2. Executive Summary of Project for BIP and BTOP

Opportunity

The opportunity addressed by this Kansas Broadband Internet (KBI) proposal is to provide last-mile wireless high-speed broadband internet and related services to rural communities in Central and Eastern Kansas. These broadband services are designed to meet the needs of residential and business customers, unserved and underserved communities that have at least 75% of area with insufficient access to such services. KBI currently operates a broadband wireless services business in 32 Kansas counties and is seeking funding to provide high-speed broadband services in 33 counties that will permit significant improvement in delivering internet information, distance learning, enable internet commerce and broadly permit rural communities to fully engage with popular internet-based services and applications. Many of the proposed communities are unserved and several remote census blocks exist in our proposed service area.

General Description of Service Area

KBI proposed funded service area includes 33 Counties (XXX Census Block Communities) in Congressional Districts 1, 2 and 4 of Kansas. Total population in these counties is 595,000 and median HH income is well below Kansas State median income level of $47,371.

Households and Businesses Passed

The number of household and business entities covered by the broadband infrastructure is [number]. This represents 100% of the entities in the proposed service areas.

Community Anchor Institutions

Community institutions have shown interest in the proposed wireless rural broadband service provided by KBI. Rural public libraries have shown strong interest in our broadband service and many have sent us letters of support. In addition, healthcare providers, public safety, education and community services organizations will have preferred enhanced services that will meet their broadband application needs. These include secure private networking services, advanced hosting services and low latency high-quality availability permitting such services as voice over IP applications. These will be useful for distance learning, training, and interactive services.

Proposed Services and Applications

KBI will make available a portfolio of broadband access services and applications for residential and business customers. Access speeds between 1Mbps to 5Mbps will be offered, bundled with email, hosting, and security services. Enhanced broadband internet applications will be
made available, such as Voice over IP (VoIP) services, once customers have subscribed to internet services. Customers will have the opportunity to utilize eCommerce services, online education programs, access information services and engage in entertainment services such as YouTube, Facebook and MySpace social networking applications.

**Non-Discrimination and Interconnection Obligations (NOFA 614)**

Kansas Broadband Internet (KBI) is committed to non-discrimination and interconnection requirements outlined in NOFA and FCC Internet Policy Statement (FCC 05-151, adopted August 5, 2005). Furthermore, KBI has designed its network architecture to permit structured network interconnection and service delivery necessary to deliver broadband internet service and associated applications. Network management practices will be prominently posted publicly on KBI’s web site.

**Type of Broadband System to be Deployed**

KBI will deploy a broadband wireless transmission system utilizing the 4G WiMAX technology standard utilizing 3.65GHz spectrum and 2.5GHz spectrum. The technology is industry standard compliant and several large equipment suppliers manufacture the equipment in volume. This technology will permit large coverage areas for both non-line of site and line-site service of up between 78 sq miles to 200 sq miles – depending on terrain.

Critical to delivering broadband service is the IP routing technology and architecture used to deliver reliable internet service. A robust high capacity internet routing technology is being deployed using Cisco equipment at the edge, backhaul and core of the network. The quality of the IP network will permit enhanced services such as Voice over IP, medical, distance learning and ecommerce applications to work with high quality of service.

**Qualification of the Applicant**

KBI has been operating a rural internet company in Kansas for several years, growing through acquisitions and investing to upgrade network infrastructure with the latest broadband wireless technologies. KBI has a seasoned management team with experience in running large scale communications company operations. Executives have had experience at Sprint, AT&T, former Alltel rural acquisitions and in small to medium size communications companies. Functional expertise includes wireless technologies, network operations, internet services, voice over IP services, marketing/sales, customer service, finance and large scale program management. Management members have individually operated telecommunications services and infrastructure budgets exceeding $500M. Several hundred employees have been under management by KBI senior executives.
Existing operations provide a core foundation to rapidly build a large scale state wide operation. Network edge out and new territory build-outs utilizing current business processes proven to be effective in rural communities will ensure a viable long term business model.

Key partnerships are in place to deliver large scale rapid execution of KBI’s proposed service area. Black & Veatch has successfully deployed thousands of wireless communications towers, radios, fiber and network switching solutions. They are tasked by KBI to be the prime program manager and deploy teams that will successfully implement a commercial ready system as specified in this funding application. Cisco is a premier internet infrastructure vendor that will deploy the IP switching system that will transport significant amounts of packet streams with Quality of Services needed to create a premium user experience for all internet services delivered to residential and business customers.

**Overall Infrastructure Cost of Broadband System**

The total cost of the project is $23,179,559. This includes the federally funded infrastructure and private investment of 20%. Federal funding is $18,543,647 with mix of loan/grant of 51%/49%. This represents a cost of $113 per household passed in service areas proposed by KBI. This is economically very efficient when compared to other terrestrial technologies that cost on average $1,100 per household passed.

**Overall Expected Subscriber Projections for the Project**

Projected residential subscribers adoption is 50,152 or 24% of households passed by the end of 5th year. Projected Small & Medium Business (SMB) adoption is 7,654 or 30% by end of 5th year.

**Number of Jobs Estimated to be Created or Saved**

The number of jobs estimated to be created or saved as a result of this project is 106 positions located in the service territory proposed by this application.