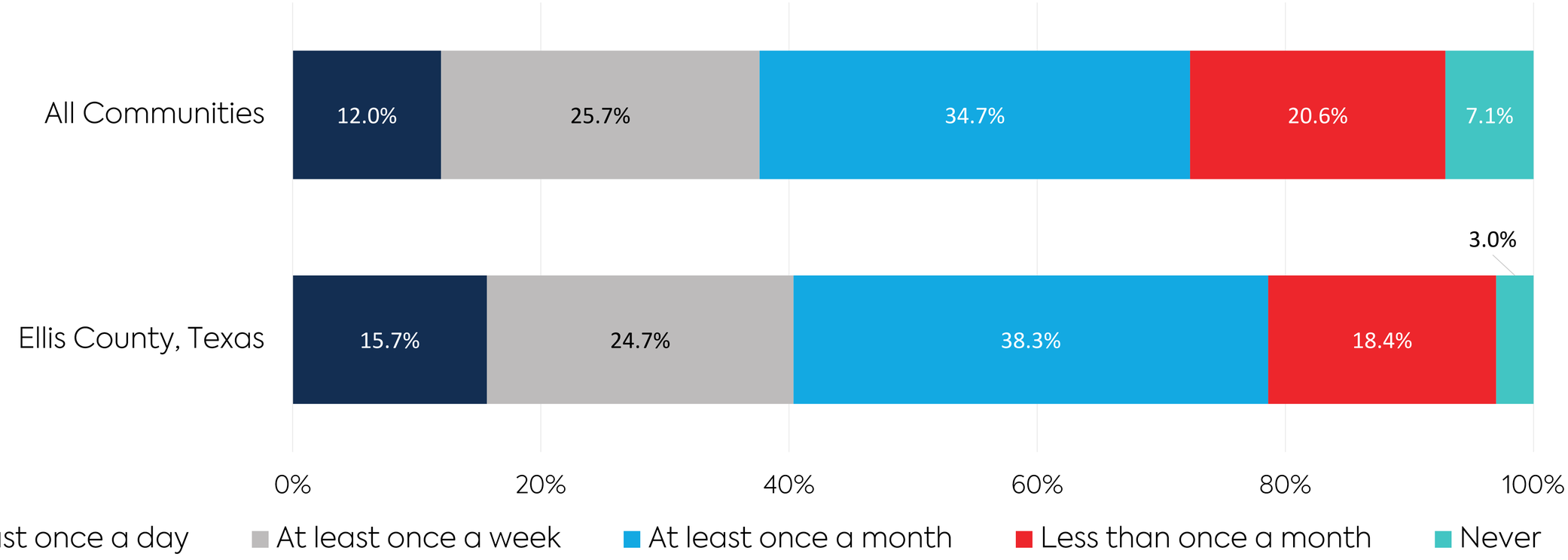
Broadband Adoption in the Health Care Sector

This chart shows the percentage of health care facilities that subscribe to various types of broadband services or that are without a connection. Fixed connections are those provided by cable, DSL, fiber, or fixed wireless technology, while non-fixed connections include dial-up, satellite, and mobile-only services. These types of non-fixed internet services, while providing basic access, can often be plagued by connection latency, have costly monthly data plans, or can be impacted by weather, terrain, large expanses of open water, and other environmental factors.



Digital Interaction

This chart shows the frequency with which residents in the community report that they digitally interact with facilities in the health care sector. Examining the digital interaction of residents, and the digital communications tools used by health care facilities, can help identify ways to increase the online presence of the health care sector.



Higher Education Survey Results

Ellis County, Texas

CONNECTED NATION

Higher Education Survey Results

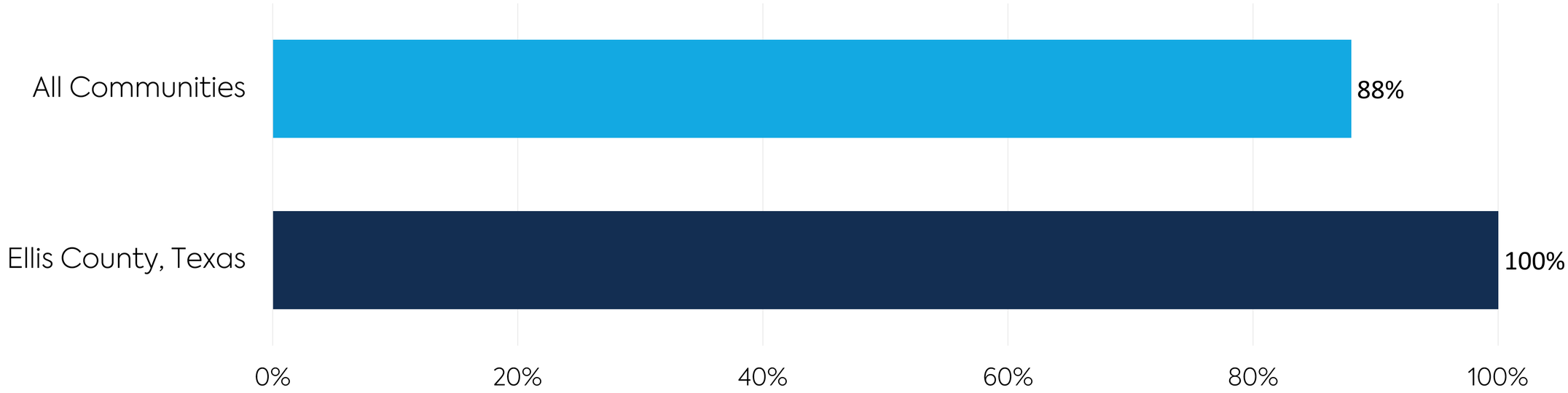
Post-secondary education contributes significantly to the talent and workforce development of a community. While the structure of K-12 education is relatively similar from one community to the next, higher education can take many forms. From community colleges and traditional universities to trade schools, higher education offers a variety of educational programs and content to meet the community's needs. Higher education can also attract students and faculty from abroad. Similar to K-12 institutions, higher education has many opportunities to leverage internet-enabled technologies to facilitate a more robust learning environment.

These data show the connectivity and use of technology among higher education institutions in the community, compared to those in other communities participating in Connected Nation's Connected program. These data should be used to make informed decisions and implement solutions for improving connectivity. This information was gathered through surveys distributed in the community.

Data from Ellis County represent survey responses collected between August 2022 and December 2022. During this time, two Ellis County higher education institutions responded. Data from all Connected communities represent survey responses collected between January 1, 2020, and November 30, 2022. As more communities participate in the Connected program, these figures are likely to change.

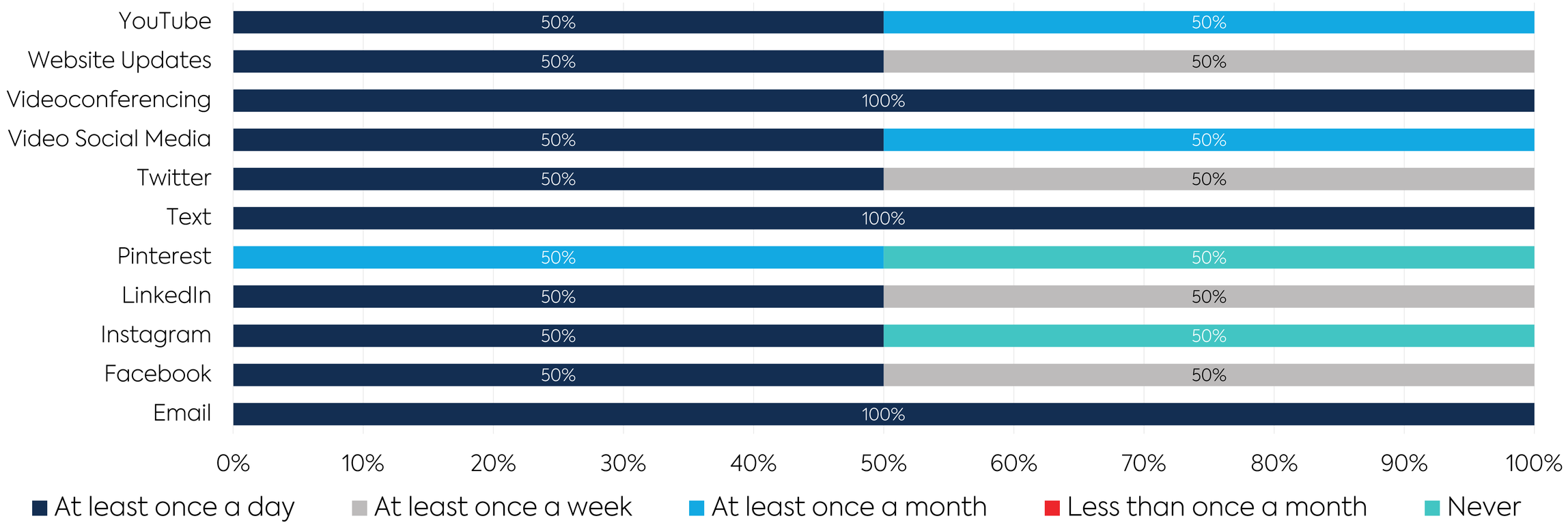
Classrooms with Wi-Fi Service

Wireless connectivity allows for a wide range of devices to be connected to the institution's network. While Wi-Fi is important in public and common areas, it is also important for Wi-Fi signals to penetrate into classrooms throughout campus. This chart shows the average percentage of higher education classrooms in the community with Wi-Fi connectivity available, compared to classrooms in other Connected communities.



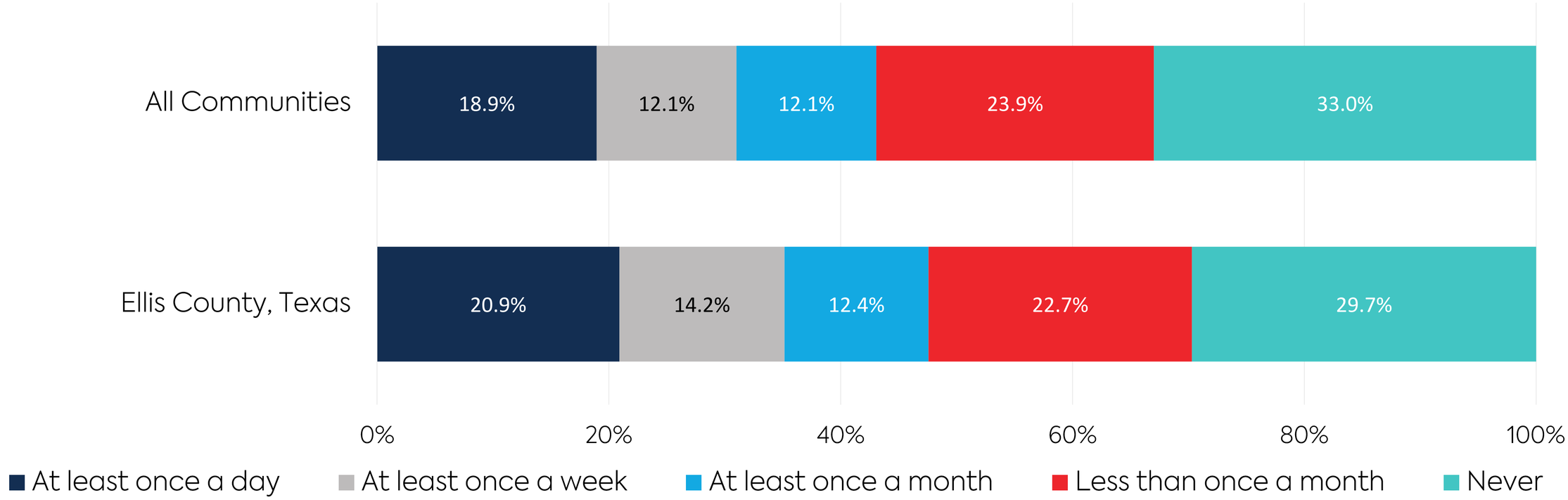
Digital Communications

This chart shows the frequency with which higher education institutions in the community use various digital tools to communicate with the public.



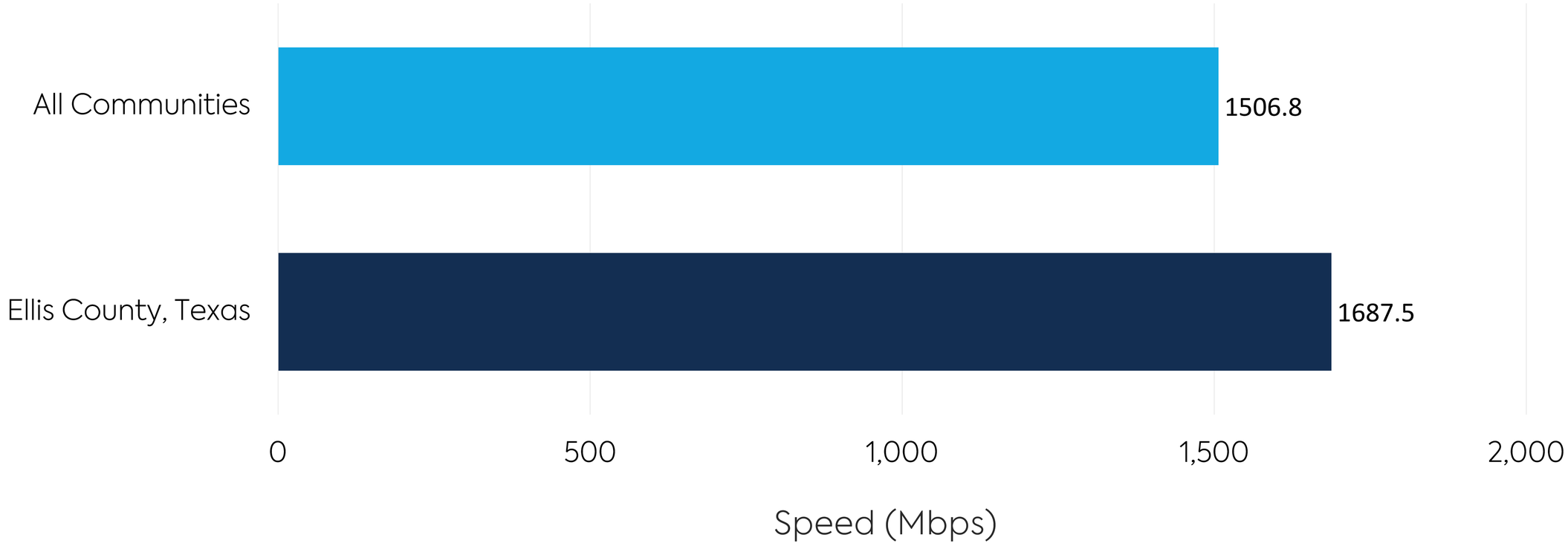
Digital Interaction

This chart shows the frequency with which residents in the community report that they digitally interact with higher education institutions. Examining the digital interaction of residents, and the digital communications tools used by higher education institutions, can help identify ways to increase the online presence of these institutions.



Download Speeds

Connection speeds can have a major impact on how the internet is used. This chart shows the average reported download speed among higher education institutions with a connection in the community, compared to those in other Connected communities.



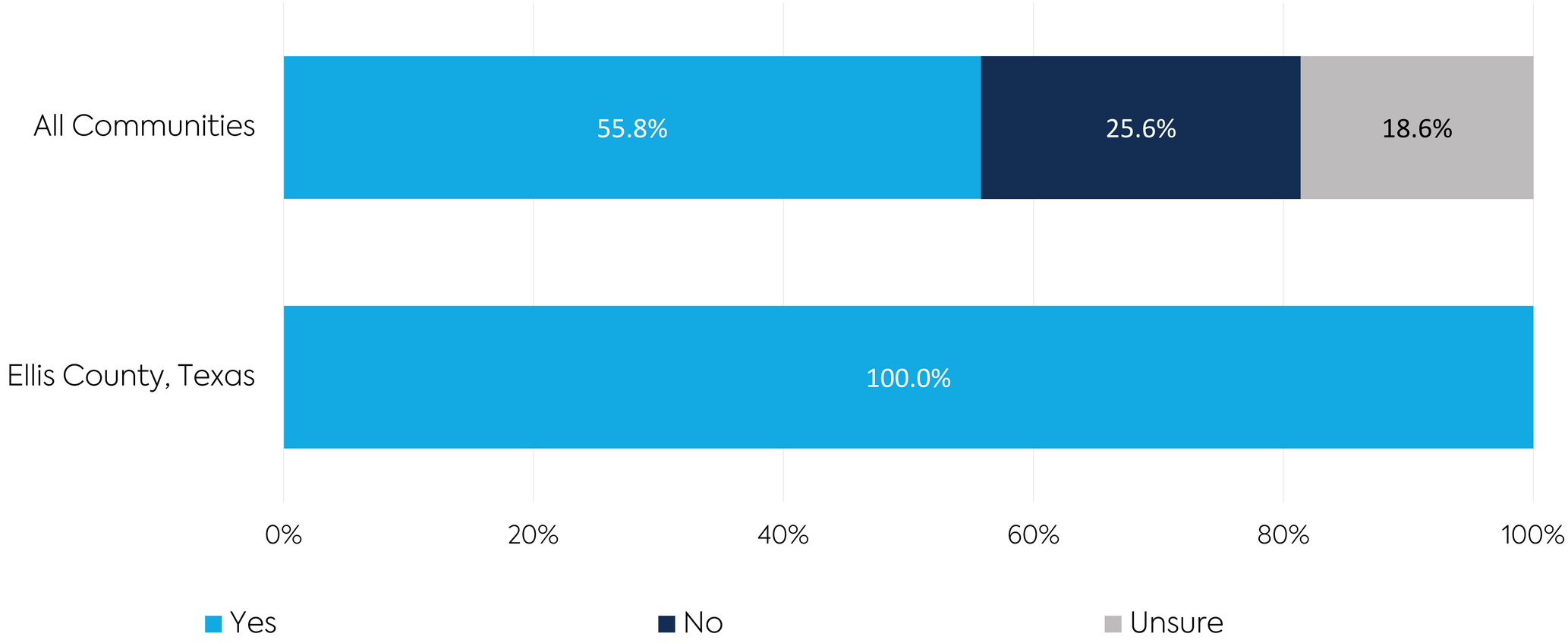
Online Courses and Degrees

While the traditional higher education environment has stood the test of time as a format conducive to improving students' knowledge, talent, and skills, a fluctuating global economy rooted in the production and transmission of information built on the backbone of the internet requires additional, flexible options for students to expand their skillsets. Occupations in the technology field, as well as those outside the field that rely heavily on the use of technology, often require new and updated skills. To gain these skills, the workforce needs access to educational opportunities and credentialing that may not be available in their community. Online degrees and educational programs offer this flexibility to local students and those from around the globe.

