

Impact of CAF II-funded Networks

Lessons from Two Rural Minnesota Exchanges Left Underserved

Through the Connect America Fund (CAF II), the Federal Communications Commission (FCC) is providing more than \$85 million over six years to qualifying telecommunications providers in Minnesota to stimulate further broadband deployment to unserved rural customers. CAF II is intended to subsidize network deployments that can deliver service of at least 10 megabits per second download/1 megabit per second upload (10 Mbps/1 Mbps). Note, the current FCC definition of “broadband” is service at the speed of at least 25 Mbps/3 Mbps.

Minnesota’s 2022 speed goal is in sync with the FCC’s current broadband definition of 25 Mbps/3 Mbps. Minnesota has chosen to aim higher by establishing a speed goal of 100/20 by 2026. Projects receiving “Border to Border” grants from the State of Minnesota’s Office of Broadband must be scalable to 100 Mbps/100 Mbps.

Minnesota residents and policymakers are asking, what difference are these CAF II investments making in Minnesota? Because the FCC does not require CAF II recipients to submit network plans or maps, the answer is: it’s hard to tell. And based on the research conducted for this paper, the lack of transparency and accountability in the CAF II program has been challenging and frustrating for residents in CAF II-eligible areas who want a role in determining their broadband future. Similarly, policymakers are at a loss to understand how to leverage the federal government’s CAF II investments when the state’s aspirations are so much greater, as well as how to account for federal investments when determining an appropriate level of state investment in redressing Minnesota’s broadband gaps.

This study’s purpose is to help local and state leaders better understand the kind of networks being built using CAF II funds. To do that we looked at two telephone exchanges in rural Minnesota: Lindstrom and Braham. We mapped the newly installed network equipment in the exchanges and drew a representation of the network’s coverage based on the location of equipment. The quality and speed of a DSL network is dependent on distance. The closer you are to the equipment, the faster your connection will be and the farther away the slower it becomes. Homes (or businesses) within 3,000 feet of the node will generally experience sustained speeds of 25 Mbps/3 Mbps or more. Properties within 9,000 feet will generally experience speeds of at least 10 Mbps/1 Mbps. Beyond 9,000 feet, properties generally will experience speeds slower than 10 Mbps/1 Mbps. It is valuable to decision makers to see how those speeds track in the community.

The report finds:

- CAF II dollars are being used to deploy Fiber to the Node technology to support distance-sensitive DSL services in and around the cities of Lindstrom and Braham.
- Even after CAF II investment, the vast majority of land within these two exchanges lies more than 3,000 feet from a fiber-fed DSL node, thus limiting the bandwidth available to those customers to something less than Minnesota's 2022 state broadband goal of 25 Mbps/3 Mbps.
- It is unlikely that any customers in these exchanges will be able to receive broadband services that meet the 2026 Minnesota broadband goal of 100 Mbps/20 Mbps without additional provider investment.
- Greater transparency from CAF II recipients would enable more effective collaboration with state elected officials, the Office of Broadband Development, and communities to maximize the value of both CAF II and ACAM (Alternative Connect America Fund) program dollars towards meeting Minnesota's broadband goals. ACAM is another FCC program that supports rural broadband deployment by mid-size telephone companies.
- So far, the networks being built in Minnesota with CAF II funds don't meet state goals of better broadband speeds for everyone. The improvements are inadequate to support broadband-based economic and community development, while discouraging investments by competitive providers. Although some residents indeed welcome CAF II-funded upgrades that improve their service from 'bad' to 'somewhat better,' in the long run, the program's second-class status for rural will cut ever deeper as networks in more densely populated, more profitable-to-serve areas continue to advance. CAF II funding has not been enough to incent participating providers to invest in the kind of world-class networks rural areas need to survive and thrive in an increasingly interconnected world. Absent additional incentives, future upgrades seem unlikely in communities already served by CAFII investment.
- Minnesota can boast of examples where communities, the State's Border to Border Broadband grant program and CAF II recipients have worked together to finance and build networks that offer better service than CAF II-funded networks alone.
- Maximizing the public benefit from public investments is good for everyone.
- Better bandwidth through better transparency and collaboration is possible.

Report available at

<https://blandinfoundation.org/learn/research-rural/broadband-resources/broadband-initiative/>

100 North Pokegama Avenue
Grand Rapids, MN 55744

877.882.2257