



NYS Broadband Flash Bulletin

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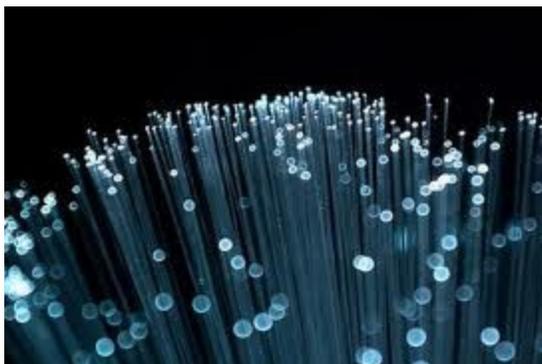
High-Speed Broadband for the Southern Tier

Launched in February 2011 with a \$9.7 million grant from Corning Incorporated and \$2.2 million from Chemung, Schuyler, and Steuben Counties, the Southern Tier Network (STN) is moving forward rapidly in building an optical fiber broadband network in the three counties. The route mapping for this dark fiber backbone is complete, engineers having determined the best placement of the optical fiber ring. The project construction began this spring, with fiber being carried to Schuyler Hospital, STN's first customer. Businesses, schools, public safety departments, government, and health care facilities are working with STN to configure their networks. Service providers are determining how best to expand their services using the STN backbone.

The Southern Tier Region has developed a strategy for technology led development, and the fiber backbone will be one component used to attract technology-based business into the region. Studies have shown that progressive technology-based businesses demand diversity, competition, and low cost high speed broadband access. The STN fiber will seek to provide these components as well as provide a foundation for service providers and other entities seeking to control their own capacities.

Activities around the creation of STN include planning by the three counties to integrate public safety programs and to collaborate with the State, towns, and villages through e-government. Equitable healthcare services are being expanded to the more remote areas of the region, and schools and colleges will benefit from having unlimited capacity to broadband technologies for the foreseeable future. In all of these examples, the users of the fiber – businesses, municipal entities, schools, healthcare programs, and others – will control their own capacities and destinies. The region believes this will be the differential that sets it apart.

STN's business plan includes extending the network east to Tioga and Broome Counties, which have expressed interest in the technology offered by STN. With the connection being built to the Ontario County open access network and then to Rochester and points north and west, the Southern Tier Network will allow connections to major metropolitan areas in multiple directions. STN will be a catalyst for future economic development of the larger Southern Tier region.



American Library Association Advocates for Library Broadband Funding

This week, the American Library Association (ALA) submitted comments to the FCC on its Further Notice of Proposed Rulemaking (FNPRM) on the reform of the Universal Service Fund (USF) contribution mechanism. The FNPRM is part of the Commission's effort to modernize universal service programs—including the E-rate program—so that they can efficiently bring the benefits of 21st century broadband to the public across the country.

The ALA advocated for the Commission to ensure the stability of the USF as it addresses contribution reform such that the necessary reforms are not disruptive to individual programs. In particular, the E-rate program depends on the fund's stability in order for libraries and schools to provide Internet-enabled services to the public. Demand on the fund continues to climb as libraries include more programs and services that demand high-capacity broadband connections, such as video conferencing and mobile computer labs.

The ALA stated "Libraries (including school libraries as part of the K-12 campus) continue to increase their connectivity and improve their services through the E-rate program, though they are not yet able to meet community demand for connectivity and will continue to need E-rate discounts to add critical capacity."

