

CORNING



# BRING BROADBAND HOME

**THE FIBER 5:**  
Pro Tips for Rural  
Broadband Planning  
and Deployment





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## Fiber Broadband Spells Opportunity for States, Communities, and Businesses

Communities with affordable, reliable, high-speed internet access can take advantage of substantial economic, educational, and quality-of-life opportunities. Broadband internet has become recognized as essential infrastructure, like electricity. Communities that have it are more successful, yet currently only **19% of Americans are connected by fiber**. The moment to bridge the Digital Divide and connect rural America has come. Corning is proud to do our part to make sure everyone, everywhere has access to reliable, high-speed connections enabled by optical fiber.

### Fiber Broadband Grows:

- Jobs and businesses
- Education opportunities
- Home values
- Social connections
- Healthcare options





### **How Are Federal Broadband Funds Allocated?**

The \$42.5 billion Broadband Equity, Access, and Deployment (BEAD) Program is designed to ensure access by the end of the decade throughout America, especially for unserved and underserved rural areas. BEAD allows each state or territory's broadband office to decide, with their communities, the best way to distribute their grant dollars.

### **Minimum Requirements for BEAD Participation**

To be eligible for funding, providers must meet minimum requirements, including:

- Reliable speeds of at least 100/20 Mbps (downstream/upstream).
- Low latency to support real-time applications like videoconferencing.
- Average combined outages may not exceed 48 hours per year, with exceptions for natural disasters.
- Develop cybersecurity and supply chain risk management plans to protect network from threats like hacking.

# 5 WAYS TO **MAKE THE MOST** OF BROADBAND FUNDING

## 1 Choose the Right Technology for Your Community

The BEAD Program provides an unprecedented opportunity for underserved rural communities to connect to high-speed internet and the jobs, education, healthcare, and other benefits that come with it. The stakes are high to ensure your network provides reliable service and meets ever-increasing demand for generations to come. The single most important key to success? Choosing the undisputed best technology for last-mile broadband delivery, optical fiber.

Although it's only the diameter of a human hair, a strand of optical fiber can carry vast amounts of data at extremely high speeds across long distances. Fiber makes this possible, because unlike traditional networks which carry electrical signals through copper wires, optical networks carry data as pulses of light through ultra-pure glass.

## 2 Lean into Industry Experts

No matter how straightforward a network deployment may seem, every project brings its own surprises. It's important to collaborate with technology and industry experts you can trust. From the initial planning process to the design phase, network construction, turn-up, and operation, you need established allies and trusted advisors who can guide you to success today and over the life of your network.

Along with 40 years of home and business fiber network experience, we've developed a robust ecosystem to support rural deployments. We can connect you to the right BABA-compliant products and the right people to help you make the most of your funding to create a future-ready, cost-effective solution that's simple to install, maintain, and evolve.

### **Broadband Network Checklist**

No matter your experience level, our experts can help you navigate these 6 key steps to network success.





### 3 Know Your Network Priorities

What's the best option for your network design? You'll need to take a wide range of variables into account and understand how to prioritize them. Our experts have been collaborating with providers for years to solve the unique challenges of rural network deployments. Together, we've developed flexible network building blocks that let you progressively deploy, evolving your network in a "pay as you grow" model.

## 4 Consider All the Business Models

It takes innovative thinking to bring broadband to underserved areas. And that includes the business model for operating the network. We'll help you examine all the variables when it comes to planning and optimizing the architecture of your network for cost, cost-sharing, scale, speed, access points, and other factors, so you can choose the scenario that makes the most sense for you and your community.

### Broadband Network Business Models

**Infrastructure:** A network built for one or more anchor service providers.

**Open access:** Allows all providers to have wholesale access to the network.







## 5 Minimize Your Need for Skilled Labor

Existing labor constraints will continue to challenge network operators as funds become available and more and more communities begin implementing their broadband plans. Over 20 years ago, Corning introduced a preterminated solution that can be installed without specialized labor. Because of the quality and efficiencies the preterminated model offers, it has become a standard among fiber network providers.



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# LET'S GET **STARTED!**

Visit us at [www.corning.com/bring-broadband-home](http://www.corning.com/bring-broadband-home) to learn more about rural broadband networks, network architecture options, and our industry-leading solutions.

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