

Broadband USA Applications Database

Applicant Name: Cook County, Minnesota

Project Title: Cook County Fiber Initiative

Project Type: Last Mile Remote

Executive Summary

This grant application is being filed by the Cook County, Minnesota government. Cook County proposes to build and operate a “fiber-to-the-premises” (“FTTP”) broadband communications network to bring broadband to the unserved areas of Cook County. Cook County plans to bring high speed Internet access to the proposed service area for the first time plus competition with video and voice. Cook County is 100% rural. Nearly 90% of the land area of the County is federally or state owned. The geography and terrain are rugged. The County is remote by definitions of the grant with the nearest town being Duluth, MN over 100 miles away. The remote nature of the County has meant that the citizens and businesses in the County have learned that they must rely on local resources. Cook County believes there is significant demand for broadband in the County. In preparation for this grant the County conducted a residential survey. 91% of residents said that the County needs a local broadband supplier. 90% of residents said they would subscribe to a local company. Another 8% said they might buy from a local company, meaning that almost everybody in the County is willing to change to a local broadband provider. These results highlight two facts: that lack of broadband is a major problem for almost everybody in the County, and second, there is a major predisposition for people in this County to look for and support a local solution to the problem. The primary economic driver of the County is tourism. The tourism businesses in the County badly need broadband for the following reasons: •Many guests have made it clear that they do not wish to stay in hotels, inns and lodges that do not offer broadband; •The inadequate Internet access available today means that hotels, inns and lodges cannot participate in online registration systems, which is costing them bookings and revenue; •The hotels, inns and lodges rely on getting college students for summer help and these students demand broadband access; •The hotels, inns and lodges need broadband to be able to use video conferencing, which would eliminate many of the numerous long trips needed to conduct business. •The hotels, inns and lodges need broadband to conduct normal business like purchasing, online banking, etc. This grant application clearly meets the criteria established by Congress in passing the broadband portion of the ARRA for the following reasons: •The areas covered by this grant do not have high-speed internet access today and citizens and businesses there are still reliant upon dial-up access to the Internet. These areas are rural, remote and unserved. •The County is willing to build a fiber network to every street, home and business in the proposed service area to bring true and permanent broadband to the area. •The business community in Cook County desperately needs broadband. •Any profits from this venture are automatically reinvested back into the local community. •This community will strongly support a local business initiative. •This project creates numerous new jobs, both permanent and construction jobs. •The project addresses the disintegration of traditional media channels for distributing important

public safety information. Within the last year the regional newspaper has terminated home delivery. After the conversion to digital television the regional broadcasters have indicated they do not plan to rebuild in the area with digital signals. This means there is no more access to local, over-the-air no-cost television news to our citizens. This has been the primary way of communicating emergency information and weather-related closings to the community. There are numerous stories in the area about the effect of the lack of broadband. Here are a few:

- A local realtor shared a story about a house sale she was about to make recently to doctors from the Mayo Clinic. As discussions progressed they asked about access to broadband. When the realtor said the only access was by satellite the sale fell through. The doctors needed the ability to work remotely at times; something they felt was not possible with satellite internet service.
- Qwest cannot address the needs of key businesses. Cascade Lodge was quoted over \$600,000 to install a T1 into their business, located directly on the main Highway 61 corridor. Lutsen Mountain Inn has been told they cannot get a T1 at any price.

The proposed service area comprises most of the geography of Cook County, Minnesota and excludes the areas of Grand Marais, the County seat and the area around Grand Portage. The areas to be served include the census designated areas of Lutsen, Schroeder, Tofte, East Cook and West Cook. The remainder of the service territory is undesignated census areas of Cook County. All of the proposed service area does not have access to any broadband today other than satellite. Even in Grand Marais, which has some broadband, the speeds are far slower than in urban areas of the state like the Twin Cities. This County has been left behind in broadband deployment. Many customers in the County must rely on dial-up. The copper wires in the county are old and it is not unusual to see dial up speeds as slow as 10 to 20 Kbps. There are numerous horror stories about the condition of the existing copper network. One business reported that it took 12 hours to download a simple update to accounting software. We believe that this County is the exact type of place that these grants are aimed at. The proposed service area includes 3,152 residential homes and 236 businesses. The proposed service area is rural and mostly residential. Many community anchor institutions are found in Grand Marais, the County seat. However, the proposed service area includes 57 anchor institutions: two medical clinics, thirteen fire houses, two town halls, two schools, one airport, eighteen communications towers used for public safety, a park ranger station, a coast guard station, five post offices, the headquarters for Cook County Electric, and the Taconite Harbor Energy Center. Cook County promises to meet the non-discrimination obligations required by the NOFA. Cook County plans to partner with Boreal Access, an ISP Cooperative working in the county for the past 15 years. Boreal provides dial-up access in the county today as well as wireless T1s for some business customers. These customers are mostly in the served areas of Grand Marais. Boreal's experience will be discussed elsewhere in this application. Cook County will be deploying a GPON passive fiber network, built to pass every home and business in the proposed service area. Cook County will construct a fiber drop from the new network to any customer that wants to be connected to the fiber network. The assets needed for the proposed network will cost \$42.2 million. This network consist of constructing \$28.3 million to build fiber to every street within the proposed service area, adding \$2.8 million in core fiber electronics and fiber splitters, adding an estimated \$3.1 million of fiber drops to get the network to homes and businesses, and adding \$1.5 million of electronics found at the customer location. Cook County also needs to buy the equipment needed to supply services to the network including \$650,000 for a voice switch, \$2.7M for a cable TV headend and settop boxes, \$173,000 for data routers and switches, and \$1.4 million for a headend building and neighborhood huts. Finally, the business needs some basic

assets needed to operate the business such as \$500,000 in spares and inventory, \$120,000 for tools, \$63,000 for furniture, \$44,000 for computers, and \$700,000 for operational software. Cook County has created a business plan for this proposed venture and projects that it will be able to get a customer penetration rate of 65% of households and 64% of businesses within the proposed service area to the fiber network within three years of the date of getting funded by the grant. In terms of broadband customers, Cook County expects to be able to connect to 2,082 residential customers and 154 business customers within the three year period from receiving grant funds. Cook County believes it will easily have built more than 67% of the network within two years as required by the grant. The project is going to create both permanent jobs and jobs during the construction of the network and the installation of customers. The project will create 13 new full time jobs in the County and 38.5 Man-years for new construction jobs. Since the work is seasonal in Cook County some of the jobs will also be seasonal. The jobs created will pay prevailing wages or higher and also will contribute to the diversification of the employment base within our region. The County has formed partnerships with many anchor institutions in the County for broadband collaboration. Attached to this grant are letters of support and partnership from the following institutions: Sawtooth Mountain Clinic which will expand its electronic medical records system to remote satellite locations including the Grand Portage Reservation; Cook County Higher Ed, which operates a virtual university in the County using video conferencing; Independent School District 166 who will work with the County to expand their Business Education curricula in exchange for producing public service video content; US Forest Service who will connect critical sites for use by the emergency response, WTIP radio who will use the network for public safety alerts for the public, and the Grand Portage Tribal Council. The community is 100% behind this project. The group of leaders that have come together to work on this project understand the importance of this infrastructure to the long-term health and well-being of our citizens and visitors. These leaders represent the full gamut of small, rural community entities including county commissioners, city council members, K-12 schools, Higher Education, health care big and small business and the average home owner.