



# Rural Broadband

Enabled by fiber, rural broadband has become an infrastructure priority in the U.S. High-speed connectivity is now an essential service, giving citizens equitable access to the vital economic and social opportunities that are rapidly expanding in the digital era. Communities that deploy fiber broadband open a digital door for their citizens, propelling innovation in education, healthcare, agriculture, and commerce, as well as enhancing quality-of-life.

## **The Broadscale Benefits of Rural Broadband**

It is widely accepted that reliable broadband delivered by advanced communications networks is a chief influencer on a community's economic livelihood and overall livability. Connectivity impacts our daily lives, from education, healthcare and government

**Black & Veatch  
has deployed/  
conducted**

**45,000**  
miles of fiber

**150,000**  
wireless sites

**50,000**  
macro and small cell site  
audits over the last 10 years

to working from home and communicating with friends. For many rural communities, connectivity is a key indicator of local business and industry growth potential. Broadband benefits include:

- Boosts local economy and employment
- Enables telehealth care services
- Facilitates local eCommerce and business opportunity
- Supports remote learning for schools and students
- Enables precision agriculture
- Improves property values and business retention
- Enables digital innovation, which benefits the whole community

### Expert Network Design and Deployment

Black & Veatch is a leader in planning, designing, and building advanced communication networks. We help communities close the digital divide and open economic, social and educational opportunities for their citizens. We specialize in these services and technologies:

#### Services

- Preliminary assessment
- Infrastructure & technology assessment
- Conceptual design & cost estimates
- Service provider ecosystem
- Material procurement
- Right-of-Way permitting
- Comprehensive design
- Installation & system testing
- Project & construction management
- Construction

### Technology Applications

- Fiber to the "X" solutions
  - Fiber to the home
  - Fiber to the premise
  - Fiber to the curb
  - Fiber to the cell site
- Aerial and underground deployment
- Distributed antenna system (DAS)
- Ethernet
- ADSS fiber design & installation
- OPGW fiber design & installation

## Fiber Deployment in Rural Colorado

(Platte River Power Authority)

Severe storms left the Town of Estes Park cut off from a reliable communications network. Black & Veatch identified routes, designed 32 miles of fiber, developed installation specifications, planned land acquisition, procurement and construction. The fiber link connects Loveland to Estes Park, and reestablishes durable, high-speed communications in Estes Park.

