

Broadband USA Applications Database

Applicant Name: Foundation Telecommunications Inc

Project Title: FTI High Speed Satellite Internet Package for Rural & Remote Small Communities

Project Type: Last Mile Remote

Executive Summary

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communities as targeted for service. The "Universal Wireless Solution" for the extremely small communities targeted in this application consists of a uniquely designed hybrid commercial grade satellite gateway to be located at any suitable location within a mile of the center of the community and is nearly totally immune from outages due to weather (UNLIKE all other residential satellite Internet solutions). The satellite gateway also serves as an omni-directional wireless 802.11b/g access point for the network; the coverage of which is designed to overlap the coverage of a second access point repeater connected to the gateway via a wireless 5.8 GHz link and located anywhere at any high point within the community. Typical "high points" in these small communities include water tanks, grain elevators, fire stations or police communications towers, individual television antenna towers at homes or businesses and taller buildings. Total installed cost of the "Universal Wireless Solution" including pre-construction engineering and surveys is approximately \$54,595 per community. This application for 115 communities that are unlikely to ever receive access to High-Speed Broadband/Internet services can be provided at an approximate cost of \$6.5 million. When funded, every school, commercial building, fire-station, police-station, city building, and home in the community will have access to the Internet. Assuming an average of 110 homes per community together with local police and fire facilities; 12,098 homes and the associated local public facilities will have access to the service. Perhaps most importantly, the FTI two-way high-speed satellite broadband/Internet solution may be IMPLEMENTED IMMEDIATELY. There are no trenches to dig or other time consuming aspects of the construction of the project. With 124 construction crews, the entire project can be constructed in less than one (1) month; aka: "Shovel Ready"! All Internet services will be available to the end users of the FTI service including but not limited to: Email (#1 Use of Internet), VoIP, Gaming, WEB Surfing, Business, Shopping, Intranet Communications, Research, Remote Site Monitoring. The ubiquitous marriage of both satellite and wireless technologies provides for a truly non-discriminatory provision of services without interconnection limitations. FTI owns or controls the entire Internet link from the end user to the OC-12 fiber interface connecting to the Internet backbone. The dual application of multiple access points with overlapping coverage areas using special multi-path antennas specially designed to operate in high reflectivity and high foliage environments ensures universal coverage. As further insurance that all potential users may receive the service, the \$42,751 per community budget includes 50 Customer Premise Equipment packages and installation costs that will provide service in weak signal areas that always exist in some corner of the community. FTI has been operating similar community networks and automated Hot Spots for over two years throughout the Commonwealth of Kentucky and the State of Indiana. In addition, FTI has both owned and operated its own two-way satellite High-Speed Broadband/Internet service for over fifteen years with its initial service offering to all one room school houses without Internet access continuously since 1994. FTI seeks out local businesses with expertise in satellite and computer technologies as the first line of customer service in each community. Once identified, FTI provides hands-on training to the technicians for all aspects of the local satellite gateway and wireless technologies; both software and hardware. This project will provide additional revenue sources to these companies and enable them to retain employees that may otherwise have to be laid off in this economy. In many cases, additional employees are added to handle the extra work load of installations and customer service. End user projections based upon prior experience in these markets are 50% of homes passed or approximately 6,700 new Internet users. This count does not include the 270 approximate schools, police, fire, volunteer fire stations and other critical community organizations

and estimated 2,000 businesses located within these communities. Small communities in and of themselves cannot reasonably attract Broadband Initiative funding based upon a total funding request of \$54,595 per community. Given their geographic isolation, it is similarly unlikely that they will ever be bundled with a community miles away as part of a larger proposal. As such, communities that continue to be overlooked by traditional providers of High-Speed Broadband/Internet services may be provided access to these services by virtue of this Broadband Initiative together with the proven innovative technological solution offered by Foundation Telecommunications, Inc.