

## Chattanooga's Big Gig

UNIVERSAL HIGH-SPEED INTERNET ACCESS IS A POPULAR DREAM THESE DAYS—everyone from the president to Google, Inc., has embraced it. And the tech press is full of testy critiques wondering why typical broadband speeds in the United States lag so far behind those in, say, South Korea.

Just five years ago, this wasn't such a hot topic. Back then, the discussion—and action—wasn't led by the federal government or the private sector. The first movers were a number of diverse but forward-thinking municipalities: cities and towns like Chattanooga, Tennessee; Lafayette, Louisiana; Sandy, Oregon; and Opelika, Alabama.

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Motives and solutions varied, of course. But as high-speed connectivity is becoming recognized as crucial civic infrastructure, Chattanooga makes for a useful case study. Its journey to self-proclaimed "Gig City" status—referring to the availability of Internet connections with 1 gigabit-per-second data transfer speeds, up to 200 times faster than typical broadband speed for many Americans—started with visionary municipal initiative, built upon via thoughtful private and public coordination. Most recently, this effort has even begun to show tangible effects on city planning and development, particularly in the form of an in-progress reimagining of a long-sleepy downtown core. In short, Chattanooga is starting to answer a vital question: once a city has world-class Internet access, what do you actually *do* with it?

The story begins more than a decade ago, when Chattanooga's city-owned electric utility, EPB, was planning a major upgrade to its power grid. Its CEO, Harold Depriest, argued for a plan that involved deploying fiber-optic cable that

could also be used for Internet access. After clearing local regulatory hurdles, the new system was built out by 2010, and every EPB power customer in the Chattanooga area—meaning pretty much every home or business—had gigabit access. But you had to pay for it, just like electricity. And the early pricing for the fastest access was about \$350 a month.

"They had very, very few takers," recalls Ken Hays, president of The Enterprise Center, a nonprofit that since 2014 has focused, at the behest of local elected officials, on strategizing around what Chattanoogaans call "the gig." The head of Lamp Post Group, a successful local tech-focused venture firm, made a point of signing up immediately, Hays continues. But on a citywide level, "we didn't have the excitement" that talk of gig-level access generates today. And in 2010, he adds, "there weren't many good case studies out there."

But broader change was afoot. The announcement of Google Fiber—the Internet search giant's foray into building out high-speed online infrastructure—sparked new interest. And in 2013, Jenny Toomey, a Ford Foundation director focused on Internet rights, helped organize a summit of sorts where officials from municipalities like Chattanooga, Lafayette, and elsewhere could meet and compare notes. "It was still pretty nascent at the time," recalls Lincoln Institute President and CEO George W. McCarthy, an economist who was then director of metropolitan opportunity at the Ford Foundation. But that summit, he continues, helped spark new conversations about how such initiatives can make cities more competitive and more equitable, and less reliant on the purely private-sector solutions we often assume are more efficient than government. "And over the course of two years since, this issue has just exploded," he says.

In fact, that summit turned out to be the rare event that actually spawned a new organization: Next Century Cities, founded in 2014, now has more than 100 member municipalities. They share best practices around an agenda that

treats high-speed Internet access as a fundamental, nonpartisan infrastructure issue that communities can and should control and shape.

Against this backdrop, Chattanooga was taking steps to demonstrate how "the gig" could be leveraged. The Lamp Post Group had moved into downtown space, and superlative Internet access was just a starting point for the young, tech-savvy workers and entrepreneurs it wanted to attract. "If we don't have housing, if we don't have open space, if we don't have cool coffee shops—they're going to go to cities that have all that," says Kim White, president and CEO of nonprofit development organization River City Company.

Starting in 2013, a city-center plan and market study conducted by River City proposed strategies to enhance walkability, bikeability, green space, and—especially—housing options. More than 600 people participated in the subsequent planning process, which ultimately targeted 22 buildings for revitalization (or demolition). Today, half of those are being redeveloped, says White, and more than \$400 million has been invested downtown; in the next year and a half, 1,500 apartments will be added to the downtown market, plus new student housing and hotel beds. The city has provided tax incentives, some of which are designed to keep a certain percentage of the new housing stock affordable. The city has also invested \$2.8 million in a downtown park that's a "key" part of the plan, White continues, to "have areas where people can come together and enjoy public space." One of the apartment projects, the Tomorrow Building, will offer "micro-units" and a street-level restaurant. "I don't think we would have attracted these kinds of businesses and younger people coming to look," without the gig/tech spark, White concludes. "It put us on the map."

The gig was also the inspiration for a city-backed initiative identifying core development strategies that led to the Enterprise Center pushing a downtown "innovation district," says Hays. Its centerpiece involves making over a 10-story office building into The Edney Innovation Center, featuring co-working spaces as well as the headquarters of local business incubator CO.LAB.



Chattanooga is leveraging universal gigabit access to revitalize a once-sleepy downtown, shown here with a view of the Market Street Bridge and the Tennessee Aquarium, designed by Peter Chermayeff. Credit: Sean Pavone

The University of Tennessee at Chattanooga has a project involving a 3D printer lab in the Innovation District, and even the downtown branch of the Chattanooga Public Library has been made over to include a tech-centric education space.

EPB, whose original fiber-optic vision set the Gig City idea in motion, has long since figured out more workable pricing schemes—gig access now starts at about \$70 a month—and drawn more than 70,000 customers. More recently, it has also offered qualified low-income residents 100-megabit access, which is still much faster than most broadband in the U.S., for \$27 a month. And its efforts to expand into underserved areas adjacent to Chattanooga have become an important component of broader efforts to challenge regulations in many states, from Texas to Minnesota to Washington, that effectively restrict municipalities from building their own high-speed access solutions.

In short, a lot has changed—in Chattanooga and in other cities and towns that have pushed for Internet infrastructure that the private sector wasn't providing. "Most of this work right now is happening at the local level," says Deb Socia, who heads Next Century Cities. "It's mayors and city managers and CIOs taking the steps to figure out what their city needs." The implications for crucial civic issues from education to health care to security are still playing out. And precisely because the thinking and planning is happening on a municipal level, it won't be driven solely by market considerations that favor what's profitable instead of what's possible. "The beauty of it is," McCarthy summarizes, "it's a both/and argument." □

**Rob Walker** (robwalker.net) is a contributor to Design Observer and *The New York Times*.