

Broadband USA Applications Database

Applicant Name: NTCH, Inc.

Project Title: NTCH (Cleartalk) Idaho Broadband Wireless Last Mile/Middle Mile application

Project Type: Last Mile Non-Remote

Executive Summary

OPPORTUNITY: This Cleartalk Broadband Infrastructure Program (BIP)/Broadband Technology Opportunities Program (BTOP) infrastructure application, aims to bring the benefits of job creation, long-term economic growth, health care access, business opportunities, distance learning and narrowing gaps in broadband delivery and adoption to underserved & unserved rural areas of Idaho. Cleartalk proposes to cover 8 counties in southwest in Idaho. A report by Connected Nation released in 2008 “The Economic Impact of Simulating Broadband Nationally” estimated that increased broadband adoption in Idaho would create more than \$378 million in direct income growth and create or save nearly 11,000 jobs. The complete solution to accomplish the goals of the above mentioned programs is to deploy a network in the proposed service area that can be accessed from any location with standard devices that can be easily obtained then follow up on that with an effective adoption program and a distribution program. This immediate proposal addresses the first requirement. Cleartalk is currently working with educational institutions and libraries in the proposed service area to identify and discuss potential solutions for the other requirements and will be ready to facilitate these organizations to submit proposals addressing these needs in subsequent rounds under this ARRA program or will submit effective proposals addressing these on our own. In this manner, Cleartalk will ensure that all citizens of the community, regardless of income, have affordable (even if this is free) and available access to broadband internet. In taking the first step of deploying the enabling technology, Cleartalk proposes deployment of a 3G wireless network and an open middle mile high bandwidth IP backhaul network. This 3G (EVDO Rev A) network will be priced at \$35 per month with a 25% discount to “Critical Community Facilities”. The network will be deployed on a new generation of “Software Defined Base Stations” that will allow for the deployment of 4G (either LTE or WiMAX with speeds up to 100 Mbps) wireless technology on the same network at minimal cost. Mobile broadband is the future and this investment insures sustainability, just as phones have migrated from fixed based stations to wireless platforms so is broadband. The broadband network deployed will use owned & leased federally licensed AWS (1700-2100 MHz) spectrum, local switching, available industry standard infrastructure and devices with a high percentage being domestically manufactured. The technologies chosen are also based on intellectual property owned by companies founded and headquartered in the United States. The Cleartalk backhaul or middle mile network that is part of this deployment will extend the availability of high capacity bandwidth (up to 1000 Mbps) to virtually anywhere in the Southwestern portion of Idaho. Cleartalk’s application combines the most cost-effective last mile proposal making high speed internet available to every person on a mobile basis with the most cost-effective middle mile proposal making high capacity internet bandwidth and transport available to fixed locations virtually everywhere in the

state. GENERAL DESCRIPTION: Cleartalk's proposal will bring the benefits of broadband to the inhabited part of an eight county area surrounding Boise in southwestern Idaho. It will cover over 70 census designated communities, 91,933 households, 8,987 businesses, 1,069 community anchor institutions, 103 Public safety Entities, 273 Critical community Facilities, 474 health Care providers, 168 Schools and 36 Libraries in a 97% rural service area. PROPOSED SERVICES: Cleartalk will serve these communities, businesses and community anchor institutions with wireless broadband with speeds in excess of 2.5 Mbps downstream and 700 kbps upstream. Cleartalk's wireless infrastructure is ready for next generation wireless technology that will offer these communities mobile internet speeds up to 40 Mbps at minimal cost when 4G wireless equipment and customer premises equipment (CPE) become readily available. Our backhaul network will provide internet and high bandwidth transport to fixed users of up to 1000 Mbps throughput. High bandwidth transport and internet will be quoted competitively where competition exists but in most of the areas where it does not, the pricing will be aggressive with a goal that rural users have this bandwidth available at the same or similar cost as a user in an urban location. NONDISCRIMINATION AND INTERCONNECTION: Cleartalk is committed to following the nondiscrimination and interconnection obligations of the Recovery Act. Clear Talk believes in the benefits of an open internet and competition. We are committed to providing service to our subscribers on a non-discriminatory basis subject to generally accepted network management practices to ensure acceptable levels of service to our customers. Cleartalk also welcomes resellers, has a history of partnering with instead of displacing existing business, and will provide wholesale rates and exclusive territories on a best of class platform to businesses able to extend sound management and customer care execution into these rural communities. Cleartalk will actively sell bandwidth and transport on the installed backhaul network created by this deployment to other carriers and will interconnect to any network that makes economic and business sense. BROADBAND SYSTEM: Cleartalk's broadband system employs the newest wireless infrastructure technology. The "Software Defined Base Stations" deployed can provide for CDMA, GSM, HSDPA, EVDO and the 4G technologies that have been chosen by the major carriers, WiMAX and LTE. These can be deployed on the same base station at the same time. The system deploys a soft-switch core and all native IP backhaul. These radios will also accommodate deployment of a long planned public safety interoperability network at 700 MHz. This is a split architecture base station deployment, which uses fiber instead of coax to carry the signal up the tower, and the latest antennas. This provides for up to a 5 db improvement in RF performance and expands coverage on a given site up to 5 miles further than traditional networks. These are not theoretical but actual results from our country's first market deployment of this technology, by Cleartalk in Grand Junction, CO. The increased power and range of this system means large reductions in cost and large improvements in signal penetration and consequent performance especially in rural markets. QUALIFICATIONS: Cleartalk currently operates and provides broadband services commercially on the same network infrastructure as proposed in this application. Cleartalk started in Grand Junction, CO and has been focused on rural communities in over 10 states for over ten years, has pioneered the concept of unlimited use, no contract, no credit check wireless, has become one of the ten largest owners of communication sites and has never gone beyond its operational or financial capabilities. Cleartalk is the rare wireless company that has built itself through service and entrepreneurship from an original Minority Enterprise Small Business Investment Corporation (MESBIC) funding of \$6,000,000 to its current operations. Cleartalk has always honored its obligations, provided excellent returns and still remains virtually debt

free. We have the respected relationships with the major equipment vendors and tower companies needed to facilitate success in this venture. Cleartalk has a history of public service and cooperation in working with small local companies across its existing service areas.

<http://cleartalk.net/community.php>. SUSTAINABILITY: This proposal looks to multiple revenue streams including data subscribership, voice revenue, 3G and 4G roaming and machine to machine applications. The scope of the deployment will attract many roaming partners from small carriers seeking targeted roaming to large carriers seeking coverage expansion to rural areas. We can connect to other carriers through one central switch and also provide switching services to other small carriers for this purpose. The key to sustaining the deployments is to make these rural deployments accessible to big carrier networks by making interconnection simple and financially beneficial. Cleartalk has existing roaming agreements with Cricket, Metro-PCS and Verizon Wireless. COST: The overall infrastructure cost of this ID 8 county service area is \$31,041,000. However we are only seeking \$18,000,000 of grant funds in our BIP proposal which equates to \$174 per covered population. Extremely cost effective based on industry benchmarks and delivers both a best in class last mile and middle mile solution. PROJECTED SUBSCRIBERS: Projection numbers in our business model are conservative and based on our experience & analysis we project 7,566 subscribers at the end of the funded period representing 3.4% of the covered population in our service area. NUMBER OF JOBS CREATED: Based on the connected nation estimate of 10,859 jobs being created or retained for the State of Idaho, Cleartalk's proposed deployment could potentially create or retain as many as 1,974 Jobs and \$68,704,645 of direct Income growth.