



broadband association of north dakota

BAND Together Newsletter

Executive Director Report: Data Centers in North Dakota - Building the Foundation for Tomorrow's Economy

It seems like everywhere you turn in North Dakota, there is talk of data centers. Much of the conversation focuses on the potential benefits and concerns that come with building one in a community, along with the many factors that go into site selection—local ordinances, available land, and the infrastructure needed to support such a project. Those are important discussions, and ones we continue to hear regularly. But before diving too deep into those details, it's helpful to step back and start with the basics.

What Exactly Is a Data Center?

Every day, we check email, watch videos, pay bills online, or connect with family and friends. It all feels simple, but behind the scenes, something powerful is making it all work. That “something” is a data center. At its core, a data center is a building filled with computers that store and send information. A simple way to think about it is as a modern warehouse—except instead of storing boxes, it stores the digital information we rely on every day.

The Different Types—and Why They Matter

There are several types of data centers, each serving a different purpose. Some companies operate their own, often referred to as enterprise data centers. These function much like a private office building, giving organizations full control over their systems while keeping sensitive information secure. Others rely on cloud data centers, which allow businesses to essentially “rent” space and computing power. This model has made technology more accessible and flexible, powering everything from email and online shopping to streaming services.

On a much larger scale, hyperscale data centers support millions of users at once. These massive facilities—often the size of several football fields—are what keep major platforms running smoothly and help drive emerging technologies like artificial intelligence. Another version, known as edge data centers, are smaller facilities located near the communities they serve. By being nearby, they help reduce delays and improve speed, which is especially important for things like video calls, streaming, and connected devices.

There are also colocation data centers, where businesses can place their own equipment in a shared, highly secure facility. This approach allows companies to benefit from reliable infrastructure without the cost of building and maintaining their own site.

Ready to engage? We encourage communities, businesses, and local leaders to reach out to BAND to learn more, ask questions, or explore opportunities for collaboration and partnership as North Dakota shapes its digital future. To learn more, **visit us online**.

BAND Member Spotlight: DCN

Connecting North Dakota's Past, Present, and Future

Since 1996, Dakota Carrier Network (DCN) has served as the backbone of rural connectivity across North Dakota. Formed by visionary rural telecom providers, DCN was created to aggregate technical and economic resources, so that local businesses, healthcare providers, financial institutions, and government entities can connect beyond their service areas—without paying exorbitant fees to large national carriers.

DCN

Dakota Carrier NETWORK

In 2000, the State of North Dakota entered a landmark public-private partnership with DCN—one that remains stronger than ever. Today, DCN's fiber network delivers gigabit and multi-gigabit connectivity to school districts, higher-education institutions, and government agencies statewide.

Additionally, DCN connects all 54 critical health institutions, and 160 banks utilize the DCN network. Linked to every BAND member's network, DCN's infrastructure now covers 98% of North Dakota's land mass with fast, reliable fiber internet, positioning the state as a national leader in broadband access.

The Evolution of Bandwidth Needs

North Dakota's bandwidth demands have grown dramatically since DCN's founding. State agencies, schools, and public-safety organizations have advanced from 1.5 Mbps circuits to 10 Mbps, 100 Mbps, and now gigabit and multi-gigabit speeds. In 2018, North Dakota became the first state in the nation to deliver one-gigabit service to all K–12 schools and higher-education institutions—an achievement powered by DCN's innovative upgrades, including its 100-gigabit enhancement to the state's STAGeNet network.

Public-safety agencies now depend on DCN's and BAND members' fiber for redundant paths that ensure no 911 call is missed, with capacity to support real-time video and data to first responders. Businesses rely on DCN for cloud applications, video conferencing, secure data transfer, and real-time operations that drive growth and competitiveness. Healthcare providers use the network for telemedicine and electronic health records. Financial institutions depend on it for secure transactions and compliance.

A Privately Held Company Owned by Dedicated Local Leaders

DCN is a privately held company owned by 13 BAND member companies—rural broadband providers deeply rooted in North Dakota communities. Together, DCN and its owners have deployed more than 70,000 miles of fiber across the state and collectively employ more than 1,000 North Dakotans.



Governor Kelly Armstrong

“By connecting K–12 schools and higher-education institutions with gigabit fiber, DCN has expanded opportunities across North Dakota—enabling classrooms to access modern learning tools, supporting teachers, and preparing our students for the jobs of tomorrow.”

“DCN and our owners have a collective total plant investment worth more than \$1.4 billion just in North Dakota, and we continue to invest more than \$100 million per year in fiber construction for each of the past five years,” said [Seth Arndorfer](#), CEO, DCN.

Recent Developments Powering North Dakota's Digital Economy

DCN's momentum continues to accelerate. [Supported by a \\$19.7M NTIA Middle Mile grant](#), in 2024 DCN completed a major expansion of its statewide fiber backbone, adding more than 600 new route miles and upgrading electronics for terabit-level capacity. These enhancements deliver greater redundancy, resiliency, and future-proof performance—critical as high-performance computing drive exponential bandwidth demand across the state.

DCN also operates [Tier III-certified data centers](#) in Bismarck and Fargo. In 2025, DCN was named [Connectbase Most Valuable Provider](#) (Regional), and [Information Systems Manager Aparna Subramanian](#) received the national InfraGard Rookie of the Year Award (Tier 6) for her leadership in protecting critical infrastructure—further underscoring DCN's commitment to cybersecurity and national security.

Learn more at daktotacarrier.com.

Upcoming Events

July 7-8

BAND's Summer Meeting (Bismarck, ND)

Nov. 30-Dec. 2

BAND's Annual Meeting (Bismarck, ND)



Get in Touch & Stay Connected!

**Carissa Swenson,
Executive Director**

I am happy to provide information or speak at an event. If you aren't already subscribed to this newsletter, [please join our mailing list](#).



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