

# ISPs Capture the Rural Broadband Opportunity

Regional providers share their strategies, plans, and priorities.

Smaller ISPs are playing a big role in closing the digital divide.



**42 million U.S. Customers** currently lack broadband internet service

- Government-led initiatives are **pumping billions of dollars** into rural broadband programs.
- Winners in the FCC's Dec. 2020 RDOF Phase I auction include 180 cable operators, electric cooperatives, incumbent telephone companies, satellite companies and fixed wireless providers.

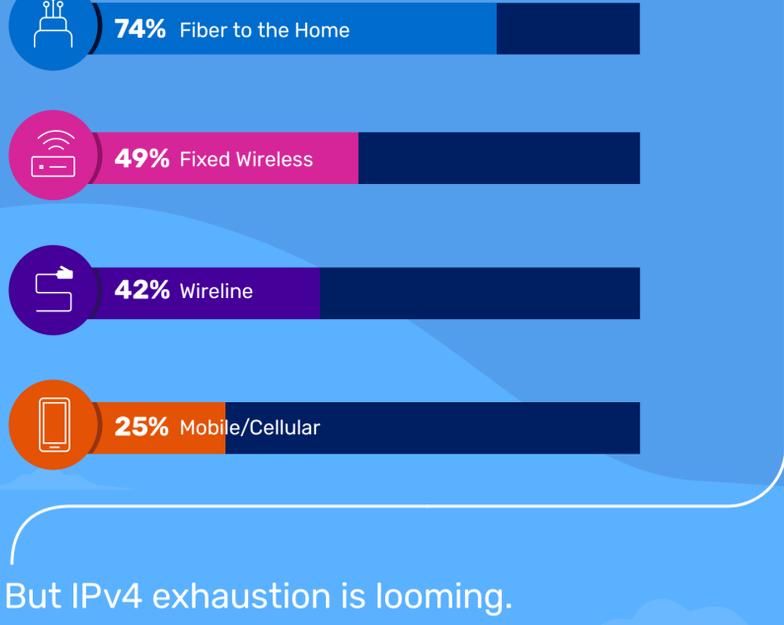
They're capitalizing on the current regional broadband boom.



U.S. broadband subscribers reached **135.5 Million at the end of the first quarter of 2021**

- 89%** of executives report good growth rates, up to 20% or more.
- More than half say continuing this trend is their top priority, above subscriber experience, security, new investments, and cost reduction

And they're using a mix of local access technologies to do so.



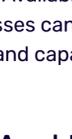
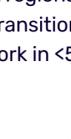
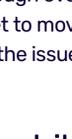
But IPv4 exhaustion is looming.

- Free IPv4 addresses have been fully allocated by the RIR
- Only 21% of regional ISPs have enough IPv4 addresses for the foreseeable future
- 53% expect to run out of available IPv4 addresses within three years

The IPv4 crunch is already threatening profitability.

- 21%** Of regional ISPs are leasing public IPv4 addresses from another service provider.
- \$32** Current market prices: \$32 per address on average.
- \$60** And in some cases, as much as \$60 per address, a 40% increase in just two years.

IPv6 offers a solution—eventually.

-  Easily Available IPv6 addresses can vastly expand capacity
-  Most regional ISPs will transition their network in <5 years
-  Though over 25% have yet to move forward on the issue at all

And IPv4 isn't going anywhere for a while.

- Almost 2/3 of Google queries access the internet using IPv4
- IPv6 lacks backward compatibility
- Even 15% of respondents on the verge of IPv4 exhaustion have no plans for IPv6
- So IPv4 connectivity will remain essential for many years

## The CGNAT Solution.

- Share existing IPv4 addresses to 64+ subscribers
- Support 10,000 new subscribers with only 150 IPv4 addresses
- Reduce IPv4 acquisition costs up to 80%
- Enable translations between IPv4 address and IPv6 addresses

Get the full picture on the rural broadband build-out.

Learn more about closing the digital divide in the A10 Networks survey report, "Insights 2022: Rural Broadband Expansion."

[Download the Report](#)