Another method of delivering curriculum in an online environment is through the development of massive open online courses (MOOCs). A MOOC is a course of study made available over the internet free of charge to a very large number of people. MOOCs have gained popularity in higher education to provide educational content to a global audience.

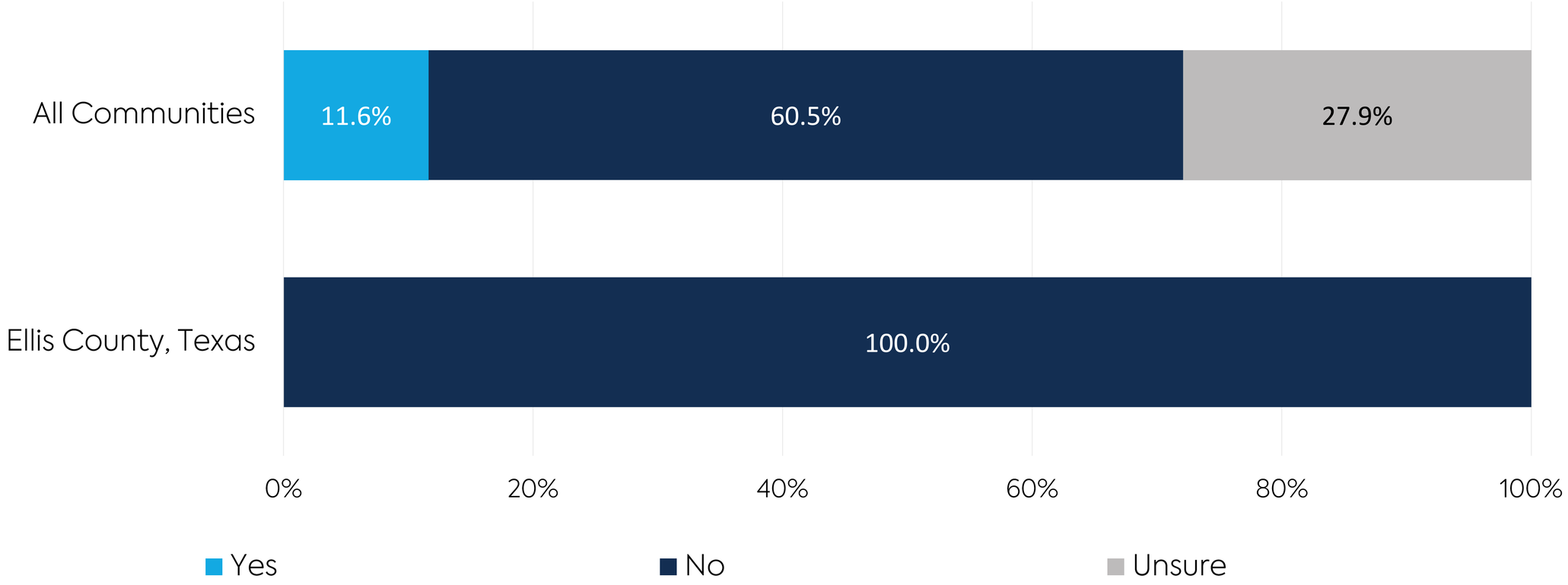
Online Degrees

This chart shows the percentage of higher education institutions offering degrees that students can complete entirely online.



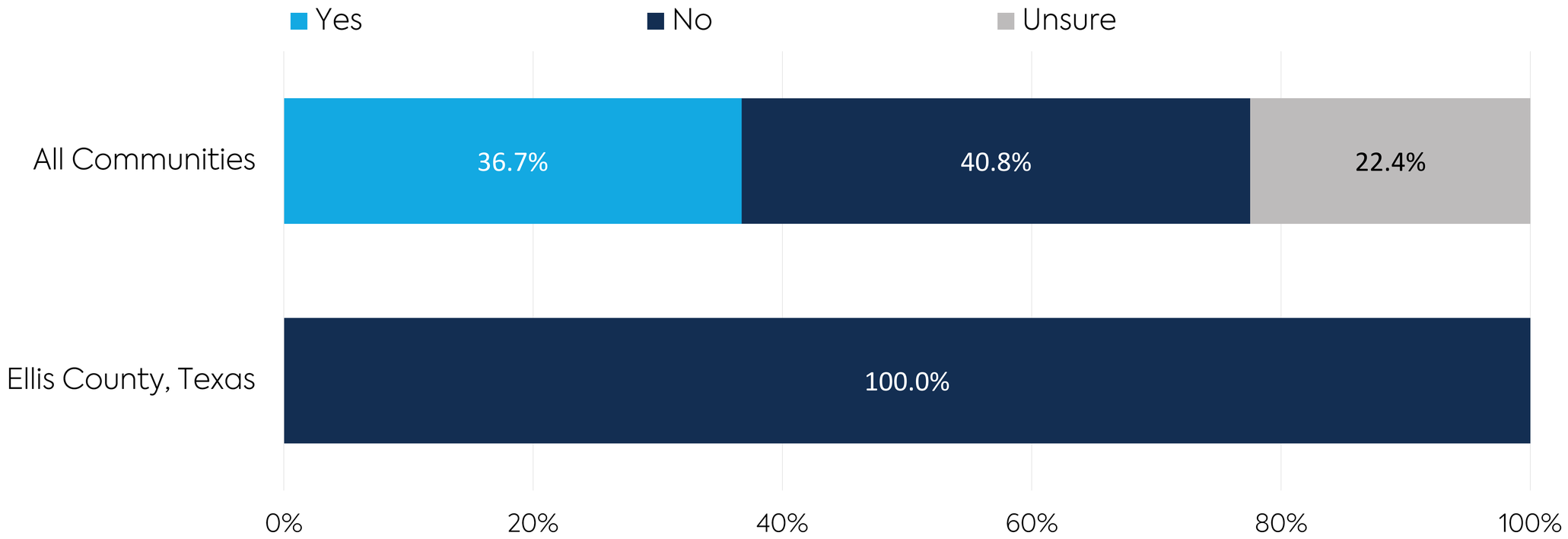
Massive Open Online Courses (MOOCs)

This chart shows the percentage of higher education institutions offering massive open online courses (MOOCs). A MOOC is a course of study made available over the internet free of charge to a very large number of people.



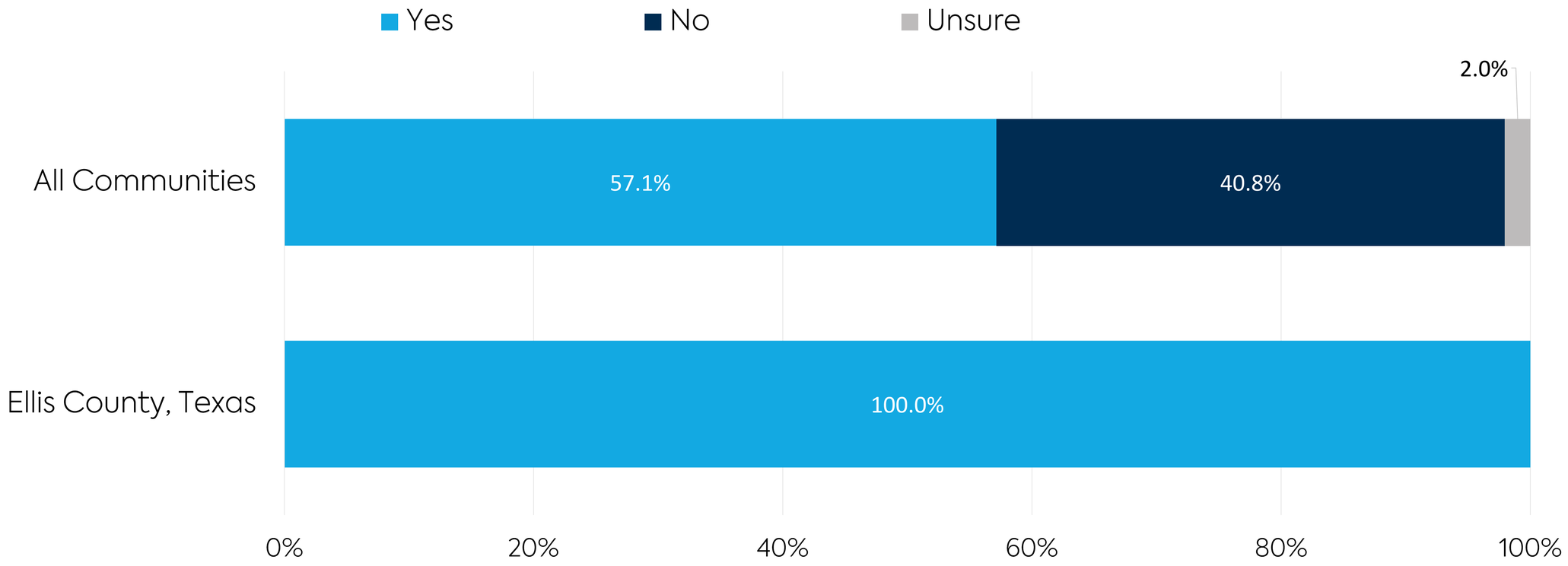
Public Wi-Fi

Public Wi-Fi can help create a better-connected community by providing additional access points for those with devices limited by mobile data plans or those without mobile broadband capability. This chart shows the percentage of higher education institutions in the community that offer free public Wi-Fi access at their location, compared to those in other participating communities.



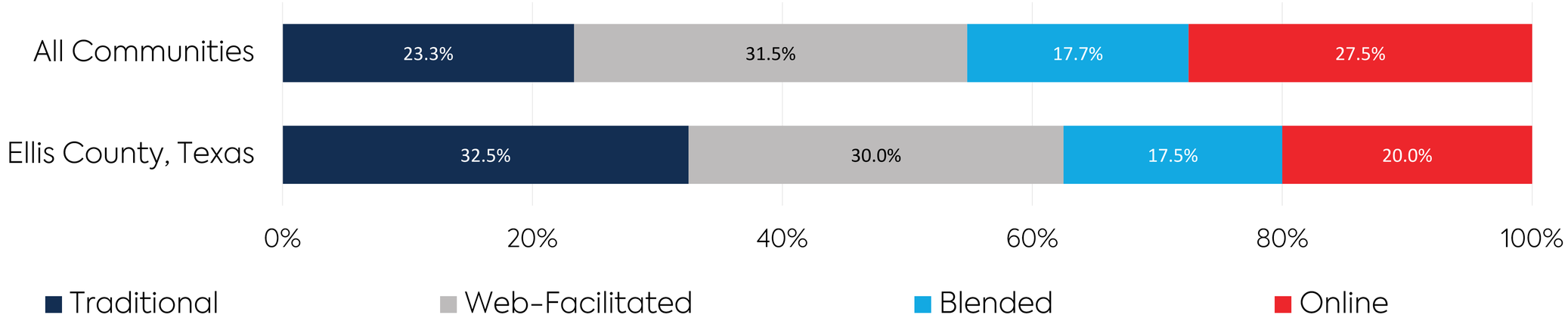
Satisfaction at Institutions of Higher Education

Competition provides communities with choices for service, allowing them the ability to switch providers if their current service does not meet their needs. This chart shows the percentage of higher education institutions that state their internet service meets or does not meet their needs.



Technology and Curriculum Delivery

Technology enables new forms of educational content delivery. Between traditional classroom instruction and online-only classes lies a spectrum of web- and technology-enabled methods of learning. This chart shows the mix of higher education curriculum delivered by colleges and universities in the community.



Traditional courses are those where no online technology is used, and content is delivered in writing or orally. Web-facilitated courses use web-based technology to facilitate what is essentially a face-to-face course and may use a course management system or web pages to post the syllabus and assignments. Blended courses combine online and face-to-face delivery, with a substantial portion of the content delivered online via online discussions and few face-to-face meetings. Online courses are those where most or all of the content is delivered online and typically have no face-to-face meetings.

K-12 School Sector Survey Results

Ellis County, Texas

K-12 School Survey Results

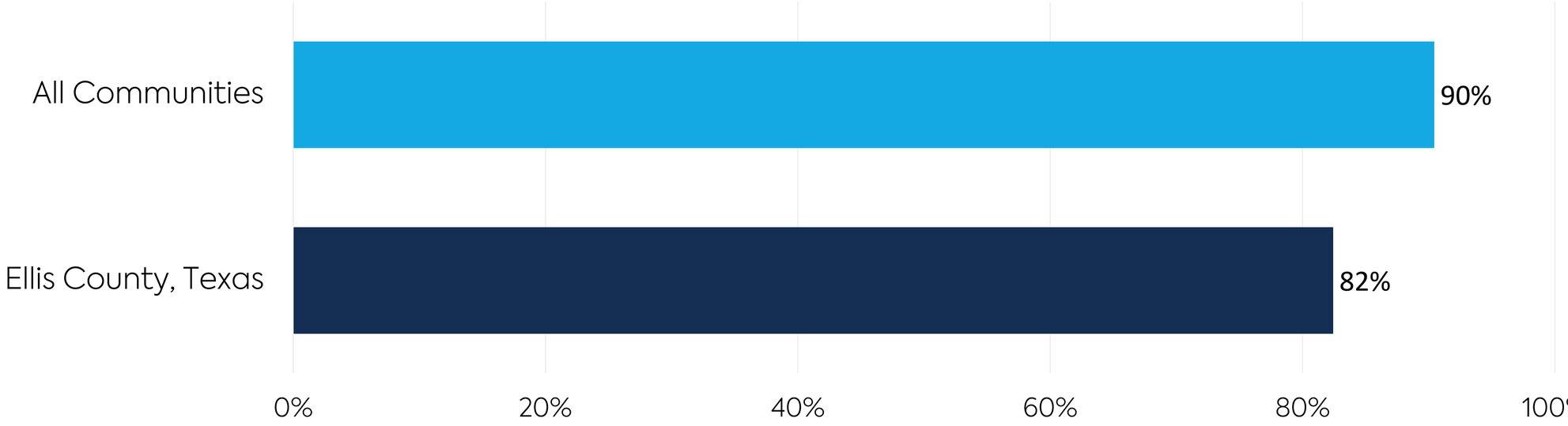
K-12 institutions are the cornerstone of a community's educational system. K-12 education provides students with the knowledge and opportunity to become productive members of the next generation workforce. Schools, along with libraries, have traditionally been early technology adopters, focused on the ways in which internet-enabled devices and applications can enhance the learning environment and provide students with opportunities beyond the classroom.

The following data show the connectivity and use of technology among K-12 schools in the community, compared to those in other communities participating in Connected Nation's Connected program. These data should be used to make informed decisions and implement solutions for improving connectivity in the community.

Data from Ellis County represent survey responses collected between August 2022 and December 2022. During this time, seven Ellis County K-12 facilities responded to the survey. Data from all Connected communities represent survey responses collected between January 1, 2020, and November 30, 2022. As more communities participate in the Connected program, these figures are likely to change.

