Executive Summary

The Five County Broadband Interconnected Training Access (FCBITA) seeks to bring high-speed broadband to underserved areas of Northern Middle Tennessee which historically have been unable to participate in the new Internet economy. FCBITA seeks to address the historic and ongoing problem of underinvestment in, and underdevelopment of, the information superhighway in this part of the world, and the resulting stagnation of education and industry. The towns directly impacted by the FCBITA Project are Allardt, Byrdstown, Celina, Gainesboro, Jamestown and Livingston. These towns today are primarily served by a single small telephone cooperative ILEC, which is undercapitalized and not service oriented. The local cable operators do not offer VoIP at all, nor does the ILEC. These providers have no reselling programs, so no third party providers exist. Internet access speeds and adoption rates today in the region fall well below the goals set by the Obama Administration in its Broadband Internet Plan.

OnWav seeks to take advantage of the BTOP CCI program to address these issues through an aggressive campaign of bringing high-speed access first. This access will then facilitate the creation of Internet-based training and computer education, so that the citizens of this area can leverage the power of the Internet for communication, commerce, education, entertainment and community organization. As a broadband access provider and morphing to a role of community technology proponent, OnWav has plans to participate in the creation of interactive training rooms within each anchor we provide service to, inclusive of local community colleges and emerging technology centers. Our broadband access will enable distance learning opportunities at every anchor institution bringing educational enhancement 'on-demand' to students, employees, and general public alike. The FCBITA Project will provide access to a potential 200 anchor institutions with public training centers designed with interactive capabilities which virtually bring teachers to each anchor in real-time two-way video and audio. Anchors will benefit further by receiving increased speed and an immediate 25% reduction in their current cost of broadband. The FCBITA Project will provide access to a potential 4,500 households and 725 businesses passed. In addition to providing high speed internet access to anchor institutions, homes and businesses, as a result of our new infrastructure OnWav's emerging business plan includes the ability to offer additional value-added services and applications including: 'IP-based Voice Services o Audio and Video Conferencing o Hosted PABX ' Corporate Outsourced services o Private Networks o Secure WAN o Off-site recovery and back-up o Data warehouse ' Website Development and Hosting ' Distance Learning Facilities, Training and Programs o adult continuing education o re-training for the unemployed o collaboration between Higher Education institutions and Public Education institutions ' Telemedicine Facilities, Training and Programs o Remote diagnostics o Medical alert services o Health education and training OnWav's plan in the initial grant-driven phase is to build the middle-mile and last mile
infrastructure, operate and grow the network end-to-end. Our open access architecture will allow us to expand our 'operator' and 'service provider' model to other third party last mile providers, thereby leveraging our middle mile facilities, and extending them to a variety of business models, including wholesale agreements such as providing backhaul services to Virtual Network Operators (VNOs) and other possible sharing arrangements with mobile carriers and Wireless Internet Service Providers (WISPs. Because of the rural nature of most of the proposed area, the difficult terrain and the lack of existing infrastructure, wire-based communication is impractical due to prohibitive high installations costs as well as high ongoing maintenance. OnWav therefore proposes expanding and upgrading its existing Cookeville network via a Licensed Microwave System combined with a 4G WiMAX last mile network. Though we are a small and young company, OnWav thinks big and delivers big. OnWav became cash flow positive in less than two years. Currently, we successfully manage all operations of our wireless network providing the full range of telecommunications including provisioning, billing, and customer service. Our ambition is to build the premier internet services company in Northern Middle Tennessee, and to expand our coverage throughout the region. This grant offers us a much-needed capital stimulus. Once established with our expanded footprint, we plan to continue to grow through organic growth and ongoing investment. The total FCBITA Project cost is $6,502,064. OnWav is prepared to contribute in excess of 20%, and so request a grant amount of $5,184,516. This budget includes a microwave middle segment, extending the high-speed internet backbone from Cookeville into the five counties to its northeast. It also includes a last mile segment, with WiMAX radio access network and customer premise equipment (CPE) for every committed anchor in the region. OnWav has forecast a total subscriber count by year 5 of about 1300, which is comprised on 150 anchors, 250 businesses and over 900 households. OnWav believes this to be a very conservative forecast. The region today has over 4,500 households and over 700 businesses. Given the past performance of the incumbent operators, OnWav believes it can over achieve its forecast. OnWav has estimated that 25 direct jobs, 12 Indirect jobs, and 20 Induced Jobs will result from this project. This will have an immediate and lasting benefit to the region, and offers a powerful return on the investment of the grant funds. The FCBITA Project fits the BTOP CCI program goals well and has real merit. The benefits for north middle Tennessee will be significant, immediate and long lasting.