**Executive Summary**

The whistles of textile mills once employing 505,000 workers in North Carolina have gone silent. Hundreds of thousands of jobs are but a memory. The Community Interactive Video Collaborative (CIVC) of the University of North Carolina at Pembroke (UNCP) and its community partners will harness the synergies of MCNC's BTOP $40 million middle mile network grant to attack high illiteracy, high unemployment, low per capita income, and a depressed standard of living. CIVC will create interactive video teleconferencing capabilities bringing new learning plus personal and economic development activities into five community colleges and two local community sites in a six county region of Southeastern North Carolina. MCNC operates the education gateway for the Internet in North Carolina as well as the North Carolina Research and Education Network (NCREN) connecting most higher education institutions. It has four physical gigE links to the Internet, one each from Level 3 and Qwest both in Charlotte and the RTP area. This also includes 10Gbps access to both Internet2, and National Lambda Rail, and private peering with several content/provider sources. Video traffic linking other locations to sites within NCREN and CIVC will experience both high availability and performance. The partners in this project with UNCP’s Division of Information Technology and the Distance Education department include Community Colleges Sandhills, Bladen, Brunswick, Robeson, and Central Carolina, along with Cape Fear Regional Medical Center, the Regional Center for Economic, Community, and Professional Development and several UNCP schools. These are Business and Education along with two College of Arts and Sciences departments, Social Work and Sociology and Criminal Justice. UNCP is partnering with MCNC's North Carolina Research and Education Network (NCREN) for broadband capacity and additional interactive video capabilities. UNCP’s enriched technology-driven programs enhance employability for graduates preparing for the modern workforce. CIVC will open avenues of interaction supporting both graduate and undergraduate degree programs offered by UNCP to community partner sites while providing interactive technology fostering local program development and delivery. All CIVC sites can participate in programs from outside the region providing an even broader range of curriculum offerings and enhanced cultural enrichment opportunities to this economically challenged area. UNCP seeks and serves vulnerable populations and has been rated the most diverse campus in the Southeast. Student demographics reflect the diversity of students served by Student Support Services, funded and sponsored by the U.S. Department of Education. Support priority is given to low-income, disabled, or first generation college students. Tutoring and advising services are also available. Disability Support Services provides individuals with necessary adaptive technology tools to accomplish their educational goals. Special programs are available in support of veterans. Many similar services are available at the CIVC Community College partners. Two classrooms in the Business
School will be retrofitted, along with one in the School of Education, and a third at UNCP’s community location, the Center for Economic, Community, and Professional Development. Six community partners committed space to install interactive video capabilities. Each CIVC classroom will be a fully equipped teaching facility offering an instructor computer, cameras, microphones, and a video monitor connected to a Polycom video codec/processor placing HD video and audio signals onto the NCREN network to interconnect another site or connect with a multi-connection bridge. The multi-connection bridge along with companion scheduling and Web conferencing technology will be located on NCREN allowing the CIVC facility to connect with virtually any similarly equipped site or up to 20 sites concurrently. Programs may be digitally archived for later viewing from any computer with a broadband connection. Importantly, the archiving infrastructure also provides scheduling and Web conferencing capabilities for up to 100 concurrent users. Using Federal formulas, the project will create 10 direct jobs, 8 indirect jobs and 8.76 induced jobs in this six county area as a result of this investment. We begin with 1500 baseline subscribers currently enrolled in UNCP video courses. We will have 6,610 new subscribers, a very conservative 1% estimate of the six-county total population. The cost for each new subscriber is $311.02. An estimated 108 instructors from both UNCP and community partners will teach courses using CIVC over a three year period. Faculty and instructors for the distance courses offered by UNCP must meet the Southern Association of Colleges and Universities faculty credentials guidelines. Engagement of the local population by CIVC community partners generated activities is assured, however those gains have not been used to determine the grant’s generated benefits. Strategic planning at Sandhills and the projected enrollment numbers from UNCP make up the anticipated 4000 broadband users outside the home. The six additional community partners’ users will be in addition. The total budget is $2,055,843.89. We are asking for $1,611,183.20 from NTIA BTOP and UNCP will match with $444,660.69 of campus or other dollars. It is extremely important to note that no matching funds are use from the community partners. However, each community partner will certainly commit resources; potentially for marketing, content delivery, and technical support for their local CIVC facility usage. Without grant provided start-up funding, CIVC cannot be built. The project scale is required to build sustained funding. UNCP contributions of $444,660.69 provided over a three year period come from state funding or student fees based on enrollment in DE courses and $5,000 from Polycom. State funding provides salaries of $268,017.72 and benefits of $57,349.97 for existing UNCP positions serving as CIVC project administrators, management, operations, and support staffing. These matching funds are already allocated locally and should not be impacted by further budget reductions as they are deemed instructional related. The University of North Carolina system has directed that instructional fund be held harmless, if possible. UNCP also received $5,000 from PolyCom for grant preparation with another $3,000 provided by UNCP. Limited budget availability and spending taxpayer money requires ultimate care. Personnel costs reflect NC position descriptions with salary and benefits based on state standards. A comprehensive review of staff, needed to foster success given the projected hours of operation, produced the minimum cost while ensuring success. Equipment needs are the minimum established by NCREN expertise designed to provide necessary services, scaled to match the number of CIVC sites. All sites share the same technology architecture achieving economies of scale while providing standard features. Because each room must remain functional and outages minimized, spare components are included in the budget building an equipment reserve to swap malfunctioning technology creating sufficient repair time. There are no environmental concerns associated with this project. All room
renovations will be minor in nature and will require the mounting of necessary technology coupled with the installation of interconnecting wiring. Some rooms may require additional local area network connections and/or addition AC outlets and associated wiring. The CIVC facilities will be sustained with funding generated by activities delivered by the technology along with an additional allocation of state resources. Sustainability is enhanced as the two university departments providing leadership; Distance Education and the Division of Information Technology currently receive state funds as well as student fee dollars. The projected enrollment increases will provide fee-based funding to sustain success. Enrollment in classes generates funds to sustain the two staff positions and yearly operational costs. University funding is already flowing into the campus Interactive Video Facility to sustain operations. Funding for each site's connectivity to NCREN is locally provided as well. UNCP is extremely qualified, highly experienced in program development, successful in sustaining video conferencing and ready to engage. For over 16 years, the campus interactive video facility has been serving the university, local communities, and small business. The facility has proven to be an innovative tool for the teaching and training of the U.S. Military ROTC program with Fort Bragg and has served local chapters of 4H, NC Parks & Recreation, NC State Forestry. The project timeline calls for CIVC to become operational in six months with continued activities for three years.