

Attachment One- Partnerships With External Agencies on Regional Telecommunications Initiatives, 2003-04 Activity Summary

Regional Telecommunications Initiatives

The college continued to play a key role in the 2003-04 year in telecommunications initiatives impacting the western North Carolina region.

BalsamWest FiberNET

For the past five years, the college has been very involved in working to bring affordable high-performance telecommunications services to western North Carolina—a region of the state which includes its services area. This journey began with the college's Appalachian Access Initiative (1999–2002), a three-year feasibility study designed to investigate and analyze the telecommunication service problem in western North Carolina and recommend a solution to bring better quality service to the region with prices at urban parity

In the end, the Appalachian Access Initiative provided the foundational knowledge and created the telecommunications infrastructure deployment strategy being implemented by a variety of public, private and non-profit entities throughout the 23-county region:

To deploy an alternative regional fiber-optic network that would be made available on a non-discriminatory basis at urban parity prices.

The WNC Knowledge Coalition adopted this strategy in 2000. In 2002, Southwestern Community College and the Knowledge Coalition applied for funding to the Rural Internet Access Authority to implement the strategy in the six counties west of the Balsams. Funding was awarded to AdvantageWest as the fiduciary agent for the project and they are making progress in the implementation phase.

The Education and Research Consortium of the Western Carolinas adopted the strategy in 2001 and moved forward to implement phase 1 of the strategy: two Tier 2 NAPs in Asheville and Greenville/Greer SC, a high traffic corridor between the two NAPs, and upstream connectivity to Atlanta and Washington, DC. A nationally renowned telecommunications engineering firm, Callisma, validated the Appalachian Access strategy and facilitated the RFP and award process for the ERC

The Eastern Band of Cherokee Indians, Drake Enterprises, and Southwestern Community College began working together in January 2003 to implement the Appalachian Access strategy in the six counties west of the Balsams. Their joint venture partnership, BalsamWest FiberNET, LLC was formed in 2003 to provide direct access to advanced telecommunications infrastructure in and through the six counties west of the Balsam Mountains in western North Carolina (Jackson, Macon, Swain, Cherokee, Clay, Graham, and the Qualla Boundary) at prices and quality levels previously enjoyed only in metropolitan areas of the U.S.



Based upon a sustainable business plan and technically sound solution, Founding Members Drake Enterprises and The Eastern Band of the Cherokee Indians, have pooled capital resources to improve reliability, lower cost, and increase services offered in the region. The Founding Members are deploying a minimum of 144 strands of single mode fiber placed in 1.5" innerduct—with a spare 1.5" innerduct. Just over half of the fiber strands have been used to form BalsamWest FiberNET, LLC and the remaining fiber strands have been retained by the founding Members for their own use independent of BalsamWest. BalsamWest's community interest partner, Southwestern Community College, works with the Founding Members to facilitate the community and economic development objectives of the company.

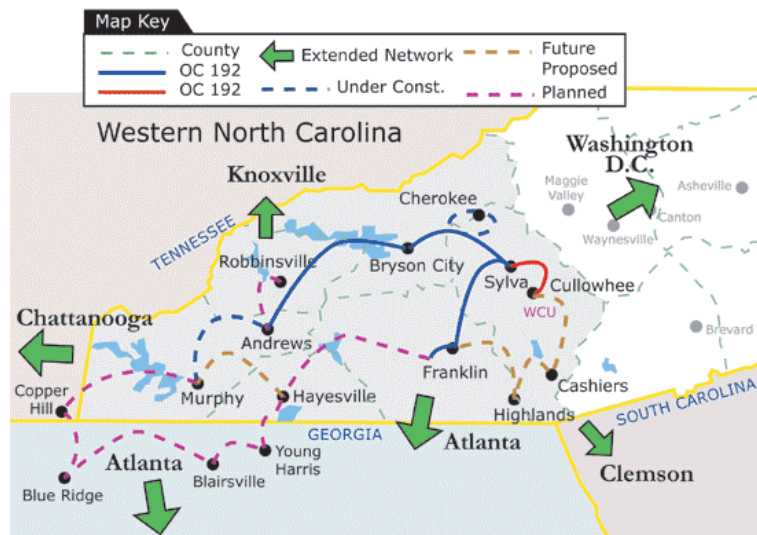
The Founding Members of BalsamWest FiberNET are not only interested in meeting their own needs, but are also committed to serving the region. They believe the old adage: "A rising tide lifts all ships." So, as part of their community development objective, the Founding Members of BalsamWest have set aside funding to work with local officials, Internet Service Providers and others in its six-county service area to develop plans and obtain resources. The Founding Members are dedicated to helping the region gain access to the tools it needs to educate and train the workforce of the future, support advances in health care, improve the ability of local businesses to succeed, and create opportunities to generate good jobs for the future.