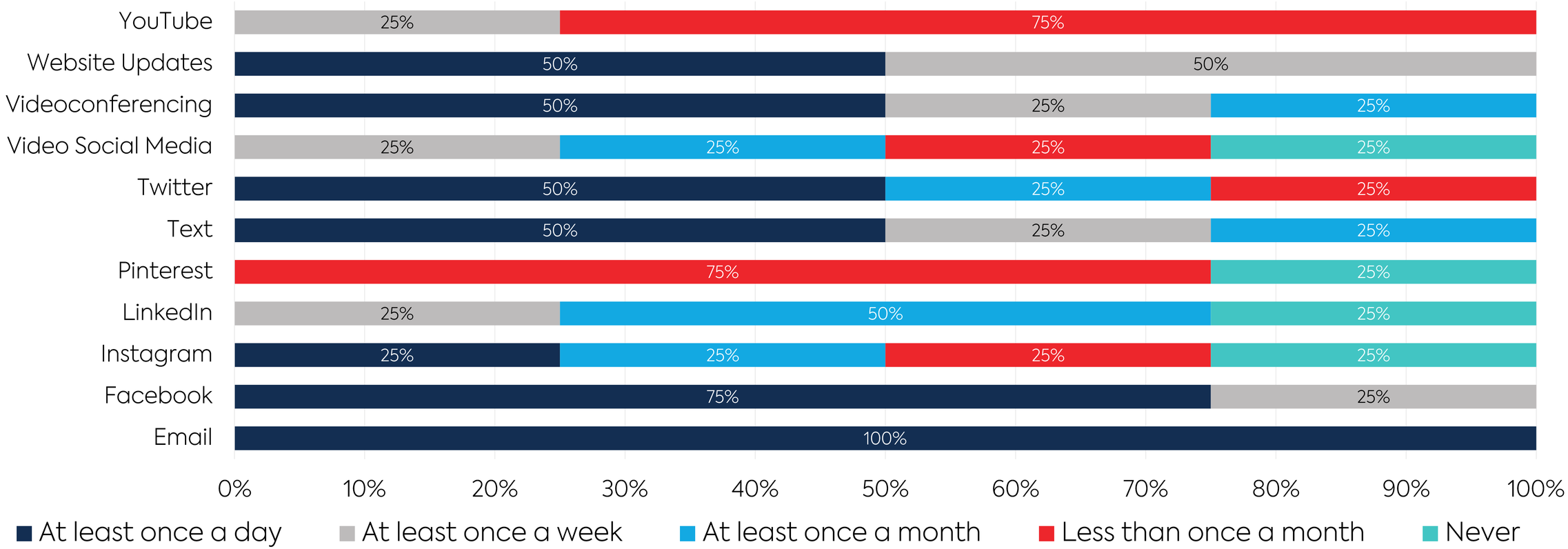
Classrooms with Wi-Fi Service

Wireless connectivity allows for a wide range of devices to be connected to the institution's network. While Wi-Fi is important in public and common areas, it is also important for Wi-Fi signals to penetrate classrooms throughout the school. This chart shows the average percentage of K-12 classrooms in the community with Wi-Fi available, compared to classrooms in other Connected communities.



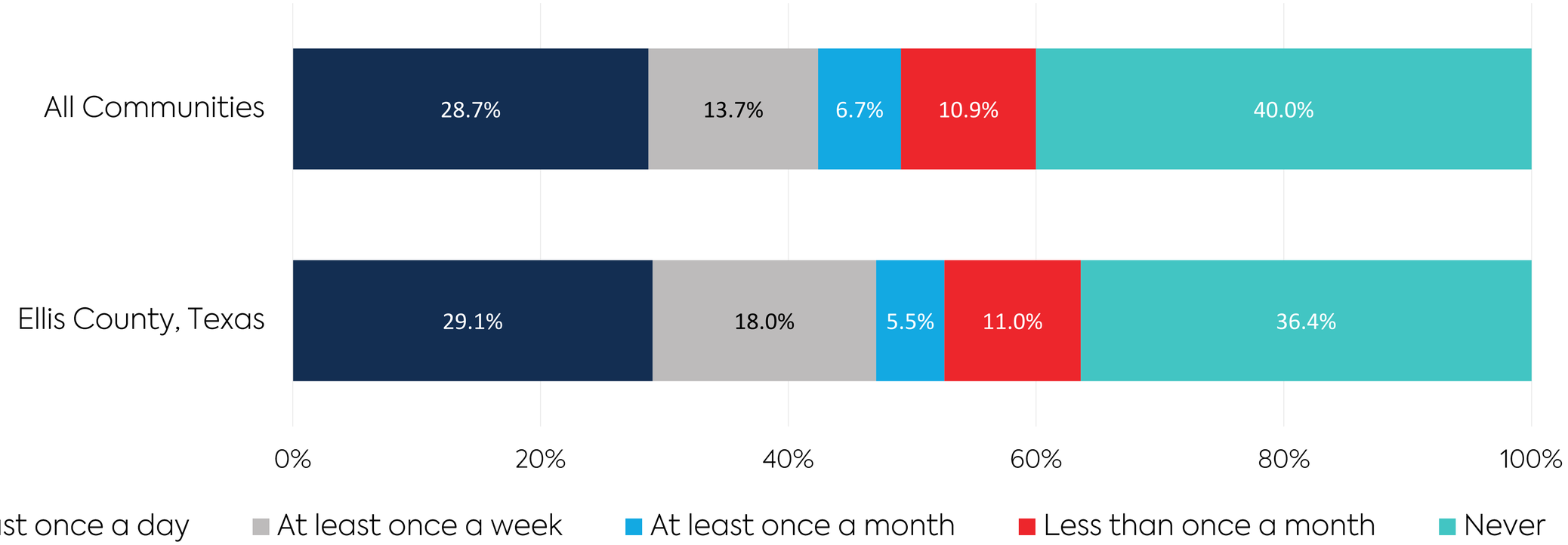
Digital Communications

This chart shows the frequency with which K-12 schools in the community use various digital tools to communicate with the public.



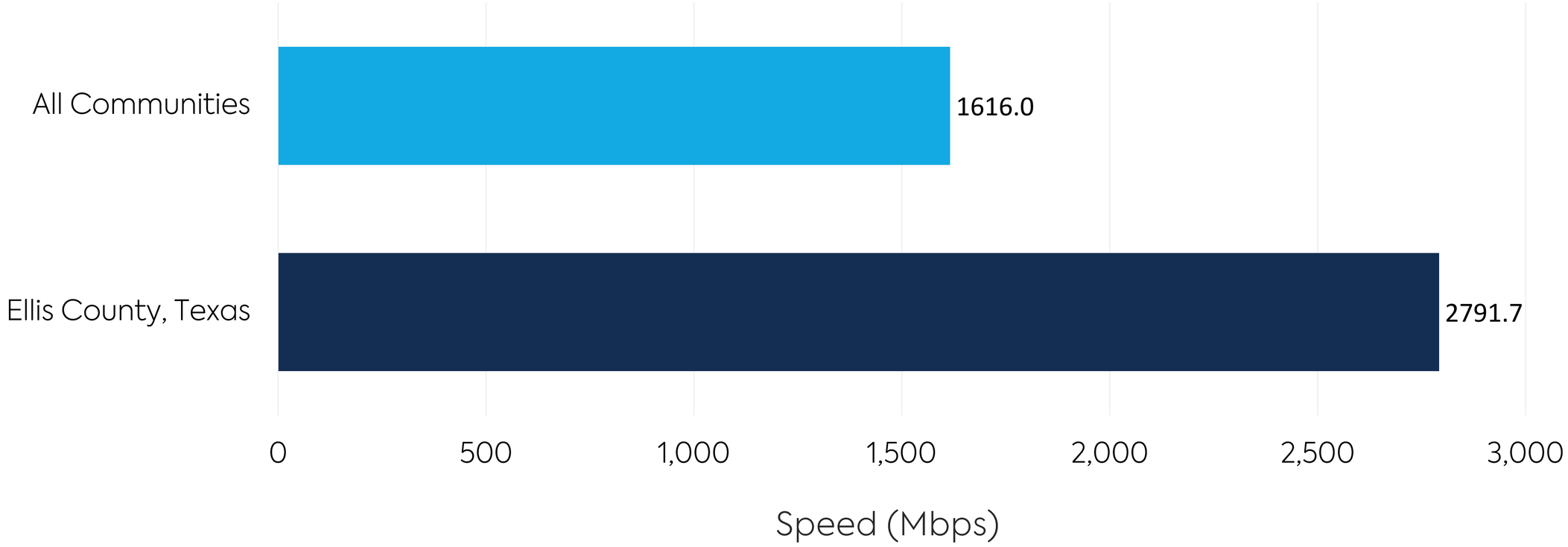
Digital Interaction

This chart shows the frequency with which residents in the community report that they digitally interact with K-12 institutions. Examining the digital interaction of residents, and the digital communications tools used by K-12 institutions, can help identify ways to increase the online presence of these institutions.



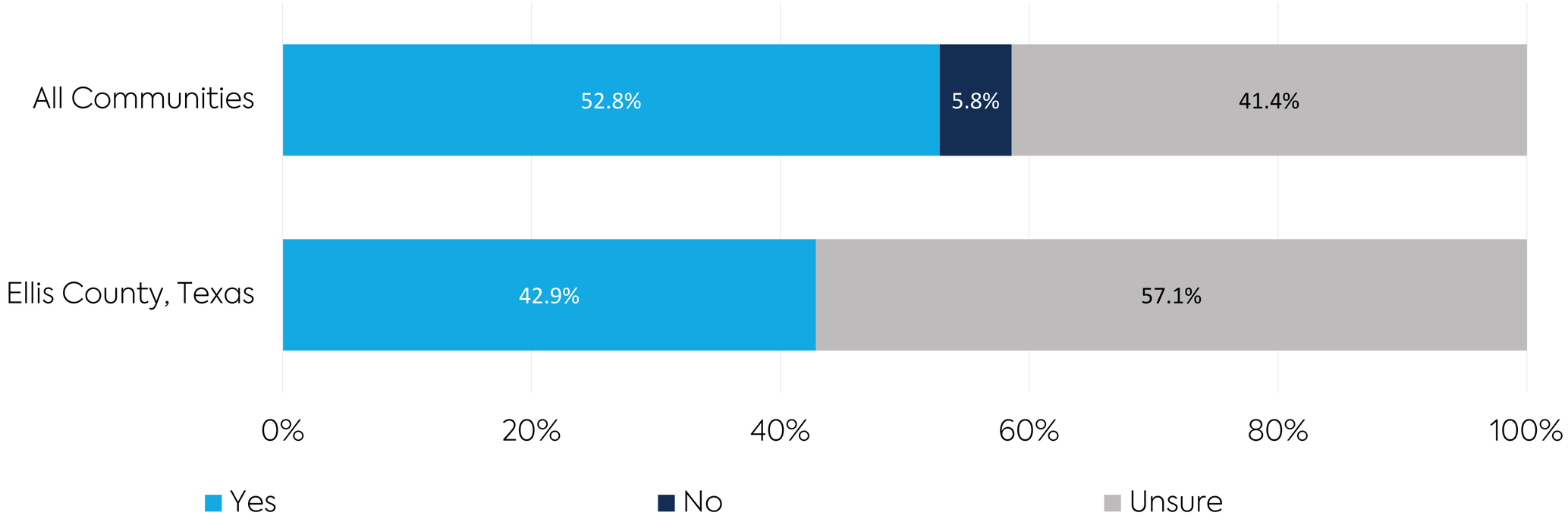
Download Speeds

Connection speeds can have a major impact on how the internet is used. This chart shows the average reported download speed among K-12 institutions with a connection in the community, compared to those in other Connected communities.



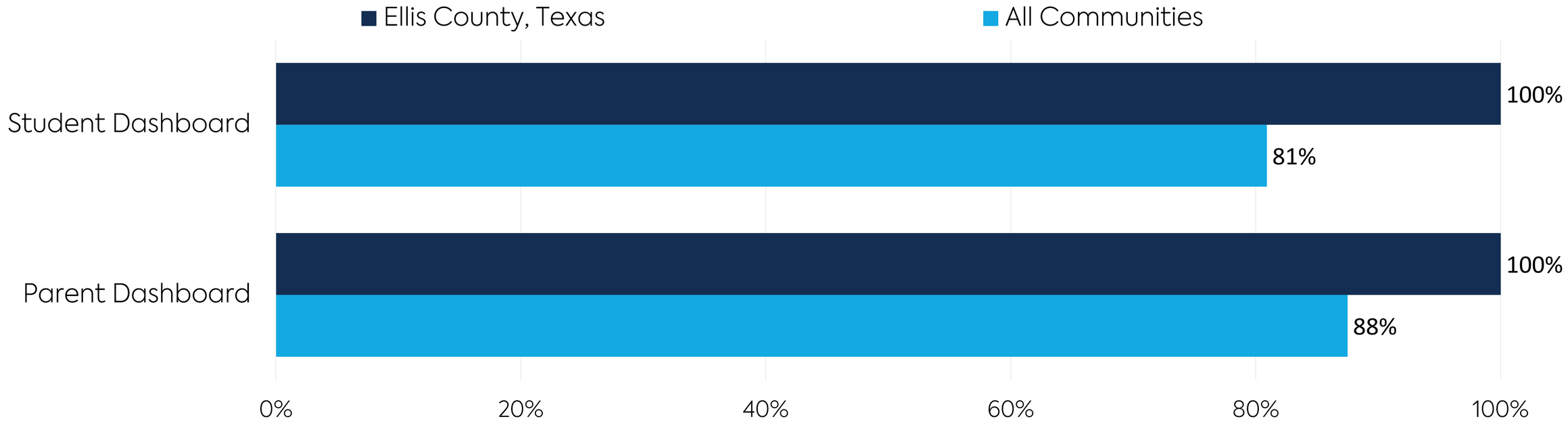
E-Rate Participation

The Schools and Libraries Program, also known as E-Rate, makes telecommunications and information services more affordable for schools and libraries by providing discounts on service, funding for equipment, and construction of internet connections. This chart shows the status of E-Rate participation for schools in the community, compared to schools in other Connected communities. Federal funding is left on the table if schools do not participate in the program.



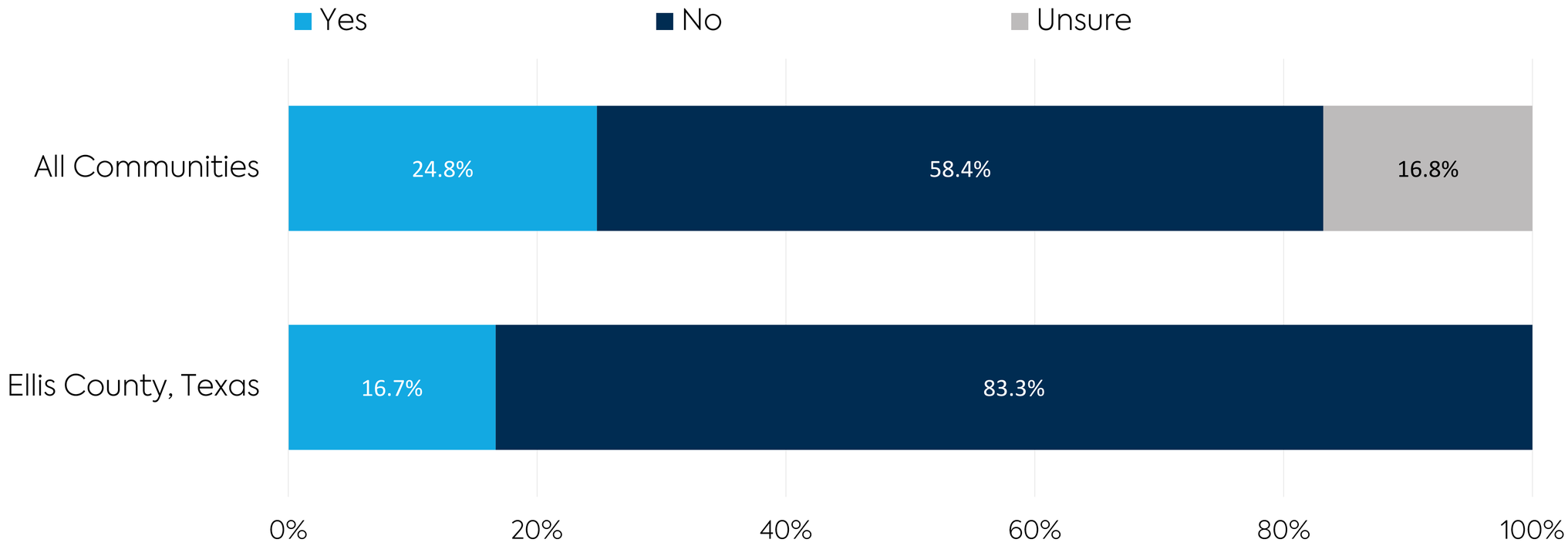
Online Portals

One way to digitally engage parents and students is through an online portal where participants can access individualized information regarding school performance, homework, activities, financial accounts, and much more. The K-12 survey asked community schools if they had 1) an online portal for students to access homework, content, etc., and 2) an online portal for parents to access grades, pay bills, register for activities, etc. This chart shows the percentage of schools that report having these two types of portals.



