

Eliminate the Digital Divide in Rural North America with Fiber

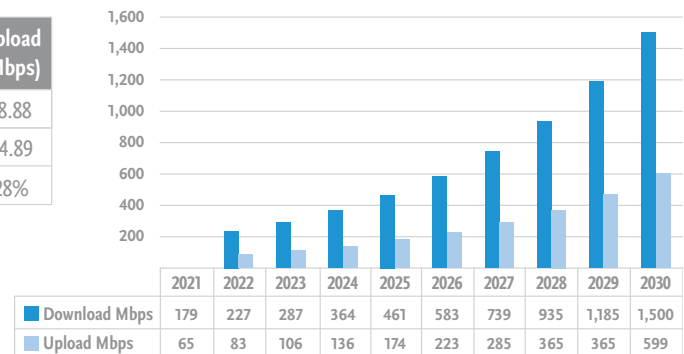
The lack of adequate high speed broadband availability in rural areas compared to metropolitan areas has been a persistent challenge in North America for many years. That challenge exploded in importance as the pandemic forced nearly all interactions to be conducted from the home, exposing the insufficient broadband availability in many rural areas of North America. The result is lower productivity, lagging education, and poorer health outcomes for rural residents. Fiber broadband can permanently close the rural high speed broadband availability divide.

As Rural Areas Lag, Metropolitan Areas Get Gigabit Broadband

Today metropolitan Internet users can take advantage of life-changing Internet applications – distance learning, remote work, tele-health, large-file exchange, VPN networks, streaming television, web searches, security cameras, exercise bikes, and more. Those applications work because of the availability of robust broadband service, with many major ISPs now offering speeds of up to a Gigabit or more. As the chart below shows, *average* broadband speeds already greatly exceed the 25/3 Mbps service to which many rural areas are relegated.

Ookla, the global speed test provider, reports average U.S. fixed broadband speeds of 179/65 Mbps in Jan 2021. Over the past five years U.S. fixed broadband speeds for download and upload have been increasing at a compound annual growth rate of 27% and 28% respectively, from 65/19 Mbps in 2016. If these growth rates continue over the next decade, the average U.S. fixed broadband speeds will be 1500/599 Mbps by 2030.

Year	Download (Mbps)	Upload (Mbps)
2016	54.97	18.88
2021	179.06	64.89
CAGR	27%	28%



Future Proof Broadband Infrastructure – Only fiber can deliver!

An optical fiber provides a noise free pathway for information to flow with nearly unlimited capacity and low latency (no delay) to and from subscribers. When fiber is deployed as critical infrastructure, communities see immediate benefits.

- Gigabit broadband speeds and beyond
- Significant economic impact
- Jobs, economic diversification, education, healthcare
- Smart Grid modernization - 43% reduction in power outages
- Path to 5G (requires robust fiber infrastructure)