Broadband USA Applications Database

Applicant Name: KEPS TECHNOLOGIES, INC., d/b/a/ ACD.net, ACDtelecom.net

Project Title: Branch-Hillsdale Broadband Infrastructure

Project Type: Last Mile Non-Remote

Executive Summary

This project will make last-mile high speed broadband available within unserved and areas of Branch and Hillsdale counties via deployment of a network consisting of a mix of fiber-to-the home, fixed and mobile wireless. It will connect the last mile to a middle-mile infrastructure for delivery of services. Services will include Internet access and voice and television service utilizing IPTV technology. Combining unserved areas within the two counties into one project will be more cost effective than separating them into two projects since facilities and fiber routes can be combined. Both counties are ideal choices for ARRA broadband funding. Greater broadband coverage will result in: a) retention and return of former Michigan residents who desire a rural setting near to urban centers, yet need high speed broadband, and b) increased revenues from tourism and property taxes from second and/or vacation home ownership. c) Augmentation of infrastructure in an area that has underinvestment by other providers. KEPS Technologies, Inc., d/b/a ACD.net and ACDtelecom.net is the lead partner of this application. We have partnered with TC3.net of Adrian Michigan (Lenawee County). TC3.net is also a Competitive Local Exchange Carrier delivering Wi-Max, DSL and telephone service in served areas of Branch and Hillsdale counties. The overall project cost will, as a result be lower than a non-partnership approach. Service Areas General Description Branch and Hillsdale counties are located in south central Michigan with their southern borders adjacent to the States of Indiana and Ohio. They are rural counties and do not have any population centers that exceed twenty thousand residents. We used a certified engineering firm, the State of Michigan broadband map data, the BroadbandUSA Mapping Tool and the Census Bureau American FactFinder to identify the unserved areas, census blocks and other demographic data required for the application. We used a certified engineering firm, the State of Michigan broadband map data, the BroadbandUSA Mapping Tool and the Census Bureau American FactFinder to identify the unserved areas, census blocks and other demographic data required for this application. ITEM DESCRIPTION Service Area Location Branch & Hillsdale Counties, Michigan Number of Townships 32 Number of Households in Unserved Area 19,176 Number of Businesses 1241 Community Anchor Institutions The project will pass (make broadband available) to the following approximately forty-seven (37) anchor institutions. Proposed Services and Applications The proposed services are Internet access with bandwidth ranging from 768Kbps to 3Mbps with additional bandwidth in fiber to the home locations and telephone service with the capability for IP enabled cell phones to utilize the bandwidth for no charge telephone calls. The services will be delivered via fiber optic cable to the home, wireless and DSL. The project will include the necessary middle mile fiber connections to the last mile distribution points. Non-Discrimination and Interconnection Obligations ACD will fully comply with the requirement of network openness. Our networks are open. The company has a long and extensive
experience working with other providers as a wholesale and retail provider, and on joint projects. Twenty-five percent of ACD’s business revenue derives from services wholesaled to other providers. Network openness is one of ACD’s core policies. With it, our operational expenses are amortized across a greater customer base. ACD sells and purchases services from and to other service providers that wish to interconnect with the network. Broadband System to be Deployed ACD will use industry standard and proven equipment in the Branch-Hillsdale expansion of its Michigan network. The project network will utilize Cisco aggregation and core switches. It will comply with ACD’s fully MPLS network MPLS is used to subdivide connectivity to various customers, classes of customers and to other service providers that wish to interconnect with the network. System summary: • ACD will use industry standard Fiber to the Home (FTTH) using a platform and technology that is Rural Utilities Service certified, and is field deployed worldwide. • The wireless connectivity will use Motorola’s Canopy Wireless system with both 900Mhz unlicensed and the 3.650Ghz licensed spectrum in locations where wireless is the most cost effective transmission. • ACD will deliver copper wire based DSL in areas where the DSL can deliver bandwidth with a minimum of 768Kbps. It should be noted that ACD DSL using Zhone equipment can deliver up to 45Mb/s to the premise. • The last mile connections will be aggregated to middle mile fiber and on to the ACD.net network. Applicant Qualifications The proposed project is a continuation of ACD’s core business utilizing technologies and equipment types currently used by ACD.net. Furthermore, the company is experienced in completing and operating similar projects such as the enclosed. Examples: • SpringfieldNet, a City of Springfield, city-wide wireless network funded by a federal Digital Divide Investment Program, Community Development Block Grant. The network is fully operation with full acceptance via a financial and physical audit by the Michigan Economic Development Program. It is a fully sustainable network. • Berrien County Michigan, Population Cluster Broadband deployment in five locations funded by two million dollar Michigan Broadband Development Authority loan fully paid off with the deployment profitable and sustainable. • TC3.net currently delivers high speed wired and wireless broadband in served areas of Branch and Hillsdale counties, including telephone service. Kevin Schoen, CEO of ACD, founded the company in 1988 at the age of fourteen. It was registered in Michigan as a C-Corporation in 1991. The company became an Internet Service Provider in 1995, and a Competitive Local Exchange Carrier in 1997. Its Lansing headquarters is a 42,000 square foot building with a certified 4,700 square foot data center that houses ACD’s network center, plus numerous customer servers and equipment. As facilities based provider, we currently own and operate a Michigan wide telecommunications network consisting of long haul and metropolitan fiber, twenty-four Central Office collocations, including five in southwest Michigan. We are submitting one other project for BIP approval, unserved areas in the adjacent Branch Hillsdale counties in south central Michigan. Overall Infrastructure Cost The price of the overall project is $9,777,314 Subscriber Projections We are estimating that we within the first two years will have 3835 customers representing 20% of the customer base. This is a conservative estimate for financial modeling purposes. Realistically we expect on the third and final year of the project we will have between 30% of the customer base representing 5752 customers and over a 5 year period we expect to have half the customers representing 9588 customers. Jobs Created and/or Saved ACD will hire approximately twenty employees and ten installer contractors for the long term operation of the network. During construction approximately twenty people will be employed doing the construction.