Overcoming Barriers to Technology

Supporting Clients in a Virtual Environment

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Broadband Research Initiative





https://www.pewtrusts.org/en/projects/broadband-research-initiative



Millions of Americans lack access to broadband

- At least 18.3 million Americans lack access to broadband at speeds of 25Mbps/3Mbps (FCC)
- As many as 42 million Americans lack access to broadband at speeds of 25Mbps/3Mbps (<u>BroadbandNow</u>)

There is a rural-urban divide in broadband access

- 5.2 percent of Americans do not have access to internet at broadband speeds
 - 1.5 percent of Americans in urban areas
 - 20.7 percent of rural Americans do not have access to broadband (<u>FCC</u>)

What do these speeds mean?

Activity	Minimum Download Speed (Mbps)
General Usage	
General Browsing and Email	1
Streaming Online Radio	Less than 0.5
VoIP Calls	Less than 0.5
Student	5 - 25
Telecommuting	5 - 25
File Downloading	10
Social Media	1
Watching Video	
Streaming Standard Definition Video	3 - 4
Streaming High Definition (HD) Video	5 - 8
Streaming Ultra HD 4K Video	25

Source:https://www.fcc.gov/consumers/guides/broadband-speed-guide



More devices and more intensive applications require higher speeds

	Light Use (Basic functions: email, browsing, basic video, VoIP, Internet radio)	Moderate Use (Basic functions plus <i>one</i> high-demand application: streaming HD video, multiparty video conferencing, online gaming, telecommuting)	High Use (Basic functions plus <i>more than one</i> highdemand application running at the same time)
1 user on 1 device	Basic	Basic	Medium
2 users or devices at a time	Basic	Medium	Medium/Advanced
3 users or devices at a time	Medium	Medium	Advanced
4 users or devices at a time	Medium	Advanced	Advanced

Basic Service = 3 to 8 Mbps*

Medium Service = 12 to 25 Mbps

Advanced Service = More than 25 Mbps

Source: https://www.fcc.gov/consumers/guides/household-broadband-guide



Where there is broadband access, not everyone is online

 Nationally, threequarters of adults have a home broadband subscription (<u>Pew</u> <u>Research Center</u>)



Image: ConnectME Authority

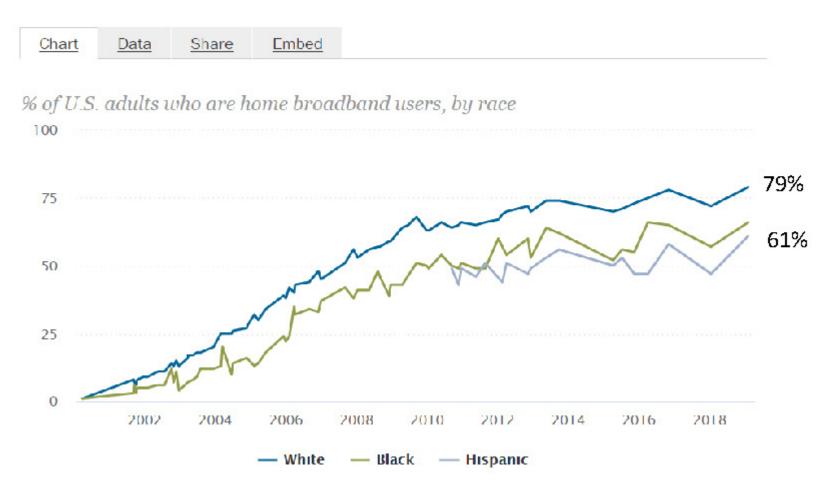
<u>Chart Data Share Embed</u>

% of U.S. adults who are home broadband users, by age

79% 75 59% 50 25 2002 2004 2006 2008 2010 2012 2014 2016 2018 **—** 18-29 **—** 30-49 -50-64

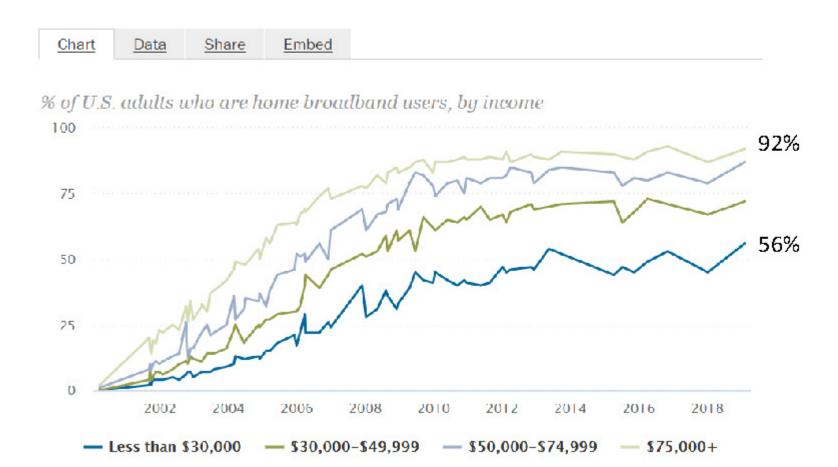
Source: https://www.pewresearch.org/internet/fact-sheet/internet-broadband/

