

Broadband USA Applications Database

Applicant Name: Freedom Wireless Broadband, LLC

Project Title: Carroll County Wireless Broadband System

Project Type: Last Mile Non-Remote

Executive Summary

EXECUTIVE SUMMARY Freedom Wireless Broadband, LLC (FWB) is a Wireless Internet Service Provider (WISP) currently providing high-speed Internet Access services to small and medium sized businesses, local and county government agencies and residential subscribers in the communities throughout Carroll County, Maryland since 2005. The two founders of FWB, Thomas Hankinson and Bruce Hall, live in Carroll County, which gives them personal knowledge of the community and, in particular, an acute awareness of the lack of broadband availability and its negative impact on their community, leading them to form FWB. The FWB executive team brings over 100 years of business experience in the telecommunications industry to the challenge of providing broadband access to Carroll County. The technical management team has 70 years of telecommunications engineering and operations experience of wireless and fiber optic networks. FWB has extensive relationships with church groups, county and town government agencies, the residential community and business organizations. FWB markets their services through these relationships, which reduces subscriber acquisition costs and stands as evidence of their reputation and recognition within their community. Working through such relationships enables FWB to identify the critical mass of interested subscribers in under served communities, strategically constructing their network to best meet local needs. FWB has learned that community relationships driving market strategic investment in network deployment is the key to their success. Using funds from this grant FWB intends to expand Internet access service from its current coverage to include all communities in Carroll County via various broadband wireless technologies. The majority of Carroll County is 35 miles from any developed urban area and does not have adequate access to broadband services. There are many isolated “pockets” of residences and small businesses with no service available other than dialup or satellite. All census tracts in the county qualify as rural (Census 2000) therefore the proposed service area is greater than 75% rural. The proposed service area also qualifies as “underserved” because less than 50% of the population have access to facilities-based, terrestrial broadband service at greater than the minimum broadband transmission speed set forth in the Notice Of Funds Availability (NOFA). FWB has constructed and operates a wireless broadband network covering over 300 square miles of the county serving seven communities. They are: Finksburg, Eldersburg, Hampstead, Mount Airy, Taylorsville, Winfield and Berrett. Approval and funding of this proposal will enable FWB to extend our network to provide high-speed broadband Internet access service throughout Carroll County. Additional areas that will be served by the project are: Taneytown, Uniontown, Sykesville, Manchester, Westminster, Mayberry, Middleburg, Deer Park, Union Bridge, Union Mills, Silver Run, AND Woodbine. The FWB network is an IP-based wireless mesh network supported by a point-to-point broadband microwave backbone. The broadband backbone provides a 20

Mbps (expandable) "pipe" from Level 3, a Tier-2 Internet PoP located in Baltimore to the FWB service hub in Eldersburg, Carroll County. From the main FWB hub, communities are interconnected via a 5.8 GHz (802.11a) wireless mesh network installed at appropriate geographic locations as determined by detailed engineering analysis. Business services subscribers will be connected directly to the 5.8 GHz network via wireless receiver / modem installed on premise. Residential services subscribers will be served via 2.4 GHz (802.11b & g) access points, also interconnected to the 5.8 GHz mesh network. The network is standards based, incorporating 802.3 wired Ethernet interfaces; 802.11a, b, g, & n air interfaces, AES encryption protocol and 802.16d air interface. As of the 2000 decennial census the total population of Carroll County is 116,094, living in 52,503 households, with 4,761 businesses in the county. FWB provides high-speed Internet access service to businesses and residences and will offer (upon funding approval) wholesale bandwidth interconnection to other service providers on a non-discriminatory basis. Interconnection rates will be negotiated on a case by case basis inclusive of bandwidth requirements and providing a discount as compared to standard business service pricing. Pending funding approval FWB intends to implement the most innovative and fair pricing plan in the industry today. We will establish a "standard" packet allowance (upload and download combined) for each service plan. Subscribers that use less than the standard allowance will receive a bill credit. Subscribers that exceed the allowance will pay a surcharge. (Hughes and Comcast have a surcharge for overage, but do not give a refund to low bandwidth consumers.) FWB's current price structure utilizes a sliding scale based on the data rate requested: Residential Service Plans: Basic - \$29/month for 756 / 756 kbps1 Silver - \$69/month for 1.0 / 1.0 mbps Gold - \$99/month for 1.5 / 1.5 mbps SoHo 1 - \$199/month for 3.0 / 3.0 mbps SoHo 2 - \$319/month for 5.0 / 5.0 mbps (unlimited packets) All services provide symmetrical data rates. Residential services include 1 email box. Residential SoHo includes 5 email boxes, 1 static IP address and 12 X 7 on-site technical support. A one-time installation charge of \$99 applies. Business Service Plans: Basic - \$69/month for 756 / 756 kbps1 Silver - \$99/month for 1.0 / 1.0 mbps Gold - \$149/month for 1.5 / 1.5 mbps Platinum - \$319/month for 3.0 / 3.0 mbps Titanium - \$499/month for 5.0 / 5.0 mbps (unlimited packets) All services provide symmetrical data rates. All business service plans include 5 email boxes, 1 static IP address and 12 X 7 on-site technical support. A one-time installation charge of \$99 applies. Critical Institutions Service Plans: Basic - \$48/month for 756 / 756 kbps1 Silver - \$69/month for 1.0 / 1.0 mbps Gold - \$100/month for 1.5 / 1.5 mbps Platinum - \$220/month for 3.0 / 3.0 mbps Titanium - \$349/month for 5.0 / 5.0 mbps (unlimited packets) The FWB pricing plan for critical institutions provides a 30% discount based on the Business Service Plan for those larger entities requiring greater bandwidth and service guarantees. For smaller institutions, or those in financial hardship, FWB will work with them to define a service plan and price structure that will accommodate their budget.