The Wired Road network has been in operation for two years and is a public/private partnership with five service providers currently offering services on the network. It is an open access, fully integrated fiber and wireless regional broadband network offering 'big broadband' 100 megabit and Gigabit fiber connections and multi-megabit wireless connections in a two county service area. This middle mile funding request will build an additional eighty miles of middle mile fiber that will connect 125 community anchor institutions (more than 90% of the CAIs in The Wired Road service area), including a heavily used community college satellite campus, three K12 school systems, a police department and two sheriff's departments, three library systems, and 19 fire and rescue locations. The Wire Road is: A true public/private partnership, with five private market service providers on board, selling services to customers; local government and the Authority do NOT sell any services and do not compete with the private sector providers. The Wired Road is incumbent friendly. All incumbent providers have been invited to use the network to sell fiber-delivered services to new and existing customers using Wired Road infrastructure. The Wired Road service area is unserved and underserved with only 25% broadband access in region. The Wired Road conducted a random telephone survey in July 2009 to assess broadband use. Unemployment in the region is very high at 12.9% vs state average of 7.6%, based on January 2010 data. The Wired Road infrastructure is a critical enabler of a regional economic development strategy focused on small businesses and entrepreneurs. The Wired Road is a collaborative effort between private sector service providers, the local governments of Grayson County, Carroll County, City of Galax, and the Blue Ridge Crossroads Economic Development Authority. Its purpose is to provide the critical enabling infrastructure to transform the regional economy from a depressed (unemployment approaching 13%) wood and textile manufacturing environment to a dynamic, small business, and entrepreneurial economy. This transformation, enabled by The Wired Road and a complementary economic development focus on attracting and supporting entrepreneurs and small businesses, will allow the region's economy to spawn new businesses, generate jobs, create wealth, and protect the rural character of our region. Based on our 2007 broadband planning project, and recently confirmed by an extensive market survey completed in the second half of 2009, the Wired Road region is predominantly unserved and underserved. Broadband use is at only 25%, which is much too low to implement the economic transformation envisioned. Despite the lack of broadband access, survey results found that over 12% of internet users are currently operating businesses from home, and 14% are working from home. The expansion of The Wired Road will bring 'big' broadband 100 megabit symmetric fiber connectivity to more than 90% of the community anchor institutions, will pass by more than 250 businesses in the communities of Galax, Hillsville, and Independence, and will pass more than
5000 homes in large unincorporated areas of Grayson and Carroll Counties. Wytheville Community College's campus currently serves over 2500 students in the region, and has expressed a strong desire for enhanced broadband connectivity. This new bandwidth will allow offerings from other institutions, like Old Dominion University, Radford University, and others, bringing affordable, accessible higher education opportunities to its students. The Wired Road currently provides connectivity to the following anchor institutions: Twin County Regional Health Center, Carroll County Schools, Carroll County Government offices, Crossroads Rural Entrepreneur Institute, Southwest Virginia Rural Entrepreneur Center (the regional business incubator), Galax City offices, and the Galax Police Dept. The proposed expansion of the Wired Road will provide connectivity to: all three business parks in the area, Wythe-Bland Regional Library, Hillsville Town offices, Carroll County Sheriff’s offices, Galax-Grayson Galax City schools, Grayson county schools, numerous EMS and volunteer fire departments, and the Galax Fire Department. Services to customers will be provided by private service providers, not the Wired Road. The Wired Road will build, operate, and maintain the network, but all services will be provided by private companies. Those services that will be deliverable over the network will include: Internet access, video, telephone, video conferencing, and many more. As an open network, The Wired Road is fully committed to the non-discrimination and interconnections obligations stipulated in the NOFA. The Wired Road is a political subdivision of Virginia and is required by law to provide publicly available price information and to provide interconnection to any requesting provider at the same price. As stated above, The Wired Road is an open access network, and will allow all qualified service providers to offer services over the network. The Wired Road has been designed as both an open access and an open services system. This service-oriented approach focuses on lowering service provider costs by providing a high performance, symmetric (two way) 100 megabit fiber connection to every home and business in the funded service areas. Standardization on 100 megabit and Gigabit fiber connections will allow service providers to deliver advanced services like telepresence HD videoconferencing to businesses, will help attract data centers and e-commerce operations to the area, and will enable many kinds of work from home and home-based businesses. The network can provide 10Gig and DWDM lightpaths upon request. The high capacity connections will also deliver HD video TV and video on demand services, voice telephone, Internet access, telemedicine and telehealth services, security services, rich multimedia distance learning opportunities, and many other residential and small business applications. The Wired Road Authority was formed in late 2007, started operations in 2008, and began offering residential services in April 2009. Over that period of time, the first phase of the network has been constructed and is fully operational. We have installed scaleable network operating software, hired a network operator, employed staff for project management and business development, and reached agreement with five private service providers to offer services on the Wired Road. The increased competition has already produced significant results, with some businesses reporting 50% to 70% reductions in the cost of Internet and telephone services. We have attracted funding for this project from local governments, private contributors, Virginia Dept. of Housing and Community Development, Appalachian Region Commission, and Virginia Tobacco Commission. In addition to the existing five providers, a sixth provider has signed an Intent to Offer Services commitment and is planning to install equipment and offer a mix of business, telehealth, and small business hosted applications. The overall cost of the system expansion is $6,619,355, with a 30% cash match of portion of $1,985,807. The match is 100% cash from primarily the Virginia Tobacco Commission, with additional funds provided by The Wired Road Authority. The
Wired Road is projecting a conservative 30% take rate in the first year of this new construction, rising to 35% in year two, and reaching 40% in year three. We believe these are conservative because telephone costs savings by going to VoIP often average 40% to 60% reductions, which provide a powerful incentive for community anchor institutions and businesses to switch to alternative providers on the new network. Other community fiber projects in the U.S. have been reporting much higher take rates for broadband in unserved areas. Notably, the Utopia community fiber project in Utah, which switched on 2008 to the open services business model used by The Wired Road has been reporting take rates exceeding 50% in their rural service areas. Commercial providers offering broadband in underserved areas have been routinely reporting take rates in excess of 30%. Global Village, a provider interested in using The Wired Road to sell services, reports that first year take rates in their home territory two hours north of Galax average 45% to 50%. The Wired Road is primarily an economic development effort, and as such, expects to contribute to significant job creation. Over the last 2 years, 125 new small businesses have been created in the region, generating over 450 jobs. Using the NOFA rules for calculating jobs, this project will create 72 direct job years, 46 indirect job years, and 26 induced jobs.