January 27-28, 2022

Local Government Interim Committee Toni Henneman

INTERNET CONNECTIVITY & DIGITAL NEWSPAPER ACCESS IN MONTANA

BACKGROUND

At the November LGIC meeting, Senator Bogner requested information regarding internet access and newspaper subscription numbers in Montana.

Montana citizens increasingly see improved internet access. The Federal Communications Commission (FCC) compiles data on the number and available speeds of internet providers. As

of December 2020, the FCC reported that 100% of Montana citizens have access to at least one internet provider offering speeds of 25/3 Mbps (megabits per second) while only 5.85% have access to fast connection speeds of 1000/100 Mbps or greater¹. However, verifying the data proves difficult since it is derived from information found on voluntarily submitted internet service provider forms. Current FCC data also may not adequately capture the challenges to provide internet in hard to service areas.

Gathering data on internet connectivity proves difficult, creating a muddy, but possibly clearing, picture with new funding on the horizon.

The National Telecommunications and Information Administration (NTIA) offers a potentially more robust data set with information gathered from multiple sources including the FCC, U.S. Census Bureau, USDA, state governments, and private entities².

Additionally, numerous factors including age, education and income levels, comfort with technology acquisition, and confidence in technology security contribute to a citizen's decision to subscribe to internet service regardless of whether service is available.

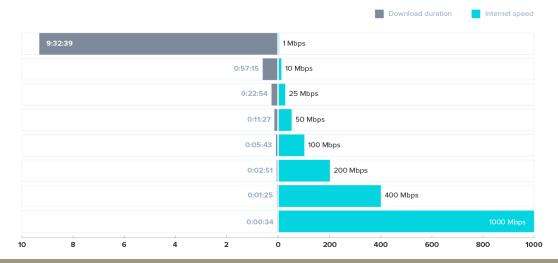
¹ Federal Communications Commission, Fixed Broadband Deployment – Area Comparison of Broadband Availability in Different Areas. <u>https://broadbandmap.fcc.gov/#/</u>

² Other sources include the Universal Service Administrative Company, Ookla, Measurement Lab (M-Lab), Microsoft, BroadbandNow, and White Star. More information may be accessed at: <u>https://www.ntia.doc.gov/press-release/2021/ntia-creates-first-interactive-map-help-public-see-digital-divide-across-country</u>

INTERNET CONNECTIVITY OPTIONS - WHAT IS "FAST" INTERNET?

The FCC defines broadband internet as a connection with a minimum download speed of 25 Mbps and upload speed of 3 Mbps (read 25/3 Mbps). Speed below 25/3 Mbps is not considered broadband but may not necessarily be "too slow" depending on a user's needs.

Connection speeds of at least 100/10 Mbps can often handle multiple users or devices while still adequately streaming video, operating video calls, and downloading large files. Many consider any speed below 25/3 Mbps "slow internet" since users often experience slow buffering speeds, difficulty connecting multiple devices, and difficulty accessing Wi-Fi connections.³



Time it takes to download a 4 GB file

| FCC Data - Percentage of MT Population with access to: | | | | | | |
|--|--------------|------------------------|------------------------|------------------------|--|--|
| Connection Speed* | No Providers | 1 or more Providers | 2 or more Providers | 3 or more Providers | | |
| ≥ 1000/100 Mbps | 94.15% | 5.85% | 0% | 0% | | |
| ≥ 250/25 Mbps | 33.35% | 66.65% | 3.63% | 0.13% | | |
| ≥ 100/10 Mbps | 25.69% | 74.31% | 14.65% | 2.43% | | |
| ≥ 25/3 Mbps | 0% | 100% | 100% | 94.93% | | |

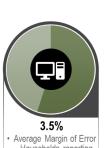
* Types of technology included: ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other

³ "Internet speed classifications: What is a good internet speed?", AllConnect. <u>https://www.allconnect.com/blog/internet-speed-classifications-what-is-fast-internet</u>



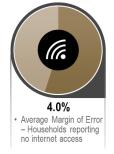
NTIA DATA

As noted in the introduction, FCC data may not paint a complete picture. The National Telecommunications and Information Administration (NTIA) produces a "National Broadband Availability Map" (NBAM) which uses additional data sources. The following table lists internet access by county, collected as part of the U.S. Census American Community Survey (ACS) results from 2015-2019.



