

BROADBAND BRIEF

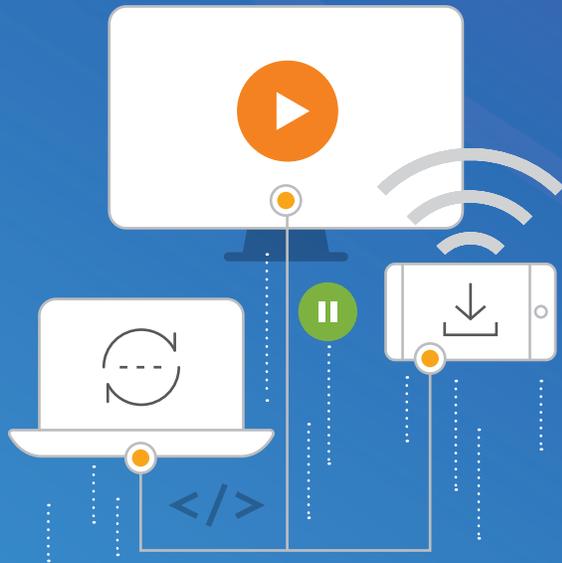


STREAMING UPSTREAM

DEPLOYING
RURAL
BROADBAND
IN THE AGE OF
STREAMING

USTELECOM

THE BROADBAND ASSOCIATION



America's rural broadband providers are doing their level best to deploy broadband to our hardest to reach communities and keep up with their customers' increasing demand for streamed content. Smart policy can help.

▶ HERE'S WHY

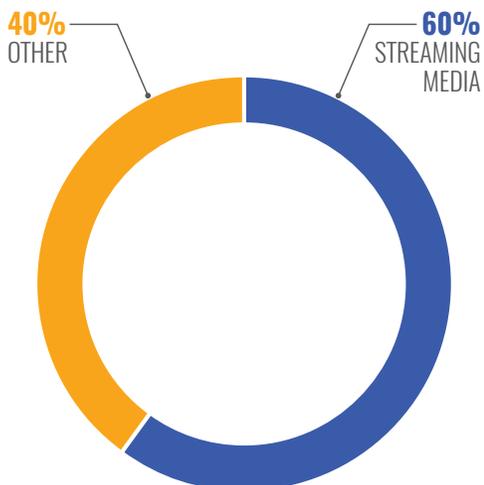
A DELUGE OF VIDEO STREAMS

Rising consumer demand for data-heavy content streams—like HD video—**continues to grow by 20% each year.**¹



SUBSCRIPTIONS TO VIDEO STREAMING SERVICES HAVE INCREASED 60% OVER THE LAST 4 YEARS⁴

STREAMING MEDIA AVERAGE SHARE OF INTERNET TRAFFIC²



Video has flooded network capacity, **consuming between 50% and 75% of internet bandwidth.**²

That growth shows no sign of stopping, as video resolution continues to improve and more households choose online video options over traditional cable.

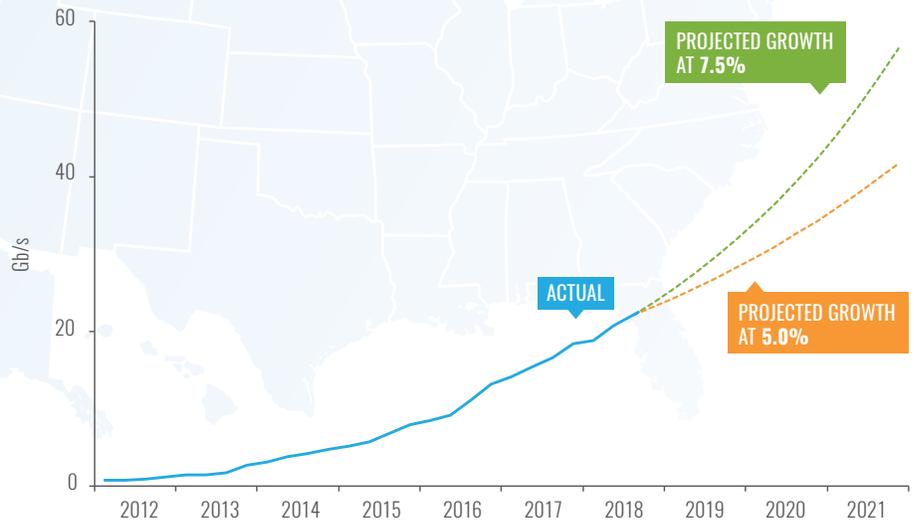
“We’re doing our best to cut down on buffering times so our customers can watch shows and movies online, without interruptions. This is one of our top priorities.”