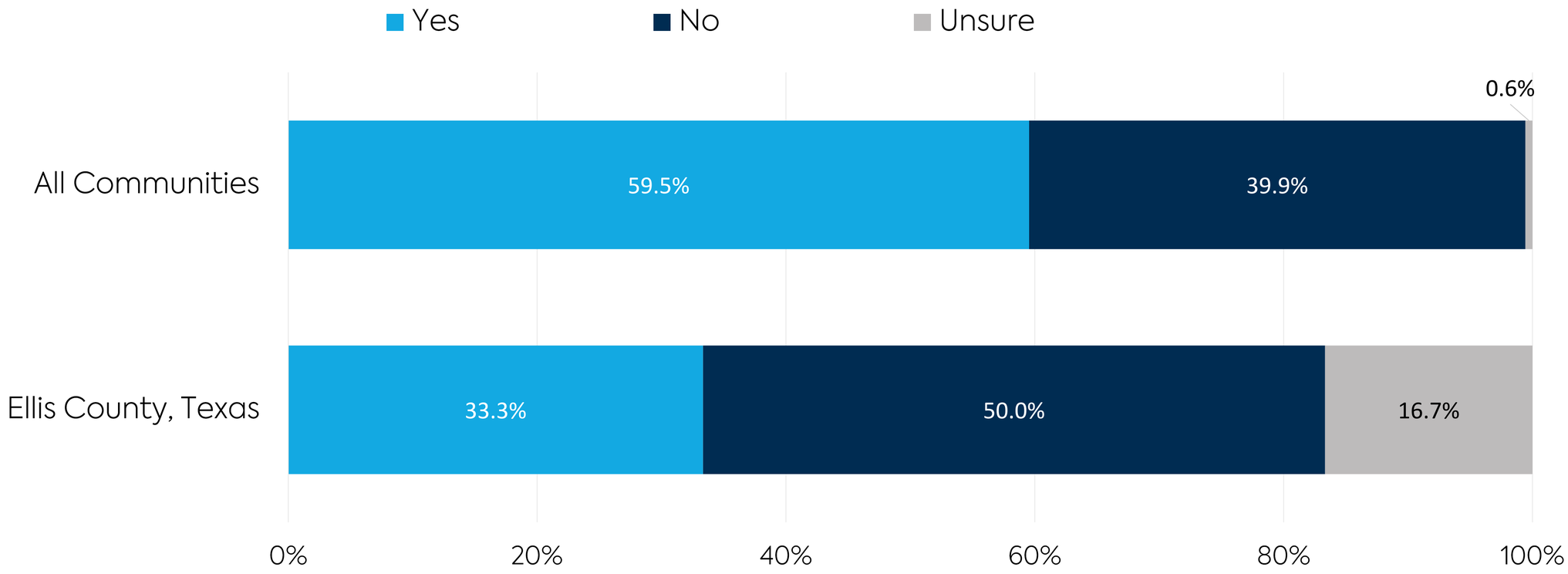
Public Wi-Fi

Public Wi-Fi can help create a better-connected community by providing additional access points for those with devices limited by mobile data plans or those without mobile broadband capability. This chart shows the percentage of K-12 facilities in the community that offer free public Wi-Fi access, compared to those in other participating communities.



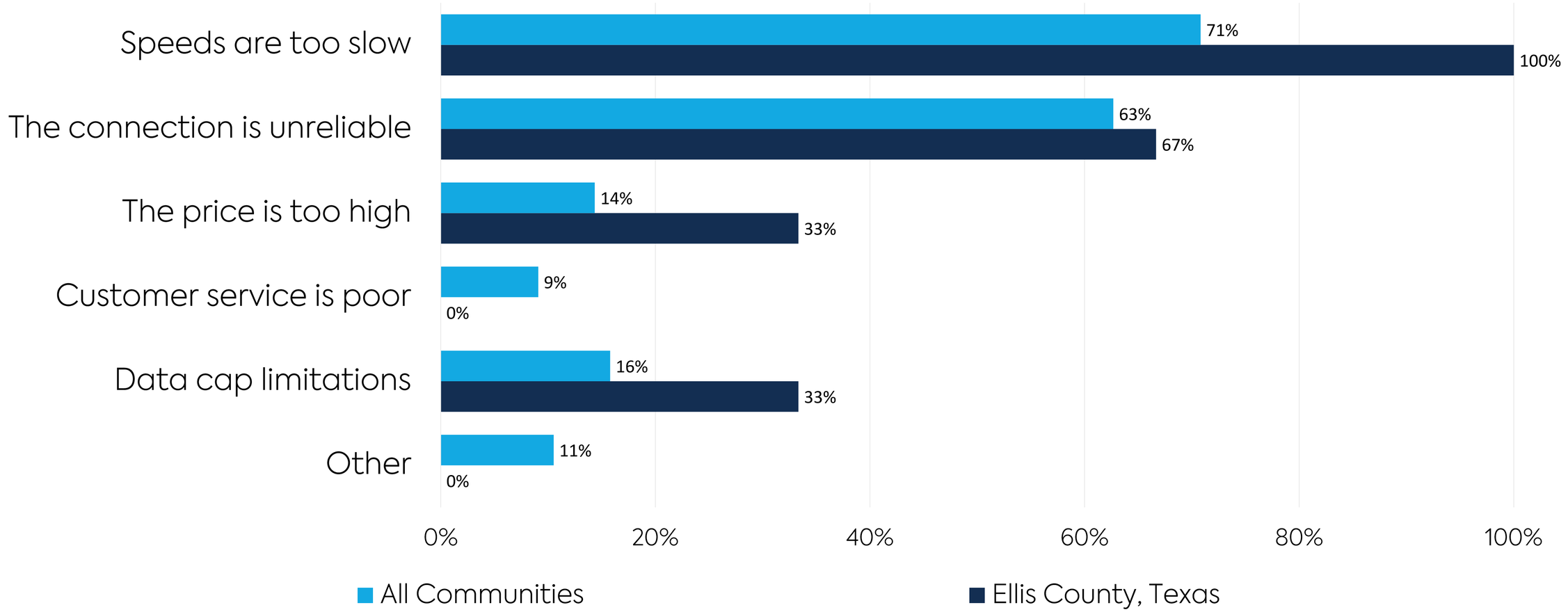
Satisfaction Among K-12 Schools

Competition provides communities with choices for service, allowing them the ability to switch providers if their current service does not meet their needs. This chart shows the percentage of K-12 institutions that state their internet service meets or does not meet their needs.



Reasons for Dissatisfaction

This chart shows the various reasons why local K-12 schools report being dissatisfied with their current internet service.

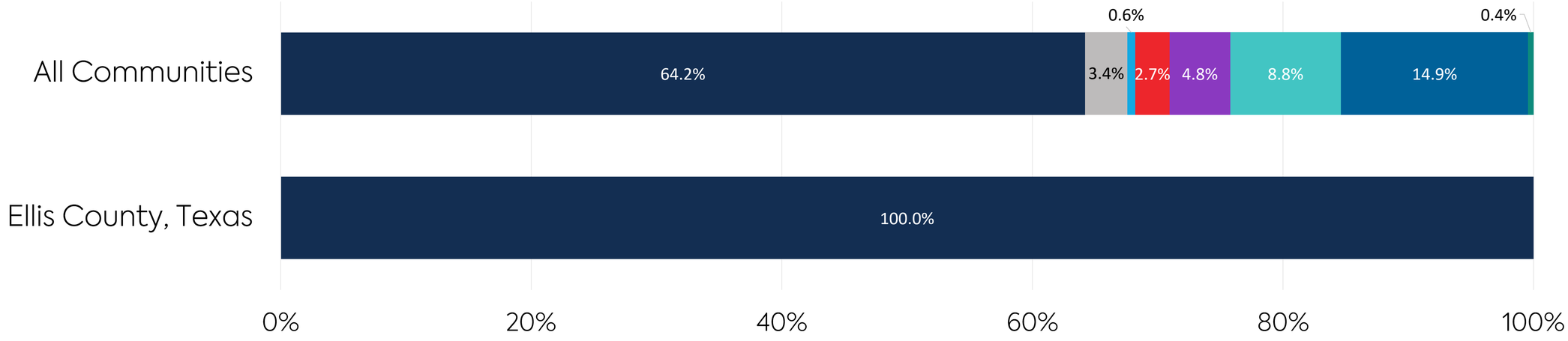


Student Devices

Many schools across the country are putting advanced computing power into the hands of every student. From tablets to laptops, Android to Apple, schools are examining ways for leveraging technology to expand opportunities for learning inside and outside the classroom. One-to-one device programs allow all students to have equal and individual access to technology, content, and resources; however, in communities without one-to-one device initiatives, technology is often shared in labs or individual classrooms among all students.

1:1 Device Programs

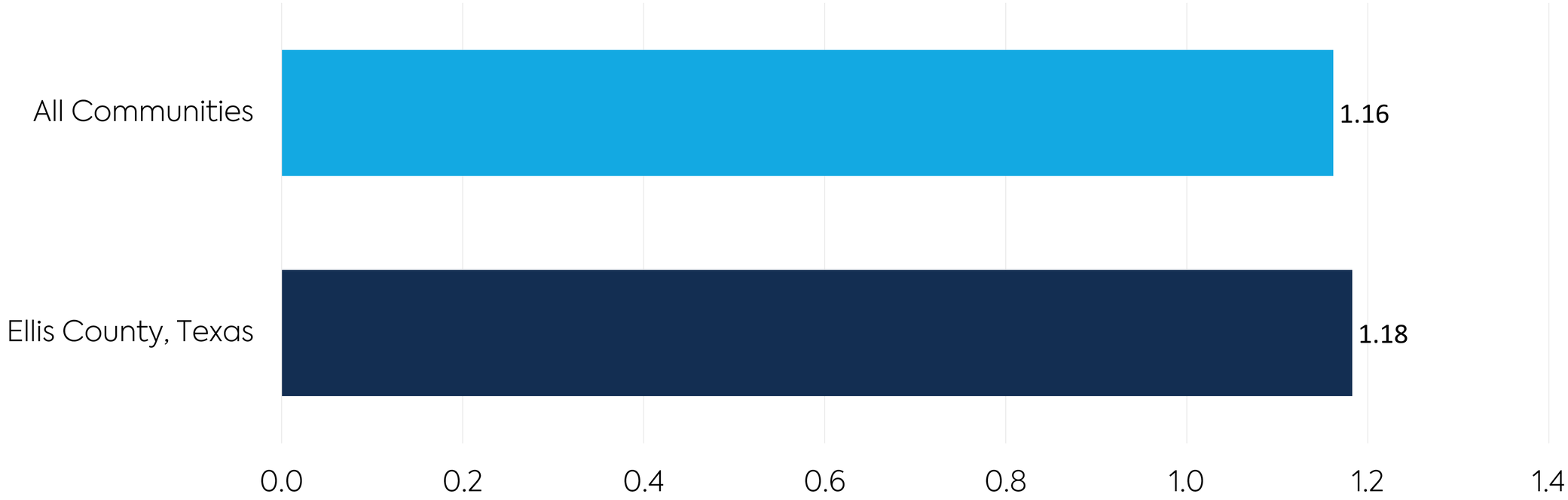
This chart shows the current state of one-to-one device programs across schools in the community, compared to schools in other Connected communities.



- Yes, the school has successfully implemented a 1:1 device program with devices supplied by the school
- The school has a bring-your-own-device program; devices are supplied by the students and content is provided by the school
- The school has successfully implemented a program where families may provide a device for their students OR students may use a device provided by the school
- The school is currently piloting a device program with a sample of students and staff
- The school has a plan to implement a device initiative
- The school is in the exploratory phase of implementing a device initiative
- No, we currently have no such program or plans to implement such initiatives
- Unsure

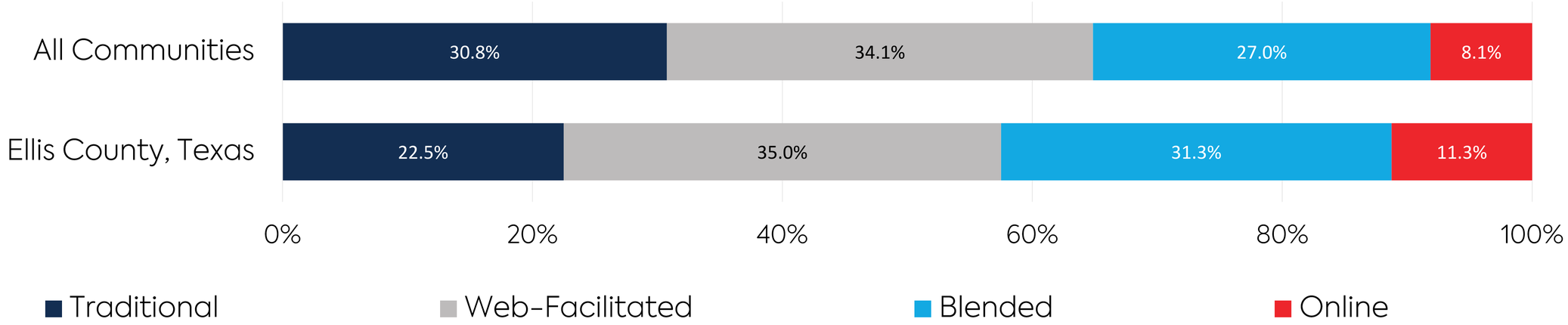
Devices per Student

This chart examines the overall ratio of devices to students (including those as part of a 1:1 program and those in labs, classrooms, and elsewhere). The device-to-student ratio is calculated by collecting the total number of devices (e.g., laptops, desktops, or tablets) and students from schools responding to the K-12 survey. Data are only representative of institutions that provided a count of both students and devices.



Technology and Curriculum Delivery

Technology enables new forms of educational content delivery. Between traditional classroom instruction and online-only classes lies a spectrum of web- and technology-enabled methods of learning. This chart shows the mix of curriculum delivered by K-12 schools in the community.



Traditional courses are those where no online technology is used and content is delivered in writing or orally. Web-facilitated courses use web-based technology to facilitate what is essentially a face-to-face course and may use a course management system or web pages to post the syllabus and assignments. Blended courses combine online and face-to-face delivery, with a substantial portion of the content delivered online via online discussions and few face-to-face meetings. Online courses are those where most or all of the content is delivered online and typically have no face-to-face meetings.

Library and Community Organization Sector Survey Results

Ellis County, Texas

Library and Community Organization Survey Results

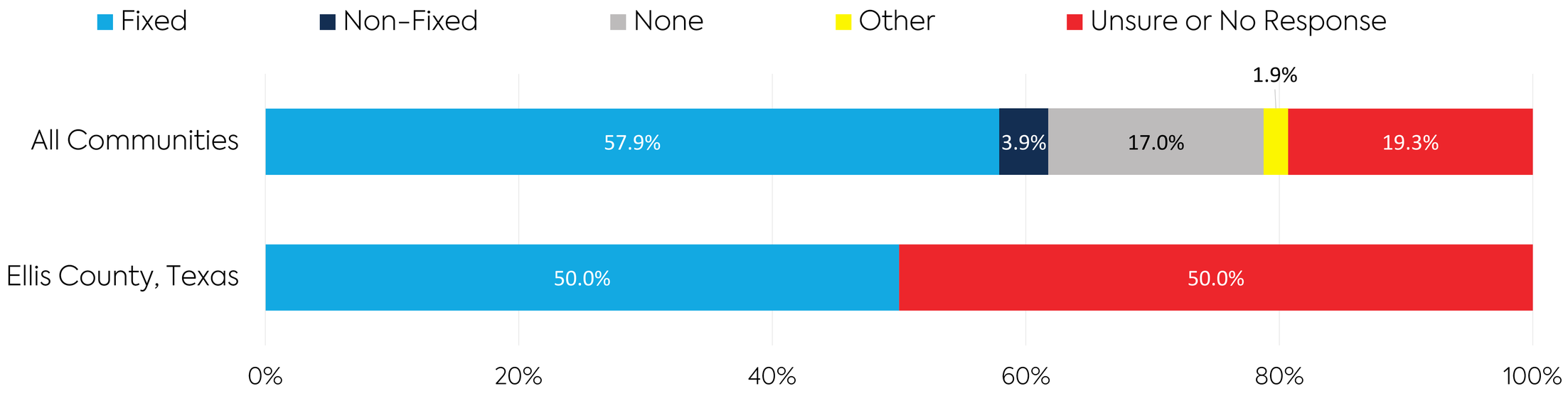
Libraries and other community organizations serve a vital role in providing access to information and technology for the entire community. Libraries often host public computers with internet access for use by those without a device or connection at home and provide technology training to develop a more digitally literate community.

The following data show the connectivity and use of technology among libraries and organizations, compared to those in other communities participating in Connected Nation's Connected program. These data should be used to make informed decisions and implement solutions for improving connectivity in the community.

The library sector includes public and private libraries, as well as other non-governmental organizations that serve the community. Data from Ellis County represent survey responses collected between August 2022 and December 2022. During this time, two Ellis County libraries and community organizations completed the survey. Data from all Connected communities represent survey responses collected between January 1, 2020, and November 30, 2022. As more communities participate in the Connected program, these figures are likely to change.