- Households reporting no computer. smartphone, or tablet

| County | Total households | Percent of Households that Have No Computer, Smartphone, or Tablet | Percent of Households with No Internet Access |
|---------------|---------------------|--|--|
| Beaverhead | 3992 | 11.2 | 17.6 |
| Big Horn | 3609 | 21.7 | 28.3 |
| Blaine | 2366 | 18.4 | 24.8 |
| Broadwater | 2364 | 12.5 | 21.5 |
| Carbon | 4524 | 11.8 | 17.9 |
| Carter | 628 | 13.5 | 18.2 |
| Cascade | 34329 | 15.8 | 20.2 |
| Chouteau | 2274 | 23 | 25.3 |
| Custer | 4903 | 13.3 | 18.9 |
| Daniels | 857 | 20 | 22.5 |
| Dawson | 3930 | 15.2 | 20.3 |
| Deer Lodge | 3903 | 16.3 | 24.2 |
| Fallon | 1334 | 12.3 | 17.5 |
| Fergus | 4912 | 12.3 | 17.7 |
| Flathead | 38773 | 9.8 | 12.9 |
| Gallatin | 43777 | 5.2 | 8.9 |
| Garfield | 438 | 17.4 | 20.5 |
| Glacier | 4163 | 28.5 | 30.7 |
| Golden Valley | 351 | 23.9 | 26.5 |
| Granite | 1308 | 16.8 | 18.3 |
| Hill | 6369 | 13 | 17.3 |
| Jefferson | 4484 | 9.7 | 15.1 |
| Judith Basin | 906 | 14.8 | 18.5 |

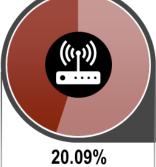




January 27-28, 2022

Internet & Online Newspaper Access in MT

| Lake | 11802 | 11 | 18.6 |
|-----------------|-------|------|------|
| Lewis and Clark | 27893 | 9.5 | 14.1 |
| Liberty | 895 | 16.2 | 25 |
| Lincoln | 8122 | 16.2 | 19 |
| McCone | 723 | 17.4 | 23 |
| Madison | 3570 | 12.5 | 16.3 |
| Meagher | 702 | 20.1 | 28.1 |
| Mineral | 1786 | 15.6 | 31.1 |
| Missoula | 49313 | 7 | 10.8 |
| Musselshell | 2181 | 18.2 | 21.7 |
| Park | 7782 | 11.2 | 14.6 |
| Petroleum | 204 | 14.7 | 14.2 |
| Phillips | 1710 | 19 | 25.1 |
| Pondera | 2103 | 15.1 | 22.2 |
| Powder River | 737 | 9.4 | 10.9 |
| Powell | 2426 | 11.4 | 21.1 |
| Prairie | 518 | 17.2 | 19.3 |
| Ravalli | 17354 | 9.6 | 15.3 |
| Richland | 4535 | 14 | 19.2 |
| Roosevelt | 3150 | 23.5 | 31.7 |
| Rosebud | 3166 | 19.1 | 25.8 |
| Sanders | 5036 | 19.5 | 26 |
| Sheridan | 1639 | 8.7 | 13.7 |
| Silver Bow | 14960 | 15.9 | 18.4 |
| Stillwater | 3761 | 9.2 | 14.8 |
| Sweet Grass | 1566 | 16.3 | 20.9 |
| Teton | 2464 | 12.9 | 20.6 |
| Toole | 1867 | 15.5 | 17.8 |
| Treasure | 351 | 11.4 | 20.5 |
| Valley | 3386 | 12.3 | 17 |
| Wheatland | 792 | 19.7 | 24 |
| Wibaux | 498 | 15.5 | 28.7 |
| Yellowstone | 66385 | 8.5 | 12.1 |



