



BROADBAND MT

BROADBAND MATTERS

SPEED MATTERS

- Telemedicine, remote learning and working, e-commerce, streaming and future technologies like virtual reality and autonomous vehicles ALL need more and more Internet bandwidth. There's no end in sight.
- The need for speed will only grow for both download and upload capacity.
- The federal government calls for identical upload and download speeds.



What's good enough today isn't good enough tomorrow

TECHNOLOGY MATTERS

- Federal rules define "Priority Broadband Projects" as those that use end-to-end fiber optic architecture.
- Only end-to-end fiber will "ensure that the network built by the project can easily increase speeds over time...to meet the evolving connectivity needs of households and businesses" and "support other advanced services."
- End-to-end fiber networks can be updated allowing for quick and relatively inexpensive upgrades as compared to other technologies.
- New fiber deployments will facilitate the deployment and growth of 5G and other advanced wireless services, which rely extensively on fiber.

If it isn't fiber, it isn't broadband

PROVIDER MATTERS

- Montana's locally-owned, community-based broadband providers have a demonstrated history of commitment to their networks, their customers and their communities.
- Federal policy prioritizes funding broadband investment projects using "[local] providers with less pressure to turn profits and with a commitment to serving entire communities."



BUILD ONCE-BUILD RIGHT



Why would one not pick fiber every time? Why do you have to be "technology neutral" where there are clear differences between the performance and the incremental upgrade costs of the technologies?

Paul de Sa, former Chief of the FCC's Office of Strategic Planning and an author of the National Broadband Plan.

5G Facts

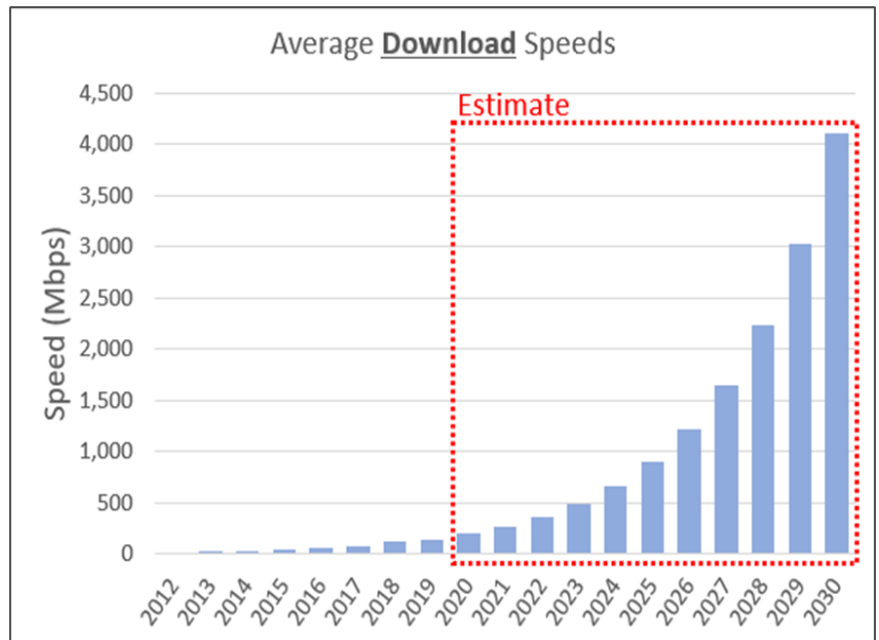
- Wireless needs wires—5G requires a dense fiber backbone network.
- The faster 5G is, the shorter its range and the more it is susceptible to interference.
- Limited in many rural applications, especially when compared to fiber.
- Long-run cost is similar to fiber.

- Traditional satellite service is slow, expensive, subject to delay and data caps.
- New (low earth orbit—LEO) service has not been launched on a commercial scale.
- It provides last-mile, individuals-only connections.
- It has limited capacity for large-scale or future high-speed demands. It's expensive.
- Unlicensed fixed wireless and satellite are considered not reliable broadband under federal rules.

Satellite Service Falls Short

Broadband Adoption

- Broadband adoption is as important as broadband availability.
- Consumers may subscribe to lower tier services even when high-speed broadband is available—often for economic reasons.
- Broadband usage is influenced by many factors, such as age, education, income and relevance
- If you're experiencing slower speeds than you expect, check your device (e.g., smart phone or computer), outdated equipment (computers, routers, modems) or certain software, especially virus protection. Even placement of your router can affect speeds.
- There are [programs](#) to assist low-income consumer access to broadband services.



Source: FCC's Measure Broadband America Reports and VantagePoint Solutions

Make sure you're getting the best broadband service you need.

For more information, visit our website at www.broadbandmt.com or email us at office@broadbandmt.com

BroadbandMT - Montana Telecommunications Association

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