



March 11, 2010

VIA ELECTRONIC COMMENT FILING SYSTEM (ECFS)

Ms. Marlene H. Dortch
Office of the Secretary
Federal Communications Commission
445 12th Street SW
Washington, D.C. 20554

**Re: Ex Parte Communication, 47 C.F.R. § 1.1206
GN Docket Nos. 09-47, 09-51, 09-137**

Dear Ms. Dortch:

On March 10, 2010, Joanne Hovis, the President Elect of NATOA, sent the attached document, at the request of FCC Chairman Julius Genachowski, via email to David Goldman, Legal Advisor to Chairman Julius Genachowski and Zachary Katz, the Deputy Chief of the Office of Strategic Planning and Policy Analysis.

Pursuant to Commission rules, please include a copy of this notice in the record for the proceedings noted above.

Sincerely,
/s/ Matthew R. Johnson
Matthew R. Johnson
Legal Fellow
NATOA



Ten innovative, replicable community broadband projects:

1. **Montgomery County, Maryland—FiberNet.** Over the past 15 years, Montgomery County has gradually and cost-effectively built fiber optics to key government facilities and other community anchor institutions as part of its public works programs. Notably, the FiberNet network currently serves two-thirds of the county's public schools with high-capacity, low-cost fiber connections that deliver significantly greater bandwidth, at a significantly lower cost, than comparable leased services—and without taxpayer-funded e-Rate subsidies.

Elementary schools served over FiberNet receive 100 Mbps symmetrical connections for an *annual operating cost of \$71 per megabit per site*. In contrast, those elementary schools served over T1 circuits leased from the phone company annually pay \$1,826 per megabit per site *after* the e-Rate discount is taken into account. Without the e-Rate subsidy to the carrier, the cost per megabit per site would be \$3,652 per year—or about \$3,000 more than the County's fees. The County plans future upgrades to 1 Gbps at an incremental cost of \$7.11 for each additional megabit per site. The County also notes that the per site costs decrease as additional sites are added, a realization of economies that are not available to those schools leasing T1 circuits.

2. **Humboldt County and City of Rio Dell, California—Digital Rio Dell.** Launched by the non-profit Access Humboldt organization, Digital Rio Dell brought together a range of public and private partners to offer free public Wi-Fi in the small, rural community of Rio Dell on the North Coast of California. Through its innovative, public-interest-focused local partnerships, Access Humboldt was able to secure cost-effective bandwidth and backbone Internet access; donated equipment; and low-cost maintenance services. As a result, Access Humboldt's operating costs for this public interest, locally owned and operated community broadband network are only a few hundred dollars per year. Given Humboldt County's remote location, general lack of infrastructure, and high level of poverty (almost 20 percent, according to recent Census statistics), this project provides broadband access to many who cannot afford what services are offered by the private sector.
3. **Case Western Reserve University (Cleveland, Ohio).** To demonstrate that broadband can be relevant to meeting its neighbors' basic human needs, Case Western launched a research project that aims to connect as many as 25,000 residents in five Cleveland neighborhoods with fiber to the home. A pilot project funded in part by the university will offer fiber connections to 104 households in two city blocks. In exchange for participation, residents will receive Internet connectivity, computers and training, health monitoring equipment, "smart home" sensors, surveillance cameras and other devices, and access to an Internet services portal that will be designed by university students.

The project is centered in some of Cleveland's neediest neighborhoods "We believe that access to the Internet at the international gold standard of 1 Gbps, coupled with integrated training and support, can change people's lives for the better," says University Vice President for Information Technology Services Lev Gonick, who has spearheaded the project.

As many as 40 community partners are involved in the project, including hospitals and a coalition of public safety forces. Local service providers will be able to offer commercial services on the network, both during and after the research project. In fact, the organizers hope the open-access network will stimulate new service offerings.

4. **Karuk Tribe Community Media Center (Happy Camp, California).** In a rural, remote area of California, the Karuk Tribe operates a low-cost but exceptionally successful public computing center that provides Native Americans in the area with Internet access and (relatively low-bandwidth, low-quality) videoconferencing that enables local students to enroll in community college courses streamed from a distant campus.

The lab is housed in a small donated space, which helps to make the center financially feasible by keeping its operating expenses extremely low. More critically, the facility shares a T1 circuit with the local school district—which contributes to the low operating costs, but also severely curtails the available broadband capacity for the center's thousands of annual users.

Despite these core limitations, however, the tribe has made available to its members an extraordinary resource. At any one time, a visitor who enters the facility will find as many as 30 local residents doing research and homework on the computers within the primary lab room, while in a small adjunct room, eight to 12 students are watching a community college class streaming from a community college. (Given a more robust broadband connection, of course, the media center would be able to offer two-way interactive videoconferencing, with higher-quality video and audio.)

5. **Pulaski, Tennessee.** Operated by Pulaski Electric Service (PES), Tennessee's oldest municipal electric system, the Energize fiber-to-the-home (FTTH) network makes triple-play broadband service available to every home, school, and business in this rural community—the smallest community in the country to have FTTH. The network also supports a data center, housed in a tornado-proof bunker, that is capable of providing redundant data storage to businesses located throughout the state.

