

iPaloAlto Broadband Fact Sheet and Mini-Questionnaire for Palo Alto Council Candidates - 2009

To assist with your campaign, here are some key facts as they apply to the proposed Palo Alto Broadband project; additional background information may be found on [iPaloAlto](#). This Broadband Fact Sheet is enclosed for your use. Reading this Fact Sheet, then completing and submitting the mini-questionnaire, should require less than 20 minutes.

A July 2005 Colleagues' Memo on broadband laid out four City objectives which subsequent Council votes have reconfirmed and further defined:

1. the construction and operation of an ultra high bandwidth citywide system,
2. capable of providing data, video and telephony service,
3. physical infrastructure owned by the City (now defined as the Fiber Optic Utility), and
4. limited capital/risk exposure for the City (now defined as the General Fund).

A consortium of companies responded to a subsequent RFP. Their proposal, and 8-0 Council votes, further defined the envisioned citywide network to be open-access active Ethernet fiber:

1. The consortium of companies chosen by Palo Alto Council...

- a. was ultimately comprised of three entities; 180 Connect (network design and construction), PacketFront (optronics for premises), and Axia NetMedia (investor and network management).
- b. had experience in financing, building, providing services and equipment to, and the long-term management of, community fiber networks like that proposed for Palo Alto.
- c. cooperatively worked with city staff from March 2007 to March 2009 and created an overview for the proposed network that was presented to Council in July 2008. Details at Events - [iPaloAlto.com](#).
- d. incorporated into the Palo Alto network design, operations and overview, lessons learned and best practices from open-access community fiber networks throughout the world.
- e. was ultimately led by investor and network manager Axia NetMedia which, in March 2009, withdrew from negotiations but has subsequently indicated a willingness to respond to a new Palo Alto RFP.

2. Ultra-high-speed broadband means...

- a. the network proposed for Palo Alto will be lightning fast with potentially unlimited capacity which leverages the open-access benefits of a point-to-point active Ethernet Fiber to the Premises (FTTP) network.
- b. Palo Alto's fiber network will initially deliver residential speeds of at least 100 Mbps (megabits per second) symmetrical and at least 1 Gbps (one gigabit per second) symmetrical for commercial users.
- c. **symmetrical** means the same high speed **uploading AND downloading**. Super-fast upload speeds will encourage a new set of applications including personal websites hosted from home.
- d. robust bandwidth like this simultaneously accommodates voice, video, HDTV, and major data files with ease; every service is more reliable, everything can be full big screen high definition.
- e. **point-to-point active Ethernet** means no sharing among neighbors. A particularly robust fiber network would offer instant self-healing capabilities in the event of a significant disaster or other emergency.
- f. it will prove especially attractive to new and growing businesses, major enterprises, educational and medical applications, start-ups, venture capitalists, innovators, non-profits, government, and you.

3. A citywide Palo Alto/Silicon Valley fiber network indicates...

- a. an open-access community fiber network will pass every premise in Palo Alto; every premise can get connected. Fiber can be our answer to fewer vehicular trips; better energy and environmental management.
- b. customers may voluntarily elect to receive one or more services from the network Menu of Services simply with a click of the mouse (after initial installation).
- c. it will be available all over town, but the precise roll-out strategy, neighborhood by neighborhood, has yet to be determined. See Item 6 below. When available, it will help you...get off our streets, onto fiber.
- d. customers will be residents, businesses, schools, non-profits, and/or government entities. The higher the community participation percentage, the more benefits the network will deliver to everyone.
- e. if the City partners with a commercial network manager, the network could be expanded to Silicon Valley communities beyond Palo Alto city limits.
- f. even those who do not choose to receive services from the open-access community fiber network may significantly benefit from competitive pricing the other guys will offer in fiber network territory only.

4. Open-access...

- a. means multiple service providers will be welcome to compete on the network, providing an incentive for quality services at very competitive prices. In Europe, dozens of service providers are common.
- b. has been compared to a regional airport like SFO, where dozens of airlines rent space and pay landing fees to provide a broad range of services. No one airline owns or controls SFO; the City owns it.
- c. strongly encourages innovation, the lifeblood of Palo Alto and Silicon Valley. Every qualified service provider is immediately welcome on the network which, in turn, attracts more users.
- d. provides an immediate outlet to the latest "killer apps" developed anywhere in the world.
- e. is the opposite of the closed-access copper-based networks owned and operated by Comcast and AT&T in our area. You may have experienced their significant service limitations and ever-higher prices.

