

# The New York Times

March 22, 2008

Hopes for Wireless Cities Fade as Internet Providers Pull Out

By IAN URBINA

PHILADELPHIA — It was hailed as Internet for the masses when Philadelphia officials announced plans in 2005 to erect the largest municipal Wi-Fi grid in the country, stretching wireless access over 135 square miles with the hope of bringing free or low-cost service to all residents, especially the poor.

Municipal officials in Chicago, Houston, San Francisco and 10 other major cities, as well as dozens of smaller towns, quickly said they would match Philadelphia's plans.

But the excited momentum has sputtered to a standstill, tripped up by unrealistic ambitions and technological glitches. The conclusion that such ventures would not be profitable led to sudden withdrawals by service providers like EarthLink, the Internet company that had effectively cornered the market on the efforts by the larger cities.

Now, community organizations worry about their prospects for helping poor neighborhoods get online.

In Tempe, Ariz., and Portland, Ore., for example, hundreds of subscribers have found themselves suddenly without service as providers have cut their losses and either abandoned their networks or stopped expanding capacity.

"All these cities had this hype hangover late last year when EarthLink announced its intentions to pull out," said Craig Settles, an independent wireless consultant and author of "Fighting the Good Fight for Municipal Wireless" (Hudson Publishing, 2006). "Now that they're all sobered up, they're trying to figure out if it's still possible to capture the dream of providing affordable and high-speed access to all residents."

EarthLink announced on Feb. 7 that "the operations of the municipal Wi-Fi assets were no longer consistent with the company's strategic direction." Philadelphia officials say they are not sure when or if the promised network will now be completed.

For Cesar DeLaRosa, 15, however, the concern is more specific. He said he was worried about his science project on global warming.

"If we don't have Internet, that means I've got to take the bus to the public library after dark, and around here, that's not always real safe," Cesar said, seated in front of his family's new computer in a gritty section of Hunting Park in North Philadelphia. His family is among the 1,000 or so low-income households that now have free or discounted

Wi-Fi access through the city's project, and many of them worry about losing access that they cannot otherwise afford.

Philadelphia officials say service will not be disconnected.

"We expect EarthLink to live up to its contract," said Terry Phillis, the city's chief information officer.

But when City Council leaders here held a hearing in December to question EarthLink about how it intended to keep service running and complete the planned network, the company failed to show up.

Officials in Chicago, Houston, Miami and San Francisco find themselves in a similar predicament with EarthLink and other service providers, and have all temporarily tabled their projects.

Part of the problem was in the business model established in Philadelphia and mimicked in so many other cities, Mr. Settles said.

In Philadelphia, the agreement was that the city would provide free access to city utility poles for the mounting of routers; in return the Internet service provider would agree to build the infrastructure for 23 free hotspots and to provide inexpensive citywide residential service, including 25,000 special accounts that were even cheaper for lower-income households.

But soon it became clear that dependable reception required more routers than initially predicted, which drastically raised the cost of building the networks. Marketing was also slow to begin, so paid subscribers did not sign up in the numbers that providers initially hoped, Mr. Phillis said.

Prices for Internet service on the broader market also began dropping to a level that, while above what many poor people could afford, was below what municipal Wi-Fi providers were offering, so the companies had to lower their rates even further, making investment in infrastructure even more risky, he said.

EarthLink, which has seen a recent decline in profits and subscribers, lost its chief executive, Garry Betty, to cancer in January 2007, and with him went one of the nation's most vocal advocates of municipal Wi-Fi. Mr. Betty's successor, Rolla P. Huff, announced plans to cut costs and move the company in a new direction by laying off about 900 workers, about half the company's work force, and withdrawing from municipal wireless projects.

Chris Marshall, an EarthLink spokesman who declined to be interviewed, said in an e-mail statement, "We concluded that our Municipal Wi-Fi operation is not consistent with our strategic direction and we've committed to a plan to sell the Muni Wi-Fi assets."

