Technology Today

5G Can Help Bridge America's \$65 Billion Digital Divide

(NAPS)—The pandemic laid bare just how sorry broadband access is in America: 42.8 million Americans—more than 1 in 8, most in rural areas—have no broadband Internet service where they live. And of those who do have broadband, 25% have only one choice. Throughout Tennessee, there are over 500k people with only one choice for home broadband, and even worse, nearly 300k people are without any access at all. That lack of choice and competition leads to high prices, poor service and some of the unhappiest customers in America. Only cable TV customers are less happy than ISP customers.

The roots of this problem lie in the vastness of America. Running a fiber connection to a every home is so expensive that the economics of wired Internet has never made sense in rural America. So for decades, small towns and rural areas have been left behind.

The problem is so bad that the recently-passed Biden Administration's infrastructure bill includes \$65 billion to help close the digital divide, an investment 78% of Americans support, according to a New York Times/Survey Monkey study.

But there's also hope on the horizon in the form of new 5G technology. 5G, or 5th generation wireless networks, have massive capacity, far more than 4G or LTE networks, meaning, they have the ability to deliver fixed wireless Internet to the home.

What's more, wireless networks were made for this challenge. The reason wired networks falter in rural areas is the reason wireless shines. Once wireless networks are built, wireless companies have every incentive to monetize the network's capacity. Less population means less congestion and more capacity dedicated to ISP services.

Fixed wireless works a lot like wired Internet. But with no wires to connect, setup is even simpler. Just plug in a dedicated router and place it somewhere with good signal, and you're off and running.

And fixed wireless broadband is already here—and expanding all the time.

• After launching in a few cities in 2019, Verizon's 5G fixed wireless Internet is now available in 40 markets, with plans to cover 30 million homes with 4G and 5G service by the end of 2023. Learn more at https://www.verizon. com/5g/home/



The digital divide has serious implications for education, telemedicine, agriculture and small business in Tennessee, but it can be bridged.

- AT&T plans to augment its wired Internet services with wireless in many areas, ramping up its coverage by 2023. Learn about this at https:// www.att.com/internet/fixed-wireless/
- T-Mobile's fixed wireless Internet service already covers 30 million homes (roughly 1 in 5) and another 3.5 million small businesses today. To find out more, visit www.t-mobile.com/isp.
 - And T-Mobile offers a unique option for employers to get dedicated internet connections for WFH employees called Home Office Internet, available to 60 million homes nationwide, as you can see at https://www.t-mobile.com/business/solutions/home-office-business-internet
- In Tennessee specifically, T-Mobile Home Internet is already available to more than 1.6 million households, with access growing all the time.

5G couldn't come at a better time. The pandemic has pushed more of the economy online, creating huge challenges for rural communities without reliable Internet—and huge opportunities for those with it. With employers making more jobs "work from anywhere," more people can relocate to those small communities and people in those communities can tap into more job opportunities, giving employers better access to talented people all across the country. But it's all dependent on access to reliable high-speed Internet.

Bridging the digital divide is not only good for the communities trapped on the wrong side of it. It's good for the country as a whole. And 5G offers us a real shot at meaningfully bridging America's digital divide.