

*Communications***As FCC Chairman Leaves Post, Challenges For Agency Persist in Broadband Expansion**

**O**ne of the biggest challenges the next Federal Communications Commission chairman will face is how to encourage the expansion of ultrahigh-speed broadband networks capable of connecting users to the internet at speeds as fast as 1 gigabit per second—whether those networks are built by private companies, public-private partnerships, or local municipalities.

While the FCC, for its part, has been busy over the last four years crafting policies to establish broadband internet as the dominant communication platform in the United States, most of the agency's work has centered on getting the most basic broadband service—defined as having an upload speed of at least 1 megabit per second and a download speed of at least 4 megabits per second—to parts of the country without any service whatsoever.

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CHIEF ARCHITECT OF 2010 NATIONAL BROADBAND PLAN

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Some have argued that this approach, while necessary, will accomplish only the bare minimum to improve U.S. competitiveness in the global information economy. According to recent FCC data, gigabit broadband connections are available in only about 40 communities across 15 states.

To try to raise those numbers, FCC Chairman Julius Genachowski called on mayors across the country in January to take up a “Gigabit City Challenge” of bringing 1-gigabit-per-second broadband services to at least one community in each state by 2015.

Blair Levin, the chief architect of the FCC's 2010 National Broadband Plan, told BNA in an interview, “Lo-

cal officials have become increasingly aware of the importance of big bandwidth for economic development, job creation, and education in their communities.”

Levin now runs the Gig.U project, a consortium of 37 university communities working to promote private investment in next-generation, ultrahigh-speed broadband “test beds.” Both the FCC's Gigabit City Challenge and Gig.U, however, have drawn skepticism from some economists and technologists for what has been termed the “build it and they will come” mentality—the belief that if gigabit networks are built, the high bandwidth-intensive applications of tomorrow will come.

Currently, few applications require speeds of a gigabit per second and, by various estimates, most households need at the very most a connection of 50 megabits per second. In New York City, for example, Time Warner Cable offers residential customers six tiers based on speed: Lite (up to 1 megabit per second), Basic (up to 3 megabits per second), Standard (up to 15 megabits per second), Turbo (up to 20 megabits per second), Extreme (up to 30 megabits per second), and Ultimate (up to 50 megabits per second)

But Genachowski and Levin see the efforts as critical to creating “innovation hubs” and keeping the United States competitive with the rest of the world in high technology. Without ultrahigh-speed broadband networks, they argue, innovators may not have the same opportunities to invent new technologies, services, and applications.

**Private or Public Broadband Networks.** In the National Broadband Plan, the FCC set a goal that by 2020, 100 million U.S. homes should have “affordable access” to internet download speeds of 100 megabits per second and upload speeds of 50 megabits per second. The agency also called for every American community to have the same affordable access to 1-gigabit-per-second broadband service at “anchor institutions” like schools, hospitals, and government buildings. And acknowledging that America's broadband future cannot rely solely on the private sector, the commission included a recommendation to Congress to make clear that state, regional, and local governments have the right to build their own broadband networks with public funds. Ultimately, one of the plan's goal is for America to have a “critical mass” of ultrahigh-speed networks.

“The projects all invited the incumbents to participate,” Levin said of his work with Gig.U. “If they want to participate, great. If they don't want to participate, I

hope that they will at least recognize that the community has a right to try to get greater deployment. We haven't yet seen a counter-reaction in those places. I hope we don't. If we do, we'll deal with it then."

Earlier this month, Time Warner Cable, the second-largest cable operator in the country, submitted a formal bid to the North Carolina Next Generation Network, a partnership between local officials, universities, chambers of commerce, and Gig.U to build an ultrahigh-speed network for businesses, institutions, and consumers.

In North Carolina, Time Warner has already invested \$1.5 billion and built out 28,000 miles of fiber and coaxial cable plant in areas covered by the N.C. Next Generation Network project. The company's "Cable Business Class" network also currently provides gigabit-speed broadband services to 16 school systems and 717 schools in the state.

In a press statement released at the time, Rob Marcus, Time Warner's president and chief operating officer, said the cable provider wants to play an "integral role" in the project.

Time Warner knows well the competitive threat from new entrants in the marketplace. The company now competes against Google Inc.'s "Google Fiber" in Kansas City, Mo. and Kansas City, Kan., where the search engine giant offers broadband internet speeds as fast as 1 gigabit per second.

