Executive Summary

Broadband development has lagged other major developments in the 24 communities in Washington County. As of 2006, although 91% of households in the County subscribed to some kind of Internet access and 77% of the 53000 households had computers in the home, only 6% were subscribing to DSL service and only 39% were subscribing to cable modem service. The demand for Internet service, clearly evident with the 91% subscription rate, validates the County is underserved. Although there has been growth in the County over the last nine years that growth has been in areas where broadband has either been unavailable of considered being an inadequate solution. Current analysis shows that 79% of the households in the County do not subscribe to a broadband offering. Nowhere does the lack of a total broadband solution impact the community more than in the fields of Education and Medicine. The offered BIP and BTOP provide the stimulus to solve this resource limitation for the benefit of the educational institutions, their students and the entire community with the offered solution, where private investment alone is not a viable option. For the Schools, specifically, we will provide a point to point microwave broadband capability connecting the school with the Washington County Public Network (WCPN), which, in turn will connect the school to the cache of educational content at the School System IP headquarters, as well as the Global Internet. Depending on the individual school, that connectivity may be a direct link to another nearby facility (school of governmental facility) where their fiber is already terminated. It may also be necessary for a two “hop” network, from a school to a tower and then to the interconnection point of the WCPN. Fifteen schools within the Washington County Schools System do not have adequate broadband access and cannot participate in the excellent educational content cached within the School System’s database. Students attending those schools can participate more fully by realizing access to that educational resource. The School System Administration can develop consistent and effectively delivered programs of education to all students in the system if there is equal access to that content by all schools and by all students served by those schools. The absence of that ability causes an inherent limitation to the future development of Washington County and its citizens. The requirement for access to learning resources does not end with the final dismissal bell and the WCBA; who have formed to assist in this effort, is committed to providing excellent access to broadband Internet at reasonable prices to all the households in the area served by the affected schools so that students can continue their learning experiences in their homes. Parent involvement contributes directly to student success in educational achievement. Experience has shown that, when broadband Internet access is available in the home, parents will be more involved in their children’s learning, student’s proficiency improves and broadband and Internet adoption rates for the entire community improve. The Communities served by the schools include Smithburg, Mt. Aetna,
Beaver Creek, part of Hagerstown, Keedysville, Rohersville, Sharpsburg, Sandy Hook, Fairplay, Hancock, Indian Spring and Clear Spring. The Incorporated areas in the County are Boonsboro, Cascade, Clear Spring, Funkstown, Hagerstown, Hancock, Keedysville, Rohersville, Sharpsburg, Smithsburg and Williamsport. In addition there are a number of Census Designated Communities nd Other Areas of the County. These areas are also inventoried and included in the plan. In the attachments of this application, the detailed census blocks are listed with the number of population, number of households, square miles per census block, number of businesses and other requested demographic data. As of the 2000 Census, Washington County had a population of 131,923, including 52,972 households and as of 2002, 8736 businesses. Washington County Households are forecasted to grow to 57,200 by 2010 according to Maryland 2000, Population and Housing Unit Counts, US Census Bureau, PHC-3-22, Issued September 2003. As of this report period, there were 21,564 students in elementary, middle and high school in the County. School enrollment has remained relatively constant with current enrollment at 21289 for grades k-12. Close to 8000 students are served by the schools that are presently underserved, so that solution will bring great gains for the System and its student body. Global Broadband Services proposes to serve virtually all of the geographical area of Washington County. In doing so, 57,200 households will be passed along with 8700 businesses. A detailed list of 1245 community institutions by community that will be passed is included in the attachments to this application. Additional major segments of the community will benefit from the cost effective broadband availability. The Washington County Library System has initiated and is expanding a program to provide Internet access to the community through computer clusters at its library locations. As these centers are created and expanded, additional bandwidth at the library is required. For those locations that are not connected to the WCPN, there is great interest in using the services that will be available through Global Broadband Services to support the Internet demand growth. There are 1245 individual social welfare and public safety organizations in Washington County that are United Way members, many with several locations. All of them have been contacted and most have provided letters of support to use the expanded services when available. These members cover many community services; volunteer fire companies, senior citizens services, health and addiction orientated support groups, the Red Cross and many others. Beneficial applications, like Voice over Internet Protocol will be service offerings for these members. Special applications, such as IP Centric groups within a VOIP offering can enable Volunteer Fire Companies to reach their members with greater reliability through many means, a call to a telephone number, call forwarding, text, e-mail fax, etc., through a single application. For those health oriented organizations, key medical data, like blood type checks against centralized data bases can be accomplished in near real time and video conferencing with specialists can be easily implemented. Social networking sites for senior citizens can reduce the depressing feelings of loneliness when friends and family cannot be near and the connectedness offered by “always on” services can insure that help is only a click away when necessary. Western Maryland Hospital Center, Washington County Hospital and Antietam Health Services have multiple service locations throughout the County. Both expanded broadband and specific applications for the health and medical disciplines will be available through Global Broadband Services. Broadband will enable the transport, offsite storage and rapid retrieval of digital records. Because of increased broadband adoption by households, distance medicine will be expanded. Seniors will be able to stay in their homes, dramatically reducing the number who would need hospitalization or nursing home care. Services offered by Global Broadband Services will differ depending on the customer need. For the
students and for the general public, a “basic” broadband Internet service will be offered that will provide 3MB down and 1MB up, along with IP addresses and e-mail server. A high end service will also offer 6MB down and 2 MB up along with the IP addresses and e-mail services. There will also be a residential Voice over Internet protocol service offered. For the small and medium size business community and most of the United Way member organizations, Broadband Internet service offerings will offer a class one service of burstable service to 10Mb downstream and 5Mb upstream with a guaranteed service of no less than 6 MB downstream and 2 MB upstream, Class 2 offers burstable service to 6 MB downstream/3Mb upstream with a guaranteed minimum of 3MB downstream and 1MB upstream. The Members of WCBA, both individually and collectively are committed to the spirit and statutory requirements of non-discrimination and interconnection. Participation in the team by Governmental, public and private entities, sharing facilities permitted by law and contract convention, assures the most efficient use of facilities for the benefit of most users that can reasonably be achieved. The IEEE standard, 802.16d, commonly referred to as fixed wireless broadband or WiMAX has been selected as the technology of choice for the broadband offering to the general population of Washington County. This technology, while fairly new in the United States is generally deployed to millions of homes and businesses around the world. The Company will use its 3.65GHz license. This insures no interference from other operators who must use other frequencies if they choose to offer a service. The point to point microwave is selected by Alcatel Lucent, our technology partner for its appropriate technology and sustainability. Alfred Boschulte, Jim Herbert and Clark Misul, together has over 110 years of senior management experience in the operations of wireline and wireless telephone companies both in the United States and Internationally. Mr. Boschulte and Mr. Herbert have formed their own companies and in the past, hired the necessary talent and executed plans successfully. Overall Infrastructure and other start up costs expected to be $9.5M. Overall subscriber projection over five years, number of households served, for the general population is about 11,000 homes, out of an expected 2015 total market for households of over 62,000,less than 20%. 40 new jobs will result.