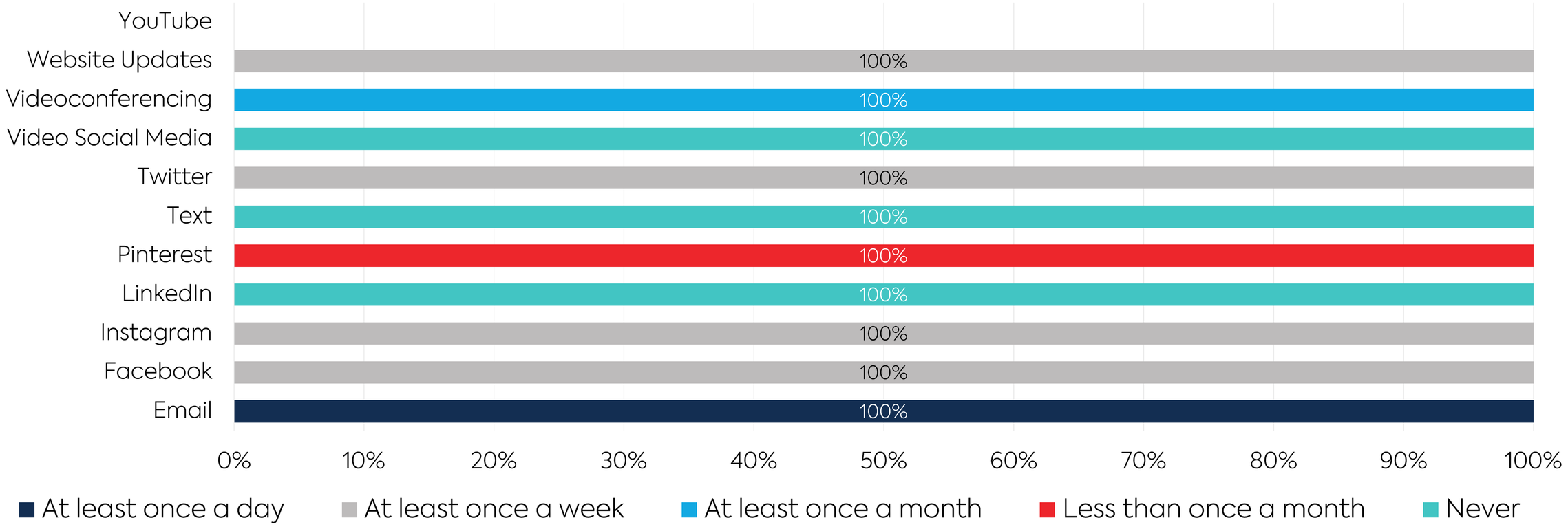
Broadband Adoption in the Library Sector

This chart shows the percentage of libraries and community organizations that subscribe to various types of broadband services or that are without a connection. Fixed connections are those provided by cable, DSL, fiber, or fixed wireless technology, while non-fixed connections include dial-up, satellite, and mobile-only services. These non-fixed internet services, while providing basic access, can often be plagued by connection latency, have costly monthly data plans, or can be impacted by weather, terrain, large expanses of open water, and other environmental factors.



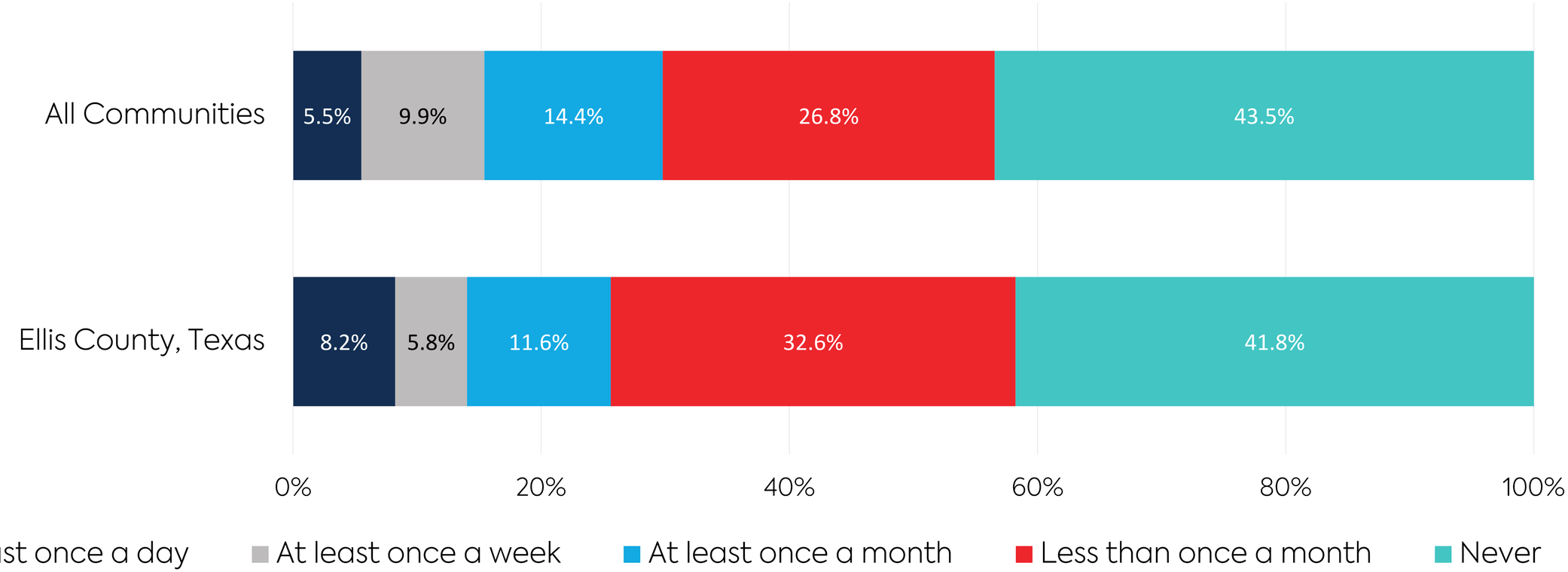
Digital Communications

Examining the digital interaction of residents, and the digital communications tools used by libraries and organizations, can help identify ways to increase the online presence of these critical institutions. This chart provides the frequency with which libraries and organizations in the community use various digital tools to communicate with the public.



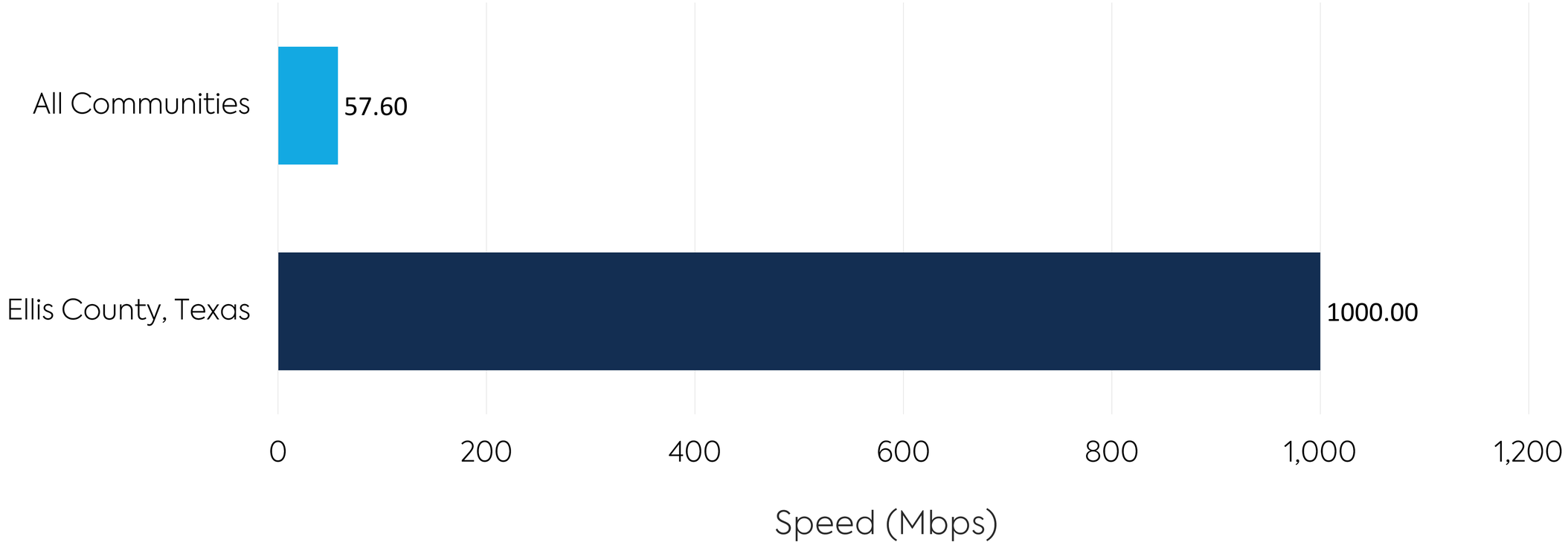
Digital Interaction

This chart shows the frequency with which residents in the community report that they digitally interact with organizations and libraries. Examining the digital interaction of residents, and the digital communications tools used by local institutions, can help identify ways to increase the sector's online presence.



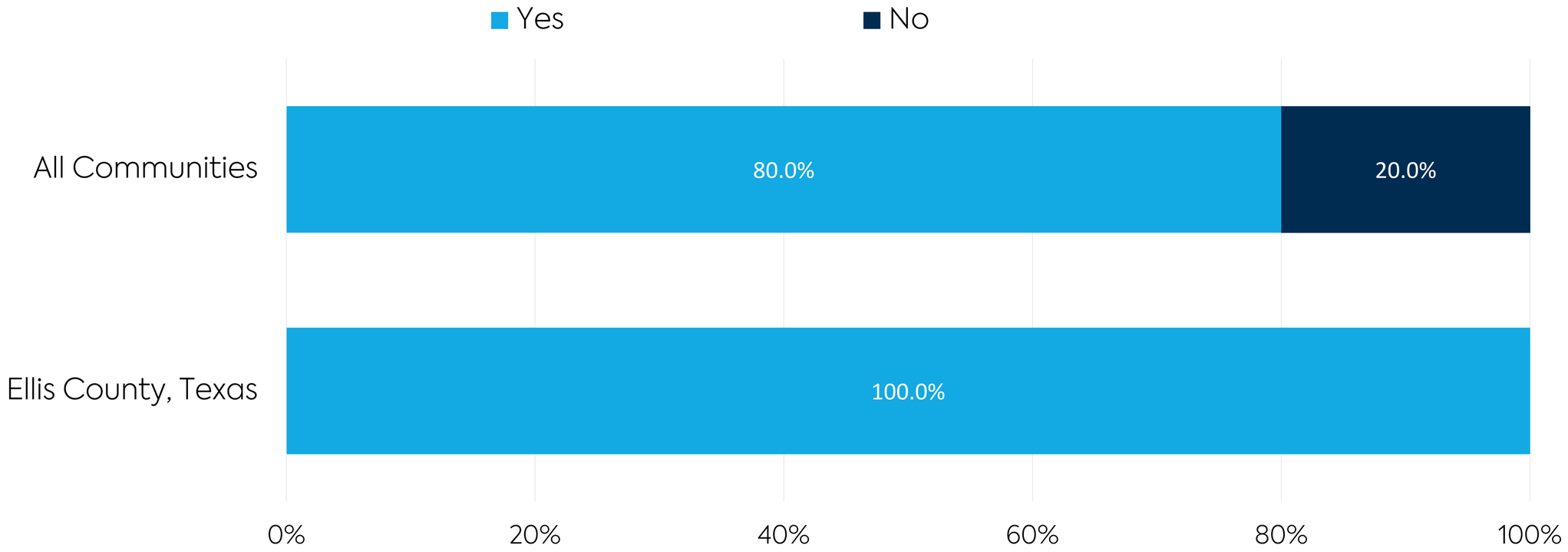
Library Sector Download Speeds

Connection speeds can have a major impact on how the internet is used. This chart shows the average reported download speed among libraries and organizations in the community, compared to those in other Connected communities.



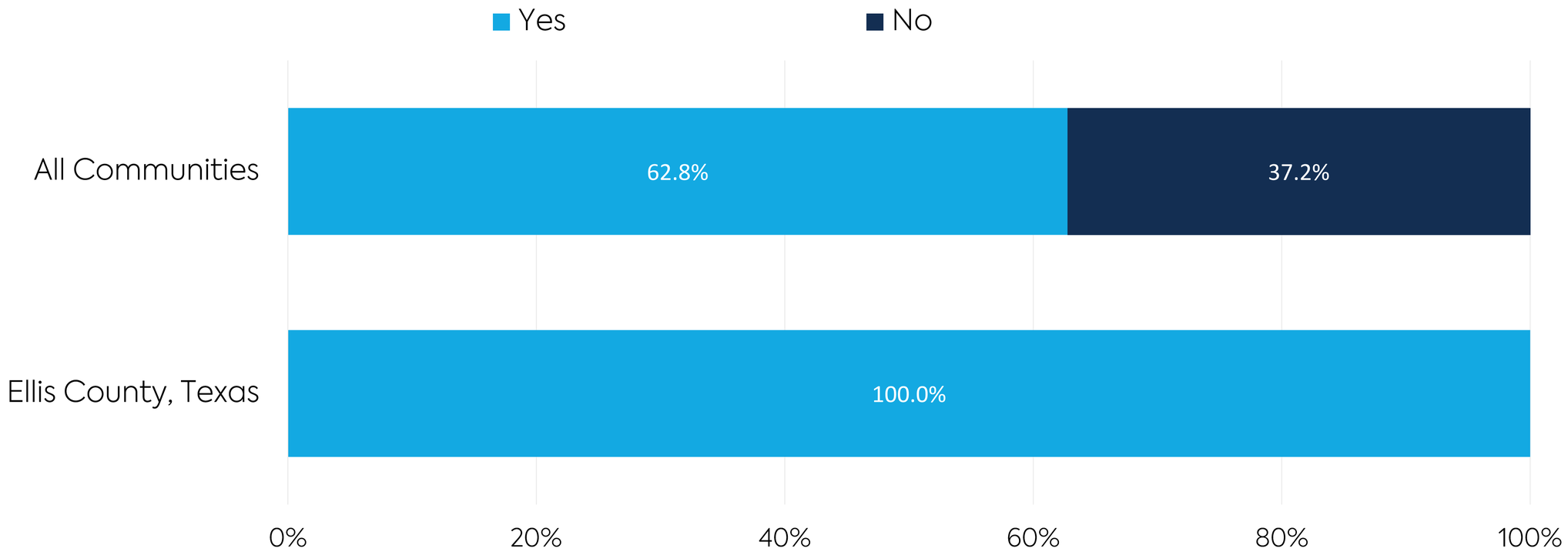
Presence of a Website

The website of a library or community organization may be the first point of contact a resident or business has when an issue arises or information is required. This chart shows the percentage of libraries and organizations in the community that have a website, compared to those in other Connected communities.



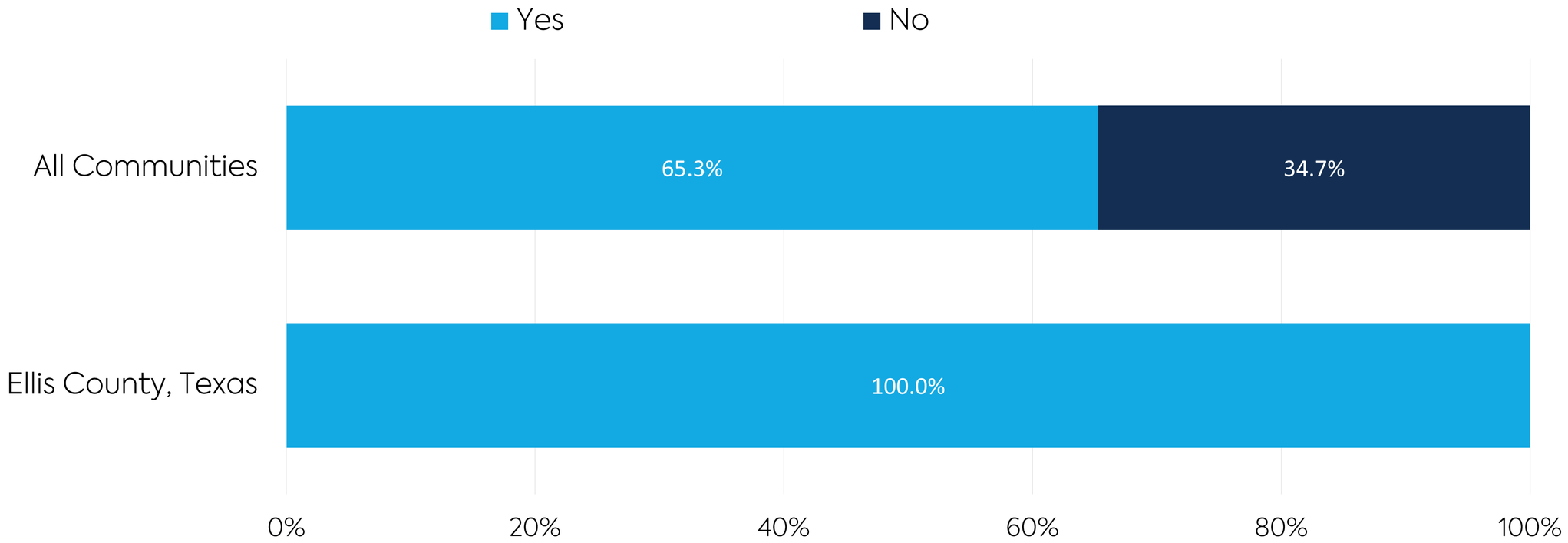
Public Wi-Fi

Public Wi-Fi can help create a better-connected community by providing additional access points for those with devices limited by mobile data plans or those without mobile broadband capability. This chart shows the percentage of libraries and community organizations that offer free Wi-Fi to the public.