So does AT&T Inc., another incumbent. Following Google's announcement this month that it will make Austin, Texas, home to its next foray into the broadband services market, AT&T promised 1-gigabit-per-second service in Austin as well—so long as the company receives the same incentives, which include expedited access to the public rights of way, permitting, and local tax breaks.

**FCC Chief Backs Publicly Funded Web Services.** The recent focus on gigabit speeds highlights a long-running debate over whether local officials should give preferential treatment to providers willing to build the fastest, most cutting-edge broadband networks in their communities—or whether they should use taxpayer funds to build the networks themselves.

According to the Institute for Local Self-Reliance, there are 340 publicly funded broadband networks in the United States, several even offering gigabit-speed broadband services. One of the most publicized projects is in Chattanooga, Tenn., which provides gigabit services through its city-owned utility, EPB.

"The advantage that the public sector has is that it doesn't need an 8 percent return on investment every year," Christopher Mitchell, director of the Institute's Telecommunications as Commons Initiative, told BNA in an interview. "Even though municipalities face the same costs for putting the fiber [cable] in the ground, the return is calculated in better educational opportunities, more jobs in the community, rising property values, and an overall higher quality of life. If it just breaks even, the community benefits are so great."

At the same time, Mitchell said, local officials must still answer to taxpayers. "A cable company or telecom company can get away with raising its rates year after year because they don't face a recall election," he said.

**Hurdles for Locally Funded Networks.** Mayors and county boards also continue to operate under intense pressure from incumbent telecommunications companies and cable operators, which have successfully lobbied legislatures in 19 states to impose some kind of limits on publicly funded broadband networks.

In February, Genachowski issued a rare press statement opposing such state legislation.

While not mentioning any particular bill or state by name, his remarks came as the Georgia Legislature was slated to consider the "Municipal Broadband Investment Act" (H.B. 282), which would prohibit any government in the state from providing a broadband internet service in areas not "unserved," which the bill defines as areas where "a Census block for which the most recent National Broadband Map shows no broadband service is available."

That bill has since been defeated, but incumbent telecom companies and cable operators in Georgia and other states continue to push for such legislation, with increasing success.

In 2012, for example, South Carolina Gov. Nikki Haley (R) signed legislation (H.B. 3508) requiring governments to petition the state Public Service Commission to designate a city or town as "unserved" before providing broadband services there. Under the new law, if an area is already served, the government would face additional regulatory scrutiny. (The law specifically defines a "served area" as one in which at least 10 percent of residents have access to internet services with speeds of at least 190 kilobits per second in at least one direction, which is considered extremely slow by the FCC's standards.)

In 2011, a North Carolina bill (H.B. 129) prohibiting municipalities from pricing their service below cost and from subsidizing services with public funds became law without the signature of Gov. Bev Perdue (D). The N.C. law also stipulates that the municipally owned service providers must grant private companies the same non-discriminatory access to utility poles and rights-of-way.

"If a community can't gain access to broadband services that meet its needs, then it should be able to serve its own residents directly," Genachowski said in the statement Feb. 15. "Proposals that would tie the hands of innovative communities that want to build their own high-speed networks will slow progress to our nation's broadband goals and will hurt economic development and job creation in those areas."

**Historic Success in Lafayette.** One local government has managed to succeed in the local broadband services marketplace despite legislation, litigation, and competition from incumbents.

The Lafayette Utilities System, in Lafayette, La., offers residents and businesses five internet speed tiers:

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15 megabits per second for \$34.95 a month; 40 megabits per second for \$49.95; 75 megabits per second for \$99.95; 100 megabits per second for \$199.95; and 1 gigabit-per-second for \$999.95. The city has largely been successful in acquiring and retaining business and residential customers because of the speeds offered, price, and service quality.

But back in the early 2000s, several bills emerged in the Louisiana legislature to block Lafayette's project. Then-Gov. Kathleen Blanco (D) decided to broker meetings between BellSouth Telecommunications Inc. (now AT&T Inc.) and Cox Communications Inc. to negotiate language in any legislation to allay the concerns of both sides. The end result was the "Local Government Fair Competition Act of 2004." Soon after she signed the bill into law, however, BellSouth and the state's cable industry association sued Lafayette to force a public referendum on the city's broadband network plan.

In 2005, Lafayette residents voted by a 2-to-1 margin to approve the plan, which required issuing \$125 million in tax-exempt bonds to build the all-fiber network. But the Lafayette Utilities System again found itself in court, this time over the city's ordinance that approved the bonds, which BellSouth and the cable association said violated the "cross-subsidization" portions of the state Local Government Fair Competition Act.