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Source: https://www.pewresearch.org/internet/fact-sheet/internet-broadband/



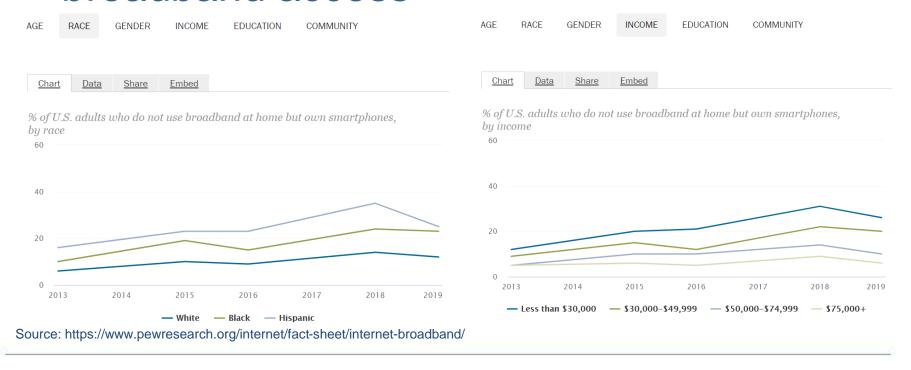


Source: https://www.pewresearch.org/internet/fact-sheet/internet-broadband/



Smartphones for broadband access

 Non-white and low-income Americans are more likely to depend on a smartphone for broadband access



Students and teachers lack access

 School closures highlighted the digital divide: 15-16 million students lack access to either an internet connection, a broadband enabled device, or both Nationally, *300,000-400,000 teachers* lack access to an internet connection necessary to teach from home (Common Sense Media)



State broadband programs provide

resources



Virginia Public WI-FI Hotspots

Right now, connectivity is more important than ever. In an effort to serve Virginia residents, many localities and service provides are of lering WHT access locations to the public. Here is an interactive map of known public WHT hotspots in Virginia, which will be continually updated.

Click here for WI-FI Map

Wi-Fi Locations List

Use the table below to filter Wi-Fi access locations by county, city or location.

		Search:
County ^	City ‡	Location
Alamance	Burlington	May Memorial Library, 342 S. Spring St.
Alamance	Burlington	North Park Library, 849 Sharpe Road
① Alamance	Graham	Graham Public Library, 211 S. Main St.
Alamance	Mebane	Mebane Public Library, 101 S. First St.
Alamance		Alamance Public Libraries Mobile Internet Cafe
Alexander	Taylorsville	Alexander Courthouse, 29 W. Main Ave.
Alleghany	Wilkesboro	Wilkes Community College, Wilkes Campus, 1328 S. Collegiate Drive

Internet Resources for Wisconsin Residents during Public Health Emergency

Traducción de Español



PSC Internet & Phone Helpline - 608-267-3595

The PSC has established their Internet & Phone helpline for Wisconsin consumers. Please dial 608-267-3595 to speak with dedicated PSC staff or leave a voicemail.

Phone: 608-267-3595



Wisconsin Public WiFi Locations Map

This mapping tool displays public WiFi locations that have been self-reported by entities and indivuduals to the PSC. The map displays hundreds of locations where citizens can go to use WiFi when it is not available at home while also maintaining social distancing during the COVID-19 public health emergency.

New locations are being added as they become available. Charter and Comcast/Xfinity also have mapping tools displaying their own WiFi locations in Wisconsin communities.

Wisconsin Public WiFi Locations Map Website

Broadband Access and Device Resources

- · California's Emergency Response Website for COVID-19
- · California Public Utilities Commission (CPUC) Essential Critical Infrastructure Workers designation
- California Public Utilities Commission (CPUC) Website Listing Consumer Protections and Affordable Plans
- California Public Utilities Commission (CPUC) Affordable Offerings Searchable Website
- California Emerging Technology Fund (CETF) Free Internet Offers in Response to COVID-19
- . California Emerging Technology Fund (CETF) Affordable Internet and Device Offers
- · Corporation for Education Network Initiatives in California (CENIC) Access Strategies in Response to COVID-19
- California Forward (CAFwd) General Resources by Region in Response to COVID-19



Questions?

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