

## Broadband and Wireless Access in Rural Colorado

Colorado's rural communities depend on broadband internet and wireless coverage. These services play an essential role in modern farming practices, healthcare and telehealth systems, education, and rural economies.

### Wireline Broadband

ISPs face significant cost barriers to building new wireline networks where populations are less dense. This leaves and estimated 200,000 Coloradans with no internet access. Where networks exist, speeds trail that of urban areas. The FCC's minimum speed requirements for broadband internet are 25 Mbps download and 3 Mbps upload (25/3). After comparing speed test data to internet service provider (ISP) coverage, 674,433 Coloradans lack access to 25/3 speeds.<sup>1</sup> The Colorado Broadband Office (CBO) estimates 182,600. The disparity is caused by the CBO's approach to mapping coverage, which is set at the census block level. Because rural blocks can be significantly larger, all unserved individuals are considered served so long as a single structure in the block has service.

### Fixed Wireless and Cellular

For communities currently unable to access wired connections, fixed wireless networks provide high speed internet by using existing cell tower infrastructure. While 5G offers faster speeds and increased connectivity, rural communities lack the necessary proximity to towers for accessing the service. Unlike 5G, 4G LTE signals span a significantly larger distance and can act as a crucial stand-in for wireline broadband solutions. The federally mandated AT&T "FirstNet" program is bringing coverage nationwide in its mission to provide a secure network for emergency responders. The initiative will create complete nationwide coverage, which will extend wireless coverage to the 202,198 Coloradans currently without any internet service.<sup>2</sup>

### Funding and Policy Solutions

The Colorado Farm Bureau supports state and federal initiatives designed to provide funding for increased broadband access including the DOLA Middle Mile Infrastructure Grants and the Broadband Deployment Board's Broadband Fund. Federal programs include the USDA's Broadband ReConnect Program, the FCC's rural broadband auctions programs, and the NTIA's Broadband Infrastructure Program. In addition to a lack of acceptable service, rural Coloradans are limited in the quality and availability of providers. Only 3% of Coloradans have access to a standalone internet plan under \$60 per month,<sup>3</sup> and the costs associated with the creation of municipally-owned networks are prohibitive. The state should:

- Encourage open networks to allow more than one ISP to use shared infrastructure.
- Allow ISPs access to more incentives for investment in rural communities, and public private partnerships should be encouraged to reduce costs of service deployment.
- Make changes to allow that broadband programs and funding may also be directed to the construction of high-speed wireless networks in areas where wireline services are cost prohibitive.<sup>4</sup>
- Change the way the Colorado Broadband Office estimates coverage levels to more accurately reflect the lack of 25/3 high speed access across the state.

<sup>1</sup> *BroadbandNow Estimates Availability for all 50 States; Confirms that More than 42 Million Americans Do Not Have Access to Broadband.* BroadbandNow. <https://bit.ly/3BoLrwE>

<sup>2</sup> *Indicators of Broadband Need.* Broadband USA. <https://bit.ly/3AihahA>

<sup>3</sup> *Colorado Internet Service Providers: Availability & Coverage.* BroadbandNow. <https://bit.ly/3DhsjkB>

<sup>4</sup> *Future of Agriculture in Colorado Taskforce,* Pg 39. <https://bit.ly/3FkmsNb>