Average percentage of

households in ALL counties reporting no internet access

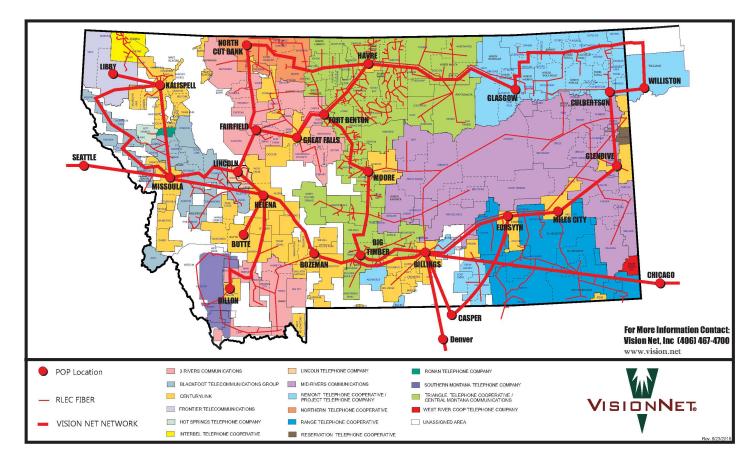


Local Government Interim Committee Toni Henneman

4

MANY TYPES OF CONNECTIONS

The number of Montanans with internet access is also challenging to capture due to the many types of internet connections available, all with varying levels of effectiveness depending on geographic location and available infrastructure. The following map illustrates the state's fiberoptic network, as reported by the Montana Telecommunications Association and its member providers. Fiber is considered one of the more stable, reliable, and fast connections. However, fiber also presents one of the largest installation challenges – both logistically and financially.



Mobile and satellite networks may service difficult to reach areas. However, these networks often lack reliability and/or high-speed connections.

Finally, regardless of connection availability, the costs of internet subscriptions, fees, hardware, or other devices necessary to adequately use an internet connection may prove a barrier to internet access, further challenging a clear picture of the number of citizens with internet access in Montana.



THE FUTURE IS LOOKING BRIGHT

Both the federal and state governments have made steps to finance additional broadband opportunities for citizens, indicating that the number of internet-connected citizens may increase over the next 5 years.

FEDERAL

Infrastructure Investment and Jobs Act (IIJA)⁴

Broadband equity, access, & deployment – \$42.5 billion

- \$100 million per state minimum
- Prioritizes unserved (≤25/3Mbps) and underserved (≤100/20Mbps) areas
- 25% state match

Broadband affordability - \$14.2 billion

- \$30 per month subsidy for qualifying lowincome households
- \$100 to broadband providers for each discounted device sold to qualifying lowincome households (household must pay at least \$10 and no more than \$50 for the device)

Digital Equity Grant Program - \$2.75 billion over 5 yrs

- Helps states fund digital equity plans
- Grants to local gov'ts, tribes, community anchor institutions, educational agencies, etc.

Existing program support

- USDA ReConnect & Rural Broadband Programs – loans & grants to rural areas – additional \$2.74 billion
- Tribal Broadband Connectivity Program additional \$2 billion

STATE

<u>SB297</u> (2021) – ConnectMT Act

• \$500,000 for broadband infrastructure projects in unserved (≤25/3Mbps) and underserved (≤100/20Mbps) areas

HB632 (2021) – ARPA Fund Deployment

- \$275 million for communication projects related to broadband infrastructure
- Communications Advisory Commission
 oversees program

⁴ "Infrastructure Investment and Jobs Act", National Council of State Legislatures. <u>https://www.ncsl.org/ncsl-in-dc/publications-and-resources/infrastructure-investment-and-jobs-act.aspx#Broadband%20Infrastructure</u>



MONTANA NEWSPAPER ONLINE SUBSCRIPTIONS

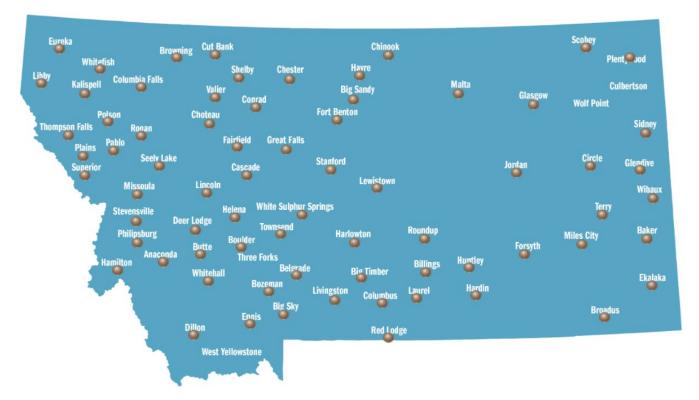
Number of Montana Newspaper Association (MNA) member publications: 795

Number of newspapers with online options:

- 71 online subscriptions available
- 3 free online access to all articles: Lone Peak Lookout (Big Sky) Silver State Post (Deer Lodge) – most, not all articles available online at no cost Kootenai Valley Record (Libby)
 5 – no online access:
 - Anaconda Leader

The Times-Clarion (Harlowton) Jordan Tribune (Jordan) Sheridan County News (Plentywood) Meagher County News (White Sulphur Springs)

MT Newspaper Assoc. Membership Directory Map



⁵ All information, including map, gathered from the Montana Newspaper Association website: <u>https://www.mtnewspapers.com/</u>. Online access determined by visiting individual newspaper websites on December 15 & 16, 2021.

