Applicant Name: LAT, Inc.

Project Title: Broadband Infrastructure deployment in rural/remote Montana

Project Type: Last Mile Remote

Executive Summary

Little Apple Technologies (“LAT”), headquartered in Manhattan, MT, is a wireless Internet service provider that offers high-speed, high-quality broadband service to “outskirt” communities in Southwest Montana. LAT seeks to utilize funding from the American Recovery and Reinvestment Act of 2009 (“Recovery Act”) to rapidly extend broadband infrastructure into difficult-to-serve areas of Montana in a manner affordable to middle- and last-mile users. LAT proposes to deploy broadband to economically depressed rural areas, thereby to provide greater access to distance learning opportunities and greater global market participation. The deployment will support better health care access and affordability to rural and remote residents. Additionally, this project will demonstrate the use of alternative energy and green strategies in broadband deployment. Using Recovery Act funding, LAT will install a carrier-class quality broadband network in a 50 mile wide by 200 mile long corridor adjacent to Montana’s major interstate transportation route, I-90. Deployment along this corridor will provide a broadband link between rural, non-rural, and remote areas while avoiding duplication in areas that are already adequately served. This proposal focuses on rural and remote unserved and underserved areas with a high proportion of rural residents. Our plan for the construction of towers and deployment of equipment for the proposed build-out as well as the need for local IT experts to support roll-out could easily generate 30 new full-time jobs in southwest Montana. Considering that the average population of Montana per square mile is 6.2 and for the US is 97.6, 30 new jobs would be significant. Currently, LAT provides high-speed broadband and VoIP from 19 access point locations, sited in and around the rural area of Three Forks, Logan, Manhattan, Belgrade, and Bozeman, MT. These access point locations allow LAT to provide broadband service of up to 3 Mbps and VoIP to the additional rural communities of Amsterdam, Willow Creek, Churchill, Four Corners, Gallatin Gateway, Sedan, Wilsall, Menard, Trail Creek, Jackson Creek, and Bridger Canyon. Sections of the larger town of Bozeman (not broadband-capable via DSL or cable modem) are able to utilize LAT’s service to access broadband. In addition to providing access, this proposal would fund upgrading our existing system to offer broadband of up to 12 Mbps to support next-generation data, voice, and video applications to consumers in these existing locations. The corridor build-out would include the installation of broadband access points in rural and remote areas near the towns of Deer Lodge, Butte, Dillon, Twin Bridges, Whitehall, Livingston, Big Timber, Columbus, and Laurel. These locations were selected for two reasons: First, they will support broadband services to a number of communities currently un-served or underserved. Second, they are proximate to fiber backbone facilities, allowing the most cost-effective and efficient routing onto the Internet. Montana’s population density is 6 persons per square mile. This project will pass 45,501 residences, 168 community anchor institutions, and 344 critical community organizations. The number
of rural residents served by the project exceeds 91,232. The service area is delineated by census blocks. Because the technology being deployed is line-of-sight dependent and because the proposed service area is mountainous and forested, not all blocks can be fully serviced. The applicant has made the best effort to accurately identify block parts that will not receive its service, and has indicated so in the application. The corridor is populated with users and potential users that address agriculture, mining, tourism, telecommuting businesses, and a number of small manufacturers. There are ~25 small schools whose access to the Internet is currently limited to dial-up connection, which cannot support the Montana Education Telecommunications Network or existing distance learning options. Of further concern is that there are ~15 volunteer fire departments whose connectivity is limited to dial-up speed (or lack of speed). Using a Terrestrial Fixed Wireless IP network, (Ethernet, copper, and fiber optic backbone connecting to wireless microwave backhaul links that connect to multiple strategically located wireless access points) LAT will provide synchronous connections with download speeds ranging from 1 Mbs to 12 Mbs and upload speeds of 0.8 Mbs to 4.5 Mbs, depending on consumer preference. System latency is far less than 120ms. The system allows VoIP telephone service, including E-911 and all required emergency service capabilities, from LAT or other vendors. This VOIP connectivity is of particular importance to those areas in the proposed funded service area who currently do not have any type of phone service. The system can support video applications and e-mail from LAT or other providers. Service is offered at a line-of-sight entry cost of $45 monthly, and is variable depending on customer needs. The deployment described in this proposal has a collateral benefit: Most of the area of this corridor is heavily forested and borders several national forests, as well as Yellowstone National Park. The broadband capability will be rapidly deployable to remote areas via mobile broadband currently under development by LAT. High-speed broadband would be available for use by emergency responders deployed for disaster-level events such as forest fires. LAT is a uniquely qualified applicant. While parts of rural America have been serviced only by incumbent DSL or cable operators, LAT has been a broadband provider and strong competitor to these areas since 2003. LAT saw the opportunity to be both a provider to unserved areas and a competitor in underserved areas, and has built a successful business by combining top-notch customer service, local staff, and the best in wireless technology at a fair price. The customers currently served by LAT can attest to our capabilities and willingness to serve when others walked away. LAT has an established and successful management team including CEO Tom Langel, COO G Avaro, CTO Aaron Svare, and R&D Coordinator Paul Tackett. Directors include: Randall Peters, Mitchell Hobish and Tom Langel. LAT understands its obligations to adhere to the non-discrimination and network interconnection requirements described in the Equal Opportunity and Nondiscrimination Certification, the Architectural Barriers Act of 1968, and the Uniform Accessibility Standards. Current policy at LAT is in conformance with strict Network Neutrality practices including no port blocking —with the limited exception of malicious e-mail spam ports — and the ability to provide customers with public IP addresses upon request. In that regard, LAT commits to (1) display its network management policies on the Web and disclose any changes thereto, (2) show no favoritism to any lawful Internet applications or content, (3) connect to the public Internet, and (4) offer technically feasible interconnection on reasonable rates and terms. These requirements are consistent with LAT’s current policies, procedures, and practices as a WISP. The overall infrastructure cost of LAT’s proposed broadband system expansion is $7,491,650. LAT’s projection for the project: 45,501 households as potential customers; 2,043 new subscribers gained; and sufficient room for additional growth and
overhead. Regarding job creation, at the outset LAT predicts that should it receive stimulus funding, its own hiring demands just to build out the essential new towers and deploy the new hardware equipment would require bringing on up to 15 new employees. The build out will also require the hiring of additional employees and subcontractors to complete the expected service to targeted areas. The advent of new and/or improved broadband service to the communities specified will stimulate jobs for IT experts in those towns.