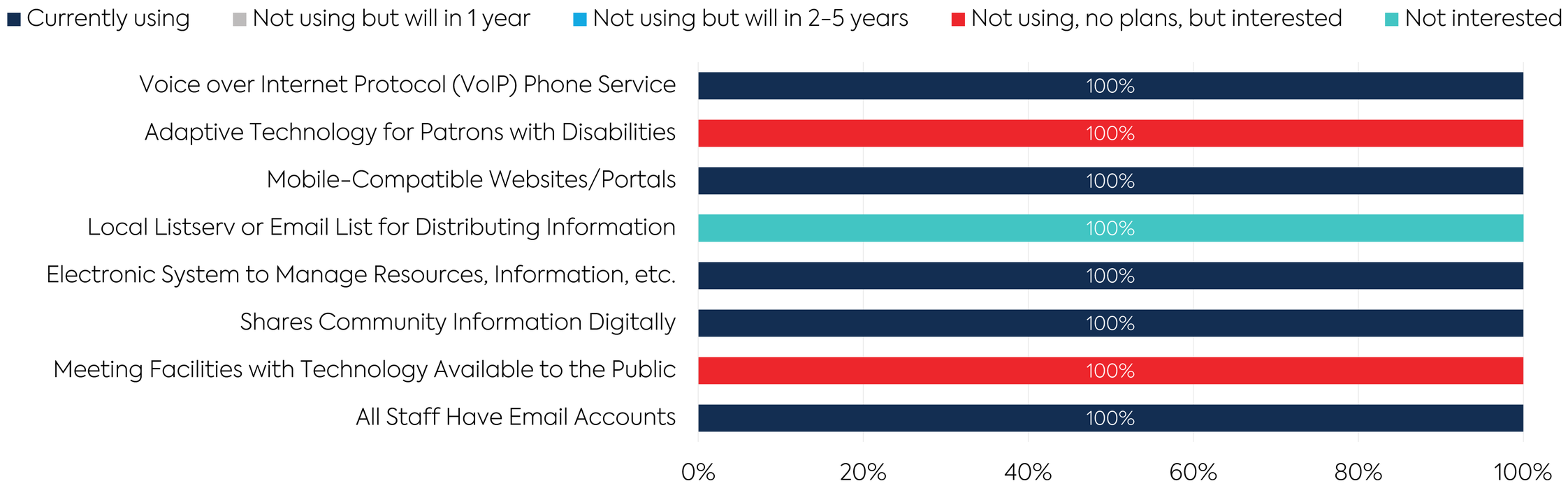
Satisfaction in the Library Sector

Competition provides communities with choices for service, allowing them the ability to switch providers if their current service does not meet their needs. This chart shows the percentage of libraries and community organizations that state their internet service meets or does not meet their needs.



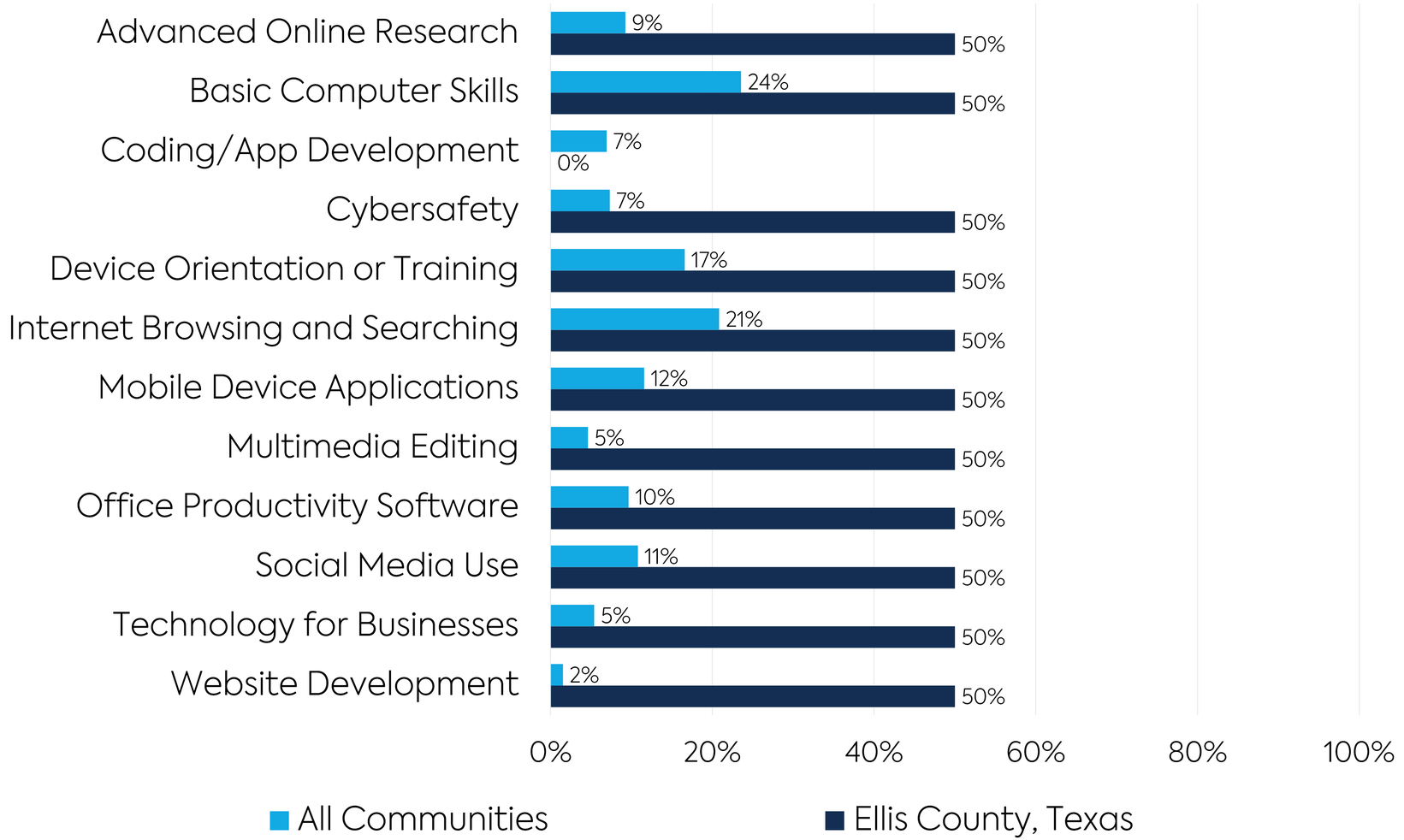
Library Sector Technology Applications

Beyond a website and the many forms of digital communications, there are more advanced ways in which a library or community organization can leverage technology to improve the services they offer to the public, and the ways in which patrons access information. This chart shows the usage and interest in a variety of technologies among libraries and other organizations in the community.



Technology Training

Libraries provide opportunities for digital literacy training outside of a traditional classroom setting. This chart shows the percentage of libraries and organizations in the community that report offering each of the various types of technology training, compared to libraries and organizations in other Connected communities.



Public Computing Centers

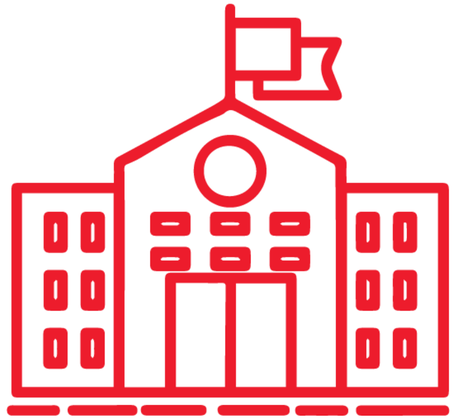
The expense associated with owning a home computer represents a significant barrier to broadband adoption. For low-income residents without the ability to purchase a home computer (or other device), a public computing center may be their only opportunity to access the internet. Further, public access to technology is necessary for community members who have little or no communication technology available in the home, need assistance to effectively use technology, or need to supplement connectivity at home or in schools. A community should have sufficient, free access to computers, internet service, wireless networks, and other communication technologies to support the needs of its residents. In addition, public computer centers should be located in safe facilities with adequate levels of privacy, security, and accessibility for people with disabilities. Information regarding the availability and location of public computer centers should be widely disseminated.

Public Computing Centers (Continued)

This shows the number of locations offering public access to computers and the internet, the number of public computers available at libraries and organizations that answered these questions in the survey, and the average number of computers per site at these responding libraries and organizations.

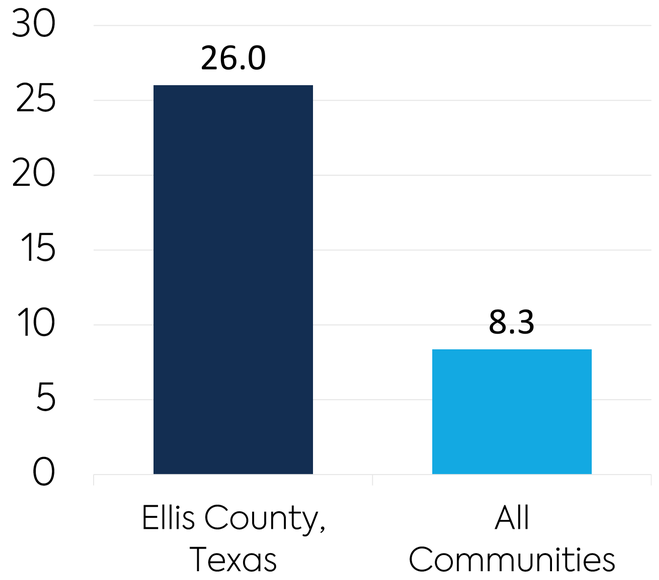
26

Computers Available to the Public



1

Locations With Public Computer Access



Average Number of Computers per Computing Site

Public Safety Sector Survey Results

Ellis County, Texas

CONNECTED NATION

Public Safety Survey Results

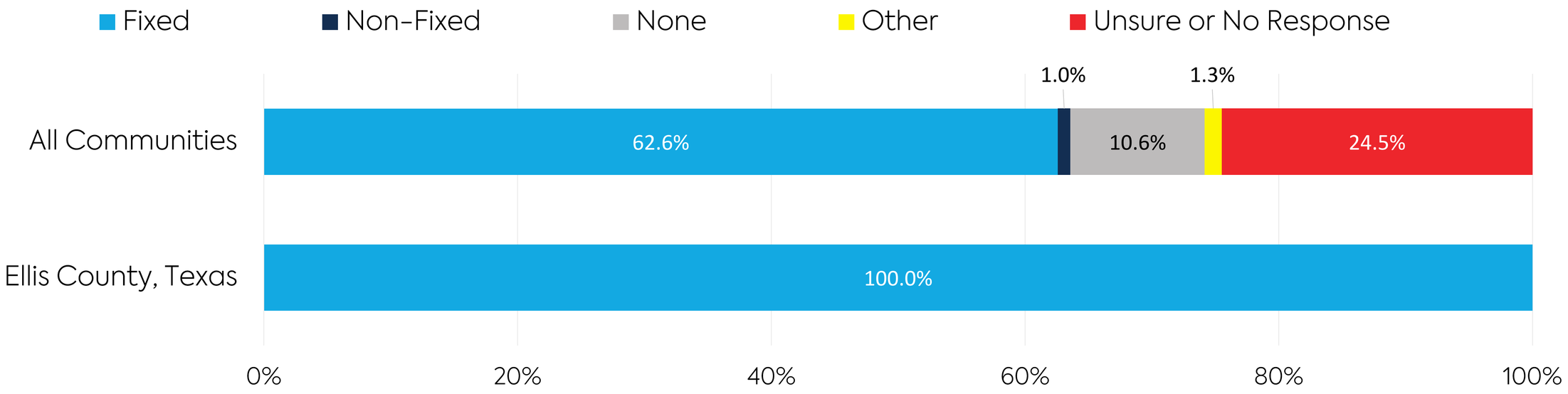
Police, fire, and emergency medical services, along with other supporting staff and organizations, are critical to the health, safety, and well-being of a community. As with the other critical sectors, broadband-enabled technology has changed and improved the ways in which public safety entities serve and protect. Additionally, the internet has brought about a new wave of criminal activity known as cybercrime. Cybersecurity and prevention, and the swift investigation and response to cybercrime from local, state, and federal law enforcement, can help keep a community safe from virtual threats such as fraud, identity theft, hacking, spam, and ransomware.

These data show the connectivity and use of technology among public safety agencies in the community, compared to those in other communities participating in Connected Nation's Connected program. These data should be used to make informed decisions and implement solutions for improving connectivity.

Data from Ellis County represent survey responses collected between August 2022 and December 2022. During this time, one Ellis County public safety agency completed this survey. Data from all Connected communities represent survey responses collected between January 1, 2020, and November 30, 2022. As more communities participate in the Connected program, these figures are likely to change.

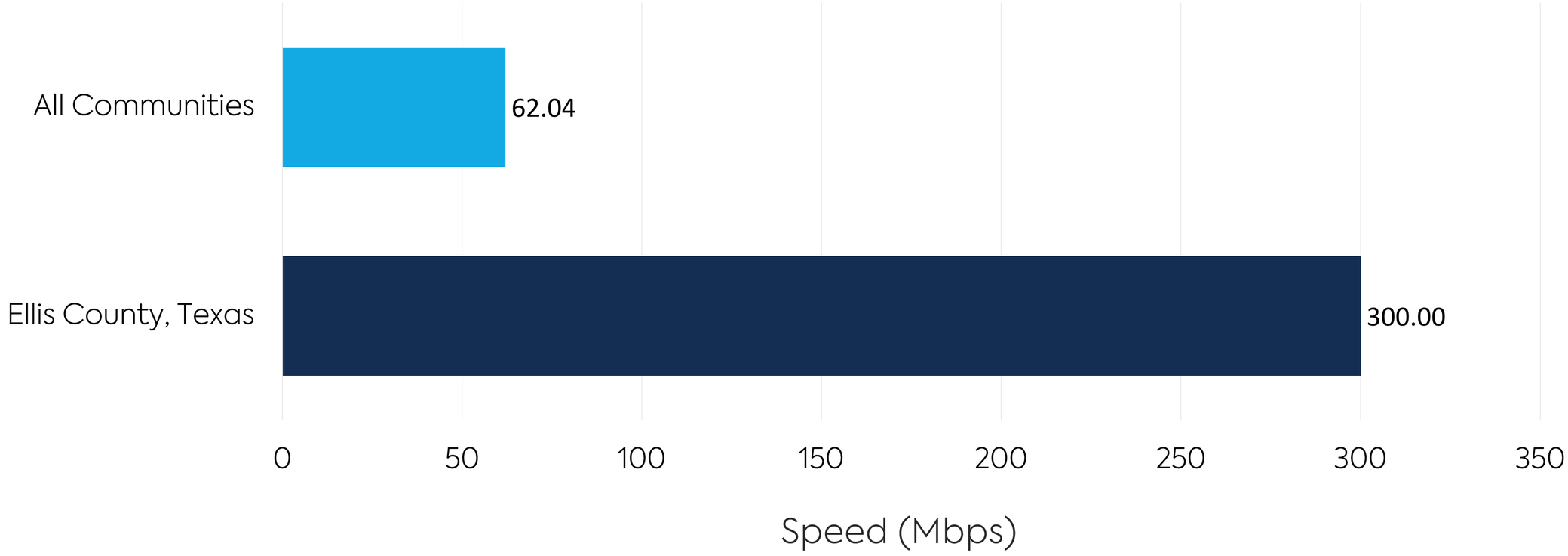
Public Safety Broadband Adoption

This chart shows the percentage of public safety agencies that subscribe to various types of broadband services or that are without a connection. Fixed connections are those provided by cable, DSL, fiber, or fixed wireless technology, while non-fixed connections include dial-up, satellite, and mobile-only services. These types of internet services, while providing basic access, can often be plagued by connection latency, have costly monthly data plans, or can be impacted by weather, terrain, large expanses of open water, and other environmental factors.