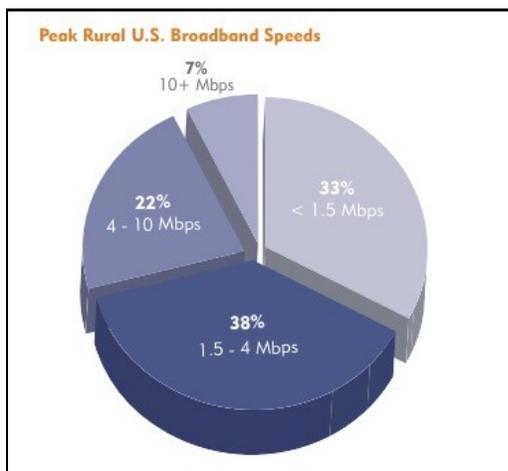
The ALA also discussed libraries as "end users" of telecommunications services, stating that libraries should not be required to pay directly into the USF. ALA suggests that the nation's most disadvantaged libraries and school would further enhance their broadband capabilities if, as with Lifeline customers, these libraries and school were not required to contribute as end-users into the Fund.

To view this article visit <http://www.districtdispatch.org/2012/07/ala-advocates-for-library-broadband-funding/>.

To view the ALA's comments to the FCC visit http://www.districtdispatch.org/wp-content/uploads/2012/07/ala_fcc_7-9-12.pdf.

Rural America Continues to Lag in Broadband Speed

Although New York's Internet speeds have improved over that past few years, newer innovative applications continue to demand higher and higher speeds. According to recent broadband studies, New York is keeping pace with the national average when compared to other states, however, many New Yorkers still can't access speeds higher than the FCC threshold (4 M b p s download/1 Mbps upload). And those living in rural areas of the State continue to fall even further behind.



The Q1 2012 Calix U.S. Rural Broadband Report, indicates the most common downstream speeds for rural America were between 1.5 Mbps to 3 Mbps, and upstream rates remained slow as well, with 95 percent receiving 1.5 Mbps or less.

Each quarter, Calix shares a snapshot of the previous quarter's Internet traffic and applications utilization based upon data aggregated from different sized wireline communications service providers serving rural America. For this Q1 2012 snapshot, over 50 service providers from every region of the U.S. provided data, drawing information from over 100,000 subscriber endpoints. All delivered broadband services over both copper and fiber – including some that delivered broadband exclusively over fiber.

The Q1 Report further highlighted that:

- 60% of rural broadband subscribers received a maximum download speed of 3 Mbps or less,
- 71% of rural subscribers received a download broadband speed that was slower than the FCC Threshold of 4 Mbps, and
- Copper subscribers had lower peak speeds than fiber subscribers with 75% of copper subscribers having peak download rates lower than 4 Mbps. Nearly half of all fiber customers had peak download rates of more than 3 Mbps.

To view the full report visit, http://portal.calix.com/portal/calixdocs/mktg/w/Calix_US_Rural_Broadband_Report_Q1_2012.pdf.

White Space Broadband -- A Solution for Rural New York?

TV white spaces are the spaces on the TV dial that don't carry TV channels. This set of frequencies is good for moving wireless and mobile data. Rural communities typically have plenty of unused TV white space and, where an investment to build a wireline network in areas of low housing density could exceed \$20,000 per mile, White Space Technology can provide a solution for remote areas of the State, where wireline technologies are cost-prohibitive.

Already popular in Europe, the Federal Communications Commission (FCC) only recently approved the new technology. Its similar to WiFi technology, but is widely considered better-suited to rural areas because the signal isn't impeded by trees, buildings or even mountains. New York has a very diverse terrain and the Adirondack Park's mountains and valleys impede line-of-sight technology. White Space can offer unique advantages to providing broadband access to the geographically challenged areas of our State.

The Town of Thurman, located in the western part of Warren County and home to approximately 1200 residents, is an example of the challenges many small communities face when it comes to broadband access. Covering an area of just about 93 square miles, more than one-third of Thurman residents do not have access to broadband. In May 2012, the Town Board approved the use of White Space. The Town of Thurman is currently exploring a partnership between the town and a nearby broadband provider to use the new technology, utilizing specialized equipment and a technology solution comprised of both wired and wireless access.

Visit the NYS Broadband Program Office Blog <http://www.nysbroadband.ny.gov/node/40> to help us continue our dialog on this newer technology.