

COVER STORY

Both payoffs, perils loom for community Internet

INTERNET PROVIDERS WARN THAT THE RUSH TO MUNICIPAL BROADBAND COULD BE A NET LOSS IN SOME COMMUNITIES.



Next Light customer Steve Webb in his basement computer room. His daughter, Sarah, 8; son Sean, 11; and neighbor Kyle Watanabe, 12, use the computers.

PHOTOS: KATHLEEN LAVINE, BUSINESS JOURNAL

BY GREG AVERY
gavery@bizjournals.com
303-803-9222, @GregAveryDenBiz

Steve Webb is happy with the 1 gigabit-per-second Internet service he started at his house nearly 18 months ago.

Gone are the concerns he once had about bumping up against the monthly download limits he'd get warnings about when he had Comcast Corp.'s business broadband service for his home. Now, Webb and his children can download videos, play online games and do whatever they want online each month.

What's more, it costs only \$49.95 a month, and that price will never go up.

And Webb lives in Longmont, not Kansas City or the handful of communities where Google famously started its Google Fiber service. His sweet deal is the result of a \$40.3 million proj-

ect led and paid for by Longmont's city-owned electrical utility.

Webb, a system administrator for EchoStar Corp., jumped at the chance to sign up for the lifetime \$49.95 price when Longmont's NextLight service offered it to people who signed in the first three months of availability.

"Really, the connection to my home is better than my work," he said. "Bit-for-bit, it's really almost free, when you think about it that way. When I watch stored video with my connection, I don't worry about it. I can let my kids go nuts on YouTube."

It means four times as much data capacity — far more than he now needs — for a third of the cost of the \$150 he was paying Comcast for 250 megabits per second business service at his house.

The affordable 1 gig broadband Webb gets is scheduled to be available citywide within a year

for any Longmont resident to order.

The city is being held up as one of the national success stories of municipal broadband — at the leading edge of a movement that could get a boost soon from state lawmakers.

But it's also a sign of a trend that has telecom and cable companies worried.

A change in the law coming?

Last fall, more than two dozen town governments, city councils and school boards in Colorado asked voters for approval to explore creating Internet networks of their own. Every ballot question won, most of them handily.

A growing roster of communities have received voter approval for municipal broadband, a step that's required under current state law. Most of the communities are rural, in places where fiber-optic networks are expensive to build and populations are small, making the private-sector business case for investment difficult.

A handful of bigger metro-area communities — Centennial, Cherry Hills Village, Boulder, Thornton — have won voter approval of municipal broadband as well. But no community other than Longmont has proceeded on from a vote to launch residential high-speed Internet service yet.

Meanwhile, Colorado's Department of Local Affairs has been issuing \$10 million in grants to communities, mainly in rural areas, to explore projects improving local broadband.

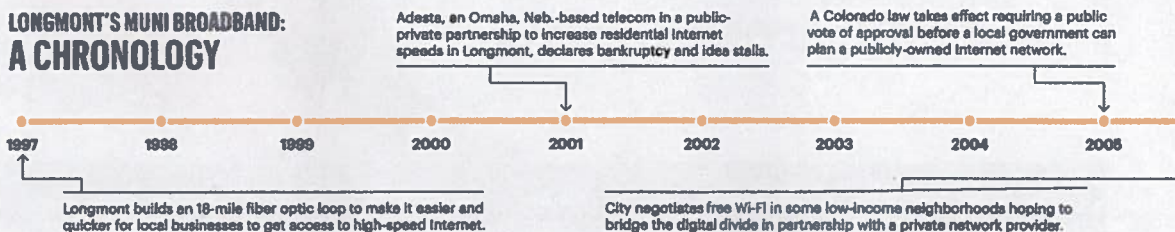
And soon, it may get easier for communities to launch broadband projects.

The Colorado Legislature is expected to see a bill in coming weeks that would repeal or modify the 2005 state law requiring voter approval before communities can pursue municipal broadband projects.

This has sparked concern that communities could be led to jump into broadband too soon, without the brake of a public vote, and make expensive mistakes.

"We don't see that there's anything wrong with the (existing) law," said Pete Kirchhof, head of the Colorado Telecommunications

LONGMONT'S MUNI BROADBAND: A CHRONOLOGY



COVER STORY

Association, a trade group of rural telecoms. "If you're getting involved in a complex business, you should have to know what you're getting into."

Industry members point to the fact that some recent pro-broadband election campaigns in Colorado communities argued that current law doesn't allow public Wi-Fi in local libraries or recreation centers. That's not true; the law does allow Wi-Fi in public facilities.

Also worrying are the publicly-funded fiber-optic network projects that failed financially, such as the Utopia network in Utah. Utopia took years to build, but it wasn't a hit with consumers and has lost money, leaving 11 communities involved with as much as \$475 million in debt over the next 30 years for a network that has never been fully operational, according to the Salt Lake Tribune.