In 2003, approximately 170 miles of the over 200-mile network has been deployed and construction is expected to conclude by spring 2005. BalsamWest FiberNET has innovatively utilized two railbeds to deploy the network—forging agreements with the Great Smoky Mountains Railroad and the North Carolina Department of Transportation. A local fiber construction company has been used—Southern Utilities & Pipeline—to efficiently and affordably deploy the network. An upstream Internet service alliance agreement has been signed with MCI—providing high-performance Internet service over the network. Community interconnection sites are being developed—to enable communities to take advantage of the tremendous resources—utilizing Cisco electronics equipment.

With the help of Southwestern Community College, BalsamWest FiberNET has also worked to fulfill its community development objectives by endeavoring to develop a private fiber optic network for the K – 20 schools in the region (public schools, community colleges, and universities). This effort is being accomplished through an initiative spearheaded by Southwestern: the Smoky Mountain Knowledge Network.

Smoky Mountain Knowledge Network

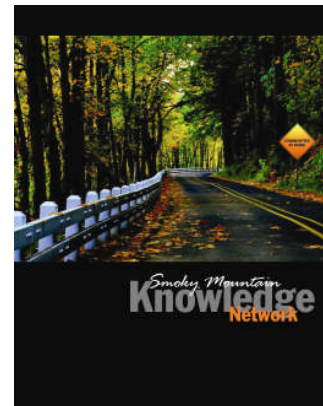
For a rural mountainous community like western North Carolina, the extreme barriers of time and distance have always been something no one ever thought could be overcome. However, with the advent of advanced telecommunications, the possibility of mitigating the negative impact of the region's abject isolation appeared to be a reachable goal. The desire to tackle these hurdles and expand educational offerings to students of various ages prompted the college and its regional partners to make a commitment to distance education. In 1995, this effort took the form of an interactive instructional television network, Community Link. This closed-loop, analog-based system was designed to deliver full-motion video and audio among 13 sites—including the college, four public school districts, and a regional university.



In 1998, several things began to emerge. First, the region began to realize that its isolation continued to exclude it from the resources needed to compete in the new economy. They also realized that the region must gain the ability to reach outside the confines of the formidable mountain region—perhaps it's only hope for joining mainstream America in the fruits of the 21st Century. Finally, the region became aware of other applications, rich electronic content, and on-line services that would add tremendous value to the lives of the people living and working in the region.

Given all of this, it became clear that a new approach must be examined—and approach that would permeate the entire community. So, regional leaders—inspired by the success of the Community Link initiative—came together to begin to imagine what this *next step* might be like and what it could mean to the people of western North Carolina. The group also understood that just as it takes a village to raise a child, so, too, would it take an entire community banding together to make this dream a reality. Therefore, additional organizations with similar missions were asked to join the group—regional libraries, county government units, public agencies, non-profit service groups, rural hospitals, area ISPs, and others.

In May of 2000, this coalition of partners organized themselves under a new structure called the Smoky Mountain Knowledge Network. This umbrella initiative was formalized by the signing of a resolution. The actual project strategy was developed during a yearlong planning period facilitated by the college. This planning process informed by careful study of best practices, an extensive needs assessment, the collective practical experience of project partners, and alignment with significant regional and state initiatives.



In the spring of 2002, leaders determined that it would add tremendous value to create a mechanism for greater grass-roots involvement in the development of a comprehensive strategy for the region. So, the three-county area identified “e-Champions” and teams. With support from the Rural Internet Access Authority and staff from Southwestern Community College, these teams received training, conducted research, surveyed community needs through forums, studied best practices—and ultimately developed a comprehensive vision for the region in the 21st Century and preliminary plans for realizing that objective. Nestled within the framework of the Smoky Mountain Knowledge Network initiative, each of these plans spoke to the importance for meeting community-specific needs. However, as leaders explored these opportunities, time-and-time-again they found that the region would not be able to move forward with implementation without better telecommunications infrastructure.

In 2003, the college worked with BalsamWest FiberNET to begin to establish an agreement that would create a private educational network—utilizing the high-performance fiber optic network being deployed by BalsamWest. The network would connect—at gigabit speeds with a high degree of capacity and reliability—more than 50 educational institutions in the region. The connectivity will enable the schools to connect with one another and anywhere in the world and aggregate demand for various applications wanted and needed by the schools—bringing never-before-imagined resources to their students, teachers and community. It is expected that the education network will operational in the year 2005.