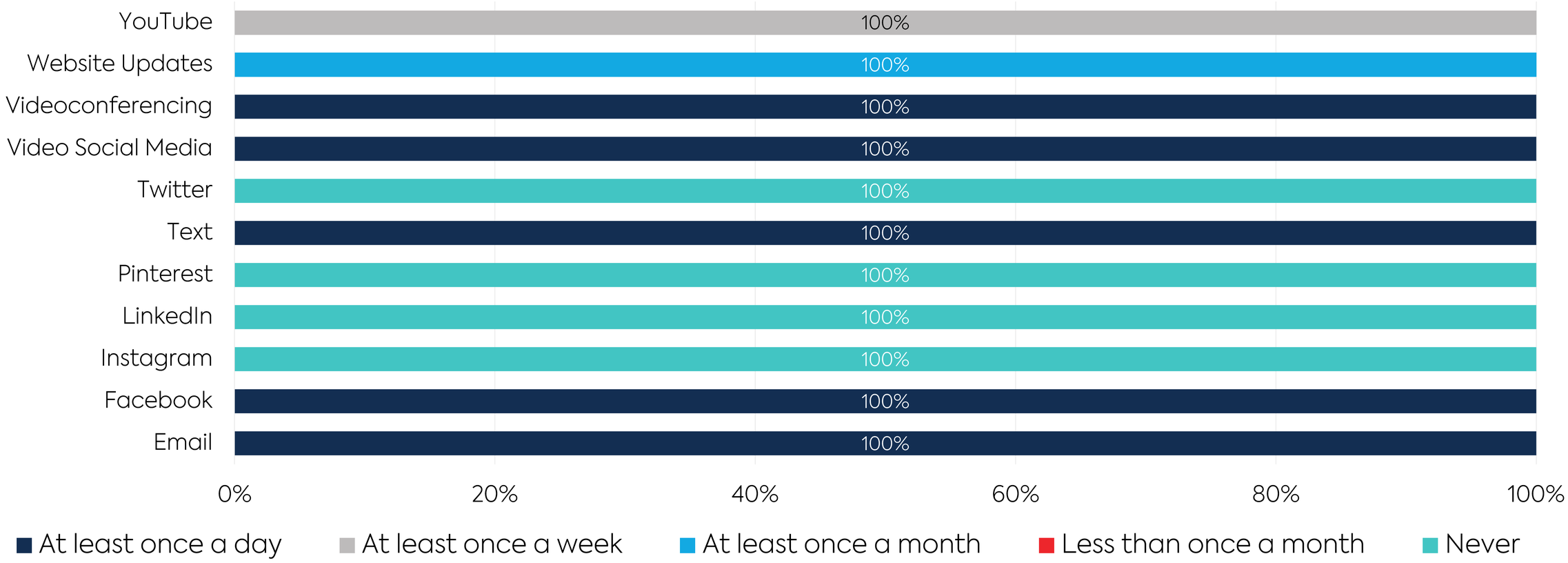
Public Safety Download Speeds

Connection speeds have a major impact on how public safety agencies can use the internet. This chart shows the average reported download speed among public safety agencies with a connection in the community, compared to those in other Connected communities.



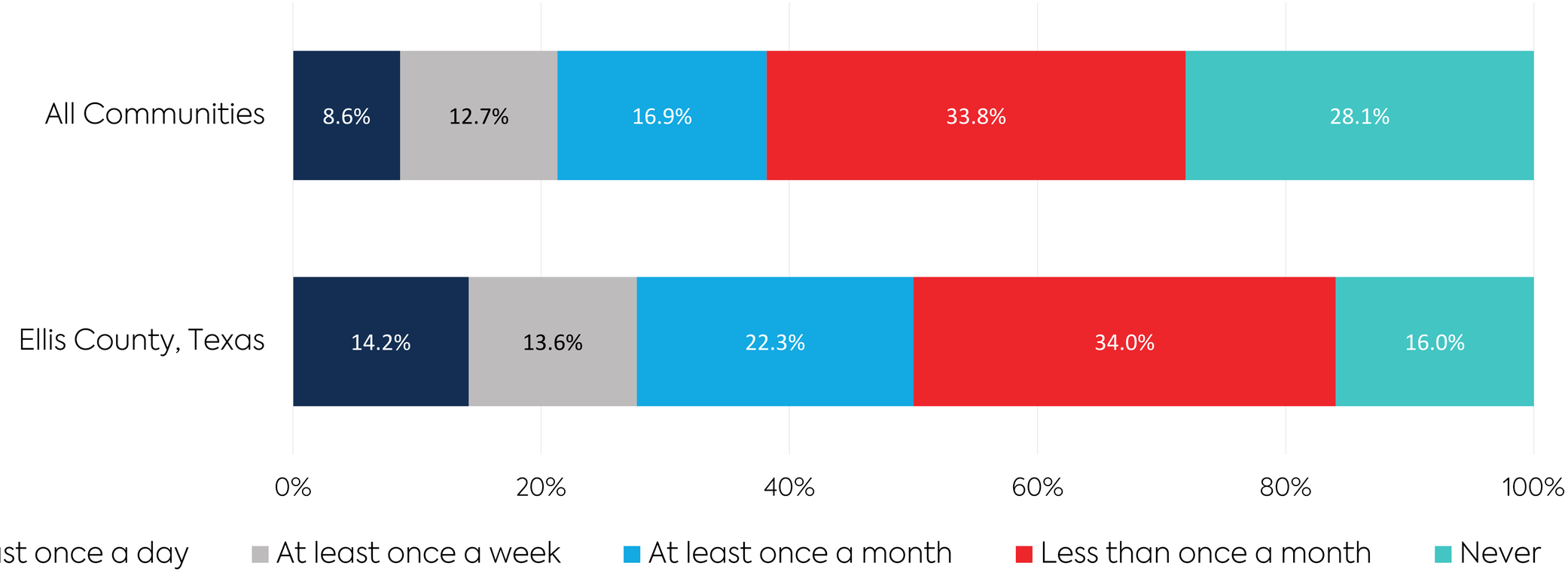
Digital Communications

Technology, coupled with an internet connection, provides myriad ways to digitally interact with the world or even those in one's own community. This chart shows the average frequency with which public safety agencies use various digital communications tools.



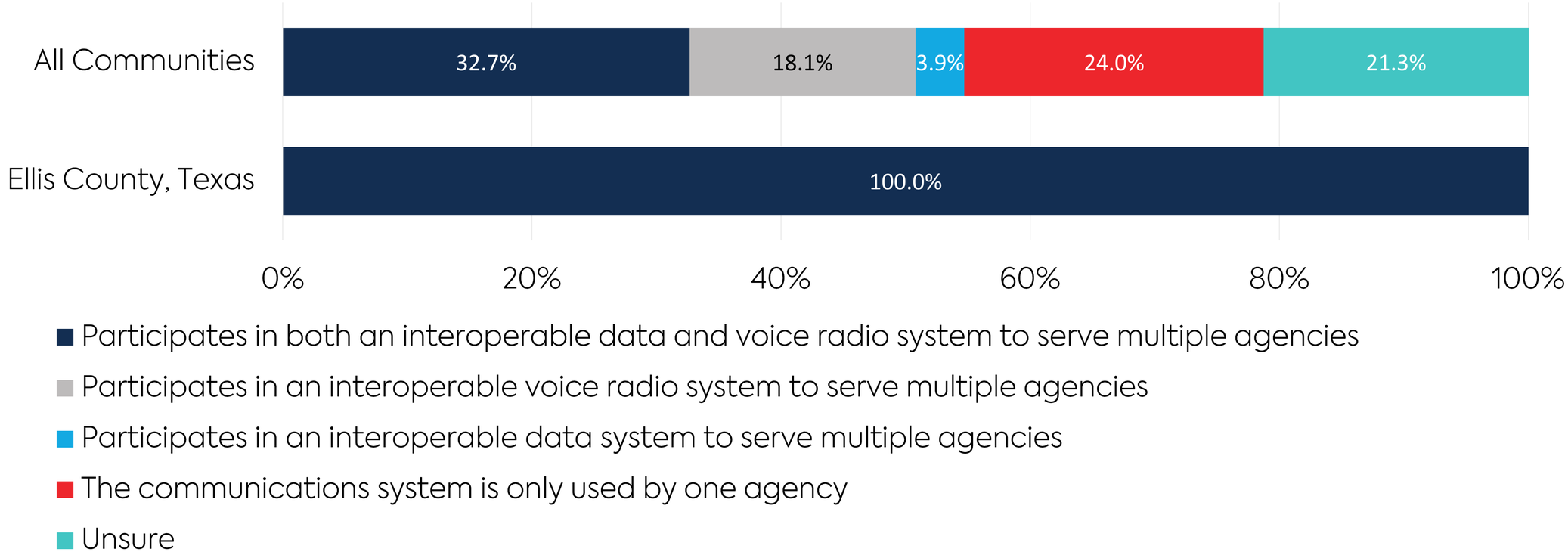
Digital Interaction

This chart shows the frequency with which residents in the community report that they digitally interact with public safety agencies. Examining the digital interaction of residents, and the digital communications tools used by local agencies, can help identify ways to increase the sector's online presence.



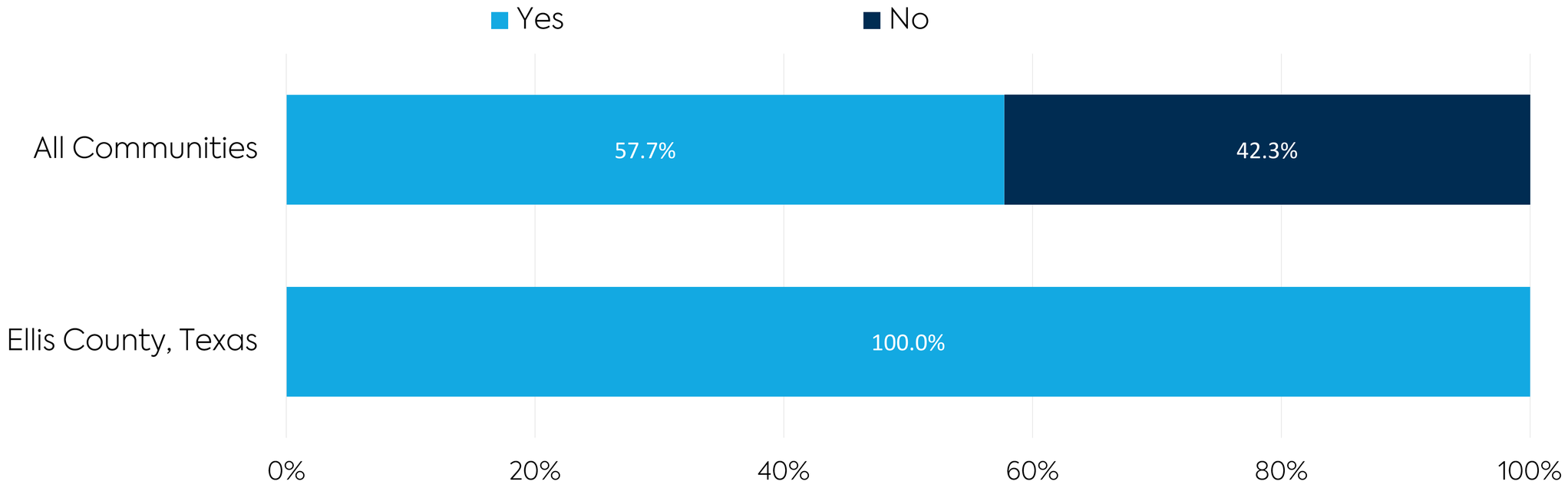
Interoperable Networks

Police, fire, emergency medical services, and 911 should all be able to communicate via a single interoperable voice and data communications network. This chart shows the percentage of agencies in the community that participate in various types of interoperable networks, compared to those in other Connected communities.



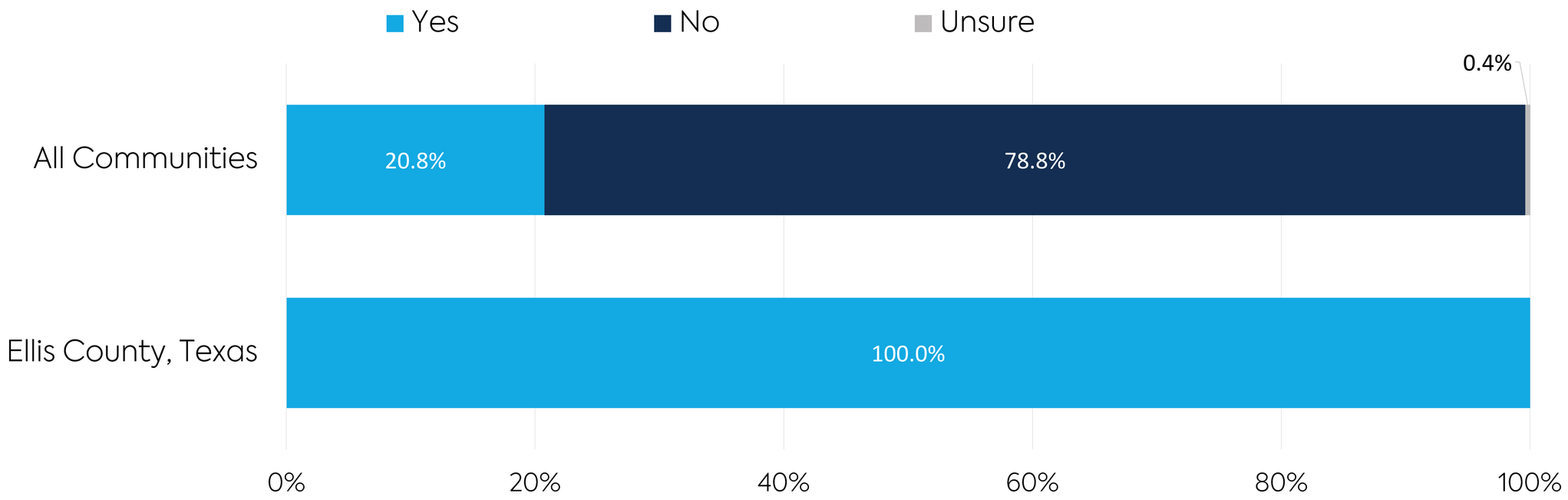
Public Safety Agencies with Websites

The website of a public safety agency may be the first point of contact a community member has when an issue arises or information is required. Therefore, the websites of these agencies should provide relevant information in an easily accessible and flexible digital environment. This chart shows the percentage of public safety agencies in the community that have a website, compared to agencies in other Connected communities.



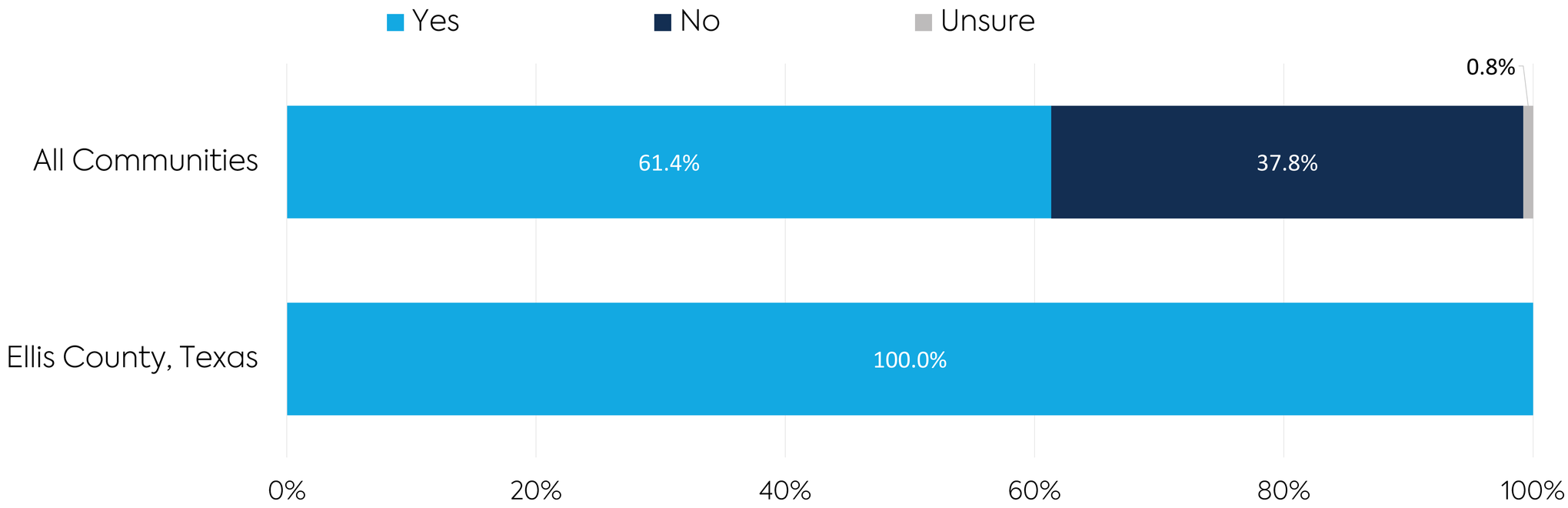
Agencies Offering Public Wi-Fi

Public Wi-Fi can assist in creating a better-connected community by providing additional access points for those with devices limited by mobile data plans or those without mobile broadband capability. This chart shows the percentage of public safety agencies in the community that offer free public Wi-Fi access, compared to those in other participating communities.



