Question 8 - Executive Summary of Project for BIP and BTOP

Executive Summary

Imagine finding out after building a new home, that telephone service, let alone high speed broadband is not available in your area! This is what residents in rural northeast Michigan had to cope with – that is until Allband Communications Cooperative moved into the neighborhood.

Allband was conceived by president John M. Reigle in the late 1990’s when he built a home near Curran, Michigan and was unable to obtain a telephone to run his home-based business. He soon found that residents in this remote and isolated area had actually died from heart attacks, car wrecks and chainsaw accidents and lost homes in fires due to the lack of access to 911 services. These tragedies prompted his interest in starting a Telephone Cooperative. Allband is the first telephone cooperative in the state of Michigan. Allband’s ultimate goal is not only to provide reliable and affordable basic telephone and broadband services to its customers, but to also provide a robust network that overtime will improve the quality of life, and the economic, educational and health care opportunities for residents in Northeast Michigan. Allband was incorporated as a non-profit cooperative to provide telecommunications services to previously unserved areas in Michigan. Allband’s objective is to serve the public interest by bringing telecommunications services to its members/customers into these unserved areas.

On November 5, 2003, with encouragement and assistance from Michigan State University, various non-profit groups and the Michigan Senate and House Representatives, customers in the unserved area decided to incorporate Allband as a non-profit cooperative. Until Allband turned-up service on November 30, 2006, the Robbs Creek exchange was not served by an ILEC, even though it was surrounded by exchanges belonging to Verizon. Due to the low population density (less than 1.6 access lines per sq. mile) and lack of commercial investment, the Robbs Creek area was ultimately ignored by Verizon...and telecommunications services were denied to residents requesting them.

Technology
The challenges of enhancing the quality of life and economic development of communities in Northeast Michigan through the deployment of advanced telecommunication services is a challenge that Allband Communications Cooperative has successfully addressed since its creation in 2003. Since Allband’s territory was a green-field environment (meaning that no telephone infrastructure existed), Allband developed its network based on current industry trends and constructed a pure fiber-optic network that provides fiber to the home service (FTTH) by utilizing active end-user fiber distribution and passive optical networking (PON).
Allband has designed an open access, net neutral model that will provide competition and IP based service offerings on a large scale throughout Northeast Michigan (Lower Peninsula). Services will include, but are not limited to: high-speed Internet, telephone, IP Video, security services and broadband education. Allband will offer unbundled network access to ISPs who desire to provide IP based services over FTTH infrastructure.

Wholesale high-speed Internet will be available from 1.5Mbps up to 25Mbps. Email hosting, web space, virus protection, spam filtering and other service will all be available to its customers. In addition, Allband plans to offer free educational services to residents in efforts to spur and enhance their broadband experience. Their free computer centers and training facilities will not only educate residents in the benefits of broadband, but will also create new jobs and training careers.

The proposed ARRA funds will help Allband in developing Broadband availability in rural communities and build stronger local economies. Anchor institutions will greatly benefit from the broadband availability. Health care services, medical institutions, Government offices, Community and Retirement Centers along with Schools and libraries will all be connected to the proposed network at a discounted rate. The project will also provide an immediate economic boost to an area with an unemployment rate among the highest in the State and almost twice the national average. This project will ensure that long-neglected residents have reliable Telecommunications services, including high speed Broadband, in addition to helping local economies thrive as a result of the improved infrastructure.

Network Design
When initiating its long-term plan to provide FTTH throughout its service area, Allband undertook a lengthy examination of the benefits and costs of such a deployment. While the initial capital cost of deploying FTTH is greater than fiber-to-the-node or fixed wireless, Allband concluded the advantages of FTTH were greater, making the FTTH deployment more cost-efficient in the long run.

First, all-fiber networks have the greatest broadband performance capabilities, including the ability to be upgraded easily at lower-cost. Allband recognized that these broadband performance capabilities were important for the economic and social well-being of its subscribers, communities, and critical institutions. Second, all-fiber networks have lower long-term operating costs, an especially critical factor given Michigan’s often-severe winters and the remoteness of these areas.

In the end, the analysis clearly favored construction of a FTTH network but with the desire to reach more potential subscribers with a lower cost per subscriber, Allband made the decision to place wireless towers at the ends of the fiber to reach more households and lower costs. As revenue is collected from this project, Allband will build out FTTH to these tower areas and push the wireless out further into unserved areas increasing its service area where there is demand for it.
The proposed FTTH/wireless network consists of one service area, contiguous within itself. The service area stretches from the outskirts of Mackinaw City down to the outskirts of Oscoda and surrounds their existing Robb's Creek exchange. The services offered to these subscribers will be IP video (only on FTTH), VoIP (only on FTTH), and data services. IP broadband services will offer Internet connectivity, business to business connectivity, connectivity to critical community facilities and open access for wholesale to other service providers. The technologies to be used are all standards based.

The proposed broadband build for the service area will pass 26,838 households (9,929 FTTH, 16,909 wireless), 2,764 businesses (1,057 FTTH, 1,707 wireless) and 219 critical community facilities (90 FTTH, 129 wireless). Every location will be passed with higher service than the minimum required broadband service speeds defined in the NOFA. Allband projects the new network will add an additional 16,016 (6,643 FTTH, 9,373 wireless) broadband data, 5,314 VoIP, and 3,986 (FTTH only) IP video subscribers.

The IP video content (programming) will be obtained from [redacted] via a packaged headend solution. The content contracts are easily obtained since the programming packages are already negotiated and priced with the programmers with packaged headend.

If the requested amount of Federal funding is granted, Allband’s estimate is that the project will create a minimum of 150 new, well-paying jobs with full benefits, including 19 "green energy" jobs. In an area that boasts very high unemployment (among the highest in the Nation) these opportunities will spur the economy and will aid local businesses and residents. In the additional, remote areas where high speed broadband will be available due to Allband’s project, the residents will now be able to start a home-based business, earn a degree online while Anchor Institutions will have access to high speed at a reduced rate.

The high speed broadband will give rise to new business opportunities includes training in the following areas: health care, law enforcement, distance learning, job creation, job training, e-commerce, home business, wild life monitoring, security / surveillance, etc.

Since 2006, Allband has been a vital part of the remote communities in which the company provides telecommunication service. Its employees live and work throughout its service area and are focused on the growth, development and community reinvestment opportunities that the ARRA funding will allow to be implemented.

Allband is proud of what it has accomplished and is proactively pursuing new ways to enhance the surrounding communities and others throughout Northeast Michigan. With the availability of the Federal ARRA funds, Allband is uniquely positioned to drastically improve broadband penetration in remote, unserved areas, giving the residents a new reason to be proud of their Communities.