Palo Alto customers sing the praises of fiber

Palo Alto officials ask community to join push for a citywide, hyperfast fiber-based Internet system

by Gennady Sheyner, Palo Alto Online Staff, Uploaded: Friday, February 26, 2010, 8:00 AM

Palo Alto businessmen George Gindoyan and Steve Tidwell are the true believers. The executive director of Jazz Pharmaceuticals and infrastructure manager for Playlist.com, respectively, Gindoyan and Tidwell use the city's 40.6-mile fiber-optic ring for lightning-quick access to the Internet.

They call it fast, affordable, flexible and reliable.

They could be poster children for a goal city officials and techie citizens are now pursuing: Become one of tech-giant Google's test locations for a citywide fiber network capable of delivering Internet access at speeds of up to or exceeding 1 gigabit per second. That's more than 100 times faster than what most Americans can access, according to the search company.

On Monday, the City Council unanimously voted to aggressively pursue a partnership with Mountain View-based Google for an expanded fiber network -- one that could use the city's existing infrastructure as its backbone.

"We, as a city, are ready to move quickly to make this a reality," Vice Mayor Sid Espinosa said.

Palo Alto already has a "ring" of fiber-optic cables that stretch underground along Page Mill, Middlefield and Arastradero roads and hang overhead at Alma Street, Embarcadero Road and East Meadow Drive. It's the very same network that Gindoyan and Tidwell are hooked up to.

But while the system supports the massive technology firms in Stanford Research Park and allows small start-ups in downtown Palo Alto to move around huge amounts of data in a matter of seconds, the ring doesn't close "the last mile" gap to homes and small businesses.

The dream of closing that gap has eluded generations of officials and tech-savvy residents alike.

Palo Alto officials plan to rally the community to support its drive toward a Google system, which could involve Google investing tens of millions of dollars in installation costs. The city's fiber ring cost an estimated $2 million to install in the late 1990s and presently clears about $2 million a year in excess revenues over costs.
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Although no taxpayer money would be involved under the Google network as outlined, a key question city officials are asking is: Why should Palo Alto residents support a fiber system?

Gindoyan and Tidwell have some answers. Gindoyan said the fiber service has been an invaluable tool for Jazz Pharmaceuticals, which employs more than 300 people.

"When you deal with data and you outsource everything, this service is about as essential as water, electricity and heating," said Gindoyan, whose company is located on Porter Drive in Stanford Research Park.

The fiber ring allows Jazz Pharmaceuticals to expand and contract along with market fluctuations without having to add or reconfigure complex technology at every step, he said. The company can move from one building to another and keep its high-speed Internet connection intact and uninterrupted, he said.

And the fiber link is fast -- really fast. Tidwell said the 1 gigabit-per-second bandwidth makes a huge difference for his company, which has its corporate office on High Street in downtown Palo Alto and which -- as the name Playlist.com implies -- creates music playlists for its users.

"It's way more than what you'd normally be able to do with a standard DSL connection," Tidwell said. "Something that can take hours to do with a DSL connection takes only a few seconds for us."

The fact that the system never crashes also helps, Tidwell said. Aside from the Feb. 17 outage, which was caused by a plane crash that unplugged the entire city, the fiber-optic system has been delivering uninterrupted service to Playlist.com since the company moved downtown last April.

"We haven't had any outages at all since we hooked up to the fiber," Tidwell told the Weekly. "Back when we were using Comcast and AT&T, service interruptions were a weekly occurrence and a major annoyance."

Google also offers reasons its "Fiber for Communities" experiment could benefit residents.

The company cites scenarios in which rural doctors could discuss a case with a specialist in New York, while both viewing 3-D images of the patient; consumers could download a high-definition, full-length feature film in less than five minutes; or software developers could create new bandwidth-intensive "killer apps" and services.

Google stated that the network, once operational, will be open to multiple service providers.

Palo Alto has been operating its network since the late 1990s. The city often refers to it either as the "fiber ring" because it circles around the city or as "dark fiber" because it relies on customers to "light it up" before data can flow. The city owns the cables and the basic infrastructure that allows customers to connect.
The customers provide the necessary transmitters and the receivers to make the system fit their particular needs.

"The customers have a great deal of flexibility in designing their network," said Joyce Kinnear, marketing manager for the city's Utilities Department.

The city currently provides fiber service to about 45 customers at about 173 service connections, according to the city's annual budget report. The number of connections went up by 10 percent in fiscal year 2009 and is expected to increase by another 10 percent in the current fiscal year, which ends on June 30.

Meanwhile, operating revenue in the city’s "fiber optics fund" has increased by 23 percent over the past two years and is projected to go up by another 14 percent this year. The system brought the Utilities Department $2.49 million in gross sales revenues in 2008 and $2.6 million in 2009. The figure is projected to go up by about $34,000 this year, according to the budget.

But while the fiber-optics system has given city officials plenty to cheer about, Palo Alto's quest to expand the network to the homes and small businesses has been plagued by years of false starts and disappointments.

The city's partnership with a Canada-based private consortium collapsed last March after the consortium's funding dried up and the city refused to provide a funding guarantee.

Months later, Palo Alto officials learned that the city's planned bid to acquire federal-stimulus funds for the citywide network is unlikely to bear fruit because the federal program is targeting "unserved" and "underserved" communities (a tough stretch for an affluent Silicon Valley community).

The City Council Monday night agreed to scrap the city's applications for federal funds and to pursue Google. The initial application is due March 26.