Broadband USA Applications Database

Applicant Name: RAILBAND LLC

Project Title: South Central Illinois Middle Mile Fiber - 10+GbE for 100+ Rural Communities

Project Type: Comprehensive Community Infrastructure

_______________________ Executive Summary _____________________

RAILband was founded in 2009 to provide high speed Internet and live broadcasts to commuter and heavy railroad passengers based on a proprietary, patent pending, technology that currently pushes the state of the art throughput speeds in broadband mobility applications. RAILband is a privately held company based in Chicago, Illinois with experience in designing, deploying and operating complex technology systems in nationwide networks and particularly in High Speed wireline / wireless broadband applications. RAILband in cooperation with the industry and industry experts has developed and patented techniques and technologies to allow the deployment and implementation of broadband applications efficiently and with economies of scale in mind. The focus of such activities has been centered in end user applications, speed of transmission and infrastructure optimization. It has been a goal and an achievement for RAILband that our technology would be a true enabler of broadband deployment with significantly smaller capital investment making it attractive and suitable to Broadband initiatives. RAILband will preserve and promote the open and interconnected nature of public Access, allow for easy access to subscriber's choice of applications and allow for legal device connectivity to the network. RAILband would also enable access to other providers thus introducing competition among service and content providers concurrently offering wholesale access to the project facilities at reasonable rates and terms. The Digital Road to Recovery: A Stimulus Plan to Create Jobs, Boost Productivity and Revitalize America is a great advocate of how investments in digital infrastructure will offer superior job creation benefits. The main reason sighted is that broadband itself increases business productivity, spurs upstream investment, and contributes to the creation of new industries. The report estimates a network multiplier of 1.7 to 2 times to the number of direct and indirect jobs created. Directly, this Railband Group Fiber Project will employ approximately 831 direct and 83 indirect full-time employees for construction, installation, maintenance and support of this middle mile system. Based on the Bureau of Labor Statistics estimates that for every 1% increase in the broadband absorption, there will be a .2% -.3% increase in non farm payroll, it is estimated this middle mile project will stimulate the creation of roughly 50,000 jobs in the areas of call centers, home based business, and general business expansion over the long run. RAILband has extensive Telecom and data experience covering all facets of communications over the past 25 years. The Company has maintained strategic relationships with leading suppliers of communication components while executive and management teams, possess superior qualifications and expertise, having managed and administered successful entrepreneurial operations and overseen divisions for some of the largest technology companies in the nation. The RAILband broadband deployment project is shovel ready. All suppliers and contractors have expressed readiness and commitment to deliver their products and services when and where they are needed.
(See attached Contractor and Vendor Letters.) Contractors will begin deployment in all three-service corridors during the same quarter year and within six months of award. 80% of complete network construction is estimated to be complete within 24 months. The Railband Group is submitting a unique and dynamic middle mile project that will support 100 Underserved Rural communities as well as 14 additional non-rural in-route communities along a 961 mile fiber optic backbone extending from the outer boundaries of Chicago to western, south-central, and southern Illinois. Until now, market conditions have never justified a business case for providing broadband services to the rural, underserved markets in Illinois. It is proposed that RAILband would design, procure, construct and operate three distinct rural fiber routes and 114 community network fiber Point-of-Interconnect(s) and provide PtP GbE connections to Anchor Institutions in the rural communities. Federal funding of $55,353,259 is requested to be combined with $24,102,003 in cash raised by Railband to address the total network cost of $79,455,262. Internal Rate of Return was calculated at 21.2% fact proving that this project is well engineered and thought. Without BTOP funding IRR is rated at 9.1% fact indicating that this project could not be profitable as demographics make it difficult to obtain financing and we very much doubt that equity and debt participation would be easily obtained to fund this project on its own. Illinois has many ingredients for a strong economy: diverse resources, a well-educated work force, a powerful higher-education network, and major hub airports offering non-stop service to business centers worldwide. Yet gaps exist between metropolitan and rural areas fact attributing to major issues in downstate economies, which are failing to achieve their potential. Our cities and towns are too far apart to function together as an efficient economic unit. Only technology enabled networks with broadband access can draw our cities into 'services' equality, transforming the entire Illinois into a virtual metropolis with more dynamic cities and rural towns, with quick connections to resources and worldwide markets. Transforming Illinois into a single economy requires the ability to access resources available to major metropolitan areas and/or visit a distant city and return the same day while connected to business operations at all times. That means downtown-to-downtown trips of short duration and high productivity. With modern technology the entire state of Illinois would be very vibrant. A fiber based BROADBAND network would become a Telecommunications backbone for most downstate Illinois BROADBAND expansion, enabling small communities adjacent to the rail-tracks, and eventually other communities to flourish and prosper. Railband Group can completely deploy this planned system rapidly (within 36 months of funding) because it has the personnel, underground utility constructions and other contractors and equipment agreement in place and ready to commence this project upon approval. The Company has previously delivered projects comparable to this proposal and is fully prepared to implement this proposed plan. The Railband Fiber plan encompasses the most comprehensive compilation of Underserved Rural Communities and Anchor Facilities throughout the state of Illinois. A review of the affected service areas / facilities is as follows: - 100 Underserved Rural Communities receiving MM fiber PoP/PoI - 14 additional in-route non-rural communities receiving the same - 22 Underserved Rural Communities (subset of the above 100) receiving WiMAX LM services - 8 additional non-rural Communities (subset of the above 14) receiving WiMAX LM services - 319 community anchor institutions - 51 Public Libraries - 116 Public Schools K-12 - 5 Community colleges - 14 Hospitals / Health Care Facilities - 102 Public Safety Facilities (Police / Fire) - 31 Other Community Support Facilities When combining the 114 propose service areas, the following consumer and employment related benefits become evident: - Advantaged Population = 880,386 - Advantaged
Households = 352,196 - Advantaged Businesses = 28,592 - Total Advantaged Square Mileage = 462 This proposal is an extremely cost efficient means to bring broadband availability to these markets. Railband Group will be able to deliver middle mile access to these Underserved Rural Communities and anchor institutions for approximately $225 per potential HH subscriber. Railband is requesting federal funds less than 70% or $157 per potential HH served. No other middle mile projects can offer similar coverage at this cost.