

Palo Alto eyes expansion of fiber network

While city waits for Google's announcement on a citywide fiber project, staff considers less ambitious options

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There's a chance that Palo Alto's dream of a citywide ultra high-speed broadband network will come true later this month, when Google announces which community will host its highly coveted Google Fiber for Communities project.

But then again, with hundreds of other cities -- from Avon, Conn., to Walla Walla, Wash. -- vying for the Google prize, the city isn't holding its breath. Instead, Palo Alto officials are busily exploring other ways to extend and "light up" the city's existing dark fiber backbone and bring high-speed Internet access to more local customers.

In the next two months, the city plans to receive the results of two different studies evaluating the potential market for a municipal fiber system and ways to attract private investment dollars to the project. The city's Utilities Advisory Commission discussed the effort at its Wednesday night meeting and lauded staff's effort to explore an expansion of the fiber network.

The major question staff is wrestling with now is just how big of an expansion the city can handle. The existing 41-mile fiber network, which has 59 customers and 154 licensed connections, has been an economic bonanza, bringing the city about \$3 million in annual fees and roughly \$2 million in profits. At the Wednesday meeting, Commission Chair Asher Waldfoegel called the fiber ring a "phenomenal asset for the city."

But while staff is enthusiastic about upgrading the system and expanding it to other major commercial and industrial customers, the road to a citywide broadband network is fraught with risks and challenges, the Utilities Department's Management Specialist Jim Fleming told the commission.

The broadband field is evolving rapidly, Fleming said, and remains highly competitive. Companies such as AT&T and Comcast offer their own high-speed Internet services, often through lucrative "triple play" packages (which feature voice, video and data services) and would be loath to lose market share to a municipal fiber system.

"It's a high-risk business," Fleming said. "The competitive landscape is getting more treacherous."

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Nevertheless, the number of municipal "Fiber to the Premise" networks (which offer citywide Internet access) has been growing nationwide. Fleming pointed to a June 2010 report in "Broadband Properties" magazine that said the number of such systems in the United States rose from 66 to 88 between 2008 and June 2010. These communities use all sorts of different business models, though in most cases they are located in areas that are underserved by existing telecommunication companies. Some communities have done well, while others less so, Fleming said.

"Every community is different, and you have to be mindful of the competitive landscape," Fleming told the commission. "You may have a very weak cable provider that's easy to go up against, or a very strong incumbent cable customer who will not stand still when you take their customers away."

In the past, cable providers have used legal means to try to stop municipal fiber projects.

Fleming also wrote in a report that reaction to such projects from communities has been mixed, with supporters viewing them as "essential infrastructure for a community's long-term economic survival" and opponents seeing them as "evidence of government overreaching by entering into a business best left to the incumbent carriers and other private-sector telecom companies."

In tech-savvy Palo Alto, the idea of spreading ultra high-speed Internet access to the masses has been buzzing around City Hall for about 15 years. In 2008, the city entered into a partnership with a consortium of high-tech firms to implement the "Fiber to the Premises" project. But the deal fell through in March 2009, after the consortium lost one of its financing partners and asked the city to contribute between \$3 million and \$5 million a year for the fiber network. The City Council chose not to do so.

Now, Palo Alto is putting together a business plan for a citywide fiber network and working with two consulting firms to evaluate whether and how to expand the existing network. One firm, Tellus Venture Associates, is analyzing the local market for fiber service while another firm, Columbia Telecommunications Corporation, is evaluating ways to attract private investment and considering various engineering scenarios for a citywide system.

Utilities staff plans to integrate the firms' findings into a business plan, which is scheduled to be presented to the commission in February and to the City Council in March.

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