

Broadband USA Applications Database

Applicant Name: Advanced Computer Solutions LLC DBA Advanced Broadband

Project Title: Advanced Radio Technology provides broadband connectivity to rural populations in north Alabama.

Project Type: Last Mile Non-Remote

Executive Summary

Advanced Computer Solutions LLC (DBA Advanced Broadband) seeks to build out a broadband wireless network to cover underserved areas of North Alabama who have previously requested service from its closely affiliated company, Cyber Broadband Inc. (CBB) Advanced has also worked closely with the State of Alabama's Broadband Initiative to identify potential service areas with the most need near its home community. CostQuest Associates, which has been contracted by the State of Alabama to assist with broadband mapping, had received numerous requests for a wireless service provider near Decatur Alabama and shared that information with ABB. Based upon these suggestions, Advanced Broadband put together a project that would target as many of these areas as possible. Advanced Computer Solutions LLC was formed in 2001 to provide computer and network consulting and solution services to our community in Cullman, Alabama. As Advanced performed work, it educated its clients on what broadband internet was and why it was needed. However, as work was performed outside of the City of Cullman in surrounding rural areas – it was quickly discovered broadband was not available. As the computer maintenance, security, and software industries moved increasingly towards requiring a broadband connection, ACS recognized the need for broadband in rural areas surrounding our city, and in the summer of 2004, researched available technologies, and recruited personnel to launch a company to meet that need – Cyber Broadband Inc. As CBB grew, its founders were split as news of the company took off and potential customers were asking for Cyber's broadband service across north Alabama. CBB discussed priorities, and decided to focus its monetary resources on its initial target market – Cullman County, Alabama. As additional requests continued to reach Cyber's office, several members who created CBB also invested time, money, and resources to launch additional broadband service offerings. In September 2008, four years after CBB began offering service in Cullman County; Advanced Computer Solutions LLC invested money and equipment and started Advanced Broadband in Blount County – also reaching parts of Winston and Walker counties. Due to the flexible nature of operating a consulting firm in addition to a Wireless Internet Service Providership, many personnel of CBB also do work for Advanced Broadband, and vice versa. In conclusion, because Cyber Broadband Inc. has dedicated its resources to Cullman County (and currently provides service to roughly 85% of Cullman County), it is Advanced Computer Solutions, DBA Advanced Broadband who is preparing this application. Many references will be found to Cyber Broadband Inc. throughout this application due to the fact the company has more statistical history than Advanced Broadband. Service Area: ABB's proposal targets four main areas – Falkville/Danville, Telephone Tower Road, Green Mountain, and Highway 65. Falkville and its neighboring town of Danville have submitted the largest number of requests to CBB over the last

