

Small towns tired of slow rollout create own high-speed networks

By Leslie Cauley, USA TODAY

DANVILLE, Va. — Twenty-five hundred workers

Spend enough time in this tight-knit farming community of 48,000 on the North Carolina border, and you'll hear that figure a lot.

It's a somber reference to the number of people still working for textile-maker Dan River, the town's biggest employer. In the 1970s, it employed about 10,000 here.

But by 2000, modernization and the push to find cheap labor offshore had taken its toll. The town's other economic anchor, tobacco, also gave ground, and 10 of the 11 auction houses eventually closed. Unemployment soared.

"This town was being stepped over, and forgotten," recalls Mayor John Hamlin. Paul Kalv, director of the city's electric service, is even more blunt: "Danville was dying."

That's when Danville decided to grab fate by the throat.

The result: nDanville, a high-octane, business-class fiber-optic network capable of delivering voice, data and video services. The system is being built in phases with help from World Wide Packets, a company that specializes in municipal networks. The state-of-the-art workhorse offers speeds up to 1 gigabit in both directions. That's about 1,000 times faster than garden-variety DSL.

"We used to have to beg businesses to locate here. Now our phones are ringing off the hook," Hamlin says, beaming.

Danville is on the leading edge of what is quickly becoming a broadband revolution. Frustrated by the slow speed of broadband rollouts in their towns, local governments across the USA are building their own networks. Their common goal: to secure a bright future by building a business-quality network now.

"This is about three things," says Jerry Gwaltney, Danville's city manager. "Jobs, jobs and jobs."

By taking control of their broadband destinies, communities say, they no longer are at the mercy of the big providers. Regional phone company Verizon finally began offering DSL service in Danville in 2003, several years after the town first asked for it. Harry Mitchell, a Verizon spokesman, says the company can't be everywhere at once.

Beyond availability, the quality of service is a major driver. Residential high-speed services currently top out at about 3 megabits per second, with 7-megabit services just beginning to pop up. Download speeds are typically a lot slower.

That's not enough juice for businesses. Absent a high-quality network, their only option is to lease a costly T1 data line from the phone company. That works for big businesses and big users, but it is beyond the budgets of most midsize and small operations.

By designing and building municipal networks, communities say they can make technology choices that suit their needs — and aspirations.

"This is about our ability to dream," says Lewis Billings, the mayor of Provo, Utah, which is also building its own network.

As essential as sewer lines

Danville and Provo are just two of about 800 communities that are in some stage of municipal broadband deployment, estimates Michael Render, president of Render Vanderslice & Associates, which tracks fiber-optic deployments. According to Render, the trend is gaining steam as broadband becomes as much a part of a town's infrastructure as sidewalks, sewer lines, power lines and gas mains.

The trend is global. World Wide Packets, which also provided gear to Provo, says it is working with about 30 communities in such far-flung spots as Finland, New Zealand and Dubai.

"All these communities believe they are being underserved by the incumbents — or not served or never-to-be-served," says Dave Curry, president and chief executive of World Wide Packets.

Provo is a good example. Qwest and Comcast were providing high-speed services, but the city wasn't happy with the speed or overall quality. About five years ago, Provo, tired of waiting for supercharged broadband to show up, decided to move ahead on its own dime.

Comcast and Qwest tried to block the plan, igniting a bitter face-off with the city. Provo ultimately prevailed, but not before a lot of mud had been slung in both directions.

In July, the city started selling a 1.5-megabit-per-second package of voice, data and video services for \$89.99 a month. (Five- and 10-megabit speeds are available for \$109.99 and \$129.99, respectively.) The rollout of iProvo, which can ramp up to 1 gigabit, is getting a good reception. So far, about 400 people have signed up. When it is fully deployed in about two years, it will pass every house, school, business and municipal building in Provo.

Comcast recently unveiled a four-month special: the first and fourth months cost a penny, and the other two months cost \$42.95 for existing cable TV customers, plus \$9.99 for installation, down from a regular fee of about \$100. (People who don't already buy cable from Comcast will pay \$52.99, plus \$9.99 for installation.) Comcast says it's a back-to-school special available throughout Utah.

The mayor isn't worried. Provo's need for high-quality broadband, he says, transcends rivalry — and temporary specials. Thanks to iProvo, he says, "I can create jobs."

Not all towns have been as lucky.

Take Tri-Cities, a trio of small towns in the Chicago suburbs: Batavia, Geneva and St. Charles. Tired of waiting for high-quality broadband, Tri-Cities proposed to forge ahead on its own in 2002 and put it to a vote.