TEXAS BROADBAND PROVIDER²

RURAL PROVIDERS NAVIGATING THE STREAMS

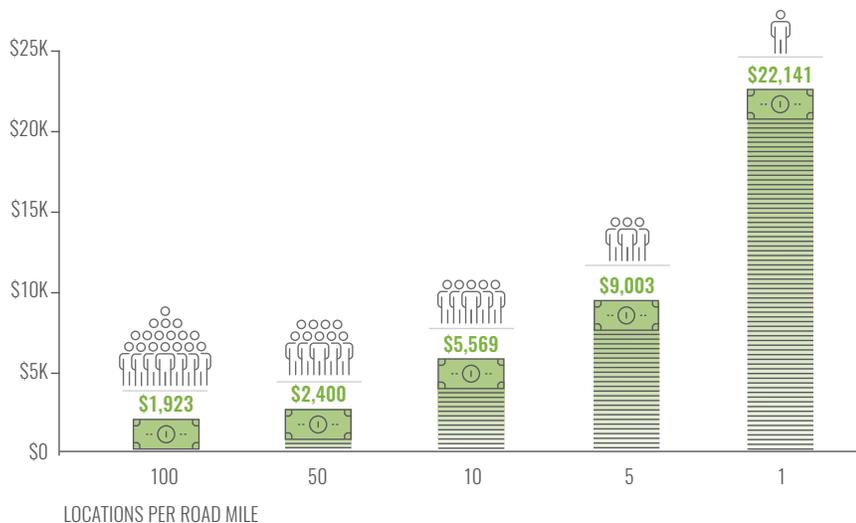
Broadband companies are committed to connecting communities, but costs mount for every mile of infrastructure built. **Low population density, coupled with the need to constantly upgrade equipment, makes deployment in rural areas extremely expensive.**

PROJECTED QUARTERLY TRAFFIC GROWTH FOR A RURAL PROVIDER²



- ▶ Traffic is growing rapidly in rural communities just as it is in urban areas.
- ▶ Low population densities and long distances in rural communities drive up the cost per customer.

CAPITAL COST PER SUBSCRIBER BY DENSITY³



“Improving network capacity to accommodate streaming is a never-ending exercise ... Providers must accommodate greater adoption of streaming across the customer base, in addition to supporting increases in video resolution.”

INDIANA BROADBAND PROVIDER²

“Rural providers have unique challenges that cannot be recovered by existing support mechanisms: fewer customers, high delivery costs, and the need to cover middle mile transport. These hurdles strain our bottom line and exaggerate the digital divide.”

WYOMING BROADBAND PROVIDER²

HERE'S A RECAP

- 1 Broadband is the backbone of connectivity
- 2 Consumer demand for streaming content shows no signs of slowing down
- 3 Streaming is flooding network capacity
- 4 Fewer people = higher cost

▶ **THAT'S WHY** rural broadband providers are investing billions of dollars in fiber and technology to deliver streamed content to consumers.

Policymakers must support efficient, effective, and equitable solutions to federal broadband support to ensure all Americans can benefit equally from broadband connectivity—no matter where they live.

SO, LET'S ESCALATE THE CONVERSATION:

- Is there enough federal support to deliver broadband to rural areas?
- How can we make sure federal support for rural broadband deployment is efficient and equitable?
- How can the internet ecosystem work together to close the digital divide?

Learn more at [USTelecom.org](https://www.ustelecom.org)

1 Cisco, “Visual Networking Index, Consumer IP traffic 2016-2021,” 2017.

2 USTelecom, “USTelecom (Network Traffic) Survey of Small and Mid-Sized Members,” 2018. USTelecom projections.

3 CostQuest Association (CQA), “Rural Broadband Economics: A Review of Rural Subsidies,” 2018. “Investment Required Per Active Subscriber to Deploy Fiber Broadband At Selected Densities (USTelecom Estimate Assuming 50% Take Rate).”

4 The Nielsen Company, “The Nielsen Total Audience Report,” 2018.