
Rural West Tennessee 21st Century Online Jobs Creation Program Synopsis

An NTIA TOP Sustainable Broadband Adoption Grant (SBAG) Proposal

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Introduction.

This program proposal is the result of a two year pilot begun in the spring of 2007 which was carried out by cTechnology, Inc. of Nashville, TN under funding from the Tennessee Department of Economic and Community Development. The purpose of this pilot was to discover new methods for *sustainable* broadband deployment, technology-based rural education, and new economic development for rural Tennessee.

The purpose of this paper is to provide a synopsis of our approach in hopes that it will be beneficial for NTIA in measuring other approaches to adoption in rural communities. This approach is borne from significant hands-on experience in rural Tennessee.

Our recommendation is that the NTIA's SBAG dollars be focused on driving the online *economy* into rural communities. A Connected Tennessee survey shows that 59% of Tennessee residents with no computer at home don't have one because they don't see a good reason for owning one¹. We believe this is a over-40 phenomenon since our surveys of high school children in our pilot rural communities show that 98% of them own a MySpace account – regardless of computer ownership or home access.² This points to a lack of understanding the value proposition of broadband in the primarily adult audience polled.

Driving broadband adoption and computer ownership in rural communities can best be done by making a strong link between the rural constituent's social, economic and educational success and the Internet. Rural young people under 25 already understand this instinctively, their parents and community leaders often do not.

We believe the best hope for stimulating immediate rural broadband demand lies in the under-25 demographic. Unfortunately, in many rural counties, young people in the under-25 demographic are abandoning west Tennessee rural communities at an estimated rate of 85%+. This is not atypical for most of rural America. **This project is not only important for driving broadband adoption, but for also giving young people a real reason to stay and thrive in their rural communities.** Our pilot project in west Tennessee has demonstrated

¹ Connected Tennessee's Residential Survey of July 2008; page 98. www.connectedtennessee.org

² Our classroom surveys in our rural pilot communities have consistently shown that even in counties where 47% of the K-12 population does not have broadband at home, 98% of the 9-12th grade children have a MySpace account. They understand that something is happening online that is important, regardless of home availability.

the power of the Internet to young people, and to show how rural America can leverage a new economic *advantage* in the global marketplace.

We have worked with a large number of regional, state, and federal-level partners and agencies to vet our project and gain a wide consensus of approval. These include:

Tennessee Department of Economic & Community Development

Paul LaGrange, Assistant Commissioner

Rick Meredith, Assistant Commissioner

Lauderdale Tennessee County Board of Education

Joey Hassell, Superintendent

Lexington Tennessee City School System

Joe T. Wood, Superintendent

Craig Fitzhugh, State Representative, Lauderdale County

Chairman, House Ways & Means Committee

Tennessee Department of Labor & Workforce Development

Susan Cowden, Administrator, Workforce Development

Tennessee Department of Education

Ralph Barnett, Assistant Commissioner

Career & Technical Education

West Tennessee Industrial Association

Mike Philpot, Director

Southwest Tennessee Federal Development District

Joe W. Barker, Executive Director

United States Department of Agriculture

Terry Kokinda, Statewide Field Representative - Tennessee

Telecommunications Program

Synopsis.

This project is about driving broadband adoption by connecting our under-25 rural young people directly into the digital online economy. The highest incentive for adoption will be found by those who are making their living directly on the Internet. We intend to connect rural young people into online careers by training and mentoring them while they are still in high school and college, and then connecting them to employers online from their rural communities.

This program will sow the seeds for creating sustained and growing broadband demand and create a local cadre of rural young people who are demonstrating the economic power of broadband in rural communities. If successful in the first year in this very high need region, we will be considering a statewide rollout of this project across rural Tennessee.

This program directly creates a connection in the rural mindset between economic prosperity and the Internet – a connection that must be made if broadband adoption is to be embraced in largely disconnected rural communities.

Our metric for success is jobs created – real employment – a sustainable economic stimulus that will continue long after the initial funding has been spent. The outcome for carriers will be a strong local demand for broadband and a new respect in rural communities for the practical economic power of the Internet. This is the ultimate key to breaking the adoption issue for rural broadband.

The current global economy has thousands of high-paying online jobs available to skilled and semi-skilled workers from companies that are seeking contractors and employees who are willing to work off-site, remotely. Many of these jobs are in online and digital technologies, which are a natural fit for the young people of rural west Tennessee. **In our west Tennessee pilot, we have found under-25 young people very enthusiastic and capable of learning these skills and becoming employable in this market. We have also found online employers very willing to mentor and train up new young rural programmers, developers, marketers, help desk people, and many other skills.**

Rural Tennessee is in dire need of new, diversified sources of high-paying jobs to grow their economies. It is full of young people who are eager to learn a skill that will lead to a solid job opportunity. In the online world, rural west Tennessee has significant advantages to overseas companies and urban areas such as:

- a lower wage differentiator as compared to urban areas
- American citizens (no H-1B hassles)
- U.S. contract law and intellectual property protection
- On-site visit/and employee transfer potential

The global digital economy, driven by the presence of the Internet, is the great opportunity equalizer of rich and poor nations *and is also the great equalizer for rural opportunity in west Tennessee via broadband.*

The Skill-Based Digital Economy Focus. **We are proposing to identify, train, and find employment for high school and college graduates directly in the online technology workforce locally.** These skills will be developed via self-study, online training, mentoring, or OJT programs in K-12 with logical extensions into higher education. Within the tech community, the hiring criterion is one's specific demonstrated technical abilities, project experience, and ability to work in a collaborative environment. This does not diminish the value of a university education but puts the "why am I in college" more in context to real life.