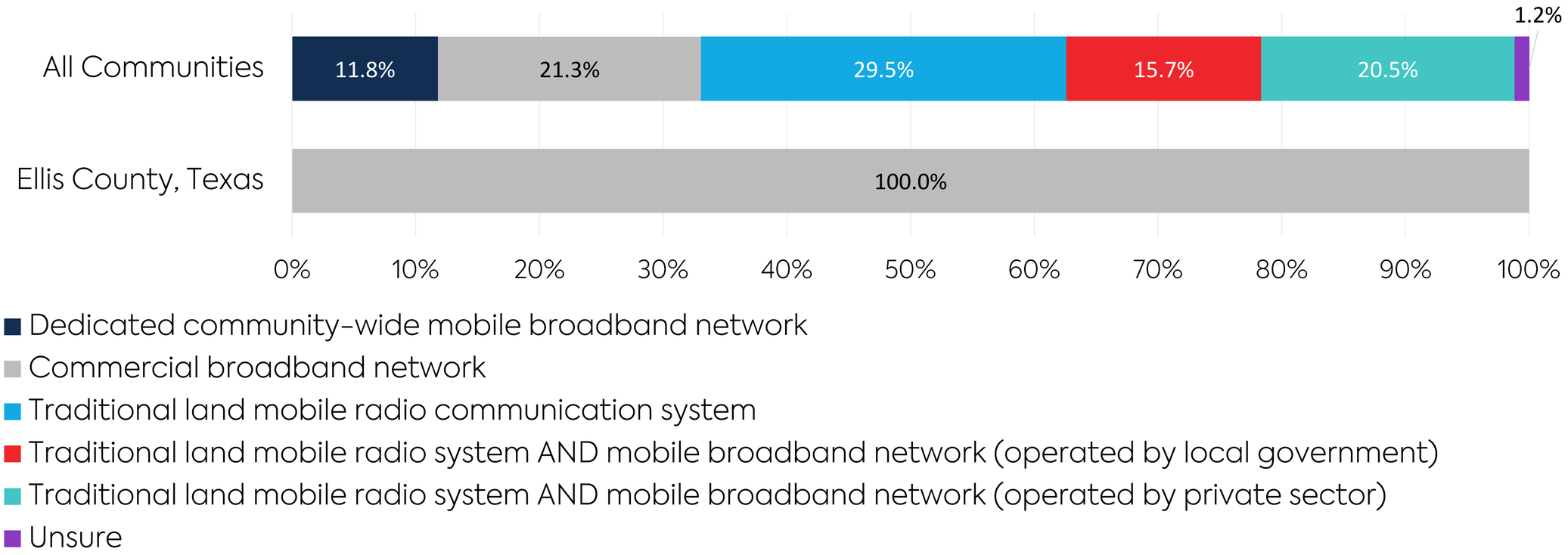
Satisfaction Among Public Safety Agencies

Competition provides communities with choices for service, allowing them the ability to switch providers if their current service does not meet their needs. This chart shows the percentage of public safety agencies that state their internet service meets or does not meet their needs.



Communication Networks

Many public safety agencies use a mixture of communications technologies. This chart shows the percentage of agencies in the community and the types of communications systems they use, compared to agencies in other Connected communities.

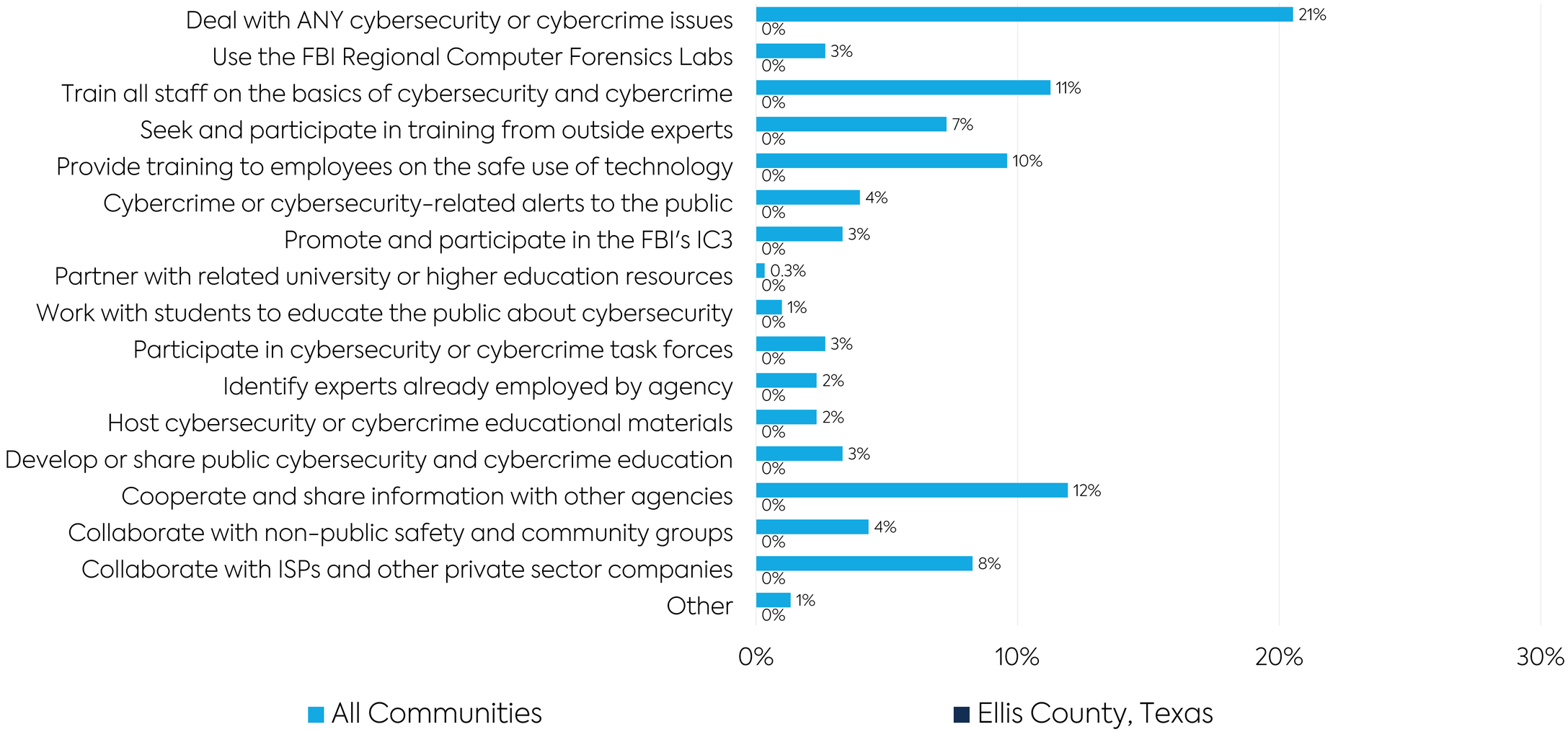


Cybercrime

While the proliferation of the internet has brought about many improvements, it has also precipitated new forms of criminal activity. Fraud, identity theft, and hacking are just a few ways in which criminals can use the internet to take advantage of residents, businesses, and institutions. A community needs strong proactive and reactive strategies to address cybercrime and keep its residents safe online.

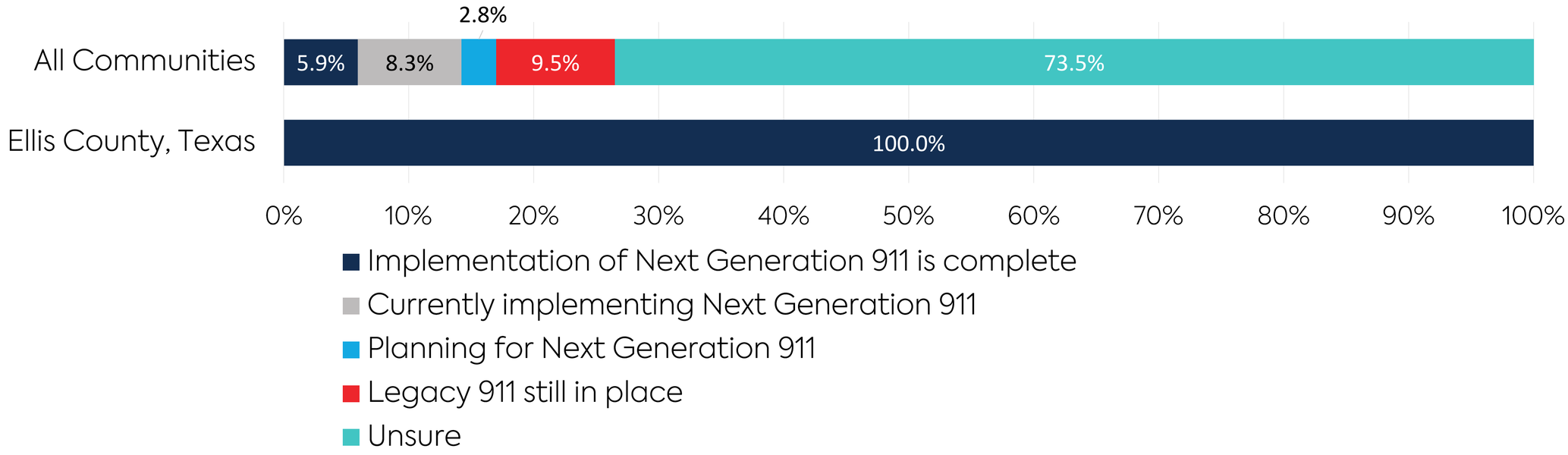
The chart on the following page examines the ways in which law enforcement entities in the community use common practices to address cybercrime. The chart shows the percentage of agencies implementing each activity, compared to agencies in other Connected communities.

Cybercrime (Continued)



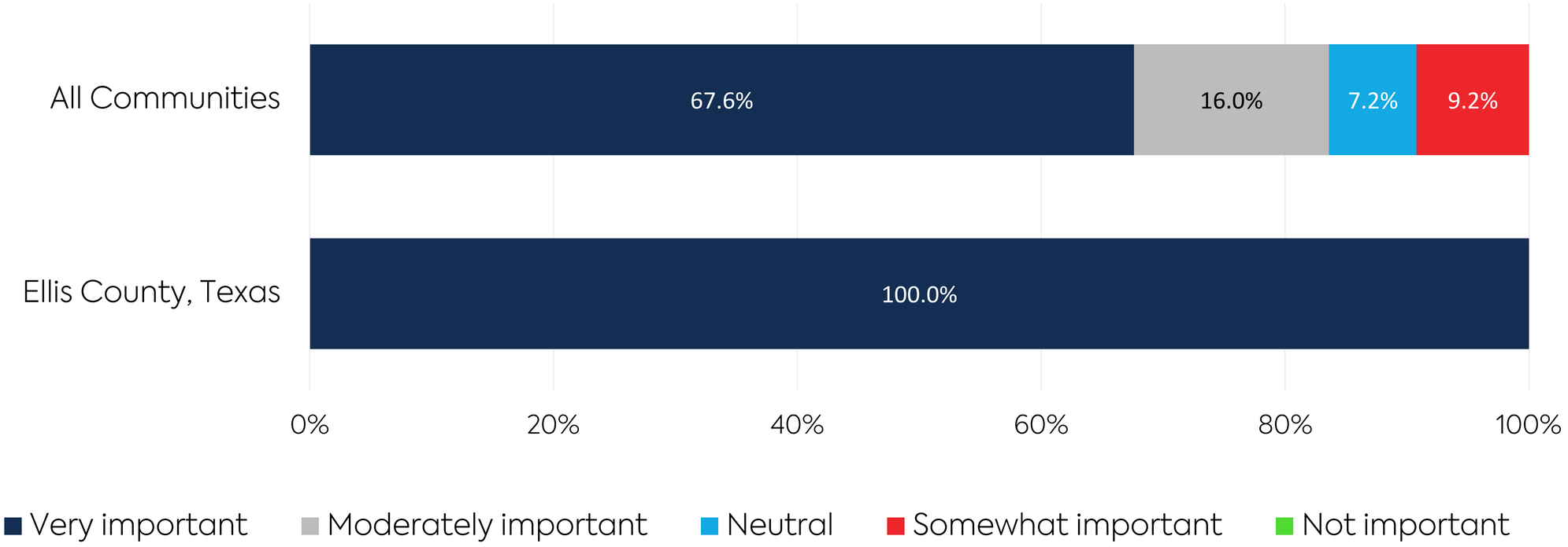
Next Generation 911

Next Generation 911 (NG911) provides public safety agencies with new tools and techniques for protecting the health, safety, and welfare of a community. Emergency texting, streaming two-way video to the field, transmission of data-intensive files, biometric data monitoring, advanced communication with neighboring public safety agencies, and information sharing are only a few examples of how NG911 can positively impact a community. The transition to NG911 may be challenging, but the benefits are great. This chart shows the percentage of public safety agencies in the community that have upgraded to an NG911 system.



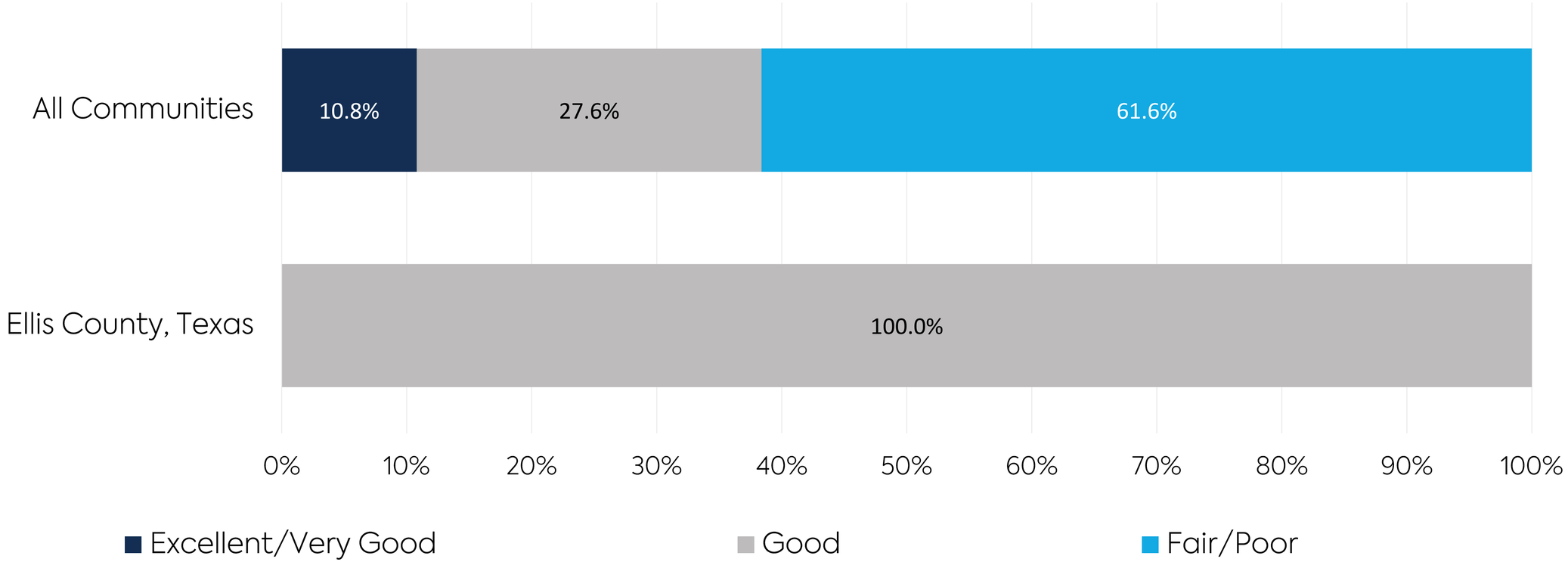
Mobile Broadband for Public Safety

Apart from the connection available to agencies at the office, mobile broadband connectivity is also important for staff in the field to quickly communicate in both emergency and non-emergency situations. This chart shows how public safety agencies rate the importance of mobile broadband connectivity.



Mobile Broadband Availability

This chart shows how public safety agencies describe or rate the current availability of mobile broadband across the community. Issues with mobile broadband availability are present if the agencies indicate that mobile coverage is very or extremely important but rate the current service as fair or poor.



Mobile Devices

Mobile broadband-enabled devices are necessary to take advantage of new and advancing mobile technologies. This chart shows the types of mobile devices provided to public safety personnel for use in the field, compared to other Connected communities.