When SBC and Comcast got wind of the plan, they went into combat mode. Both already provided high-speed services locally and felt another network wasn't necessary. Supporting the plan was Fiber For Our Future, a grass-roots group whose sole funding consisted of passing the hat at local meetings. In the face of an estimated \$1 million advertising blitz by SBC and Comcast, the group never stood a chance. The plan was soundly defeated in a referendum in April 2003.

"They flat-out lied," says Annie Collins, a member of Fiber For Our Future. She says the carriers' claims that taxes would have skyrocketed "just weren't true."

SBC says all it did was get the facts out. Comcast says it only tried to make people aware of its full range of services.

SBC, for its part, contends that governments have no business getting into broadband. "Where private alternatives exist, government should not try to compete, especially when it's being done at the initiative of a few and at the expense of many," says Howard Peak, executive director of external affairs for SBC.

Fiber For Our Future isn't giving up. According to Collins, the group collected enough signatures — 3,000 — to put the broadband plan back on the ballot in November.

The core issue, she says, is control. "Why should somebody else decide what our destiny should be?" Collins asks. "Why not decide our own future?"

Tricky to manage

The jury is still out on how these communities will fare. Technology is tricky to manage, and financial risks remain. A few towns, including the Atlanta suburb of Marietta, started down the broadband path and have since pulled back.

Given the growing importance of broadband to businesses, however, a lot of towns feel they don't have a choice.

"This was never a case of 'Build it and they will come,' " says Hamlin, the Danville mayor. "This was a case of, 'If you don't build it, you know they *won't* come.' "

Plans call for nDanville to be rolled out in three phases. The first phase, which involved wiring local schools and government offices for Internet access, was just completed. The second will take nDanville to area businesses, offering voice and data services. The third phase will take the service directly to consumers with a full bundle of voice, data and video. Total expected cost: about \$37.5 million.

Funding for Phase 1, which cost about \$2.5 million, came from Danville's municipal electric utility reserves.

Funding for the other two phases hasn't been set. If nDanville doesn't prove popular, it may never get beyond the first phase.

Still, the early signs are encouraging.

Luna Innovations, a company that specializes in nanotechnology, a leading-edge area of science that focuses on molecular-level technology, decided this year to set up a branch in Danville. Luna, based in Blacksburg, Va., plans to use the site to develop and manufacture a range of commercial products: composites, textile additives, medical supplies and more.

Luna is recruiting nanotechnologists from outside the area but is hiring locally for other technical and manufacturing jobs. Charles Gause, a Luna vice president, says he expects the Danville office to employ several hundred workers within five years.

The company is taking over a former warehouse that dates to the 1870s. It is in the heart of Danville's historic and now mostly abandoned tobacco district. The irony isn't lost on Gause.

"Danville kind of missed out on the 20th century," Gause gently jibes. "But now it's going to come back and dominate the 21st century."

Lots of possibilities

Education is also getting a lift.

Local schools used to spend about \$400,000 a year to get voice and T1 lines from Verizon. They're paying the city more — about \$600,000 a year — for nDanville but are getting a lot more firepower. "This thing does in seconds what used to take 15 minutes or more," says Dianne Locker, a local school administrator.

She says nDanville paves the way for a raft of possibilities: advanced college placement courses, home-based instruction, teacher-parent meetings via the Internet and videoconferencing galore.

"If you want to recruit high-tech, you have to *be* high-tech," says Locker, adding: "Nobody moves to Danville without first looking at the schools."

On a recent visit to Galileo Magnet High School downtown, technology was everywhere. The whole school is essentially a Wi-Fi hot spot. Students surfed the Web on their school-issued wireless laptops. You wouldn't think you were in a 200-year-old farming community that, until a few years ago, had only dial-up access.

Verizon isn't sitting idle. It has spent about \$7.5 million on a Danville network since 2002. DSL was formally rolled out in 2003 and is available to about 60% of the city. "We think we have a pretty good network in Danville," says Verizon spokesman John Knapp. "And it's getting better all the time."

To be sure, nDanville is no cure-all for the city. Dan River is operating under Chapter 11 bankruptcy protection; it hopes to emerge later this year. Unemployment remains a crushing 14%. Among the adult workforce, nearly a third don't have high school diplomas.

Still, nDanville is already a huge success by at least one measure. It has given this town something that seemed unlikely just a few years ago: hope.

Says city manager Gwaltney: "If we keep our vision — our tunnel vision — and stay the course, the sky's the limit for us."