Beyond simply offering "triple-play" service, the PES fiber network is a driver of local economic development. It delivers big broadband to a relatively remote, low-income community—and in the process, is a powerful tool for attracting businesses looking for a low-cost base of operations. It also enables entrepreneurial residents to launch high-bandwidth home-based businesses.

6. **NCRnet (National Capital Region interoperable fiber optic network).** Designed and deployed with a range of innovative digital networking technologies and IT security measures, the fiber-optic NCRnet network represents one of the most sophisticated approaches to regional interoperability in the United States.

An ongoing collaborative project among 22 local government jurisdictions, two states, and the District of Columbia, NCRnet is an exceptionally cost-effective network dedicated to public safety communications and the needs of first responders in and around the nation's capital. Built on a foundation of public-private partnerships and local, state, and federal funding, NCRnet enables local government agencies and organizations to seamlessly share critical data and information during emergencies and day-to-day operations. The network also supports high-definition videoconferencing among emergency operations centers and other critical facilities.

7. **Bristol, Virginia.** Bristol and the Southwest Region of Virginia encountered conditions a decade ago that are similar to conditions that many areas of the United States are experiencing today, or are likely to experience in the years ahead. Moreover, the many positive results that Bristol has achieved could benefit many other communities and the United States as a whole, if applied more broadly.

As the twenty-first century began, Bristol, Virginia, a town of 18,000 on the border of Virginia and Tennessee in southwest Virginia, was facing the simultaneous decline of its bedrock industries — tobacco, textiles, coal mining, and agriculture. Many of its stores and businesses were boarded up, and the future looked grim for Bristol and the entire region. The City leaders, with the encouragement and assistance of U.S. Representative Rick Boucher, decided to take matters into their own hands and rebuild the local economy through advanced telecommunications infrastructure and services.

In 2001, Bristol won a crucial challenge to Virginia's then-existing barrier to public entry, and it began to build a state-of-the-art fiber-to-the-home ("FTTH") system. Three years of industry-backed legislative challenges and litigation disrupted Bristol's progress and substantially added to its burdens and costs. Nevertheless, Bristol stayed the course. Now, the city system serves more than 65 percent of Bristol's residents and businesses, and it has begun to attract hundreds of high-paying jobs to the town and region. For example, two new employers alone are bringing in up to 1500 jobs paying twice the local average wages.¹ Each new job creates new revenues that will purchase goods and services in the local economy. The recipients of these new revenues will, in turn, have additional income to spend in the local economy, and so it goes. This is what economists call the "multiplier effect." In the end, boosting community spending power will increase local income, sales, and property tax revenues; boost property values; and injecting new spirit and energy into the community and the region in multiple ways.

¹ Paul Miller, *Bristol's Broadband Push*, Virginia Business Magazine, November 2006. <http://tinyurl.com/ydpps52>.

8. **Lafayette, Louisiana.** Like Bristol, the City-Parish of Lafayette, LA, had to overcome three years of time-consuming and expensive challenges by the incumbents, but it is now completing the build-out of its state-of-the-art fiber system. Even before the system was built, the City's intense desire to develop a world-class communications infrastructure attracted global attention and prompted one firm – NuComm International – to locate a new 1,000-job call center there. The call center will add \$115 million annually to Lafayette's local economy.² Lafayette is currently making itself a testbed for applications that will take maximum advantage of its fiber system. Among other things, its school system has established a corps of creative "Fiber Kids," and on April 20-22, 2010, Lafayette is hosting a workshop of leaders in the fiber field around the world.
9. **Powell, Wyoming.** Powell exemplifies the way in which municipalities are using advanced communications systems to shrink the world and give its residents an opportunity to perform on a global platform. A South Korean venture capital firm has agreed to pay up to \$5.5 million to engage 150 certified teachers in rural Wyoming to teach English to students in South Korea using high speed video teleconferencing over Powell's fiber-to-the-home system. The Powell fiber system will enable the Wyoming-based teachers to work from home. The company that developed this project is now planning similar projects for students in China, Japan, and Taiwan.³
10. **Tacoma, Washington.** For more than a decade, Tacoma's Click! Network has played a significant role in revitalizing Tacoma and has attracted more than 100 high-tech businesses to the community. Business leaders readily acknowledge that Tacoma's municipal communications utility's ability to serve their needs is the key factor that made them comfortable with moving to Tacoma rather than to Seattle or other large cities.⁴

² "Largest NuComm International Location to Open in Louisiana," *News Blaze* (August 7, 2006), <http://tinyurl.com/yaopz4h>.

³ Associated Press, "English ed company gets \$1.5 million," *Trib.com* (May 9, 2008), <http://tinyurl.com/yd64uue>.

⁴ John Cook, "Digital Economy May Spark Tacoma's Renaissance," *Seattle-Post Intelligencer Reporter* (August 16, 2000), <http://tinyurl.com/yhwkcgz>.