several years and have been a priority for growth. However, since Falkville is actually in Morgan County, Cyber has been unable to expand to cover this area. The largest of the four proposed areas with a potential service area of 14,354 residents, Falkville is ideal for wireless internet service due to its flat terrain at the foot of Lacon Mountain. Telephone Tower Road aims to provide service to small roads that are off of main highways between Decatur and Lacey's Spring, Alabama. Many residents have reported cable or DSL is "at the end of the road" – but not at the actual resident's house – where it should be. Cable and DSL companies tend to exclude many of these areas because there are not enough subscribers to generate a reasonable return on investment. Since a wireless signal does not care how many customers live on a road – radios are able to provide service at a lower cost than wired methods. This area should serve 7595 residents. Green Mountain is a required service area as it is the link to our source of internet connectivity. As a tower site is required here anyway, it makes sense to provide service to customers accessible from this location – approximately 5499 residents. Finally, Highway 65 is a very rural and undeveloped area in between two ridges just inside of Jackson County. With a population of 1,051 persons over 20 or so miles, this area does not even have access to cellular telephone service. Businesses and households: Both CBB and Advanced Broadband, since their inception, have targeted rural areas, which statistically have few businesses. Therefore, the numbers of businesses in our proposed coverage area are few. Using CBB's subscriber base as an example, businesses tend to be home owned and operated. Examples include medical transcription, advertising and graphics firms, and accounting services. CBB also provides service to several rural fire departments. In researching potential service areas, the group found most area schools and hospitals had exclusive access to fiber – but those same resources, which often ran right in front of rural houses – were not available for consumer use. This is another reason our group of companies – only two of three companies in Alabama that provide wireless access to individual home residents – and two of only nine companies that provide wireless access at all - chooses to serve a market other companies refuse as a matter of corporate policy. Community Involvement: Before receiving a lead from CostQuest to provide service in our application target area, Advanced Broadband aimed to provide a high capacity link to an already existing microwave tower site in Jasper (Walker County) Alabama. From that location, ABB had planned to serve residents in Oakman AL and surrounding rural areas of Jasper AL. However, the owner of the microwave tower, the Walker County Emergency Management Agency, was non-responsive to repeated efforts to partner. Advanced attempted to contact other potential customers in Jasper – their local hospital – and several schools along highway 69 – and promptly found out, as stated above, those sites already had exclusive access to fiber. In fact, our company was told schools along Highway 69 recently were connected by Charter Communications – but only for the schools. The water department manager of Oakman, when interviewed, told ABB that Oakman was primarily a retirement community. Just a few months prior Verizon Wireless installed cellular towers that gave Oakman residents some broadband access, thus meeting their need. Our new target areas, as suggested by CostQuest, have two volunteer fire departments that will receive internet at a discounted rate. ABB was unable to locate any libraries during our visit but will make broadband internet available at a discounted rate to such libraries which may subscribe. Proposed Services: Broadband service has become a requirement for persons living both in highly populated areas and rural areas. Tasks such as online banking, online classes, online research, communication, video-conferencing with overseas military personnel, and remote access to business networks and applications are absolutely necessary in today's fast-paced environment. These

needs are further heightened by the current state of energy prices – and their associated impact on travel – in addition to our economy in general. Sure, it is a great fact that many rural children and educational areas have access to broadband at their facilities – but it is an absolute insult that broadband connectivity runs alongside the road to many residents who would like the service – but the companies who own the lines refuse to provide the service to the residents – or are too large to respond to the needs of the customers in these smaller areas.

Interconnection / Type of Broadband System: The Advanced Broadband network will be built in a method where interconnection is allowed and readily available at any major interconnect. The speed between tower sites will be built to provide up to 10 MBPS and provide service to customer locations at 2 MBPS in each direction (upload and download). The tower infrastructure will allow for an upgrade of this capacity as needed – to 300 MBPS with today’s technology. Advanced’s network proposal continues to build upon the technology currently employed by Cyber Broadband in Cullman County and Advanced Broadband in Blount, Walker, and Winston Counties - The Motorola Canopy platform of broadband radios – made right here in the United States – in Schaumburg, IL.

Qualifications: Advanced Broadband shares many owners and operators with Cyber Broadband – who has built and operates a wireless network providing service to over 150 residents of Cullman County who had few or no broadband options. This network currently consists of seven tower sites with a sustained network bandwidth usage of more than three MBPS. Our network administrator and CEO, Mr. Jay Fuller, is also 100% owner of Advanced Computer Solutions LLC DBA Advanced Broadband. These two companies, in addition to BamaWISP north of Huntsville Alabama, are the only three companies in the state of Alabama to be known to provide wireless broadband service primarily to rural residents. There are eight other known broadband wireless providers, all of which prioritize business customers and prefer not to do business with residential accounts. There is no better qualification for executing this project than the fact our management team already works on similar projects every day.

Subscriber Estimates / Jobs Created: Based on the rate of growth of CBB, ABB should achieve an average of 40 customer installs once equipment is available and installation crews are well trained. The number of jobs created by offering broadband service to rural areas will be substantial.