5. Applications and benefits available from the open-access fiber network will likely include...

- a. **aggressive telecommuting** which can reduce expense by reducing vehicle trips and global warming. Fiber is proving to be real mass transit, reducing traffic and air pollution.
- b. **traffic time-shifting** can move significant traffic to less congested times of the day, thereby materially increasing the total daily capacity of major arterial streets.
- c. **Stanford** recognizing the benefits of connecting its fiber network to the open-access Palo Alto fiber network. Support tailored to the combined networks would provide further benefits to all parties.
- d. **triple play, quadruple play, and even quintuple play** packages from multiple service providers. Those with competitive prices, superior reliability and attractive services will be rewarded.
- e. **redundancy** opportunities for commercial customers, a very big deal if you are a emergency services facility or enterprise which must remain connected no matter what.
- f. **one-click menu** of available services that are instantly available the second the customer confirms the order. Instant gratification; that's what customers want.

6. A NEW DEVELOPMENT: the Fiber Optic Fund reserve currently (6/30/09) totals \$7 million cash on hand.

- a. This reserve accumulated from the net revenues earned from leasing fiber strands on the City utility's 41-mile dark fiber network, a ring configuration which serves most Palo Alto commercial areas.
- b. The Fiber Optic Fund reserve is currently growing about \$2 million annually; thus is expected to be at least \$9 million by June 2010; at least \$11 million by June 2011.
- c. By law, utility reserve funds must be used or invested to benefit rate payers or prospective rate payers to that particular utility; in this case fiber optic utility-related infrastructure and/or services.
- d. City staff and Council are currently considering alternatives for improving and/or expanding the dark fiber network which may utilize this reserve in some way.
- e. The electric utility also has \$32 million "no longer needed Calaveras Reserve funds" which may be utilized in some way involving fiber including a Smart Grid and/or Smart Metering program.
- f. In April 2009 Council authorized staff to pursue federal economic stimulus and federal appropriations funds to fund network capital costs and to conduct a community interest survey; staff effort is ongoing.
- g. Among the expansion ideas is the building of a citywide Fiber to the Premises (FTTP) network in phases with Phase One expanding fiber services primarily into commercial areas.

7. The next step is a business plan from staff due this fall indicating where the best prospects for FTTP may be in Palo Alto.

- a. Advisors to the Mayor have recommended expanding City fiber services into commercial areas 'where the money is.'
- b. Advisors have also recommended future FTTP plans place a high priority on return on investment (ROI) so that services can be expanded to all neighborhoods as soon as possible.
- c. Advisors have recommended entering into a partnership with a commercial entity at an early stage to increase expertise and reduce risk.

8. Mini-Questionnaire: Based on what you know so far, how would you characterize where you stand? (Please place an 'X' in the appropriate box.)

- a. **I strongly support** the envisioned open-access Fiber to the Premises network for Palo Alto; I will recommend it to our community and I will vote for it.
- b. **I support** the concept of an open-access Fiber to the Premises network for Palo Alto; as I get more comfortable, I can see how I may recommend it and vote for it.
- c. **I may support** an open-access Fiber to the Premises network for Palo Alto; but I will have to learn considerably more before I could endorse it or vote for it.
- d. **I do not support** the vision for an open-access Fiber to the Premises network for Palo Alto, but I am willing to invest some time to be convinced otherwise.
- e. **I do not support** the vision for an open-access Fiber to the Premises network for Palo Alto, and I am unlikely to change my mind.

9. From time to time, experts on the fiber issue are in Palo Alto and make themselves available for public or private background meetings.

- a. **I would appreciate being invited to background meetings** on the Palo Alto Fiber to the Premises topic. My phone and email are listed below.
- b. **I wish to subscribe to the iPaloAlto email list.** iPaloAlto occasionally emails updates of importance on the fiber topic.

[iPaloAlto](#) is your direct link to updated information about the proposed open-access Palo Alto Fiber to the Premises network.

When you have completed your questionnaire, "file save as" to the file name and location on your computer you choose.

Finally, click the SUBMIT QUESTIONNAIRE, then ATTACH TO YOUR EMAIL THE FILE YOU JUST SAVED, and SEND email.

This completed questionnaire is due back no later than 8 pm Monday, September 7, 2009.

We plan to promptly report to our members where each Council candidate stands at this time on the Fiber Palo Alto issue.

We thank you for completing this Broadband Questionnaire for Palo Alto Council Candidates - 2009 and submitting it to iPaloAlto.

SUBMIT QUESTIONNAIRE

If you mail your completed questionnaire to:

iPaloAlto
Bob Harrington
1802 Fulton Street
Palo Alto, CA 94303

Telephone: 650 324-1793
Facsimile: 650 321-2922

Please provide your contact information:

Name: _____
Address: _____
City, State, ZIP: _____
Email: _____

Daytime phone: _____
Evening phone: _____
Cellular phone: _____