Rural Tennessee Advantage. The below example shows how a NYC company could cut in half its wage for an entry-level programmer in half while the rural community gains a job paying above the local median salary. We can become globally competitive in west TN!

- Entry Level PHP Programmer: New York: \$50-\$61,000
- Entry Level PHP Programmer: Nashville: \$33-\$41,000
- **Entry Level PHP Programmer: Ripley TN: \$25-\$32,000**

Youth-Oriented. This project is focused on the under-25 demographic which already has a high interest in the Internet. We believe that in order for rural communities to survive long term, we must address how the next generation is going to stay and prosper. Youth prosperity will also bring strong broadband services demand, retail demand, and a rising awareness and use of technology in rural communities, which can foster local expertise and further broadband demand.

Rural Co-Working Centers. To foster this kind of tech economic growth in a rural area will take an innovative mix of K-16 educational initiatives and direct job placement. We intend to set up “Co-Working Centers”, right on rural Main Street, (Halls, TN, first pilot), which will be local community facilities where these young people can work together. The outcome will be the fostering of a “Digital Community” where these skills can be perpetuated in the rural community.

These facilities will be equipped with broadband and distance learning capabilities. It will be similar to urban Co-Working Centers appearing around the country and will be where rural co-workers will gather and work. This will naturally foster a demand for the same level of broadband access at their homes experienced at the Co-Working Center. **More importantly, this places broadband directly in the mind of the community as a key to economic success and the retention of their under-25 population.** Any level of economic success locally by young people in the online economy will be front page news in a small rural community that is desperate for any type of economic light.

Our model is self-sustainable over the long term. Once this catalyst is set in place, the relational dynamics of the Internet will begin to foster long-term sustainable job creation in the online economy and links into new outside resources. **We believe the rural Co-Working Centers will make the first online employment successes in this arena highly visible to young people who want to stay local but currently, see no real opportunity or focus on their generation.** They are our future – we need them to stay in their rural communities in order to preserve our heritage and rural communities. They are also currently the primary users of the Internet in these settings.

Local Industry Retention. Rural Tennessee has counties with companies at risk for relocation due to the inability to recruit local new workers with specific technology skills. *This rural job loss threat must be resolved immediately with concrete, measureable action that brings industry directly into play in the local K-12 system to a far higher degree than is currently being done.* This program will also create a new dynamic in workforce readiness which will also benefit the existing local industries and make the region more attractive to new ones. We intend to heavily leverage online social networks to raise the regional profile for technology.

Entrepreneurial Business Development. Today, the online economy is spawning new ideas and new companies at an amazing rate. Our local rural “Co-Working Center” concept will not only be a place to work remotely, but will also foster young people to create new online companies locally. A new Internet company formed locally has a high chance of staying local and creating its own local job demand and sparking higher demand broadband services such as Metro Ethernet.

Program Execution. Our experience in rural communities has shown that this type of activity cannot be successful without significant on-the-ground activity. We intend to deploy a force of 10+ technology educators in the first 90 days across the 19-county region and drive change by working in conjunction with local P-16 institutions, regional economic development, Connected Tennessee, and other interested public and private agencies. Projects of this type require gaining the respect of the local community first. We have gained the respect of the rural community in west Tennessee over the past two years and this is crucial to gaining a rapid start on a project of

this size. We believe our approach will create a cadre of trainers who can then affect change across the state in the following waves of broadband stimulus rollout.

Solid Success Metrics. The success metric for this project will be measured in rural *online* jobs created, as well as new interest and demand for broadband services in all 19 rural counties in west Tennessee:

- Direct exposure of online economic opportunity and careers across the entire rural west Tennessee region (19 rural counties, approx 100,000 students), through the high schools and community colleges.
- 380 new rural K-16 students recruited for online careers per year across 19 counties
- 38 Co-Working Centers established in 19 rural counties
- 1900 new tech young people in training/hired in the next 5 years
- 3 Year Goal: \$12m - \$16m in new salaries; \$23m - \$63m in regional ECD impact
- \$300k - \$500k in new broadband revenues to carriers added annually in the region
- Cost target of <\$5,000 per new rural online job created

Funding and Timing. We are seeking a total of \$2.3m to jumpstart this program and have a path to self-sustainability defined. We have strong support from the local communities in our pilot area. We are currently working with the West Tennessee Industrial Association and local organizations to raise the required 20% matching funds for the NTIA TOP Sustainable Broadband Adoption Grant. West Tennessee is within the Delta Regional Authority and considered a very high needs area. We would propose that Delta regions be given special matching fund waiver considerations down to 5-10% rather than 20%. Our experience with USDA Community Connect and Distance Learning Grant programs in this region has been that it is difficult for the local community alone to make a 15% match much less a 20% match. Some of these communities are experiencing 18+% unemployment already.

This project has been in development for over 2 years and we are excited about the potential that broadband holds to transform this region. We believe that this approach will justify carrier investment and drive ongoing demand in the region. It will also serve as a model for wise spending of stimulus funding that will provide for multiple outcomes.

We believe the only sustainable priority for any adoption program should be focused on driving education and economic development. Healthcare, social networking, and entertainment will not produce sustained broadband adoption by rural constituents in large numbers that the basic drive for making a living will elicit. The NTIA Sustainable Broadband Adoption Grant stimulus holds the promise to transform rural Tennessee's economy and provide a entirely new start for these communities. We look forward to continuing the discussion and furthering the goals of the NTIA, the carriers, and most importantly, the communities of west Tennessee.

Sincerely,

Paul Van Hoesen
Director, cTechnology, Inc.

cTechnology Online Career Ladder