Colorado had its own boondoggle in publicly financed broadband with the statewide Eagle-Net network, which was started by a coalition of Colorado school districts trying to get broadband service in hard-to-reach areas.

That \$110 million project, funded in 2010 with federal stimulus money, failed to reach half the hard-to-reach mountain area schools and community institutions it aimed to serve. Eagle-Net also ran into a buzzsaw of opposition from small, local telecoms on the plains that argued it duplicated their fiber-optic networks and threatened their businesses' viability by trying to lure away the biggest customers in their communities.

Investment disincentive

Telecom and cable officials members do express support for public investment to help get broadband to under-served areas they've found unprofitable to reach.

But they worry a rush toward municipal broadband could lead to smaller-scale versions of the Eagle-Net debacle in rural areas while sparking taxpayer-subsidized competition for their companies in more populated areas.

And the concern arises as CenturyLink Inc. and Comcast have invested in bringing higher speeds to Front Range cities - investments that might not be worth it if they face growing competition.

Comcast expects to have its Docsis 3.1, multi-gigabit broadband service available across its entire Colorado footprint by some point next year.

Local officials with the Philadelphia-based cable giant have some concerns about municipal broadband, but it's being publicly circumspect and notes that most of the elections have been in other cable providers' Colorado territories.

"We do support policies that encourage broadband and fair competition," said Leslie Oliver, a Comcast spokeswoman for Colorado.



Next Light workers prep a neighborhood for cable installation in Longmont.

MORE ONLINE

This report continues at DenverBusinessJournal.com.

ONLINE NOW

Story: The Colorado Legislature takes up the issue of municipal broadband.

"We want to work with broadband providers to promote private investment."

Roberta Robinette, Colorado president of external affairs for AT&T, the second-biggest U.S. mobile phone company, sees the need for investment in fiber optics to handle the exploding use of mobile broadband. But Robinette worries about the risks local taxpayers could face if communities go ahead with ill-considered broadband projects, she said.

She and others point to talk during some of the

election campaigns of networks built with bond proceeds and being paid back with subscriber revenue, as if there was no risk to taxpayers.

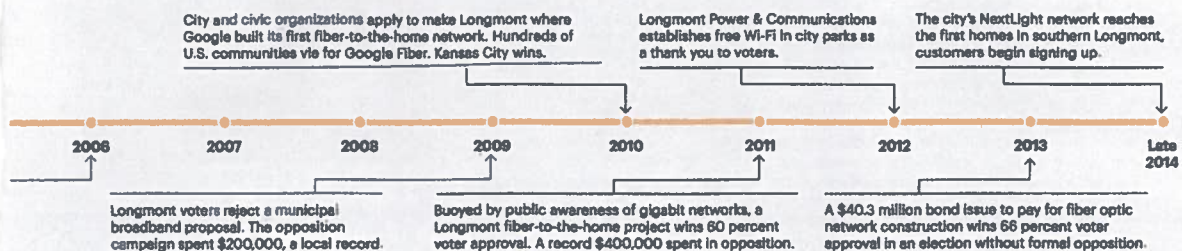
Small-scale telecoms that have been around for decades often struggle to succeed, Robinette said, and it's difficult to see why newcomers serving the same customers should expect better results.

"Most municipalities don't truly understand how complex these networks really are. It's not a one-time expense," Robinette said. "To just say 'without raising your taxes' is not giving a true picture of what you're asking to take on."

Seattle balks

Seattle looked at a citywide high-speed Internet project that had cost estimates of between \$480 million and \$665 million. But the city council,

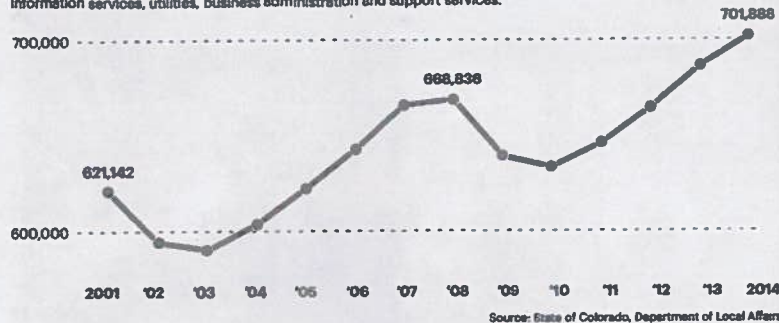
CONTINUED ON PAGE A6



COVER STORY

BROADBAND-RELATED EMPLOYMENT

Colorado job growth since 2000 in industries considered dependent on broadband availability, fields such as professional and business services, finance, information services, utilities, business administration and support services.



CONTINUED FROM PAGE A5

in a 6-2 vote, rejected the idea as too risky last year. A consultant's report estimated the Seattle project would need significantly higher adoption than has been seen in Chattanooga, Tennessee, the longest-standing big city municipal broadband effort, in order to be viable at \$75 a month.