For San Francisco residents, EarthLink's change of plans was an especially big letdown. Unlike most other cities where municipal wireless was going to be offered in free hotspots and at a reduced price for residential service, San Francisco planned to offer citywide wireless free in a three-way deal with EarthLink, which was to build the grid, and Google, which would have paid to advertise through the network.

"It was a huge disappointment for us," Mayor Gavin Newsom of San Francisco said about EarthLink's shift in course, "and, with all due respect, it doesn't seem like a smart way to run a business to work with a city for two years over a major plan and then suddenly one day to call and say you are pulling out."

Mr. Newsom said that rather than select a single Internet provider to blanket the city, he might team up with multiple nonprofits and companies, and set up smaller free Wi-Fi areas, especially in poor neighborhoods.

Smaller cities, too, have run into problems with municipal wireless efforts.

Tempe, for instance, was one of the first midsize cities in the nation to go live in 2006 with its municipal wireless network, after erecting about 900 routers on utility poles and contracting with Gobility, a Texas-based provider, for residential service at about \$20 per month. In December, the company suddenly pulled service after failing to get enough subscribers.

"The entire for-profit model is the reason for the collapse in all these projects," said Sascha Meinrath, technology analyst at the New America Foundation, a nonprofit research organization in Washington.

Mr. Meinrath said that advocates wanted to see American cities catch up with places like Athens, Leipzig and Vienna, where free or inexpensive Wi-Fi already exists in many areas.

He said that true municipal networks, the ones that are owned and operated by municipalities, were far more sustainable because they could take into account benefits that help cities beyond private profit, including property-value increases, education benefits and quality-of-life improvements that come with offering residents free wireless access.

Mr. Meinrath pointed to St. Cloud, Fla., which spent \$3 million two years ago to build a free wireless network that is used by more than 70 percent of the households in the city.

But projects covering larger cities have proved far more difficult to sustain financially, and much of the attention has turned now to Minneapolis, which is rolling out a network based on a new business model that many market analysts believe will avoid the financial risks that EarthLink encountered in Philadelphia and elsewhere.

In Minneapolis, the Internet service provider agreed to build the network as long as the city committed to becoming an “anchor tenant” by subscribing for a minimum number of city workers, like building inspectors, meter readers, police officers and firefighters.

This type of plan is more viable, according to market analysts and city officials, because the companies paying to mount the routers and run the service are guaranteed a base number of subscribers to cover the cost of their investment.

Some companies have also begun offering technological alternatives that may help expand wireless access.

Meraki, a wireless networking company based in Mountain View, Calif., has jumped into the void in San Francisco with a program it calls “Free the Net.” The company sells low-cost equipment that can be placed in a person’s home to broadcast a wireless signal. The company also sells inexpensive repeaters that can be placed on rooftops or outside walls to spread the original customer’s signal farther. The combination of the two types of equipment creates a mesh of free wireless in neighborhoods. The company says it has almost 70,000 users throughout San Francisco.

Back in Philadelphia, Cesar’s older sister, Tomasa DeLaRosa, said she had faith that city officials would find a way to finish the network and keep her Internet service going.

“Our whole house is totally different now,” said Ms. DeLaRosa, 19, who had never had Internet access at home until last December because she could not afford it.

After signing up for a job training program and completing its course work, Ms. DeLaRosa received a free laptop, training and a year’s worth of free wireless service from Esperanza, a community group.

Greg Goldman, chief executive of Wireless Philadelphia, a nonprofit organization that was set up as part of the city’s deal with EarthLink, said that about \$20 million had already been spent on the network, and only about \$4 million more would be needed to cover the rest of the city.

Mr. Goldman’s organization is responsible for providing bundles that include a free laptop, Internet access, training and technical support to organizations like Esperanza so they can use them as incentives for their low-income clients like Ms. DeLaRosa to complete job training and other programs.

“For us and a lot of people in this neighborhood,” Ms. DeLaRosa said, “the Internet is like a path out of here.”