The case went all the way to the Louisiana Supreme Court, which in the end ruled for Lafayette.

"It is not for the faint of heart," Terry Huval, director of the Lafayette Utilities System, told BNA in an interview. "You're going to have people criticizing you. You're going to have people questioning you. You're going to have large companies trying to put bills in the legislature to cripple you."

To Huval, without help from the Congress and the FCC, gigabit challenges are "all talk."

Congress, for one, should pass new legislation to prevent states from placing restrictions on or outright thwarting municipal broadband projects, he said.

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Huval noted that one problem for cities and states stems from a 2004 U.S. Supreme Court ruling that the Telecommunications Act of 1996 does not give municipalities the right to offer telecommunications services when a state law prohibits it.

Section 253 of the act states that "no state or local statute or regulation, or other state or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." In reversing a decision by the U.S. Court of Appeals for Eighth Circuit, the high court said that the class of "entities" contemplated by section 253 does not include the state's own subdivisions.

"The presence of these state laws provides that foothold, that ability for our adversaries to make things more difficult," Huval said.

**Incumbents Better Equipped?** But while Lafayette Utilities System is a success story, becoming cash-positive for the first time this past fiscal year, there have been cases in which publicly funded broadband projects have struggled to survive.

The telecommunications companies and cable operators argue, too, that they are far better equipped than governments to build networks.

"We already have the infrastructure at the local level, and we're making improvements and enhancements on a daily basis to better respond to consumer demand," an executive for a telecom company told BNA.

For their part, cable operators have been upgrading their networks to a technological standard called DOCSIS 3.0, which can offer broadband internet services with speeds of up to 100 megabits per second, fast enough to download an album on iTunes in three seconds. According to analysts, the cable industry will cover 100 percent of the homes they reach with DOCSIS 3.0 by the end of this year.

Verizon Communications Inc.'s fiber-optic FiOS service, meanwhile, can provide speeds up to 150 megabits per second, but is only available to about 10 percent of the households in the United States. AT&T is planning network upgrades as well to convert its slower copper phone lines to fiber. As part of \$14 billion in new investment announced last November, AT&T plans to increase internet speeds to 75 megabits per second in its footprint.

But the task of building an ultrahigh-speed fiber broadband network remains costly and capital intensive.

"Running a fiber cable to the house is really messy," Charles Hall, president of the Baton Rouge-La.-based analyst firm Rider Research, told BNA in an interview. "You have to run the wire under the ground, down the street, across lawns, and into homes. That is not a trivial task."

Hall said that while municipal networks can represent unfair competition to the private sector, cities "may need to do it or threaten to do it" to ensure that there is the fastest-possible broadband internet service available.

Jim Baller, president of the Washington, D.C., firm the Baller Herbst Law Group, who has worked as a consultant to Google in Kansas City, Kan.; Kansas City, Mo.; and Gig.U, likens the gigabit movement to the rural electrification movement of the late 1800s. At that time, communities not served by private electric companies built their own systems.

"Visionaries saw many uses beyond the ones for which electric networks were first built and had to go out and demonstrate to potential users what you can do with electricity," Baller told BNA in an interview. "We see more and more applications that require faster speeds and shorter latency but the full benefits of the networks are out there in front of us. We know that we're going to be able to use them much more extensively to deliver affordable modern health care and that they're going to contribute to job creation and economic development, intelligent transportation systems. Every part of our lives."

Despite the need for more speed, the FCC may be limited in what it can do to hasten the deployment of faster-speed broadband networks.

At an FCC workshop on the matter last month, experts urged both the agency and local officials to ease access for would-be providers to (1) multiple-dwelling units, such as apartment buildings, (2) “must-have” television programming, such as local sports, and (3) utility poles.

One of the reasons Google chose Kansas City, Kan., and Kansas City, Mo., for its fiber project was the existence of a municipal utility in Kansas City, Kan. that could provide expedited access to utility poles—access Google could not obtain easily on its own.

In an interview with BNA, Aaron Deacon, managing director of KC Digital Drive, an organization that was created out of the Mayors’ Bistate Innovation Team established by Kansas City, Mo., Mayor Sly James and Kansas City, Kan., Mayor Joe Reardon, admitted that in the cities, local officials made a commitment to simplify and streamline permitting policies for the Google Fiber project.

Now that Google is there, the challenge is how best to use a gigabit for economic development, education, health care, and the arts.

“Having the technology in place forces people to really focus, and say, ‘Oh, OK, the future is a little closer than maybe we thought it was,’” Deacon said.

PAUL BARBAGALLO