Opponents of municipal broadband point to that as a cautionary tale, suggesting municipal broadband would be folly for small governments if Seattle, a technologically capable and wealthy city, is afraid to take the plunge.

But Seattle is just an example of local control to Tom Roiniotis, general manager of Longmont Power and Light, the utility building the NextLight network.

"If a community wants to do this or not, that's their right," he said.

The skeptics of municipal broadband echo today what was said when Longmont started its electric power utility to light the city streets in 1912, he said.

"The same arguments were used against public utilities a century ago - it's too complex, it's too risky," Roiniotis said, adding that the difficulties building broadband networks are the same regardless of who's paying for it. "You've got to pick the right technical plan and the right business plan, yes, but that's true for the public or the private sector."

A public local utility company is a common thread among most U.S. communities held up as examples of municipal broadband, said Ken Fellman, a Denver telecommunications lawyer and former Arvada mayor who has battled cable and telephone companies throughout his career.

Cities that already own utility poles and maintain the wires, and navigate the regulatory environment of providing electricity are well-suited to handle broadband today, he said.

"But most communities don't want to get involved with all that - they just want better broadband," Fellman said.

In this interconnected age, broadband is seen by many community leaders as a bedrock service necessary for communities to have up-to-date schools and health care, and to have technologically savvy residents who make decent-enough money to support a local retail economy.

Areas without good broadband feel they're poised to slip farther behind as urban areas begin to adopt "smart city" technologies, Fellman said. Internet-connected street lights, parking meters and infrastructure hold the promise of new conveniences for communi-

ties and greater efficiency.

"There are technologies coming down the pike that could really make things better and solve some problems," he said. "You need that every bit as much in Yuma as you do in Denver."

Competition an issue

But, if municipal broadband catches on around the state, national companies could start looking at Colorado as a place where it's hard to fairly compete and get reasonable returns on big investments, said Robinette, from AT&T.

That, in the long run, could hurt the state more than helps, she said.

Unlike cable and telecom companies, publicly funded high-speed networks typically don't pay taxes or fees to local governments. And discounted prices they offer consumers reduce the profit potential for private network

owners, Robinette said.

"It really is a disincentive to investing the hundreds of millions of dollars it takes to provide our services," she said.

In Longmont, the aim is to make NextLight broadband so reliable and affordable that people come to think of it like water or city streets - a ubiquitous service they count on.

NextLight has 2,855 customers so far. Nearly half of the households have signed up in the neighborhoods where NextLight is available and the city has done the full compliment of marketing, Roiniotis said.

Webb, the Dish Network systems administrator who signed up in the first generation of NextLight customers, said many of his colleagues in tech circles marvel at the broadband deal he gets, and he's astonished more of his neighbors haven't signed on.

NextLight is only a few months old, doesn't bundle video services and isn't marketed as effectively as Comcast and CenturyLink.

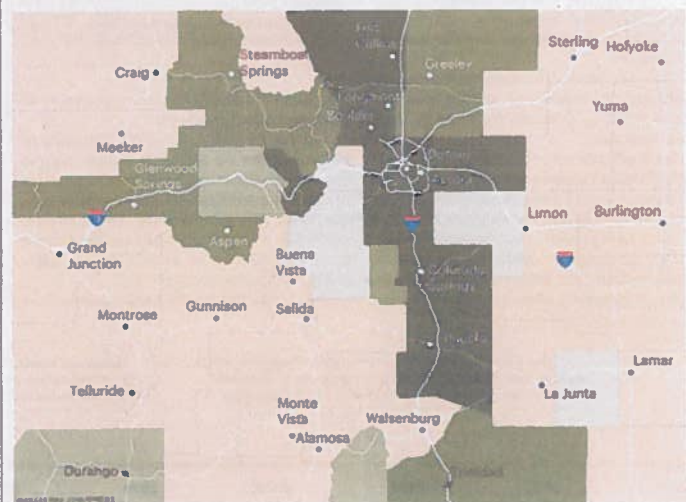
Even so, NextLight's sign-up rate so far outstrips the 37 percent rate the city built its business plan around, Roiniotis said. More than 90 percent of customers are choosing the \$49.95 per-month gigabit plan and not the \$40.25 megabits-per-second service, which so far means more revenue per customer than was in the business plan.

The network's business plan is to have its user-revenue support everything as an enterprise fund that pays back the bonds without using other city tax revenue. Gone are the profit motives and competitive concerns that drive private-sector investment, he said.

"We do it for different reasons," Roiniotis said. "If we cover the cost of providing the service, that's success. We do this to improve the community, to improve education and improve economic development." ▮

BROADBAND AVAILABILITY

Colorado counties with the highest and lowest access to broadband, defined by the Federal Communications Commission as speeds of at least 25 megabits-per-second download and 3 Mbps upload.



Percentage of county without broadband access

Less than 18 percent 18-40 percent 40-60 percent 60-80 percent More than 80 percent